North Korea Missile Chronology

Last update: January 2012

This annotated chronology is based on the data sources that follow each entry. Public sources often provide conflicting information on classified military programs. In some cases we are unable to resolve these discrepancies, in others we have deliberately refrained from doing so to highlight the potential influence of false or misleading information as it appeared over time. In many cases, we are unable to independently verify claims. Hence in reviewing this chronology, readers should take into account the credibility of the sources employed here.

Inclusion in this chronology does not necessarily indicate that a particular development is of direct or indirect proliferation significance. Some entries provide international or domestic context for technological development and national policymaking. Moreover, some entries may refer to developments with positive consequences for nonproliferation.

2011

10 January - 14 February 2011
New satellite images of the Dongchang (Tongchang) missile base are released showing its completion. The base is reportedly more sophisticated than the Musudan-ri base on the east coast of the country. Analysts report that Dongchang's launch tower uses adaptive bracketing for missile engine straps which "indicate the launch stand itself was built to support different types of rockets."[1] The launch pad is large enough to hold North Korea's largest missiles, including the Taepodong 2.
— Allison Puccioni, and Nick Hansen, "North Korea Advances Its Tangchang Launch Site," *Jane's Country Risk Daily Report*, 28 February 2011; "US Intelligence Chief Expresses Concern Over North Korean Missile," *Jane's Country Risk Daily Report*, 18 February 2011; Doug Richardson, "North Korea Completes Tongchang-ni Launch Tower," *Jane's Missiles and Rockets*, 8 March 2011.

11 January 2011
While visiting China, U.S. Secretary of Defense Robert Gates tells the media that North Korea will likely develop an ICBM within the next five years. Gates also stats that the DPRK's development of ICBMs poses a "direct threat to the United States."
— Doug Richardson, "North Korea Could Have ICBM within Five Years," *Jane's Missiles and Rockets*, 26 January 2011; Elisabeth Bumiller, and David E. Sanger, "Gates Warns of North Korea Missile Threat to U.S.," *The New York Times,* 11 January 2011. www.nytimes.com; "Gates Warns of North Korean Missile Advances," *Intelligence Quarterly*, 12 January 2011. www.inteligencequarterly.com.

9 March 2011
Park Chang-kyu, an official from South Korea's Agency for Defense Development, states that North Korea's electromagnetic pulse (EMP) warhead is "at a considerably substantial level of development."
— Rob Waugh, "We Come in Peace? South Korea Unveils 'Peace Eye' War Plane as Techno-Battle between North and South Heats Up Again," *The Daily Mail,* 21 September 2011, www.dailymail.co.uk; Joohee Cho, "North Korea Nears Completion of Electromagnetic Pulse Bomb," *ABC News*, 9 March 2011, www.abcnews.go.com.

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16 April 2011
U.S. officials in Seoul announce that the two countries will continue developing a bilateral missile defense shield. Work on the project will be conducted by the South Korean and U.S. governments as well as various private industry entities from both countries. One of the primary goals of the shield will be to counter possible DPRK missile threats.
— Jon Grevatt, "South Korea and US Discuss Joint Military Systems and Development," *Jane's Defence Weekly*, 19 April 2011; "S. Korea, US Sign Pact on Missile Defense System Development," *The Korea Times,* 16 April 2011.

26 May 2011
A North Korean-owned, but Belize-flagged freighter, believed to be carrying a shipment of missile components voluntarily turns around after being shadowed by the U.S. Navy's *McCampbell* destroyer. The ship refused to allow U.S. personnel to board after Belize – which maintains a Proliferation Security Initiative Boarding Agreement – agreed to a search. Instead, the ship returns to North Korea after "concerted backchannel pressure from other governments in the region." American officials claim that the freighter may have been bound for Myanmar.
— David Sanger. "U.S. Said to Turn Back North Korea Missile Shipment," *The New York Times,* 12 June 2011, www.nytimes.com; Ishaan Tharoor, "Why the U.S. Secretly Intercepted a North Korean Vessel," *Time*, 13 June 2011, www.time.com; "US Navy 'Stopped North Korean Vessel Bound for Burma,'" BBC World News, 13 June 2011, www.bbc.co.uk.

8 June 2011
North Korea launches a KN-06 surface-to-air missile (SAM) from its west coast. Analysts believe that the launch was not meant to be perceived as hardening rhetoric by North Korea. These launches were the first such tests since 2009.
— Sebastien Falletti, "North Korea Tests KN-06 Missile," *Jane's Defence Weekly*, 9 June 2011; "Report Says North Korea Tested Missiles," *Jane's Intelligence Weekly*, 8 June 2011; Rick Wallace, "Missiles Fail to Test S Korean Confidence," *The Australian,* 9 June 2011, www.theaustralian.com.au.

21 June 2011
Exiting U.S. Secretary of Defense Robert Gates asserts that North Korea is developing a road-mobile ICBM even before perfecting the technology in their existing static ICBMs. Stating "North Korea now constitutes a direct threat to the United States," Gates points out that the U.S. has difficulty locating road-mobile missiles elsewhere.
— John Barry, "The Defense Secretary's Exit Interview," *The Daily Beast,* 21 June 2011, www.thedailybeast.com; Jeffrey Lewis*, "DPRK Road Mobile ICBM?," Arms Control Wonk, 5 October 2011.*

2 August 2011
Japan's Defense Ministry releases a report asserting that North Korea is further developing its Musudan missile system. The report marks the first time the Japanese government publicly mentions the missile.
— Pamela Falk, "N. Korean Missiles Could Hit Guam, Japan Warns," *CBS News* World Watch, 2 August 2011, www.cbsnews.com; "North Korea Seeks New Missile, China Navy Active: Japan," *The Times of India*, 2 August 2011, www.timesofindia.indiatimes.com.

24 August 2011
While on a visit to Russia, Kim Jong Il agrees to consider a moratorium on nuclear weapons testing and nuclear missile production. The U.S. Department of State responds that "if in fact they are now willing to refrain from nuclear test and missile launches, this would be welcome, but it would be insufficient."

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— Seth Maydans, and Choe Sang-hun, "North Korea is Said to Weigh Nuclear Test Moratorium," *The New York Times,* 24 August 2011, www.nytimes.com; Peter Foster, "North Korea 'Ready to Impose Nuclear Moratorium', declares Kim Jong-il," *The Telegraph,* 24 August 2011, www.telegraph.co.uk; "N Korea to Discuss Nuclear Moratorium," *The Irish Times*, 24 August 2011, www.irishtimes.com.

12 October 2011
South Korea claims that the DPRK has moved a number of ground-to-air missiles closer to Baengyeong, South Korea's northernmost island. Moveable launch pads are also reported to be redeployed. The moves come as President Lee Myung-bak and his defense chief Kim Kwan-jin, are in Washington, DC for an official state visit.
— "S. Korean military beefs up border vigilance against N. Korea," Yonhap News Agency, 12 October 2011, www.english.yonhapnews.co.kr; "S. Korean Military Beefs Up Border Vigilance," *The Korea Herald*, 13 October 2011, www.koreaherald.com.

1 December 2011
During a visit by U.S. Secretary of Defense Hilary Clinton, Myanmar's President Thein Sein asserts that Myanmar has had no "secret dealings" with North Korea vis-à-vis WMD. Despite rumors of collaboration between North Korea and Myanmar on a nuclear program, Washington, DC has focused primarily on the transfer of missile components and systems. President Thein Sein gave "strong assurances" that Myanmar would abide by UN Security Council Resolutions regarding North Korea, according to Clinton.
— "Myanmar Vows it Has No Illegal Dealings with North Korea: Clinton," *Global Security Newswire*, 1 December 2011, http://gsn.nti.org; "Clinton Urges Myanmar to Sever 'Illicit Ties' with NKorea," Agence France-Presse, 1 December 2011.

19 December 2011
North Korea reportedly tests a short-range missile hours after the announcement of the death of Kim Jong-il. The South Korean official who confirmed the test claims that it was unlikely that the two events were linked, rather to show that the pre-planned event would not be disrupted and that the North Korean military remained strong. The missile is said to have a 72-mile range, and was launched off the east coast of the peninsula landing in the East Sea (Sea of Japan).
— "N. Korea Test-Fires Short-Range Missile," Yonhap, 19 December 2011; Damien McElroy, "Kim Jong-il Dead: North Korea Conducts Missile Test; North Korea Conducted a Short Range Missile Test on Monday Night as the Regime Demonstrated its Dedication to the Military would Outweigh all Other Matters of State," *The Telegraph*, 20 December 2011; Lee Tae-hoon , "Seoul Beefs up Watch on NK Military Movements," *Korea Times*, 19 December 2011.

2010

1 February 2010
The Pentagon's "Ballistic Missile Defense Review" asserts that if North Korea continues on a similar path of development, they will be capable of mating a "nuclear warhead to a proven delivery system." The report also states that the DPRK had developed an "advanced solid-propellant" SRBM and was developing a "mobile" IRBM as well.
— Office of the Secretary of Defense, "Ballistic Missile Defense Review Report," Department of Defense, 1 February 2010.

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4 February 2010
The United States says that it is working with South Korea in order to create a bilateral missile defense system designed to counter the threats associated with the DPRK's missile program. Peppino Debiase, the Director of the Office of Missile Defense Policy, states that the U.S. wants to continue dialogue with South Korea so as to "cooperate and develop" a common understanding of all relevant issues.
— Peppino Debiase, "Defense Department Quadrennial Defense Review (QDR) Rollout Briefing," The Washington Foreign Press Center, Washington, D.C., 4 February 2010; "US, South Korea Discussing Defence System Against North Missile Attack," BBC Monitoring Asia Pacific, 4 February 2010, via Lexis Nexis, www.lexisnexis.com.

9 March 2010
South Korean media report that the DPRK's People's Army has created a new division that will be tasked with handling intermediate-range ballistic missiles (IRBM). The division will be in charge of controlling and deploying North Korea's IRBM arsenal. South Korea's Defense Ministry does not immediately confirm the reports though.
— "North Korea 'Creates Midrange Missile Unit,'" *The Japan Times,* 10 March 2010, www.japantimes.co.jp; Jung Sung-ki, "NK Creates Mid-Range Ballistic Missile Unit," *The Korea Times*, 9 March 2010.

17 March 2010
South Korean defense minister Kim Tae-young states that the DPRK has increased its missile arsenal by 25% from 800 in 2008 to over 1,000 today. He asserts that the arsenal includes various types of Scuds, Nodongs, and IRBMs that are capable of reaching India, Russia, and Guam.
— "N.Korea Now Possesses 1,000 Missiles: Seoul Minister," Agence France-Presse, 17 March 2010; Sebastien Falletti, "North Korea's Missile Stockpile Up To 1,000," *Jane's Defence Weekly*, 19 March 2010.

30 August 2010
U.S. President Obama signs an executive order placing additional sanctions on North Korea. The U.S. Department of Treasury announces that it sanctioned eight North Korean entities for involvement in nuclear and missile programs. The list includes the following companies: Green Pine Associated Corporation, Korea Taesong Trading Company, and the Korea Heungjin Trading Company. The following five entities are also sanctioned: the Second Economic Committee, the Munitions Industry Department, and two members of the General Bureau of Atomic Energy.
— "US Broadens Sanctions Against North Korea," *Jane's Intelligence Weekly*, 2 September 2010; "North Korea Punished by US over Sinking of Warship," *The Guardian,* 30 August 2010, www.guardian.co.uk; Mary Beth Sheridan, "Obama Administration Announces New Sanctions against North Korea," *The Washington Post,* 30 August 2010, www.washingtonpost.com.

9 October 2010
An Iranian delegation from the Shahid Hemat Industrial Group are reported to have visited officials in North Korea. Analysts believe that the two sides discussed ballistic missile cooperation and missile technology transfers.
— "Strategic Weapon Systems: North Korea," *Jane's Sentinel Security Assessment*, accessed 12 October 2011.

10 October 2010
The DPRK hosts a military parade which publicly displays a number of new and revamped missile systems. Nodong IRBMs are paraded on eight transporter-erector-launchers (TEL) carrying one missile each while other TELs carried the newly-public Musudan IRBM. Other missiles include: a new variation of the Nodong IRBM (which features a triconic nose cone), the KN-02, and the Hwasong 5.

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— Sebastien Falletti, Duncan Lennox, and Ted Parsons, “Pyongyang Parades Missiles and Manpower amid Signs of Succession,” *Jane’s Defence Weekly*, 15 October 2010; Doug Richardson, “New Missiles Shown in Pyongyang Military Parade,” *Jane’s Missiles and Rockets*, 26 October 2010.

12 November 2010
A UN Sanctions committee reports that the DPRK is illegally exporting nuclear and missile components to Syria, Iran, and Myanmar. The committee concludes that these exports provide North Korea with approximately $100 million-worth of hard currency each year. The report also states that the DPRK has used private jets, off-shore companies, and the falsification of shipping documents in order to continue exporting banned materials.
— Damien McElroy, “North Korea ‘Runs International Nuclear Smuggling Network,’” *The Telegraph.* 12 November 2010, www.telegraph.co.uk; Sebastien Falletti, “North Korean Arms Exports Float UN Sanctions,” *Jane’s Defence Weekly*, 19 November 2010; “N.Korea ‘Giving Nuclear Material to Iran, Syria,’” AFP Newswire, 12 November 2010, www.afp.com.

2009

12 January 2009
A U.S. Defense Department report states that North Korea has developed both nuclear weapons and missile delivery systems.
—"N.K. Has Nuclear Weapons, Missile Systems," The Korea Herald, 14 January 2009, in Lexis Nexis, web.lexis-nexis.com.

5 February 2009
The United States imposes sanctions on three North Korean companies for their role in spreading missile technology and weapons of mass destruction, without elaborating on the nature of the activities or the laws violated. The Korea Mining and Development Corporation, the Moksong Trading Corporation and the Sino-Ki were added to the United States Federal Register's proliferation blacklist.
—Jin Dae-woong, "3 N. Korea Firms Face Sanctions for Proliferation," *The Korea Herald*, 5 February 2009 (Lexis-Nexis Academic).

13 February 2009
The Taepodong-2, North Korea's most advanced long-range missile, is being transported to the Musudan-ni launch site on the eastern seaboard. The missiles have not yet been sighted near the launch pad, but a test-firing is believed possible later this month.
—Kwang-Tae Kim, "Report: N. Korea Could Test-Fire Missile this Month," *The Associated Press*, 13 February 2009 (Lexis-Nexis Academic).

24 February 2009
North Korea announces plans to launch its Kwangmyongsong-2 communications satellite via an Unha-2 (Taepodong-2) delivery rocket from the Musudan-ni launch site in the near future, ostensibly as a development of North Korea's space program. The announcement raised concerns among critics, who believe that the move may be a front for continued missile testing following a failed test of the long-range Taepodong-2 in 2006. Officials from South Korea and the United States have stated that the launch would constitute a violation of United Nations Security Council Resolutions 1695 and 1718.
—Choe Sang-Hun, "Worry of a North Korean Missile Test," *The New York Times*, 24 February 2009.

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13 March 2009
With the North Korean satellite launch approaching, Japan declares its right to "intercept any object if it is falling towards Japan." As the Taepodong-2's spent stages are expected to fall outside of Japanese territory, the right would probably only be exercised in the event of a serious failure. The declaration comes after the U.S. Pacific Command proclaimed its readiness to shoot down the Taepodong-2 if it appeared to be a missile instead of a satellite. North Korea has stated that shooting down the launch vehicle would be an act of war.
—Choe Sang-Hun, "Japan Warns North Korea Over Rocket Lauch," *The New York Times*, 13 March 2009; Martha Raddatz and Lauren Sher, "U.S. Ready to Respond to N.Korea Missile," *ABC News*, 26 February 2009.

5 April 2009
The Kwangmyongsong-2 satellite is launched with a three-stage Taepodong-2 delivery vehicle. The satellite passes over Japan without incident, but radar contact is lost over the Pacific Ocean. Following a malfunction, the satellite fails to achieve orbit and splashes down after traveling roughly 3,100 km. Despite the crash, North Korea immediately claims success.
—Jae-soon Chang and Kelly Olsen, "Analysts: Rocket Gives N. Korea New Bargaining Chip," *Associated Press*, 6 April 2009.

25 May 2009
The DPRK test-fires three short-range surface to air missiles a few hours after conducting its second nuclear test. The missiles of 130km range were launched from the Musudanri missile base in the Southern Hamkyung Province.
—"DPRK Test-Fires Short-Range Missile After Nuclear Test," Xinhua General News Service, 25 May 2009, in Lexis-Nexis, www.lexisnexis.com; "DPRK Test Fires Two More Short-Range Missiles," Xinhua General News Service, 25 May 2009, in Lexis-Nexis, www.lexisnexis.com.

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2 June 2009
North Korea appears to be preparing to test an intercontinental ballistic missile. The missile appears to be a longer version of the Taepodong-2 rocket launched on April 5, 2009. Satellite images indicate the North Koreans are transporting the missile by train to the newly developed Dongchang-ri facility on the DPRK west coast, 35km south of China. An estimated launch date is still unclear.
—Eric Talmadge, "North Korea Readies Long-range Missile Test," Associated Press World Stream, June 2, 2009, in Lexis Nexis, www.lexis-nexis.com; "Roundup: Report: North Korea Assembling Missile at Launch Site," Deutsche Presse-Agentur, June 3, 2009, in Lexis Nexis, www.lexis-nexis.com.

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Lexis Nexis, www.lexis-nexis.com; "Roundup: Report: North Korea Assembling Missile at Launch Site," Deutsche Presse-Agentur, June 3, 2009, in Lexis Nexis, www.lexis-nexis.com.

12 June 2009
The UN Security Council passed resolution reprimanding North Korea for the May 25 nuclear and May 26 missile tests. The resolution imposes new sanctions, expands arms embargos, and authorizes ship searches on the high seas. The resolution aims to deprive North Korea of the means for financing its nuclear and missile programs, and bans DPRK arms exports, especially missiles. The resolution calls on countries to refrain from providing financial support to industries that could contribute to North Korea's nuclear and ballistic missile programs.
—Edith M. Lederer, "UN Imposes Tough New Sanctions on North Korea," Associated Press, June 12, 2009, in Lexis Nexis, www.lexis-nexis.com.

16 June 2009
According to media reports, the Dongchang-ri long range missile launch pad on the northwest coast has been completed. The new launch pad is 50 meters high and capable of launching intercontinental ballistic missile measuring 40 meter or longer. Previous ICBM launches were conducted at the Musudan-ri launch pad and only tested missile measuring 32 meters. However, a missile launch did not imminent. No missiles have been brought to the launch pad and radar has not been set up.
—"North Korea Readies New Missile Launch Pad: newspaper," Agence France Presse, June 16, 2009, in Lexis Nexis, www.lexis-nexis.com.

17 June 2009
North Korea may have transported another long range ballistic missile to the Musudan-ri launch site on the DPRK east coast. U.S. and ROK official are considering if DPRK will launch two long range ballistic missiles from the both launch sites, or if this is an elaborate diversion to mislead watchers. DPRK is believed to posses three to four ICBM, and may be stockpiling additional missiles in the research center in Sanumdong.
—"N. Korea Missile Possibly at Launch Site in Musudan-ri: Report," Japan Economic Newswire, June 17, 2009, in Lexis Nexis, www.lexis-nexis.com.

2008

9 January 2008
The Korean Central News Agency (KCNA), a North Korean state-run news source, accuses Japanese lawmakers of revising guidelines for the operation of missile defense systems as being aimed to allow Japan to preemptively strike North Korea. Japan recently revised its guidelines so that the defense minister can now directly issue orders to intercept missiles using missile defense systems, instead of waiting for the prime minister to order missile defense operations. KCNA repeated an often-written complaint that Japan is constructing a fictitious "missile threat" from North Korea to establish military primacy in the region.
—KCNA, "North Korean Party Paper on Japan's Revision of Guidelines for 'Missile Shield,'" in BBC Monitoring Asia Pacific, 9 January 2008, in Lexis-Nexis, web.lexis-nexis.com.

24 January 2008
An updated CRS Report for Congress on the "North Korean Ballistic Missile Threat to the United States" is released, arguing, as it did in 2007, that North Korea is developing at least two new types of ballistic missiles based on liquid-fueled, Soviet R-27 missile technology. The report estimates that that the Musudan, the land-based version of the missile, has a range of 2,500 — 3,200 km, and the unnamed sea-based version of the R-27 has a range of at least

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2,500 km. The report concludes that North Korea "may be actively pursuing a sea-based ballistic missile capability." Anonymous U.S. officials cited within the report contend that North Korea may be developing the new sea-based ballistic missile to threaten the continental United States, while other experts note that North Korea lacks a submarine that could carry such a missile within striking distance of the continental United States.
—Steven Hildreth, "North Korean Ballistic Missile Threat to the United States," *CRS Report for Congress*, Updated 24 January 2008, www.fas.org.

25 February 2008
KCNA decries the U.S. effort to shoot down USA 193, a nonfunctioning American spy satellite on February 20 using a modified Navy Standard Missile (SM)-3 as an attempt to gain military superiority in space. The news agency alleged that the United States was attempting to prevent other countries from weaponizing outer space, and that shooting down the satellite could spark an arms race in space.
—KCNA, "North Korea Says U.S. Trying to Start 'Arms Race' in Space," in BBC Monitoring Asia Pacific, 25 February 2008, in Lexis-Nexis, web.lexis-nexis.com.

2 March 2008
The spokesman for the P'anmunjom Mission of the Korean People's Army gave a radio address denouncing an annual, joint U.S.-South Korean military exercise known as "Key Resolve." The spokesman argued that the United States and South Korea were fabricating a nuclear and missile threat from North Korea to justify the exercise, but warned that North Korea would prepare a "counterstrike" against the U.S. and South Korean forces if the military exercise turned into an offensive attack against North Korea. The BBC Monitoring Asia Pacific service noted that officials from the P'anmunjo'm Mission also issued statements in response to joint U.S.-South Korean military exercises in 2006 and 2007.
—Central Broadcasting Station, "North Korean Military Warn of 'Counterstrike' Against South-U.S. Exercises," in BBC Monitoring Asia Pacific, 2 March 2008, in Lexis-Nexis, web.lexis-nexis.com.

3 March 2008
An unclassified U.S. intelligence report covering WMD acquisition patterns for foreign countries concludes that North Korea continued attempts to export missiles to other states during 2006. The report notes that North Korea maintained robust missile supply relationships with Iran and Syria, but that two United Nations Security Council Resolutions banning the sale and transfer of missiles to and from North Korea have impeded many countries from buying North Korean missiles.
—U.S. Director of National Intelligence, Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, 1 January to 31 December 2006," Unclassifed March 3, 2008, Uploaded 2 July 2008, www.dni.gov.

28 March 2008
According to Yonhap News Agency in South Korea, North Korea test-fired three short-range missiles off of its west coast, into the West Sea. South Korean officials posit that the missiles were either P-20 Styx or SY-1anti-ship cruise missiles. South Korean officials downplayed the incident, commenting that the missile tests were part of a routine military training exercise. Yet analysts within South Korea posited that the tests were conducted in reaction to the tough stance that newly elected South Korean president Lee Myung-bak has taken towards North Korea. Lee Myung-bak has criticized North Korea for its human rights records and implored the country to move forward in nuclear disarmament talks. This was North Korea's first missile test since June 27, 2007, when it fired three KN-02 short-range ballistic missiles into the Sea of Japan.
—Ching-Ching Ni, "North Korea Test-Fires Missiles," *Los Angeles Times*, 28 March 2008; Blaine Harden, "North

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Korea Test-Fires Missiles in Ongoing Show of Truculence," *Washington Post*, 29 March 2008; Richard Spencer, "Americans Condemn N Korean Missile Test," *Daily Telegraph*, 29 March 2008, all in Lexis-Nexis, web.lexis-nexis.com; Joseph Bermudez, "North Korea Carries out ASCM Test Exercises," *Jane's Defense Weekly*, 1 April 2008, www.janes.com; Arthur Bright, "North Korea Test-Fires Missiles After South Korea Adopts Tougher Line," *Christian Science Monitor*, 28 March 2008, www.csmonitor.com.

11 April 2008
The Japanese government voted to extend sanctions against North Korea until mid-October 2008. The sanctions were originally imposed on North Korea after it conducted missile tests in July 2006 and tested a nuclear device in October 2006. The extended sanctions prohibit ships with North Korean flags from entering Japanese ports and ban all North Korean imports into Japan. Speaking to the press, Japanese Foreign Minister Masahiko Komura stated that North Korea must demonstrate a willingness to dismantle its nuclear weapons and missile programs and resolve the past abductions of Japanese citizens before Japan will lift the sanctions.
—Reiji Yoshida, "Cabinet Extends North Sanctions," *Japan Times*, 12 April 2008, in Lexis-Nexis, web.lexis-nexis.com.

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18 May 2008
KCNA denounces U.S. plans to export fifty AIM-9X short-range air-to-air missiles to South Korea. The news agency accused the United States of arming South Korea to help U.S. forces invade North Korea.
—KCNA, "North Korean Agency Criticizes U.S. Missile Exports to South," in BBC Monitoring Asia Pacific, 18 May 2008, in Lexis-Nexis, web.lexis-nexis.com.

30 May 2008
According to Yonhap, a South Korean news agency, North Korea test-fired three short-range missiles into the West Sea. The missiles were believed to be short-range Styx missiles, made from Soviet technology, which have a range of 45 km. Yonhap reported that two of the three missiles misfired during the test. The South Korean Defense Ministry stated that the missile tests were part of routine military exercises.
—Yonhap News Agency, "Two of Three North Korean Short-Range Missiles Said Misfired," in BBC Monitoring Asia Pacific, 31 May 2008, in Lexis-Nexis, web.lexis-nexis.com.

8 August 2008
A [U.S.] Congressional Research Service report states that North Korea (in addition to Iran) purchased an unknown number of portable anti-aircraft Stinger missiles when the Soviet-backed Najibullah regime in Afghanistan collapsed in the early 1990s. The United States has failed in its efforts to buy back the 2,000 Stingers it had provided to Afghanistan's mujahideen.
—"US Report Says North Korea Brought Missiles from Afghanistan in 1990s," BBC Monitoring Asia Pacific, 19 August 2008, in Lexis Nexis, web.lexis-nexis.com.

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—"US Report Says North Korea Brought Missiles from Afghanistan in 1990s," BBC Monitoring Asia Pacific, 19 August 2008, in Lexis Nexis, web.lexis-nexis.com.

31 August 2008
North Korea celebrates the tenth anniversary of the launch of its first "self-claimed" rocket, the Taepodong-1, and claims it can do so again at any time. The Taepodong-1, derived from the Soviet Scud missile, is a three-stage intermediate-range missile that can be used as both a nuclear delivery system and a space launch vehicle.
—"Pyongyang Radio Says North Korea Able to Launch Satellites at Any Time," BBC Monitoring Asia Pacific, 31 August 2008, in Lexis Nexis, web.lexis-nexis.com.

11 September 2008
The Associated Press reports that North Korea has secretly built a second long-range missile base in Pongdong-ni, on the west coast (the first is in Musadan-ni base, on the east coast). In a clear indication of the continuation of its ballistic missile program, North Korea began construction of the facility about eight years ago. As the site is currently capable of conducting tests of long-range missiles, it could be used to launch a missile carrying a warhead. Experts are concerned that launches from the new site would be difficult to detect because of its hidden location among hills near the Chinese border. In spite of a failed 2006 launch of North Korea's intercontinental ballistic missile, the Taepodong-2, from Musudan-ni, this new site would allow more frequent and extensive testing of the Taepodong-2. The new site would enable North Korea to launch three to four times a year.
—"NK Has 2nd Long-Range Missile Site," Korea Times, 11 September 2008, in Lexis Nexis, web.lexis-nexis.com.
"North Korea Builds Nuclear Missile Site," The Daily Telegraph, 12 September 2008, in Lexis Nexis, web.lexis-nexis.com.

16 September 2008
North Korea conducts an engine test at its new long-range missile test site in Dongchang-li, North Pyongan province. It is assumed the test is of the Taepodong-2 (6,700km range) missile; during such a test, the rocket engine is laid on its side and ignited to test performance. The test confirms that the new launch site is already partially operational.
—"North Korea Reportedly Conducts 'Engine Ignition Test' for Missile," BBC Monitoring Asia Pacific, 16 September 2008, in Lexis Nexis, web.lexis-nexis.com.

18 December 2008
Admiral Timothy Keating of the U.S. Pacific Command states that North Korea possesses long-range ballistic missiles capable of reaching both Hawaii and the mainland United States.
—"US Military Says North Korea Possesses Missiles Capable of Reaching USA," BBC Monitoring Asia Pacific, 19 December 2008, in Lexis Nexis, web.lexis-nexis.com.

18 December 2008
Admiral Timothy Keating of the U.S. Pacific Command states that North Korea possesses long-range ballistic missiles capable of reaching both Hawaii and the mainland United States.

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—"US Military Says North Korea Possesses Missiles Capable of Reaching USA," BBC Monitoring Asia Pacific, 19 December 2008, in Lexis Nexis, web.lexis-nexis.com.

2007

3 January 2007
An updated U.S. Congressional Research Service report on the "North Korean Ballistic Missile Threat to the United States" contends that North Korea is developing at least two new medium or intermediate range ballistic missiles – a land- and sea-based version of the same system -- probably based on the Soviet R-27 submarine-launched ballistic missile. The report estimates that, since the R-27 is a proven design, North Korea would probably be able to develop and deploy the updated missiles without extensive testing. The report concludes that, if North Korea's new missiles are indeed based on the R-27, that they will probably be more accurate and able to deliver payloads over longer ranges than other missiles in North Korea's arsenal.
—Steven Hildreth, "North Korean Ballistic Missile Threat to the United States," *CRS Report for Congress*, Updated 3 January 2007, http://handle.dtic.mil.

16 January 2007
North Korea's official Korean Central News Agency (KCNA) berates the South Korean military for its construction of the Cheju naval base, which the news agency views as part of a larger effort to establish a U.S. missile defense over U.S. military bases in the Republic of Korea.
—Korean Central News Agency, "North Korea Urges South 'Warhawks' to Stop 'Dangerous' Move over Naval Base,", in BBC Monitoring Asia Pacific, 16 January 2007, in Lexis-Nexis, http://web.lexis-nexis.com.

29 January 2007
U.S. Army Brig. Gen. Patrick O'Reilly, the Director of the U.S. Missile Defense Agency, states that Iran and North Korea are jointly developing long-range ballistic missiles. He notes that the two countries are both trying to build ballistic missiles with longer-ranges, with North Korea testing the Taepodong system in July 2006, and Iran developing a space launch vehicle. According to one media source, O'Reilly's remarks constitute the first time a U.S. Defense Department official has publicly discussed missile cooperation between Iran and North Korea.
—Jin Dae-Woong, "Concerns Grow over Missile Links Between N. Korea, Iran," *Korea Herald*, 29 January 2007, in Lexis-Nexis, http://web.lexis-nexis.com; Bill Gertz, "How the 'Axis' Seeks the Killer Missile," *Washington Times*, 30 January 2007, in Lexis-Nexis, http://web.lexis-nexis.com.

28 February 2007
John Bolton denounces the U.S. administration for attempting to resolve North Korea's nuclear activities within the Six-Party framework. Bolton alleges that resuming talks with the North Koreans would weaken the diplomatic pressure that the United States and other involved countries such as China and Japan, had worked to place on the Kim Jung Il regime after North conducted ballistic missile tests in July 2006. Bolton advocates further isolation of North Korea, instead of engagement.
—Kyodo News Agency, "Nuclear Deal Rewards North Korea for Bad Behaviour – Ex-U.S. Envoy to UN,", in BBC Monitoring, 28 February 2007, in Lexis-Nexis, http://web.lexis-nexis.com.

10 April 2007
The government of Japan votes to extend sanctions on North Korea for another six months, since no progress was being made over the regime's denuclearlization or in resolving the abductions of Japanese nationals issue. Limited

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sanctions were first imposed on North Korea in the fall of 2006, after it tested seven ballistic missiles in July 2006, and then tested a low-yield nuclear device in October 2006. The extended sanctions prohibit ships with North Korean flags from entering Japanese ports and ban all North Korean imports into Japan.
—"Japan Extends Sanctions on North Korea," *Radio Free Europe/Radio Liberty*, 10 April 2007, www.globalsecurity.org.

25 April 2007
North Korea reveals three new types of missiles during a military parade commemorating the 75th anniversary of the establishment of the Korean People's Army (KPA). David Isby of *Jane's Missiles and Rockets* observes that this event marked the first time in 15 years that North Korea had included missiles in a military parade. One of the new missiles was a Musudan intermediate-range ballistic missile, which has an estimated range of 2,5000 - 5,000 km. Japanese, American, and South Korean intelligence officials have named the new missile after the military base where the missile was first identified. The Musudan is based on the R-27, a Soviet submarine-launched ballistic missile. According to *Jane's Defence Weekly*, North Korea's new KN-02 surface-to-surface missile, which has an estimated range of 120 km, was also displayed during the parade. The KN-02 is based on the Soviet SS-21 short-range missile technology, which North Korea received from Syria during the early 1990s. A Nodong missile with an extended range of 1,300 km was also on display during the parade.
—Jung Sung-ki, "Pyongyang Showcases New Ballistic Missile," *Korea Times*, 28 April 2007; "North Korea's New Ballistic Missile Called 'Musudan': Sources," Kyodo News Agency , 14 May 2007; "New DPRK Missile has 5,000-km Range," *Daily Yomiuri*, 17 May 2007; Joseph Bermudez, "Japan Reveals Name of North Kora's R-27 IRBM," *Jane's Defence Weekly*, 23 May 2007, all in Lexis-Nexis, http://web.lexis-nexis.com; Joseph Bermudez, "North Korea Takes Wraps off KN-02," *Jane's Defense Weekly*, 9 May 2007, www.janes.com; David Isby, "North Korea Parades Latest Missiles," *Jane's Missiles and Rockets*, 1 June 2007, www.janes.com; Daniel Pinkston, "North Korea Displays Ballistic Missiles during Parade, Some for First Time," *WMD Insights*, June 2007, http://wmdinsights.com.

25 May 2007
At about 9:00 AM local time, North Korea test-fires one short-range, anti-ship cruise missile off of the east coast of the country. The missile is fired from a military base in South Hamgyong Province, into the Sea of Japan. Joseph Bermudez of *Jane's Defence Weekly* hypothesizes that, based on its range, the missile was either a "Seersucker" CSSC-3, or an enhanced version of the "Seersucker" known as the KN-01. The KN-01 has an estimated range of up to 200 km. South Korean press reports classified the missile as a KN-01. This was North Korea's first missile test 4 - 5 July 2006, when North Korea tested seven missiles over two days. U.S. officials state that the test was part of a routine military exercise. However, media reports note that the missile test was timed to deliver a political signal to South Korea. The missile test occurred several hours before South Korea conducted a launch ceremony for its first Aegis destroyer. According to analyst Daniel Pinkston, the new ship will enhance South Korea's ability to track and target air and sea-borne targets.
—Yonhap News Agency, "South Korean 'Intelligence Source': North Test-Fired One Short-Range Missile," in BBC Monitoring Asia Pacific, 26 May 2007, in Lexis-Nexis, http://web.lexis-nexis.com; Joseph Bermudez, "North Korea Tests Short-Range Missile," *Jane's Defence Weekly*, 6 June 2007, www.janes.com; Daniel Pinkston, "North Korea Tests Anti-Ship Cruise Missiles as South Korea Launches First Aegis Destroyer and New Attack Submarine," *WMD Insights*, July/August 2007, http://wmdinsights.com.

4 June 2007
North Korea's Korean Central News Agency (KCNA) denounces a planned Japanese defense white paper, accusing the Japanese Ministry of Defense of constructing a ballistic "missile threat" from North Korea to serve the Japanese government's own "sinister political and military purposes." The news agency went on to accuse Japan of

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fabricating a missile threat from North Korea and developing missile defense systems to help prepare for the joint invasion of North Korea, helped by Japan and the United States.
—Korean Central News Agency, "N Korea Blasts Japan's 'Defense White Paper," Says UN Role 'Invasion' Excuse,", in BBC Monitoring Asia Pacific, 4 June 2007, in Lexis-Nexis, http://web.lexis-nexis.com.

7 June 2007
North Korea flight-tests two short-range, anti-ship cruise missiles off the west coast of the country into the Yellow Sea. An official from the South Korean Ministry of Defense suggested that the missiles were either the CSSC-3 "Seersucker" missiles, or KN-01 missiles. The KN-01 is an improved version of the Chinese-made Seersucker missile with an estimated range of 160 – 200 km. South Korean sources also speculate that North Korea tested a KN-01 on May 25, 2007. The missile tests were conducted during a weeklong military exercise to simulate defending the North Korean coasts. However, Joseph Bermudez of *Jane's Defence Weekly* argued that the missile tests were timed to send a "political message" to world leaders attending an annual Group of Eight (G-8) summit in Germany demonstrating North Korea's military capabilities. Japanese Prime Minister Shinzo Abe responded to the missile tests by chastising North Korea for violating United Nations Security Council Resolution 1718, which calls on North Korea to cease the development of ballistic missiles.
—Joseph Bermudez, "North Korea Conducts Second Coastal-Defence Missile Test in 2007," *Jane's Defence Weekly*, 20 June 2007, www.janes.com; Joseph Bermudez, "Further Details Emerge of North Korean Ballistic Missiles," *Jane's Defence Weekly*, 14 November 2007, www.janes.com; "Missiles DPRK Launched Were Ballistic," *Daily Yomiuri*, 7 July 2007, in Lexis-Nexis, http://web.lexis-nexis.com.

19 June 2007
North Korean newspaper *Nodong Sinmun* criticizes the United States for three planned missile defense tests during the summer of 2007. The newspaper purports that U.S. efforts to develop a missile defense shield and to deploy missile defense systems in Japan serve as evidence that the United States plans to use its missile defenses to conduct preemptive missile attacks against other countries, with the goal of "assuring military supremacy" in Asia.
—Nodong Sinmun, "North Korea Paper Condemns U.S. Missile Defense Shield, Interceptor Tests," in BBC Monitoring Asia Pacific, 19 June 2007, in Lexis-Nexis, http://web.lexis-nexis.com.

27 June 2007
North Korea launches three short-range ballistic missiles off the east coast of the country, into the East Sea. According to Japanese intelligence sources, the three missiles were KN-02 short-range, anti-ship missiles. KN-02 missiles are updated versions of Soviet SS-21 missiles, with an estimated range of 100 – 120 km. Officials from the South Korean Defense Ministry confirmed that the missiles had an approximate range of 100 km, yet *The Daily Yomiuri* newspaper in Toyko estimated the missiles' range to be 120 km. Based on this short range, two U.S. defense officials, Commander General Burwell Bell of the Forces of Korea, and Richard Lawless, then the U.S. deputy undersecretary of defense for Asia and Pacific security affairs, speculated that the new missiles were designed to target South Korea, and not Japan. Gordon Johndroe, the spokesperson for the U.S. National Security Council, condemned North Korea for testing the missiles "during a delicate time in the six-party talks." Japanese Prime Minister Shinzo Abe again responded to the missile tests by condemning North Korea for violating United National Security Council Resolution 1718, which calls on North Korea to abandon the development of ballistic missiles.
—Yonhap News Agency, "South Korea Says Recently-Launched North Missiles 'In Development Stage,'" in BBC Monitoring Asia Pacific, 28 June 2007; Kyodo News Agency, "Japan PM Slams North Korea's Reported Missile Launches," in BBC Monitoring Asia Pacific, 28 June 2007; Kyodo News Agency, "U.S. 'Deeply Troubled' by Reported North Korean Missile Tests," in BBC Monitoring Asia Pacific, 28 June 2007; "Missiles DPRK Launched were Ballistic,"

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The Daily Yomiuri, 7 July 2007; Choson Ilbo, "North Korean missiles 'Clearly Target South Korea, not Japan – Paper,", in BBC Monitoring Asia Pacific, 9 July 2007, all in Lexis-Nexis, http://web.lexis-nexis.com.

18 September 2007
The U.S. Treasury Department placed new sanctions on a North Korean arms exporter, Korea Mining and Development Corporation (KOMID), for its continued involvement in the proliferation of ballistic missiles. Specifically, the sanctions were imposed in reaction to the transfer of North Korea's Nodong, medium-range ballistic missile, to Iran. KOMID has been the target of U.S. financial sanctions six times in the past, and is considered to be the preeminent exporter of ballistic missile technology in North Korea. Two Iranian firms were also sanctioned for their involvement in arms transfers.
—Yonhap News Agency, "US Set to Announce Additional Sanctions on North Korea Entities," in BBC Monitoring, 26 September 2007, in Lexis-Nexis, http://web.lexis-nexis.com; Bill Gertz, "Bush Hits Iran, N. Korea with Arms Sanctions," *The Washington Times*, 26 September 2007, in Lexis-Nexis, http://web.lexis-nexis.com.

3 October 2007
The six countries involved in the Six-Party Talks issue a statement on the implementation of "Phase Two" of North Korea's denuclearization, wherein the parties give North Korea a target deadline of December 31, 2007 to disable its three main nuclear facilities at Yongbyon and provide a complete declaration of its nuclear activities. In exchange for these actions, the statement implies that the United States will begin the process of removing North Korea from its list of state sponsors of terrorism, as long as North Korea fulfills its obligations under "Phase Two." North Korea has been on the U.S. State Department's list of state sponsors of terrorism since 1988, after allegedly bombing a Korean Air Lines flight in November 1987. North Korea has not been explicitly linked to any terrorist acts since that incident. However, its transfers of missile technology to countries such as Iran, Syria, Pakistan, and Yemen have kept North Korea on the U.S. State Department's list since the late 1980s.
—Larry Niksch, "North Korea: Terrorism List Removal?" *CRS Report for Congress*, Updated 14 January 2008, www.fas.org; Vikaas Sharma, "State Sponsors: North Korea," Council on Foreign Relations website, Updated 28 June 2008, www.cfr.org.

9 October 2007
The Japanese cabinet approved a six-month extension of sanctions against North Korea. The sanctions package bans all imports from North Korea into Japan, and forbids ships flying North Korean flags from entering Japanese ports. The measures were originally after North Korea test-fired ballistic missiles in July 2006, and tested a nuclear device in October of that year.
—Kyodo News Agency, "Japanese Cabinet Approves Extension of North Korea Sanctions for Six Months," in BBC Monitoring Asia Pacific, 9 October 2007, in Lexis-Nexis, http://web.lexis-nexis.com.

11 October 2007
South Korean officials from the National Assembly's Defense Committee alleges that North Korea has developed a new type of solid-fueled, short-range missile, known as the KN-02, which was tested on June 27, 2007. This allegation was reported by the South Korean newspaper *JoongAng Ilbo*, and was based on intelligence data provided by the South Korean Joint Chiefs of Staff. A member of the South Korean parliament, representing the Grand National Party, also gave the uncorroborated estimate that the KN-02 could carry a chemical weapon, and could reach the Kyonggi Province of South Korea, which includes the capital of Seoul.
—JoongAng Ilbo, "North Korea Develops Short-Range Chemical Warhead Capable Missile – Paper," in BBC Monitoring Asia Pacific, 11 October 2007, in Lexis-Nexis, http://web.lexis-nexis.com.

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21 November 2007
Writing in Jane's Missiles and Rockets, Joseph Bermudez provides new details about North Korea's ballistic missile programs. Citing information circulated by the South Korean Ministry of National Defense, Bermudez notes that North Korea's KN-01 anti-ship cruise missile has been tested 10 times between February 2003 and June 2007, including twice during 2007, on May 25 and June 7. The South Korean Ministry of Defense has stated that the new KN-02 missile has been tested 12 times since 2004, including three tests during May and June of 2007. Bermudez argues that the KN-02 has already attained initial operational capability, and is likely to achieve full operational status during 2008.
—Joseph Bermudez, "Further Details Emerge of North Korean Ballistic Missiles," Jane's Missiles and Rockets, 1 December 2007, www.janes.com.

2006

9 March 2006
A U.S. Government spokesperson confirms the report that North Korea fired two short-range missiles the previous day, March 8. The test shots were launched within North Korean territory in the direction of China and were first reported by a Japanese news agency. The test-firing occurred while the multilateral Six Party Talks were in their fifth month of inactivity due to North Korea's refusal to participate until the U.S. lifts its financial sanction on North Korean companies considered by the U.S. government to be engaging in illegal activities.
—Onishi, Norimitsu,"US Confirms Test of Missiles Was Conducted by North Korea" *New York Times*, 9 March 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

15 March 2006
Admiral Timothy Keating, commander of the U.S. Northern Command, testifies at the Senate Armed Services Committee that the United States was aware of North Korea's plans to launch missiles and that the U.S. monitoring system effectively confirmed the launch. According to General Burwell Bell, chief of the U.S. Forces Korea, the missiles illustrate North Korea's "quantum leap forward" in its technology having improved both the accuracy and mobility of its missile systems.
—"Admiral Said US Knew in Advance of North Korea's Missile Launch" *Yonhap* News Agency, 15 March 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

22 March 2006
In a special report on North Korean Ballistic Missile Capabilities, the Monterey Institute's Center for Nonproliferation Studies confirms that "North Korea does not have an operational missile that can strike the United States but "would probably require several years and additional flight-tests to develop a reliable ballistic missile system capable of delivering a nuclear warhead to the continental United States."
—"CNS Special Report on North Koran Ballistic Missile Capabilities," James Martin Center for Nonproliferation Studies, March 22, 2006; Sanh-Hun Choe, "Governments Alert to Possible North Korean Missile Activity," *The International Herald Tribune*, 20 May 2006,in Lexis-Nexis, http://web.lexis-nexis.com.

20 May 2006
U.S., South Korean and Japanese government officials report that North Korea is developing its ballistic missile arsenal by working on the Taepodong-2 missile, but that there are "no reliable signs that the North intends to test the missile soon." Representatives in Japan's ministry of Defense acknowledge the arrival of a missile to a North Korean site but "do not feel there is imminent danger of a missile launch'' as reported by Japan's chief cabinet

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secretary, Shinzo Abe. The Taepodong-2 ballistic missile has a range of more than 6,700 kilometers and a different and improved version of the Taepodong-2 is estimated to have a range of 15,000 and the capability to reach the U.S. mainland.
—Sanh-Hun Choe, "Governments Alert to Possible North Korean Missile Activity," *The International Herald Tribune*, 20 May 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

20 June 2006
Ri Pyong Dok, an official from North Korea's foreign ministry, announces that North Korea has no promises to keep when it comes to conducting missile tests, stating that a missile test would not be ''bound by any statement such as the Pyongyang declaration'' and that the topic is a matter of autonomy. North Korea signed a moratorium in 2002.
—Cooper, Helen and Michael R. Gordon, "North Korea Disavows its Moratorium on Testing of Long-Range Missiles" The *New York Times*, 21 June 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

20 June 2006
According to American officials, North Korea completes its fueling of a long-range ballistic missile. Intelligence from U.S. satellite photographs relay that North Korea is preparing for the detonation at a remote site on its eastern coast. The photographs depicted booster rockets that were attached to a launching pad and liquid-fuel tanks that were fitted to a missile. The missile is believed to be a Taepodong-2 two-stage version which is capable of reaching the United States (Alaska or Hawaii). In an effort to avoid misunderstanding, U.S. State Department officials telephoned DPRK diplomats at the DPRK mission to the UN in New York and warned them against the launching. Should the missile launching become a reality, U.S. experts believe that North Korea claim that the test is part of a program to put satellites in orbit.
—Cooper, Helen and Michael R. Gordon "North Korea Apparently Fuels Long Range Missile Test" *The International Herald Tribune*, 20 June 2006,in Lexis-Nexis, http://web.lexis-nexis.com.

22 June 2006
Former defense secretary, William Perry, urges President Bush to launch a pre-emptive strike against North Korea's long-range ballistic missile which it is reportedly getting ready to launch. Perry and co-author Ashton B. Carter advise using a submarine-launched cruise missile carrying a high-explosive warhead to destroy the missile before it can be launched. When queried about the likelihood of the United States attempting to shoot down a missile launched by the DPRK, J. Thomas Schieffer, the U.S. Ambassador to Japan, answers "we have greater technical means of tracking it than we had in the past, and we have options that we have not had in the past." On a parallel note, Lee Jong-Seok, South Korea's unification minister, was quoted as suggesting that all ROK investment and humanitarian aid to the DPRK will be halted should the DPRK conduct a missile test.
—Kessler, Glen and Anthony Faiola, "Former Defense Officials Urge U.S. Strike on North Korean Missile Site" *Washington Post*, 22 June 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

4 July 2006
According to U.S. officials, North Korea launches at least one long-range Taepodong-2 missile and at least four other smaller-range missiles. The Taepodong-2 missile, which has the capability of reaching Alaska, landed in the Sea of Japan/East Sea within one minute of it launching. U.S. homeland security complexes were on high alert but did not have to react since the long-range missile plunged into the Sea of Japan, four hundred miles off the Japanese coast. The shorter-range missiles, believed to be various types of Scud missiles, also landed in the Sea of Japan. The exact number of missiles launched is disputed, with U.S. officials suggesting five or six in all, and South Korean officials estimating that 10 had been fired. U.S. officials stated that the missile test is not considered an

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immediate threat to the United States, but that there will be repercussions. The Six-Party talks have yet to reconvene following North Korea's refusal to return to the talks in November 2006.
—Stockman, Farah, "Defiant North Korea Tests Missiles; Launching Stirs Diplomatic Furor," *Boston Globe*, 5 July 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

13 July 2006
Inter-Korean cabinet-level talks end one day in advance after the parties fail to reach an agreement. South Korea demanded that North Korea terminate its missile tests and return to negotiations regarding North Korea's nuclear program. North Korea responded to the South's commands by demanding more economic aid and argued that North Korea's ''army-first'' policy of increasing its defense capacity 'promotes the security for the South and benefits the general public of the South.' North Korea requested that the South provide 500,000 tons of rice in food aid, as well as raw materials for shoes and textiles however South Korea bluntly refused the request.
—Sang-Hun, Choe, "Korean Talks Collapse, with North Rejecting Demands," *International Herald Tribune*, 14 July 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

16 July 2006
The United Nations Security Council (UNSC) unanimously votes for a resolution condemning North Korea's latest missile deployment and overall weapons program. The three-pronged resolution demands that the DPRK: 1) stops producing and testing missiles; 2) halt future launches; and 3) unconditionally return to six-party negotiations regarding the DPRK's nuclear weapons program. Forty-five minutes after the approval of the resolution, North Korea's U.N. Ambassador Pak Gil Yon, stated that North Korea "completely rejected" the resolution and that the DPRK would pursue its missile launches to reinforce its self-defense and to serve as a warning.
—Oda, Takashi, "Political Pulse; Stepping Up to the U.N. Plate," *The Daily Yomuiri*, 21 July 2006, in Lexis-Nexis, http://web.lexis-nexis.com; Sung-ki, Jung, "Missile Activity Seen in North Korea" *Korea Times*, 18 September 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

9 August 2006
Japan's Deputy Chief Cabinet Secretary, Seiji Suzuki, confirms that six of the seven missiles launched by North Korea on 5 July landed accurately in their targeted areas in the Sea of Japan/ East Sea. Mid-range Nodong missiles and short-range Scuds met their expected targets, however the seventh missile, the long-range Taepodong, failed to land in its targeted area.
—Kyodo News Agency "Japanese Official Says Six of Seven North Korean Missiles Landed Accurately," in BBC Monitoring, 9August 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

2 September 2006
Pentagon officials announce the successful interception of a rocket fired from Alaska which resembles a warhead from a North Korean rocket. The intercepting rocket was launched from the Vandenberg Air Force Base, in California, in the first full-scale test of the U.S. ballistic missile defense system in over a year. The successful interception occurred in space over the Pacific Ocean, 17 minutes after the target missile was launched from a military compound in Kodiak, Alaska. The event marked the first time that an interceptor was launched from one of the two U.S. operating sites. Previously, tests were carried out at Kwajalein Atoll in the Marshall Islands.
—Cloud, David S., "Officials Call Test a Success after Missile Is Shot Down," *New York Times*, 2 September 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

3 September 2006
South Korean and U.S. intelligence authorities warn of a possible missile test in North Korea after witnessing the

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arrival of numerous large trucks at a North Korean missile launch site in Kitaeryong, Kangwon Province. Intelligence authorities cannot verify whether the trucks are equipped with missile launch pads or not, though some speculate that the trucks themselves may be launch vehicles.
—Sung-ki, Jung, "Missile Activity Seen in North Korea," *Korea Times*, 18 September 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

16 September 2006
South Korean Joint Chiefs of Staff (JCS) announces that North Korea's long-range Taepodong-2 ballistic missile test launch in July failed due to technical issues. After a two-month long analysis of numerous intelligence reports, the chief of the JCS's defense analysis office, Maj. Gen. Park Soo-keun, said "the Taepodong-2 was confirmed to have crashed into a beach on the east coast about 2 kilometers from the launch site in North Hamkyong Province, after traveling for 40 seconds. The Taepodong-2 was the third missile launched during the series of missile tests on July 5. The six missiles were launched from mobile launchers at a site located in Kitaeryong, Kangwon Province.
—Sung-ki, Jung, "Seoul Confirms Failure of Taepodong-2 Missile Test" *Korea Times*, 18 September 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

20 September 2006
In reaction to the series of missile test conducted in July 2006, Japan and Australia implement new economic sanctions on North Korea, targeting companies and individuals linked to North Korea's proliferation efforts. In Japan, the new sanctions reportedly affected 11 companies and 270 banks and Government's spokesman, Shinzo Abe stated that the new sanctions "will demonstrate the resolve of the international community, as well as Japan."
—Cameron, Deborah, "North Korea Hit With New Sanctions in Response to Missile Tests," *Sydney Morning Herald*, 20 September 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

9 October 2006
North Korea conducts an underground nuclear test. The Korean Central News Agency (KCNA) releases a report confirming the nuclear test and states that the test was "conducted with [100 percent] indigenous wisdom and technology." The U.N. Security Council holds an emergency meeting, strongly condemning North Korea's test, and vows to enact a "strong and swift" response.
—"DPRK Successfully Conducts Underground Nuclear Test," KCNA website, 9 October 2006, www.kcna.co.jp
Yonhap News Agency, "UN Security Council 'Strongly Condemns' North Korea Nuclear Test," in BBC Monitoring, 9 October 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

11 October 2006
U.S. President George Bush announces that the United States will increase cooperation with its allies on defense initiatives, namely cooperation on ballistic missile defense. According to the deputy commander of Northern Command, North Korea's missile launches in July 2006 had encouraged the missile defense community to focus on accelerating the U.S. system's readiness to respond to future launches. Pentagon spokesman Bryan Whitman reported that the ballistic missile defense system has been a Defense Department priority, stating "North Korea's record as a weapons proliferator underscores the need for nations to band together and for the United States to have a robust missile defense."
—Bruno, Michael, "In the Name of Deterrence, Missile Defense Boosted," *Aerospace Daily and Defense Report*, 11 October 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

14 December 2006
South Korea's Ministry of Defense announces that it is developing and deploying bombs designed to destroy

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underground nuclear facilities or missile bases, known as bunker busters. The Ministry also announced that they have already employed a ballistic-missile early warning system to respond to North Korean nuclear and missile threats and that they are increasing the emergency defense budget to accommodate new weapons, including GPS-guided bombs known as joint direct attack munitions (JDAM) missiles and improved domestic ground-to-ground Hyunmoo missiles. The project is expected to be completed in 2012 and is anticipated to counter the threat imposed by North Korean nuclear facilities and missile bases above ground.
—"South Korea to Increase Defense against North Missiles," *Choson Ilbo*, 14 December 2006, in Lexis-Nexis, http://web.lexis-nexis.com.

2005

15 February 2005
The Japanese government announces that, until it establishes a missile defense system, it will rely on the the Patriot Advanced Capability 2 (PAC2) deployed by Japan's Self-Defense Force to intercept missiles aimed at Japan. The Diet is revising a bill that would allow "SDF to intercept missiles even if an order has not been issued to mobilize against an armed attack" and to give the director general of the Defense Agency the ability to "issue an order to deal with an emergency in peacetime." The government implemented policy allowing the use of PAC2s following North Korea's announcement on February 10 that it had nuclear weapons in its arsenal.
—"PAC2s to Fill Void Until Missile Defense System Operational," *Daily Yomiuri*, 16 February 2005, in Lexis-Nexis, http://web.lexis-nexis.com.

16 February 2005
According to the South Korean newspaper *Chosun Ilbo*, North Korea has developed a new extended-range Scud missile, referred to as the "Scud-ER (extended range)." The missile has an estimated range of 600-1000km and could reach western Japan or any location in South Korea. The United States is attempting to confirm by using satellite technology if the missile has already been deployed.
—Osedo, Hiroshi, "North Korea Develops Powerful Missile," *Courier Mail*, 16 February 2005, in Lexis-Nexis, http://web.lexis-nexis.com.

3 March 2005
Japanese Prime Minister, Junichiro Koizumi, reports that efforts are being made to reengage North Korea in dialogue about its nuclear program as well as its missile capabilities at the Six-Party Talks and that he believes North Korea will be persuaded "to accept an unconditional resumption" and return to the negotiation without preconditions. North Korea's official media source declared a day earlier that it would only reengage in talks if certain demands were met, including a U.S. apology for Secretary of State Condoleezza Rice's labeling of the country as an "outpost of tyranny". North Korea's Foreign Ministry reminded in a memorandum that Pyongyang has manufactured nuclear weapons and warned that North Korea may carry out long-range missile tests. Japan's chief cabinet secretary, Hiroyuki Hosada, responded to North Korea's statements by confirming that Tokyo has detected no indications of North Korea preparing to launch missiles.
—"Japanese PM Says North Korea Should Discuss Missile Tests at Six-way Talks," Kyodo News Service, 9 March 2005, in Lexis-Nexis, http://web.lexis-nexis.com.

8 March 2005
The commander of U.S. forces in South Korea, Gen. Leon J. LaPorte, announces to the U.S. Senate Armed Services Committee that by 2015 North Korea could manufacture long-range missiles capable of reaching the west coast of

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the United States. According to LaPorte, the missile would "provide North Korea with the capability to directly target the continental United States, or provide the regime's clients with an intercontinental capability that could undermine the stability of other regions." In his testimony, LaPorte also voiced concerns over the production and deployment of North Korea's existing medium-and intermediate-range missiles, stating "the North Korean ballistic missile inventory includes over 500 Scud missiles that can deliver conventional or chemical munitions across the entire peninsula and within the region." LaPorte also referred to a report claiming that North Korea is "preparing to field a new intermediate-range ballistic missile that could reach U.S. facilities in Okinawa, Guam and possibly Alaska."
—Statement of General Leon J. LaPorte before the Senate Armed Services Committee, March 8, 2005, www.shaps.hawaii.edu; "US General Says North Korean Missile to be Operational by 2015," *Yonhap News Agency*, 9 March 2005, in Lexis-Nexis, http://web.lexis-nexis.com.

1 May 2005
North Korea fires an unidentified short-range missile into the Sea of Japan/East Sea according to Japanese government sources. The Japanese Defense Agency could not confirm if the missile was an updated version of a surface-to-surface ballistic missile as suspected.
—"North Korean Missile Fired into the Japan Sea," *Daily Yomiuri*, 2 May 2005, in Lexis-Nexis, http://web.lexis-nexis.com.

17 June 2005
North Korean leader Kim Jong-Il offers to end North Korea's missile program in a meeting with South Korea's unification minister, Chung Song-young, under the condition that the United States normalizes its relations with the DPRK. The offer concerned approximately 100 Rodong (Nodong) missiles and the Taepodong missile. A staff member at the ministry confirmed that Kim Jong-Il "said that he has the intention to scrap the missiles if relations with the U.S. are normalized." During the meeting, Kim also offered North Korea reengagement in the multilateral Six-Party Talks in July with the precondition that the United States "respects" North Korea.
—Fifield, Anna, "North Korea 'Sets Terms for Scrapping Missiles,'" *Financial Times*, 21 June 2005, in Lexis-Nexis, http://web.lexis-nexis.com.

29 June 2005
General Leon J. LaPorte, the top U.S. military commander in South Korea, said that North Korea is believed to be close to acquiring technology to mount nuclear warheads on its Taepodong-II intercontinental ballistic missiles currently under development. He added that "this missile could deliver a nuclear warhead to parts of the United States if a third stage was added."
—Yonhap News Agency, "US General Says North Korea's Nuclear Weapons Do Not Change Power Balance," in BBC Monitoring, 29 June 2005, in Lexis-Nexis, http://web.lexis-nexis.com.

29 June 2005
General Leon J. LaPorte, the top U.S. military commander in South Korea, said that North Korea is believed to be close to acquiring technology to mount nuclear warheads on its Taepodong-II intercontinental ballistic missiles currently under development. He added that "this missile could deliver a nuclear warhead to parts of the United States if a third stage was added."
—Yonhap News Agency, "US General Says North Korea's Nuclear Weapons Do Not Change Power Balance," in BBC Monitoring, 29 June 2005, in Lexis-Nexis, http://web.lexis-nexis.com.

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22 July 2005
Japanese parliament enacts a revised law that enables the chief of the Defense Agency to order missile interceptors in emergency situations without having to get approval from the Prime Minister and the Cabinet, setting the stage for Japan to introduce a missile defense system in 2007. Kyodo reports that Japan's Defense Agency called for expedited procedures for intercept orders saying that ballistic missiles from North Korea can reach Japan in about 10 minutes, leaving no time to wait for approval from the Cabinet and the Security Council of Japan.
—Kyodo News Agency, "Japan's Revised Law Allows Defense Chief to Order Missile-Interception," in BBC Monitoring, 22 July 2005, in Lexis-Nexis, http://web.lexis-nexis.com.

16 October 2005
UK newspaper the *Sunday Telegraph* reports that Russia has been acting as go-betweens with North Korea as part of a deal negotiated between Iran and North Korea in 2003. According to the article, Russia has helped Iran receive clandestine shipments of "top secret missile technology believed to be channeled through Russia."
—Con Coughlin, "Deadly Weapons at Heart of New Great Game Secret Missile Help for Iran 'Has Support of Russian Intelligence,'" *Sunday Telegraph*, in Lexis-Nexis, http://web.lexis-nexis.com.

28 November 2005
German news magazine *Der Spiegel* reports that Iran has offered North Korea a comprehensive economic aid package in return for North Korea's continued assistance on Tehran's missile program. According the article, a senior Iranian official visited Pyongyang during the second week of October and promised "massive, free deliveries of oil and natural gas." In a press conference, Iranian Foreign Ministry spokesman Hamid-Reza Asefi rebuffed such allegations saying that "this news if fundamentally incorrect."
—"Iran Made 'Secret Offer' of Economic Aid to North Korea – German Source," Text of unattributed report entitled "Mullahs helping Stalinists" by German news magazine *Der Spiegel*, 28 November 2008, in BBC Monitoring, in Lexis-Nexis, http://web.lexis-nexis.com; Choe Sang-Hun, "Iran-North Korea Talks May Harden U.S. Stance; Oil is Reportedly Offered for Missile Help," *International Herald Tribune*, in Lexis-Nexis, http://web.lexis-nexis.com; Iran Denies Proposing Deal to NK," *Korea Times*, 29 November 2005, in Lexis-Nexis, http://web.lexis-nexis.com.

2004

January-February 2004
On 29 January, U.S. media outlets report that North Korea is offering to sell Nigeria missile technology, causing Washington to threaten the Nigerian government with economic sanctions. According to Nigerian officials, a visiting DPRK delegation approached them with a memorandum regarding joint development of missile technology and training and manufacturing ammunition. According to press reports, the Nigerian government acknowledged that it is pursuing "ballistic-missile technology for peaceful purposes." On 4 February, a U.S. official confirms that Nigeria ultimately rejected North Korea's missile offer.
—Kralev, Nicholas, "North Korea Offers Nigerian Missile Deal; US Warns Ally to Spurn Pact," *Washington Times*, 29 January 2004, in Lexis-Nexis, http://web.lexis-nexis.com; "World Briefing Africa: U.S. Says North Korea Missile Offer is Rejected," *Reuters*, 4 February 2004, in Lexis-Nexis, http://web.lexis-nexis.com.

29 January 2004
The Japanese parliament approves legislation to impose economic sanctions on North Korea. Although the Diet

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claimed that the legislation was sponsored in an effort to maintain "peace and stability" on the Korean peninsula, legislators and analysts claim that the legislation is part of Japan's effort to put pressure on North Korea over its nuclear and missile programs as well as Japan's frustration for North Korea's failure to explain the abduction of Japanese nationals which took place during the 1970s and 1980s. A North Korean news source issues a statement that the Diet's decision could "lay a stumbling block in the way of a peaceful solution to the nuclear issue…and escalate the military tension in the region."
—"Japan Lower House Slaps DPRK with Sanctions," *China Daily*, 30 January 2004, in Lexis-Nexis, http://web.lexis-nexis.com.

28 February 2004
North Korea's Vice Foreign Minister Kim Kye-gwan announces that North Korea sold missiles to Pakistan to "acquire foreign currency" at a news conference held at the North Korean Embassy in Beijing just hours after the closure of the second round of the Six Party Talks. The Vice Foreign Minister denied any involvement in deals concerning highly enriched uranium, stating "that we do not have enriched uranium, that we do not have the facilities, scientists or experts related to HEU." and contending that North Korea only uses natural uranium.
—"North Korea Says Missiles Sold to Pakistan, Denies Nuclear Deal," BBC News Monitoring, 4 February 2004, in Lexis-Nexis, http://web.lexis-nexis.com.

14 March 2004
According to U.S. and Chinese officials, the CIA releases a classified report that addresses the history of Khan Laboratories' collaboration with North Korea – a topic that is traced back to the early 1990's. The *New York Times* reports that "evidence suggests that North Korean scientists worked at the Khan Laboratories in the late 1990's, ostensibly on missile technology, and that several of the critical shipments to Pyongyang, the North Korean capital, took place on Pakistani military cargo planes." The article also notes that North Korea was catalytic in Pakistan achieving its goal of acquiring "long-range missiles that could reach virtually all parts of India."
—David, E. Sanger, "U.S Widens View of Pakistan Link to Korean Arms," *New York Times*, 14 March 2004, in Lexis-Nexis, http://web.lexis-nexis.com.

26 March 2004
The National Institute for Defense Studies –a branch of the Japanese Defense Agency – published a report claiming that "North Korea is capable of deploying 175 to 200 Rodong (Nodong) missiles, each able to carry nuclear warheads that could hit any part of Japan." The report, which highlights the necessity to create a missile defense program that could strike North Korean missile bases, explains Japan's precarious situation, writing: "Because Japan and the United States have yet to establish effective countermeasures, Tokyo could militarily be taken hostage, which increases the level of Japan's vulnerability." Despite Japan's statements, it is unlikely that North Korea was capable of miniaturizing its warhead to fit on a Nodong at this point in time.
—"Report: North Korea Missile Threat Growing," *Daily Yomiuri*, 26 March 2004, in Lexis-Nexis, http://web.lexis-nexis.com.

5 August 2004
The *New York Times* reports that North Korea is approaching possible deployment of a new SSN6 submarine-launched ballistic missile with a range of more than 2,600 miles. U.S. government officials explained that the missile is not capable of reaching the US since North Korea lacks a submarine capable of deploying the missile within range of the United States. Nevertheless, U.S. forces in Japan and Guam could be at risk. The appearance of the new mobile missile provokes inquiry into who provided the DPRK with the necessary technology to fully develop the missile.

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—Thom Shanker, "Korean Missile Said to Advance; US is Worried," *New York Times*, 5 August 2004, in Lexis-Nexis, http://web.lexis-nexis.com.

12 October 2004
A report in the *Rodong Sinmun*, the DPRK's ruling party publication denies that North Korea is preparing a missile test but notes that the DPRK weapons program is aimed at countering a growing U.S. military threat." Surveillance of recent activity near DPRK missile sites caused Japanese officials to voice its concerns at a meeting with North Korea in China in September 2004. Rodong Sinmun, the DPRK's ruling party publication accused Washington of circulating rumors in an "attempt to carry into practice its strategy of preemptive attack."
—"North Korea says No Missile Test, but Defends Missile Program," *Agence France Presse*, 12 October 2004 www.spacewar.com.

2 December 2004
A Paris-based dissident group, the National Council of Resistance in Iran, reveals that Iran is collaborating with North Korean scientists in the secret development of a longer-range ballistic missile. The missile is reported to "have the capacity to carry a nuclear warhead" and, according to the dissidents, "a range of more than 1,500 miles." Iran's defense minister, Ali Shamkhani, and Mortezar Ramandi, a spokesman for the Iranian Mission to the United Nations, both denied that Iran was developing a ballistic missile with a range any greater than 1,250 miles. However, a November 2004 CIA report confirms that Iran "is pursuing longer-range ballistic missiles" than the Shahab-3 which has a range of 1,250 miles. The dissident group supplying information is on the U.S. list of terror organizations and has a "mixed record of credibility." Dissidents claimed that that missile system was dubbed "Ghadr" ("capable" or "powerful") and operated on solid-fueled engines allowing it to be launched faster than Iran's previous missiles.
—Douglas Jehl,"Iran is Said to Work on New Missile; Dissident Group Says Longer-Range Weapon Could Reach Europe," *New York Times*, 2 December 2004, in Lexis-Nexis, http://web.lexis-nexis.com.

2003

6 January 2003
North Korea's official Korean Central News Agency accuses the United States of pursuing a plan of "military intervention against the DPRK" by moving forward with its plans to develop a ballistic missile defense system.
—"KCNA on U.S. Moves for MD Establishment," Korean Central News Agency, 6 January 2003, www.kcna.co.jp.

7 January 2003
Japanese and Indian foreign ministers express concerns over Pakistan's alleged role in the transfer of nuclear technology to North Korea. Japan's Foreign Minister Yoriko Kawaguchi says Pakistan's "clandestine transfer" of nuclear and missile technology to the DPRK will impact relations between Japan and Pakistan.
—"India, Japan Concerned over Alleged Pakistan-North Korea Nuke Link," Agence France Presse, 7 January 2003, in Lexis-Nexis, http://web.lexis-nexis.com; "No Violation of Global Pacts, Pakistan Assures N Korea," *Daily Times* (Pakistan), 9 January 2003, www.dailytimes.com.pk.

7 January 2003
Japan's Defense Agency reportedly says North Korea's Nodong ballistic missile has a 50 percent chance of striking within a 2km radius of its target, making it more accurate than previously estimated. The Nodong missile has an estimated range of 1,300km and is capable of striking most of Japan.

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—"North Korea's Missile Has Better tan Expected Accuracy: Report," Agence France Presse, 7 January 2003, in Lexis-Nexis, http://web.lexis-nexis.com; "Japan Learns N. Korea's Nodong Missile May Be Accurate," Jiji Press Service, 7 January 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

11 January 2003
DPRK Ambassador to China Ch'oe Chin-su says North Korea may abandon the moratorium on ballistic missile tests that has been in place since 1999. Ch'oe suggests there may be potential to negotiate on the decision depending on U.S. policy towards North Korea.
—Hwang Yu-sŏng, Lee Yŏng-i, and Lee Ki-hong, "Puk, 'Misailsilhŏm Chaegae' Wihyŏp," *Donga Ilbo*, 13 January 2003, in KINDS, www.kinds.or.kr; Peter S. Goodman and Philip P. Pan, "N. Korea Threatens to Resume Missile Tests," *Washington Post,* 12 January 2003, pg. A1, www.washingtonpost.com.

13 January 2003
U.S. Assistant Secretary of State for East Asia and Pacific Affairs James Kelly visits South Korean and says Washington is ready for dialogue with Pyongyang over North Korea's withdrawal from the NPT and its renunciation of the moratorium on missile tests.
—Alexander Zyuzin, "US Willing to Talk to N. Korea on Fuel Shortage-Kelly," ITAR-TASS, 13 January 2003, Lexis-Nexis, http://web.lexis-nexis.com.

13 January 2003
Rodong Sinmun, the official daily of the Korean Workers' Party, condemns the "U.S. piracy committed against the DPRK cargo ship *Sŏsan* as a blatant provocation" and warns against further actions to seize DPRK cargo ships carrying missiles.
—"Rodongsinmun 'Sŏsan' Hosagŏn'e Taehan Sajoewa Posang Yoku," Korean Central News Agency, 13 January 2003, www.kcna.co.jp "U.S. Warned Against Any More Piratic Acts Against DPRK Trading Cargo Ships," *Korean Central News Agency*, 13 January 2003, www.kcna.co.jp.

14 January 2003
Following North Korea's announcement to end the missile test moratorium, Chinese Foreign Ministry spokesperson Zhang Qiyue expresses China's displeasure but urges, "No party should make any move that would further escalate the situation."
—"China Warns of Escalation after N Korean Threat to Test Missiles," Agence France Presse, 14 January 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

14 January 2003
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—"China Warns of Escalation after N Korean Threat to Test Missiles," Agence France Presse, 14 January 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

20 January 2003
North Korea's Central Broadcasting Station argues that the DPRK missile program is "strictly of a self-defensive and peaceful nature." The commentary also criticizes the U.S. and Japan for exaggerating the North Korean missile threat.
—"Cannot Take Issue with Strengthening Self-defensive Defence Capabilities," Central Broadcasting Station

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(Pyongyang), in "North Korean Daily Denounces US, Japan for 'Propagandizing' Missile Threat," BBC Monitoring, 20 January 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

23 January 2003
In response to U.S. Secretary of Defense Donald Rumsfeld's comment that the DPRK is the "biggest ballistic missile disseminator in the world," the Korean Central News Agency counters by criticizing the United States as the world's "biggest arms exporter."
—"KCNA Blasts U.S. Lip-service to Dialogue," Korean Central News Agency, 23 January 2003, www.kcna.co.jp.

24 January 2003
During a lower house budget committee meeting, Japanese Defense Agency Director General Shigeru Ishiba says Japan is constitutionally allowed to "counterattack" North Korea's missile bases if Pyongyang begins preparations for an attack on Japan. At the same meeting, Foreign Minister Kawaguchi states that it would be "within the legal framework of self-defense" for Japan to ask the U.S. to execute a preemptive attack against a North Korean missile launch.
—"Ishiba: Japan to 'Counterattack' If N. Korea Prepares to Attack," 25 January 2003, *Yomiuri Shimbun,* in Lexis-Nexis, http://web.lexis-nexis.com; "Japan Can Ask US Forces to Stop Any N Korean Missile Attack: Defence Chief," Agence France Presse, 24 January 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

4 February 2003
At the request of Tsutomu Arai, director of Japan's Nonproliferation Division at the Foreign Ministry, Petr Litavrin, deputy director-general of the Russian Foreign Ministry's Security and Arms Control Bureau, agrees to urge Pyongyang not to test-fire ballistic missiles.
—"Japan Asks Russia to Urge N. Korea Not to Test-fire Missiles," Japan Economic Newswire, 4 February 2003, in Lexis-Nexis, http://web.lexis-nexis.com; "Japan, Russia Agree to Prevent N. Korea's Nuke Development," Jiji Press Service, 4 February 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

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9 February 2003
Japan's *Yomiuri Shimbun* reports that an internal Japanese government document features a detailed plan to address the North Korean missile threat. The plan includes demanding that Pyongyang suspend any missile test launches, a public alert system in the case of North Korea preparing to launch missiles, and dispatching of Self-Defense Forces personnel "to deal with disasters" should a missile land within Japanese territory or waters.
—"Govt. Devises N. Korea Missile Plan," *The Daily Yomiuri* (Tokyo), 9 February 2003, in Lexis-Nexis, http://web.lexis-nexis.com; "Gov't Prepares for Scenario of N. Korean Missile Launch: Paper," Kyodo News Service, 8 February 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

11 February 2003
CIA Director George Tenet testifies before the U.S. Senate Armed Services Committee and says that the United

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States could face a "near term" missile threat from North Korea.
—"The Worldwide Threat in 2003: Evolving Dangers in a Complex World," DCI's Worldwide Threat Briefing, 11 February 2003, www.cia.gov.

13 February 2003
Japan's Defense Agency Director-General Shigeru Ishiba says Japan "will use military force as a self-defense measure" against North Korea if it is clear that the DPRK is preparing a ballistic missile strike against Japan. He adds that Tokyo will consider the process of fuelling a missile as the start of a military strike if the missile is pointed at Japan. Ishiba also states that the government will push Japan's parliament to enact "crisis-legislation" granting the military broader ability to act in case of a direct attack against Japan.
—"Japan Says it Would Strike North Korea if Attack Imminent," *Channel NewsAsia,* 13 February 2003, in Lexis-Nexis, http://web.lexis-nexis.com; Stephen Lunn, "Japan Vows to Get in First Shot at N Korea - Countdown to War," *The Weekend Australian,* 15 February 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

14 February 2003
Japan's Defense Agency Director-General Shigeru Ishiba denies that Japan is preparing a preemptive strike against the DPRK to prevent a missile attack on Japan saying there is no "imminent danger of a missile launch" from North Korea and that "Japan is not making any special preparations" in response to the tense situation in North Korea.
—"Japan Defense Chief Denies Preparing Pre-emptive Strike on N. Korea," Agence France Presse, 14 February 2003, in Lexis-Nexis, http://web.lexis-nexis.com; "N. Korea's Missile Threat Not Imminent: Defense Min.," Jiji Press Ticker Service, 14 February 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

24 February 2003
On the eve of South Korean President elect Roh Moo-Hyun's inauguration, North Korea fires a short-range anti-ship cruise missile, which travels 60 km before falling into the sea of Japan. Initially believed to be a CSSC-3 Seersucke" or AG-1, the cruise missile is later classified as either a Seersucker or a KN-01, which is a North Korean enhanced version of the Seersucker with an approximate range of 200km. The missile was launched from a Korean People's Navy coastal defense site located at either North Hamgyŏng Province or South Hamgyŏng Province. The test comes as U.S. Secretary of State Colin Powell is on a diplomatic tour of East Asia having visited Japan and China before arriving in Seoul for Roh's inauguration. Japan's Prime Minister Junichiro Koizumi is also at the inauguration. This is the first North Korean missile firing since the Paektusan-1 ballistic missile was launched over Japan on 31 August 1998.
—Han P'yŏng-su, "Misail Palsa Anp'ak," *Munhwa Ilbo,* 25 February 2003, in KINDS, www.kinds.or.kr; Doug Struck et al, "N. Korea Fires Missile on Eve of Transition In the South," *Washington Post,* 25 February 2003, pg. A1, www.thewashingtonpost.com; Lim Chang-Won, "North Korea fires missile as Roh becomes South Korean president," Agence France Presse, 25 February 2003, in Lexis-Nexis, http://web.lexis-nexis.com; Joseph Bermudez, "North Korea Tests Anti-ship Cruise Missiles," *Jane's Defense Weekly,* 28 February 2003, www.janes.com.

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25 February 2003
An unidentified South Korean Ministry of Defense official says North Korea's cruise missile test appears to a part of a regular "winter military drill" by the North Korean military.
—Park Pyŏng-jin, "Misail Sihŏmpbalsa Paegyŏng; Puk Yŏllyejŏk Tonggyehullyŏn Kanŭngsŏng," *Segye Ilbo*, 26 February 2003, in KINDS, www.kinds.or.kr; Anwar Iqbal, "U.S. Downplays North Korean Missile Test," United Press International, 25 February 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

25 February 2003
U.S. Secretary of State Colin Powell downplays the North Korean cruise missile test, saying it was not "particularly surprising" and "seems to be a fairly innocuous" test that does not violate North Korea's moratorium on tests of long-range ballistic missiles.
—"Press Conference," U.S. Department of State, 25 February 2003, www.state.gov.

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—"Press Conference," U.S. Department of State, 25 February 2003, www.state.gov.

26 February 2003
U.S. Deputy Secretary of State Richard Armitage reportedly tells Japanese lawmakers that U.S. Forces would execute an immediate "counterattack" against North Korea if the DPRK military carries out a missile attack on Japan.
—"U.S. to Counter N. Korea Missile Attack on Japan: Armitage," Japan Economic Newswire, 26 February 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

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10 March 2003
Jane's Defence Weekly reports that the DPRK's missile tests on 24 February 2003 and 10 March 2003 "appear" to have employed an "indigenously designed extended-range version of the CSSC-3 'Seersucker' medium-range anti-ship missile." [Note: The "Seersucker" is sometimes referred to as the AG-1 as it was first test fired from the An-gol army barracks on North Korea's east coast in May 1997. Previous news reports on the missile tests have classified

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the missiles as short-range; this article is likely the first to classify the missiles as medium-range.]
—Joseph Bermudez Jr., "North Korea Continues Anti-ship Cruise Missile Tests," *Jane's Defence Weekly,* 10 March 2003, www.janes.com.

10 March 2003
North Korea fires a surface-to-air cruise missile, but a South Korean official says the missile explodes in mid-air before reaching its target some 110 miles away in the Sea of Japan. The missile is believed to be the same type of anti-ship cruise missile fired by the DPRK on 24 February 2003.
—Jong-Heon Lee, "N.Korea Fires Another Land-to-Ship Missile," United Press International, 10 March 2003, in Lexis-Nexis, http://web.lexis-nexis.com; Doug Struck, "N. Korea Test-Fires Missile Into Sea of Japan," *The Washington Post,* 10 March 2003, p. A17, www.washingtonpost.com.

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18 March 2003
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—"Spokesman for DPRK Foreign Ministry on Rumor about Its Possible Missile Launch=," Korean Central News Agency, 18 March 2003, www.kcna.co.jp.

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19 March 2003
The *Rodong Sinmun*, official daily of the Korean Workers' Party, publishes a commentary accusing Japan of being in a "great hurry" to "introduce the U.S. interceptor missile system," and intending to "reinvade the DPRK." The editorial warns that if Japan "keeps acting recklessly...it will have to pay dearly for it."
—*Rodong Sinmun,* 19 March 2003, "Japan Urged to Stop Acting Rashly," Korean Central News Agency, 19 March 2003, www.kcna.co.jp.

28 March 2003
Japan launches a rocket placing two spy-satellites into low-earth orbit despite threats of "disastrous consequences" by the DPRK. The satellites will allow Japan to detect preparations for ballistic missile launches at North Korean missile sites.
—James Brooke, "Japan Launches Spy Satellite Despite North Korean Threats," *The New York Times,* 28 March 2003, www.nytimes.com.

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29 March 2003
Japanese Defense Agency Director-General Shigeru Ishiba and South Korean Defense Minister Cho Young Kil discuss the threat of North Korea's ballistic missile program and say that the North Korean nuclear issue should be resolved peacefully. Cho states that there is no "specific evidence" to suggest North Korea is preparing a ballistic missile launch. Ishiba says that the missile defense system being developed by the United States and Japan is a "wholly defensive system and the only way to defend" Japan from the North Korean ballistic missile threat.
—"Japan, S. Korea to Resolve N. Korean Issue Peacefully," Japan Economic Newswire, 29 March 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

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1 April 2003
One or two North Korean planes intrude into Japan's airspace and flew in the direction of a Japanese reconnaissance plane. This event marks North Korea's first physical action towards Japan following Pyongyang's disclosure of its nuclear program in October 2002. The DPRK planes left Japan's airspace before two Japanese F-15 fighters had the opportunity to intercept.
—Green, Shane, "Alarm as North Korean Planes Enter Japanese Airspace," *Sydney Morning Herald*, 10 April 2003, in Lexis-Nexis, http://web.lexis-nexis.com; Green, Shane, "Japan Scrambles Jets after Korean Breach," *The Age*, 10 April 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

9 April 2003
The 15-member UN Security Council meet to discuss North Korea's suspected nuclear weapons programs. Division in the council leads to no solid conclusions or plans for future action. The delegations of China and Russia - two Security Council members opposed to issuing a statement condemning North Korea's nuclear activities - raise concerns that this meeting will exacerbate the already volatile situation. Pyongyang had previously issued statements saying that the UN talks are a "prelude to war" and that it would consider any UN sanctions as a "declaration of war."
—Hewitt, Giles, "UN Split on Crisis in Korea-Nuclear Threat Mounts," *Daily Telegraph*, 10 April 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

29 April 2003
US Secretary of State Colin Powell confirms that during three-way talks in Beijing one week earlier, North Korea pledged to end its nuclear program and suspend its testing and selling of missiles if the United States committed to a list of North Korean requests. Requests included "economic assistance, a non-aggression guarantee from the United States and normalization of relations." U.S. officials warn that this was not the first time that North Korea made disarmament promises and that the U.S. government will have "to look at what [the DPRK has] said this time and determine what it means." With respect to the deal North Korea has offered, the White House states that the United States "will not reward North Korea for bad behavior."
—Eccleston, Roy, "North Korea Offers Deal on Nuclear Program," *The Australian*, 30 April 2007, in Lexis-Nexis,

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http://web.lexis-nexis.com; Julian Borger and Jonathan Watts, "North Korea Offers New Peace Deal: US to Study Nuclear Weapons Proposal," *The Guardian*, 29 April 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

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22 June 2003
According to Japan's *Daily Yomiuri* newspaper, the allegation that North Korea's nuclear arsenal has grown to include nuclear warheads capable of being carried by ballistic missiles was confirmed by U.S. and South Korean observers of North Korea's nuclear program. The report explains that North Korea had "already downsized nuclear warheads to about 1 ton each—small enough to be carried by the North's Rodong medium-range ballistic missile."
—Ishiguro et al., "North Korea's Nuclear Threat Growing, Analysts Say," *Daily Yomiuri*, 22 June 2007, in Lexis-Nexis, http://web.lexis-nexis.com.

22 June 2003
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—Ishiguro et al., "North Korea's Nuclear Threat Growing, Analysts Say," *Daily Yomiuri*, 22 June 2007, in Lexis-Nexis, http://web.lexis-nexis.com.

3 July 2003
According to the *New York Times*, the Bush administration enacts economic sanctions on six Asian firms that had supposedly helped Iran's nuclear weapons program. One of the firms, North Korea's Changgwang Sinyong Corporation, has a history of involvement in North Korean missile sales and was acknowledged in early 2003 as the company involved in a trade agreement between Pakistan and North Korea.
—Sanger, David E., "US Penalizes Six Asian Firms for Helping Iran Arm Itself", *New York Times*, 3 July 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

13 July 2003
An article published by *The Business* estimates that Pyongyang receives up to $550 million annually from missiles-related sales and potentially $100 million more from currency counterfeiting. The country's state run drug industry tops this figure with approximate revenue of $500 million to $1 billion. It was reported that U.S. intelligence agencies were looking into a possible correlation between opium imports from Afghanistan and compensation for North Korean missiles acquired by Pakistan.

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—Fenby, Johnathan, "North Korea Uses Drugs to Beat Downturn", *The Business,* 13 July 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

27 July 2003
According to an Austrian Intelligence Report, North Korea's sole state bank in Europe, the Golden Star Bank in Vienna, is in reality the DPRK's European headquarters for illicit trade in missile technology. The Austrian report claims that agents raise money for Kim Jong Il's regime "by selling weapons and missile technology to Third World countries and countries in crisis in the Near and Middle East (for example, Syria, Iran, Iraq or Libya)." A representative for the bank declared the report to be full of "false accusations." The *Asian Wall Street Journal* also claims that the bank is part of a secret financial network controlled by Bureau 39 (part of the ruling Communist Korean Workers' Party), which was set up in the 1970s to produce hard currency. The newspaper report also alleges that Bureau 39 is involved in drug-smuggling, counterfeiting, and an illicit weapons trading operation that is estimated to make more than a billion dollars in annual revenues. The Korean Daesong Bank's branches in Vienna, Macao, Seoul and Beijing are alledged conduct Bureau 39's illicit activities.
—Burgermeister, Jane, "North Korean Bank is 'Front for Arms Trade', *The Observer*, 27 July 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

8 August 2003
A North Korean freighter believed to be transporting illicit and hazardous chemical materials is inspected by Taiwanese officials while in transit at Kaohsiung Harbor in southern Taiwan. The search of the *Be Gaehung* was sparked by a tip from U.S. intelligence that the freighter contained approximately one metric ton of hydrafil (also known as aluminum hydroxide), a dual-use compound that could be used in the production of ballistic missiles. Taiwan's Central News Agency reports that "Hydrafil is not dangerous in itself, however, if combined with other chemicals, it can be processed into alumina which can be used in making the outer shells of missiles and other related materials."
—"Taiwan Customs Officials Search North Korean Freighter" *Central News Agency*, 8 August 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

9 August 2003
U.S. intelligence officials issues a report based on spy satellite images claiming that North Korea was rebuilding a destroyed missile facility on its northeastern coast which had been previously used for testing Paektusan-2 (Taepodong-2) long-range ballistic missile.
—"Japanese Agency: US Says North Korea Rebuilt Damaged Weapons Site," *Kyodo News Service*, 9 August 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

16 September 2003
A commentator for a North Korean satellite TV station declares that "the development, deployment, and export of missiles are issues pertaining to [our] sovereign rights."
The broadcast elaborates on what North Korea would consider a declaration of war to be, stating: "We have already declared that we would recognize any act of interdiction against our vessels and aircraft as a declaration of war against us and that we would take strong countermeasures." The report followed *Pacific Protector,* the September 13 maritime military exercise under the U.S.-led Proliferation Security Initiative, in which countries including the United States, Japan, Australia, France, participated.
—Korean Central Satellite TV, "North Korean TV Says Missile Exports a 'Sovereign Right'", in BBC Monitoring, 16 September 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

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3 October 2003
David Kay, chief the weapons inspector of the U.S.-led Iraq Survey Group reports that Sadaam Hussein's regime paid the North Korean government $10 million for "missile technology for the Nodong, a 1,300-kilometer missile, as well as other non-missile related but prohibited technologies" prior to the U.S.-led invasion of Iraq in 2003, yet never collected any weapon technology due to U.S. pressure on North Korea. A CIA adviser to the Defense Department confirmed that Iraq was never compensated for the $10 million it paid to North Korea.
—Gertz, B., Dinan, S., "Iraq Paid North Korea to Deliver Missiles; US Pressure Blocked Deal," *Washington Times*, 4 October 2003, in Lexis-Nexis, http://web.lexis-nexis.com; Dana Priest and Dana Milbank, "Iraq Sought Missile Parts, President Says; But Reports Dispute Other White House Claims," *Washington Post*, 4 October 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

20 October 2003
The North Korean government conducts a missile test of a new cruise missile. According to U.S. officials, the weapon was "fired from the northeast coast of North Korea and traveled into the East Sea/Japan Sea." This was the third test of the missile which is a "modification of the Chinese-designed HY-2 Silkworm" with a range of approximately 100 miles," according to the press reports.
—Gertz, Bill, "North Korea Retests 100-mile-range Cruise Missile", *The Washington Times*, 21 October 2003, in Lexis-Nexis, http://web.lexis-nexis.com; Kyodo News Service, "Japanese Minister Downplays North Korea's 20 October Missile Test," in BBC Monitoring, 21 October 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

21 October 2003
Japanese Defense Agency representatives allege that North Korea test fired a second ground-to-ship Silkworm missile into the Sea of Japan. According to the Yonhap "Japanese officials said the launch of the short-range missile posed no threat to the North's neighbors and is believed to be part of a regular military exercise."
—Kyodo News Service, "Japanese Defense Officials Say North Korea Test-Fires Missiles," in BBC Monitoring, 21 October 2003, in Lexis-Nexis, http://web.lexis-nexis.com; "South Korea Trying to Confirm Whether North Conducted Thirds Missile Test, *BBC Monitoring Asia Pacific*, 26 October 2003, in Lexis-Nexis, http://web.lexis-nexis.com; Yonhap News Agency, "South Korean Official: North Missile Launch 'Routine Training,'" in BBC Monitoring, 20 October 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

14 November 2003
The DPRK's Korean Central News Agency (KCNA) reacts to South Korea's deployment of 100 tactical ground-to-ground missiles, citing the deployment "intolerable" and in response to "the U.S. strategy to mount a preemptive nuclear attack on the DPRK."

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—KCNA, "North Korean News Agency Says South's Missile Deployment 'intolerable'," in BBC Monitoring, 14 November 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

1 December 2003
Bush administration officials report that Sadaam Hussein was anticipating a large weapons deal with North Korea previous to the U.S.-led invasion of Iraq. According to retrieved computer files reviewed by weapons inspectors, talks regarding the purchase of Nodong missiles and the idea of creating "a full production line to manufacture, under an Iraqi flag, the North Korean missile system, which would be capable of hitting American allies and bases around the region" were conducted in Syria without the knowledge of the Syrian government. Sadaam Hussein's initial payment of $10 million dollars was neither put towards the project nor reimbursed. Iraqi officials demanded that North Korea hold to its end of the bargain; however the imminent U.S. invasion prevented officials from obtaining compensation.
—Sanger, David E. and Thom Shanker, "A Region Inflamed: Weapons; For the Iraqis, a Missile Deal That Went Sour; Files Tell of Talks with North Korea," *The New York Times*, December 1, 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

29 December 2003
North Korea opposes Japan's decision on 19 December to create a missile defense system, claiming that Japan's plan will not be able to challenge the DPRK's "self-defensive striking force" and that boosting Japan's self-defense is unnecessary. A North Korean news source threatens that Japan will face "destruction that will leave them unable to revive" if they continue to "advance towards becoming a military power and waging war."
—Korean Central Satellite TV, "North Korea Warns Japan against Missile Defence System," in BBC Monitoring, 29 December 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

2002

Early 2002
The US and South Korea have working-level discussions to develop a "roadmap" for a "package deal" to resolve North Korea's ballistic missile and WMD programs. The roadmap is said to be a "step-by-step package deal involving strict reciprocity."
—Park Doo-shik, "US Open to Talks with North Korea," Chosun Ilbo, 8 February 2002, http://english.chosun.com; Park Tu Shik, "Taebuk Kibonjŏngch'aek 'Road Map' Han'gug'e Chŏndal/Mi'e 'Ŏmgyŏkhan Sanghojuŭi' Chŏg'yong," Chosun Ilbo, 7 February 2002, p. 3, in KINDS, www.kinds.or.kr.

Early January 2002
The South Korean government learns from Chinese sources that Kim Jong Il might visit China during mid February 2002. Speculation is that Kim is concerned the United States will expand the war on terrorism to North Korea. Other analysts believe Kim might visit China to address North Korea's severe foreign exchange shortage, which according to the *Chosun Ilbo*, is due in part to North Korea's declining missile exports.
—Yi Kyo-kwan, "Kim Chong-il To Possibly Visit Beijing Around February," *Chosun Ilbo*, 29 January 2002, in "'Source' Says DPRK Leader To 'Possibly' Visit China, Vietnam in Jan-Feb," FBIS Document ID: KPP20020129000114; Lee Kyo Kwan, "Kim Chŏng Il Ddo Chungguk Kana...2 Wŏl Kke Beijing Pangmun Chang Jjŏ Min Kwa Hoedam Kanŭngsŏng," *Chosun Ilbo*, 30 January 2002, p. 53, in KINDS, www.kinds.or.kr.

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7 January 2002
North Korean print and broadcast media report that South Korea has decided to purchase 111 Army Tactical Missile System (ATACMS) ballistic missiles from Lockheed-Martin of the United States. KCNA says the plan is "intended to lead the situation to the brink of war." The missiles have a range of 300km.
—"S. Korean Authorities' Plan to Introduce Missiles Under Fire," Korean Central News Agency, 7 January 2002, www.kcns.co.jp; "Namjosŏndangguk'I Missile'ŭl Kkŭr'ŏ Tŭr'i'gi'e Gwangbun," Korean Central News Agency, 7 January 2002, www.kcns.co.jp; "North Denounces South's New Missiles," *Joongang Ilbo*, 8 January 2002, http://english.joins.com; Ch'oe Sŏn Yŏng, "Puk, Nam ATACMS Missile Kumae Podo," Yonhap News Agency, 7 January 2002, www.yonhapnews.co.kr; "Puk, Nam Missile Kumae Pi'nan," *Hankyoreh Shinmun*, 8 January 2002, p. 4, in KINDS, www.kinds.or.kr.

8 January 2002
Pyongyang Radio denounces the United States for elevating the Ballistic Missile Defense Organization (BMDO) to an agency and renaming it the "Missile Defense Agency" (MDA) on 4 January 2002.
—"Puk, Mi Missile Pang'ŏguk Sŏlch'i'e Kwanshim," *Chosun Ilbo*, 9 January 2002, www.chosun.com; Ch'oe Sŏn Yŏng, "Puk, Mi Missile Pang'ŏguk Sŏlch'i'e Kwanshim," *Joongang Ilbo*, 8 January 2002, www.joins.com; Korean Central Broadcasting Station, 9 January 2002, in "DPRK Denoucnes US Plans for Creating Missile Defense Agency," FBIS Document ID KPP20020109000007.

9 January 2002
The National Intelligence Council of the United States releases, "Foreign Missile Developments and the Ballistic Missile Threat Through 2015: Unclassified Summary of a National Intelligence Estimate." The report says "during the next 15 years, the United States most likely will face ICBM threats from North Korea and Iran." North Korea is reportedly working on the Taepodong-2 ballistic missile, which is estimated to have a range of 10,000km in a two-stage configuration with a several-hundred-kilogram payload. However, the range could be extended 15,000kg with a third stage similar to the third stage used for the Paektusan-1 SLV launch on 31 August 1998. According to the report, North Korea "is nearly self-sufficient in developing and producing ballistic missiles and has demonstrated a willingness to sell complete systems and components." The report says the Taepodong-2 may be ready for flight-testing, but a South Korean government says, "I understand that there is no specific information or signs of the possibility of North Korea test-firing a Taepodong-2 missile."
—National Intelligence Council, "Foreign Missile Developments and the Ballistic Missile Threat Through 2015: Unclassified Summary of a National Intelligence Estimate," December 2001, released on 9 January 2002, www.cia.gov; Kwon Kyong-pok, "CIA: Possibility of North Korea Test-Firing Taep'odong-2 Missile," Yonhap News Agency, 10 January 2002, in "ROK Official Denies 'Signs' of DPRK Test-Firing Taep'odong-2 Missile," FBIS Document ID KPP20020110000050; John J. Lumpkin, "CIA: China Expected to Target U.S.," *Washington Post*, 9 January 2002, www.washingtonpost.com; Bill Gertz, "Intelligence Report Sees China Greatly Increasing Missile Force," *Washington Times*, 10 January 2002, p. 7; Kwon Kyŏng Bok, "'Puk, Taepodong 2 Ho Shihŏmbalsa Kanŭngsŏng' CIA," *Joongang Ilbo*, 10 January 2002, www.joins.com; Rich Tuttle, "Intelligence report Sees No Major Changes in Missile Threat," *Aerospace Daily*, 11 January 2002, Vol. 210, No. 8, p. 5, in Lexs-Nexis, http://web.lexis.nexis.com; "US Could Face North Korean and Iranian ICBM Threats by 2015," *Jane's Missiles and Rockets*, February 2002, p. 6.

10 January 2002
The North Korean print and broadcast media criticize the United States for labeling North Korea as a "rouge state" and "sponsor of terrorism" in an effort to isolate and undermine North Korea. The media say the North Korean "missile threat" is nonexistent, and that North Korea produces missiles for self-defense.
—"U.S. Hit for Pulling Up DPRK," Korean Central News Agency, 10 January 2002, www.kcna.co.jp; "Saeroŭn

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Kukka't'eroro Konghwa'gug'apsalwihan <T'ero'jiwŏn'guk>, <Pullyangbaegukka> Sodong/Rodongshinmun," Korean Central News Agency, 10 January 2002, www.kcna.co.jp; "U.S. Brigandish Logic Blasted," Korean Central News Agency, 10 January 2002, www.kcna.co.jp; "<Haek Mit Missile Wihyŏp> Kwa <Sangyongmugi Ch'ukkam> Ŭl Ddŏdŭ'nŭn'gŏs'ŭn Kangdojŏngnolli/Rodongshinmun," Korean Central News Agency, 10 January 2002, www.kcna.co.jp; "North Argues Missiles Are for Self-Defense," *Joongang Ilbo*, 12 January 2002, http://english.joins.com; Korean Central Broadcasting Station (Pyongyang), 10 January 2002, in "US Denounced for 'Targeting' DPRK With MD, Urged To Withdraw USFK," FBIS Document ID KPP20020110000068; Korean Central Broadcasting Station (Pyongyang), 10 January 2002, in "US Decried for Calling DPRK Terror Sponsor; Missile 'Sovereignty' Reasserted," FBIS Document ID KPP20020110000065; Ch'oe Sŏn Yŏng, "Puk, Missile Kaebal'ŭn Chawijŏk Mokchŏk," Yonhap News Agency, 10 January 2002, www.yonhapnews.co.kr.

11 January 2002

The Korean Central News Agency says the United States has "reportedly set up a special missile unit allegedly to protect its forces in South Korea and the South Korean army from the 'missile threat' of North Korea." The commentary labels the United States an "arch criminal posing a real missile threat to the world." The article also claims the "creation of the missile unit is an unpardonable challenge" and that North Korea will respond by increasing its self-defense capabilities.

—"KCNA on 'Missile Threat'," Korean Central News Agency, 11 January 2002, www.kcna.co.jp; "Migug'ŭi T'uksu Missile Pudaech'angsŏl'ŭn Tobalchŏkchŏktaehaeng'wi/Chosŭnjungangt'ongshin Ronp'yŏng," Korean Central News Agency, 11 January 2002, www.kcna.co.jp.

13 January 2002

The *Rodong Sinmun* says the US creation of a special missile unit for missile defense in South Korea is really aimed at striking North Korea "in an 'emergency' on the Korean peninsula." The commentary says North Korea "is ready enough to undertake a war against the United States, and if the US imperialist dare to provoke North Korea, they will face a bitter defeat."

—"Rodong Sinmun on Purpose of Founding U.S. Special Missile Unit," Korean Central News Agency, 13 January 2002, www.kcna.co.jp; "Rodongshinmun T'ŭksu Missile Pudaech'angsŏlmokchŏg'ŭl P'ongno," Korean Central News Agency, 13 January 2002, www.kcna.co.jp; Kim Nam-hyok, "With an Eye Toward Preemptive Strike," *Rodong Sinmun*, 13 January 2002, in "DPRK Criticizes US launch of Special Missile Unit," FBIS Document ID: KPP20020128000085.

24 January 2002

US Under Secretary of State for Arms Control John Bolton says, "The fact that governments which sponsor terrorist groups are also pursuing chemical, biological, nuclear, and missile programs is alarming and cannot be ignored. Countries such as North Korea and Iraq must cease their violations of NPT and allow the International Atomic Energy Agency to do its work. Further, I caution those who think that they can pursue nuclear weapons without detection: the United States and its allies will prove you wrong." Bolton makes his comments during the Conference on Disarmament in Geneva. In response, North Korea's delegate says that North Korea was permitting international inspections of its nuclear facilities.

—Elizabeth Olson, "U.S. Warns of Arms Threat, Citing North Korea and Iraq," *New York Times*, 26 January 2002, p. 4, in Lexs-Nexis, http://web.lexis.nexis.com; Tim Witcher, "North Korea to be Feature of Bush's Asia Visit," Agence France Presse, 25 January 2002, in Lexs-Nexis, http://web.lexis.nexis.com; "US, South Korea and Japan Discuss North Korea Moves," Agence France Presse, 25 January 2002, in Lexs-Nexis, http://web.lexis.nexis.com; Peter Slevin, "U.S. Backs Rules Against Arms Spread," *Washington Post*, 25 January 2002, p. A15, in Lexs-Nexis, http://web.lexis.nexis.com.

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25 January 2002
The Trilateral Coordination and Oversight Group (TCOG) conclude a one-day meeting in Seoul. The TCOG consists of government officials from the United States, South Korean and Japan that meet to coordinate policy towards North Korea. The participants say North Korea will be an important topic during George W. Bush's trip to Asia in February, and that Bush's visits would "positively contribute to peace and stability on and around the Korean peninsula." A South Korean government official later reveals that the US delegation informs the Japanese and South Korean participants that the Bush administration will now require "step-by-step reciprocity from North Korea, and will spell out how North Korea will be punished or rewarded for future conduct."
—Tim Witcher, "North Korea to be Feature of Bush's Asia Visit," Agence France Presse, 25 January 2002, in Lexs-Nexis, http://web.lexis.nexis.com; "US, South Korea and Japan Discuss North Korea Moves," Agence France Presse, 25 January 2002, in Lexs-Nexis, http://web.lexis.nexis.com; "U.S. to Keep North on a Short Leash," *Joongang Ilbo*, 7 February 2002, http://english.joins.com; Jong-Heon Lee, "Bush Visit Seen as Peace Builder," United Press International, 25 January 2002, in Lexs-Nexis, http://web.lexis.nexis.com; "TCOG Meeting," *Korea Update*, Vol. 13, No. 1, January 2002, p. 3.

28 January 2002
Cho Myŏng Rok, First Vice Chairman of the National Defense Committee, meets with China's new ambassador to North Korea. [Note: Cho has reportedly been suffering from kidney disease.]
—"Cho Myŏng Rok Ch'ongjŏngch'i'gukchang'i Chunggukshin'imdaesarŭl Manatta," Korean Central News Agency, 28 January 2002, www.kcna.co.jp; Korean Central News Agency, 28 January 2002, in "DPRK's KCNA: Director of KPA General Political Department Meets New Chinese Ambassador," FBIS Document ID KPP20020128000101; Kim Tu Hwan, "Puk Cho Myŏng Rok, U Dŭng Hŏ Chungguktaesa Manna," *Joongang Ilbo*, 29 January 2002, www.joins.com.

29 January 2002
During his State of the Union Address, President George W. Bush says North Korea is part of an "axis of evil."
—George W. Bush, "The President's State of the Union Address," 29 January 2002, www.whitehouse.gov.

30 January 2002
Bush administration officials say that although George W. Bush labelled North Korea as part of an "axis of evil" in his 29 January State of the Union Address, the United States is not planning imminent military action against North Korea, Iran or Iraq.
—David E. Sanger, "Bush Aides Say Tough Tone Put Foes On Notice," *New York Times*, 31 January 2002, p. 1; Sally Buzbee, "Rumsfeld: U.S. Watching 'Axis of Evil'," Associated Press, in *Joongang Ilbo*, 1 February 2002, http://english.joins.com; Kim Chin and O Yŏng Hwan, "Mi'guk 'Bush Pal'ŏn Kunsahaengdong Imbak Ddŭs Anida'," *Joongang Ilbo*, 31 January 2002, www.joins.com.

31 January 2002
A spokesman for the North Korean Foreign Ministry issues a statement in response to George W. Bush's State of the Union Address on 29 January. The spokesman blames the US economic recession, terrorist attacks, and other US problems on the "unilateral and self opinionated foreign policy, political immaturity and moral leprosy of the Bush administration." He says, "There has been no precedent in the modern history of DPRK-US relations that in his policy speech the US President made undisguised threatening remarks on aggression and threat against the DPRK, an independent and sovereign state. This is, in fact, little short of declaring war against the DPRK." He also says, "The option to 'strike' imprudently advocated by the US is not a monopoly."
—Spokesman for DPRK Foreign Ministry Slams Bush's Accusations," Korean Central News Agency, 31 January 2002,

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www.kcan.co.jp; Bush'ŭi <Nyŏndu'gyosŏ>nŭn Uri'e Taehan Sŏnjŏnp'ogo / Chosŏnoemusŏngdaebyŏn'in Sŏngmyŏng," 31 January 2002, www.kcna.co.jp; Seo Soo-min, "NK Likens Bush's Remarks to Declaration of War," *Korea Times*, 1 February 2002, www.koreatimes.co.kr; David R. Sands, "North Korea Assails 'Axis' Label," *Washington Times*, 1 February 2002, p.1.

31 January 2002
US National Security Advisor Condoleezza Rice tells the Conservative Political Action Conference that North Korea is "the world's number one merchant for ballistic missiles. Rice says the United States has offered a "road map to for reciprocal steps that would enable North Korea to take a better course." However, she adds, "We've had no serious response from Pyongyang."
—Condoleezza Rice, "Remarks by the National Security Advisor Condoleezza Rice to CPAC," 31 January 2002, www.cpac.org; "North Korea Leads World in Ballistic Missile Exports," *World Tribune.com*, 4 February 2002, www.worldtribune.com;; Peter Slevin, "Powell Offers Reassurance to South Korea; U.S. Remains Willing to Hold Talks With North, Seoul Counterpart Is Told," *Washington Post*, 2 February 2002, p. A19, in Lexs-Nexis, http://web.lexis.nexis.com; George Gedda, "Powell Plans Talks with Leaders from Europe, the Middle East and Asia on Terror-Fighting Policy," Associated Press, 1 February 2002, in Lexs-Nexis, http://web.lexis.nexis.com; Bob Deans, "Despite 'Axis of Evil' Staus, U.S. Open to Talks with North Korea," Cox News Service, 1 February 2002, in Lexs-Nexis, http://web.lexis.nexis.com; Choi Won-ki, "North Korea Refused Talks with U.S." *Joongang Ilbo*, 4 February 2002, http://english.joins.com.

Early February 2002
An underground munitions plant in Sŏnggan-kun (城干郡), Chagang Province explodes, killing at least 1,000 people. The factory reportedly produced the warheads for 240mm multiple rocket launchers, and was 80 meters underground with eight stories. [Note: This could be the No. 81 Munitions Factory (第81號兵器工場), but this is not yet confirmed. A number of small power plants were reportedly established in the area around 1997 or early 1998, but it is unclear if any of the power plants were specifically constructed to provide energy for this munitions factory.]
—Lee Kyo Kwan, "[NK Report] Chiha Kunsugongjang P'okpal...1000 Yŏ'myŏng Sa'mang," *Chosun Ilbo*, 23 June 2002, www.chosun.com; Yi Kyo-kwan, "Underground Munitions Plant Explodes...About 1,000 Persons Killed," *Chosun Ilbo*, 23 June 2002, in "DPRK Underground Munitions Plant Reportedly Exploded in Feb, Killing 1,000 People," FBIS Document ID: KPP20020623000046; Lee Chae Sŭng, "Pukhanŭi 6 Kae Kwŏn'yŏkpyŏl Kong'ŏppaech'i Hyŏnhwang," *Segye Ilbo*, 22 July 1992, p. 12, in KINDS, www.kinds.or.kr; "Chŏllyŏg'ŭl Chach'ero Hae'gyŏlhago'innŭn Chagangdo/So'gae," Korean Central News Agency, 5 February 1998, www.kcna.co.jp; "Shi'gun 30 Yŏ'got Chungsohyŏng Paljŏnso Taeryang Kŏnsŏl/100 Yŏ'gae Kongjang Chŏllyŏkkonggŭp," *Kukmin Ilbo*, 2 February 2002, p. 15, in KINDS, www.kinds.or.kr.

1 February 2002
In New York, US Secretary if State Colin Powell tells South Korean Minister of Foreign Affairs and Trade Han Sŭng Su that North Korea has continued to sell ballistic following the terrorist attacks on 11 September 2001 in the United States. Powell says North Korea actually increased its missile exports during the last 4-5 months.
—Park Doo-shik, "US Steps Up NK Missile Monitoring," *Chosun Ilbo*, 5 February 2002, http://english.chosun.com; O Yŏng Hwan, "Pukhan Missile Such'ul Kyesok Chŭngga," *Joongang Ilbo*, 6 February 2002, p. 2, in KINDS, www.kinds.or.kr; Park Tu Shik and Yu Yong Wŏn, "Mi, Puk Missile Kamshich'ejero," *Chosun Ilbo*, 6 February 2002, in KINDS, www.kinds.or.kr; Hwang Chae Hun, "Mi 'Puk Missile Such'ulhwaktae' T'ongbo," Yonhap News Agency, 5 February 2002, www.yonhapnews.co.kr; Kim Jin, "Powell Voices Reservations on 'Sunshine' Policy Results,"

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Joongang Ilbo, 4 February 2002, http://english.joins.com; Kim Kwi Kŭn, "<Puk Missile Kaebalmit Such'ulhyŏnhwang>" Yonhap News Agency, 6 February 2002, www.yonhapnews.co.kr.

3 February 2002
Israeli Foreign Minister Shimon Peres says, "Iran, in collaboration with North Korea, is trying to build a missile with a range of 10,000km that could threaten North America."
—Alan Friedman, "Peres Asserts Iran Armed Hezbollah: He Says 8,000 Missiles Were Sent," *International Herald Tribune*, 4 February 2002, p. 1, in Lexs-Nexis, http://web.lexis.nexis.com.

3 February 2002
US Secretary of State Colin Powell says that North Korea is continuing to develop missiles and sells them. Powell says the United States is prepared to negotiate with North Korea "any time, any place, without preconditions."
—Face the Nation, CBS News Transcripts, in "Secretary of State Colin Powell Discusses the War on Terrorism," 3 February 2002, in Lexs-Nexis, http://web.lexis.nexis.com.

4 February 2002
During a Tokyo news conference, Admiral Dennis Blair, commander of US Forces in the Pacific, says, "There are no 'Afghanistans' in the Pacific, countries which harbor and support terrorist organizations, but North Korea is a special case." Blair also says, "We need to be on guard against North Korea, along with its export of missiles and missiles it's building itself."
—Asia Pacific Warned Against NKorean Missile Threat by US Pacific Commander," AFX – Asia, 4 February 2002, in Lexs-Nexis, http://web.lexis.nexis.com; Kyodo News Service, "U.S. Admiral Calls for Stronger Asian Unity Against Terrorism," Japan Economic Newswire, 4 February 2002, in Lexs-Nexis, http://web.lexis.nexis.com; Kim Sung-soo, "U.S. Keeps Pressure on North," *Joongang Ilbo*, 5 February 2002, http://english.joins.com.

5 February 2002
Former South Korean Minister if Foreign Affairs and Trade, Han Sŭng Su, who was dismissed yesterday, says that the United States has informed South Korea that North Korea has continued to develop and export missiles. Han says that before 11 September 2001, North Korea's WMD were not such a problem, but now the US basic strategy is that North Korea's WMD programs must be stopped. Han also says that the United States is not likely to extend the next stage of the "war on terrorism" to North Korea.
—Oh Young-hwan, "North Persists in Arms Sales, U.S. Tells Seoul," *Joongang Ilbo*, 6 February 2002, http://english.joins.com; O Yŏng Hwan, "Pukhan Missile Such'ul Kyesok Chŭngga," *Joongang Ilbo*, 6 February 2002, p. 2, in KINDS, www.kinds.or.kr; Park Tu Shik, "Han Sŭng Su Chŏn Oegyo 'Mi, Ag'ŭi Ch'uk Palŏn Kŭ'gŏ'itta," *Chosun Ilbo*, 6 February 2002, p. 3, in KINDS, www.kinds.or.kr; Yonhap News Agency, 5 February 2002, in "ROK's Yonhap: Outgoing Minister Says U.S. Unlikley To Take War on Terror to N.K." FBIS Document ID: KPP20020205000069; Hwang Chae Hun, "Mi 'Puk Missile Such'ulhwaktae' T'ongbo," Yonhap News Agency, 5 February 2002, www.yonhapnews.co.kr.

5 February 2002
Testifying before the Senate Foreign Relations Committee, US Secretary of State Colin Powell says that George W. Bush's reference to Iran, Iraq, and North Korea as an "axis of evil" was "not a rhetorical flourish -- ;he meant it." Powell also says, "it does not mean that we are ready to invade anyone or that we are not willing to engage in dialogue. Quite the contrary." Committee Chairman Joseph Biden says, "I agree with the president that each nation poses a security threat to the United States and to the civilized world, but they are hardly identical or allied with each other, and our policies toward them have up to now involved very different strategies."

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—Richard Wolffe, "Powell Acts to Defend Policy on Rogue States "Axis of Evil" Bush Stance Challenged," *Financial Times* (London), 6 February 2002, p. 8, in Lexs-Nexis, http://web.lexis.nexis.com; Todd S. Purdum, ""Poweel Says U.S. Plans To Work Out Binding Arms Pact," *New York Times*, 6 February 2002, p. A1, in Lexs-Nexis, http://web.lexis.nexis.com; "Powell, Puk-MI Taehwa 'Kong'ŭn Ije Pukhan'e' (Chonghap)," Yonhap News Agency, 6 February 2002, www.yonhapnews.co.kr.

5 February 2002
Yang Sŏng Ch'ŏl, South Korean ambassador to the United States, says that recent harsh comments from US officials towards North Korea indicates that they must have significant evidence that North Korea is selling weapons of mass destruction. Yang says relations between the United States and North Korea could turn around if North Korea clarifies its position on WMD and allays fears that it possesses nuclear weapons.
—Oh Young-hwan, "North Persists in Arms Sales, U.S. Tells Seoul," *Joongang Ilbo*, 6 February 2002, http://english.joins.com; Park Doo-shik, "US Steps Up NK Missile Monitoring," *Chosun Ilbo*, 5 February 2002, http://english.chosun.com; "Puk Missile Munjae Choyul Chaengjŏmhwa-2," Yonhap News Agency, 5 February 2002, www.yonhapnews.co.kr.

5 February 2002
A "diplomatic source" says that North Korea conducted three or four Taepodong-2 engine tests at the Musudan-ri rest facility last year. The last test is said to have been in mid-December 2001. Between 1998 and 2000, North Korea conducted an average of one or two Taepodong-2 engine tests a year. The information is said to come from US satellite imagery.
—Park Tu Shik and Yu Yong Wŏn, "Mi, Puk Missile Kamshich'ejero," *Chosun Ilbo*, 6 February 2002, in KINDS, www.kinds.or.kr; "Report: N. Korea Preparing New Long-Range Missile Test," *World Tribune.com*, 7 February 2002, www.worldtribune.com; Kyodo News Service, 6 February 2002, in "N. Korea Conducts Engine Tests for Long-Range Missile: Report," FBIS Document ID: JPP20020206000070.

5 February 2002
The *Rodong Sinmun* criticizes George W. Bush's State of the Union Address as being "little short of declaring war." The official daily of the Korean Workers' Party says the "options to 'strike' on the lips of the US is not its monopoly."
—"Bush's Accusation Against DPRK Under Fire," Korean Central News Agency, 5 February 2002, www.kcna.co.jp; "<T'agyŏk>ŭi Sŏnt'aekkwŏn'ŭn Mi'guk'ŭi Tukjŏmmul'i Anida / Rodongshinmun," Korean Central News Agency, 5 February 2002, www.kcna.co.jp; Paul Shin, "N. Korea Accuses U.S. of War Plot – AP," Associated Press, in *Joongang Ilbo*, 6 February 2002, http://english.joins.com.

6 February 2002
In testimony before the US Senate Select Committee on Intelligence, CIA Director George Tenet says North Korea is exporting ballistic missiles and missile components to countries like Iran, Libya, Syria and Egypt. Tenet says North Korea could have a ballistic missile that could reach the United States by 2015, and that North Korea has enough plutonium for one or two nuclear bombs. According to Tenet, North Korea is using the profits from its missile exports to further develop its missiles, and probably to covertly develop WMD.
—James Risen, "A Nation Challenged: The Threat; Al Qaeda Still Able to Strike U.S., Head of C.I.A. Says, *New York Times*, 7 February 2002, p. A1, in Lexs-Nexis, http://web.lexis.nexis.com; Associated Press, "Countries, Groups and Others that Are Considered Risks to U.S. Security," *St. Petersburg Times*, 7 February 2002, in Lexs-Nexis, http://web.lexis.nexis.com; Han Ki Hŭng, "Mi CIA Kukchang 'Puk 2015 Nyŏn Mibont'o Konggyŏk Kanŭng," *Donga Ilbo*, 7 February 2002, www.donga.com; "CIA: Egypt Continues Missile Projects with N. Korea," *Middle East*

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Newsline, 12 February 2002, www.menewsline.com; Lee Ki Ch'ang, "Egypt, Pukhan'gwa Missile Hyŏpnyŏk Chisok," *Joongang Ilbo*, 14 February 2002, www.joins.com.

6 February 2002
South Korean President Kim Dae Jung says that nuclear and missile problems must be resolved peacefully. Kim says that recently North Korea has been harshly criticizing the United States because of the US attitude towards North Korea. Kim also says that there can be policy differences among allies, but that anti-Americanism is not in Korea's interest.
—Chŏng Jae Yong, "Kim Taet'ongnyŏng, 'Haek, Missile Munjae, Taehwaro Pulŏya'," *Joongang Ilbo*, 6 February 2002, www.joins.com; Yonhap News Agency, 6 February 2002, in "ROK Leader Says 'Anti-US' Voices 'No Help' To ROK-DPRK Relations," FBIS Document ID 200202060000121; Chŏng Chae Yong, "Kim Taet'ongnyŏng 'Taehwaro P'ulŏya'-1," Yonhap News Agency, 6 February 2002, www.yonhapnews.co.kr; "President Urges Dialogue with North Korea," *Chosun Ilbo*, 7 February 2002, http://english.chosun.com.

6 February 2002
Im Dong Wŏn, national security and unification advisor to the South Korean president, says that North Korea poses a threat to security on the Korean peninsula, but the threat must be reduced through peaceful dialogue. Im says that the use of military force will only result in the danger of igniting another Korean war.
—Kwŏn Kyŏng Bok, "Im T'ŭkpo 'P'yŏnghwajŏgŭro Anbowihyŏp Haeso'," Yonhap News Agency, 6 February 2002, www.yonhapnews.net.

6 February 2002
A South Korean military source says that North Korea conducted a number of engine tests for its Taepodong-2 missile at the Hwadae-kun [Musudan-ri] test facility last year. According to the source, it will take some time for North Korea to conduct a test flight of the Taepodong-2. [Note: English sources only refer to the missile as the "Taepodong," but the Korean source specifies the missile as the Taepodong-2.]
—Kim Min Sŏk, "Pukhan, Changnyŏn Such'arye Missile Shilhŏm," *Joongang Ilbo*, 6 February 2002, www.joins.com; "North Korea Working to Improve Missile's Range," *Joongang Ilbo*, 6 February 2002, http://english.joins.com; *Joongang Ilbo*, 7 February 2002, in "ROK DefMin Report: DPRK Conducts 'Numerous' Missile Tests in 'Past Few years'," FBIS Document ID KPP20020206000145; Sohn Suk-joo, "NK Tests New Engine for Taepodong II," *Korea Times*, 7 February 2002, www.koreatimes.co.kr.

6 February 2002
North Korean media criticize Admiral Dennis Blair, commander of US Forces in the Pacific, for his remarks at a Tokyo press conference on 4 February 2002. The Korean Central News Agency says, "This clearly indicates what a dangerous phase the US design to stifle socialist Korea has reached."
—"U.S. Brasshat's Reckless Remarks Assailed," Korean Central News Agency, 6 February 2002, www.kcna.co.jp; "T'aep'yŏngyangjiyŏk Mi'gunch'ongsaryŏnggwan'ŭi P'og'ŏn/Chosŏnjungangt'ongshin," Korean Central News Agency, 6 February 2002, www.kcna.co.jp.

6 February 2002
Yang Sŏng Ch'ŏl, South Korean ambassador to the United States, says that the things have fundamentally changed since the terrorist attacks against the United States on 11 September 2001. Yang says the United States is sending a strong warning to North Korea about its continuing development, production and export of missiles.
—Hwang Chae Hun, "Chumidaesa 'Mi, Puk Missile Kangnyŏkkyŏggo'," *Joongang Ilbo*, 6 February 2002, www.joins.com.

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6 February 2002
Yonhap News Agency reports that the CEP of the North Korean Scud-B, Scud-C, and Nodong-1 are 450-1,000m, 450-550m, and 2-4km, respectively.
—Kim Kwi Kŭn, "<Puk Missile Kaebalmit Such'ulhyŏnhwang>," Yonhap News Agency, 6 February 2002, www.yonhapnews.co.kr.

7 February 2002
North Korean UN Ambassador Pak Kil Yŏn says that North Korea is prepared to renew dialogue with the United States even though President George W. Bush labeled North Korea as a member of the "axis of evil." Pak says that Bush's speech amounts to a declaration of war, which surprised North Korea and caused confusion in governments around the world. Pak says that if the United States has a hostile or confrontational approach to North Korea, then North Korea will response in similar ways. On the other hand, Pak says, "Nice words will be answered by nice words."
—Edith M. Lederer, "North Korea Takes Wait-And-See Tone," Associated Press, in *Joongang Ilbo*, 11 February 2002, http://english.joins.com; "UN Chujae Puktaesa 'Ŏnjedŭn Puk-Mi Taehwa Yongŭi'," *Joongang Ilbo*, 8 February 2002, www.joins.com; Zeno Park, "North Korea Calls US 'Empire of Devil'," Agence France Presse, 8 February 2002, in Lexs-Nexis, http://web.lexis.nexis.com.

7 February 2002
In Seoul, Admiral Dennis Blair, commander of US Forces in the Pacific, says, "North Korea has become a potential threat to world security by engaging in missile proliferation and drug trafficking."
—Sohn Suk-joo, "US Commander Sees N. Korea as Threat to World Security," *Korea Times*, 8 February 2002, www.koreatimes.co.kr; Park Doo-chik, "US Asia Pacific Commander Warns NK Still a Threat," *Chosun Ilbo*, 7 February 2002, http://english.chosun.com.

8 February 2002
The Korean Central News Agency criticizes President Bush's defense budget, saying "Though it has the largest number of weapons of mass destruction in the world, the US is sharply increasing military expenditure. This clearly proves that the US, 'empire of devil,' is posing a grave threat to the world peace and stability."
—"KCNA on U.S. National Defense Budget," Korean Central News Agency, 8 February 2002, www.kcna.co.jp; "Segye'rŭl Wihyŏpha'nŭn Mi'gug'ŭi Kukpang'yesan / Chosŏnjungangt'ongshin Ronp'yŏng," Korean Central News Agency, 8 February 2002, www.kcna.co.jp.

8 February 2002
North Korea cancels the proposed visits of four former US ambassadors to South Korea. The US delegation was to include William Gleysteen, Richard Walker, Donald Gregg, Stephen Bosworth, and University of California Professor Emeritus Robert Scalapino. North Korea proposed the visit in recent months as a way to maintain a channel of communication with the United States. Pak Kil Yŏn, North Korean Ambassador to the UN, says he received instruction from Pyongyang to cancel the trip, but he does not link the move to George W. Bush's State of the Union Address. However, Gleysteen and Scalapino say Bush's speech is clearly the reason for the cancellation.
—Micheal Gordon, "A Nation Challenged: Korea; North Korea Cancels Trip By 4 Experts From the U.S.," *New York Times*, 9 February 2002, p. A9, in Lexs-Nexis, http://web.lexis-nexis.com; Vanessa Palo, "N. Korea Tells US Envoys Not to Come," Associated Press, in *Joongang Ilbo*, 11 February 2002, http://english.joins.com.

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8 February 2002
South Korean Minister of Foreign Affairs and Trade Ch'oe Sŏng Hong tells the National Assembly that South Korea will take issue with North Korea's WMD programs when inter-ministerial talks resume. Ch'oe says that South Korea has told North Korea to address the suspicions surrounding its missile and WMD programs during the June 2000 summit and other occasions.
—Yonhap News Agency, 9 February 2002, in "ROK's Yonhap: Seoul to Issue Direct Appeal to Pyongyang over WMD," FBIS Document ID KPP20020209000014.

11 February 2002
In response to US National Security Advisor Condoleezza Rice's comments on 31 January 2002, when she said North Korea is the world's largest exporter of ballistic missiles, the Korean Central News Agency says, "This is totally false propaganda" with the intention "to isolate and stifle" North Korea.
—KCNA on U.S. Conservatives' Rash Act," Korean Central News Agency, 11 February 2002, www.kcna.co.jp; "Mi'daet'ongnyŏnggukkaanbodamdangbojwa'gwan'ŭi <Terror Haengdongp'ogi> Chujang'ŭl Kyut'an / Chosŏnjungangt'ongshin Ronp'yŏng," Korean Central News Agency, 11 February 2002, www.kcna.co.jp; Ch'oe Sŏn Yŏng, "Puk, Rice Chŏnmibosudongmaeng Hoeŭi Palŏn Pinan," Yonhap News Agency, 12 February 2002, www.yonhapnews.co.kr.

11 February 2002
In response to CIA Director George Tenet's testimony before the US Senate Select Committee on Intelligence, the Korean Central News Agency says North Korea's development of weapons of mass destruction is "non-existent." KCNA says the information provided by the CIA has "always been nothing but sophism designed to slander and do harm to other countries."
—"KCNA on CIA Chief's Remarks," Korean Central News Agency, 11 February 2002, www.kcna.co.jp; "Mijungangjŏngboguk Changgwan'ŭi Moryag'in <Taeryangsallyungmugigaebal> Mangbal / Chosŏnjungangt'ongshin Ronp'yŏng," Korean Central News Agency, 11 February 2002, www.kcna.co.jp.

12 February 2002
In testimony before the Senate Budget Committee, Secretary of State Colin Powell says the United States has no plans to start a war with North Korea. Powell says, "We want to see a dialogue. We want to contain North Korea's activities with respect to proliferation, and we are going to keep the pressure on them." Powell adds that George W. Bush will offer to restart dialogue with North Korea without conditions.
—Alan Sipress, "Powell: No Plans Now for War With 'Axis'; Diplomatic, Political Approaches Stressed," *Washington Post*, 13 February 2002, in Lexs-Nexis, http://web.lexis.nexis.com; Michael R. Gordon and David E. Sanger, "A Nations Challenged: Iraq; Powell Says U.S. Is Weighing Ways to Topple Hussein," *New York Times*, 13 February 2002, p. A1, in Lexs-Nexis, http://web.lexis.nexis.com; Barry Schweid, "Powell Says President Will Offer North Korea Unconditional Talks," Associated Press, 12 February 2002, in Lexs-Nexis, http://web.lexis.nexis.com; Xinhua News Agency, "U.S. to Offer Unconditional Talks to DPRK: Powell," Xinhua General News Service, 12 February 2002, in Lexs-Nexis, http://web.lexis.nexis.com; Kim Jin, "U.S. Hopes to Draw North from Isolation, Powell Says," *Joongang Ilbo*, 14 February 2002, http://english.joins.com.

15 February 2002
North Korean radio reports "there is no reason for our nuclear and missile policies to attract suspicion." The broadcast says these programs are "transparent, clear and are intended for self-defense." The report also calls George W. Bush the "most ferocious war fanatic among previous US presidents and an ignorant political hooligan."

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—Kim Ho-sam, 15 February 2002, in "DPRK Calls Bush 'Ignorant Political Hooligan,' Decries US 'Hypocrisy' Over Missile Threat," FBIS Document ID KPP20020215000205.

17 February 2002
World Tribune.com reports that North Korea "has intensified preparations for what appears to be a Taepodong test in early 2003. [Note: This is likely a reference to static tests of engines for the Taepodong-2 over the last couple of years.]
—"Bush to Offer Carrot to N. Korea," *World Tribune.com*, 17 February 2002, www.worldtribune.com.

18 February 2002
Assistant Secretary of Defense Paul Wolfowitz says that North Korea is the world's number one exporter of ballistic missile technology.
—Park Wan Kyu, "Wolfowitz 'Puk Missile Such'ul 1 Wi'guk'," *Segye Ilbo*, 20 February 2002, p. 2, in KINDS, www.kinds.or.kr.

18 February 2002
Israeli Brigadier General (reserves) Shlomo Brom, former chief of the Israeli Strategic Planning Division, says that countries in the Middle East will deploy North Korean-made Nodong missiles by 2004 or 2005.
—Brent (Won-ki) Choi, "Rodong Deployment in Mideast Expected by '04," *Joongang Ilbo*, 19 February 2002, http://english.joins.com; "Iran to Deploy North Korean Missiles in Three Years: Israeli Expert," Agence France Presse, 19 February 2002, in Lexs-Nexis, http://web.lexis-nexis.com; *Joongang Ilbo*, 19 February 2002, in "Israeli Military Expert Warns of Nodong missile Deployment in Mideast by 2004," FBIS Document ID KPP20020219000005; Ch'oe Wŏn Ki, "Chungdong Such'ul Pukhan Missile 2~3 Nyŏnnae Paech'idoel'gŏt," *Joongang Ilbo*, 19 February 2002, p. 2, in KINDS, www.kinds.or.kr.

20 February 2002
During his visit to South Korea, George W. Bush says the United States has no intention of invading North Korea. Bush also says that he supports Kim Dae Jung's "sunshine policy" of engagement with North Korea, and that Washington is prepared to renew dialogue with Pyongyang.
—O P'ung Yŏn, Kim Su Chŏng, and Hong Wŏn Sang, "Bush, 'Pukch'imgong Ŭisa Ŏpta'," *Taehan Maeil*, 21 February 2002, p. 1, in KINDS, www.kinds.or.kr; Kim Min Bae, "Bush 'Pukch'imgong Ŭisa Ŏptta'," *Chosun Ilbo*, 20 February 2002, www.chosun.com.

21 February 2002
During a press conference in Beijing, President George W. Bush says that he has asked Chinese President Jiang Zemin to help the United States renew bilateral talks with North Korea.
—"Bush Seeks Jiang's Help in NKorea Dialogue," Agence France Presse, 21 February 2002, in Lexs-Nexis, http://web.lexis-nexis.com; Lee Sang Min, "Bush 'Puk-Midaehwa Chaegae'e Chung Chiwŏn Yoch'ŏng'," *Joongang Ilbo*, 21 February 2002, www.joins.com.

21 February 2002
According to Sŏ Yu Sŏk, a researcher at the South North Peace Research Institute (남북평화연구소), North Korea has recently been exporting missile components and computer software to support a Nodong maintenance and assembly plant in Iran. Sŏ's article in the *Segye Ilbo* also reports that North Korea is currently developing the Taepodong-2, which has an estimated range of 4,300-6,000km when delivering a 1,000kg warhead. The Taepodong-2 is said to have an unidentified propellant for the first stage, and a Nodong missile for the second

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stage.
—Sŏ Yu Sŏk, "Puk, Missile Ch'oedaesagŏri 9,600km Taepodong 2 Ho Kaebalchung," *Segye Ilbo*, 20 February 2002, p. 8, in KINDS, www.kinds.or.kr.

22 February 2002
North Korea's Foreign Ministry releases a statement that rejects George W. Bush's call for dialogue with the United States. The English version reads, "We are not willing to have contact with his clan which is trying to change by force of arms the system chosen by the Korean people." However, the Korean version of the statement is slightly different, "While the US has no intention of recognizing our system, we do not need any proposals for a dialogue that is looking for a pretext to invade [North Korea]."
—"DPRK Foreign Ministry Spokesman on Bush's Slanders," Korean Central News Agency, 22 February 2002, www.kcna.co.jp; "Uri Ch'eje'e Taehan Bush'ŭi Mangbal'ŭn Uriwaŭi Taehwabujŏngsŏn'ŏn / Chosŏn'oemusŏngdaebyŏn'in Tamhwa," Korean Central News Agency, 22 February 2002, www.kcna.co.jp; Kim Yŏng Shik, "Puk, Bush Taehwaje'ŭi Kŏbu," *Donga Ilbo*, 22 February 2002, www.donga.com.

23 February 2002
The *Pyongyang Times* reports that graduates of the University of Science "played a pivotal role in the manufacture and launch of the satellite Kwangmyŏngsŏng-1, which was inserted into earth orbit in August 1998. The University of Science was reportedly established in January 1967.
—Ri Mi Hwa, "Future Scientists Brought Up," *Pyongyang Times*, 23 February 2002, www.times.dprkorea.com.

26 February 2002
Iraq is reportedly trying to acquire surface-to-air missiles (SAMs) from North Korea. Pyongyang is said to be interested in supplying the missiles to Baghdad, but no shipments have been confirmed.
—"U.S. Suspects Iraq Importing Surface-to-Air Missiles," Geostrategy-Direct.com, 26 February 2002, www.geostrategy-direct.com.

27 February 2002
The US and South Korea complete the first of a joint study on confidence-building measures (CBMs) with North Korea to address Pyongyang's ballistic missiles, WMD programs and conventional forces. The initial part of the study is said to have 32 items to be proposed for CBMs with North Korea. The joint study team reportedly began the study in June 2001.
—Jong-Heon Lee, "U.S. Moves to Tackle Conventional Weapons," United Press International, 28 February 2002, in Lexs-Nexis, http://web.lexis-nexis.com; C.W. Lim, "US and South Korea Study Ways to Ease Tensions with North," Agence France Presse, 28 February 2002, in Lexs-Nexis, http://web.lexis-nexis.com; Kim Min-Seok, "U.S. to Join Effort to Limit North's Arms," *Joongang Ilbo*, 28 March 2002, http://english.joins.com; Yu Yong Wŏn, "[Han-Mi] Taebuk Kunsashilloejoch'i Maryŏn...Hotline Tŭng Hyŏpsang," *Chosun Ilbo*, 27 February 2002, www.chosun.com; Kim Kwi Kŭn, "[Han-Mi, CBM Kongdong'yŏn'gusŏnggwawa Chŏnmang]," *Chosun Ilbo*, 27 February 2002, www.chosun.com; Kim Kwi Kŭn, "Hanmi, Kunsashilloejoch'i Kongcongdaeŭng Hab'ŭi," *Chosun Ilbo*, 27 February 2002, www.chosun.com; "Military Confidence-Building," *Korea Now*, Vol. 31, No. 5, 9 March 2002, p. 9.

4 March 2002
The North Korean media criticize recent statements by CIA Director George Tenet and Deputy Defense Secretary Paul Wolfowitz that accuse Pyongyang of being a major exporter of missiles and missile technology. The *Rodong Sinmun* says, "It is the height of sarcasm that the United States unreasonably pulls up the DPRK over its missile plan for self-defense despite the fact that the US is the world's biggest producer and exporter of weapons and other

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military equipment." The commentary also warns, "The people's army and people of Korea are becoming increasingly assertive that there can be no compromise with the US and they should fight it out."
—"U.S. Cock-and-Bull Stories Rebuffed," Korean Central News Agency, 4 March 2002, www.kcna.co.jp; "Taemibinanhoep'i'rŭl Wihan <T'ando Missile Such'ulguk> Pal'ŏn / Rodongshinmun," Korean Central News Agency, 4 March 2002, www.kcna.co.jp; Shim Kyu Sŏk, "Puk, Missile Kisul Such'ulguk Chimok'e Panbal," *Chosun Ilbo*, 4 March 2002, www.chosun.com.

5 March 2002
The *Chosun Ilbo* publishes a detailed report on North Korean missile exports. According to the report, North Korea has been exporting Nodong and Scud-B missiles to countries in the Middle East such as Iran and Iraq. The airframes and steel components such as pipes are shipped by freighter from the ports of Namp'o or Shin'ŭiju, and the engine and other "core" parts are shipped by air from Chunghwa Airfield at Chunghwa-kun, Pyongyang, or from Mirim Airfield at Mirim-dong, Sadong-kuyŏk, Pyongyang. The North Korean Air Force operates both of the airfields. The Yong'aksan Trading Company (龍岳山貿易商社) under the Second Economic Committee's External Economic Bureau handles missile exports, and the Ch'anggwang Credit Bank (창광신용은행) receives payment in dollars before exchanging the payments for Hong Kong dollars, Japanese Yen or Deutsche Marks. The Reconnaissance Bureau (정찰국) under the Ministry of the People's Armed Forces General Staff Department is in charge of the actual shipments from North Korea. [Note: There are no confirmed reports of North Korean shipments of Nodong or Scud missiles to Iraq.]
—Lee Kyo Kwan, "[NK Report] Pukhan Missile Such'ul Ŏddŏhke Hana?" *Chosun Ilbo*, 5 March 2002, www.chosun.com; Yi Kyo-kwan, "How Does North Korea Export Missiles?" *Chosun Ilbo*, 5 March 2002, in "DPRK Said to Export Body, Main Parts of Missiles Separately," FBIS Document ID KPP20020305000112.

5 March 2002
General Thomas Schwartz, Commander in Chief US Forces, Korea, tells the Senate Armed Services Committee that North Korea is the number one proliferator of missiles, but that Pyongyang has lived up to its commitment to abstain from missile flight-tests. Schwartz says that missile and weapons exports are "where they get their money, that's how they have kept their economy alive," and that exports have increased in the "last couple of months." Furthermore, Schwartz says that North Korea's "ballistic missile inventory includes over 500 Scuds of various types," and that North Korea can deploy missiles armed with chemical warheads, and has the ability to weaponize biological agents for delivery with its missiles. The general also says there is no evidence that Pyongyang is engaged in international terrorism.
—"Statement of General Thomas A. Schwartz, Commander in Chief United Nations Command/Combined Forces Command & Commander, United States Forces Korea, before the 107th Congress Senate Armed Services Committee, 5 March 2002, p. 8, www.senate.gov; "North Korea Expanding Missile Sales: US General," Agence France Presse, 5 March 2002, in Lexs-Nexis, http://web.lexis-nexis.com; "Chuhanmi'gun Saryŏnggwan 'Pukhan Missile Such'ul Chŭngga'," *Chosun Ilbo*, 6 March 2002, www.chosun.com; Park Wan Kyun, "Schwartz Saryŏnggwan Misang'wŏn'gunsawi Chŭng'ŏn," *Segye Ilbo*, 6 March 2002, p. 2, in KINDS, www.kinds.or.kr.

3 April 2002
North Korea and Russia sign an agreement for scientific exchanges during 2002-2004.
—Ch'oe Sŏn Yŏng, "Puk-Rŏ, Munhwa.Kwahakkyoryugyehoeksŏ Ch'egyŏl," *Joongang Ilbo*, 6 April 2002, www.joins.com.

26 April 2002
In testimony before the Senate Armed Services Committee, Lt. General Leon J. LaPorte says that North Korea has

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"over 500 Scuds of various types" and "continues to produce and deploy Nodong missiles."
—"Advance Questions for Lieutenant General Leon J. LaPorte, USA Nominee for the Position of Commander in Chief, United Nations Command/Combined Forces Command/Commander, United States Forces Korea," April 2002, www.senate.gov; Jim Garamone, "Korea, Pacific Command Nominees Testify," American Forces Press Service, 26 April 2002, www.defenselink.mil; "LaPorte Chuhanmisaryŏnggwan Sangwŏnch'ŏngmunhoe Mundap 'Chuhanmin'gun [*sic*] Hyŏndaehwa-Kaehyŏk P'il'yo'," *Taehan Maeil*, 29 April 2002, p. 6, in KINDS, www.kinds.or.kr.

29 April 2002
During a speech at a Korea Institute for Defense Analyses seminar in Seoul, Lieutenant General Daniel R. Zanini, Commander Eighth United States Army, says that North Korea's missile inventory "approaches 1,000." Zanini's statement was widely misquoted in the press as "North Korea possesses 1,000 missiles" or "over 1,000 missiles."
—"US Commander Warns of NK's Enhanced Missile Capabilities," *Korea Times*, 30 April 2002, www.koreatimes.co.kr; "North Korea Possesses 1,000 Ballistic Missiles says Zanini," *Joongang Ilbo*, 1 May 2002, in KINDS, www.kinds.or.kr; Yonhap News Agency, 29 April 2002, in "Eighth US Army Commander Reportedly Notes DPRK's 'Big Increase' in Missiles," FBIS Document ID: KPP20020429000092; Yu Yong Wŏn, "[Mi 8 Kunsaryŏnggwan] 'Pukhan, Kosŏngnŭng Missile 1000 Kiboyu'," *Chosun Ilbo*, 29 April 2002, www.chosun.com; Sŏng Dong Ki, "'Puk Missile 1000 Yŏgae Poyu' Mi 8 Kun SaryOnggwan Palghyŏ," *Donga Ilbo*, 29 April 2002, www.donga.com; Kim Min Sŏk, "Puk, T'ando Missile 1 Ch'ŏnbal," *Joongang Ilbo*, 30 April 2002, p. 2, in KINDS, www.kinds.or.kr.

9 May 2002
In Kuala Lumpur, North Korea and Malaysia sign a memorandum of understanding on cooperation in science and technology. The agreement covers the fields of satellites, information technology and agro-technology. The MOU is signed by Dr. Lee Kwang Ho, president of North Korea's Academy of Sciences, and by Datuk Seri Law Hieng Ding, Malaysia's Minister of Science, Technology and Environment.
—"Malaysia and North Korea Enhance Cooperation in Science and Technology," *Malaysia General News*, 9 May 2002, in Lexs-Nexis, www.lexis-nexis.com; "MOU Signed between DPRK and Malaysia," Korean Central News Agency, 14 May 2002, www.kcna.co.jp; "Chosŏn'gwa Malaysia Ŭi Kwahakkisulhyŏpcho'e Kwanhan Ryanghaemun Choin," Korean Central News Agency, 14 May 2002, www.kcna.co.jp; "DPRK Delegation Leaves for Malaysia," Korean Central News Agency, 4 May 2002, www.kcna.co.jp; Malaysia'e Ka'nŭn Chosŏnjŏngbugwahakkisultaep'yodan Ch'ulbal," Korean Central News Agency, 4 May 2002, www.kcna.co.jp; "Malaysian IT Delegation Arrives in Pyeongyang (sic)," *Joongang Ilbo*, 8 August 2002, http://english.joins.com; Chŏng Yŏng Shik, "Malaysia Kwagidaep'yodan Pangbuk," *Joongang Ilbo*, 8 August 2002, www.joins.com.

June 2002
Iran and Libya sign a deal for Tehran to transfer Shehab-3 missile technology. The deal is reportedly for five years and Libya will pay Iran $13.5 million per year. North Korea will also participate in the project according to *Middle East Newsline*.
—"Iran Begins Export of Shihab-3 Technology," *Middle East Newsline*, Vol. 4, No. 351, 18 September 2002, www.menewsline.com.

2 June 2002
National Defense Commission Chairman Kim Jong Il, Kim Il Ch'ŏl, Minister of the People's Armed Forces, and Vice Marshal Kim Yŏng Ch'un, chief of the general staff of the Korean People's Army, and other high-ranking officials meet with a Russian military delegation from the Far Eastern Military District. The Russian delegation is led by Colonel General Yuri Yakubov, the commander of the district. Andrei Karlov, the Russian ambassador to North Korea, and Vladislav Prokopenko, the Russian military attaché from the embassy also attend the meetings. The

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delegation arrived in Pyongyang on 31 May, and was preceded by a "Red-Flag Ensemble" that arrived on 27 May.
—"Kim Jong Il Meets with Russian Military Delegation," Korean Central News Agency, 2 June 2002, www.kcna.co.jp; "Kim Jong Il Ch'ongbisŏ Russia Ryŏnbangmuryŏk Wŏndonggun'gwan'gudaep'yodan'ŭl Chŏpkyŏn," Korean Central News Agency, 2 June 2002, www.kcna.co.jp; "Chief of KPA general Staff Meets Russian Military Delegation," Korean Central News Agency, 2 June 2002, www.kcna.co.jp; "Kim Yŏng Ch'un Ch'ongch'ammojang'i Russia Ryŏnbangmuryŏk Wŏndonggun'gwan'gudaep'yodan'ŭl Mannatda," Korean Central News Agency, 2 June 2002, www.kcna.co.jp; "Delegation of Far Eastern Military District of Russia Here," Korean Central News Agency, 31 May 2002, www.kcna.co.jp; "Russia Ryŏnbangmuryŏk Wŏndonggun'gwan'gudaep'yodan Toch'ak," Korean Central News Agency, 31 May 2002, www.kcna.co.jp; "Russian Military Delegation Feted," Korean Central News Agency, 1 June 2002, www.kcna.co.jp; "Inminmuryŏkpu'esŏ Russia Ryŏnbangmuryŏk Wŏndonggun'gwan'gudaep'yodan'ŭl Wihayŏ Yŏnhoe Maryŏn," Korean Central News Agency, 1 June 2002, www.kcna.co.jp; "Delegation and Ensemble of Far Eastern Military District of Russia Here," Korean Central News Agency, 27 May 2002, www.kcna.co.jp; "Russia Ryŏnbangmuryŏk Pulg'ŭn'giwŏndonggungwan'guhyŏpchudan Toch'ak," Korean Central News Agency, 27 May 2002, www.kcna.co.jp; "<Pukhandanshin> Russia Kunhyŏpchudan Pyongyang Toch'ak," Yonhap News Agency, 27 May 2002, www.yonhapnews.net; "N.K. Defense Minister Meets with Russian Military Delegation," *Joongang Ilbo*, 3 June 2002, http://english.joins.com; "Puk Kim Il Ch'ŏl, Rŏgun Taep'yodan Manna," *Chosun Ilbo*, 3 June 2002, http://nk.chosun.com.

17 June 2002
Government delegations from the United States, Japan, and South Korea hold a Trilateral Coordination and Oversight Group (TCOG) meeting in San Francisco. The three sides agree about the importance of holding "comprehensive and flexible talks with North Korea." The US and Japanese delegations reaffirmed support for Kim Dae Jung's policy of engagement with Pyongyang, and for the implementation of the Agreed Framework.
—Press Statement, Richard Boucher, Spokesman, "Joint Statement by the Trilateral Coordination and Oversight Group," US Department of State, 18 June 2002, www.state.gov; "U.S. Hopes to Ease N. Korea Tension – AP," *Joongang Ilbo*, 19 June 2002, http://english.joins.com; Shim Jae-yun, "ROK Urges US to Upgrade Level for Dialogue with NK," *Korea Times*, 21 June 2002, www.hk.co.kr; Kim Ji-ho, "North Korea Urged to Allow International Nuclear Inspection," *Korea Herald*, 20 June 2002, www.koreaherald.co.kr.

14 June 2002
Ambassador Jack Pritchard, Special Envoy for Negotiations with the DPRK, meets with Ambassador Pak Kil Yŏn at North Korea's Permanent Mission to the UN in New York. Pritchard asks the Mission if there are any convenient dates for a US delegation to visit North Korea. On 25 June, the United States informs the Mission that a delegation could be prepared to visit Pyongyang on 10 July. On 27 June, the US side asks for a confirmation of the date, and for a timely response in consideration of time needed for travel arrangements. Following the naval clash between North and South Korea on 29 June, and the lack of a response from Pyongyang, the United States cancels the proposed visit on 1 July 2002.
—Press Statement, Richard Boucher, Spokesman, "Status of Political Dialogue with North Korea," US Department of State, 2 July 2002, www.state.gov; Office of the Spokesman, "Taken Questions From Daily Press Briefing of June 14, 2002: North Korea – Talks in New York," US Department of State, 14 June 2002, www.state.gov; Yonhap News Agency, 28 June 2002, in "ROK's Yonhap: Washington Suggests Sending Envoy to Pyongyang Second Week of July," FBIS Document ID: KPP20020629000007; "ROK"Mi T'ŭksabangbuk Ch'ŏlhoe Kongshik Palp'yo," *Joongang Ilbo*, 3 July2002,www.joins.com.

24 June 2002
The Korean Central news Agency reports that North Korea will host the "2002 Pyongyang International Technology

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and Infrastructure Exhibition" 17-20 September 2002. The event will be co-sponsored by the DPRK International Exhibition Company and the Munich International Exhibition Corporation. The exhibition will display "equipment for developing the latest technology and machines and equipment to be used in building, building materials, metal, mining, transport, communications and chemical industry." [Note: Transfers of machines and technologies for metallurgy could possibly be applied to missile development.]
—"Pyongyang International Technology and Infrastructure Exhibition to Be Held," Korean Central News Agency, 24 June 2002, www.kcna.co.jp; "P'yŏngyang Kukchegyŏngje Mit Habugujo Chŏllamhoega Chinhaeng Toenda / 9 Wŏl 17 Il ~ 20 Il," Korean Central News Agency, 24 June 2002, www.kcna.co.jp.

29 June 2002
North and South Korean naval forces clash in coastal waters off the west coast. One South Korean vessel is sunk and four sailors are killed. North Korean casualties are estimated to be about 30. During the skirmish, South Korean elint indicates that North Korean radars have been turned on for ship-borne anti-ship Styx missiles and for Silkworm missiles based onshore. The South Korean vessels disperse chaff as a countermeasure and reportedly break off their aggressive pursuit of the North Korean vessels in fear that a North Korea could respond with a missile attack, which would potentially result in a serious escalation of the conflict.
—"The Naval Clash on the Yellow Sea on 29 June 2002 between South and North Korea: The Situation and ROK's Position," Ministry of National Defense, Republic of Korea, 1 July 2002, www.mnd.go.kr; "Pukhan'gun'ŭi NLL Ch'imbŏm Mit Tobal'gwa Uri Kun'ŭi Taeŭng," Ministry of National Defense, Republic of Korea, 2 July 2002, www.mnd.go.kr; "Sŏhae'gyojŏn Chosa Kyŏl'gwa [Sŏhae'gyojŏnsat'ae Kwallyŏn Podo Briefing ('02.7.7)]," Ministry of National Defense, Republic of Korea, 7 July 2002; Ministry of National Defense, 7 July 2002, in "ROK Defense Ministry Announces Investigation Results of West Sea Clash—Graphics," FBIS Document ID: KPP20020707000007; Hwang Jang-jin, "N.K Readied Anti-Ship Missiles During Naval Exchange of Fire," *Korea Herald*, 5 July 2002, www.koreaherald.co.kr; Yonhap News Agency, 4 July 2002, in "ROK DefMin (sic) Refutes Criticism, Says DPRK Was Preparing Missile launch in Sea Clash," FBIS Document ID: KPP20020704000034; Hwang Jang-jin, "S. Korea, U.S. Analyze Communications During West Sea Skirmish with N. Korea," *Korea Herald*, 1 July 2002, www.koreaherald.co.kr; Hwang Jang-jin, "South, North Exchange Fire in West Sea," *Korea Herald*, 30 June 2002, www.koreaherald.co.kr; Doug Struck, "N. Korea Sends Contradictory Signals," *Washington Post*, 1 July 2002, p. 12; Yonhap News Agency, 7 July 2002, in "ROK's Yonhap: Misinformation Causes navy's Meager Reaction to N. K. Provocation," FBIS Document ID: KPP20020707000010; "S. Korean Military to Blame for Armed Clash in West Sea," Korean Central News Agency, 30 June 2002, www.kcna.co.jp; "Sŏhaemujangch'ungdolsa'gŏn Taehan Namjosŏn Tanggug'ŭi Palp'yo'nŭn Nalcho / Chosŏn'inmin'gun Haegunsaryŏngbu Taebyŏn'in," Korean Central News Agency, 30 June 2002, www.kcna.co.jp; "U.S. Is to Blame for Armed Clash in West Sea of Korea," Korean Central News Agency, 1 July 2002, www.kcna.co.jp; "Migug'ŭn Sŏhaemujangch'ungdolsa'gŏn'ŭi Ch'aeg'im'esŏ Chŏltaero Pŏs'ŏ Nalsu Ŏpta / Chosŏn'oemusŏngdaebyŏn'in," Korean Central News Agency, 1 July 2002, www.kcna.co.jp.

July 2002
A Pakistani C-130 transport plane lands in North Korea and is loaded with missile parts for export back to Pakistan. [Note: The shipment is part of a suspected nuclear-for-missile barter deal between Islamabad and Pyongyang. It is not clear if Pakistan delivered nuclear materials or technologies on this flight.]
—David E. Sanger, "In North Korea and Pakistan, Deep Roots of Nuclear Barter," *New York Times*, 24 November 2002, www.nytimes.com.

1 July 2002
The United States cancels a proposed visit by a US delegation to Pyongyang. On 14 June, Ambassador Jack Pritchard, Special Envoy for Negotiations with the DPRK, met with Ambassador Pak Kil Yŏn at North Korea's

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Permanent Mission to the UN in New York, and proposed the visit. The US State Department says the trip, which was proposed for 10 July, is no longer possible because of the Pyongyang's "failure to respond in a timely manner," and because the clash between North and South Korean naval vessels on 29 June "had created an unacceptable atmosphere in which to conduct the talks."
—Press Statement, Richard Boucher, Spokesman, "Status of Political Dialogue with North Korea," US Department of State, 2 July 2002, www.state.gov; Office of the Spokesman, "Taken Questions From Daily Press Briefing of June 14, 2002: North Korea – Talks in New York," US Department of State, 14 June 2002, www.state.gov; Vernon Loeb, "U.S. Shelves N. Korea Talks" *Washington Post*, 3 July 2002, p. 20, www.washingtonpost.com; Yonhap News Agency, 3 July 2002, in "ROK's Yonhap: Hope for U.S.-N.K. Talks Disappears Due Mostly to Naval Clash," FBIS Document ID: KPP20020703000029; "Mi T'ŭksabangbuk Ch'ŏlhoe Kongshik Palp'yo," *Joongang Ilbo*, 3 July 2002, www.joins.com.

1 July 2002
A North Korean Foreign Ministry spokesman accuses the United States of being responsible for the 29 June naval clash between North and South Korea because the "Northern Limit Line" was set unilaterally by the United States and was not part of the July 1953 armistice. According to the spokesman, "the incident occurred as the South Korean naval vessels intruded into the territorial waters of the north side and fired first hundreds of rounds of bullets and shells at the patrol boats of the navy of the Korean People's Army on routine coastal guard duty."
—"U.S. Is to Blame for Armed Clash in West Sea of Korea," Korean Central News Agency, 1 July 2002, www.kcna.co.jp; Migug'ŭn Sŏhaemujangch'ungdolsagŏn'ŭi Chaeg'im'esŏ Chŏldaero Pŏs'ŏ Nalsu Ŏpta/Chosŏn'oemusŏngdaebyŏn'in," Korean Central News Agency, 1 July 2002, www.kcna.co.jp.

7 July 2002
US Ambassador Thomas Hubbard says that the naval clash on 29 June appears to be a deliberate attack from North Korea, but that he expects no significant changes in bilateral relations between Washington and Pyongyang, and between Seoul and Pyongyang. Hubbard says the United States continues to support Kim Dae Jung's policy of engagement with North Korea, and he believes it is impossible to know whether Kim Jong Il was involved in the command decisions related to the sea battle.
—Kim Kwang-tae, "Naval Clash NK's 'Deliberate' Provocation: Hubbard," *Korea Times*, 8 July 2002, www.hankooki.com.

9 July 2002
According to a Geostrategy-Direct.com report, "US officials have confirmed that Egypt obtained at least 24 Nodong missiles and engines from North Korea." According to the report, Egypt has acquired a number of launchers from former Soviet states including Belarus and Latvia. The number of launchers is said to exceed the number of missiles, which suggests that Egypt is planning to acquire more Nodongs from North Korea. The Nodongs currently in the Egyptian inventory are said to have been smuggled across the border with Libya.
—"Middle East Report: U.S. Confirms Delivery of No-Dong Missiles to Egypt via Libya," *Geostrategy-Direct.com*, 9 July 2002, http://geostrategy-direct.com.

13-16 July 2002
Kim Yŏng Nam, President of the Presidium of Supreme People's Assembly, visits Libya to meet with a number of high-level officials. Kim is accompanied by Foreign Minister Paek Nam Sun, Minister of Trade Lee Kwang Kun and Academy of Sciences President Lee Kwang Ho. The two sides sign agreements on scientific and technical cooperation, the promotion and protection of foreign investment, and information and cultural exchanges. [Note: The meetings are also suspected of addressing cooperation in the field of ballistic missiles.]

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—Agreements, Plan Signed betwiin [*sic*] DPRK and Libya," Korean Central News Agency, 16 July 2002, www.kcna.co.jp; "Chosŏn'gwa Libya'saie Hyŏpchowa Kyoryu Kanghwahalte Taehan Hyŏpchŏngdŭlgwa Chiphaenggyehoeksŏ Choin," Korean Central News Agency, 16 July 2002, www.kcna.co.jp; "Inter-Sector Talks Held between DPRK and Libya," Korean Central News Agency, 15 July 2002, www.kcna.co.jp; "Chosŏn'gwa Libya'saiŭi Pumunbyŏlhoedam Chinhaeng," Korean Central News Agency, 15 July 2002, www.kcna.co.jp; "Iran Begins Export of Shihab-3 Technology," *Middle East Newsline*, Vol. 4, No. 351, 18 September 2002, www.menewsline.com; "DPRK Senior Official Winds up Visits to Indonesia, Libya and Syria," Xinhua News Agency, 19 July 2002, in Lexis-Nexis, http://web.lexis-nexis.com; "Kim Yong Nam Leaves Tarabulus," Korean Central News Agency, 16 July 2002, www.kcna.co.jp; Kim Yŏng Nam Wiwŏnjang Libya Pangmun Kkŭt'mach'igo T'arabul'sŭ Ch'ulbal," Korean Central News Agency, 16 July 2002, www.kcna.co.jp; Talks Held between Kim Yong Nam and Mustafa al Kharoubi," Korean Central News Agency, 15 July 2002, www.kcna.co.jp; "Kim Yŏng Nam Wiwŏnjang Libya Ch'ong'inmindaehoe Pisŏ'rŭl Manatta," Korean Central News Agency, 15 July 2002, www.kcna.co.jp; "N. Korea Discusses Missile Deal with Libya, Syria," *Middle East Newsline*, Vol. 4, No. 258, 12 July 2002, www.menewsline.com.

23 July 2002

In a statement before the Senate Foreign relations Committee, Frank Gaffney, president of the Center for Security Policy, says, "It is no coincidence the regimes that are currently working hardest to attain and proliferate weapons of mass destruction are the same regimes that are the most tyrannical." Gaffney includes North Korea with Iran, Iraq, Syria, Libya, Cuba, Sudan, Algeria, and China. [Note: The statement elicits a response from the North Korean media on 14 August.]

—Frank J. Gaffney, "Nuclear Treaty with Russia," Statement before the US Senate Foreign Relations Committee, Federal Document Clearing House Congressional Testimony, 23 July 2002, in Lexis-Nexis, http://web.lexis-nexis.com.

26 July 2002

Kim Jong Il visits the Hŭich'ŏn Machine Tool Factory to inspect NC machine tools.

—"Efficient Engine for Building Powerful Nation," Korean Central News Agency, 22 August 2002, www.kcna.co.jp; "Kim Jong Il Ch'ongbisŏ Hŭich'ŏnshinae Kongjang, Kiŏpsodŭl'ŭl Hyŏnjijido," Korean Central News Agency, 27 July 2002, www.kcna.co.jp; Korean Central News Agency, 22 August 2002, in "DPRK's KCNA: Efficient Engine for Building Powerful Nation," FBIS Document ID: KPP20020822000033.

29 July 2002

During a visit to Pyongyang, Russian Foreign Minister Igor Ivanov says that North Korea "is ready for a constructive dialogue with the United States and Japan, without any preconditions." Ivanov held several hours of talks with Kim Jong Il during his two-day visit.

—Karen DeYoung, "N. Korea Eager for Talks, Russia Says," *Washington Post*, 30 July 2002, p. 11, www.washingtonpost.com.

30 July 2002

Geostrategy reports that in recent weeks, US reconnaissance satellites have detected information that indicates North Korea is preparing to export "chemicals used in rocket fuel," probably to a country in the Middle East.

—"Satellites Spot North Koreans Preparing Rocket Fuel Ingredients for Export," *Geostrategy*, Week of 30 July 2002, http://geostrategy-direct.com.

31 July 2002

US Secretary of State Colin Powell and North Korean Foreign Minister Paek Nam Sun have a 15-minute talk over coffee at the ARF meeting in Brunei. Paek later says that North Korea has agreed to resume dialogue with the

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United States. Paek also holds a meeting with Japanese Foreign Minister Yoriko Kawaguchi, and both parties agree to work towards the normalization of ties between Tokyo and Pyongyang.
—Don Kirk, "Powell Meets With North Korean Counterpart in Brunei," *New York Times*, 31 July 2002; Karen DeYoung, "Powell Tentative on N. Korea," *Washington Post*, 1 August 2002, p. 22; "Coffee With North Korea," *Washington Post*, 1 August 2002, p. 26; Kyodo News Service, 31 July, in "Japan, N. Korea Agree to promote Normalization," FBIS Document ID: JPP20020731000116.

August 2002
North Korea delivers 15 Scud-C missiles to Yemen. In December, Yahya Alshawkani, a spokesman for the Yemeni embassy in the United States, confirms the transfer. [Note: In late August, the United States imposes sanctions on a North Korean trading company believed to have arranged the transfer. However, according to the State Department, the sanctions are imposed because of missile transfers that occurred during the Clinton administration.]
— Bill Gertz, "N. Korea Ships Fuel, Missiles to Yemen," *Washington Times*, 2 December 2002, p. 1, www.washtimes.com; Department of State, Bureau of Nonproliferation Public Notice 4106 in the *Federal Register*, Vol. 67, No. 164, 23 August 2002, pp. 54693-54694; Michael R. Gordon, "North Korea Incurs U.S. Penalty for Missile Parts Sales to Yemen," *New York Times*, 22 August 2002, www.nytimes.com; *SIPRI Yearbook 2002: Armament and Disarmament and International Security*, Stockholm International Peace Research Institute, (Oxford: Oxford University Press, 2002).

August 2002
According to evidence acquired by the Bush administration, Pakistan has been assisting North Korea with its nuclear weapons program as late as August 2002. The administration believes Pakistan has been providing "nuclear technical knowledge, designs and possibly materials in exchange for missile parts up until this summer."
—Glenn Kessler, "Pakistan's N. Korea Deals Stir Scrutiny," *Washington Post*, 13 November 2002, p. A1, www.washingtonpost.com.

8 August 2002
The North Korean Foreign Ministry issues a statement regarding the visit of a special US envoy to Pyongyang. The spokesman says North Korea is willing to receive the envoy, but that results from the restart of bilateral dialogue would depend upon the "US dropping it hostile policy towards North Korea."
—"Spokesman of DPRK FM on Issue of Pyongyang Visit of U.S. Special Envoy," Korean Central News Agency, 8 August 2002, www.kcna.co.jp; "Munjenŭn Migug'I Taejosŏnjŏktaeshijŏngch'aeg'ŭl Kŭ'mandu'nŭnde Itta / Chosŏn'oemusŏngdaebyŏn'in Migukt'ŭksa P'yŏnyangbangmunmunje'e Ŏn'gŭp," Korean Central News Agency, 8 August 2002, www.kcna.co.jp; Kim Hee-sung, "North Challenges 'Hostile' Policy, Reports on Envoy," *Joongang Ilbo*, 9 August 2002, http://english.joins.com.

8 August 2002
In Tokyo, Vann H. Van Diepen, director of the US State Department's Office of Chemical, Biological, and Missile Nonproliferation, says, "The North Koreans hopefully realize it's very much in their interest to maintain that [missile test] moratorium and maintain it indefinitely." Van Diepan also says that any North Korean missile test would be very destabilizing.
—Oh Day-young, "U.S. Official Warns the North to Keep Missile Moratorium," *Joongang Ilbo*, 10 August 2002, http://english.joins.com.

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8 August 2002
A Malaysian government delegation in the field of science and technology visits Pyongyang. The delegation is led by Datuk Seri Law Hieng Ding, Malaysian Minister of Science, Technology and Environment. Kim Yŏng Nam, President of the Presidium of North Korea's Supreme People's Assembly, and Dr. Lee Kwang Ho, president of North Korea's Academy of Sciences, meet with the delegation. On 9 May 2002, the two countries signed a memorandum of understanding on cooperation in science and technology that covered the fields of satellites, information technology and agro-technology.
—"Kim Yong Nam Meets Malaysian Delegation," Korean Central News Agency, 8 August 2002, www.kcna.co.jp; "Kim Yŏng Nam Wiwŏnjang'I Malaysia Chŏngbugwahakkisuldaep'yodan'ŭl Manatta," Korean Central News Agency, 8 August 2002, www.kcna.co.jp; Ri Mi Hwa, "Rosy Prospects in Sci-Tech Cooperation," *Pyongyang Times*, 17 August 2002, www.times.dprkorea.com.

14 August 2002
Middle East Newsline reports that North Korea and Egypt recently met to discuss military cooperation, and that the talks could have included missiles. According to the report, the meeting took place during a visit from a committee in North Korea's Supreme People's Assembly. The meeting took place with members of Budget Committee in Egypt's parliament.
—"Egypt, N. Korea Discuss New Cooperation Plan," *Middle East Newsline*, 14 August 2002, Vol. 4, No. 305, www.menewsline.com; *Middle East Newsline*, 14 August 2002, in "Cairo, Pyongyang Talks reportedly Dealt with New North Korea Missile Sales," FBIS Document ID: GMP20020814000089.

14 August 2002
In response to the US Senate testimony on 23 July by Frank Gaffney, president of the Center for Security Policy, the *Rodong Sinmun* says that North Korean missiles are "not for threatening anyone."
—"U.S. Hawkish Forces' Sophism Under Fire," Korean Central News Agency, 14 August 2002, www.kcna.co.jp; "Shinmundŭl Sŏnjegonggyŏg'ŭi Kushil'ŭl Maryŏnhagi Wihan Mi'gukhojŏnseryŏg'ŭi Kwebyŏn'ŭl Kyut'an," Korean Central News Agency, 14 August 2002, www.kcna.co.jp.

15 August 2002
In US Secretary of Defense Donald Rumsfeld's annual report, Rumsfeld says that "Iraq, Iran and North Korea are arming with long-range missiles and are seeking or acquiring nuclear, biological, and chemical (NBC) weapons."
— Donald H. Rumsfeld, "Annual Report to the President and the Congress," 2002, p. 12, www.defenselink.mil.

16 August 2002
The US imposes sanctions against North Korea's "Ch'anggwang Shinyong Corporation" for violating US export control laws regarding the Missile Technology Control Regime (MTCR). According to reports, the sanctions are being applied for the sale of Scud-C missile components to Yemen during the time of the Clinton administration. The sanctions will last for two years. [Note: The organization is actually a bank that handles the financial transactions for North Korea's exports. The name of the bank is "Korea Ch'anggwang Credit Bank (창광신용은행)."]
—Department of State, Bureau of Nonproliferation Public Notice 4106 in the *Federal Register*, Vol. 67, No. 164, 23 August 2002, pp. 54693-54694; Michael R. Gordon, "North Korea Incurs U.S. Penalty for Missile Parts Sales to Yemen," *New York Times*, 22 August 2002, www.nytimes.com; Peter Slevin, "U.S. to Sanction North Korean Manufacturer," *Washington Post*, 23 August 2002, www.washingtonpost.com; Ser Myo-ja, "U.S. Sanctions North for Yemen Missile Sale," *Joongang Ilbo*, 24 August 2002, http://english.joins.com; Eli J. Lake, "U.S. to penalize

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North Korean Arms Firm," *Washington Times*, 23 August 2002, www.washtimes.com; "U.S. Imposes Sanctions on N. Korea," *Middle East Newsline*, Vol. 4, No. 320, 26 August 2002, www.menewsline.com.

20 August 2002
Korean Central Television in Pyongyang denies the accusations in Donald Rumsfeld's report issued on 15 August that say "North Korea is arming with long-range missiles and is seeking or acquiring nuclear, biological, and chemical (NBC) weapons." The broadcast admits that North Korea produces missiles for self-defense, but says that Pyongyang opposes the use of weapons of mass destruction.
—Korean Central Broadcasting, 20 August 2002, in "DPRK Criticizes US Defense Report Claiming DPRK Possesses Long-Range Missiles," FBIS Document ID: KPP20020820000090.

20-24 August 2002
North Korea's National Defense Commission Chairman Kim Jong Il visits the Russian Far East and meets with President Vladimir Putin. Kim visits a number of factories, including production facilities for the Sukhoi-27 fighter and diesel submarines. The two leaders discuss economic issues and the linkage of railways between the two nations. According to *Shindonga*, a South Korean monthly, Kim suggests a joint project for the production of ballistic missiles with a range of up to 500km. The production facility would be located in the Russian Far East and North Korea would send Korean engineers for "technical cooperation."
—*Shindonga*, 1 October 2002, pp. 126-131, in "ROK Monthly: Russia Rejects DPRK Request for Weapons During Kim Chong-il's Visit" FBIS Document ID: KPP20021002000005; "Kim Jong Il, Putin'ege Hangmo-Suho'i27 – Diesel Chamsuham Yogu Hada Kŏjŏldanghaetta," *Shindonga*, October 2002, www.donga.com;"Kim and Team Talk Weapons, Jets, Subs with Russia," *Joongang Ilbo*, 21 August 2002, http://english.joins.com; Ahn Sung-kyoo, "North's Leader Sits in Cockpit of Russian Jet; Summit Unsure," *Joongang Ilbo*, 22 August 2002, http://english.joins.com; ITAR-TASS, 22 August 2002, in "North Korean Leader Kim Expresses Interest in Russian Troops Weapons," FBIS Document ID: CEP20020822000160; "Detailed Report on Kim Jong Il's Visit to Far Eastern Region of Russia," Korean Central News Agency, 26 August 2002; "Kim Jong Il Kukpang'wiwŏnjang'ŭi Russia'ryŏnbang Wŏndongjiyŏkpangmun'e Taehan Sangbo," Korean Central News Agency, 26 August 2002; "Korean Deeply Impressed by Kim Jong Il's Foreign Tour," Korean Central News Agency, 23 August 2002; "Kim Jong Il Wiwŏnjangkkesŏ kkomsso'molsŭ'k'ŭ - Na – A'mu'reshi'rŭl Pangmun Hashiyŏtta," Korean Central News Agency, 22 August 2002; "Third Day: Kim Jong-il Visists Factories in Khabarovsk," *Joongang Ilbo*, 22 August 2002, http://english.joins.com; Doug Struck, "Putin Wants Korean Rail to Help Russia's Far East," *Washington Post*, 23 August 2002, www.washingtonpost.com; Ki-Hyun Kim, "Putin Advised Kim Jong-il to Open Up," *Donga Ilbo*, 23 August 2002, www.donga.com; Kim Ki Hyŏn, "Putin Kaebangnasŏra Kim Jong Il Sŏltŭk," *Donga Ilbo*, 23 August 2002, www.donga.com; Jim Heintz, "N. Korea, Russia Talk Economics – AP," *Joongang Ilbo*, 24 August 2002, http://english.joins.com; Korean Central Broadcasting Station, 21 August 2002, in "Details of DPRK Leader's 21 Aug Visit to Komsomolsk-on-Amure," FBIS Document ID: KPP20020821000123.

26 August 2002
In an interview with a South Korean Internet news provider, US Ambassador Thomas Hubbard says that the United States is not ruling out the possibility of seizing North Korean missile exports on the high seas. However, Hubbard says that the United States wants to resolve its dispute with North Korea over its missile and WMD programs through dialogue.
—Son Byŏng Kwan, et al., "Panmi'gamjŏng, 'Taehwabujŏk'i Wŏn'in Yŏjungsaengsa'gŏn 'Chaep'an'gwan P'ogi' Kollan [Yŏllin Interview 69] Hubbard Chuhan Midaesa," *Ohmynews*, 26 August 2002, www.ohmynews.com; Shimi Jae-yun, "US Hints at Retaliatory Steps Against NK Exports of Missiles," *Korea Times*, 26 August 2002, www.koreatimes.co.kr; Kwon Kyung-bok, "US Ambassador Notes NK Taking Right Steps," *Chosun Ilbo*, 26 August

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2002, http://nk.chosun.com; Yonhap News Agency, 26 August 2002, in "Further on Interview with US Ambassador Hubbard to ROK on USFK, DPRK Issues," FBIS Document ID: KPP20020826000064.

26 August 2002
While in Tokyo, John Bolton, US Under Secretary of State for Arms Control and International Security, says the United States has evidence that North Korea is producing nuclear, chemical and biological weapons, and long-range ballistic missiles. Bolton also says that North Korea is exporting missiles and missile components.
—"Bolton Fields Queries on Iraq, North Korea," August 26 Roundtable in Tokyo, 26 August 2002, www.globalsecurity.org; Natalie Obiko Pearson, "Top U.S. Arms Negotiator Accuses North Korea of Building, Exporting Weapons of Mass Destruction –AP," *Joongang Ilbo*, 27 August 2002, http://english.joins.com; Kwon Kyung-bok, "John R. Bolton to Visit Seoul," *Chosun Ilbo*, 27 August 2002, http://english.chosun.com; "Bolton Ch'a'gwan, 'Pukhan Haek-Saenghwahang'mugi Kaebal'," *Chosun Ilbo*, 27 August 2002, http://nk.chosun.com.

29 August 2002
In Seoul, John Bolton, US Under Secretary of State for Arms Control and International Security, says that "in addition to its disturbing weapons of mass destruction activities, North Korea also is the world's foremost peddler of ballistic missile-related equipment, components, materials and technical expertise." Bolton also says that George W. Bush's reference to North Korea as being part of an "axis of evil" was "more than a rhetorical flourish—it was factually correct." Bolton says the Agreed Framework is "in serious doubt" unless safeguards inspections begin soon, and there is "little doubt that North Korea has a chemical weapons program and "one of the most robust offensive bioweapons programs on earth."
—John R. Bolton, "North Korea: A Shared Challenge to the U.S. and the Republic of Korea," 29 August 2002, Seoul, www.state.gov; Sang-Hun Choe, "Negotiator Says N. Korea Well-Armed," *Washington Post*, 29 August 2002, www.washingtonpost.com; Martin Nesirky, "U.S. Official Calls N. Korea 'Peddler' of Missile Technology," *Washington Post*, 30 August 2002, p. 17, www.washingtonpost.com; Don Kirk, "Senior U.S. Official Underscores Bush's Criticism of North Korea," *New York Times*, 29 August 2002, www.nytimes.com; Xinhua News Agency, 29 August 2002, in "Xinhua: US Urges DPRK To Accept IAEA Atomic Inspections," FBIS Document ID: CPP20020829000040; Kim Ji-ho, "U.S. Diplomats Meet Seoul Officials on North Korea, Presidential Race," *Korea Herald*, 29 August 2002, www.koreaherald.co.kr; Kwon Kyung-bok, "State Department's Bolton Visits Cheong Wa Dae," *Chosun Ilbo*, http://english.chosun.com; Kwon Kyung-bok, "Bolton Says NK 'Armed to the Teeth'," *Chosun Ilbo*, 29 August 2002, http://nk.chosun.com; "Bolton to Arrive in Seoul Today," *Korea Times*, 27 August 2002, www.koreatimes.co.kr; Hwang Chae Hun, "Hanmi 'Puk WMD' Taech'aek Hyŏb'ŭi (Chonghap)," Yonhap News Agency, 28 August 2002, www.yonhapnews.net; Hwang Chae Hun, "Bolton, 'Geneva Hab'ŭi' Mirae Uryŏ," Yonhap News Agency, 29 August 2002, www.yonhapnews.net.

7 September 2002
The Trilateral Coordination and Oversight Group (TCOG) meeting is held in Seoul. The delegations from the United States, Japan and South Korea were led by Assistant Secretary of State for East Asian and Pacific Affairs James A. Kelly, Director General of Asian and Oceanian Affairs Hitoshi Tanaka, and Deputy Foreign Minister Lee Tae Shik. The three sides reconfirm their goal of resolving the issue of North Korea's WMD and missile programs through dialogue, and "highlight the importance of improved implementation of the Agreed Framework." [Note: Later reports indicate that while in Seoul, James Kelly briefs the South Korean government on US intelligence regarding North Korea's uranium enrichment program.]
—"Korea - Trilateral Coordination and Oversight Group Joint Statement," Press Statement, Richard Boucher, Spokesman, US Department of State, 9 September 2002, www.state.gov; "ROK, US, Japan Positively Assess Pyongyang's Move Toward Dialogue," *Korea Times*, 9 September 2002, in Lexis-Nexis, http://web.lexis-nexis.com;

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"ROK, US, Japan Launch Trilateral Talks on NK," *Korea Times*, 7 September 2002, in Lexis-Nexis, http://web.lexis-nexis.com; Kyodo News Service, "U.S., S. Korea Express Support Koizumi's Visit," Japan Economic Newswire, 7 September 2002, in Lexis-Nexis, http://web.lexis-nexis.com; Kim Ji-ho, "Three Nations to Discuss Koizumi's Visit," *Korea Herald*, 6 September 2002, in Lexis-Nexis, http://web.lexis-nexis.com; Lee Chong Hun, "[Puk Haekkaebal'gyehoek P'amun] Pyongyang Hoedamsŏ Pukshiin Ŏdŏnaegikkaji," *Donga Ilbo*, 17 October 2002, www.donga.com; Sŏ Ŭi Tong, "TCOG Hoeŭi Kyŏlsan / Mi 'Palbbarŭn Pukhaengbo' Chin'ŭi'p'aakchuryŏk," *Munhwa Ilbo*, 7 September 2002, p. 2, in KINDS, www.kinds.or.kr; Kim Su Chŏng, "TCOG Muŏl Non'ŭihana/ Nampuk-Pug'il'gwangye Kaesŏn Sokto-Panghyang Choyulhaltŭt," *Taehan Maeil*, 7 September 2002, p. 3, in KINDS, www.kinds.or.kr.

10 September 2002
The *Rodong Sinmun* carries a commentary criticizing US Under Secretary of State for Arms Control and International Security John Bolton's recent remarks in Seoul regarding North Korea's suspected WMD activities. The daily says Bolton's charges are "sheer lies" with the "sinister intention to justify the US hostile policy towards North Korea." The commentary claims Bolton's remarks are designed to "mislead public opinion through false propaganda to brand North Korea as a 'criminal' and to impose 'nuclear inspections'."
—"Bolton's Outbursts Under Fire," Korean Central News Agency, 10 September 2002, www.kcna.co.jp; "Migungmusŏng Kunch'uk Mit Anbomunjedamdangch'a'gwan'ŭi <Anbosang Uryŏyoin> Pal'ŏn Pi'nan / Rodongshinmun," Korean Central News Agency, 10 September 2002, www.kcna.co.jp.

17 September 2002
Japanese Prime Minister Junichiro Koizumi pays a one-day visit to Pyongyang for a summit with North Korea's National Defense Chairman and Korean Workers' Party general Secretary Kim Jong Il. The two sides discuss a number of issues including North Korea's WMD and missile development programs. During the talks, Kim Jong Il admits that North Korea had abducted Japanese citizens in the past, but he apologizes and pledges to investigate past cases and prevent it from happening again. Kim also promises to extend Pyongyang's missile flight-test moratorium indefinitely, and to resolve the concerns over North Korea's nuclear program through international agreements. Later reports speculate that Kim indirectly admitted to Koizumi that North Korea has nuclear weapons when he said, "no one knows what will happen if we fight a nuclear war against the United States."
—Howard W. French, "North Koreans Sign Agreement with Japanese," New York Times, 18 September 2002, p. A1, in Lexis-Nexis, http://web.lexis-nexis.com; Doug Struck, "N. Korea Admits It Abducted Japanese; Disclosure Clears Way for Historic Accord," Washington Post, 18 September 2002, p. A1, in Lexis-Nexis, http://web.lexis-nexis.com; "Kim Jong Il Told Koizumi that N. Korea Has Nukes," Daily Mainichi News, 18 October 2002, http://mdn.mainichi.co.jp; Shin Yun Sŏk, "'Haekchŏnjaeng Haebwaya Miwa Uyŏl'ar'a'/Kim Jong Il, Koizumi Hoedamddae Pal'ŏn," Hankook Ilbo, 19 October 2002, p. 2, in KINDS, www.kinds.or.kr; "DPRK-Japan Pyongyang Declaration Published," Korean Central News Agency, 17 September 2002, www.kcna.co.jp; "DPRK Foreign Ministry Spokesman on Issue of Missing Japanese," Korean Central News Agency, 17 September 2002, www.kcna.co.jp; "Japanese Prime Minister Arrives Here," Korean Central News Agency, 17 September 2002, www.kcna.co.jp; "Talks between Kim Jong Il and Koizumi Held," Korean Central News Agency, 17 September 2002, www.kcna.co.jp; "Choil P'yŏngyang Sŏn'ŏn," Korean Central News Agency, 17 September 2002, www.kcna.co.jp.

21-27 September 2002
In Warsaw, the participants at the Missile Technology Control Regime's 17th plenary meeting agree to continue approaching Pyongyang to find a solution to the North Korean missile problem. The plenary decides to hold the 19th meeting in South Korea in September 2004.
—Yonhap News Agency, 30 September 2002, in "ROK's Yonhap: MTCR Members Agree to Continue Contact with

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N.K.," FBIS Document ID: KPP20020930000042; Pak Che Kyun, "Missile Kisult'ongjech'eje 2004 Nyŏn Ch'onghoe Han'gug'e Kaech'oe," *Donga Ilbo*, 30 September 2002, p. 2, in KINDS, www.kinds.or.kr.

3-5 October 2002
US Assistant Secretary of State for East Asia and Pacific Affairs James Kelly leads a delegation to Pyongyang to discuss various bilateral issues. While in Pyongyang Kelly meets with First Vice Foreign Minister Kang Sŏk Chu and Vice Foreign Minister Kim Kye Kwan. On the first day of the talks, Kelly offers no specific evidence, but says the United States has evidence that North Korea has been pursuing a program to produce highly enriched uranium for nuclear weapons. The North Korean delegation initially denies the allegations, but on the second day of the talks, the North Korean delegation admits to having such a program. North Korean media describe Kelley's attitude as "arrogant" during the talks. Later, a "high-ranking South Korean government official" says that Kang proposed to link US nuclear suspicions and a reduction in conventional forces with the United States lifting economic sanctions and changing its hostile policy towards North Korea. [Note: US press reports suggest that the evidence regarding North Korea's uranium enrichment program is based on the discovery that North Korea has been attempting to acquire large amounts of high-strength aluminum for gas-centrifuges.]
—"US Special Envoy Leaves Pyongyang," Xinhua News Agency, 5 October 2002, in Lexis-Nexis, http://web.lexis-nexis.com; Kim Min-bai, "Government Stresses Dialogue on Nuclear Issue," *Chosun Ilbo*, 17 October 2002, http://english.chosun.com; Press Statement, Richard Boucher, Spokesman, "North Korean Nuclear Program," U.S. Department of State, 16 October 2002, www.state.gov; James A. Kelly, "U.S.-East Asia Policy: Three Aspects," Remarks at the Woodrow Wilson Center, Washington, D.C., 11 December 2002, www.state.gov; Joby Warrick, "U.S. Followed the Aluminum: Pyongyang's Efforts to Buy Metal Was Tip to Plans," *Washington Post*, 18 October 2002, www.washingtonpost.com; Oh Young-hwan, "North Continued Nuclear-Arms Project," *Joongang Ilbo*, 18 October 2002, http://english.joins.com; "Spokesman for DPRK FM on DPRK Visit of Special Envoy of U.S. President," Korean Central News Agency, 7 October 2002, www.kcna.co.jp; Andrea Koppel and John King, "U.S.: North Korea Admits Nuke Program," CNN, 16 October 2002, www.cnn.com.

4 October 2002
The *Asahi Shimbun* reports that about three months ago North Korea disbanded the "727 Liaison Office for Japan (對日 727 連絡所)" under the Operations Department (作戰部) of the Korean Workers' Party Central Committee (朝鮮勞動黨中央委員會). The office, based in Ch'ŏngjin, North Hamgyŏng Province, was staffed with about 1,500 personnel and was responsible for spy ship operations in Japanese territorial waters. Kim Jong Il reportedly issued the order to disband the office in order to reduce the possibility of conflicts with Japan. The name of the office comes from the date of 27 July, when Kim Il Sung is said to have issued instructions to encourage a revolution in South Korea.
—"Pyongyang Shuts Spy Ship Section," *Asahi Shimbun*, 5 October 2002, www.asahi.com; "Tainichi Kosakusen Bumon wo Kaisan ka Chosen Rodoto Sakusenbu," *Asahi Shimbun*, 4 October 2002, www.asahi.com; Kyodo News Service, 4 October 2002, in FBIS Document ID: JPP20021004000017; Shin Yun Sŏk, "Puk, Taeilgongjaksŏn Pusŏ Haech'e/Il'innapch'i-Goesŏnbak Kwallyŏn Nodongdangsosok '727 Yŏllakso'," *Hankook Ilbo*, 5 October 2002, p. 2, in KINDS, www.kinds.or.kr.

7 October 2002
The North Korean Foreign Ministry issues a statement saying that during his 3-5 October trip to Pyongyang, US Assistant Secretary of State for East Asia and Pacific Affairs James Kelly took a "high handed and arrogant attitude" in raising "issues of concern." According to the ministry, Kelly said that North Korea's relations with the United States, Japan and South Korea would be normalized only when North Korea meets the unilateral US demands regarding North Korea's nuclear and missile programs. The message conveyed by Kelly, according to the

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statement, indicates that the Bush administration is not pursuing a policy of dialogue, but rather "a hardline policy of hostility to bring North Korea to its knees by force." The ministry concludes that "such unchanged policy of the United States compels North Korea to take all necessary countermeasures, pursuant to the army-based policy whose validity has been proven."
—"Spokesman for DPRK FM on DPRK Visit of Special Envoy of U.S. President," Korean Central News Agency, 7 October 2002, www.kcna.co.jp; "Miguktaet'ongnyŏngt'ŭksa'nŭn Shimhi Amnyŏkchŏg'igo Omanhage Nawatta/Chosŏn'oemusŏngdaebyŏn'in," Korean Central News Agency, 7 October 2002, www.kcna.co.jp.

10 October 2002
Paris Intelligence Online quotes "diplomatic sources" as having said that Syria will soon begin producing the Scud-C with a range of about 700km when armed with 700kg warhead. Syria developed the capability to produce the missile with North Korean assistance, and will be able to produce about 30 missiles a year. The warhead is capable of separating from the missile airframe, but the performance is reportedly not as good as North Korea's Scud-D.
—*Paris Intelligence Online*, 10 October 2002, in "'Diplomatic Sources': Syria to Produce Upgraded Scud C Missiles," FBIS Document ID: EUP20021014000033.

10 October 2002
Mohammad Reza Khatami, second deputy speaker of Iran's parliament, says that Iran procured weapons from abroad during its war with Iraq but that Iran has suspended such deals with North Korean following the war. Khatami makes the comment to Japanese Foreign Minister Yoriko Kawaguchi after Kawaguchi mentioned Japan's concern over the similarities between Iranian and North Korean missiles.
—Jiji Press, 10 October 2002, in "Iranian Hints at Past Missile Purchase from N. Korea," FBIS Document ID: JPP20021010000188; Kyodo News Service, 10 October 2002, in "Iran No Longer Seeks Weapons from N. Korea: Vice Speaker," FBIS Document ID: JPP20021010000143.

17 October 2002
US intelligence officials claim that North Korea has obtained uranium enrichment technology from Pakistan. According to the officials, North Korea obtained gas centrifuges from Pakistan in the late 1990s in exchange for missile technology. One intelligence official describes the relationship as "a perfect meeting of interests—the North has what the Pakistanis needed, and the Pakistanis had a way for Kim Jong Il to restart a nuclear program we had stopped." The cooperation between North Korea and Pakistan reportedly began around 1997, but the officials are uncertain as to when, or if, the relationship ended. The White House has refused to comment on Pakistan's role in helping North Korea acquire uranium enrichment technology, but Asad Hayauddin, spokesman for Pakistan's Embassy in Washington, calls the allegations "absolutely incorrect." Hayauddin says, "We have never had an accident or leak or any export of fissile material or nuclear technology or knowledge."
—David E. Sanger and James Dao, "U.S. Says Pakistan Gave Technology to North Korea," *New York Times*, 17 October 2002, www.nytimes.com; Joby Warrick, U.S. Followed the Aluminum: Pyongyangs Efforts to Buy Metal Was Tip to Plans, *Washington Post*, 18 October 2002, www.washingtonpost.com.

19-22 October 2002
North and South Korea hold their Eight Inter-Ministerial Talks in Pyongyang. The two sides discuss a number of economic issues, and issue a joint statement that includes, "The North and the South agreed to make common efforts to guarantee peace and security on the Korean peninsula, consistent with the spirit of the June 15 Joint Declaration, and to actively cooperate to resolve all problems through dialogue, including the nuclear issue." North Korean officials tell South Korean Minister of Unification Chŏng Se Hyŏn that Pyongyang is willing to resolve the nuclear issue if the United States first changes its hostile policy towards North Korea.

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—"Joint Press Release of the Eighth Inter-Korean Ministerial Talks," 22 October 2002, www.unikorea.go.kr; "Che 8 Ch'a Nambukchanggwan'gŭphoedam Kongdongbodomun," 22 October 2002, www.unikorea.go.kr; Charles Whelan, "South Fails to Extract Nuclear Pledge from North," Agence France Presse, 23 October 2002, in Lexis-Nexis, http://web.lexis-nexis.com; "Inter-Korea Talks Stalled over Nuclear Statement," Agence France Presse, 22 October 2002, in Lexis-Nexis, http://web.lexis-nexis.com; Kim In Ku, "Nambuk 'Pukhaek Taehwaro Hae'gyŏl'," *Chosun Ilbo*, 23 October 2002, http://nk.chosun.com; "Chŏng T'ong'il 'Puk, Chŏktae Anhamyŏn Anbomunje P'unda'," *Chosun Ilbo*, 23 October 2002, http://nk.chosun.com; Pak Rok Sam, "'Pukhaek Taehwa Hae'gyŏl' Kŭkchŏk T'a'gyŏl," *Taehan Maeil*, 22 October 2002, www.kdaily.com; "Pukhaekkaebal P'amun...Taehwaro Hae'gyŏl," *Chosun Ilbo*, 23 October 2002, http://nk.chosun.com; Lee Young-jong, "North 'Listens' to Protest of Its Bomb Program," *Joongang Ilbo*, 21 October 2002, http://english.joins.com; "North Fails to Respond on Nuclear Issue," *Chosun Ilbo*, 20 October 2002, http://english.chosun.com; "8th Inter-Korean Ministerial Talks Open," Korean Central News Agency, 21 October 2002, www.kcna.co.jp; "Joint Press Release on 8th Inter-Korean Ministerial Talks Published," Korean Central News Agency, 23 October 2002, www.kcna.co.jp; "Che 8 Ch'a Pungnamsanggŭphoedam'i Kkŭtnatta / Kongdongbodomun," Korean Central News Agency, 23 October 2002, www.kcna.co.jp; Yonhap News Agency, 20 October 2002, in "Atmosphere at 20 Oct ROK-DPRK Ministerial Talks Reportedly 'Heavy and Serious'," FBIS Document ID: KPP20021020000016.

About 21 October 2002
A US Air Force RC-135S "Cobra Ball" reconnaissance aircraft arrives at Kadena Air Base in Okinawa Japan. This aircraft is used to track ballistic missiles, which gives rise to speculation that North Korea could be preparing for a missile test.
—Kyodo News Service, 2 November 2002, in "U.S. Moves Missile Surveillance Units to Okinawa," FBIS Document ID: JPP20021102000004; James Brooke, "A Missile Shield Appeals to a Worried Japan," *New York Times*, 11 November 2002, p. A5, in Lexis-Nexis, http://web.lexis-nexis.com; "Dando Misairu Hassyano Beikanshibutai, Okinawani Syuketsu," *Asahi Shimbun*, 2 November 2002, www.asahi.com.

23 October 2002
After returning from the Eight Inter-Ministerial Talks in Pyongyang, South Korean Minister of Unification Chŏng Se Hyŏn delivers a message from North Korea that says "Pyongyang will resolve all security concerns if the US is first willing to abandon its hostile policy towards North Korea."
—"Chŏng T'ong'il 'Puk, Chŏktae Anhamyŏn Anbomunje P'unda'," *Chosun Ilbo*, 23 October 2002, http://nk.chosun.com.

31 October 2002
According to an Associated Press report, US intelligence agencies are looking, but so far have no evidence that North Korea is preparing for a missile flight test. Intelligence officials reportedly believe North Korea could flight-test the so-called "Taepodong-2" with little notice.
—John J. Lumpkin, "U.S. Eyes N. Korea on Missile Tests," *Washington Post*, 31 October 2002, www.washingtonpost.com; "Mijŏngbodangguk, Puk Missile Shil'ŏmbalsa Yeŭijushi," *Chosun Ilbo*, 31 October 2002, http://nk.chosun.com.

31 October 2002
The *USS Invincible*, a ship used to track ballistic missile tests, arrives in Okinawa. The ships arrival, along with the deployment of a US Air Force RC-135S "Cobra Ball" reconnaissance aircraft, generates speculation that North Korea could be preparing for a missile test.
—Kyodo News Service, 2 November 2002, in "U.S. Moves Missile Surveillance Units to Okinawa," FBIS Document

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ID: JPP20021102000004; James Brooke, "A Missile Shield Appeals to a Worried Japan," *New York Times*, 11 November 2002, p. A5, in Lexis-Nexis, http://web.lexis-nexis.com; "Dando Misairu Hassyano Beikanshibutai, Okinawani Syuketsu," *Asahi Shimbun*, 2 November 2002, www.asahi.com.

November 2002
According to a "military source" cited by the South Korean press, an explosion at North Korea's Musudan-ri missile test facility causes extensive damage to both equipment and the physical infrastructure of the test site. The explosion reportedly occurs during a missile engine test.
—Yonhap News Agency, 21 April 2003, in "ROK's Yonhap: Explosion Damaged Missile Test Site in N.K.: Military Source," FBIS Document ID KPP20030421000010; "Explosion Hit North Korea Missile Test Site: Report," Agence France Presse, 21 April 2003, in Lexis-Nexis, http://web.lexis-nexis.com.

5 November 2002
A "South Korean government source" says the United States has informed the South Korean government that US analysts believe North Korean officials meant "biochemical weapons" when recently claiming Pyongyang has something "more powerful than nuclear weapons." [Note: This was more likely a reference to the "single-hearted unity of the Korean People's Army and the Korean People behind Kim Jong Il."]
—Lee Kyo Kwan, "Puk, Hwahangmugi Chŏnbangbudae Paech'i Wallyo," *Chosun Ilbo*, 5 November 2002, http://nk.chosun.com.

12 November 2002
A *Rodong Sinmun* commentary says that North Korea "does not conceal the fact that it is developing missiles to defend the aggression by the US imperialists." The official daily of the Korean Workers' Party says the program is defensive and peaceful, and that the United States has a policy of stifling North Korea with nuclear weapons.
—" U.S. Deceptive Remarks about Missile Threat from DPRK Refuted," Korean Central News Agency, 12 November 2002, www.kcna.co.jp; "Hŏwigimanjŏg'in <Missile Wihyŏp> Sŏl / Rodongshinmun Ronp'yŏng (Chŏnmun)," Korean Central News Agency, 12 November 2002, www.kcna.co.jp; Korean Central News Agency, 12 November 2002, in "DPRK's KCNA: US Deceptive Remarks about Missile Threat from DPRK Refuted," FBIS Document ID: KPP20021112000083.

Mid-November 2002
A missile shipment departs from the port of Namp'o to Yemen. The number of missiles is not clear, but the shipment reportedly contains "inhibited red fuming nitric acid," which is used as an oxidizer for Scud missile fuel. [NOTE: This is the second North Korean missile shipment to Yemen this year. The first shipment arrived in August.]
—Bill Gertz, "N. Korea Ships Fuel, Missiles to Yemen," *Washington Times*, 2 December 2002, p. 1, www.washtimes.com.

25 November 2002
US Secretary of State Colin Powell says he has told Pakistani President Pervez Musharraf that Pakistan will face "consequences" if the United States feels there is any "inappropriate contact" between Pakistan and North Korea.
—Stephen Collinson, "US Puts Pakistan on Notice over North Korea Nuclear Links," Agence France Press, 26 November 2002, in Lexis-Nexis, http://web.lexis-nexis.com; "US Refuses to Criticise Pakistan over North Korea Claims," Agence France Presse, 26 November 2002, in Lexis-Nexis, http://web.lexis-nexis.com; "North Korea Still Top Proliferator of Missiles: Rumsfeld," Agence France Presse, 26 November 2002, in Lexis-Nexis, http://web.lexis-nexis.com.

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26 November 2002
US Defense Secretary Donald Rumsfeld says that "North Korea remains the single biggest proliferator of missile technology" and that "the things we don't know about North Korea are worrisome."
—"North Korea Still Top Proliferator of Missiles: Rumsfeld," Agence France Presse, 26 November 2002, in Lexis-Nexis, http://web.lexis-nexis.com; "N Korea World's Single Biggest Exporter of Missile Technology: Rumsfeld," Channel NewsAsia, 27 November 2002, in Lexis-Nexis, http://web.lexis-nexis.com; Han Ki Hong, "Rumsfeld 'Mi, Pukhan T'ando Missile Kwallyŏn Morŭ'nŭn Pubun'issŏ Uryŏ," *Donga Ilbo*, 27 November 2002, www.donga.com.

2 December 2002
In Beijing, Russian President Vladimir Putin and Chinese President Jiang Zemin sign a joint declaration that includes, "The two sides maintain that it is crucial to peace and security in Northeast Asia to maintain a nuclear-free Korean peninsula and the system for nonproliferation of weapons of mass destruction." The declaration also calls on North Korea and the United States to abide by the Agreed Framework, and to normalize relations.
—Xinhua News Agency, 2 December 2002, in "Xinhua Carries 'Full Text' of 2 December Sino-Russian Joint Declaration," FBIS Document ID: CPP20021202000186; "China, Russia Issue Joint Statement," *People's Daily*, 3 December 2002, http://english.peopledaily.com.cn; Yoo Kwang-jong, "China, Russia Tell Pyeongyang to Ban the Bomb," *Joongang Ilbo*, 3 December 2002, http://english.joins.com; Agence France Presse, 2 December 2002, in "AFP: More on PRC, Russia Want US to Engage DPRK; Details of Joint Declaration Given," FBIS Document ID: CPP20021202000106; "China, Russia Move Closer with Putin's Visit," *Gazeta*, 2 December 2002, www.gazeta.ru.

3 December 2002
At a Department of Defense press briefing, Secretary of Defense Donald Rumsfeld says, "North Korea has weapons of mass destruction and is denying freedom and food and every kind of opportunity that is available to the South Korean people to the people of North Korea. It's a tragedy that it happens." Rumsfeld also says North Korea "is a vicious regime and that what it is doing to the people of North Korea is criminal."
—United States Department of Defense News Transcript, "DoD News Briefing - Secretary Rumsfeld and Gen. Myers," 3 December 2002, www.defenselink.mil; "Rumsfeld: North Korea is a Tragedy," *Joongang Ilbo*, 4 December 2002, http://english.joins.com; Yonhap News Agency, 4 December 2002, in "ROK's Yonhap: Rumsfeld Calls Pyongyang 'Vicious Regime'," FBIS Document ID: KPP20021204000025; "Rumsfeld 'Pukhan Hyŏnshil Kŭ Chach'e'ga Pi'gŭk'," *Chosun Ilbo*, 4 December 2002, www.chosun.com.

4 December 2002
The *Financial Times* quotes a US military official as saying missiles are North Korea's top export item at about $560 million.
—Andrew Ward, "US Accuses North Korea of Narcotics Trade," *Financial Times* (London), 4 December 2002, p. 11, in Lexis-Nexis, http://web.lexis-nexis.com.

9 December 2002
After a meeting with Japanese Foreign Minister Kawaguchi, Deputy Secretary of State Richard Armitage tells the press that the United States has "patience for diplomacy to work" in dealing with North Korea. Armitage also says that US policy towards North Korea is in line with allies in the region.
—"Remarks to Journalists at the Foreign Ministry Building," Richard Armitage, Deputy Secretary of State, US Department of State, 9 December 2002, www.state.gov.

10 December 2002
Spanish sailors, part of a US-led coalition force patrolling the Arabian Sea, intercept the unflagged North Korean

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vessel *Sŏsan* en route to Yemen found to be carrying 15 Scud missiles, including conventional warheads, and 85 drums of "inhibited red fuming nitric acid," which is used as an oxidizer for Scud missile fuel. The missiles and oxidizing agent are discovered in crates hidden underneath bags of cement. At the request of the Spanish crew, a US explosives ordinance disposal team boards to vessel to investigate the missiles.
—Matt Kelley, "Ship Carrying Dozen North Korean Missiles Intercepted in Arabian Sea," Associated Press, 11 December 2002, in Lexis-Nexis, http://web.lexis-nexis.com; "Scud Missile Found on Ship from Yemen," Japan Economic Newswire, 10 December 2002, in Lexis-Nexis, http://web.lexis-nexis.com; Tom Raum, "Ship Carrying Dozen North Korean Missiles Intercepted in Arabian Sea," Associated Press, 10 December 2002, in Lexis-Nexis, http://web.lexis-nexis.com; Yiftah S. Shapir, "North Korean Missiles for Yemen: Is There a Missing Link?" *Tel Aviv Notes*, 22 December 2002, no. 59, Jaffee Center for Strategic Studies; "15 Scud Missiles Found on Ship from N. Korea," Japan Economic Newswire, 11 December 2002, in Lexis-Nexis, http://web.lexis-nexis.com.

11 December 2002
Yemeni Foreign Minster Abu Baker Abdullah al-Kurbi meets with Edmund Hull, US ambassador to Yemen, and confirms that the shipment of North Korean Scud missiles intercepted by US and Spanish forces in the Arabian Sea on 10 December is bound for Yemen. Al-Kurbi, claiming that the United States has no right to detain the ship, demands the shipment be allowed to arrive in Yemen.
—"Yemen Says Scuds Bound for Army, Wants Them Back," ONASA News Agency, 11 December 2002, in Lexis-Nexis, http://web.lexis-nexis.com; "Yemen Confirms Ordering Missiles from DPRK," Xinhua News Agency, 11 December 2002, in Lexis-Nexis, http://web.lexis-nexis.com; "Yemen Protests to US and Spain over Scud Ship Interception," Deutsche Presse-Agentur, 11 December 2002, in Lexis-Nexis, http://web.lexis-nexis.com.

11 December 2002
Yemeni President Ali Abdullah Saleh assures US Vice President Dick Cheney that the missiles bound for Yemen will be used solely for national defense.
—"US to Release Ship with Missiles for Yemen," Xinhua News Agency, 11 December 2002, in Lexis-Nexis, http://web.lexis-nexis.com.

11 December 2002
White House spokesman Ari Fleisher announces that the United States will release a North Korean ship delivering 15 Scud missiles to Yemen. Fleisher tells reporters, "There is no provision under international law prohibiting Yemen from accepting delivery of missiles from North Korea." Fleisher continues, "While there is authority to stop and search, in this instance there is no clear authority to seize a shipment of Scud missiles from North Korea to Yemen and therefore the merchant vessel is being released."
—"US to Release Ship with Missiles for Yemen," Xinhua News Agency, 11 December 2002, in Lexis-Nexis, http://web.lexis-nexis.com.

11 December 2002
Japan's Chief Cabinet Secretary Yasuo Fukuda condemns North Korea for exporting missiles to Yemen. Fukuda says that even though North Korea needs that foreign currency from exports, exporting ballistic missiles to the Middle East is unacceptable.
—"Japan Slams N. Korea's Missile Exports," Jiji Press Ticker Service, 11 December 2002, in Lexis-Nexis, http://web.lexis-nexis.com.

13 December 2002
According to the Japanese Foreign Ministry, Yemen's ambassador to Japan Abdulrahman Al-Hothi delivers a

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message from Yemeni President Ali Abdullah Saleh ensuring Japan that the Scud missiles from North Korea will be "used purely for defensive purposes." In the message, President Saleh also reportedly promises not to import any missiles from North Korea in the future.
—"Yemen Promises Not To Buy North Korean Missiles Again," Agence France Presse, 13 December 2002, in Lexis-Nexis, http://web.lexis-nexis.com.

13 December 2002
The North Korean Foreign Ministry issues a statement demanding an apology from the United States for detaining the North Korean vessel *Sŏsan* while it was delivering 15 Scud missiles to Yemen. According to the statement, North Korea has already clarified that it "is not only producing missiles to defend itself from the constant US military threat but also exporting them to earn foreign currency." The Foreign Ministry also says, "The United States must apologize for its shameless piracy committed against out cargo ship, which was carrying out normal trading activities, and duly compensate fro all the mental and material damage done to our crew and cargo ship."
—"Chosŏn'oemusŏng Taebyŏn'in Mi'gug'ŭi <Sŏsan>Ho Ch'imbŏm'ŭn Haejŏkhaeng'wi," Korean Central News Agency, 13 December 2002, www.kcna.co.jp; Central Broadcasting Station, 13 December 2002, in "North Korea Calls for Apology, Compensation in 'Raiding' of 'Cargo Ship' Incident," BBC Monitoring International Reports, 13 December 2002, in Lexis-Nexis, http://web.lexis-nexis.com.

19 December 2002
Roh Moo Hyun (No Mu Hyŏn; 盧武鉉), a former human rights lawyer, and candidate of the Millennium Democratic Party (새千年民主黨), wins South Korea's presidential election. [Note: Roh has said he would like continue engagement with North Korea, but cannot accept North Korea developing nuclear weapons.]
—Paul Shinn, "Former Human Rights Lawyer Roh Wins South Korean Presidential Election," Associated Press, 19 December 2002, in Lexis-Nexis, http://web.lexis-nexis.com; Andrew Ward, "Victory for Roh Will Create Tension with US," *Financial Times* (London), 20 December 2002, in Lexis-Nexis, http://web.lexis-nexis.com; Doug Struck, "Anti-U.S. Mood Lifts South Korean; President-Elect Wants Talks With North, Challenging Bush," *Washington Post*, 20 December 2002, in Lexis-Nexis, http://web.lexis-nexis.com; "No Mu Hyŏn Taet'ongnyŏng Tangsŏn/Kŭ'nŭn Nuguin'ga," *Chosun Ilbo*, 20 December 2002, p. 6, in KINDS, www.kinds.or.kr; "NDFSK Spokesman on Results of Presidential Election," Korean Central News Agency, 23 December 2002, www.kcna.co.jp.

19 December 2002
The *Rodong Sinmun* commentary calls the interception of the North Korean ship *Sŏsan* an act piracy by the imperialistic United States, and an act of state-sponsored terrorism.
—" U.S. Piracy Against DPRK Trading Cargo Ship Condemned," Korean Central News Agency, 19 December 2002, www.kcna.co.jp; "Rodongshimun <Sŏsan>Hosa'gŏn'ŭn Chŏnjaeng'ŭi Pulchib'ŭl Il'ŭ'k'nŭn'gŏt," Korean Central News Agency, 19 December 2002, www.kcna.co.jp.

21 December 2002
A *Rodong Sinmun* commentary demands that the United States apologize and pay compensation for intercepting the Sŏsan-ho off in the coast of east Africa on 10 December.
—"Brigandish Nature of Pirates in 21st Century Revealed," Korean central News Agency, 21 December 2002, www.kcna.co.jp.

24 December 2002
On the 11th anniversary of Kim Jong Il's appointment as supreme commander of North Korea's armed forces, Minister of the People's Armed Forces Kim Il Ch'ŏl says, "The U.S. hawks who are pushing the situation on the

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Korean Peninsula to the brink of a nuclear war. If they, ignorant of their rival, dare provoke a nuclear war, the army and people of the DPRK led by Kim Jong Il, the invincible commander, will rise up to mete out determined and merciless punishment to the U.S. imperialist aggressors with the might of single-hearted unity more powerful than A-bomb."
—"DPRK Ready to Punish Yankees in Singlehearted (sic) Unity More Powerful than A-Bomb," Korean Central News Agency, 24 December 2002, www.kcna.co.jp.

2001

2001

North Korea conducts three or four engine tests for its Taepodong-2 missile at the Hwadae-kun [Musudan-ri] test facility, with the last test being conducted in mid-December 2001. According to a South Korean source, it will take some time for North Korea to conduct a test flight of the Taepodong-2.
—Park Tu Shik and Yu Yong Wŏn, "Mi, Puk Missile Kamshich'ejero," Chosun Ilbo, 6 February 2002, in KINDS, www.kinds.or.kr; Kim Min Sŏk, "Pukhan, Changnyŏn Such'arye Missile Shilhŏm," Joongang Ilbo, 6 February 2002, www.joins.com; "North Korea Working to Improve Missile's Range," Joongang Ilbo, 6 February 2002, http://english.joins.com; Joongang Ilbo, 7 February 2002, in "ROK DefMin Report: DPRK Conducts 'Numerous' Missile Tests in 'Past Few years'," FBIS Document ID KPP20020206000145; "Report: N. Korea Preparing New Long-Range Missile Test," World Tribune.com, 7 February 2002, www.worldtribune.com; Kyodo News Service, 6 February 2002, in "N. Korea Conducts Engine Tests for Long-Range Missile: Report," FBIS Document ID: JPP20020206000070; Kim Kwi Kŭn, "Puk, Changnyŏn Such'arye Missile Engine Shihŏm," Yonhap News Agency, 6 February 2002, www.yonhapnews.co.kr.

January-September 2001

Iran begins serial production of the Shehab-3, which is based on the Nodong. Production reportedly includes "subsystems as well as assembly of the entire missile." According to Israeli and US sources, Iran has the capacity to produce 20 Shehab-3 missiles a year, but continues to have problems in engine development despite "extensive Russian and North Korean assistance." According to *Jane's Defence Weekly*, Iran acquired 20 Nodong engines in 1999.
—Andrew Koch and Steve Rodan, "Iran Begins Serial Production of Shehab 3," *Jane's Defence Weekly*, vol. 36, no. 15, 10 October 2001.

1 January 2001

The South Korean Institute of Foreign Affairs and National Security (IFANS), affiliated with the Ministry of Foreign Affairs and Trade, issues a report that suggests an international consortium similar to the Korean Peninsula Energy Organization will emerge to manage the elimination of the North Korean missile program. The report is entitled "Outlook for International Politics in 2001."
—Yonhap News Agency, 1 January 2001, in "ROK's Yonhap: KEDO-Style Consortium Likely to Emerge as Solution to N.K. Missile," FBIS Document ID KPP20010101000010.

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1 January-30 June 2001

According to the CIA, North Korea "continues procurement of raw materials and components for its ballistic missile programs from various foreign sources, especially through North Korean firms based in China." The CIA believes that North Korea is capable of arming its missiles with chemical warheads, and possibly with some biological agents. North Korea supplied ballistic missile "equipment, technology, and expertise to Iran," and continued its "long-standing relationship with Egypt on ballistic missiles." North Korea received "dual-use missile-related items, raw materials, and/or assistance" from China.

—Central Intelligence Agency, "Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Weapons, 1 January through 30 June 2001," 30 January 2002, www.cia.gov; Bill Gertz, "CIA Sees Rise In Terrorist Weapons," *Washington Times*, 31 January 2002, p. 4; "'Puk Haekkaebal Noryŏk'...CIA Pogosŏ, Changnyŏn'edo Kwallyŏn'gisul Hoektŭkshido," *Donga Ilbo*, 1 February 2002, www.donga.com.

2 January 2001

The US imposes economic sanctions against North Korea's Ch'anggwang Shinyong Company for selling missile technology. The firm is said to have violated the United States' "Iran Nonproliferation Act of 2000," which requires sanctions against firms providing materials or technologies to develop missiles or nuclear weapons. The sanctions are published in the Federal Gazette on 17 January 2001, and effective until 6 April 2002.

—Department of State, "[Public Notice 3539] Imposition of Nonproliferation Measures Against a North Korean Entity, Including Ban on U.S. Government Procurement," *Federal Register*, vol. 66, no. 11, 17 January 2001, pp. 4050-4051; Bill Gertz, "China, N. Korea Hit With Sanctions," *Washington Times*, 28 June 2001, p. 1; Charles Lee, "N. Korean [*sic*] Firm Sanctioned over Missile Exports," United Press International, 30 January 2001; C. W. Lim, "US Imposes Sanctions on North Korean Firm over Iran Missile Exports," Agence France Presse, 30 January 2001, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

18 January 2001

According to a diplomatic source in Seoul, Charles Kartman, US special envoy for the Korean peace process meets Lee Hyŏng Chŏl, North Korean ambassador to the United Nations in New York to discuss the North Korean missile program. The official says that at the meeting, which is the first between North Korea and the new Bush administration, North Korea lays out a proposal with regard to its missile program.

—"U.S., North Discuss Missile Question," *Joongang Ilbo*, 28 January 2001, http://english.joins.com.

February 2001

According to a Russian report, North Korea and Iran "modernize Chinese C-802 cruise missiles with a range of 120km."

—Baku MPA, 9 January 2002, in "Iranian Envoy in Azerbaijan Denies Tehran Has Nuclear Weapons," FBIS Document ID CEP20020109000141; MPA News Agency (Azerbaijan), 9 January 2002, in "Iran Diplomat in Azerbaijan denies Tehran Has Nuclear Weapons," BBC Monitoring International Reports, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

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6 February 2001
A South Korean Military source says that North Korea is likely to buy Russian-made S-300 surface-to-air missiles (SAMs) by the end of the year.
—"NK Seeking Purchase of Missiles from Russia," *Korea Times*, 7 February 2001; Kim Kwi Kŭn, "Puk, Rŏje Mugidoip Chŏkkŭk Ch'ujin," *Joongang Ilbo*, 6 February 2001, www.joins.com.

7 February 2001
A South Korean government official says that North Korea has requested free satellite imagery from Russia for intelligence purposes.
—"N. Korea Asking Russia for Military Satellite Images of Korea," Yonhap News Agency, 7 February 2001, www.yonhapnews.co.kr; Chu Yong Sŏng, "Puk, Rŏ Wisŏngsajin Musangjegong Yoch'ŏng," Yonhap News Agency, 7 February 2001, www.yonhapnews.co.kr.

15 February 2001
According to the *Wolgan Chosun*, Kim Jong Il is shot in the side by a bodyguard. According to the report, Pak Song Pong, first vice director of the Munitions Industry Department under the Korean Workers' Party, was also shot and died on 20 February. [Note: Pak's sudden death on 20 February has been confirmed, but the shooting has not.]
—U Chong Chang, "Kim Jong Il, Yŏpkurie Han Pang Maja?" *Wolgan Chosun*, 1 June 2001, http://monthly.chosun.com; U Chong Chang, "Rumor of Attack on Kim Chong Il," *Wolgan Chosun* (Seoul), 1 June 2001, in FBIS Document ID KPP20010524000099.

15-16 February 2001
Representatives from both North and South Korea attend a meeting in Moscow to discuss Russia's proposed Global Control System (GCS), which is designed to stop missile proliferation. The GCS was first proposed by Russian President Yeltsin in 1999 as a multilateral organization to compete with the MTCR.
—"Nambuk, Mosuk'uba Kukche Missile Hoiui Ch'amsok," *Chosun Ilbo*, 16 February 2001, www.chosun.com; Shin Yong Bae, "2 Koreas to Attend Talks in Moscow," *Korea Herald*, 14 February 2001, www.koreaherald.co.kr.

21 February 2001
The North Korean Foreign Ministry issues a statement criticizing the hard-line policies of the Bush administration. A spokesman says North Korea has "made a series of reasonable proposals for substitute satellite launches," and that North Korea might stop missile exports if it receives appropriate compensation in hard currency. The spokesman also said there is no formal agreement between the United States and North Korea to suspend missile flight tests, and that North Korea "will not be bound to our pledge related to the missile issue raised during the previous US administration." North Korea agreed to a flight test moratorium in September 1999, but the spokesman says North Korea "will not indefinitely maintain the moratorium."
—"Spokesman for DPRK Foreign Ministry on New U.S. Administration's Policy Towards DPRK," Korean Central News Agency, 22 February 2001, www.kcna.co.jp; "Migukŭi Kŭ Ŏddŏn Taejosŏnjŏngch'aeg'edo Chunbidoeyŏ Itta/Oemusŏngdaebyŏnin," Korean Central News Agency, 21 February 2001, www.kcna.co.jp; Yonhap News Agency, 22 February 2001, in "ROK's Yonhap: DPRK FM Warns of Breaking Geneva Accord If US 'Turns Hard Line

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Against DPRK," FBIS Document ID KPP20010222000004; Kim Tu-hwan, Yonhap News Agency, 22 February 2001, in "DPRK Missile Development Reemerges As Pending Issue," FBIS Document ID KPP20010222000105.

21 February 2001

According to US government sources, the Bush administration plans to emphasize a reduction in North Korean conventional forces, including a withdrawal of forward-deployed North Korean troops. Some US officials believe reaching an agreement with North Korea on conventional forces will be relatively easy compared to nuclear and missile issues. The Bush administration is also considering the replacement of one or both light water reactors (LWRs) under the Agreed Framework with conventional power plants as part of its ongoing policy review.
—Kyodo News Service, in "Bush to Seek Cut in N. Korea's Conventional Forces," Japan Economic Newswire, 22 February 2001.

21 February 2001

North Korea's *Youth Front*, published by the Kim Il Sung Youth League, says, "If another war takes place on the Korean Peninsula, all US bases in the south [Korea] and in the areas surrounding the peninsula, including Guam and Okinawa, will be blown sky-high."
—"N.K. Says U.S. Bases in Guam, Okinawa Within Its Range," *Korea Herald*, 13 March 2001; AFP (Hong Kong), 12 March 2001, in "AFP: DPRK Newspaper Threatens to Blow Up US Base," FBIS Document ID CPP20010312000111.

22 February 2001

The CIA issues its semiannual unclassified report to Congress on WMD proliferation. The report says that North Korea has continued to procure materials and components abroad for its ballistic missile program, especially from Chinese firms.
—CIA, "Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, 1 January Through 30 June 2000," 22 February 2001, www.cia.gov; Bill Gertz, "China Aids Pakistani, 'Rogue' Missile Programs, CIA Says," *Washington Times*, 27 February 2001, p. 10.

Late February 2001

US intelligence detects the loading of missiles components in the port of Nampo on North Korea's west coast. The destination is unknown, but one US official reportedly said the shipment appears to contain "chemical weapons-related warheads," while another said the components included "fuel tanks and related propulsion gear." However, the shipment is delayed for more than a week because the port is frozen.
—Bill Gertz, "Weapons Sales Concern Seoul, United States," *Washington Times*, 9 March 2001, www.washingtontimes.com; Bill Gertz, "North Korea Sends Missile Parts, Technology to Iran," *Washington Times*, 18 April 2001, www.washingtontimes.com; Shin Ki Sŏp, "Puk, Ch'oegŭn Missile Pupum Such'ul Shido," Hankook Ilbo, 9 March 2001, hankooki.com; "N. Korea Ready To Send Missiles to Middle East," *Middle East Newsline*, vol. 3, no. 100, 12 March 2001, www.menewsline.com.

March 2001

Israeli Prime Minister Ariel Sharon visits the US Congress and tells an informal group of House and Senate

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members that Egypt is trying to procure "advanced" Scud missiles from North Korea.
—Eli J. Lake and Richard Sale, "Egypt Buys Missiles from North Korea," United Press International, 18 June 2001.

1 March 2001
A high-ranking official in the South Korean government says North Korea has deployed more than 100 Nodong missiles. According to the official, US intelligence has confirmed that 20 of the Nodongs are in underground sites in Yŏngjŏ-dong [Yŏngjŏ-ri], Yanggang Province, which is only 20km from the Chinese border. The official says that North Korea is building two more missile bases for Nodong and Taepodong (Paektusan-1) missiles at Yongnim-kun, Chagang Province and Sangnam-ri, North Hamgyŏng Province. The construction at the Yongnim-kun and Sangnam-ri bases is about 60-80 percent complete.
—Yu Yong Wŏn, "Nodong 1 Ho Missile Puk, 100 Yŏbal Paech'i/Mi, Shimgakhan Uryŏ P'yomyŏng," *Chosun Ilbo*, 2 March 2001, p. 1, in KINDS, www.kinds.or.kr; Yu Yong Wŏn, "Nodong 1 Ho Ch'ugabaech'i/Hubang Chihagiji 3 Kot Kŏnsŏltŭng Puk Missile Pimilchŭnggang Kyesok," *Chosun Ilbo*, 2 March 2001, p. 3, in KINDS, www.kinds.or.kr; *Chosun Ilbo,* 2 March 2001, in "ROKG Official Cites US Sources: DPRK Deploys 100 Nodong-1 Missiles Since 1998," FBIS Document ID: KPP20010302000010.

2 March 2001
A high-level source in South Korea's Ministry of National Defense denies yesterday's press reports regarding North Korea's missile deployment and engine tests. The source says that it has not been confirmed whether North Korea has deployed 100 Nodong missiles, and that there is no information about engine tests for the Taepodong-2 in 2000.
—Chŏng Ch'ung Shin, "Kukpangbu 'Puk Missile Chŭnggangbaech'i Sashilmu'gŭn," *Munhwa Ilbo*, 2 March 2001, p. 2, in KINDS, www.kinds.or.kr.

3 March 2001
The *Joongang Ilbo* reports that the Nodong missile base at Shin'o-ri, Unchŏn-kun, North P'yŏng'an Province has nine launchers and about 40 Nodong missiles.
—Kim Min Sŏk, "Puk Missile Kiji Kyesok Chŭngsŏl," *Joongang Ilbo*, 6 March 2001, p. 8, in KINDS, www.kinds.or.kr.

4 March 2001
According to the South Korean Ministry of National Defense, North Korea has 27 mobile Scud missile launchers and about 500 Scud missiles. According to the ministry, North Korea has deployed Scud-B and Scud-C missiles in the area of Shin'gye-kun, North Hwanghae Province. Furthermore, North Korea is currently excavating underground missile sites, including sites at "Sakkanmol" and "Kŭmch'ŏn-ri," and the construction is nearing completion. [Note: The number of sites under excavation is uncertain. The location of "Sakkanmol" is at Sakkabbong, Koksan-kun, North Hwanghae Province.]
—Kang Ho Shik, "Puk Missile Chŭngga Chŏllyŏk Chŏnjinbaech'i Anp'akk," *Kyunghyang Shinmun*, 5 March 2001, p. 3, in KINDS, www.kinds.or.kr; Kim Min Sŏk, "Puk Scud Missiler Kiji Chŭngsŏl," Joongang Ilbo, 5 March 2001, p. 2, in KINDS, www.kinds.or.kr; Kang Ho Shik, "Puk Scud Missile Kiji Chŭngsŏl," *Kyunghyang Shinmun*, 5 March 2001, p. 1, in KINDS, www.kinds.or.kr.

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4 March 2001
According to Hideshi Takesada, North Korea has exported Nodong missiles and transferred Scud-C technology to Iraq. [Note: This report is unsubstantiated, and could be in error.]
—Hideshi Takesada, "The BMD Issue in Northeast Asia: Strategic Relations and Japan's Option," unpublished conference paper for "Partnership for Peace: Building Long-Term Security Cooperation in Northeast Asia," sponsored by the Nautilus Institute and Fudan University, 4 March 2001, www.nautilus.org.

6 March 2001
Wendy Sherman, former US senior policy coordinator on North Korea under the Clinton Administration, says that trilateral meetings between the United States, Japan, and South Korea have included discussions on Japan's provision of financial compensation to North Korea in case North Korea abandons its missile program; Sherman says the compensation would cover lost export earnings. The issue has been an important agenda item in trilateral meetings, but she says that Japan would decide upon any compensation in bilateral talks with North Korea.
—Kyodo News Service (Tokyo), 7 March 2001, in "Japan Payment is 'Big Card' in N. Korea Policy," FBIS Document ID: JPP20010307000122.

9 March 2001
Middle East Newsline reports that Egypt is continuing to cooperate with North Korea in the area of missile development. The cooperation reportedly includes the "transfer of missile components, materials and technical expertise" from North Korea to Egypt. The cooperation is said to "go both ways."
—Egypt Continues to Obtain N. Korean Missile Help Washington," *Middle East Newsline*, 9 March 2001, www.menewsline.com.

13 March 2001
The head of the North Korean delegation for interministerial talks, which are scheduled to begin today in Seoul, calls his counterpart in Seoul to inform him that North Korea will have to postpone the talks. Chŏn Kŭm Chin, the North Korean representative gives no reason for the sudden postponement, but some speculate the reason may be health problems for Chŏn, the recent summit between Kim Dae Jung and George W. Bush, or the perceived US hard-line policy towards North Korea.
—"5th Inter-Korea Ministerial Talks Postponed," *Chosun Ilbo*, 13 March 2001, www.chosun.com; Lee Young-jong and Lee Soo-jeong, "North Abruptly Calls Off Meeting," *Joongang Ilbo*, 14 March 2001, http://english.joins.com; Associated Press, in "North Korea Cancels Talks With South Korea," *New York Times*, 12 March 2001, www.nytimes.com.

16 March 2001
Middle East Newsline reports that US officials are monitoring North Korea's trade with western countries in the belief that North Korea has reached a bottleneck in the development of its Taepodong-2 missile. North Korea has recently established diplomatic relations with several western countries. The report says US officials will be watching Brazil, which was involved in the Condor program in the mid-1980s.
—"U.S. Monitors N. Korea for Technology Transfer," *Middle East Newsline*, vol. 3, no. 108, www.menewsline.com.

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19 March 2001
Israeli Prime Minister Ariel Sharon, speaking before the American-Israel Public Affairs Committee, says that Iran has acquired most of its technology from North Korea for its ballistic missiles that are capable of striking Israel.
—Choe Hong Sŏp, "[Israel] 'Pukhan-Chungdong Missile Connection Magara'," *Chugan Chosun (Weekly Chosun)*, no. 1648, 12 April 2001, http://weekly.chosun.com.

22-23 March 2001
According to a South Korean source, North Korean Deputy Foreign Minister Ch'oi Su Hŏn reveals during his trip to Sweden that North Korea intends to restart missile talks with the United States. Ch'oi gave no indication of any dates, but said sometime after the United States completes its review of policy towards North Korea.
—"North Intends to Hold Missile Talks with U.S. 'Later'," *Joongang Ilbo*, 2 May 2001, http://english.joins.com; Shogo Kawakita, Kyodo News Service, 27 April 2001, in "EU Diplomat Tells Kyodo North Korea Ready to Resume Missile Talks with US," FBIS Document ID JPP20010427000008.

27 March 2001
General Thomas Schwartz, Commander-in Chief UN Command and Combined Forces Command and Commander US Forces Korea, testifies before the US Congress that North Korea has been strengthening its military capabilities by deploying more ballistic missiles and conducting intensified training. Schwartz also testifies that North Korea has the world's largest stockpile of multiple rocket launchers (MRLs). Schwartz's testimony surprises South Korean government officials, and the opposition Grand National Party later summons South Korean Defense Minister Kim Dong Shin to testify before the National Assembly on 4 April to explain the difference in views.
—Shim Hae Hoon, "South Korea, USA Disagree over North Korean Threat," *Jane' Defence Weekly*, 18 April 2001, p. 5; Pamela Hess, "Schwartz: N. Korean Military Threat Growing," United Press International, 27 March 2001.

Late March 2001
North Korea ships various components, including rocket motors and missile airframes, by air to Iran. A US reconnaissance satellite spotted the shipment being loaded onto an Iranian Il-76 transport at Sunan (Pyongyang) Airport. One US intelligence official is quoted as saying the shipment was intended for Iran's Shehab-3 program.
—Bill Gertz, "North Korea Sends Missile Parts, Technology to Iran," *Washington Times*, 18 April 2001, www.washingtontimes.com; "N. Korea Sends New Missile Shipment to Iran," *Middle East Newsline*, 18 April 2001, www.menewsline.com.

1 April 2001
Jane's Missiles and Rockets reports that North Korea has been purchasing Russian 9K310/9K38 Igla (SA-16 Gimlet/SA-18 Grouse) heat-seeking man-portable air-defense systems (MANPADS). According to Bulgarian sources, the price of a missile and gripstock launcher is $5,000 and the price of additional missiles is $3,700 each. Russia is reportedly selling as many as 3,000 Igla MANPADS to North Korea.
—David C. Isby, "Russia Sells Igla to North Korea and India," *Jane's Missiles and Rockets*, 1 April 2001.

4 April 2001
Egyptian President Hosni Mubarak denies that Egypt is cooperating with North Korea in the area of ballistic

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missiles. US officials have accused Egypt of having acquired Scud-C missiles from North Korea, but Mubarak denied it. "We are not dealing with North Korea. Why are you making this propaganda against us? I cannot understand this. Anyway, I'm used to it. Before every visit, I hear so many rumors. But I don't care because I know what I'm doing," Mubarak said. The issue was raised during US Secretary of State Colin Powell's visit to Cairo in late February.
—Janine Zacharia, "Mubarak Sees Hope for Progress under Sharon," *Jerusalem Post*, 5 April 2001, p.2; "Speech by Egyptian President Mubarak to the Ad Hoc Committee of Arab American and American Jewish Leaders," Federal News Service, 4 April 2001, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

4 April 2001
The South Korean National Assembly summons Defense Minister Kim Dong Shin to explain the difference in views with General Thomas Schwartz, Commander-in Chief UN Command and Combined Forces Command and Commander US Forces Korea. Schwartz testified on 27 March 2001 before the US Congress that North Korea has been strengthening its military capabilities by deploying more ballistic missiles and conducting intensified training. Schwartz also said that North Korea has the world's largest stockpile of multiple rocket launchers. Schwartz's testimony surprised South Korean government officials.
—Shim Hae Hoon, "South Korea, USA Disagree over North Korean Threat," *Jane's Defence Weekly*, 18 April 2001, p. 5; Pamela Hess, "Schwartz: N. Korean Military Threat Growing," United Press International, 27 March 2001.

6 April 2001
Lee Jae Uk, a senior researcher at the Korea Institute of Defense Analysis, releases a report that says North Korea exported up to 540 ballistic missiles to the Middle East between 1985 and 2000. The number includes 490 Scud-B and Scud-C missiles and 50 Nodong missiles that were sold to Libya last year. According to Lee's report, the Scud-B and Scud-C missiles sold for between $2 million and $2.5 million, and the Nodong has been sold for around $7 million. [Note: The first of the Nodong missiles sold to Libya were reportedly delivered in November 2000.]
—Kim Min Sŏk, "North Sold 540 Missiles in Mideast," *Joongang Ilbo*, 7 April 2001, http://english.joins.com; David C. Isby, "North Korea Remains Committed to Missile Proliferation," *Jane's Missiles and Rockets*, 1 June 2001, p. 5.

12 April 2001
Chugan Chosun reports that there are nine North Korean technicians in Libya assisting with its missile development program.
—Choe Hong Sŏp, "'[Israel] Pukhan-Chungdong Missile Connection Magara'," *Chugan Chosun*, 12 April 2001, www.weekly.chosun.com.

12 April 2001
According to a *Chugan Chosun* interview with an Israeli government official, Israel believes that Iran is not capable of producing ballistic missiles, such as the Shehab-3, on its own. The official says he is certain there has been close cooperation in the area of missile development between Russia, Iran and North Korea.
—Ch'oe Hong Sŏp, "'[Israel] Pukhan-Chungdong Missile Connection Magara'," *Chugan Chosun*, 12 April 2001, www.weekly.chosun.com; *Chugan Chosun,* 12 April 2001, in "ROK Weekly Interviews Israeli Official on DPRK Missile Exports," FBIS Document KPP20010411000117, 10 April 2001.

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13-27 April 2001
US intelligence reportedly discovers that a North Korean missile shipment to Iran is being delayed because of a dispute over a letter of credit between the two countries. The discovery is reported on 27 April, and is said to have occurred within "the last two weeks."
—Bill Gertz and Rowan Scarborough, "Inside the Ring," *Washington Times*, 27 April 2001, www.washtimes.com.

14-15 April 2001
The Russian newspaper *Vremya Novostey* reveals that North Korea has convinced Russia to "renew full-scale bilateral cooperation in the sphere of military technology." Citing "high-ranking sources," the report says that negotiations on this matter began with Vladimir Putin's visit to Pyongyang in July 2000. North Korea is said to have a debt of $3 billion to Russia, and reportedly asked for part of the debt to be cancelled during Putin's visit; however, Russia declined. Instead, the two countries are considering joint usage of the Sŭngni Chemical Plant and the Kim Ch'aek Iron Works. According to this report, North Korea has budgeted $1.45 billion for the military this year, out of a national budget of less than $10 billion.
—Yuriy Golotyuk, "Ot Nashego Stola [From Our Desk]," *Vremya Novostey*, 17 April 2001, in Integrum Techno, www.integrum.ru; "N.K.-Russia to Forge Alliance," *Joongang Ilbo*, 19 April 2001, http://english.joins.com.

17 April 2001
Jerry Humble, Deputy Commander-in-Chief of UN Forces in Korea, while attending a seminar in Texas says that North Korea has increased its stockpile of ballistic missiles to 600, a 25% increase over the past two years. Humble says that 70% of these missiles are deployed near the Demilitarized Zone (DMZ), up from 65%.
—"USFK Warns on Increase of North Korean Missiles," *Chosun Ilbo*, 18 April 2001, in FBIS Doc ID: KPP20010418000091; Chu Yong Chung, "Puk, 2 Nyŏn'gan Changgŏrip'o 25% Chŭnggang Chuhan UN Kun Pusaryŏnggwan 'Missile To 600 Yŏgiro'," *Chosun Ilbo*, 18 April 2001, www.chosun.com.

18 April 2001
South Korean Defense Minister Kim Dong Shin tells the National Assembly that North Korea has about 500 Scud missiles and about 40 Nodong missiles. Kim says that Scud missiles are deployed at Shin'gye-kun, North Hwanghae Province, and that Nodong missiles are deployed at Shin'o-ri, Unchŏn-kun, North P'yŏng'an Province.
—Kim Min Sŏk, "Kukpang'wi, Pukhan Kunsaryŏk Nollan," *Joongang Ilbo*, 24 April 2001, p. 8, in KINDS, www.kinds.or.kr.

22 April 2001
A ROK military source states that North Korea received a number of DR-3 REYS unmanned aerial vehicles (UAV) from a country in the Middle East that has a military agreement with North Korea. The UAVs were received in the late 1990s and were manufactured in the CIS. The DR-3 REYS is 7.3 meters long and has a wingspan of 3 meters. According to the report, North Korea has been actively developing a UAV, but has yet to deploy any.
—Yu Yong Wŏn, "Puk, Chŏngch'alyong Muinhanggonggi Chungdongsŏ Chegongbada," *Chosun Ilbo*, 22 April 2001, www.chosun.com; Yu Yong Won, "NK Acquires Aerial Drone," *Chosun Ilbo*, 22 April 2001, www.chosun.com.

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26-28 April 2001

A high-level North Korean military delegation led by National Defense Commission Vice Chairman and People's Armed Forces Minister Kim Il Chŏl leaves for Moscow on the 26th. On the 27th, Kim signs an "agreement on cooperation in the field of military technology between the two countries" with Russian Deputy Prime Minister Ilya Clevanov. Another agreement is signed to train North Korean military officers in Russia. According to ITAR-TASS, "Russian Defense Minister Sergei Ivanov believes that 'the topic of cooperation in the field of missile technology was touched on.'" A "high-level South Korean government source" later reveals that Kim Il Chŏl asks Russia to sell SAMs and other high-tech weapons to North Korea.

—"DPRK High-Ranking Military Delegation Leaves for Russia," Korean Central News Agency, 26 April 2001, www.kcna.co.jp; "Talks Held between Vice-Chairman of DPRK NDC and Russian Deputy Prime Minister," Korean Central News Agency, 28 April 2001, www.kcna.co.jp; Kim Ki Hyun, "P'yang, Moscow Sign Military Pacts," *Donga Ilbo*, 29 April 2001, http://english.donga.com; Kim Ki Hyun, "N. Korean Defense Chief's Visit to Russia," *Donga Ilbo*, 30 April 2001, http://english.donga.com; Sergei Ostanin, "Russia North Korea Sign Agreement on Military-Technical Cooperation," ITAR-TASS, 28 April 2001, FBIS Document ID: CEP20010428000158; "Russia to Provide $2 Billion for TSR-TKR Railways Project," *Joongang Ilbo*, 2 August 2001, http://english.joins.com; *Joongang Ilbo*, 2 August 2001, in "ROK Daily Says Russia to Provide $200 Million for Railway Linkage," FBIS Document ID KPP20010802000093.

27 April 2001

A Russian Defense Ministry Spokesman says Russian Defense Minister Sergei Ivanov and North Korean Minister of the People's Armed Forces Kim Il Chŏl are discussing plans to restore and modernize Soviet-made weapons systems in North Korea. All of North Korea's air defense equipment and up to 95% of its coastal forces equipment were made in the USSR. According to this report, the two ministers discussed a number of issues, but did not discuss the development of North Korean missile technologies at all. It is later revealed that Russia agrees to sell S-300 surface-to-air missiles (SAMs) and the Pchela-1 unmanned aerial vehicle (UAV) to North Korea. Kim is also said to have expressed "an active interest in the IGLA portable anti-aircraft missile and radar systems." It is later revealed that Kim supposedly conveys a message from Kim Jong Il that North Korea is prepared to pay cash for any weapons purchases.

—Agentstvo Voyennykh Novostey (Moscow), 27 April 2001, in "Russia to Repair North Korea's Soviet-Era Weaponry," FBIS Document ID CEP20010427000272; Interfax News Agency Daily News Bulletin, "Moscow, Pyongyang Sign Agreement on Military Cooperation," 27 April 2001; Chu Sŏng Min, "Pukhan, Russia Sonjapko 'Mugi Kangguk' Paltodum," *Sisa Journal*, vol. 603, 17 May 2001,www.e-sisa.co.kr; Kwŏn Kyŏng Pok, "Rŏ, Puk e S-300 Missile P'anmae Chŏnmang," *Chosun Ilbo*, 2 September 2001, www.chosun.com; *Chosun Ilbo*, 17 July 2001, in "DPRK Allegedly Asks for Weapons in Exchange for TransSiberian [*sic*] Railway Link," FBIS Document ID KPP20010718000009; Park Pyŏng Chin, "Puk Chŏllŏkchŭnggang Pakch'a Paegyŏng," *Segye Ilbo*, 10 September 2001, p. 5, www.segyetimes.co.kr; Kim Ki Hyun, "N. Korean Defense Chief's Visit to Russia," *Donga Ilbo*, 30 April 2001, www.donga.com; Kim Ki Hyŏn, "Inminmuryŏkpujangŭi Pangnŏ," *Donga Ilbo*, 30 April 2001, www.donga.com; Kim Ki Hyun, "P'yang, Moscow Sign Military Pacts," *Donga Ilbo*, 29 April 2001, www.donga.com; Kim Ki Hyŏn, "Puk-Rŏ, Kunsahyŏpnyŏkhyŏpchŏng Ch'egyŏl," *Donga Ilbo*, 29 April 2001, www.donga.com.

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3 May 2001

Kim Jong Il tells a European Union delegation that North Korea will extend its missile flight-test moratorium until at least 2003. However, Kim tells visiting Swedish Prime Minister Göran Persson that North Korea will sell missiles if there are buyers.

—"Kim Pledges Missile Test Freeze," Reuters, 3 May 2001; Kim Min Bae, "Puk, Missile Such'ul Kanghaeng P'yomyŏng," *Chosun Ilbo*, 4 May 2001, www.chosun.com; Christopher Torchia, "European Envoy: North Korea Views Missile Technology as Trade Item," Associated Press, 4 May 2001; John Leicester, "North Korea Extends Missile Test Moratorium," *Chicago Tribune*, 3 May 2001, http://sns.chicagotribune.com; Doug Struck, "North Korea Extends Missile Test Halt: Says It Will Launch No Missiles Until 2003," *Washington Post*, 4 May 2001, www.washingtonpost.com; *Donga Ilbo* (Seoul), 3 May 2001, in "ROK Daily Sees DPRK Decision To Freeze Missile Launch as Gesture to US," FBIS Document ID KPP20010503000123; Alex Wagner, "D.P.R.K. Extends Missile Pledge As U.S. Readies to Resume Talks," *Arms Control Today*, June 2001, pp. 21, 25; Kim Hee Sung, "N.K. Chairman Pledges to Maintain Missile Moratorium till Year 2003," *Joongang Ilbo*, 5 May 2001, http://english.joins.com; "Missile Technology Is a Commodity to Be Sold, Says North," *Joongang Ilbo*, 5 May 2001, http://english.joins.com; Kim Young Sik, "North Korea Extends Missile Test Moratorium until 2003," *Donga Ilbo*, 4 May 2001, www.donga.com; Kim Yŏng Shik, "Pukhan Missile Palsa 2003 Nyŏnkkaji Yuye," *Donga Ilbo*, 4 May 2001, www.donga.com; "North Korea Promises to Keep Missile Test Moratorium," Agence France Presse, 3 May 2001; Kim Jin Kook, "Solana Quotes Kim Jong-il: 'Missile Buyers Welcome'," *Joongang Ilbo*, 4 May 2001, http://english.joins.com; "News Review: North Korea Extends Missile Test Moratorium, Holds Firm on Exports," *Disarmament Diplomacy*, Issue No. 57, May 2001, www.acronym.org.uk; Doug Struck, "N. Korean Leader to Continue Sale of Missiles," *Washington Post*, 5 May 2001, www.washingtonpost.com.

14 May 2001

A "senior South Korean government official" says that North Korea is negotiating with Russia to procure Russian "military hardware." North Korea is asking to purchase 700 billion won ($538 million) worth of goods, but North Korea has a debt of about Rb4 billion with Russia. The officials from the North Korean Ministry of the People's Armed Forces left for Russia on 11 May.

—Kim Kwang-tae, "NK Seeks to Purchase Weapons From Russia," *Korea Times*, 15 May 2001, www.koreatimes.co.kr; Ok Yŏng Dae, "Puk-Rŏ Mugigumae Hyŏpsangjung," *Segye Ilbo*, 15 May 2001, www.segyetimes.co.kr.

22 May 2001

Assistant Secretary of State James Kelly says that missile talks with North Korea will resume soon, but that the Bush administration will not be as "soft as the Clinton administration."

—Ch'oe Ch'ŏl Ho, "Kelly Miat'aedamdang Ch'agwanbo 'Taebuk Missile Hoedam Kot Chaegae," *Taehan Maeil*, 24 May 2001, www.kdaily.com.

23 May 2001

Deputy Secretary of State Richard Armitage and Deputy Secretary of Defense Paul Wolfowitz say that bilateral talks between the United States and North Korea will probably resume next month.

—Chu Yong Chung, "Mi 'Pukkwa Naedal Taehwa Chaegae'," *Chosun Ilbo*, 24 May 2001, www.chosun.com.

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25 May 2001
James Kelly, US assistant secretary of state for East Asian and Pacific affairs, tells South Korean Deputy Foreign Minister Lim Sung Jun that talks between the United States and North Korea are likely to resume in June. Kelly makes the remarks in Honolulu during the Trilateral Coordination and Oversight Group (TCOG) meeting. Kelly says the North Korean missile program will likely be the first item on the agenda.
—Kyodo News Service (Tokyo), 26 May 2001, in "U.S.-North Korea Talks May Resume in June: Yonhap," FBIS Document ID JPP20010526000055.

27 May 2001
James Kelly, US representative to the Trilateral Consultation and Oversight Group (TCOG) briefs his South Korean and Japanese counterparts on the US policy review of North Korea. He says, "We are in the final stage in the comprehensive review of US policy toward North Korea." All three delegations agree that consultation and coordinated policy is needed towards several issues, including missiles, WMD, and humanitarian issues.
—"Brief Comments from Three Delegations after TCOG Talks," *Joongang Ilbo*, 29 May 2001, http://english.joins.com.

28 May 2001
Kim Chŏng Nam, son of North Korea's National Defense Commission Chairman Kim Jog Il, is reportedly seen getting his haircut at the Swiss Hotel in Beijing. There are allegations that he has been involved in North Korea's missile trade.
—Fuji Television (Tokyo), 20 June 2001, in "Japan's Fuji TV report Says Kim Chong-nam Witnessed in Beijing," FBIS Document ID JPP20010621000138.

Late May 2001
North Korean Foreign Minister Paek Nam Sun tells Selig Harrison that Pyongyang is reconsidering its missile flight-test moratorium. Harrison quotes Foreign Minister Paek as saying, "As to whether we will maintain the moratorium until 2003, that is yet to be decided. It depends entirely on the policy of the new administration." During a five-day visit to Pyongyang, Harrison also met with General Lee Chan Bok, the North Korean representative at Panmunjom. Harrison quotes General Lee as saying, "Right now our government has not decided that we need nuclear weapons, but everybody is thinking in that direction in view of the hostile attitude of the Bush administration." Harrison says the Bush administration stance is playing into the hands of hard-liners in Pyongyang.
—John Pomfret, "North Korea Said to Warn of New Missile Tests," *Washington Post*, 4 June 2001, p. A15; John Pomfret, "A North Korean Warning on Missiles: U.S. Scholar Sees Negative Mood in Pyongyang as Bush Hardens Line," *International Herald Tribune*, 4 June 2001, p. 9; Elisabeth Rosenthal, "North Korea Threatens to Pull Out of Missile Pacts," *New York Times*, 5 June 2001, www.nytimes.com; Joe McDonald, "N. Korea Warns of Actions on Missiles," Associated Press Online, 6 June 2001, www.ap.org.

31 May 2001
Iran successfully tests its newly developed "Fateh (Victorious) 110." The *Joongang Ilbo* reports that the missile was likely developed with North Korean assistance. The missile uses solid fuel, but all of North Korea's ballistic missiles

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use liquid fuel. If Iran transfers solid-fuel technology to North Korea, it could be used to enhance North Korean missile capability.
—"White House Expresses Worries over Iran's Missile Plan," *Joongang Ilbo*, 1 June 2001, http://english.joins.com; Justin Anderson, "Carnegie Analysis: Background on Test of New Iranian Missile, 31 May 2001, www.ceip.org; "Iran Successfully Test-Fires Domestic Solid-Fuelled Missile," IRNA (Tehran), 31 May 2001, www.irna.com; "Iran Successfully Test-Fires Domestic Solid-Fuelled Missile," IRNA, 31 May 2001, www.irna.com; "Iran Test-Fires New Home-Made Guided Missile," *Gulf News*, 1 June 2001, www.gulfnews.com; Doug Richardson, "Iran Tests Solid-Propellant Missile," *Jane's Defence Weekly*, 1 August 2001, p. 17; Jim Matthews, "Iran Claims Successful Test of First Locally Built Missile," *Aerospace Daily*, vol. 198, no. 4, 1 June 2001, p. 7.

June 2001
Russian officials and experts say they believe North Korea has reached a bottleneck and can no longer continue its missile development program without external aid. In a press conference for US journalists, Russian President Vladimir Putin says, "...the limit of modernization has been reached." Russian experts reportedly say the Taepodong-1 (Paektusan-1) and Taepodong-2 missiles are "paper missiles" and have not demonstrated the performance claimed by North Korea. They also believe North Korea will need a new design, and new components and materials, as well as advanced test facilities to produce a missile capable of striking the United States.
—"Russia: N. Korea Unable to Advance in Missile Development," *Middle East Newsline*, vol. 3, no. 248, 26 June 2001, www.menewsline.com.

June 2001
The United States and South Korea begin a joint study on confidence-building measures (CBMs) with North Korea to address Pyongyang's ballistic missiles, WMD programs and conventional forces. The joint study team reportedly completes the first part of the study in late February 2002, with 32 items to be proposed for CBMs with North Korea.
—Jong-Heon Lee, "U.S. Moves to Tackle Conventional Weapons," United Press International, 28 February 2002, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; C.W. Lim, "US and South Korea Study Ways to Ease Tensions with North," Agence France Presse, 28 February 2002, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Kim Min-Seok, "U.S. to Join Effort to Limit North's Arms," *Joongang Ilbo*, 28 March 2002, http://english.joins.com; Yu Yong Wŏn, "[Han-Mi] Taebuk Kunsashilloejoch'i Maryŏn...Hotline Tŭng Hyŏpsang," *Chosun Ilbo*, 27 February 2002, www.chosun.com; Kim Kwi Kŭn, "[Han-Mi, CBM Kongdong'yŏn'gusŏnggwawa Chŏnmang]," *Chosun Ilbo*, 27 February 2002, www.chosun.com; Kim Kwi Kŭn, "Hanmi, Kunsashilloejoch'i Kongcongdaeŭng Hab'ŭi," *Chosun Ilbo*, 27 February 2002, www.chosun.com.

1 June 2001
The *Financial Times* reports that US officials are concerned about contacts between North Korean officials and senior figures in the Pakistani nuclear program. There is also evidence that North Koreans have visited a nuclear weapons site in Pakistan. Some speculate that North Korea might obtain nuclear weapons technology in exchange for ballistic missile technology.
—Stephen Fidler and Edward Luce, "US Fears North Korea Could Gain Nuclear Capability Through Pakistan," *Financial Times*, 1 June 2001, p. 1.

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4 June 2001

The *Tokyo Shimbun* reports that Japan's Foreign Ministry has drafted a plan to form a consortium with the United States, South Korea, and the European Union to buy all of North Korea's ballistic missiles. The plan would include the monitoring of North Korea's missile production facilities to ensure transparency. Japan would also insist that any funds transferred to North Korea under the plan be for non-military uses. However, Channel NewsAsia issues a report quoting a Japanese Foreign Ministry official denying there is such a plan. The official says, "There is no concrete plan for the reported framework. We are neither thinking of such a framework nor planning on discussing it with other countries."

—Yonhap News Agency (Seoul), 4 June 2001, in "ROK's Yonhap: 'Japan Pushing to Buy All N.K. Missiles': Tokyo Shimbun," FBIS Document ID KPP20010604000027; Vasily Golovnin, "Tokyo Planning to Buy Up North Korean Missiles," ITAR-TASS, 4 June 2001; Kyodo News Service (Tokyo), 3 June 2001, in "Japan Eyes Body to Buy Up N. Korean Export Missiles," FBIS Document ID JPP20010603000039; "Japan May Buy North Korean Missiles," *Foreign Report*, Jane's Information Group Limited, 21 June 2001; "Proposal Raised to Buy N. Korean No-Dong Missiles Tokyo," *Middle East Newsline*, vol. 3, no. 216, 4 June 2001, www.menewsline.com; "Japan Denies Eyeing N. Korean Export Missiles," Channel NewsAsia, 4 June 2001.

5 June 2001

US State Department spokesman Richard Boucher warns that bilateral relations with North Korea will be harmed if Pyongyang ends its moratorium on missile flight-tests.

—"Test Ban Is Crucial, U.S. Tells the North," *Joongang Ilbo*, 5 June 2001, http://english.joins.com.

2-5 June 2001

North Korean Vice Foreign Minister Ch'oe Su Hŏn and Yang Hyŏng Sŏp, Vice Chairman of the Presidium of the Supreme People's Assembly, tell visiting Spanish Vice Foreign Minister Miguel Nadal that North Korea will maintain its flight-test moratorium until 2003. This contradicts reports in late May from Selig Harrison that North Korea is reconsidering the moratorium.

—Kim Ji Ho, "N.K. Renews Promise on Missile Moratorium, Spanish Official Says," *Korea Herald*, 8 June 2001.

6 June 2001

The Bush administration announces that its North Korea policy review is complete. The administration says it wants to restart talks with Pyongyang to seek "improved implementation of the Agreed Framework, verifiable constraints on North Korea's missile program, a ban on missile exports, and a less-threatening North Korean conventional military posture." The administration offers incentives, such as "greater humanitarian aid, easing of economic sanctions, and unspecified political steps."

—"Statement by the President," Office of the Press Secretary, 13 June 2001, www.whitehouse.gov; Alex Wagner, "Bush Outlines Resuming Talks with North Korea," *Arms Control Today*, July/August 2001, pp. 23, 25; Kyodo News Service, 6 June 2001, in "Bush Wants 'Serious' Talks with N. Korea on Missiles," FBIS Document ID JPP20010606000167.

6 June 2001

In Seoul, Spanish Vice Foreign Minister Miquel Nadal says that North Korea intends to maintain its missile flight-

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test moratorium until 2003. Nadal has recently completed a four-day trip to Pyongyang, where he discussed the moratorium with "many senior officials," Vice Foreign Minister Ch'oe Su Hŏn and Vice President of the Standing Committee of the Supreme People's Assembly Yang Hyŏng Sŏp.
—Kyodo News Service, "N. Korea to Keep Moratorium on Missile Testing," Japan Economic Newswire, 7 June 2001, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

7 June 2001
Secretary of State Colin Powell says that the Bush administration has expanded the dialogue with North Korea by "putting conventional forces on the agenda and by making it clear to the North Koreans that we want to talk about missiles and missile technology and missile sales and nuclear weapons programs, but we also want to talk about humanitarian issues."
—Alex Wagner, "Bush Outlines Resuming Talks with North Korea," *Arms Control Today*, July/August 2001, pp. 23, 25.

13 June 2001
Jack Pritchard, US special envoy for Korean peace talks, meets with Lee Hyŏng Chŏl, North Korean ambassador to the United Nations in New York. Pritchard explains the outline of the Bush administration's policy towards North Korea and requests a meeting with Kim Gye Gwan, North Korean vice foreign minister. Lee responds that he will reply in one or two weeks after delivering the message to Pyongyang.
—"'A Useful Start,' Comments Washington on U.S.-DPRK Talks," *Joongang Ilbo*, 14 June 2001, http://english.joins.com; "Not Much Enthusiasm from N.K. in resuming Next Dialogue with U.S.," *Joongang Ilbo*, 15 June 2001, http://english.joins.com; Kuk Ki Yon, "Mi, Kim Gye Gwan Kwa Hoedam Kongshikcheŭi," *Segye Ilbo*, 14 June 2001, www.segyetimes.co.kr; Steve Mufsaon, "North Korea, U.S. to Hold Talks Today on Missiles," *Washington Post*, 13 June 2001, p. A21; Alex Wagner, "Bush Outlines Resuming Talks with North Korea," *Arms Control Today*, July/August 2001, pp. 23, 25.

14 June 2001
The US imposes economic sanctions against North Korea's Ch'anggwang Shinyong Company for selling missile technology. This marks the first time the Bush administration imposes economic sanctions for weapons-related transfers. The sanctions are announced in the Federal Register.
—Department of State, [Public Notice 3708] Bureau of Nonproliferation; Imposition of Nonproliferation Measures Against a North Korean Entity, Including a Ban on U.S. Government Procurement, *Federal Register*, vol. 66, no. 123, 26 June 2001, pp. 33988-33989; Bill Gertz, "China, N. Korea Hit With Sanctions," *Washington Times*, 28 June 2001, p. 1; Associated Press, "U.S. Penalizes China, N. Korea Cos.," *New York Times*, 28 June 2001, www.nytimes.com; Reuters, "U.S. Sanctions North Koreans, Chinese Firms," *Washington Post*, 28 June 2001, p. A14, www.washingtonpost.com; Reuters, "U.S. Says Chinese and North Korean Firms Aid Iran Weapons Bid," *South China Morning Post*, 28 June 2001, www.scmp.com.

14 June 2001
South Korean Unification Minister Lim Dong Wŏn says that South Korea has no intention of linking the supply of electricity to North Korea with the issues of nuclear weapons and ballistic missile proliferation.

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—Lee Chul Hee, "No Linkage Seen in Aid to North, Nuclear Issue," *Joongang Ilbo*, 15 June 2001, http://english.joins.com; Lee Ch'ŏl Hŭi, "Haek-Missile Yŏn'gyeanhko Taebuk Chŏllyŏkchiwŏn," *Joongang Ilbo*, 14 June 2001, www.joins.com; "Seoul Opposes Proposal To Link N.K. Energy Aid With Missiles," *Korea Herald*, 15 June 2001, www.koreaherald.co.kr.

18 June 2001

A North Korean Foreign Ministry spokesman issues a statement in response to the Bush administration's announcement on 6 June 2001 of its intention to resume dialogue with North Korea. The spokesman says that the United States is attempting to "disarm North Korea through negotiations" because the administration has proposed the topics of discussion to include North Korea's nuclear weapons program, missile program, and conventional military forces. North Korea claims there should be no preconditions for resuming the dialogue that has been suspended for four months. Furthermore, the spokesman says North Korea will never discuss its conventional forces as long as US military forces remain in South Korea, and that the first item on the agenda should be "compensation for the loss in electricity due to the delay in construction of the light-water reactors (LWRs) under the Agreed Framework."

—"Spokesman of DPRK Foreign Ministry on Bush's Statement on Resuming Negotiations with DPRK," Korean Central News Agency, 18 June 2001, www.kcna.co.jp; Charles Lee, "N. Korea Rejects 'Unfair' Talks with US," United Press International, 21 June 2001; "Pyongyang Sets Agenda for US Talks," *South China Morning Post*, 19 June 2001, www.scmp.com; "U.S. Expects North Korea Talks to Continue," *South China Morning Post*, 19 June 2001, www.scmp.com; Alex Wagner, "Bush Outlines Resuming Talks with North Korea," *Arms Control Today*, July/August 2001, pp. 23, 25; John Burton, "N. Korea Frosty about US Talks Plan," *Financial Times*, 19 June 2001, p. 12; Kim Yŏng Shik, "Puk Chŏllyŏkposang'yogu Anp'akk / KEDO Sŏ Chŏllyŏkchiwŏn Mi Pandaemara," *Donga Ilbo*, 19 June 2001, p. 3, www.donga.com; Kim Yong-sik, *Donga Ilbo*, 18 June 2001, in "Background of DPRK Demand for US Compensation for Power Losses Viewed," FBIS Document ID KPP20010618000122.

18 June 2001

Reports say Egypt is planning to purchase 50 Nodong engines. According to reports, there are somewhere between 50 and 300 North Koreans in Egypt assisting with missile development, and the number of North Koreans in both Egypt and Libya is said to have increased over the last two years. The North Koreans are said to be working on increasing the range of Scud missiles in Egypt's inventory. Much of Egypt's missile development is said to be taking place in Libya.

—"Up to 300 N. Koreans in Egypt for Missile Program, *World Tribune*, 21 June 2001, www.worldtribune.com; Up to 300 N. Koreans Aid Egypt's Missile Program," *Middle East Newsline*, vol. 3, no. 242, 21 June 2001, www.menewsline.com; Eli J. Lake and Richard Sale, "Egypt Buys Missiles from North Korea," United Press International, 18 June 2001; Mikhail Falkov, "Jerusalem Attacks Cairo Via Washington," *Novosti Nedeli* (Tel Aviv) 21 June 2001, p. 11, in "Israel Said Using US Channels To Prevent Egypt's North Korean Arms Purchases," FBIS Document ID GMP20010625000058.

19 June 2001

NBC News reports that according to anonymous US intelligence sources, the United States believes North Korea

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has built one or two nuclear bombs, but "there is no evidence it has built missile warheads."
—Robert Windrem, "How Real Is the Rogue Threat?" NBC News, 19 June 2001, www.msnbc.com.

20 June 2001
North Korean television criticizes the United States for unilaterally setting the agenda for bilateral talks. The Bush administration announced on 6 June 2001 bilateral talks should resume, but the administration proposed that conventional weapons should be included on the agenda. The broadcast accused the United States of not implementing the Agreed Framework, and reiterated the North Korean demand for compensation due to the delay in the construction of the two light-water reactors (LWRs).
—Pyongyang Korean Central Television, 20 June 2001, in "DPRK TV Commentary Reiterates Need To Compensate for Electricity Loss," FBIS Document ID KPP20010620000115; Korean Central Broadcasting Station (Pyongyang), 20 June 2001, in "DPRK Daily Decries US 'Preconditions' for DPRK-US Dialogue," FBIS Document ID KPP20010620000090.

21 June 2001
South Korean Defense Minister Kim Dong Shin meets with US Secretary of Defense Donald Rumsfeld in Washington, D.C. The two agreed on a number of issues, including that the US should maintain a long-term military presence in Korea to ensure regional stability; that the United States and South Korea should strengthen military readiness against North Korea and develop an allied defense posture for the 21st century; that Pyongyang poses a threat with its nuclear and missile programs, and North Korea submit to IAEA inspections. Secretary Rumsfeld also expressed US support for Kim Dae Jung's engagement policy towards North Korea. The two sides also agree that South Korea should take the lead in negotiating conventional arms control issues with North Korea, which seems contradictory to the results of the Bush review of policy towards North Korea announced on 6 June 2001.
—Jefferson Morris, "Rumsfeld, S. Korean Minister Agree On North Korea Policies," *Aerospace Daily*, 22 June 2001; Kyodo News Service, 22 June 2001, in "U.S., S. Korea Reaffirm Threats from N. Korea," FBIS Document ID JPP20010622000001; Yonhap News Agency, 22 June 2001, in "ROK's Yonhap: S.K. to Take Initiative in Conventional Forces talks with N.K.," FBIS Document ID KPP20010622000004; Kim Kwang-tae, "Seoul Set To Take Up Conventional Weapons Issue After Kim's Return," *Korean Times*, 25 June 2001, www.koreatimes.co.kr; US Reaffirms Security Commitment to Korea," *Korea Times*, 23 June 2001, www.koreatimes.co.kr; "[Sasŏl] Han-Mi Kukpangjanggwanhoedam Ihu," *Taehan Mail*, 23 June 2001, p. 5, www.kdaily.com; *Taehan Mail*, 23 June 2001, in "ROK Daily Views Result of ROK-US Defense Ministerial Talks," FBIS Document ID KPP20010622000108; Chin Kyŏng Ho and Pak Ch'an Ku, "Nambuk Chaeraemugihyŏpsang 'Sonswiun Ŭijebut'ŏ Chŏpkŭn'," Taehan Maeil, 23 June 2001, p. 5, www.kdaily.com; Chin Kyong-ho, *Taehan Maeil*, 23 June 2001, in "Prospects for N-S Korea Negotiations on Conventional Weapons Reductions Viewed," FBIS Document ID KPP20010622000110, Yu Yong Wŏn, "Hanmikukpang Anbogongjoman Chaehwagin," *Chosun Ilbo*, 23 June 2001, p. 4, www.chosun.com; Yu Yong-won, *Chosun Ilbo*, 23 June 2001, in "ROK Daily Suspects Opinion Difference in ROK-US Defense Ministers' Talks," FBIS Document ID KPP20010622000101.

21 June 2001
Egyptian Foreign Minister Ahmed Maher meets with Secretary of State Colin Powell. The Bush administration is

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concerned about Egypt's missile cooperation with North Korea, which is said to include the purchase of 50 Nodong engines. However, Maher says that Egypt's missile cooperation with North Korea has ended.
—"Cooperation," *Middle East Newsline*, vol. 3, no. 244, 22 June 2001, www.menewsline.com.

25 June 2001
NuclearFuel says that reports in early June 2001 about possible cooperation in the nuclear field between North Korea and Pakistan are erroneous. US Deputy Secretary of State Richard Armitage was cited as the source of the earlier reports, but a "US nonproliferation official" said last week that the evidence points to cooperation in the area of solid-fuel missiles. Apparently, there is no indication of Pakistan assisting North Korea with uranium enrichment.
—Mark Hibbs, "North Korean-Pakistan Collusion Said Limited to KRL and Missiles," *NuclearFuel*, vol. 26, no. 13, 25 June 2001, www.mhenergy.com.

Late June 2001
North Korea conducts a static test of rocket engine at the Musudan-ri missile and space launch facility. The engine may be for the Taepodong-2. *Jane's Defence Weekly* reports that US reconnaissance aircraft detected the test.
—Bill Gertz, "N. Korea Tests Its Missile Engine: Continues Work on Taepodong," *Washington Times*, 3 July 2001, p. A1; "In Brief: North Korea Missile Engine Test," *Jane's Defence Weekly*, 25 July 2001, p. 16; Barry Schweid, "North Korean Missile Development Continues," Associated Press, 3 July 2001, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

30 June 2001
In a meeting with Japanese Prime Minister Junichiro Koizumi, President Bush says that Kim Jong Il is not trustworthy because "he makes his own people go hungry."
—Kyodo News Service, 1 July 2001, in "Bush Tells Koizumi N. Korea's Kim Is Untrustworthy," FBIS Document ID JPP20010701000021.

July 2001
The Journal of Electronic Defense reports that Russia has recently decided to sell the Pchela unmanned aerial vehicle (UAV) to North Korea. The Pchela was first used in 1995 in Chechnya, and formally entered into service in the Russian military in 1997. It cruises at an altitude of 2,750m and at speeds of 105-145km per hour. It is also capable of carrying a variety of reconnaissance payloads for two hours over a 55km range. The decision to sell the UAV to North Korea is likely a result of Defense Minister Kim Il Ch'ŏl's trip to Moscow in April 2001. [Note: These numbers have been converted from English units—confirm if possible.]
—"DPRK Interested in Russian UAVs," *The Journal of Electronic Defense*, July 2001, p. 20.

July 2001
In an issue of *Han'guksa,* a South Korean Defense Ministry magazine published by the Han'gukkunsamunjaeyŏn'guso (Korean Research Institute for Strategy, www.kris.or.kr) twice a year, General Thomas Schwartz, commander of the UN Command in South Korea, calls North Korea "the major security threat in Northeast Asia." Schwartz also says "their dogged adherence to a 'military first' policy when viewed against the

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backdrop of a nation on the brink of complete economic and social collapse is problematic." Schwartz says, "North Korea also possesses weapons of mass destruction and continues to develop asymmetric threats."
—Tim Witcher, "North Korea Threat Grows Despite Near Collapse, Says US Commander," Agence France Presse, 12 July 2001; Kim Min Sŏk, "Schwartz 'Pukhan, Sŏn'gunjŏngch'it'as Kyŏngje-Sahoe Wanjŏnbunggoe," *Joongang Ilbo*, www.joins.com.

Early July 2001
Cho Myŏng Rok, first vice chairman of the National Defense Commission and director of the General Political Department of the Korean People's Army, reportedly visits China for medical treatment. The reason for Cho's treatment is not known. However, a high-ranking North Korean defector said that Cho is known to be a heavy drinker.
—Shim Kyu Sŏk, "DPRK Cho Myong-nok Receiving Medical Treatment in China," 27 July 2001, in "DPRK Cho Myong-nok Reportedly in China for Medical Treatment," FBIS Document ID KPP20010726000126; Shim Kyu Sok, "Pukhan Cho Myŏng Rok, Chungguksŏ Shinbyŏngchiryo Chung," Yonhap News Agency, 26 July 2001, www.yonhapnews.co.kr; Ch'oe Son Yong, "Puk Kun Kowiganbudŭl Kim Wiwŏnjang Pangnŏ Suhaeng Anhae," Yonhap News Agency, 26 July 2001, www.yonhapnews.co.kr; Ŏm Nam Sok, "Puk Kim Yong Sun – Cho Myŏng Rok Sukch'ongsol," Yonhap News Agency, 27 July 2001, www.yonhapnews.co.kr.

Early July 2001
A delegation from the Egyptian Defense Ministry spends three days meeting with members of the US House and Senate to discuss Egypt's military needs. The delegation denies US intelligence reports about Egyptian missile cooperation with North Korea.
—"U.S. Acknowledges Concern over Egypt's No-Dong," *Middle East Newsline*, vol. 3, no. 296, 30 July 2001, www.menewsline.com.

3 July 2001
US State Department spokesman Richard Boucher declines to confirm that North Korea conducted a rocket engine test in late June, but says, "We expect North Korea to abide by its moratorium on the launch of long-range missiles." However, Reuters News Agency later reports that "US officials anonymously disclose that North Korea conducted a ground test late last week of engines in its long-range missile."
—Kyodo News Service (Tokyo), 3 July 2001, in "U.S. Expresses Concern on N. Korea Missile Program," FBIS Document JPP20010703000141; Kim Hee Sung, "North Korea's Missile Test: First Step of Imaginary Crisis," *Joongang Ilbo*, 4 July 2001, www.english.joins.com; Reuters, "U.S. Official Downplays Rocket Test," *Washington Times*, 7 July 2001, p. 5; Lee Ch'ŏl Hŭi and Han Ki Hŭng, "Mi 'Puk Missile Engine Shihŏm Uryŏ' ...'PalsaYuye Chunsun' Puke Kyŏnggo," *Donga Ilbo*, 4 July 2001, www.donga.com; Lee Ch'ŏl Hŭi and Han Ki Hŭng, "[Puk Missile Engine Shihŏmbaegyŏng] 'Manyang An'gidarinda' Miappak Gesture," *Donga Ilbo*, 4 July 2001, www.donga.com; Bill Gertz, "U.S. Warns N. Korea on Missile Tests," *Washington Times*, 4 July 2001, p. 3.

3 July 2001
Syria conducts a flight-test of a Scud-B armed with a chemical warhead during an exercise. The missile flies 300km and is considered successful. It is unclear if the missile was imported from North Korea or if North Korea played in

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role in the test. Since Syria has purchased Scud missiles from North Korea, this test could be indicative of North Korean warhead capabilities.
—"Syria Tests Scud B with Chemical Warhead," *Middle East Newsline*, vol. 3, no. 274, 13 July 2001, www.menewsline.com; Ze'ev Schiff, "Syrian Scud Fired with Chemical Warhead," *Ha'aretz*, 13 July 2001, www.haaretz.co.il.

4 July 2001
In an interview with *Al Mussawar* magazine, Egyptian President Hosni Mubarak says Egypt is not interested in having intermediate-range missiles because his country has no hostile intentions towards other countries. Mubarak's denial contradicts US intelligence reports that Egypt is trying to develop a variant of the Nodong ballistic missile.
—"Mubarak Denies No-Dong Missile Program," *Middle East Newsline*, vol. 3, no. 262, 5 July 2001, www.menewsline.com.

6 July 2001
During a State Department briefing session, Deputy Secretary of State Richard Armitage says, "Recently, we believe they [North Korea] tested a motor engine, a rocket engine. There is nothing in itself wrong with that." Armitage also urged North Korea to resume bilateral talks with the United States.
—"'Nothing Wrong' With North Korean Rocket Motor Tests: Top US Official," Agence France Presse, 6 July 2001; Yonhap News Agency, 6 July 2001, in "ROK's Yonhap: Armitage Urges DPRK to Resume Talks With US," FBIS Document ID KPP20010707000042.

9 July 2001
Iranian Defense Ministry Spokesman Keivan Khosravi denies accusations from a US congressman that Iran is trying to extend the range of its ballistic missiles. According to the *Tehran Times*, another Iranian government official denied the accusation that Iran is seeking help from Russia and North Korea to do so.
—Maryam Karami, "Defense Ministry: Iran Has No Plan to Increase Range of Missiles," 10 July 2001, in "Tehran Times: Defense Ministry Denies Iran Planning to Increase Range of Missiles," FBIS Document ID IA20010710000053.

9 July 2001
A *Rodong Sinmun* commentary says, "The DPRK has never allowed 'verification' and 'inspection' as its national defense industry and military forces are vital to it [*sic*]. It will neither permit 'verification' and 'inspection' nor accept the demand for the reduction of armed forces in the future, too, but further strengthen them."
—"U.S. Urged to Properly Understand DPRK's Principled Stand Towards U.S. Proposal," Korean Central News Agency, 9 July 2001, www.kcna.co.jp; "Migukŭn Uriŭi Wŏnch'ikchŏngnipchangŭl Ddokparo Alaya Handa," Korean Central News Agency, 9 July 2001, www.kcna.co.jp; Korean Central News Agency, 9 July 2001, in "DPRK's KCNA: U.S. Urged to Properly Understand DPRK's Principled Stand Towards U.S. Proposal," FBIS Document ID KPP20010709000070; "North Korea Not to Resume Talks with US under Bush's Conditions," Agence France Presse, 9 July 2001; Ch'oe Sŏn Yŏng, "Puk, 'Kŏmjŭg-Sach'al-Muryŏkkamch'uk Suyong Mothae," *Joongang Ilbo*, 9 July 2001, www.joins.com.

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11 July 2001
Korean Central Television in Pyongyang denounces the Bush administration's proposal for renewing bilateral dialogue. The broadcast says that if the United States truly intends to reopen dialogue, "the agenda items should be practical issues about implementing the articles in the DPRK-US Framework Agreement [*sic*] and the DPRK-US Joint Communiqué as agreed upon."
—Korean Central Television (Pyongyang), 11 July 2001, in "US 'Arrogant' Attitude Toward Dialogue With DPRK Denounced," FBIS Document ID KPP20010711000103; Vladimir Kutakhov, "DPRK Does Not Intend to resume Dialogue on US Terms—Media," ITAR-TASS, 11 July 2001, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

9-13 July 2001
According to *Ha'aretz*, a delegation from the Israeli Defense Ministry pays a secret visit to Washington to discuss suspicions that Egypt is acquiring Nodong missiles or technology from North Korea. However, US officials have reportedly discussed this issue with Egyptian officials, and are "satisfied with their explanation." Analysts believe this to mean that Egypt has only concluded an agreement with North Korea to acquire technology to improve its current Scud missile inventory. The issue was reportedly raised several months ago when US intelligence learned that North Korea and Egypt were in the advanced stages of signing an agreement to transfer Nodong technology to Cairo. Egypt claims missile cooperation with North Korea ended in 1996.
—"Egypt Gives U.S. 'Satisfactory Replies' on Missile Deal with North Korea," *Ha'aretz*, 15 July 2001; Natan Guttman, "Egypt Gives US 'Satisfactory Replies' on Missile Deal with North Korea," *Ha'aretz*, 15 July 2001, in "Israel – Egypt Gives US 'Satisfactory Replies' on Missile Deal With North Korea," FBIS Document ID GMP20010715000115; Han Ki Hung, "'Puk Nodong Missile Ae Such'ul Ŭihok' Israel Ŏllon Podo," *Donga Ilbo*, 16 July 2001, www.donga.com; "Egypt May Have Acquired No Dong Technology," *Janes Missiles and Rockets*, September 2001, p. 3.

13 July 2001
Edward Dong, director of Korean Affairs at the State Department, meets with officials from the North Korean UN office in New York. The two sides discuss the resumption of bilateral talks, but neither side says when talks will resume.
—Yonhap News Agency, 14 July 2001, in "ROK's Yonhap: N.K-U.S. Working Contact Ends without Notable Outcome," FBIS Document ID KPP20010714000002.

16 July 2001
Middle East Newsline reports "Israel has acknowledged that Egypt is developing a variant of the North Korean Nodong intermediate-range missile." The report says US concerns over this development has apparently resulted in Egypt suspending its plans to import 50 North Korean missile engines for the "Nodong variant."
—"Israel Doesn't Fear Egypt's No-Dong Missile," *Middle East Newsline*, vol. 3, no. 276, 16 July 2001, www.menewsline.com.

17 July 2001
Vice Marshall Cho Myŏng Rok, First Vice Chairman of the National Defense Commission, enters Hospital 301 in Beijing with kidney disease, and receives a kidney transplant. Cho is later reported to be in critical condition.

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—"North Korean Number Two in Critical Condition in Beijing," Agence France Presse, 11 August 2001, in "AFP Cites ROK Newspaper on DPRK Cho Myong-nok Reportedly in 'Critical Condition'," FBIS Document ID: KPP20010811000018; Ch'oe Chae Yong, "Puk Kim Jong Il Ch'ŭkkŭn Cho Myŏng Rok Widok," *Kyunghyang Shinmun*, 11 August 2001, www.khan.co.kr; Shim Kyu Sŏk, "Cho Myŏng Rok Che 1 Puwiwŏnjang, 16 Il Pyongyang Kwihwan," Yonhap News Agency, 17 August 2001, www.yonhapnews.co.kr; Ch'oe Wŏn Ki, "Widoksŏl Pukhan 2 Inja Cho Myŏng Rok P'arisŏ Susul," *Joongang Ilbo*, 15 October 2001, www.joins.com.

20 July 2001

A North Korean Foreign Ministry spokesman, in response to the 14 July 2001 missile interceptor test by the United States, says that North Korea must take counter-measures for self-defense, and that North Korea "will have nothing to lose even if all the points agreed upon between the DPRK and the US are scrapped."
—"U.S. Interceptor Missile Test Under Fire," Korean Central News Agency, 20 July 2001, www.kcna.co.jp; "Migukŭi Missile Yokyŏkshihŏme Chawijŏktaeŭngjoch'i / Chosŏnoemysŏng Taebyŏnin," Korean Central News Agency, 20 July 2001, www.kcna.co.jp; Korean Central News Agency, 20 July 2001, in "DPRK FM on US Interceptor Missile Test, Says DPRK 'Compelled' To Take Action," FBIS Document ID KPP20010720000067; Korean Central Broadcasting Station, 20 July 2001, in "DPRK Radio Reports on DPRK Foreign Minister's Answers to KCNA Reporter on US Missile Interceptor Test," FBIS Document ID KPP20010720000113; "Pyongyang Criticizes Missile-Defense Test," *Washington Times*, 21 July 2001, www.washtimes.com; "North Korea Vows Countermeasures in Reply to U.S. Test," *South China Morning Post*, 20 July 2001, www.scmp.com.

24 July 2001

Kim Jong Il, in response to questions submitted from ITAR-TASS before his trip to Russia, says, "The US propaganda on a 'missile threat' from our country is absolutely groundless. This is sophistry aimed at covering the ambitions of those who seek to establish their global supremacy. No matter how we are advertising 'North Korea threatens the USA' and that is why 'America is worried,' nobody believes it. Moreover, the new US administration, which is spreading rumors about a missile threat from North Korea, began to 'pin a label to our conventional weapons describing them as threats.' This is absurd and a new impudent challenge to us. Our missile program has a purely peacemaking nature and it does not threaten anyone. The implementation of our peace missile program is our sovereign right. The entire world knows that we do not threaten the United States and the United States poses a permanent threat to us, deploying its armed forces on half of our country."
—ITAR-TASS, 26 July 2001, in "ITAR-TASS Interviews North Korean Leader," FBIS Document ID CEP20010726000358; "North Korean Leader Says Missile Program 'Peaceful'," Agence France Presse, 27 July 2001; "Answers Given by Kim Jong Il to Questions Raised by ITAR-TASS," Korean Central News Agency, 27 July 2001, www.kcna.co.jp; Korean Central News Agency in "DPRK's KCNA: 'Full Text' of Kim Chong-il Answers to ITAR-TASS Questions," in FBIS Document ID KPP20010727000033; "Kim Dismisses 'Rogue' Status," BBC News, 26 July 2001, http://news.bbc.co.uk; Chi Il Ŭ, "Kim Jong Il, 'Rocket Wihyŏp Kŭn'gŏ Ŏptta'," *Joongang Ilbo*, 27 July 2001, www.joins.com.

24 July 2001

Korea Central Broadcasting reports from Pyongyang that North Korea has already become a "strong and powerful country" (kangsŏngdaeguk) in the areas of the military and political ideology, and now only has to develop a strong

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economy to become a "strong and powerful country."
—Chŏng Yong Shik, "Pukhan 'Sasang-Kunsabunya'esŏ Imi Kangguk'," *Joongang Ilbo*, 24 July 2001, www.joins.com.

23 July 2001
Middle East Newsline reports that the United States is blocking Egypt from importing key components, including 50 Nodong missile engines, for its missile program. The issue is said to have been at the top of the agenda when an Egyptian military delegation visited Washington, D.C., last week.
—"Egypt's Missile Program Stuck in Second Phase," *Middle East Newsline*, vol. 3, no. 286, 23 July 2001, www.menewsline.com; "Egypt's Missile Program Slowed by U.S. Opposition," *World Tribune.com*, 24 July 2001, www.worldtribune.com.

26 July 2001
During a hearing by the U.S. House International relations Subcommittee on the Middle East and South Asia, Assistant Secretary of State William Burns acknowledges the concern that Egypt is developing a variant of the Nodong ballistic missile. Burns does not deny Egypt's acquisition or development of the Nodong, but instead suggests that the issue be discussed in a classified hearing.
—"U.S. Acknowledges Concern Over Egypt's No-Dong," *Middle East Newsline*, vol. 3, no. 296, 30 July 2001, www.menewsline.com.

27 July 2001
In an interview with the Interfax News Agency, Maksim Pyadushkin, deputy director of the Russian Center for Analysis of Strategies and Technologies, says there are no plans for large-scale Russian deliveries of military hardware to North Korea in the near future. According to Pyadushkin, the total amount of arms trade between the two countries has been less than $10 million over the past few years. Pyadushkin says that North Korea "is barely capable of assigning over $100 million a year to military spending, and the bulk of the sum is spent on its missile program."
—Kseniya Golovanova, et al., Interfax News Agency (Moscow), 30 July 2001, in "Interfax Diplomatic Panorama for 30 Jul 01," FBIS Document ID CEP20010730000203.

28 July 2001
Russian Deputy Foreign Minister Alexander Losyukov says that missiles will not be discussed as a special topic during Kim Jong Il's upcoming trip to Moscow, but that the issue may be covered during talks over strategic stability. Losyukov says that Kim's offer last year to suspend its missile program in exchange for satellite launches is still valid even though Kim has not spoken about the offer since. According to Losyukov, North Korea has confirmed to Russia that the offer is still in effect. However, Losyukov says, "We believe that this issue is a matter for US-Korea relations."
—Kseniya Golovanova, et al., Interfax News Agency (Moscow), 30 July 2001, in "Interfax Diplomatic Panorama for 30 Jul 01," FBIS Document ID CEP20010730000203.

29 July 2001
A South Korean government official says that North Korea and Russia are close to closing a deal for the sale of

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weapons, including S-300 surface-to-air missiles (SAMs), to North Korea. The two countries are expected to reach an agreement when Kim Jong Il reaches Moscow during his current train trip from Pyongyang. In route, Kim visits the Polyot Plant in Siberia, which is Russia's largest aerospace firm. North Korea sent a military delegation to Moscow in April and May 2001 that revealed North Korea was willing to pay cash for weapons systems. North Korea is reportedly asking for assistance and permission to produce S-300 SAMs, as well as permission to purchase machinery parts for missile and rockets. [Note 1: National Defense Commission Vice Chairman and People's Armed Forces Minister Kim Il Chŏl visited Moscow the last week of April. Apparently, a working group may have stayed in Moscow through May after Kim Il Ch'ŏl's departure; Note 2: Russia's Polyot produced the SS-4, SS-7, and SS-11 ballistic missiles, a number of small launch vehicles, and rocket engines for launch vehicles. Currently, its key activities involve production of various satellites.]
—"N. Korea, Russia Step Closer to Weapons Deal," *Korea Times*, 29 July 2001, www.koreatimes.co.kr; Hwang Jang Jin, "Russia, N.K. Make Progress on High-Tech Weapons," *Korea Herald*, 30 July 2001, www.koreaherald.co.kr; Agence France Presse, "Former Allies May Seal Military Pact," in *South China Morning Post*, 30 July 2001, www.scmp.com; "N.K. Chairman to Settle Armament Deal with Russia," *Joongang Ilbo*, 30 July 2001, http://english.joins.com; *Joongang Ilbo*, 30 July 2001, in "ROK Daily Says Kim Chong-il to Settle Arms Deal with Russia," FBIS Document ID KPP20010730000092; James Foley, "DPRK and Russia Revive Friendship," *Jane's Intelligence Review*, vol. 13, no. 10, 1 October 2001.

30 July 2001
Russia's Deputy Foreign Minister Alexander Losyukov says that he does not view the North Korean missile program as a threat to Russia and that the United States should deal with any efforts to terminate the North Korean missile program.
—"Russia Will Address Missile Problem at Summit," *Joongang Ilbo*, 31 July 2001, http://english.joins.com.

31 July 2001
Kim Jong Il's train stops in the city of Kransnoyarsk, where Kim and his entourage is said to visit the Kransnoyarsk Machine-Building-Building Plant (Krasmash), which is Russia's largest production facility for submarine launched ballistic missiles (SLBMs), including the SS-N-20 (RSM-52) Sturgeon. Kim also stops in Omsk, which is considered the "center of Russia's defense manufacturing industry." Reports say that S-300 surface-to-air missiles (SAMs) and missile and rocket components are on Kim's shopping list to modernize the North Korean military. [Note: The Polyot firm mentioned in the 29 July entry is located in Omsk.]
—"Russia Will Address Missile Problem at Summit," *Joongang Ilbo*, 31 July 2001, http://english.joins.com; Shin Yong Bae, "Kim's Omsk Visit Seen as Plan to Modernize Weapons," *Korea Herald*, 2 August 2001, www.koreaherald.co.kr; *Korea Herald*, 2 August 2001, in "DPRK Leader's Visit to Omsk Seen as Part of Weapons Modernization," FBIS Document ID KPP20010801000131.

1 August 2001
A broadcast in Pyongyang says that North Korea will not resume dialogue with the United States unless the United States drops its stance on "the verification of North Korea's missile and nuclear programs" as part of the discussion agenda. Furthermore, the broadcast says that the US proposal to include conventional weapons in bilateral talks is part of a US effort to "completely disarm" North Korea.

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—Kim In Ku, "Puk 'Missile Kŏmjŭng P'ogihaeya Mi-Puk Taehwa Chaegae'," *Chosun Ilbo*, 1 August 2001, www.chosun.com.

Early August 2001
US government officials and congressional sources say they suspect China has been transferring missile components and technology to Iran, Libya, and Syria though North Korea.
—"N. Korea Serves as Chinese Front for Missiles," *Middle East Newsline*, vol. 3, no. 324, 17 August 2001, www.menewsline.com.

Early August 2001
Senator Joseph Biden, chairman of the Senate Foreign Relations Committee, meets with President George Bush, and Bush recognizes the problems he created with his remarks during President Kim Dae Jung's visit to Washington in March 2001. Biden says Bush's remarks are unintentional, and that Bush "displayed enthusiasm for reopening talks with Pyongyang."
—Brent Choi, "Mr. Bush recognizes His Mistake—Special Interview with Senator Biden," *Joongang Ilbo*, 13 August 2001, http://english.joins.com; "North Korea Refuses to Talk to U.S.," *Arms Control Today*, September 2001, p. 40; Shin Ch'I Yŏng and Yun Sŭng Mo, "Biden Misangwŏnoegyowiwŏnjang 'Puk-Mi'daehwa Missile Munjae'e Ch'ojŏm," *Donga Ilbo*, 13 August 2001, p. 2, www.donga.com.

2 August 2001
According to *Middle East Newsline*, Iran has reduced the emphasis on long-range ballistic missile development because of delays in the transfer of components and technology from Russia. Instead, Iran's Defense Ministry will focus on short- and medium-range missile development with Chinese and North Korean assistance. According to this report, the Shehab-3, which is based on the Nodong, has been plagued by engine problems.
—Steve Rodan, "Iran Changes Direction in Missile Development," *Middle East Newsline*, vol. 3, no. 302, 2 August 2001, www.menewsline.com.

2 August 2001
Rodong Sinmun reports that North Korea's missile development program is a self-defensive measure for dealing with "US maneuvers to invade and wage war." Korean Central Broadcasting in Pyongyang makes similar statements and adds that the program is North Korea's "sovereign right that nobody can pick on or interfere with."
—"Miguk Ddodŭnun [Missile Wihyŏp] Sŏlŭn Kwebyŏn / Rodong Sinmun," Korean Central News Agency, 2 August 2001, www.kcna.co.jp; "Migukmujanggwanŭi Pukchosŏnwihyŏp Palŏn Pinan / Chosŏnchungangt'ongshin Ronp'yŏng," Korean Central News Agency, 2 August 2001, www.kcna.co.jp; "KCNA on Sophism of U.S. State Secretary," Korean Central News Agency, 2 August 2001, www.kcna.co.jp; "U.S [*sic*] Rumor About 'Missile Threat' Dismissed," Korean Central News Agency, 2 August 2001, www.kcna.co.jp; Lee Yong Sop, "Puk 'Missile Kaebalŭn Chajugwŏn'," *Hankook Ilbo*, 4 August 2001, p. 2, www.kinds.or.kr; Ch'oe Son Yong, "'Missile Kaebalŭn Chajujŏk Kwŏlli' [Chosŏn Chungang T'ongshin]," *Joongang Ilbo*, 3 August 2001, www.joins.com; Kim Hee Sung, "'N.K. Missile Program Will Continue' – KCNA," *Joongang Ilbo*, 3 August 2001, http://english.joins.com; Lee Jong Heon, "N. Korea Vows to Keep Missiles," United Press International, 3 August 2001; Korean Central Broadcasting (Pyongyang), 2

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August 2001, in "DPRK Radio Asserts 'Sovereign Right' in Missile Development; Claims US 'Sophistry'," FBIS Document ID 20010802000064.

4 August 2001

Kim Jong Il holds a summit meeting with Russian President Vladimir Putin in Moscow, and repeats that North Korea will abide by its missile flight-test moratorium until at least 2003. In a declaration signed by the two leaders, North Korea claims its missile program is "peaceful in nature and does not pose a threat to any nation respecting North Korea's sovereignty." Putin reportedly tells Kim that Russia would be willing to provide satellite launches as long as Russia is paid for the services.

— Reuters, "North Korea to Stick to Missile Moratorium," *New York Times*, 4 August 2001, www.nytimes.com; Michael Wines, "North Korean Leader Vows to Curb Missile Program," *New York Times*, 5 August 2001, www.nytimes.com; Chŏng Yŏn Shik, "Puk, Missile Munjae'e Russia Chiji Hwakpo," Yonhap News Agency, 5 August 2001, www.yonhapnews.net; "DPRK-Russia Moscow Declaration," Korean Central News Agency, 4 August 2001, www.kcna.co.jp; Dave Montgomery, "N. Korea's Kim Visits Russian Space Facilities," *Philadelphia Inquirer*, 6 August 2001, http://inq.philly.com; Interfax (Moscow), 4 August 2001, in "Russia Ready to Help DPRK Launch Satellites if Reimbursed," FBIS Document ID CEP20010804000137; Interfax (Moscow), 4 August 2001, in "Russian Help with North Korean Space Launches Conditional on Payment," FBIS Document ID CEP20010804000140; Xinhua (Beijing), 4 August 2001, in "Xinhua 'Urgent:' DPRK Says To Observe Missile Test Moratorium," FBIS Document ID CPP20010804000069; Korean Central Broadcasting Station (Pyongyang), 4 August 2001, in "DPRK Radio Carries 'Moscow Declaration'," FBIS Document ID KPP20010804000062; Kyodo News Service, 4 August 2001, in "Putin, Kim Call for Adherence to ABM Pact, Sign Accord," FBIS Document ID JPP20010804000057; Kim Pŏm Su, "Kim Jŏng Il Wiwŏnjang Russia Pangmun, Puk-Chung-Rŏ Hyŏpnyŏkch'eje Kuthigi Punsŏk," *Chugan Han'guk*, 7 August 2001, www.hankooki.com; James Foley, "DPRK and Russia Revive Friendship," *Jane's Intelligence Review*, vol. 13, no. 10, 1 October 2001.

5 August 2001

Kim Jong Il visits Korolyov Mission-Control Center and the Khrunichev Space Center on the outskirts of Moscow, and then visits a "top-secret" factory that develops space launch vehicles (SLVs) for commercial satellites. Kim is reported to ask the cost of launching a North Korean satellite from Russia. The "Rokot" plant at the Khrunichev Space Center is where the SS-19 ICBM was assembled during the Soviet era, which raises concerns that North Korean missile experts may have accompanied Kim on the tour to learn more about long-range missiles. [Note: Khrunichev is heavily involved in spacecraft and space launch vehicle activities, including production of the Rokot SLV (derived from the SS-19) and the Proton SLV.]

—Dave Montgomery, "N. Korea's Kim Visits Russian Space Facilities," *Philadelphia Inquirer*, 6 August 2001, http://inq.philly.com; Gerard Baker and Andrew Jack, "Kim Jong-il Refuses to Drop Missile Project: North Korean Leader on Russian Trip Says He Will Uphold Test Moratorium," *Financial Times* (London), 6 August 2001, p. 1; Chu Yong Song, "Chairman Kim Inquires the Cost of Satellite Launch in Russia," Yonhap News Agency, 12 August 2001, in "ROK Article on DPRK Leader Reportedly Expressing Interest in Cost of Satellite Launch," FBIS Document ID: KPP20010812000004; Chu Yong Sŏng, "Kimwiwŏnjang Wisŏngbalsa Piyong Rŏe Munŭi," Yonhap News Agency, 12 August 2001, www.yonhapnews.co.kr; Chi Il Wu, "Rŏ 'Puk-Rŏ Ujubunya Hyŏmnyŏk Kanŭng'," *Joongang Ilbo*, 9

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August 2001, www.joins.com; ITAR-TASS, 2 August 2001, in "Russia: DPRK's Kim Jong-il to Arrive in Moscow 3 Aug; Agenda Outlined," FBIS Document ID CEP20010802000321.

8 August 2001

A spokesman for the North Korean Foreign Ministry says that North Korea "can never accept the agenda items of the talks unilaterally raised by the US out of its intention to disarm the DPRK and stifle it and will not respond to the talks with the US before it withdraws the items." The statement is similar to several responses that have followed the 6 June 2001 proposal to resume talks with North Korea.

—Korean Central News Agency, "Answers Given by Spokesman for DPRK Foreign Ministry," 8 August 2001, www.kcna.co.jp; Kim Ji-ho, "N.K. Again Turns Down U.S.-Proposed Agenda," *Korea Herald*, 10 August 2001, www.koreaherald.co.kr.

8 August 2001

Chinese President Jiang Zemin tells US Senate Foreign Relations Committee Chairman Joseph Biden that China does not want North Korea to have intercontinental ballistic missiles (ICBMs), and that Beijing would not provide missile technology to Pyongyang. Biden tells reporters on the 9th that he asked Jiang to end missile-related transfers to Pakistan, Iran, Libya, and North Korea. However, Biden says that Jiang was very emphatic when he stressed that China had nothing to so with North Korea's ICBM development.

—"China Vows Not to Help North Korean Missile Program: Senators," Agence France Presse, 9 August 2001; Lee Jong Hwan, "Jiang Zemin 'Puk Missile Kaebal Pandae'," *Donga Ilbo*, 10 August 2001, p. 5; Kim Chin, "Chungguk Chang JJŏ Min Chusŏk 'Pukhan Missile Kaebal Wŏnch'i'anhta'," *Joongang Ilbo*, 10 August 2001, p. 8, www.joins.com.

9 August 2001

Middle East Newsline reports that US government officials have received assurances from Egypt that Cairo is not developing a variant of the Nodong missile. The United States believes that missile cooperation between North Korea and Egypt is continuing, but it is mostly limited to the realm of short-range Scud missiles.

—"State Depart. Believes Egypt Remains Within Missile Limits," *Middle East Newsline*, Vol 3, no. 312, 9 August 2001, www.menewsline.com; Al-Ahram al-Masa'I (Cairo), 7 August 2001, in "US 'Allegations' about Egyptian-Korean Missile Cooperation 'Rejected'," FBIS Document ID: GMP20010808000028.

11 August 2001

Joseph Biden, chairman of the Senate Foreign Relations Committee, says that North Korea's long-range ballistic missiles instead of conventional weapons should be the focus of US-North Korean dialogue. He says there has been little change in North Korea's conventional military capabilities over the last ten years, and that he does not see North Korea invading South Korea.

—Hŏ Yong Pŏm, "'Mi-Puktaehwa Chaegaedoemyŏn Missile Munjae Ch'ojŏm Toeya' Biden Mioegyowiwŏnjang," *Chosun Ilbo*, 13 August 2001, p. 2, www.chosun.com; Shin Ch'I Yŏng and Yun Sŭng Mo, "Biden Misangwŏnoegyowiwŏnjang 'Puk-Mi'daehwa Missile Munjae'e Ch'ojŏm'," *Donga Ilbo*, 13 August 2001, p. 2, www.donga.com.

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13 August 2001
At a press conference in Moscow, US Secretary of Defense Donald Rumsfeld says, "By the year 2003, North Korea will have completed the development of an intercontinental ballistic missile (ICBM) and currently possesses enough plutonium to develop five nuclear warheads." Rumsfeld also says, "I have already presented the view in 1998 that North Korea would establish its ICBM capability within five years. Considering the fact that North Korea has already tested a three-stage long-range missile, the completion of its ICBM development by 2003 is certain."
—"US Department of Defense Says 'North Korea Will Complete Its ICBM Development Within Two Years'," *Hankook Ilbo*, 15 August 2001, p. 2, in "ROK Daily Reports US SecDef's Remarks to Russian Media on NK Nuclear Capability," FBIS Document ID: KPP20010820000109; Yun Sŭng Yong, "Migukpang 'Puk 2 Nyŏnnae ICBM Kaebal Kkŭtnaelgŏs'," *Hankook Ilbo*, 14 August 2001, www.korealink.co.kr.

16 August 2001
First Vice Chairman of the National Defense Commission, Marshall Cho Myŏng Rok, returns from China after having received a kidney transplant at the 301 Hospital in Beijing.
—Shim Kyu Sŏk, "Cho Myŏng Rok Che 1 Puwiwŏnjang, 16 Il Pyongyang Kwihwan," Yonhap News Agency, 17 August 2001, www.yonhapnews.co.kr.

21 August 2001
Deputy CIA Director John E. McLaughlin delivers a speech at the Fourth Annual Space and Missile Defense Conference in Huntsville, Alabama, and addresses the North Korean missile issue. McLaughlin says that North Korea may pose an intercontinental ballistic missile (ICBM) threat to the United States within 15 years, and that the August 1998 failed satellite launch with the Taepodong-1 (Paektusan-1) could have delivered a small biological or chemical warhead to US territory if it had flown an ICBM trajectory. According to McLaughlin, North Korea has transferred the Nodong to Pakistan, and the technology to Iran for its Shehab-3, which is supposedly a "direct descendent of the Nodong." McLaughlin also says that North Korea has received "missile-related items, raw materials, or other help from firms in China," and that Pyongyang is "still selling missile-related equipment, components, materials, and technical expertise to the Middle East, South Asia, and North Africa."
—John E. McLaughlin, "Remarks of the Deputy Director of Central Intelligence John E. McLaughlin at the 4th Annual Space and Missile Defense Conference," 21 August 2001, www.cia.gov.

September 2001
North Korea conducts a missile engine test at a "development facility." According to the *Washington Times*, US intelligence analysts believe it is a new surface-to-surface missile (SSM), surface-to-air missile (SAM) or anti-ship cruise missile. The airframe is said to be "wider than most of the rockets in the North Korean inventory." The new missile, which was detected by "US reconnaissance equipment," is said to use solid fuel. [Note: The "development facility" is possibly the Musudan-ri test facility.]
—Bill Gertz and Rowan Scarborough, "Inside the Ring," *Washington Times*, 9 November 2001, p. 9; "U.S. Divided Over N. Korean Missile Sales," *Middle East Newsline*, vol. 3, no. 430, 12 November 2001, www.menewsline.com.

3 September 2001
First Vice Chairman of the National Defense Commission, Marshall Cho Myŏng Rok, is seen greeting Chinese

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President Jiang Zemin during his arrival at Sunan (Pyongyang) Airport for an official state visit to North Korea. Cho was hospitalized in mid July 2001 at the 301 Hospital in Beijing to receive a kidney transplant.
—"Puk Cho Myŏng Rok P'yŏngyang Kwihwan Hwagin," *Segye Ilbo*, 3 September 2001, www.segyetimes.co.kr.

4 September 2001
During talks with visiting Chinese President Jiang Zemin, Kim Jong Il reaffirms that North Korea will maintain its flight-test moratorium for its ballistic missiles until at least 2003. The newly appointed Chinese ambassador to South Korea later reveals that Kim Jong Il says "both sides [North and South Korea] must strive to create the conditions for his trip to Seoul by the end of the year."
—"N. Korea Pledges to Continue Missile Test Ban," *Middle East Newsline*, vol. 3, no. 349, 5 September 2001, www.menewsline.com; ITAR-TASS, 4 September 2001, in "North Korean, Chinese Leaders Discuss Missiles-Related Subjects" FBIS Document ID CEP20010904000127; Yu Sang Ch'ŏl and Oh Yŏng Hwan, "Puk Missile Palsayuye Chaehwagin," *Joongang Ilbo*, 4 September 2001, www.joins.com; "NK Reaffirms Halt to Missile Tests Until 2003," *Joongang Ilbo*, 7 September 2001, http://english.joins.com; "Kim Jong-Il Renews Pledge to Postpone Missile Testing: Reports," Agence France Presse, 5 September 2001; "N. Korea Pledges to Continue Missile Test Ban," *World Tribune.com*, 6 September 2001, www.worldtribune.com; "Kim Jong Il 'Han'guktappang Yŏ'kŏn Chosŏnghaeya'," *Donga Ilbo*, 12 September 2001, www.donga.com; "N.K. Chairman Wants 'Right Conditions' for Return Visit," *Joongang Ilbo*, 13 September 2001, http://english.joins.com.

6 September 2001
According to *World Tribune.com*, China has "largely taken over the Iranian Shehab-4 project." According to intelligence sources, Russian assistance over the last year has been "significantly reduced" following the implementation of missile technology export controls under President Putin. The decline in Russian assistance has apparently resulted in China's return to the program. The greatest help by the Chinese is said to be simulation testing with supercomputers, which has reduced the need for flight-testing. [Note: Many analysts believe the Shehab-4 is a copy or variant of the Paektusan-1. The Iranian reliance upon Russian and Chinese assistance may indicate that the North Korean Paektusan program has also been dependent upon substantial foreign technical assistance.]
—Steve Rodan, "China Comes to the Rescue of Iran's Long-Range Missile Program," *World Tribune.com*, 6 September 2001, www.worldtribune.com; Iranian Student News Agency, 7 September 2001, in "Iran: ISNA Says Iran Continues Attempts to Manufacture of (sic) Shehab-4 Missile," FBIS Document ID IAP20010907000019.

7 September 2001
The CIA releases its "Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, 1 July Through 31 December 2000." The report says that North Korea obtained raw materials and components for ballistic missiles from "various foreign sources, especially through North Korean firms based in China." Chinese firms are also said to have provided "dual-use missile-related items, raw materials, and/or assistance to North Korea." As a supplier, North Korea is said to have provided "significant ballistic missile-related equipment, components, materials, and technical expertise to countries in the Middle East, South Asia, and North Africa." North Korea is said to have "maintained a missile relationship" with Egypt, and provided assistance and equipment for Syria's liquid-propellant missile program. North Korea is also

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reportedly a supplier of "missile-related equipment, materials, technology, and expertise to Libya and Iran." —"Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, 1 July Through 31 December 2000," CIA, 7 September 2001, www.cia.gov; "Russia, N. Korea, China Give Iran Missile Aid-CIA," *Joongang Ilbo*, 11 September 2001, http://english.joins.com; Bill Gertz, "CIA Uncovers Missile moves by China," *Washington Times*, 8 September 2001, www.washtimes.com; "CIA Says Iran Got New Missile Aid," *Washington Post*, 8 September 2001, p. 9.

7 September 2001

The *Asahi Shimbun* reports that the most recent addition of a North Korean encyclopedia (Chosŏntaebaekkwasajŏn) published in Pyongyang refers to the rocket launched from the Musudan-ri launch facility in North Hamgyŏng Province on 31 August 1998 as the "Paektusan-1." The reference is from the 12th volume of an encyclopedia that was first published in 1995. There are now 23 volumes of what is expected to eventually be a 30-volume set. The encyclopedia entry reportedly says the Paektusan-1 was launched at 12:07 p.m. on 31 August 1998 at 86 degrees from the Musudan-ri launch facility, and successfully delivered the Kwangmyŏngsŏng-1, North Korea's first artificial satellite, into earth orbit. The encyclopedia also says the launch vehicle had three stages, with the first and second stages using liquid fuel, while the third stage used solid fuel. —"'Taepodong' Kitachosenwa 'Hakutozan 1 Go' To Meimei," *Asahi Shimbun*, 7 September 2001, www.asahi.com; Mun Il, "Taepodong Missile Chŏngshikmyŏngch'ing 'Paektusan 1 Ho Rocket'," *Kukmin Ilbo*, 7 September 2001, p. 8, www.kukminilbo.co.kr; Shim Kyu Sŏn, "Pukhan Taepodong Missile 'Paektusan 1 Ho' Kongshik Myŏngmyŏng," *Donga Ilbo*, 7 September 2001, www.donga.com; Shim Kyu Sŏn, "North Korea's Taepo Dong Missile Officially Named Paektusan No. 1," *Donga Ilbo*, 7 September 2001, in "DPRK's Taepo Dong Missile Named Paektusan No. 1," FBIS Document ID KPP20010910000089.

9 September 2001

In documents submitted to a National Assembly hearing, the South Korean Ministry of National Defense reveals that since 1991, North Korea has imported $343.3 million worth of weapons. Imports have included navigation equipment, which could possibly be of the type used in ballistic missile guidance. During the same period, North Korea exported missiles, missile parts, and missile launchers.

Year	North Korean Arms Imports
1991	$22 million
1992	$54 million
1993	$2 million
1994	$4.6 million

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1995	$6.7 million
1996	$11 million
1997	$23 million
1998	$50 million
1999	$70 million
2000	$100 million

—Kim Kwi Kŭn, "Puk, 91 Nyŏnihu 3 Ŏk 4 Ch'ŏnman Dollar Mugisuip," *Joongang Ilbo*, 10 September 2001, www.joins.com; "Puk, 91 Nyŏnihu 3 Ŏk 4000 Man Dollar Mugisuip," *Chosun Ilbo*, 9 September 2001, www.chosun.com; Yu Yong Wŏn, "NK Arms Imports and Exports Increasing," *Chosun Ilbo*, 9 September 2001, www.chosun.com; *Chosun Ilbo*, 9 September 2001, in "ROK Ministry: DPRK Arms Trade Increasing," FBIS Document ID KPP20010909000043; "North Made Armament Purchase Worth $340 Million for Past Decade," *Joongang Ilbo*, 10 September 2001, http://english.joins.com; Lee Soo Jeong, "South Korea: North Korea Spending More to Modernize Its Outdated Military," Associated Press, 10 September 2001.

9 September 2001

A South Korean government official says that North Korean and Russia are currently discussing the details of proposed weapons sales, and that North Korea would like to purchase 10 weapons systems, including MIG-29 and SU-27 fighter aircraft, S-300 surface-to-air missiles (SAMs), T-80 and T-90 tanks, and MI-24 helicopters. The official says he expects North Korea to deploy some of the weapons by next year. Reports say that North Korea's military modernization had been at a standstill since 1988 because of economic difficulties.

—Pak Pyŏng Chin, "Hanbando Ddaeanin Kunbikyŏngjaeng Param," *Segye Ilbo*, 10 September 2001, p. 1, www.segyetimes.co.kr; Pak Pyŏng Chin, "Puk Chŏllŏkchŭnggang Pakch'a Paekyŏng," *Segye Ilbo*, 10 September 2001, p. 5, www.segyetimes.co.kr.

10 September 2001

A North Korean Foreign Ministry spokesman says that Japan's flight-test of the H-2A space launch vehicle (SLV) on 29 August 2001 "compels the DPRK to reconsider its moratorium on satellite launches." The report says the H-2A can easily be converted into an ICBM, and that North Korea is the number one target of Japan's hostile policy.

—"DPRK Foreign Ministry Spokesman on Japan's Rocket Test-Fire," Korean Central News Agency, 10 September 2001, www.kcna.co.jp; "[H-2A] Palsa [Wisŏngbalsajungjiripchangŭl Koryŏhae Poji Anhŭlsu Ŏpsta] / Chosŏnoemusŏngdaebyŏnin," Korean Central News Agency, 10 September 2001, www.kcna.co.jp; "North Korea Threatens to End Missile Moratorium," Agence France Presse, 11 September 2001; "N. K. Foreign Ministry Issues Warnings on Japan's Missile Test," *Joongang Ilbo*, 11 September 2001, http://english.joins.com.

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10 September 2001
Jack Pritchard, US special envoy for Korean peace talks, says that bilateral talks between the US and North Korea should resume soon. While visiting Seoul for meetings with South Korean officials, Pritchard says that we should expect talks to begin soon now that Kim Jong Il has had recent summit meetings with Vladimir Putin and Jiang Zemin. Pritchard is in Seoul after participating in the Trilateral Coordination and Oversight Group (TCOG) meeting in Tokyo on 6 September.
—Hŏ Yŏng Pŏm, "Mi-Puk Taehwa Kot Shijak," *Chosun Ilbo*, 10 September 2001, www.chosun.com.

11 September 2001
Korean Central Broadcasting in Pyongyang says that the Bush administration must learn from the Clinton administration's North Korea policy, and abandon its policy of "crushing (suffocating) North Korea to death."
—Ch'oi Sŏn Yŏng, "'Mi, Clinton Chŏngbu Taebukchŏngch'aeksŏ Kyohun Ch'ajaya' [Puk Pangsong]," *Joongang Ilbo*, 11 September 2001, www.joins.com.

14 September 2001
Korean Central Television says that North Korea's missile program is for peaceful purposes, but that Japan's H-2A space launch vehicle (SLV) is "very dangerous and aimed at an invasion of North Korea." Furthermore, the broadcast says that the H-2A is simply a "transport rocket" and that it can carry nuclear, chemical, and biological payloads.
—Han Dong Ch'ŏl," Puk, Il Shinhyŏng Rocket Palsa Pinan," Yonhap News Agency, 14 September 2001, www.yonhapnews.co.kr.

15 September 2001
The North Korean media quote a CNN interview with Donald Gregg, president of the Korea Society and former ambassador to South Korea, in which Gregg said the "missile threat from North Korea is an exaggerated story and North Korea should no longer be called a rogue state." Gregg is a longtime friend of former President George Bush.
—"U.S. Urged to Drop Its Reckless Policy Towards DPRK," Korean Central News Agency, 15 September 2001, www.kcna.co.jp; "Tŏ Isang T'onghalsu Ŏpnŭn Migukŭi Kŏjisrolli / Minjuchosŏn," Korean Central News Agency, 15 September 2001, www.kcna.co.jp.

17 September 2001
The *Rodong Sinmun* reports that North Korea will not produce missiles if the United States "withdraws its nuclear weapons and missiles from the region, and stops threatening North Korea." The commentary also says that North Korea is desperate for "every gram of steel" and that its missile program is only for self-defense. The commentary emphasizes that North Korea's missile program is peaceful in nature and that the country produces missiles for self-defense, and would not "trouble itself to develop missiles if the US did not pose a military threat to North Korea."
—"North Korea Hints Conditional Suspension of Missile Production," *Joongang Ilbo*, 17 September 2001, http://english.joins.com; Shim Kyu Sŏk, "Puk, Chogŏnbu Missile Chejo Chungdan Shisa," *Joongang Ilbo*, 17 September 2001, www.joins.com; "U.S. Urged to Drop Its Hard-line Policy Towards DPRK," Korean Central News Agency, 17 September 2001, www.kcna.co.jp; "[Missile Wihyŏp] ŭl Kŏlgo Bŏllinŭn Migukŭi Apnyŏksodongŭl

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Kyut'an / Rodong Sinmun," Korean Central News Agency, 17 September 2001, http://www.kcna.co.jp; Korean Central Broadcasting Station (Pyongyang), 17 September 2001, in "DPRK's Nodong Sinmun: US 'Military Threats' Necessitates [*sic*] Missile Production," FBIS Document ID KPP20010917000071; Sim Kyu-sok, "Background of North Korea's Indication to 'Conditionally Suspend Missile Program'," Yonhap News Agency, 17 September 2001, in "ROK Article on DPRK's Indication of Suspending Missile Program," FBIS Document ID KPP20010917000104; Shim Kyu Sŏk, "Puk 'Chogŏnbu Missile Chejo Chungdan' Shisa Paegyŏng," Yonhap News Agency, 17 September 2001, www.yonhapnews.co.kr; "North Korea Ready to Abandon Missile Development: State Media," Agence France Presse, 17 September 2001; Shim Kyu Sŏk, "Puk Missile Chejo Chungdan Shisa Pae'gyŏng," Yonhap News Agency, 12 October 2001, www.yonhapnews.co.kr.

18 September 2001

In a meeting with South Korean Foreign Minister Han Sŭng Su in Washington, D.C., Secretary of State Colin Powell says the United States supports President Kim Dae Jung's "sunshine policy," and asks North Korea to renew dialogue with the United States. Powell says there are no conditions for reestablishing bilateral talks.

—Kim Sŏng Su, "Powell Puk-Midaehwa Chaegae Ch'okku," *Joongang Ilbo*, 19 September 2001, www.joins.com.

18 September 2001

The *Rodong Sinmun* criticizes "loud-mouthed Japanese reactionaries" following Japan's test-launch of the H-2A last month. The commentary says this "compels North Korea to reconsider its stand whereby it declared a moratorium on its satellite launches." The daily also said the North Korean missile program is peaceful in nature, but "is not merciful to those who dare infringe upon its dignity and sovereignty."

—DPRK Compelled to Take Counter-Action Against Japan's Moves," Korean Central News Agency, 18 September 2001, www.kcna.co.jp; "Ilbonŭi Tokchajŏgin Missile Pangwich'egyech'angsŏle Taeŭngjoch'i / Rodong Sinmun," Korean Central News Agency, 18 September 2001, www.kcna.co.jp; Han Tong Ch'ŏl, "Puk, 'Il Rocket Palsa Tongbuga P'yŏnghwa Wihyŏp'," Yonhap News Agency, 18 September 2001, www.yonhapnews.co.kr.

20-28 September 2001

The MTCR holds its 16th plenary meeting in Ottawa, Canada. The South Korean Ministry of Foreign Affairs and Trade later reveals that a proposal is drafted to "grant international assistance to countries that abandon their ballistic missile programs." The officials says, "The new code of conduct would be officially adopted within the late half of next year after undergoing a negotiation process with non-member nations." [Note: The reference is to an MTCR-sponsored initiative known as the International Code of Conduct, or ICOC.]

—"MTCR to Provide Assistance When Giving Up Weapons Program," *Joongang Ilbo*, 5 October 2001, http://english.joins.com; *Joongang Ilbo*, 5 October 2001, in "Missile Technology Control Regime To Assist Countries Ending Missile Development," FBIS Document ID KPP20011005000111.

21 September 2001

Korean Central Television criticizes the recent CIA unclassified report to the US Congress that named North Korea as an exporter of missiles and missile components to the Middle East. The broadcast calls the report a "shameless sophistry designed to promote the deployment of a missile defense system, as well as the production and sales of weapons of mass destruction by the US."

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—Chŏng Yŏn Shik, "Puk, Mugisuch'ul Chijŏk Mi CIA Pogosŏ Pinan," Yonhap News Agency, 21 September 2001, www.yonhapnews.co.kr; Kim Yŏng Sŏk, "Puk, Missile Kisulsuch'ul Mijijŏk 'P'aryŏmch'ihan sori' Kangnŏk Pinan," *Kukmin Ilbo*, 22 September 2001, p. 2, www.kukminilbo.co.kr; "North Korea Denies Exporting Missiles," *Washington Times*, 23 September 2001, p. 11; Korean Central Broadcasting Station (Pyongyang), 21 September 2001, in "Program Summary—P'yongyang KCBS Korean 1220 GMT 21 Sep 01," FBIS Document ID KPP20010921000083.

24 September 2001

North Korea's ambassador to Iran meets with Iranian Cooperative Minister Ali Sofi to discuss bilateral cooperation. Minister Sofi says an Iranian-North Korean joint economic commission would renew its activities, but he gives no details on the type of cooperation North Korea is seeking.

—"Iran Plans Strategic Upgrade with N. Korea, Russia," *Middle East Newsline*, 1 October 2001, http://menewsline.com; *Middle East Newsline*, 1 October 2001, in "Iran reportedly Planning Strategic Weapons Upgrade with Russia, N. Korea," FBIS Document ID GMP20011001000106.

26 September -6 October 2001

Cho Myŏng Rok, first vice chairman of North Korea's National Defense Commission, is hospitalized and undergoes surgery in a Paris hospital for kidney disease. Cho reportedly received a kidney transplant at a hospital in Beijing in July 2001.

—Brent Choi, "N.K. Vice-Chairman Jo Again Hospitalized in Paris," *Joongang Ilbo*, 15 October 2001, http://english.joins.com.

4 October 2001

Pyongyang Broadcasting says Japan's test launch of the H-2A space launch vehicle (SLV) is a "dangerous step in the militarization of Japan." The report also says that "the US and Japan should not miscalculate North Korea's peaceful stance of suspending its satellite launches."

—Kim Tu Hwan, "Puk, 'Missile Palsayuye Nayaksŏng'ŭro Opanmara'," Yonhap News Agency, 4 October 2001, www.yonhap.co.kr; Yonhap News Agency, "Puk, 'Missile Palsayuye Nayaksŏng'ŭro Opanmara'," *Chosun Ilbo*, 7 October 2001, www.chosun.com.

5 October 2001

The South Korean Ministry of Foreign Affairs and Trade (MOFAT) reveals that the Missile Technology Control Regime (MTCR) intends to provide international assistance to countries that abandon their ballistic missile and/or space programs. The draft proposal is a result of the MTCR's 16th plenary meeting held in Ottawa, Canada 20-28 September 2001. According to the MOFAT, "the new code of conduct would be officially adopted within the second half of 2002 after negotiations with non-member countries."

—"MTCR to Provide Assistance When Giving up Weapons Program," *Joongang Ilbo*, 7 October 2001, http://english.joins.com; *Joongang Ilbo*, 5 October 2001, in "Missile Technology Control regime to Assist Countries Ending Missile Development," FBIS Document ID KPP20011005000111.

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11 October 2001
In a press briefing, Secretary of Defense Donald Rumsfeld says, "...as you've known from photographs you've seen of North Korea, it is perfectly possible to dig into the side of a mountain and put a large ballistic missile there and erect it and fire it out of the mountain from an underground post."
—Donald H. Rumsfeld, "United States Department of Defense News Transcript: Secretary Rumsfeld Media Availability with Secretary White," United States Department of Defense, 11 October 2001, www.defenselink.mil; "N. Korea Tunnel Technology Is Hot Item for Mideast Rogue States," *World Tribune.com*, 16 October 2001, www.worldtribune.com.

12 October 2001
Pyongyang Broadcasting repeats an offer from 17 September 2001 that North Korea will abandon the development of missiles if the United States does not threaten North Korea militarily. The broadcast also repeats remarks from Donald Gregg, former US ambassador to South Korea, who claimed in a recent CNN interview that the missile threat from North Korea is exaggerated, and that the United States should no longer refer to North Korea as a "rogue state."
—Shim Kyu Sŏk, "Puk Missile Chejo Chungdan Shisa Pae'gyŏng," Yonhap News Agency, 12 October 2001, www.yonhapnews.co.kr; Chŏng Sang Yong, "Puk, 'Missile Kaebalŭn Miŭi Panpuk Apsalch'aektong Ddaemun'," Yonhap News Agency, 12 October 2001, www.yonhapnews.co.kr; Pyongyang Broadcasting Station, 12 October 2001, in "DPRK Reiterates Its Stance on Missile Development," FBIS Document ID KPP20011012000054.

16 October 2001
In an interview at the White House with Asian journalists before departing to attend the APEC summit in Shanghai, President Bush warns North Korea "not to think that because we happen to be engaged in Afghanistan we will not be prepared and ready to fulfill our end of our agreement with the South Korean government." Bush also says that he would like to renew dialogue with North Korea but that, "I must tell you that I've been disappointed in Kim Jong Il not rising to the occasion, being so suspicious, so secretive."
—Kim Hee-sung, "Bush Gives Out Strong Warning to North Korea," *Joongang Ilbo*, 18 October 2001, http://english.joins.com; "Bush Interview With Yonhap News Agency in White House, "*Joongang Ilbo*, 18 October 2001, http://english.joins.com; "[Editorials] Pyeongyang Gets Another Chance," *Joongang Ilbo*, 18 October 2001, http://english.joins.com; *Joongang Ilbo*, 18 October 2001, in "DPRK Urged To Consider Bush's Warning," FBIS Document ID KPP20011018000110; Yonhap News Agency, 18 October 2001, in "ROK Daily Analyzes US President's Interview With Yonhap News Agency," FBIS Document ID KPP20011018000013.

19 October 2001
During a news conference in Shanghai, President Bush says his administration would like to begin a dialogue with the government of North Korea, and that he supports South Korea's sunshine policy. Bush is in China to attend the APEC forum meeting.
—Associated Press, "Bush Seeks Meeting With N. Korea LeaderAP," *Joongang Ilbo*, 20 October 2001, http://english.joins.com.

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21 October 2001

The *Rodong Sinmun* criticizes the United States for deploying aircraft from the *USS Kitty Hawk* to South Korean airbases. The aircraft carrier is usually based in Yokosuka, Japan, but it was deployed to the Indian Ocean in support of military operations in Afghanistan against the Taliban and Al-Qaida network. The commentary says the deployment "complicates the situation" and "compels the DPRK to increase its military power with heightened vigilance."

—"U.S. Arms Buildup in S. Korea Condemned," Korean Central News Agency, 21 October 2001, www.kcna.co.jp; "Namjosŏnesŏŭi Migunjŏllyŏkkanghwarŭl Ŏmjungshi, Ch'ongdaerŭl Dŏukkanghwahalgŏshida / Rodongshinmun," Korean Central News Agency, 21 October 2001, www.kcna.co.jp; Associated Press in "North Korea Calls for Military Alert," *Joongang Ilbo*, 23 October 2001, http://english.joins.com; Nam Kwang Shik, "Puk, Namhannae Migunsaryŏk Chŭnggang Pandae," *Joongang Ilbo*, 22 October 2001, www.joins.com; Agence France Presse, 21 October 2001, in "AFP: DPRK Vows To Increase Military Readiness Amid Stalled Inter-Korean Talks," FBIS Document ID KPP20011021000038; Yonhap News Agency, 22 October 2001, in "Radio Beijing Cites Nodong Sinmun Editorial Denouncing US Military Buildup in ROK," FBIS Document ID KPP20011022000011.

23 October 2001

A spokesman for the North Korean Foreign Ministry criticizes President George Bush for comments "unbecoming for the president of a superpower." The criticism is in response to Bush's remarks about his suspicion of Kim Jong Il. The spokesman praises the thaw in US-North Korea relations at the end of the Clinton presidency, and says North Korea was prepared to abandon its missile program but that the Bush administration "attaches priority to the establishment of a missile defense system intended for world supremacy, and it felt a more urgent need to make an enemy called 'rogue state'." The spokesman repeated earlier statements calling the Bush administration to renew dialogue in June "a brigandish demand intended to unilaterally disarm the DPRK." The spokesman says that the Bush administration's policy toward North Korea has "cooled" relations between North and South Korea, and that it has made it impossible to implement agreements between the two Koreas. Furthermore, he says that the only "normal and rational" way to reopen dialogue between the United States and North Korea is to begin with a discussion of the "practical problems related to the implementation of the Agreed Framework and the Joint Communiqué between the US and North Korea."

—"Spokesman for DPRK Foreign Ministry Slams Bush's Remark," Korean Central News Agency, 23 October 2001, www.kcna.co.jp; "Taet'ongnyŏngŭi Ch'emo'e Ŏŭlliji Anhnŭn Bush ŭi Kyŏngsolhan Ŏndong / Chosŏn'oemusŏngdaebyŏn'in," Korean Central News Agency, 23 October 2001, www.kcna.co.jp; Kim Mee-sung, "North Condemns President Bush's Speech on N. K. Leader," *Joongang Ilbo*, 24 October 2001, http://english.joins.com; Chŏng Yŏn Shik, "Puk, Bush Taet'ongnyŏng Kijahoegyŏn Pinan," *Joongang Ilbo*, 23 October 2001, www.joins.com; Kwŏn Kyŏng Bok, "Pukhanŭi Bush Pinanbaekyŏnggwa Chŏnmang," Yonhap News Agency, 23 October 2001, www.yonhapnews.co.kr.

23 October 2001

General Thomas Schwartz, Commander of US Forces in Korea, says that US Forces in Korea have been strengthened since the 11 September terrorist attacks in the United States. Reports reveal that fighter aircraft have been deployed to South Korean air bases.

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—Kim Ŭng Sŏp, "Terror Chŏnjaeng Chŏnboda Hanbando Chŏllyŏk Pokang," *Kook Bang Ilbo*, 25 October 2001, http://kookbang.dapis.go.kr; Yonhap News Agency, "Puk 'Mi Hangungnae Chŏnt'ugi Ch'ugabaech'I Taeŭng—Kun Kyŏnggyet'aese Tor'ip'," *Segye Ilbo*, 23 October 2001, p. 2, www.segyetimes.co.kr.

23 October 2001
The Yonhap News Agency quotes a source in the South Korean Institute of Defense Analysis (KIDA) as saying the United States will probably try to restrict the flow of weapons to the Middle East in the aftermath of the 11 September terrorist attacks, and that it is very likely to affect North Korean arms sales to the region. According to a South Korean Ministry of National Defense official, North Korea has earned about $60 million a year in arms exports, which mostly consist of missile components, small arms, artillery, and ammunition.
—Kim Kwi Kŭn, "Puk, Taechungdong Mugisuch'ul Cheyakchŏnmang," Yonhap News Agency, 23 October 2001, www.yonhapnews.co.kr; "North's Armament Export in Middle East Not Likely," *Joongang Ilbo*, 23 October 2001, http://english.joins.com.

23 October 2001
Pyongyang Radio says that military capabilities must be increased to defend against imperialism. The broadcast says that it does not matter how large a country's land mass or population is, or how developed its economy and technology are, but that a country can be swallowed up by imperialists and become colonial slaves overnight if the military is weak.
—Chŏng Yŏn Shik, "Puk, 'Naraŭi Palchŏnŭn Kullyŏg'I Kich'o'dwaeya'," *Joongang Ilbo*, 23 October 2001, www.joins.com.

24 October 2001
Korean Central Television in Pyongyang criticizes the United States for deploying a squadron of fighter aircraft in South Korea, saying the United States has the intention of crushing North Korea with military force. The broadcast also says, "The US is deploying aircraft to South Korea saying there is a danger because North Korea is a supporter of terrorism, but the thought occurs that the US could launch a preemptive strike against us."
—Chŏng Yŏn Shik, "Puk, Miŭi Pihaengdaedae Paech'i Pinan," Yonhap News Agency, 24 October 2001, www.yonhapnews.co.kr.

8 November 2001
An unnamed Bush administration official says that North Korea is trying to sell missiles to three or four countries in the Middle East. The official does not name the countries but says they are "concentrated in an area west of China to the Mediterranean Sea." According to reports, North Korea is said to have reached a deal with Egypt on the sale of Nodong missiles, but there is no confirmation.
—George Gedda, "North Korea Said to Be Trying to Sell Missiles in Mideast, Asia; Egypt May Have Agreed to Buy," Associated Press, 9 November 2001, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; George Gedda, "North Korea Seeks Missile Sales-AP," *Joongang Ilbo*, 9 November 2001, http://english.joins.com; Yonhap News Agency, "Pukhan, Asia.Chungdonggukka'e Missile P'anmae Shido," *Joongang Ilbo*, 9 November 2001, www.joins.com; Chu Yong Chung, "'Puk, Missile P'anmae Shido A-Chungdong 3~4 Kaeguk Taesang' AP T'ongshin

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Podo," *Chosun Ilbo*, 10 November 2001, p. 2, in KINDS, www.kinds.or.kr; "Mijŏngbu Kwalli 'Puk Missile Such'ul Shido'," *Donga Ilbo*, 10 November 2001, in KINDS, www.kinds.or.kr.

12 November 2001

Middle East Newsline reports that Bush administrations officials are split over North Korean missile export activities. In contrast to an unnamed official who was quoted on 8 November 2001 as having said North Korea is looking to export more missiles to the Middle East, the report says other officials have said North Korea has suspended missile shipments over the last two months. The report quotes Deputy Defense Secretary Paul Wolfowitz as saying, "North Korea has a record, and they seem to have gone quiet lately."
—"U.S. Divided Over N. Korean Missile Sales," *Middle East Newsline*, vol. 3, no. 430, 12 November 2001, www.menewsline.com.

13 November 2001

In a speech at the UN General Assembly, North Korean Ambassador to the UN Lee Hyŏng Ch'ŏl says that the United States must return to the position of the Clinton administration before North Korea will resume bilateral dialogue. Lee also says, "It is totally irrational to say the United States deploys huge armed forces around the Korean Peninsula and conducts large-scale military exercises against us to advance peace, whereas it is a 'threat to peace' that we take self-defense measures to cope with the US military threat." Furthermore, Lee says that any accusations of North Korea posing a "missile threat" are groundless.
—Kim Hee-sung, "N.K. Proposes Conditions for Dialogue with U.S.," *Joongang Ilbo*, 14 November 2001, http://english.joins.com; Yonhap News Agency, 14 November 2001, in "ROK's Yonhap: N.K. Tells U.S. to Go Back to Clinton's Policy on Pyongyang," FBIS Document ID KPP20011114000061; Kang Chin Uk, "Puk, UN Ch'onghoesŏ Taemi Taehwa Chogŏn Cheshi," Yonhap News Agency, 16 November 2001, www.yonhapnew.co.kr.

15 November 2001

In a Washington, D.C. press briefing with South Korean Defense Minister Kim Dong Shin, Defense Secretary Donald Rumsfeld says, "It is beyond question or doubt but that North Korea has been actively developing an intercontinental ballistic capability. It's also beyond doubt but that they've been actively marketing those missile technologies to any number of countries around the globe. It's also clear they've been making efforts to develop weapons of mass destruction."
—Secretary of Defense Donald H. Rumsfeld, presenter, "Joint Press Conference with Minister of National Defense Kim Dong-Shin of the Republic of Korea," U.S. Department of Defense News Transcript, 15 November 2001, www.defenselink.mil; George Gedda, Associated Press, "Rumsfeld Worried About NKorea Missiles – AP," *Joongang Ilbo*, 16 November 2001, http://english.joins.com.

19 November 2001

U.S. News & World Report reports that US intelligence estimates have "pushed back the timetable on North Korea's missile development over the past two years." The report claims that political pressure from Congress after the Paektusan-1 flight-test on 31 August 1998, which was only 47 days after the release of the Rumsfeld Report, resulted in published estimates that North Korea could develop long-range missiles capable of striking the United States by 2010. The article claims that a classified version of the recent National Intelligence Estimate has several

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footnotes disputing the assessment that North Korea will be able to develop long-range ballistic missiles so quickly, but that they were deleted from the unclassified version.
—Mark Mazzetti, Richard J. Newman, and Kevin Whitelaw, "Wishing Upon a Star," *U.S. News & World Report*, 19 November 2001, www.usnews.com.

24 November 2001
In response to Defense Secretary Rumsfeld's remarks on 15 November 2001, the Korean Central News Agency carries a commentary saying Rumsfeld's remarks are provocative and that North Korea poses no threat. The commentary says that North Korea is faithfully implementing its "faithful promise to international society to freeze ballistic missile launches until 2003." The commentary also says that Rumsfeld's statement about a "threat from North Korean WMD development and missile technology proliferation is a clear challenge to us." [Note: The English version of this commentary was published on 26 November.]
—"Taejosŭnjŏktaeshich'aektongŭi Tosurŭl Nopiryŏnŭn T'ero, Missile Wihyŏp Palŏn/Chosŏnjungangt'ongshin Ronp'yŏng," Korean Central News Agency, 24 November 2001, www.kcna.co.jp; "KCNA Slams Remark of U.S. Defense Secretary," Korean Central News Agency, 26 November 2001, www.kcna.co.jp.

26 November 2001
During an appearance at the White House rose garden, George W. Bush says, "I made it very clear to North Korea that in order for us to have relations with them, that we want to know: Are they developing weapons of mass destruction? And they ought to stop proliferating."
—Mike Allen, "Iraq's Weapons Could Make It a Target, Bush Says," *Washington Post*, 27 November 2001, p. A7; Han Ki-heung and Lee Jong-hoon, "Bush Demands 'Inspections over North Korea's Mass-Destructive Weapons," *Donga Ilbo*, 28 November 2001, http://english.donga.com; Lee Jong Hun and Han Ki Hŭng, "Salsangmugi Sach'al Padaya Bush, E Konggaeyogu," *Donga Ilbo*, 28 November 2001, www.donga.com.

26 November 2001
A senior State Department official says the United States will ask Egypt to clarify recent reports that Egypt has concluded a deal to acquire Nodong missiles from North Korea. [Note: These comments are in response to a report from the *Joongang Ilbo* on 27 November.]
—"US Seeks to Clarify Reports that North Korea to Sell Missiles to Egypt," Agence France Presse, 26 November 2001, in defense-aerospace.com, www.defense-aerospace.com; "U.S. Out to Confirm Reports of Egypt's Missile Purchase," *Joongang Ilbo*, 27 November 2001, http://english.joins.com.

27 November 2001
The *Joongang Ilbo* quotes a "South Korean diplomatic source" as having said that North Korea secretly sold Nodong missiles to Egypt earlier this year. The report also quotes a fellow at the Korean Institute for Defense Analysis (KIDA) having said, "We believe the North Koreans agreed to sell as many as 24 Nodong missiles to the Egyptian military." The report adds that Egypt turned to North Korea after having tried for years to purchase missiles from the United States and European countries. According to *Middle East Newsline*, the United States has already stopped a deal for Egypt to buy 50 Nodongs from North Korea. [Note: This seems to corroborate a report from *Ha'aretz* on 15 July about the sale.]

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—Choi Won-ki, "Missile Sales to Egypt Worry Israel," *Joongang Ilbo*, 27 November 2001, http://english.joins.com; "North Korea to Sell Missiles to Egypt: Report," Agence France Presse, 26 November 2001, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Brent (Won-ki) Choi, "Missile Transactions between N.K. and Egypt – Full Version," *Joongang Ilbo*, 28 November 2001, http://english.joins.com; "Report: North Korea Sells Egypt 24 Medium-Range Missiles," *World Tribune.com*, 27 November 2001, www.worldtribune.com; "N. Korea Concludes No-Dong Accord with Egypt," *Middle East Newsline*, vol. 3, no. 453, 27 November 2001, www.menewsline.com.

27 November 2001

A "congressional source" tells the Associated Press that the US Congress is investigating reports that North Korea is providing Egypt with "long-range" ballistic missiles. [Note: this is a reference to recent reports that North Korea is supplying Nodong missiles to Egypt.]

—Barry Schweid, "Congressional Hearing Called on Reports North Korea Providing Egypt with Long-Range Missiles," Associated Press, 27 November 2001, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Yonhap News Agency, 28 November 2001, in "ROK's Yonhap: U.S. Congress to Investigate Reports of N.K.-Egypt Missile Trade," FBIS Document ID Kpp20011128000008; "Miguk'ŭihoe, Pukhan-Egypt Missile Kŏraesŏl Ch'ŏngmunhoe Yŏr'ŏ Chosa," *Joongang Ilbo*, 28 November 2001, www.joins.com; "U.S. Out to Confirm Reports of Egypt's Missile Purchase," *Joongang Ilbo*, 27 November 2001, http://english.joins.com.

28 November 2001

Egyptian President Hosni Mubarak denies reports that Egypt has a secret deal to purchase 24 Nodong missiles from North Korea.

—MENA (Cairo), 28 November 2001, in "Egyptian President Denies Israeli Media Claims about North Korean Arms Deal," FBIS Document ID MP20011128000138; "Mubarak Denies Egypt Has Bought Weapons from North Korea," Agence France Presse, 28 November 2001, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Brent (Won-ki) Choi, "Egypt Strongly Denies Report on Missile Transactions with N.K.," *Joongang Ilbo*, 29 November 2001, http://english.joins.com; Ch'oe Wŏn Ki, "Egypt, Pukhan Missile Kumae Podo Kangnyŏk Puin," *Joongang Ilbo*, 29 November 2001, www.joins.com; *Al-Akhbar* (Cairo), 30 November 2001, in "Egypt Denies Arms Deal with North Korea," FBIS Document ID GMP20011130000161.

29 November 2001

Korean Central Television in Pyongyang says that the North Korean missile program and its conventional forces are matters of national sovereignty and the right to self-defense. The broadcast also says that North Korea will not reduce its conventional forces until US forces are withdrawn from South Korea.

—Ch'oe Sŏn Yŏng, "Puk, 'Chŏkdaejŏk Puk.Migwan'gye Chawijŏk Kukpangnyŏk Yoguhae'," *Joongang Ilbo*, 29 November 2001, www.joins.com; "N. Korea Slams Calls for Arms Inspections," CNN.com, 29 November 2001, www.cnn.com.

December 2001

According to a South Korean Ministry of Foreign Affairs and Trade source, the United States offers to hold deputy minister-level talks with North Korea, but North Korea declines. The United States suggests that Jack Pritchard, special envoy for the four-party talks, and Kim Kye Gwan, North Korean deputy minister of Foreign Affairs,

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participate in the talks.
—Kim Jin, "Powell Voices Reservations on 'Sunshine' Policy results," *Joongang Ilbo*, 4 February 2002, http://english.joins.com.

1 December 2001
A commentary in the *Rodong Sinmun* criticizes the United States for planning to deploy radars in South Korea as part of a proposed US missile defense system. The newspaper claims that the deployment is "aimed at mounting missile attacks against North Korea at any time." The commentary also says that the North Korean "missile program is one means to protect socialism and to smash the imperialists' policy of using military force to strangle North Korea."
—"U.S. Urged to Stop Hostile Moves Against DPRK," Korean Central News Agency, 1 December 2001, www.kcna.co.jp; "Namjosŏn'e Missile Yogyŏk Radar'rŭl Paech'iharyŏgo Hanŭn Migukŭl Kyut'an/Rodong Sinmun," Korean Central News Agency, 1 December 2001, www.kcna.co.jp; Shim Kyu Sŏk, "Puk, Mi'e 'Missile Kaebal Chajugwŏn' Kangjo," *Joongang Ilbo*, 1 December 2001, www.joins.com; Lee Jong-heon, "N. Korea Vows to Stick to Missile Program, United Press International, 1 December 2001, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Yonhap News Agency, 1 December 2001, in "Possible Strong Attitude by DPRK Toward United States Viewed," FBIS Document ID Kpp20011201000042; "North Korea Hints at Continuing Missile Development," Agence France Presse, 1 December 2001, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Cho Chŏng Chin, "Pukhan, Missile Chaegaebal Kangnyŏkshisa," *Segye Ilbo*, 2 December 2001, p. 1, in KINDS, www.kinds.or.kr.

1-8 December 2001
A joint Russian-North Korean military committee meets in Pyongyang. According to a South Korean military source, the participants are at the level of major general, and the meeting is held to discuss military cooperation between the two countries. The two sides reportedly discuss North Korea's acquisition of the Igla (SA-18) portable surface-to-air missile (SAM). Military exchanges between Russia and North Korea had been suspended since 1989.
—Ch'oe Wŏn Ki, "[Shinnampuk] Pukhan-Russia MIG-29 Pon'gyŏk Saengsan Mulmitcha'gŏp," *Joongang Ilbo*, 10 December 2001, www.joins.com.

3 December 2001
In an interview with the BBC, South Korean Unification Minister Hong Sun Yŏng says, "Several North Korean hard-liners are trying to enfeeble or reverse the reconciliation process [with South Korea]." He also says that North Korean hard-liners are using South Korean enhanced security measures in the wake of the terrorist attacks on 11 September 2001 as a pretext to exert their influence. Hong says there is a "friction or tension between militarists and economists."
—"Leadership of North Is Seen in Struggle," *Joongang Ilbo*, 5 December 2001, http://english.joins.com; "North Korea Calls for Hight [*sic*] Security Alert," Agence France Presse, 5 December 2001, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

4 December 2001
A South Korean "military source" says that North Korea is developing software for missile guidance systems. The source says that North Korea is "now developing software for controlling long-range missile trajectories, and for

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deciphering radio guidance signals." According to the source, North Korea used its own technology to develop the propellant and the Kwangmyŏngsŏng-1 satellite that was launched with the Paektusan-1 SLV on 31 August 1998. However, the launch failed to place the satellite into orbit. [Note 1: The above text is derived from a CNS translation of the original Korean sources because there are translation problems with the English reports. Articles in English report that "North Korea used its own guidance system in the 1998 Paektusan-1 launch," and that "North Korea is developing guidance software for controlling missile orbits." The problems are (1) there is no reference to North Korea using its own guidance system for the 1998 launch, and (2) the Korean word "궤도" is translated as "orbit" when it should be "trajectory" in this context. Note 2: If this report is true, it is strange that North Korea is now "developing software for radio guidance systems." The software for controlling a missile's flight path should be applicable to both inertial and radio guidance systems. Furthermore, radio guidance is less sophisticated than inertial guidance, and it is susceptible to counter-measures such as jamming. One explanation is that North Korea installed foreign-made guidance systems on its ballistic missiles until recently, but can no longer procure them.]
—"N. Korea Developing Software for Guidance System," *Korea Times*, 4 December 2001, www.hankooki.com; Kim Kwi-kun, "DPRK Develops Guidance Control Software," Yonhap News Agency, 3 December 2001, in "Further on DPRK Developing Missile Guidance Control Software," FBIS Document ID KPP20011203000126; Kim Kwi Kŭn, "Puk, Missile Yudojeŏ Software Chach'e'gaebal," *Joongang Ilbo*, 4 December 2001, www.joins.com; Kim Hee-sung, "North to develop Software for Missile Guidance System," *Joongang Ilbo*, 4 December 2001, http://english.joins.com; David C. Isby, "North Korea Develops Taepo Dong 2 Guidance Software," *Jane's Missiles and Rockets*, February 2002, p. 7.

Mid December 2001
According to media reports, North Korea conducts the last of three or four Taepodong-2 engine tests this year at the Musudan-ri test facility. According to a South Korean military official, it will take North Korea some time to conduct a flight-test of the Taepodong-2.
—Kim Min Sŏk, "Pukhan, Changnyŏn Such'arye Missile Shilhŏm," *Joongang Ilbo*, 6 February 2002, www.joins.com; Park Tu Shik and Yu Yong Wŏn, "Mi, Puk Missile Kamshich'ejero," *Chosun Ilbo*, 6 February 2002, in KINDS, www.kinds.or.kr; "North Korea Working to Improve Missile's Range," *Joongang Ilbo*, 6 February 2002, http://english.joins.com; *Joongang Ilbo*, 7 February 2002, in "ROK DefMin Report: DPRK Conducts 'Numerous' Missile Tests in 'Past Few years'," FBIS Document ID KPP20020206000145; "Report: N. Korea Preparing New Long-Range Missile Test," *World Tribune.com*, 7 February 2002, www.worldtribune.com; Kyodo News Service, 6 February 2002, in "N. Korea Conducts Engine Tests for Long-Range Missile: Report," FBIS Document ID: JPP20020206000070.

26 December 2001
The *Jammu Daily Excelsior* of India reports that Pakistan's AQ Khan Research Laboratories, which handle Pakistan's nuclear program, have used North Korean technology to develop a missile with a "capacity far beyond the Ghauri." [Note: There is the possibility that Pakistan could have exchanged nuclear technology for the North Korean missile technology.]
—B.L. Kak, "Terrorist Threat from North Korea; Pak Wants FBI to Confirm Jiadis' Involvement," *Jammu Daily*

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Excelsior, 26 December 2001, in "India: Daily Notes North Korea's Covert Support to Islamic Terrorists," FBIS Document ID SAP20011226000059. The US and South Korea have working-level discussions to develop a "roadmap" for a "package deal" to resolve North Korea's ballistic missile and WMD programs. The roadmap is said to be a "step-by-step package deal involving strict reciprocity." Park Doo-shik, "US Open to Talks with North Korea," *Chosun Ilbo*, 8 February 2002, http://english.chosun.com; Park Tu Shik, "Taebuk Kibonjŏngch'aek 'Road Map' Han'gug'e Chŏndal/Mi'e 'Ŏmgyŏkhan Sanghojuŭi' Chŏg'yong," *Chosun Ilbo*, 7 February 2002, p. 3, in KINDS, www.kinds.or.kr.

2000

December 1999-January 2000

North Korea conducts three or four static engine tests for its Taepodong missile at the Musudan-ri missile facility. These tests follow North Korea's announcement of a flight-test moratorium in September 1999. [Note: This article is not clear whether this is a test for the Paektusan-1/Taepodong-1 or Taepodong-2, but it is probably for the latter.]

—Kim Min Sŏk and Lee Yŏng Chong, "Puk Missile Shilhŏm Chaegae...Engine Yŏnsojinghu P'och'ak," Joongang Ilbo, 24 February 2000, www.joins.com.

2000

North Korea moves FROG rockets to a FROG base in the southwestern part of North Korea.

—Kang Ho Shik, "Puk Scud Missile Kiji Chŭngsŏl," *Kyunghyang Shinmun*, 5 March 2001, p. 1, in KINDS, www.kinds.or.kr.

3 January 2000

Space Imaging, a US firm, releases satellite imagery of the Musudan-ri test facility on CNN television. The one-meter resolution photos, which were taken on 1 November 1999 by the firm's Ikonos satellite, are posted a few days later on the Federation of American Scientists' website.

—Cable News Network, CNN Live Event/Special, 3 January 2000, in "Millennium 2000: CEO of Space Imaging Discusses Three-Dimensional Aerial Photographs," Transcript # 00010354V54, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Ryuichi Otsuka, "N. Korean Missile Base Detailed U.S. Firm Gives Public Clear View of Taepodong Launch Site," *Daily Yomiuri*, 9 January 2000, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; William J. Broad, "Spy Photos of Korea Missile Site Bring Dispute," *New York Times*, 11 January 2000, p. A8, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Michael Evans, "Spy Pictures Show Korea's Empty Threat," *The Times* (London), 12 January 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Joseph C. Anselmo, "Commercial Images Detail North Korean Missile Site," *Aviation Week & Space Technology*, vol. 152, no. 3, 17 January 2000, p. 414, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

6 January 2000

The *Washington Times* quotes a US House national security aide as saying that North Korea and China have close cooperation on ballistic missiles and that China probably has provided North Korea with warhead data that could

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be used to develop small nuclear warheads.
—Bill Gertz, "China Breaks Vow, Sends N. Korea Missile Materials," *Washington Times*, 6 January 2000, p. 1.

22 January 2000
North Korea is reconsidering its declared moratorium on flight-testing of missiles. A spokesman for the North Korean Foreign Ministry says that the US missile interceptor test in the Pacific on 18 January 2000 has compelled North Korea to take its moratorium on missile flight-tests into serious consideration. The spokesman further says, "It is one more grave challenge to the magnanimity and good faith shown by the DPRK in its efforts to settle outstanding issues through negotiations. We will make an appropriate decision."
—"DPRK FM Spokesman on U.S. Missile Interceptor Test," Korean Central News Agency, 22 January 2000, www.kcna.co.jp; "Missile Palsarimshijungjimunjaerŭl Koryŏhaji Anhŭlsu Ŏptta," Korean Central News Agency, 22 January 2000, www.kcna.co.jp; "North Korea Reconsiders Missile Test Moratorium after US Firings," Agence France Presse, 23 January 2000.

31 January 2000
US State Department Spokesman James Rubin announces in Moscow that North Korea has agreed to send a high-level delegation to the United States in March for talks on the North Korean missile program. The announcement comes at the end of seven days of meetings in Berlin between the United States and North Korea. Rubin says that the Clinton administration's hope is that the visit in March would lead to a permanent agreement under which North Korea would agree to stop flight-tests of its ballistic missiles. Rubin further states that North Korea has officially accepted the invitation; however, the agenda and leader of the North Korean delegation for the visit is yet to be determined.
—Jane Perlez, "US-North Korea Talks on Missile Program Set for March," *New York Times*, 31 January 2000.

February 2000
According to scholar James Cotton, US specialists maintain that North Korea is developing a longer-range version of the Taepodong missile, which could strike targets in the continental United States and much of Asia by 2003. North Korea has exported about 400 Scud type missiles to Iran, Syria, and Pakistan. Cotton asserts that at present, despite having a missile development program, North Korea does not have the capability to arm its missiles with nuclear warheads.
—James Cotton, "North Korea Nuclear and Missile Nonproliferation and Regional Security," Australia and Security Cooperation in the Asia Pacific (AUS-CSCAP) Newsletter No. 9, February 2000, http://aus-cscap.anu.edu.au.

February 2000
According to the Korean Central News Agency (KCNA), Russian Foreign Minister Igor Ivanov and his North Korean counterpart, Paek Nam Sun, discussed missile cooperation during Ivanov's visit to North Korea. KCNA reported that this move comes in response to increasing Japanese and US efforts to set up a theater missile defense (TMD) system. William Schneider, a US expert on international security, said that within five years North Korea, Iran, Russia, and China will possess a nuclear potential sufficient to inflict major destruction on the United States, even if their systems are inferior to US systems in accuracy and capability. Russia and North Korea signed a new friendship pact requiring each country not to support any state that attacks the other.

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—"North Korea and Russia to Cooperate on Missiles," *Middle East Newsline*, 14 February 2000, www.menewsline.com.

2 February 2000

CIA Director George Tenet testifies before the US Senate Intelligence Committee that North Korea could threaten US cities with ballistic missiles within 15 years. Tenet says that North Korea could test the Taepodong-2 this year, and that North Korea might be able to arm it with nuclear warheads. Tenet also says that Nodong missile sales are changing the strategic balance in the Middle East and Asia. (Note: get English sources).

—Kim Chong U, "Haeg'unban Kanŭnghan Puk Taepodong 2 Ho Yŏnnae Shihŏmbalsa," *Joongang Ilbo*, 4 February 2000, www.joins.com.

8 February 2000

South Korean Foreign Minister Lee Jŏng Bin says that North Korea has accepted proposals from the United States to cease development of ballistic missiles and nuclear weapons and to renounce terrorism in return for improved relations with the United States. However, North Korea has demanded direct food aid from the United States and the removal of North Korea from a list of states known to sponsor terrorism.

—"North Korea Accepts US Proposal to Halt Missile Program: South Korea," Agence France Presse, 8 February 2000.

9 February 2000

Robert Walpole, national intelligence officer for strategic and nuclear programs, tells Congress that North Korea continues to supply ballistic missile components and technology to other hostile countries. The official says that North Korea has been so active lately that it has "supplanted Russia as the major supplier of technical know-how and equipment for missile programs." However, the official would not confirm a recent report in the *Washington Times* that North Korea transferred twelve missile engines to Iran in November 1999. The official also noted that North Korea was continuing the development of its own ballistic missiles despite a pledge to halt the program. According to the *Washington Times*, Walpole says, "Those engines are critical to the Taepodong program, and they would be critical to the Shehab-3 program and any extensions of the Shehab-3 program."

—Tom Raum, "CIA Official Suggests North Korea Continuing Nuclear Weapons Program," Associated Press, 9 February 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Bill Gertz, "'Critical' N. Korea Missile Parts Seen Aiding Iran's Program," *Washington Times*, 10 February 2000, p. A3.

16 February 2000

According to *Izvestia*, North Korea had planned to launch a missile on 16 February 2000 to celebrate Kim Jong Il's birthday but cancels the launch at the last minute. The missile was to be launched from Musudan-ri, North Hamgyŏng Province. During his recent visit to discuss a Treaty of Friendship between Russia and North Korea, Russian Foreign Minister Igor Ivanov insisted that North Korea not break its current flight-test moratorium. North Korea had announced that it could break the moratorium because the United States had tested missile interceptor systems.

—"Ivanov Seen Responsible for DPRK Missile Non-Launch," *Izvestia* (Moscow), FBIS Document CEP2000217000222,

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17 February 2000; "Puk Kim Jong Il Saeng'ilddae Missile Ssoryŏhaetta," *Hankook Ilbo*, 18 February 2000, p. 2, in KINDS, www.kinds.or.kr.

17 February 2000

The *Sankei Shimbun* reports that North Korea and Iran are jointly developing a new missile based on China's C-802 cruise missile. The report claims that Iran had acquired about 125 C-802 cruise missiles from China in the mid-1990s, but that China suspended sales to Iran after the United States demanded a halt to the sales in 1996. Iran reportedly sent some of the C-802s to North Korea in April or May 1999.

—Kyodo News Service, "N. Korea, Iran Jointly Developing Missile: Newspaper," Japan Economic Newswire, 16 February 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "N. Korea, Iran Jointly Develop Missile: Report," *Korea Times*, 17 February 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, 17 Feb 2000, in "Sankei Shimbun: DPRK, Iran Jointly Developing Missile," FBIS Document ID JPP20000217000006; Chŏn Hyŏn Il, "Puk-Iran, Chungje Sunhang Missile Kongdong Kaeryang Yŏn'gye," *Segye Ilbo*, 18 February 2000, p. 2, in KINDS, www.kinds.or.kr; Shim Kyu Sŏn, "Puk-Iran Missile Kongdonggaebal Ch'ujin," *Donga Ilbo*, 18 February 2000, p. 2, in KINDS, www.kinds.or.kr.

23 February 2000

Jane's Defence Weekly reports that sources in US and Israeli intelligence agencies believe that Egyptian firms are sending missile technologies from the United States and other Western countries to North Korea.

—Steve Rodan, "Israel, USA Claim Egyptian Missile Links with N. Korea," *Jane's Defence Weekly*, vol. 33, no. 8, 23 February 2000.

26 February 2000

South Korean military sources say that North Korea has recently formed four to six missile launch battalions and is likely to develop its Taepodong ballistic missiles to a range of 2,000-2,500km within the year 2000. However, North Korea is not going to replace its currently deployed Nodong missiles with the Taepodong. After establishing a missile division in 1999, North Korea now operates independent missile launch and technology battalions. These battalions are stationed at underground missile bases or hangars that North Korea built from the mid-1980s to 1990s. Furthermore, North Korea has modified large trucks it bought from Japan into transporter erector launchers (TELs), and a majority of these TELs have been placed along the Demilitarized Zone (DMZ).

—Yonhap News Agency, 27 February 2000, in "ROK 'Source' Says DPRK Operates Missile Launch Battalions," FBIS Document KPP20000227000010; Yonhap News Agency, 27 February 2000, in "North Korea Reportedly Operates Missile Launch Battalions," BBC Worldwide Monitoring, 27 February 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

March 2000

Japan's Foreign Ministry reports in the *2000 Diplomatic Blue Book*, an annual report, that Japan sees it highly likely that North Korea has completed the deployment of medium-range Nodong missiles, and believes North Korea is likely working to develop long-range missiles. The ministry said that against this backdrop, Japan would keep intact its balanced policy of dialogue and deterrence in dealing with North Korea, while sustaining its efforts to normalize ties with Pyongyang. The government report said, "There is believed to be no change in the situation that the

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Korean Workers Party of Kim Jong Il has the overall grip on power in politics." Japan held talks with North Korea to establish diplomatic ties in April 2000; both sides are to meet again in Tokyo on 23 May 2000.
—Kyodo News Service, "Japan Sees North Korea Making Longer-Range Missiles," Japan Economic Newswire, 9 May 2000, in Lexis-Nexis Academic Universe, 8 May 2000, www.lexis-nexis.com; "North's Long-Range Missiles in Combat Positions, Tokyo Warns," *South China Morning Post*, 10 May 2000, www.scmp.com; "Japan's North Korean Missiles Likely," BBC News, 9 May 2000, http://news2.thls.bbc.co.uk.

8-9 March 2000
The United States and North Korea hold meetings in New York to prepare for the upcoming visit to Washington by top North Korean officials. The North Korean delegation, led by Vice Foreign Minister Kim Gye Gwan, meets with US special envoy to North Korea, Charles Kartman, to discuss increased political recognition and economic assistance given to North Korea in return for concessions on its missile program. On the second day of the talks, Kartman is joined by Michael Sheham, US coordinator for counter-terrorism, who discusses the possibility of removing North Korea from the United State's list of state sponsors of terrorism.
—Sharon Behn, "US, North Korea Set for Second Day of Negotiations on Landmark Visit," Agence France Presse, 9 March 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

9 March 2000
South Korean President Kim Dae Jung delivers his "Berlin Declaration," which proposes governmental talks between the two Koreas and aims to increase inter-Korean exchanges.
—"S. Korea's Kim Set to Work Directly with North," United Press International, 10 March 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "South Korean President Kim Dae-jung Calls for Talks with North Korea," Agence France Presse, 9 March 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kim Ji-ho, "'Berlin Declaration' Shows Seoul's Will, Confidence in Inter-Korea Initiative," *Korea Herald*, 10 March 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kim Min Bae, "Kim Taet'ongnyŏng 'Berlin Sŏn'ŏn' 4 Kaehang Palp'yo," *Chosun Ilbo*, 10 March 2000, p. 1, in KINDS, www.kinds.com; Kim Min Bae, "Kim Taet'ongnyŏng 'Berlin Sŏn'ŏn' Pukchiwŏn, Chŏngbuga Chikchŏp Nasŏnda," *Chosun Ilbo*, 10 March 2000, p. 3, in KINDS, www.kinds.com.

16 March 2000
Bilateral talks between the United States and North Korea break off without any agreement. The talks were intended to lay the groundwork for a visit to the United States by a top-level North Korean official. Although the talks failed, both sides are still hopeful that an agreement could be reached. Both sides also say that the talks will continue at an undetermined later date.
—"US, North Korea Talks End without Agreement," Agence France Presse, 16 March 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

30 March 2000
The United States, South Korea, and Japan jointly urge North Korea to accept South Korean President Kim Dae Jung's recent call for greater inter-Korean cooperation. The three sides hope that North Korea would respond positively to President Kim's Berlin declaration for peace and prosperity on the Korean Peninsula issued on 9

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March. The joint statement issued by the three allies in Tokyo expresses hope that the United States and North Korea would improve relations through dialogue, including talks on a visit by a high-level North Korean official, as well as talks on North Korea's missile and nuclear programs.
—"North Korea Pressed by South Korea's Allies to Accept Kim Initiative," Agence France Presse, 30 March 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

April 2000
The United States imposes sanctions against North Korea's Ch'anggwang Shinyong Company for selling missile technology to Syria.
—Bill Gertz, "China, N. Korea Hit With Sanctions," *Washington Times*, 28 June 2001, p. 1.

24-30 June 2000
The United States and North Korea hold bilateral talks in Rome. The talks cover a wide range of issues, and the two sides agree to hold bilateral missile talks in the future.
—"US-N. Korea Delegations Make Progress in Rome Talks: US State Dept," Agence France Presse, 30 May 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "US-N. Korean Talks in Rome Shrouded in Secrecy," Agence France Presse, 23 May 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "US, NK to Resume Bilateral Talks in Rome Wednesday," Korea Times, 24 May 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Sharon Behn, "US, N. Korean Talks in Rome to Focus on Missile Question, High-Level Visit," Agence France Presse, 23 May 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, "US, N. Korea Agreee on More Talks on N. Korea Missile Program," Japan Economic Newswire, 30 May 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

27 May 2000
South Korean Minister of Unification Im Dong Wŏn pays a secret visit to Pyongyang to hold talks with Kim Jong Il. The talks last for four hours, and Im notes that Kim has a sense of humor and is respectful towards his elders. He also believes that Kim Jong Il is a much stronger leader than his father, and that he is a very good listener. According to Im, Kim directly took notes during the meeting, as if he were a student in class. [Note: Im's observations are part of a report submitted to President Kim Dae Jung upon Im's return to Seoul, which are cited in Don Oberdorfer's revised edition of *The Two Koreas*. The revised edition is scheduled for release in December 2001.]
—Ch'oe Wŏn Ki, "Don Oberdorfer 'Tugaeŭi Korea' Kaejŏngp'an/'Im Dong Wŏnssi Kŭkpi Pangbuk," *Joongang Ilbo*, 5 December 2001, p. 10, in KINDS, www.kinds.or.kr; "Spy Agency Chief Secretly Visited Pyongyang Prior to Summit," *Korea Herald*, 20 June 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

June 2000
Western intelligence sources say North Korea is helping Iraq in its medium-range missile and nuclear weapons programs. Sources said Iraq is trying to acquire its pre-1991 strategic weapons capability by increasing its oil revenue through enhanced exports. Former UN chief arms inspector Richard Butler said that Iraqi weaponization would continue to pose a threat to the United States and Israel. US experts say that, despite repeated appeals, North Korea has also continued to sell intermediate and long-range missiles such as the Nodong and Taepodong-1

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(Paektusan-1) to Iran, Syria, and Libya. Sources say that commercial contacts are mostly used to hide the weapons transactions.
—"Iraq, N. Korea Believed Cooperating on Missiles, WMD," *Middle East Newsline*, vol. 2, no. 218, 8 June 2000, www.menewsline.com.

8 June 2000
A Russian government source reveals that during Russian President Vladimir Putin's visit to North Korea on 19 July 2000, North Korea is expected to declare it has no plans to attack the United States with missiles in the foreseeable future, and that it does not have the technical capability to develop an intercontinental ballistic missile (ICBM). The source also told Japan's Kyodo News that North Korea would possibly discuss the missile issue at the Russia-North Korea summit. The report said that contrary to the US belief that North Korea could develop an ICBM by 2005, Russian Defense Minister Igor Sergeyev says North Korea would need a minimum of 15 years.
—Kyodo News Service, "LEAD: N. Korea to Declare It Will Not Attack U.S.: Report," Japan Economic Newswire, 14 June 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

8 June 2000
US intelligence officials, quoting a National Security Agency (NSA) report of 8 June 2000, say that Russia and Uzbekistan are cooperating on the sale of missile parts to North Korea. The parts being sold include a special aluminum alloy, laser gyroscopes used in missile guidance, and connectors and relays used in missile electronics, the officials say. The report also says that Russia has been collaborating with a North Korean missile company in sending missile components to Yemen. According to officials, the gyroscopes for the North Korean Scud missiles were first sold to North Korea's Ch'anggwang Shinyong Company in Kazakhstan and then resold to Yemen. The United States has placed an export ban on the firm since April 2000 for selling Scud missiles to Iran.
—Bill Gertz, "Russia Sells Missile Technology to North Korea," *Washington Times*, 30 June 2000, p. A1.

9 June 2000
A North Korean Foreign Ministry spokesman says the United States is wrong in citing the threat from North Korea as justification for a proposed national missile defense (NMD) system. The spokesman accuses the United States of insincerity in implementing the 1994 Geneva Agreed Framework, under which North Korea has suspended its suspected nuclear program. He says the United States is behind schedule on its commitment to lift economic sanctions and supply two light-water nuclear reactors. In Washington, a senior US State Department official says that discussions with North Korea on its missile program are expected to start soon, and also the United States would be ready to lift economic sanctions against North Korea by the end of June 2000.
—"Pyongyang Ups the Ante ahead of Missile Talks with Washington," Agence France Presse, 10 June 2000, in Lexis-Nexis Academic Universe, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

16 June 2000
According to South Korean government spokesman Park Chun Yŏng, President Kim Dae Jung, in a telephone conversation with US President Bill Clinton, says that he comprehensively discussed the North Korean weapons development program with North Korean leader Kim Jong Il during their summit in Pyongyang. Park said, "President Kim told President Clinton that he strongly urged the North Korean leader to successfully conclude

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negotiations with the US on North Korea's nuclear and missile programs, and that leaving these weapon issues unsettled could impede regional peace and cooperation." Furthermore, President Kim also stressed the importance of North Korea abiding by the 1991 inter-Korean nuclear nonproliferation accord, and the 1994 US-North Korea Agreed Framework.
—"President Says He Urged N.K. Leader to Resolve Nuclear, Missile Issues with U.S. at Summit Talks," *Korea Herald*, 17 June 2000, www.koreaherald.co.kr.

19 June 2000
The United States eases economic sanctions against North Korea. The measures are said to be "the final phase of what President Clinton announced last September 17." Some restrictions will remain in place due to North Korea's inclusion on a list of terrorist-supporting states.
—James Gerstenzang, "U.S. Lifts Some Sanctions against N. Korea, Stops Calling It 'Rogue'," *Los Angeles Times*, 20 June 2000, p. A6, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; John Burton and Stephen Fidler, "US Eases Sanctions against Pyongyang," *Financial Times*, 20 June 2000, p. 14, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Ben Barber, "White House Ends Embargo on Trade with North Korea; Action Follows Pyongyang Summit," *Washington Times*, 20 June 2000, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Shin Yong-bae, "U.S. Lifting of Sanctions Expected to Boost Mood of Détente on Peninsula," *Korea Herald*, 20 June 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "US Sanction Lifting Toward NK Takes Effect," *Korea Times*, 20 June 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

19 June 2000
Japan's *Sankei Shimbun* reports that 15 North Koreans, including 10 engineers, will return to Pyongyang from Pakistan in a few days. The North Koreans are reported to have been helping Pakistan with its missile development program.
—"N. Korean Missile Experts to Return Home from Pakistan: Report," Agence France Presse, 19 June 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

20 June 2000
Pakistan denies reports that say Pakistan has received help for its missile program from North Korea. The *Sankei Shimbun* reported on 19 June 2000 that 15 North Korean personnel, including 10 engineers, would return to Pyongyang soon from Pakistan.
—"News From Our World Resources: 'No Korean Help' in Missile Programmes," *Gulf News*, 21 June 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Pakistan Denies Using N. Koreans on Missile Programme," Agence France Presse, 20 June 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

21 June 2000
A senior US State Department official says that following a North Korean announcement to continue its moratorium on missile testing, the United States will soon resume negotiations with North Korea on the missile issue. The official says a visit to the United States by a North Korean high-level delegation and talks on reaffirmation of North Korea's pledge to halt nuclear weapons will also be announced soon. If the talks succeed, missile-related shipments to Iran, Pakistan, and possibly other nations could end. Flight-testing, one element of

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North Korea's missile development program, and other unresolved issues such as the suspended North Korean nuclear program, will be discussed during the talks, the official added. Furthermore, the official said that despite a similar pledge in September 1999, there were no indications of North Korea's suspending the development of its Taepodong-2 missile.
— Jane Perlez, "North Korea's Missile Pledge Paves the Way for New Talks," *New York Times*, 22 June 2000; "U.S. to Announce Missile Talks with North Korea," Associated Press, 22 June 2000, in Lexis-Nexis Academic Universe, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Matthew Lee, "US Expects Resumption of Missile Talks with N. Korea Shortly: Official," Agence France Presse, 22 June 2000, Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North Korea Promises to Halt Missile Tests," Lexis-Nexis Academic Universe, 21 June 2000; *Donga Ilbo* (Seoul), 3 May 2001, in "ROK Daily Sees DPRK Decision To Freeze Missile launch as Gesture to US," FBIS Document ID KPP20010503000123.

28 June 2000
The US government announces that bilateral missile talks with North Korea will resume 10-12 July after a year and four months. During the fourth round of talks held in March 1999 in Pyongyang, North Korea said it could not give up missile development unless the United States provided $1 billion per year in compensation for three years. However, in September 1999, North Korea promised to halt all flight-tests as long as the two sides remain engaged in negotiations.
—Kim Chin, "Pukhan-Mig'uk Missile Hoedam 7 Wŏl 10 Il Chaegae," *Joongang Ilbo*, 30 June 2000, www.joins.com.

29 June 2000
President Bill Clinton warns that despite signs of reconciliation that emerged from the June 2000 inter-Korean summit, North Korea's weapons program remains a threat to the United States.
—"Russia Selling Missile Technology to North Korea: Report," Agence France Presse, 30 June 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

1 July- 31 December 2000
According to the CIA, North Korea obtains raw materials and components for ballistic missiles from "various foreign sources, especially through North Korean firms based in China." Chinese firms are also said to provide "dual-use missile-related items, raw materials, and/or assistance to North Korea. As a supplier, North Korea is said to provide "significant ballistic missile-related equipment, components, materials, and technical expertise to countries in the Middle East, South Asia, and North Africa." North Korea is said to "maintain a missile relationship" with Egypt, and provide assistance and equipment for Syria's liquid-propellant missile program. North Korea is also reportedly a supplier of "missile-related equipment, materials, technology, and expertise to Libya and Iran."
—"Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, 1 July Through 31 December 2000," CIA, 7 September 2001, www.cia.gov; "Russia, N. Korea, China Give Iran Missile Aid-CIA," *Joongang Ilbo*, 11 September 2001, http://english.joins.com; Bill Gertz, "CIA Uncovers Missile moves by China," *Washington Times*, 8 September 2001, www.washtimes.com; "CIA Says Iran Got New Missile Aid," *Washington Post*, 8 September 2001, p. 9.

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July 2000

North Korea delivers the first of 50 Nodong missiles and seven launchers to Libya. The rest of the missiles will be delivered over a two-year period, and North Korea will construct the infrastructure to maintain and store the missiles, and train Libyan personnel in missile technology for five years. According to *Middle East Newsline*, the contract for the missiles is signed with North Korea's state-owned Ch'ŏngch'ŏn'gang Corporation.

—Con Coughlin, "Missile Deal Puts Israel in Gaddafi Sights," *Sunday Telegraph*, Issue 1948, 24 September 2000, www.telegraph.co.uk; "Puk Nodong Missile Libya Sŏ Suip," *Joongang Ilbo*, 25 September 2000, www.joins.com; "Libya Acquires No-Dong Missiles from N. Korea," *Middle East Newsline*, vol. 2, no. 370, 24 September 2000, www.menewsline.com; Douglas Davis, "Report: Libyan Missiles Can Hit Israel," *Jerusalem Post*, 25 September 2000, p. 5, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

10-12 July 2000

The United States and North Korea hold the fifth round of bilateral missile talks in Kuala Lumpur. Chang Ch'ang Ch'ŏn, North Korea's Director-General for US Affairs, says the talks are focused on the suspension of North Korea's missile exports. Chang says that during the negotiations the North Korea delegation "clarified that we could continue our discussions on the condition the US side is willing to compensate for the political and economic losses we would incur if we suspend our missile exports. Our position was the US should provide compensation of $1 billion in cash." US sources say that Washington's ultimate goal is to induce North Korea to join the Missile Technology Control Regime (MTCR). Robert Einhorn, Assistant Secretary of State and the chief US negotiator, says the talks are "substantive and candid" and he describes the North Korean side as "very professional and serious-minded." Einhorn says the two sides hope to meet "within the next few months" and is optimistic that the "positively evolving environment" would lead to firm progress.

—"USDS Einhorn Press Conference on N. Korea Missile Talks," *Asia Pulse*, 13 July 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Ranjan Roy, "U.S., North Korea Near Wrap-Up of Missile Talks," Associated Press, 12 July 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North Korea Asks for US1 Billion to halt Missile Sales," Channel NewsAsia, 12 July 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "U.S. Rejects North Korea's Billion Dollar Missile Demand," Deutsche Presse-Agentur, 12 July 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Tim Johnson, "LEAD: U.S., N. Korea End Missile Export Compensation Talks," Japan Economic Newswire, 12 July 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Puk-Mi Missile Hoedam Kyŏllyŏl," *Taehan Maeil*, 13 July 2000, p. 1, in KINDS, www.kinds.co.kr; "Pukhan-Miguk Missile Hoedam Kyŏllyŏl," *Joongang Ilbo*, 13 July 2000, p. 2, in KINDS, www.kinds.co.kr; "Puk-Mi Missile Hoedam Kyŏllyŏl," *Segye Ilbo*, 13 July 2000, p. 1, in KINDS, www.kinds.co.kr.

13 July 2000

After a stalemate in the US-North Korea missile talks in Kuala Lumpur, North Korea says it would continue its missile development program. Chang Ch'ang Ch'ŏn, Director-General for US Affairs, said North Korea's missile program is part of its right to self-defense. "However, we will continue our discussions on the condition that the US gives compensation for our economic and political losses in case of suspension," Chang said.

—"North Korea Vows to Continue Missile Program," *New York Times*, 13 July 2000, www.nytimes.com.

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19 July 2000
During Russian President Vladimir Putin's visit to Pyongyang, North Korea's National Defense Commission Chairman Kim Jong Il tells Putin that North Korea will give up its intercontinental ballistic missile (ICBM) development program in exchange for two or three satellite launches a year.
—Kim Chin, "Pukhan 'Taeryukkan Missile P'ogi'," *Joongang Ilbo*, 5 August 2000, www.joins.com.

August 2000
North Korea begins the delivery of 50 Nodong missiles and seven launchers to Libya. According to *Defense & Foreign Affairs' Strategic Panning Policy*, the missiles are being procured on behalf of Iraq, Egypt, and Libya at a cost of $600 million. The North Korean firm Ch'ŏngchŏn'gang Corporation is the supplier.
—"Arms Transfer Tables," *Defense & Foreign Affairs' Strategic Panning Policy*, January 2002, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

September 2000
North Korea ships 50 Nodong missiles and seven launchers to Libya. The deal also includes the dispatch of North Korean engineers and technicians to "design storage facilities."
—Eli J. Lake, "Analysis: Prospect of North Korean Missile Curbs Fade," United Press International, 6 December 2000.

September 2000
North Korea and Syria complete a contract for North Korean exports of Scud missiles to Syria.
—Eli J. Lake, "Analysis: Prospect of North Korean Missile Curbs Fade," United Press International, 6 December 2000.

12 September 2000
The US Defense Department reports that North Korea's ballistic missile inventory includes over 500 Scuds "of various types," and that North Korea "continues to produce and deploy medium-range Nodongs capable of striking United States bases in Japan." The report also says that North Korea continues to work on the "5,000km-range Taepodong-2," and that the "Perry process provides a diplomatic roadmap for addressing...the missile threat."
—US Secretary of Defense, "2000 Report to Congress: Military Situation on the Korean Peninsula," 12 September 2000, www.defenselink.mil.

23 September 2000
Syria successfully flight-tests a "Scud-D" that was acquired from North Korea. The Scud-D is said to be capable of delivering chemical and biological warheads.
—Ch'oe Hong Sŏp, "'[Israel] Pukhan-Chungdong Missile Connection Magara'," *Chugan Chosun*, 12 April 2001, www.weekly.chosun.com.

10 October 2000
Marshall Cho Myŏng Rok, vice chairman of North Korea's National Defense Commission, visits Bill Clinton at the White House. Cho delivers a formal plan for North Korea to abandon its Taepodong missile program in exchange for satellite launches.

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—Jim Mann, "U.S. and North Korea Vow to Improve Ties," *Los Angeles Times*, 13 October 2000, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; *Chosun Ilbo*, 11 October 2000, in "DPRK Proposes Dropping Missile Project During Meeting With Clinton," FBIS Document ID KPP20001011000098, 11 October 2000; Chu Yong Chung, "Onŭl Kongdongsŏngmyŏng Muŏl Tamŭlkka/Mi-Puk 'Shil'ikch'aenggigi' Hab'ŭimun Shin'gyŏngjŏn," *Chosun Ilbo*, 12 October 2000, p. 3, in KINDS, www.kinds.or.kr; Yun Kuk Han, "Clinton Yŏnnae Pukhanbangmun," *Hankyoreh Shinmun*, 13 October 2000, p. 1, in KINDS, www.kinds.or.kr; "Puk-Mi Kongdongsŏngmyŏng Chŏnmun/Pukhanchŭk Palp'yo," *Munhwa Ilbo*, 13 October 2000, p. 4, in KINDS, www.kinds.or.kr; Kuk Ki Yŏn, "Clinton-Cho Myŏng Rok, 45 Pun'gan Yanggukhyŏn'an Taehwa," *Segye Ilbo*, 12 October 2000, p. 3, in KINDS, www.kinds.or.kr.

12 October 2000

The United States and North Korea issue a joint communiqué that includes a North Korean commitment not to "launch long-range missiles of any kind while talks on the missile issue continue."

—US-DPRK Joint Communiqué, Released by the Office of the Spokesman US Department of State, 12 October 2000, www.state.gov; *Donga Ilbo* (Seoul), 3 May 2001, in "ROK Daily Sees DPRK Decision to Freeze Missile launch as Gesture to US," FBIS Document ID KPP20010503000123; Chu Yong Chung, "Onŭl Kongdongsŏngmyŏng Muŏl Tamŭlkka/Mi-Puk 'Shil'ikch'aenggigi' Hab'ŭimun Shin'gyŏngjŏn," *Chosun Ilbo*, 12 October 2000, p. 3, in KINDS, www.kinds.or.kr; Yun Kuk Han, "Clinton Yŏnnae Pukhanbangmun," *Hankyoreh Shinmun*, 13 October 2000, p. 1, in KINDS, www.kinds.or.kr; "Puk-Mi Kongdongsŏngmyŏng Chŏnmun/Pukhanchŭk Palp'yo," *Munhwa Ilbo*, 13 October 2000, p. 4, in KINDS, www.kinds.or.kr; Kuk Ki Yŏn, "Clinton-Cho Myŏng Rok, 45 Pun'gan Yanggukhyŏn'an Taehwa," *Segye Ilbo*, 12 October 2000, p. 3, in KINDS, www.kinds.or.kr.

23-25 October 2000

US Secretary of State Madeleine Albright visits Pyongyang, where she meets with Kim Jong Il, National Defense Committee Vice Chairman Cho Myŏng Rok, Foreign Minister Paek Nam Sun, and Kim Yŏng Nam, president of the presidium of North Korea's Supreme People's Assembly. During the visit, Albright discusses the possibility of launching satellites in exchange for North Korean restraints on its missile program. Albright says a lot of progress is made, but it will be discussed in more detail in an experts' meeting the following week. During six hours of talks, Kim Jong Il agrees "to halt all exports of missile technology, including existing contracts, and to freeze testing, production and deployment of all missiles with a range over 500km." Albright is said to be impressed with Kim's familiarity with the technical details of the missile issue and his ability to discuss it without referring to his notes.

—Michael Gordon, "How Politics Sank Accord on Missiles With North Korea," *New York Times*, 6 March 2001, www.nytimes.com; Son Key Young, "US, NK Discuss Missile-for-Satellite Exchange-Secretary of State Albright Says," *Korea Times*, 25 October 2000, www.koreatimes.co.kr; "U.S. Secretary of State and Her Party Arrive," Korean Central News Agency, 23 October 2000, www.kcna.co.jp; "Kim Jong Il Receives U.S. Secretary of State," Korean Central News Agency, 23 October 2000, www.kcna.co.jp; "Kim Jong Il Arranges Dinner for U.S. Secretary of State," Korean Central News Agency, 23 October 2000, www.kcna.co.jp; "Jo Myong Rok Meets Madeleine K. Albright," Korean Central News Agency, 23 October 2000, www.kcna.co.jp; "Kim Jong Il Meets Again Madeleine K. Albright," Korean Central News Agency, 24 October 2000, www.kcna.co.jp; "Kim Yong Nam Meets Albright," Korean Central News Agency, 24 October 2000, www.kcna.co.jp; "Jo Myong Rok Hosts Luncheon for Albright," Korean Central

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News Agency, 24 October 2000, www.kcna.co.jp; "Paek Nam Sun Meets U.S. Secretary of State," Korean Central News Agency, 24 October 2000, www.kcna.co.jp; "Albright Meets Mediapersons (sic)," Korean Central News Agency, 24 October 2000, www.kcna.co.jp; "Banquet Given by U.S. Secretary of State," Korean Central News Agency, 24 October 2000, www.kcna.co.jp; "U.S. Secretary of State Leaves," Korean Central News Agency, 25 October 2000, www.kcna.co.jp; Leon V. Sigal, "Reversing US Missteps Toward North Korea," *Boston Globe*, 23 June 2001, www.boston.com; Ch'oe Wŏn Ki, "Don Oberdorfer 'Tugaeŭi Korea' Kaejŏngp'an/'Im Dong Wŏnssi Kŭkpi Pangbuk," *Joongang Ilbo*, 5 December 2001, p. 10, in KINDS, www.kinds.or.kr.

31 October 2000

In Tokyo, Iranian Foreign Minister Kamal Kharrazi tells Japanese Foreign Minister Yohei Kono that Iran's Shehab missiles have been developed independently and are not linked to the North Korean missile program.
—Vladimir Solntsev, "Iranian Shehab Missiles Not Linked With Any KDPR Programme," ITAR-TASS News Agency, 31 October 2000.

November 2000

North Korea delivers the first of 50 Nodong missiles to Libya as part of a $600 million contract. North Korea also sends at least 11 engineers and technicians to help Libya deploy the missiles. According to a source in the US Defense Department, North Korea delivers 36 missiles and launch equipment, which Israeli intelligence discovers after it is moved from a dessert location to the coast.
—"Libya Obtains N. Korean No-Dong Missiles," *World Tribune.com*, 9 August 2001, www.worldtribune.com; Lee Jong Hwan, "Jiang Zemin 'Puk Missile Kaebal Pandae'," *Donga Ilbo*, 10 August 2001, p. 5, in KINDS, www.kinds.or.kr.

November 2000

Commercial satellite imagery from the Space Imaging Company, based in Denver, Colorado, indicates that the Musudan-ri launch facility has been modified since satellite imagery was obtained one year ago in November 1999. The new imagery shows that the launch pad has a new structure that is 10m wide and 20m long, as well as a new building near the launch pad. The modifications may give the facility the capability of launching the Taepodong-2, which is estimated to have a range of up to 6,000km.
—David C. Isby, "North Korea Updates Taepo Dong Launch Pad," *Jane's Missiles & Rockets*, vol. 5, no. 7, July 2001, p. 2; Chu Yong Sŏng, "Puk, Taepodong Missile Palsadae'e Kujomul," *Chosun Ilbo*, 16 May 2001, www.chosun.com; Kyodo News Service (Tokyo), 16 May 2001, in "Satellite Shows New Structure at N. Korean Launch Pad," FBIS Document ID JPP20010516000123; Kyodo News Service, "Satellite Shows New Structure at N. Korean launch Pad," Japan Economic Newswire, 16 May 2001, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

1-3 November 2000

The United States and North Korea hold "expert-level" talks on the North Korean missile program in Kuala Lumpur. The talks cover the technical details of providing satellite launches and other compensation in return for North Korea halting its missile program.
—"Missile Deal to Open Way for Clinton's Trip to NK," *Korea Times*, 31 October 2000, www.koreatimes.co.kr; Kim Tu-hwan, "Reemerging DPRK Missile Issue," Yonhap News Agency, 22 February 2001, in "DPRK Missile

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Development Reemerges As Pending Issue," FBIS Document ID KPP20010222000105; Michael Gordon, "How Politics Sank Accord on Missiles With North Korea," *New York Times*, 6 March 2001, www.nytimes.com.

4 December 2000

Citing the 2000 South Korean *Defense White Paper*, Channel NewsAsia reports that North Korea has deployed 500 short-range missiles along its border with South Korea. [Note: The 2000 Defense White Paper does not reference the number of short-range missiles North Korea has deployed. The report is most likely due to a mistranslation of a section in the *Defense White Paper* that mentions the deployment of 500km range Scud-Cs.]

—"North Korea Deploys New Artillery Units Along Border," Channel NewsAsia, 4 December 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Republic of Korea Ministry of National Defense, *Defense White Paper*: 2000.

21 December 2000

US Secretary of State Madeline Albright says that there is a "genuine possibility" of the United States and North Korea reaching an agreement on North Korea's production and exports of missiles.

—Kyodo News Service, "Albright Sees 'Genuine Possibility' of Deal with Pyongyang," Japan Economic Newswire, 21 December 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

28 December 2000

President Clinton issues a statement that there is not enough time to conclude a missile agreement with North Korea before his term expires in January 2001, and therefore will not visit Pyongyang. Clinton also says that he believes Kim Jong Il is committed to reaching an agreement on ending the North Korean missile program. Sources say North Korea was unwilling to commit to specific details until Clinton arrived in Pyongyang. According to reports, Clinton was to visit Pyongyang 7-10 January 2001.

—John Lancaster, "Clinton Rules Out a Visit to North Korea," *Washington Post*, 29 December 2000, p. 26; Kyodo News Service, 29 December 2000, in "N. Korea Rejects Missile Accord Draft with U.S.: Sources," FBIS Document ID JPP20001229000032.

28 December 2000

North Korea conducts three or four engine tests for its Taepodong-2 missile at the Hwadae-kun [Musudan-ri] test facility, with the last test being conducted in mid-December 2001. According to a South Korean source, it will take some time for North Korea to conduct a test flight of the Taepodong-2.

—Park Tu Shik and Yu Yong Wŏn, "Mi, Puk Missile Kamshich'ejero," *Chosun Ilbo*, 6 February 2002, in KINDS, www.kinds.or.kr; Kim Min Sŏk, "Pukhan, Changnyŏn Such'arye Missile Shilhŏm," *Joongang Ilbo*, 6 February 2002, www.joins.com; "North Korea Working to Improve Missile's Range," *Joongang Ilbo*, 6 February 2002, http://english.joins.com; *Joongang Ilbo*, 7 February 2002, in "ROK DefMin Report: DPRK Conducts 'Numerous' Missile Tests in 'Past Few years'," FBIS Document ID KPP20020206000145; "Report: N. Korea Preparing New Long-Range Missile Test," *World Tribune.com*, 7 February 2002, www.worldtribune.com; Kyodo News Service, 6 February 2002, in "N. Korea Conducts Engine Tests for Long-Range Missile: Report," FBIS Document ID: JPP20020206000070; Kim Kwi Kŭn, "Puk, Changnyŏn Such'arye Missile Engine Shihŏm," Yonhap News Agency, 6 February 2002, www.yonhapnews.co.kr.

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1999

1999

North Korea delivers 10 tons of powdered aluminum to Syria. The aluminum originally came from China, and is delivered to the Centre des Etudes et de Recherche Scientifique (CERS, Scientific Studies and Research Center), the institute in charge of Syria's missile and chemical weapons programs.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 19.

1999

North Korea sells 20 Nodong engines to Iran. [Note: This could be the same shipment of 12 missile engines for Iran's new Shehab medium-range missiles that took place in November 1999 according to the *Washington Times*.]
—Andrew Koch and Steve Rodan, "Iran Begins Serial Production of Shehab 3," *Jane's Defence Weekly*, vol. 36, no. 15, 10 October 2001.

1999

North Korea begins efforts to acquire gyros and accelerometers for the Nodong-1 in order to reduce its circular error probability (CEP), which is estimated to be 2-4km.
—Kim Kwi Kŭn, "Puk Missile Kaebalmit Such'ulhyŏnhwang," Yonhap News Agency, 6 February 2002, www.yonhapnews.co.kr.

1999

North Korea deploys 240mm multiple rocket launchers (MRLs) and SA-7 portable surface-to-air missiles (SAMs) near the Demilitarized Zone (DMZ).
—Yonhap News Agency, 16 February 2002, in "ROK Article Views Status of DPRK Conventional Weapons Deployed Near Armistice Line," FBIS Document ID KPP20020217000005; Kim Ki Dong, "Bush Panghan Kŏktong'ŭi Hanbando/Puk Hyujŏnsŏnbaech'i Mugi'nŭn," Segye Ilbo, 18 February 2002, p. 2, in KINDS, www.kinds.or.kr.

1999-2001

The number of North Koreans possibly involved in missile development in Libya and Egypt has increased.
—"Up to 300 N. Koreans in Egypt for Missile Program, *World Tribune*, 21 June 2001, www.worldtribune.com; Up to 300 N. Koreans Aid Egypt's Missile Program," *Middle East Newsline*, vol. 3, no. 242, 21 June 2001, www.menewsline.com.

January 1999

Masaaki Nakayama, a member of Japan's ruling Liberal Democratic Party, meets with a senior North Korean official in Beijing in an attempt to reopen talks on various issues, including North Korea's missile program. The meeting is believed to be a follow-up to a December meeting in New York. However, Nakayama denies the story.
—"Japan Demands End to N. Korea Missile Tests," Korea Times, 21 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

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2 January 1999

Japan's Defense Agency issues a report on North Korea (99年 北韓 情勢) that says North Korea might have already deployed Nodong-1 missiles. The report, which is said to use US military intelligence sources, also says North Korea is constructing several ballistic missile facilities, including one at Chiha-ri, P'an'gyo-kun, Kangwŏn Province. The agency also says that North Korea has made rapid progress in the development of the Taepodong-1 [Paektusan-1].

—"N. Korea May Have Deployed Rodong-1," *Daily Yomiuri*, 3 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Hwang Yŏng Shik, "[Pukhan Taepodong Missile] 'Sae Chihabalsagiji Kŏnsŏl Kanŭngsŏng'," *Hankook Ilbo*, 4 January 1999, p. 1, in KINDS, www.kinds.or.kr; Lee Jun, "'Puk Nodong 1 Ho Shilchŏnbaech'i'; Il Pangwich'ŏng Chŏngsebogosŏ," *Chosun Ilbo*, 4 January 1999, p. 2, in KINDS, www.kinds.or.kr.

2 January 1999

Japan's NHK, quoting Japan Defense Agency sources, reports that North Korea has deployed Nodong medium-range ballistic missiles (MRBMs). However, NHK does not mention the number of missiles or where they have been deployed. According to the report, North Korea produced 20 Nodong-1 missiles in 1997, and 10 more during the first half of 1998. North Korea reportedly deployed some of them but also exported some to Iran and Pakistan.

—"Report: North Korea Deploying Medium-Range Missiles," Associated Press, 2 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, 2 January 1999, in "North Korea Deploying, Exporting Medium-Range Missiles – Japanese Report," BBC Worldwide Monitoring, 2 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "'Puk, Nodong 1 Ho Missile Iran-Pakistan'e Such'ul' NHK Podo, *Chosun Ilbo*, 3 January 1999, www.chosun.com.

3 January 1999

A spokesman for Iran's Defense Ministry denies a report by Japan's NHK television on 2 January that Iran has purchased missiles from North Korea. Iran's Foreign Ministry says the report is "unfounded" and that Iran has no missile cooperation with other countries.

—"Iran Denies Purchase of Ballistic Missile from DPRK," Xinhua News Agency, 3 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

4 January 1999

A Japanese Defense Agency official states that North Korea has deployed medium-range ballistic missiles (MRBMs) and is constructing three missile launch facilities, including one at Taepo-dong [Mususan-ri]. The official says the assessments are based upon US satellite imagery. [Note: The construction at Musudan-ri almost certainly consists of improvements or expansion of existing facilities.]

—Kyodo News Service, "N. Korea Deployed Medium-Range Missiles," Japan Economic Newswire, 4 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North Korea Has Deployed Medium-Range Missiles, Report Says," Deutsche Presse-Agentur, 4 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

5 January 1999

Japan's Chief Cabinet Secretary Nonaka Hiromu says that Japan has no conclusive information that North Korea

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has deployed Nodong-1 ballistic missiles on an operational basis.
—"Japan Yet to Verify NKorea Missile Report," Agence France Presse, 5 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Japan Yet to Verify North Korea's Missile Deployment," Deutsche Presse-Agentur, 5 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Japan Unable to Confirm Info on N. Korea's Missile Deployment," Jiji Press, 5 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service (Tokyo), 5 January 1999, in "Japan Yet To Confirm DPRK Missile Deployment," FBIS Document ID FTS19990104001379, 4 January 1999.

6 January 1999
The Japanese government confirms through various sources that North Korea is planning to deploy missiles at 10 different sites, including some sites still under construction.
—"North Korea Said To Deploy Missiles at More Than 10 Sites," Yonhap News Agency, 6 January 1999, in BBC Worldwide Monitoring, 6 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North Korea Building Missile Silos," Asahi News Service, 7 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Lee Jun, "Pukhan Missile Kiji 10 Kot Nŏm'ŏ," *Chosun Ilbo*, 6 January 1999, www.chosun.com.

7 January 1999
US and Japanese diplomatic sources say that North Korea has begun construction of at least five underground missile launch sites located near its borders with China and South Korea. The launch sites are reportedly more than 50m deep and capable of multiple firings.
—"Report: North Korea Building Underground Missile Launch Sites," Associated Press, 8 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Yonhap News Agency, 8 January 1999, in "Pyongyang Said to Be Building 'at Least Five' Underground Missile Sites," BBC Summary of World Broadcasts, 9 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "More Taepodong Sites Seen," *Daily Yomiuri*, 9 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

19 January 1999
US Pacific Command announces that the United States has yet to detect any signs that North Korea is preparing to launch another ballistic missile.
—"No Signs NK Preparing Missile Launch, Prueher Says," *Pacific Stars and Stripes,* 20 January 1999, p.1.

19 January 1999
Japan's Foreign Minster Masahiko Komura announces to the Diet that Japan is ready to resume dialogue with North Korea if Pyongyang takes steps to eliminate international concern over its nuclear and missile programs.
—"Japan Open to Talks with North Korea: Komura," *Japan Times*, 20 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

28 January 1999
The commander of UN Forces in Korea, US General John H. Tilelli, says there is no evidence that North Korea is preparing for another missile flight-test, and that North Korea's military posture has changed very little over the

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last two years. However, Tilelli says that North Korea's economic problems must have degraded their military readiness. In regard to the Nodong, Tilelli says that development is complete and the missile is now being produced, but he cannot confirm whether the missile has been deployed.
—"U.S. Commander: No Evidence of Increased N. Korean Threat," *Korea Times*, 29 January 2000, www.koreatimes.co.kr.

2 February 1999
CIA director George Tenet says that North Korea is developing a new generation of missiles that could deliver larger payloads to the continental United States.
—James Risen, "C.I.A. Sees a North Korean Missile Threat," *New York Times*, 3 February 1999, www.nytimes.com;"N. Korea Could Test Taepodong-2 as Early as 1999, U.S. Says," Jiji Press Ticker Service, 4 February 1999, in Lexis-Nexis Academic Universe, http://web.lexis.nexis.com.

3 February 1999
State Department Spokesman James Rubin says that North Korea could possibly test-launch its Taepodong-2 missile later this year. However, Rubin says that North Korea must overcome several important technical obstacles to deliver a small warhead with its Taepodong-1 (Paektusan-1) missile. Rubin also says that a North Korean missile test will worsen US-North Korean relations, and that the United States is cooperating with its allies to prevent North Korean missile development.
—Kyodo News Service, "N. Korea Could Test Taepodong-2 This Year, U.S. Says," Japan Economic Newswire, 4 February 1999, in Lexis-Nexis Academic Universe, http://web.lexis.nexis.com; "N. Korea Could Test Taepodong-2 as Early as 1999, U.S. Says," Jiji Press Ticker Service, 4 February 1999, in Lexis-Nexis Academic Universe, http://web.lexis.nexis.com; Kuk Ki Yŏn, "Puk, Taepodong 2 Ho palsashilŏm Kanŭngsŏng Ittda," *Segye Ilbo*, 5 February 1999, p. 1, in KINDS, www.kinds.or.kr; "Mi'gungmubudaebyŏnin 'Puk Taepodong 2 Ho Yŏnnae Shihŏmbalsa Kanŭng' Palgyŏ," *Kyunghyang Shinmun*, 5 February 199, p. 2, in KINDS, www.kinds.or.kr; Kim Sŏng Yong, "Taepodong 2 Ho Shihŏmbalsa Tan'gye," *Chosun Ilbo*, 4 February 1999, www.chosun.com.

4 February 1999
According to the *Chosun Ilbo*, the Korean Workers Party holds a Political Bureau meeting at which Kim Jong Il addresses the participants. Kim reportedly says, "The successful orbiting of our first man-made satellite has created a big stir in the world. The successful launching of 'Kwangmyŏngsŏng-1,' using our own strength and technology, in the face of the imperialists' schemes to isolate and ruin our country with an economic embargo on top of natural disasters hitting the country for several years in a row, represents a major victory of our version of socialism. Based on a firm faith in our strength and technology, we should produce even better satellites in the future."
—"Kim Jong Il's Address at 1999 Workers' Party Political Bureau Meeting," *Chosun Ilbo*, 24 June 2001, www.chosun.com.

4 February 1999
Japan's Chief Cabinet Secretary Hiromu Nonaka announces that Japan will not resume food assistance to North Korea until it guarantees cessation of missile launchs.

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—"Japan Not Ready to Resume Food Aid to North Korea, Official Says," Deutsche Presse-Agentur (Tokyo), 4 February 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

6 February 1999

North Korea's *Rodong Sinmun* says in a commentary that US criticisms of the North Korean "missile threat" are a "vicious challenge to North Korea and no less than a declaration of war. It is not the United States but North Korea that is exposed to [a] missile threat."

—"U.S. Fiction of 'Missile Threat' under Fire," Korean Central News Agency, 6 February 1999, www.kcna.co.jp; "Migug'ŭi <Missile Wihyŏp> Ron Pinan/Rodongshinmun," Korean Central News Agency, 6 February 1999, www.kcna.co.jp; Kim In Gu, "Puk 'Missile Munje Shibimalla'," *Chosun Ilbo*, 6 February 1999, www.chosun.com.

8 February 1999

The Korean Central News Agency announces that North Korea "will never give up" its "sovereign right" to build and launch missiles. [Note: There is no KCNA announcement in early February that North Korea "will never give up its sovereign right to build and launch missiles. Jim Lea mostly likely published this statement from an earlier report.]

—Jim Lea, "NK Says It Will Not Stop Missile Development," *Pacific Stars and Stripes*, 9 February 1999, p. 3.

9 February 1999

The *Washington Post* quotes Robert Einhorn, US deputy assistant secretary for nonproliferation at the State Department, as saying that the United States has yet to detect any signs that North Korea is getting ready to launch another missile.

—"World Brief," *Washington Post*, 9 February 1999, p. A10.

17 February 1999

Japan's Defense Agency says that North Korea has the technological capability to launch a long-range ballistic missile (LRBM) that could hit parts of the United States.

—"Japan Says NK Has Long-Range Missile Capability," *Pacific Stars and Stripes*, 18 February 1999, p. 3.

24 February 1999

US intelligence reports suggest that China may be assisting North Korea in its space and missile program through the transfer of dual-use satellite technology.

—Bill Gertz, "U.S. Eyes N. Korean Missiles for Signs of Aid," *Washington Times*, 24 February 1999, p. A3.

24 February 1999

The Japanese Defense Agency reports that the Nodong-1 and the Taepodong-1 (Paektusan-1) are both capable of carrying 500-1,000kg warheads, but that North Korea does not have the technology to miniaturize a nuclear bomb.

—*Mainichi Shimbun* (Tokyo), 24 February 1999, p. 1, in "DA: DPRK Missile Technology Insufficient," FBIS Document FTS19990225000868.

Late February 1999

US satellite imagery reportedly reveals the deployment of 10 or more Nodong missiles on mobile launchers in "Yong'ŏ-dong," Yanggang Province. This is the first report of the deployment of Nodong missiles in a particular

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location. According to reports, the US government notifies the Japanese government of this development, saying that the missiles are loaded on mobile launchers. [Note: The correct name of the location is "Yŏngjŏ-ri, Kimhyŏngjik-kun, Yanggang Province."]
—Kyodo News Service, "U.S. Confirms Missile Deployment in N. Korea: Daily," Japan Economic Newswire, 27 March 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North Korean Nodong Deployment Confirmed U.S. Spy Satellite Spots Missiles in Northern Area," *Daily Yomiuri*, 28 March 1999, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Report: NK Deploys Missiles That Could Hit Japan," *Korea Times*, 27 March 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Nam Yun Ho, "Pukhan Chunggŏri Missile Yong'ŏ-dongbaech'i Hwagin Yomiurishinmun," *Joongang Ilbo*, 29 March 1999, www.joins.com; "US Confirms Missile Deployment in North of N. Korea: Report," Agence France Presse, 28 March 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

1 March 1999
North Korea warns Japan that Japanese satellites in space are vulnerable to missile attack and could become targets, depending on Japan's attitude and actions toward North Korea. North Korea's *Rodong Sinmun* accuses Japan of having a "reactionary scheme for a preemptive strike against North Korea that has triggered a hatred of the Korean People's Army and people for Japan and hardened their pledge to revenge it." The commentary goes on to warn "Japan's militarists," that "if they dare attack, they will be reduced to crow feed."
—"Foolish Behavior," Korean Central News Agency, 1 March 1999, www.kcna.co.jp; "Pangwich'ŏngjanggwan Noroddaŭi Tobalbal'ŏnbinan/Rodongshinmun," Korean Central News Agency, 1 March 1999, www.kcna.co.jp; "North Korea Warns Japan Could Become Missile Target," Agence France Presse, 1 March 1999, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

6-7 March 1999
Japan holds secret, informal talks with North Korea in Singapore to discuss limits on North Korea's missile program.
—Kyodo News Service (Tokyo), 11 March 1999, in "Japan, DPRK Confer on Missiles, Normalization," FBIS Document ID FTS19990311000669, 11 March 1999.

8 March 1999
According to the *Washington Times*, the National Security Agency issues a report that claims China sold specialty steel to North Korea. [Note: This could be possibly maraging steel, which can be used for missiles.]
—Bill Gertz, "China Breaks Vow, Sends N. Korea Missile Materials," *Washington Times*, 6 January 2000, p. 1.

12 March 1999
According to Japanese sources, North Korean scientists and engineers working on the Taepodong missile program receive orders to "stand down" and halt preparations for a possible missile launch.
—Bungo Osawa, *Mainichi Shimbun* (Tokyo), 13 March 1999, p. 3, in "'Informed Source' Says DPRK Stands Down on Missile Alert," FBIS Document ID FTS19990313000938, 13 March 1999.

16 March 1999
The US State Department announces that the fourth round of bilateral missile talks with North Korea will take

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place on 29 March 1999 in Pyongyang.
—Lim Yun-Suk, "US and N. Korea to Tackle Missile Issue Following Deal over Nuclear Site," Agence France Presse, 17 March 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Park Tu Shik, "Mi-Puk, 29 Il Missile Hyŏpsang Chaegae," *Chosun Ilbo*, 17 March 1999, www.chosun.com.

19 March 1999
The Korean Central News Agency denies that North Korea has obtained missile technology from China.
—"KCNA on U.S. Ill-Intentioned False Propaganda," Korean Central News Agency, 19 March 1999, www.kcna.co.jp; Korean Central News Agency (Pyongyang), 19 March 1999, in "KCNA Rejects Rumors of Using Foreign Nuclear Technology," FBIS Document ID FTS19990319000514, 19 March 1999.

22 March 1999
Japanese Prime Minister Keizo Obuchi announces that Japan has made North Korea aware of the importance of the August 1998 missile launch and that he does not expect North Korea to test launch another missile.
—Kyodo News Service, "Obuchi Seeks N. Korea's Response to Japanese Concern," Japan Economic Newswire, 22 March 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Obuchi Sees No Immediate Danger of N. Korean Missile Launch," Jiji Press Ticker Service, 23 March 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

23 March 1999
The US State Department implements sanctions against three Egyptian firms for "transferring dual-use technology and missile components" to North Korea. The firms are Arab-British Dynamics, Helwan Machinery and Equipment Company, and Kader Factory for Developed Industries. Israeli and US intelligence sources reportedly say they believe Egypt has transferred technology acquired from participation in the Condor missile program. Egypt ended its participation in the program in the late 1980s under US pressure.
—Steve Rodan, "Israel, USA Claim Egyptian Missile Links with N Korea," *Jane's Defence Weekly*, vol. 33, no. 8, 23 February 2000.

25 March 1999
A South Korean government source says that North Korea has at least four missile factories and ten missile bases, and possibly as many as eight factories and twelve bases, with more under construction. The source says North Korea is currently building two more missile launch sites. The source also states that North Korea is capable of producing more than 100 Scud-type missiles annually.
—Lee Sung-yul, "North Korea Operates at Least 4 Missile Factories, 10 Launch Sites, Official Says," *Korea Herald*, 26 March 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "N. Korea Has at Least Four Missile Factories, 10 Bases: Report," Agence France Presse, 25 March 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Yonhap News Agency, 25 March 1999, in "ROK Official Comments on DPRK Missile Plants, Bases," FBIS Document ID FTS19990324002145; Yonhap News Agency, 25 March 1999, in "South Korean Official Comments on North Korean Missile Plants, Bases," BBC Worldwide Monitoring, 25 March 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

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29-30 March 1999
The fourth round of bilateral missile talks between the United States and North Korea are held in Pyongyang. The talks end without resolution, but the two sides agree to hold another round of talks.
—"DPRK on 4th DPRK-U.S. Missile Negotiations," Korean Central News Agency, 31 March 1999, www.kcna.co.jp; Lim Yun-Suk, "US and N. Korea to Hold Talks on Pyongyang's Missile Exports," Agence France Presse, 28 March 1999; "NK Earns $100 Million Annually from Missile Exports," *Korea Times*, 1 April 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kwŏn Tae Yŏl, "[Mi-Puk] Missile Hyŏpsang Pyongyang'sŏ O'nŭlkkaji Yŏllyŏ," *Chosun Ilbo*, 31 March 1999, www.chosun.com; Kwŏn Tae Yŏl, "Mi-Puk Missile Hoedam Sŏnggwaŏbs'ŏ," *Chosun Ilbo*, 29 March 1999, www.chosun.com.

31 March 1999
A North Korean Foreign Ministry official declares that North Korea has a "legitimate right of self-defense to develop, test, and produce missiles by its own efforts and defend the security" of North Korea. The official condemns the United States for using the North Korean missile threat as a justification for constructing a national missile defense system. The spokesman says that North Korea reaffirmed its position that it needs to be compensated for the foreign exchange it would lose from its missile exports before it can halt the sales.
—"DPRK on 4th DPRK-U.S. Missile Negotiations," Korean Central News Agency, 31 March 1999, www.kcna.co.jp; "Missile Such'ulchungji Tae Hyŏn'gŭmbosangjean/Oemusŏngdaebŏn'in 4 Ch'a Missile Hyŏpsang'e Ŏn'gŭp," Korean Central News Agency, 31 March 1999, www.kcna.co.jp; Korean Central News Agency (Pyongyang), 31 March 1999, in "DPRK Foreign Ministry Spokesman on US 'NMD' System," FBIS Document ID FTS19990331000440, 31 March 1999.

31 March 1999
At the close of the fourth round of US-North Korean missile talks, US Deputy Assistant Secretary of State Robert Einhorn announces that North Korea has offered to suspend its missile exports in exchange for cash compensation from the United States. Einhorn says that the North Korean proposal is unacceptable, but that the United States has offered to lift economic sanctions on North Korea in successive stages if North Korea pledges to cooperate on missile issues. Einhorn also warns North Korea that another missile launch will have negative consequences.
—"U.S. Team Ends Talks in N. Korea; North Resists Halt to Missile Exports," *Washington Post*, 1 April 1999, p. A16, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Jun Kwan-woo, "No Progress Made in N.K. Missile Talks," *Korea Herald*, 1 April 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Jun Kwan-woo, "Washington, Pyongyang Poles Apart in Missile Nonproliferation Talks," *Korea Herald*, 2 April 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Yonhap News Agency (Seoul), 31 March 1999, in "DPRK To Continue Development of Long-Range Missiles," FBIS Document ID FTS19990331000150, 31 March 1999.

31 March 1999
A senior US government official says that North Korea earns about $100 million per year from missile exports.
—"NK Earns $100 Million Annually from Missile Exports," *Korea Times*, 1 April 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

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April-May 1999
Iran reportedly sends some Chinese-made C-802 cruise missiles to North Korea to "improve the systems and precision" of the missiles. In February 2000, North Korea and Iran are reported to be jointly developing a copy of the missile. [Note: Iran reportedly first received the missiles from China in the mid-1990s.]
—Kyodo News Service, "N. Korea, Iran Jointly Developing Missile: Newspaper," Japan Economic Newswire, 16 February 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "N. Korea, Iran Jointly Develop Missile: Report," *Korea Times*, 17 February 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Chŏn Hyŏn Il, "Puk-Iran, Chungje Sunhang Missile Kongdong Kaeryang Yŏn'gye," *Segye Ilbo*, 18 February 2000, p. 2, in KINDS, www.kinds.or.kr; Shim Kyu Sŏn, "Puk-Iran Missile Kongdonggaebal Ch'ujin," *Donga Ilbo*, 18 February 2000, p. 2, in KINDS, www.kinds.or.kr; Kyodo News Service, 16 Feb 2000, in "Sankei Shimbun: DPRK, Iran Jointly Developing Missile," FBIS Document ID JPP20000217000006.

2 April 1999
Senior US officials say that North Korea has shipped "missiles, missile technology, and parts produced by its advanced ballistic program" to "countries such as Iran and Pakistan" and that North Korea earns about $100 million annually from missile sales.
—"Missile Exports Earn Pyongyang $770 Million a Year, Report Says," *South China Morning Post,* 3 April 1999, www.scmp.com.

14 April 1999
Pakistan conducts a flight test of the so-called "Ghauri-2" from a mobile launcher. Pakistan claims that the missile was produced at the Khan Research laboratory in Pakistan. However, the missile is believed to be a North Korean-produced Nodong, which would make this test the fourth flight test of the Nodong.
—Kathy Gannon, "Pakistan Tests New Missile Capable of Carrying Nuclear Warhead," Associated Press, 14 April 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Pakistan Test-Fires Long-Range Ballistic Missile in Response to India," Agence France Presse, 14 April 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "A Better Missile, Says Pakistan," *The Hindu*, 15 April 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 24.

5 May 1999
North Korea conducts a static engine test for the Taepodong-2.
—Chŏng Ho Wŏn, "Puk Shihŏmbalsa Missile Sagŏri'nŭn 4500-6700km Ch'ujŏng," *Segye Ilbo*, 12 August 1999, p. 1, in KINDS, www.kinds.or.kr; Kim Chong Ch'ŏl, "'Pukhan Missile Palsa Tŭkshilddajyŏ Kyŏljŏnghaltŭt' Ch'ŏn Kukchŏngwŏnjang," *Hankyoreh Shinmun*, 12 August 1999, p. 1, in KINDS, www.kinds.or.kr.

21 May 1999
North Korea conducts another static engine test for the Taepodong-2.
—Chŏng Ho Wŏn, "Puk Shihŏmbalsa Missile Sagŏri'nŭn 4500-6700km Ch'ujŏng," *Segye Ilbo*, 12 August 1999, p. 1, in KINDS, www.kinds.or.kr; Kim Chong Ch'ŏl, "'Pukhan Missile Palsa Tŭkshilddajyŏ Kyŏljŏnghaltŭt' Ch'ŏn Kukchŏngwŏnjang," *Hankyoreh Shinmun*, 12 August 1999, p. 1, in KINDS, www.kinds.or.kr.

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25-28 May 1999
US policy coordinator for North Korea William Perry visits North Korea and proposes a package deal from the United States, Japan, and South Korea to end economic sanctions, provide economic assistance, and establish diplomatic relations with North Korea in exchange for an end to North Korea's missile and nuclear programs.
—Son Key-young, "NK Rolls Out Red Carpet for Perry," *Korea Times*, 27 May 1999, www.koreatimes.co.kr; Son Key-young, "Perry Arrives in Seoul for Debriefing on North Korea Visit," *Korea Times*, 28 May 1999, www.koreatimes.co.kr; Son Key-young, "Perry Fails to Meet Kim Jong-il," *Korea Times*, 30 May 1999, www.koreatimes.co.kr; "U.S. President's Special Envoy Here," Korean Central News Agency, 25 May 1999, www.kcna.co.jp; "Reception for U.S. President's Special Envoy," Korean Central News Agency, 25 May 1999, www.kcna.co.jp; "Kim Yong Nam Meets U.S. President's Special Envoy," Korean Central News Agency, 26 May 1999, www.kcna.co.jp; "Personal Letter to Kim Jong Il," Korean Central News Agency, 26 May 1999, www.kcna.co.jp; "Talks between Kang Sok Ju and William Perry," Korean Central News Agency, 28 May 1999, www.kcna.co.jp; "Reception by U.S. President's Special Envoy," Korean Central News Agency, 28 May 1999, www.kcna.co.jp; "U.S. President's Special Envoy and His Party Leave," Korean Central News Agency, 28 May 1999, www.kcna.co.jp.

29-30 May 1999
North Korea begins preparations for another missile test immediately following William Perry's departure from North Korea.
—Park Tu Shik, "[Puk Missile Shilhŏmjunbi] 'Tŏ K'ŭn Tanggŭn Naera' Sŏbang'e Message," *Chosun Ilbo*, 18 June 1999, www.chosun.com.

Mid 1999
US Secretary of Defense William Cohen raises the issue of Egyptian-North Korean missile cooperation during his visit to Cairo. According to *Jane's Defence Weekly*, sources in US and Israeli intelligence agencies believe Egyptian firms are sending missile technology from the United States and other Western countries to North Korea.
—Steve Rodan, "Israel, USA Claim Egyptian Missile Links with N. Korea," *Jane's Defence Weekly*, vol. 33, no. 8, 23 February 2000.

June 1999
The Defense Intelligence Agency issues a report that claims North Korea has obtained accelerometers, gyroscopes, and "special high-tech machinery" from Chinese government-owned companies. The Pentagon believes that the transferred technology contains material of US-origin. The arms sales are believed to be in response to the NATO bombing of the Chinese embassy in Belgrade.
—Bill Gertz, "Missile Parts Sent to North Korea by Chinese companies; Response to Embassy Bombing Seen," *Washington Times*, 20 July 1999, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

11 June 1999
Speaking at an academic conference, former South Korean Defense Minister Lee Jong Gu reveals that North Korea has deployed 20 surface-to-air missiles (SAMs) with a range of 250km that can be used in a surface-to-surface role along the Demilitarized Zone (DMZ). Lee also says that North Korean FROG-5 and FROG-7 rockets deployed along

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the DMZ can be equipped with chemical warheads.
—Yonhap News Agency (Seoul), 11 June 1999, in "Former ROK Minister Comments on DPRK Missile Deployment," FBIS Document ID FTS19990611000729, 11 June 1999.

15 June 1999
A Japanese government official discloses that North Korea is preparing for another Taepodong missile test "around July or August" by expanding its launch facilities. The report is said to be the result of US satellite imagery and other South Korean government information. Japanese Chief Cabinet Secretary Hiromu Nonaka denies reports that Japan has information that a North Korean launch is imminent.
—*Nihon Keizai Shimbun* (Tokyo), 16 June 1999, in "Sources: DPRK Preparing for Missile Launch," FBIS Document FTS19990615001749; Kyodo News Service (Tokyo), 16 June 1999, in "Nonaka Says DPRK Missile Launch Not 'Imminent'," FBIS Document ID FTS19990616000062; Park Chŏng Hun, "[Ilshinmun] 'Puk Taepodong Missile 7-8 Wŏl Palsashihŏm'," *Chosun Ilbo*, 16 June 1999, www.chosun.com.

17 June 1999
US intelligence sources say that North Korea is "refurbishing its launch pad" and making preparations for another missile launch later this summer. The launch is expected to be a flight-test for the Taepodong-2.
—Elizabeth Becker, "U.S. Says Photos Show North Korea Preparing for Missile," *New York Times*, 18 June 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

18 June 1999
Ch'ŏn Yong T'aek, director of South Korea's National Intelligence Service, tells the National Assembly that North Korea has apparently been preparing to launch a missile, but he does not know when the launch will occur. However, Ch'ŏn says that analysts believe it will take two or three months for North Korea to complete the launch preparations.
—Kim In Ku, "[Puk Missile/Chŏngbubunsŏk] 'Taepodong' Ch'aryang Umjig'im Hwalbal," *Chosun Ilbo*, 18 June 1999, www.chosun.com.

22 June 1999
North Korea leases satellite transponders from Thai company Shinawatra Satellite Public Co. Ltd. for the relay of domestic digital television signals. The company has similar contracts with India, Vietnam, and Myanmar, and says the transponder on the Thaicom 3 communications satellite is only capable of broadcasting television or radio signals. A spokesman for the firm later says, "There is no Global Positioning System (GPS) on any of our satellites." Shinawatra will monitor use of the transponders, and unauthorized use would result in the cancellation of the lease. South Korea and Japan are concerned that North Korea could use the transponders to locate the impact point of its ballistic missiles during tests. However, analysts believe that the transponders would need to be modified for military purposes, and it is unclear whether North Korea has the ability to modify them.
—*Matichon* (Bangkok), 23 June 1999, pp. 1, 18, in "Thaicom Transponders Reported Leased to North Korea," FBIS Document ID 19990623000735; "Thai Firm denies It Supplied N. Korea with Missile Tracking System," Agence France Presse, 13 July 1999.

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23-24 June 1999
Charles Kartman, US envoy for Korean affairs, meets with North Korean Vice Foreign Minister Kim Gye Gwan in Beijing. They discuss the possible date for resuming missile talks.
—Jun Kwan-woo, "U.S. North Korea May Resume Talks in Missile Nonproliferation in July," *Korea Herald*, 28 June 1999, www.koreaherald.co.kr; "Puk-Mi Naeil Beijing'sŏ Kowigŭphoedam," *Chosun Ilbo*, 22 June 1999, www.chosun.com.

24 June 1999
Speaking at the Heritage Foundation, US Assistant Secretary of State Stanley Roth claims that North Korea will suffer "very serious consequences" if it launches another ballistic missile.
—George Gedda, "U.S. Warns North Korea against New Missile Test," Associated Press, 24 June 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

25 June 1999
India detains the North Korean ship *Ku Wŏl San* at Kandla under suspicions that it was delivering missile components to Pakistan. A week later, after investigating the cargo, Indian intelligence sources confirm that the ship was carrying 148 crates with machinery and blueprints for the 300km-range Hwasŏng-5 (Scud-B) and the 500km-range Hwasŏng-6 ballistic missiles. The seized cargo includes heavy-duty presses that are used for flattening and milling high-grade steel; a plate bending machine with three rollers capable of rolling 16-mm thick sheets; "torroidal" air bottles, which are used to guide a warhead once it has separates from the missile; and two sets of "theodolites," which are used to survey a launch site. North Korea maintains that the ship was not bound for Pakistan, and that North Korea would not undermine the security of India. India believes that Pakistan is acquiring missile technology from both North Korea and China as part of a "fail-safe" program of having two separate teams simultaneously developing North Korean liquid-fuel missiles and Chinese solid-fuel missiles.
—Mihir Mistry, *Times of India*, 5 July 1999, www.timesofindia.com; Manoj Joshi, "India Refuses To Let N. Korea Off the Hook" *Times of India*, 31 July 1999, www.timesofindia.com; Douglass Davis, "Report: Libyan Missiles Can Hit Israel," *Jerusalem Post*, 25 September 2000, p. 5, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

26 June 1999
The United States, Japan, and South Korea agree to cooperate to avert a North Korean missile launch. The three countries pledge to push North Korea to respond to the proposals made by US policy coordinator for North Korea William Perry in May 1999.
—"Japan, S. Korea, U.S. to Cooperate on N. Korean Missile," Japan Economic Newswire, 26 June 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

26 June 1999
The *Rodong Sinmun* publishes a commentary that says the production and deployment of missiles are the sovereign rights of North Korea.
—"Papers on U.S. Racket about 'Missile Threats'," Korean Central News Agency, 26 June 1999, www.kcna.co.jp; "Shinmundŭl Migug'ŭi <Missile Wihyŏp> Sodong'ŭl Ronp'yŏng," Korean Central News Agency, 26 June 1999,

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www.kcna.co.jp; "[Pukhan] 'Missile Kaebal Paech'i'nŭn Chajugwŏn Munje'," *Chosun Ilbo*, 25 June 1999, www.chosun.com.

28 June 1999

A US Defense Intelligence Agency report says that North Korea has recently moved a Taepodong-2 missile to a launch site on the east coast.

—Bill Gertz and Rowan Scarborough, "Inside the Ring," *Washington Times*, 16 July 1999, p. A7, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Taepodong 2 Ho Palsagijiro Olmgyŏ," *Chosun Ilbo*, 17 July 1999, www.chosun.com.

28 June 1999

South Korea reveals that a fifth round of US-North Korean missile nonproliferation talks could begin as early as July 1999. US special envoy Charles Kartman proposed the talks during a mid-June 1999 meeting with North Korean Vice Foreign Minister Kim Gye Gwan.

—Jun Kwan-woo, "U.S. North Korea May Resume Talks in Missile Nonproliferation in July," *Korea Herald*, 28 June 1999, www.koreaherald.co.kr.

28 June 1999

North Korea is reportedly developing the "Taepodong-3," which would be capable of striking almost all of the United States. [Note: This is likely a three-stage configuration of the so-called "Taepodong-2."]

—"North Korea," *Aviation Week and Space Technology*, vol. 150, no. 26, 28 June 1999, p. 20, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, "N. Korea Developing Teapodong-3 Missile: U.S. Magazine," Japan Economic Newswire, 3 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Puk, Taepodong 3 Ho Missile Kaebalchung," *Chosun Ilbo*, 3 July 1999, www.chosun.com.

29 June 1999

Japanese Foreign Minister Masahiko Komura reports to the Japanese Diet that North Korea has deployed at least 10 Nodong missiles.

—"Report: North Korea has Deployed At Least 10 Rodong Missiles," Associated Press, 30 June 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

30 June 1999

US Deputy Assistant Defense Secretary for Asia Kurt Campbell announces that the United States is trying to prevent a North Korean test of the Taepodong (Paektusan-1) missile and is using "intensive diplomacy...to dissuade North Korea from taking an action which will have very real consequences for our ability and our desire to engage North Korea."

—Robert Burns, "Pentagon Official Says North Korea Preparing for a Missile Launch," Associated Press, 30 June 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Bill Gertz, "N. Korea Might Test Missile with Long-Range Capability; U.S. Trying to Stop with Diplomacy, Pentagon Official Says," *Washington Times*, 1 July 1999, p.A3, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

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30 June 1999
South Korea military and intelligence sources say that North Korea is constructing three large-scale "underground tunnel" facilities for the transportation of missiles. The facilities are reportedly located in Yongnim-ŭp, Yongnim-kun, Changang Province; "Yŏngjŏ-dong," Pŏptong-kun, Kangwŏn Province; and Sangnam-ri, Hŏch'ŏn-kun, South Hamgyŏng Province. [Note: The actual name of the location "Yŏngjŏ-dong" is "Yŏngjŏ-ri." There are two locations in North Korea called "Yŏngjŏ-ri".
—The other Yŏngjŏ-ri is in Kimhyŏngjik-kun, Yanggang Province. This is the first report of missile facility construction at Yŏngjŏ-ri, Pŏptong-kun, Kangwŏn Province. Since this report has not been substantiated, and there is no advantage to placing an intermediate-range missile facility in Pŏptong-kun, Kangwŏn Province, the construction site is probably at Yŏngjŏ-ri, Kimhyŏngjik-kun, Yanggang Province.] "[Pukhan] Yongnim Tŭng 3 Kossŏ Missile Kaengdogongsa," *Chosun Ilbo*, 30 June 1999, www.chosun.com; *Chosun Ilbo*, 30 June 1999, in "DPRK Allegedly Constructing Missile Pit Sites for Launch," FBIS Document ID: FTS19990701001996, 6 July 1999.

July 1999
North Korea ships specialty steel with missile applications to Egypt. The steel is shipped through a Chinese firm in Hong Kong.
—Bill Gertz, "North Korea Continues To Develop Missiles; Sells Technology to Rogue Nations," *Washington Times*, 28 October 1999, p. A1; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 26.

3 July 1999
After concluding a visit to North Korea, former UN Undersecretary General Yasushi Akashi states that North Korean officials informed him that North Korea is "ready" to launch a rocket but did not say if or when it would be launched. He says North Korea believes that if China and Japan can launch satellites, it should have the same right.
—Nicholas D. Kristof, "A Report That North Korea Has Plans to Test-Launch a Missile," *New York Times*, 4 July 1999, p.11, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Puk Missile Palsa Chunbi Wallyo," *Chosun Ilbo*, 3 July 1999, www.chosun.com; Kyodo News Service, "N. Korea Developing Teapodong-3 Missile: U.S. Magazine," Japan Economic Newswire, 3 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

3 July 1999
During President Kim Dae Jung's trip to the United States, the United States tells South Korea that Pyongyang might suspend its plan to test launch a ballistic missile.
—"NK Might Suspend Firing Missile," *Korea Times*, 4 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

6 July 1999
Japanese Foreign Minister Masahiko Komura announces that a major focus of Japanese Prime Minister Keizo Obuchi's trip to mainland Asia in early July 1999 will be to encourage countries including China to press North Korea not to conduct missile tests. Japan indicates that it will take diplomatic action including possible suspension of $1 billion in funds for the Korean Peninsula Energy Development Organisation (KEDO) if North Korea launches a missile.

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—"Obuchi to Discuss N. Korea Missile During China Trip," Japan Economic Newswire, 6 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

6 July 1999
South Korean President Kim Dae Jung says that if North Korea tests a missile, South Korea will "take considerable countermeasures" against it. Kim indicates that these countermeasures do not include ending South Korea's commitment to Korean Peninsula Energy Development Organisation (KEDO) or the "sunshine policy" of engaging North Korea.
—Son Key-young, "N. Korea Missile Test Will Not Derail Engagement Policy: Kim," *Korea Times* (Seoul), 7 July 1999, www.koreatimes.co.kr.

6 July 1999
Pentagon Spokesman Kenneth Bacon announces that North Korea has shown no signs of slowing or stopping its preparations for a missile launch despite repeated warnings from the United States, Japan, and South Korea.
—Shigemi Sato, "US Missile-Tracking Ships Leave Japan Amid Fears of North Korea Test," Agence France Presse, 8 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

6 July 1999
A South Korean government source reveals that North Korea is building an underground missile base at "Yŏngjo-dong," Kimhyŏngjik-kun, Yanggang Province, about 20km from the Chinese border. The source says the launch areas are facing towards China, which would make them difficult for South Korean or US military forces to strike. The base construction is said to be about 70% complete and has about 10 launch areas that are well over 20m long, which is reportedly large enough for the Nodong, Taepodong-1, and Taepodong-2 missiles. The source says North Korea has about 10 missile bases, with three more underground currently under construction. [Note: The government source appears to be in the Defense Ministry. The *Segye Ilbo* reports the same information from a Defense Ministry official on 7 July.]
—Yu Yong Wŏn, "Pukhan Chiha Missile Kiji Chunggukkukkyŏng Pugŭn'e Kŏnsŏl," *Chosun Ilbo*, 7 July 1999, p. 1, in KINDS, www.kinds.or.kr; Yu Yong Wŏn, "Pukhan, Chunggukkukkyŏngbugŭn'e Chiha Missile Kiji Kŏnsŏl," *Chosun Ilbo*, 7 July 1999, www.chosun.com; Kim Yŏng Bŏn, "Puk, Chunggukkyŏng'e Missile Kiji Kŏnsŏlchung," *Munhwa Ilbo*, 7 July 1999, p. 5, in KINDS, www.kinds.or.kr; "N. Korea Building New Missile Facility Near Border With China," *Korea Times*, 7 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Report: North Korea Building New Missile Facility," Associated Press, 7 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Han Kyŏng Hun, "Pukhan Chunggug'in'gŭn Chiha Missile Kiji Kŏnsŏl," *Segye Ilbo*, 8 July 1999, p. 2, in KINDS, www.kinds.or.kr.

7 July 1999
A South Korean presidential spokesman confirms reports that North Korea is building a missile base at "Yŏngjŏ-dong," Kimhyŏngjik-kun, Yanggang Province, near the Chinese border. [Note: The location is actually called "Yŏngjŏ-ri."]
—Kevin Sullivan and Mary Jordan, "North Korea Building New Missile Site, South Says," *Washington Post*, 7 July

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1999, p. A17, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Puk, Chunggukkukkyŏng'e Missile Kiji Kŏnsŏljung," *Kukmin Ilbo*, 9 July 1999, p. 2, in KINDS, www.kinds.or.kr.

7-8 July 1999

Two US missile-tracking ships leave Japanese ports. On 7 July, the *USS Invincible*, an ocean surveillance ship equipped with a radar system for tracking the trajectories of ballistic missiles, leaves from a US base on the Japanese island of Kyushu. On 8 July, the *USS Observation Island*, also equipped with a special radar system, departs from a US naval base in Tokyo Bay. A spokesman at the Yokosuka base refused to talk about the specifics of the mission.

—Shigemi Sato, "US Missile-Tracking Ships Leave Japan Amid Fears of North Korea Test," Agence France Presse, 8 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

8 July 1999

South Korean Defense Minister Cho Sŏng T'ae confirms that North Korea is building an underground facility at "Yŏngjŏ-dong," which will most likely be used to store and launch ballistic missiles. [Note: The name of the location is actually "Yŏngjŏ-ri."]

—Kyodo News Service, "South Defense Minister Says North Tunnel for Missile Use," Japan Economic Newswire, 8 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "N. Korea Missile Base Near Chinese Border: South Korean Defense Chief," Agence France Presse, 8 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

8 July 1999

The *Segye Ilbo* reports that North Korea has 10 missile bases, including bases at Chunggangjin and Paeg'un. North Korea is also reportedly building missile bases at Yongnim-kun, Chagang Province; at Yŏngjŏ-dong [Yŏngjŏ-ri], Kimhyŏngjik-kun, Yanggang Province, and at Sangnam-ri, Hŏch'ŏn-kun, South Hamgyŏng Province.

—Kim Kyŏng Hun, "Pukhan Missile Ŏdi'e Sumgyŏ Twŏtna/Chung Chŏpkyŏngjiyŏk Tŭng 10 Kos'e Palsagiji," *Segye Ilbo*, 8 July 1999, in KINDS, www.kinds.or.kr.

8 July 1999

Two Japanese legislators say that North Korea uses Japanese-made components and machinery to produce missiles. The legislators claim that up to 40% of the semiconductors used in the Taepodong-1 were made in Japan, and that "high-tech welding machines" used in developing North Korea's missiles were also made in Japan. The lawmakers cite a reliable South Korean source for this information.

—Kyodo News Service, "Japanese Parts Used for N. Korean Missile: Lawmakers," Japan Economic Newswire, 8 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

9 July 1999

North Korea signs a contract to lease space on the Thai company Shinawatra's Thaicom 1A satellite for radio and television broadcasting. Some analysts in Japan and South Korea are concerned that the satellites can be used to monitor the impact point during a missile flight-test.

—THAICOM News Archives, "Thaicom Strictly Commercial," 13 July 1999.

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10 July 1999
US Senator Robert Toricelli travels to North Korea and meets with North Korean Vice Minister for Foreign Affairs Kim Gye Gwan to discuss the possible forthcoming missile launch. After the meeting, Toricelli says, "Despite the illogic and enormous setback that I believe will ensue, the North Koreans may indeed proceed with the firing of a multi-stage rocket this summer." He says that a North Korean missile launch would have "extraordinary consequences" that would alter North Korea's relations with the United States, Japan, and possibly China.
—Jim Lea, "Report: NK to Launch a Missile," *Pacific Stars and Stripes*, 13 July 1999, p. 1.

10 July 1999
According to unnamed South Korean intelligence officials, North Korea will likely launch a Taepodong-2 missile in late August 1999, ostensibly to put a satellite into orbit. The launch site will likely be Musudan-ri, the same location that North Korea used to attempt a satellite launch in August 1998. The height of the launch tower at Musudan-ri has been increased significantly, indicating that the missile to be launched could have a longer range. North Korea has leased Thailand's Thaicom 1A satellite with a global-positioning system and the capability to locate missile impacts. The United States has deployed two ships, the *Observation Island* and the *Invincible*, in the region to track anticipated North Korean and Chinese ballistic missile tests. Japanese military officials have indicated that a North Korean missile launch in August is "unlikely."
—Jim Lea, "Report: NK to Launch a Missile," *Pacific Stars and Stripes*, 13 July 1999, p. 1.

12 July 1999
US Senator Robert Toricelli says it appears North Korea will test launch a ballistic missile within the next two months.
—Charles Hutzler, "North Korea Likley to Fire Test-Missile – US Senator," AAP News, 13 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kim Sŏng Yong, "Puk Missile 2 Kaewŏllae Shihŏmbalsa," *Chosun Ilbo*, 12 July 1999, www.chosun.com.

13 July 1999
Shinawatra Satellite Public Co. Ltd. denies that any of its satellite transponders could be used for military purposes. A company spokesman says that the concern over whether North Korea might use the transponder to track ballistic missiles is unfounded. Instead, the spokesman claims that no Shinawatra satellites have global positioning system (GPS) capabilities. The spokesman clarifies that North Korea would be using the transponders solely for television and radio broadcasting.
—"Thai Firm Denies it Supplied N. Korea with Missile Tracking System" Agence France Presse, 13 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Shinawatra Denies Military Satellite Deal with N. Korea," *Business Day* (Thailand), 14 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Supalak Ganjanakhundee, "Thai Satellite Providing TV Transimission for N. Korea," Japan Economic Newswire, 13 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

15 July 1999
A North Korean Foreign Ministry spokesman says that North Korea has the sovereign right to launch satellites.
—"DPRK FM Spokesman Clarifies Its Stand on Satellite Launch," Korean Central News Agency, 15 July 1999,

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www.kcna.co.jp; "Wisŏngbalsanŭn Chajujŏkchu'gwŏn'gukka'ŭi Happŏpchŏkkwŏllimunje/Oemusŏng Taebyŏn'in," Korean Central News Agency, 15 July 1999, www.kcna.co.jp; "North Korea Claims Right to Launch Scientific Satellites," Agence France Presse, 15 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

16 July 1999
South Korea's National Security Council says that North Korea has been preparing for a missile launch, but gives no details about the preparations, or when a launch might take place.
—"North Korea Preparing to Test Long-Range Missile, Says Seoul," Deutsche Presse-Agentur, 16 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

17 July 1999
Norata Hosei, head of Japan's Defense Agency, says the Taepodong-2 has a range of 6,000km, and that some experts believe the Taepodong-3 is already under development. The Taepodong-3 is expected to have a range of at least 8,000km.
—"[Il Pang'wich'ŏngjanggwan] 'Puk Taepodong 3 Ho Missile Kaebalchung'," *Hankook Ilbo*, 19 July 1999, p. 30, in KINDS, www.kinds.or.kr; "Puk, Taepodong 3 Ho Missile Kaebal," *Chosun Ilbo*, 17 July 1999, www.chosun.com.

20 July 1999
A South Korean military source says that the first stage of North Korea's Taepodong-2, which is still under development, is similar to that of China's CSS-3 (Dong Feng-4); the South Koreans believe the engine will use a fuel mixture made of nitrogen and hydrogen. The second stage is expected to be a Nodong missile.
—Kyodo news Service, "Taepodong-2 Missile Similar to China's CSS-3 Rocket," Japan Economic Newswire, 20 July 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com;

20 July 1999
Responding to a 20 July report in the *Washington Times*, Secretary of State Madeleine Albright says that the United States is "concerned by reports that North Korea may be seeking from China materials such as specialty steel for its missile program." Yu Shining, a spokesman for the Chinese Embassy, when asked to comment on the reported Chinese transfer of missile components to North Korea, refused to comment on specifics but did claim that China has "always abided by our commitments undertaken to abide by the guidelines and parameters of the Missile Technology Control Regime (MTCR)."
—Bill Gertz, "Technology Transfers a Concern, U.S. Says; China Denies Violating Missile Controls," *Washington Times*, 21 July 1999, p. A4, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

22 July 1999
South Korean officials announce that the United States and North Korea would hold bilateral talks prior to the four-party talks scheduled to begin on 4 August 1999 in Geneva. The US special envoy for Korean issues, Charles Kartman, will meet with North Korean Vice Foreign Minister Kim Gye Gwan to discourage North Korea from conducting any ballistic missile tests.
—Son Key-young, "NK, US to Hold Talks on Missile Threat in Geneva," *Korea Times*, 22 July 1999,

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www.koreatimes.co.kr; "Missile Issue to Dominate Preliminaries of 4-Way Talks," *Korea Herald*, 22 July 1999, www.koreaherald.co.kr.

22 July 1999

Stephen Bosworth, US ambassador to South Korea, tells a South Korean audience that "North Korea is a sovereign state and retains a right to test its missiles, but the North should give up its (missile) sovereignty to peacefully coexist with the world community.' Bosworth reportedly made the comment in response to a reporter's question concerning North Korea's right to launch missiles. Bosworth's comments came under attack from South Korean analysts. The US Embassy in Seoul clarified that Bosworth's comments were misunderstood, and denied that the United States believes North Korea has the right to launch missiles. South Korea is afraid that Bosworth's comments may lead North Korea to believe that Seoul and Washington have policy differences on North Korea's anticipated missile test.

—Son Key-young, "Seoul to Refer NK Missile Launch to Security Council," *Korea Times*, 23 July 1999, www.koreatimes.co.kr; Jun Kwan-woo, "U.S. Envoy Urges N.K. to Give Up 'Sovereign Right' to Test Missile," *Korea Herald*, 23 July 1999, www.koreaherald.co.kr; Jun Kwan-woo, "U.S. Envoy Under Fire For Remarks On 'Sovereign' N.K's Missile Rights," *Korea Herald*, 27 July 1999, www.koreaherald.co.kr.

3 August 1999

The *Sankei Shimbun* reports that North Korea is improving and expanding the flight-test facility at Musudan-ri. In March 1999, North Korea began construction of two structures to store and load fuel and oxidizing agents, and is also currently building a pipeline connecting the structures to the launch pad. One pipeline reaches the launch pad and the other is about half complete. The launch tower has also reportedly extended to about 33 meters, which is said to be sufficient to launch the still untested Taepodong-2. A Japanese government official said that US reconnaissance satellites had confirmed the report. Japanese government officials are concerned that if North Korea builds permanent facilities and pipelines, reconnaissance satellites will be unable to determine if the fueling of a missile is underway.

—Kyodo News Service, 3 August 1999, in "2 Facilities Seen at N. Korean Missile Base: Paper," Japan Economic Newswire, 2 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Two Facilities Seen at North Korea Missile Base, Newspaper Says," Deutsche Presse-Agentur, 3 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "N. Korea Building Pipelines at Base," *Daily Yomiuri*, 4 August 1999, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, 3 August 1999, in "Fuel Storage, Injection Facilities Reportedly Seen at North Korean Missile Base," BBC Worldwide Monitoring, 3 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Associated Press, "Pyongyang Upgrading Missile-Launch Base" *South China Morning Post*, 3 August 1999, www.scmp.com.

3 August 1999

A North Korean Foreign Ministry spokesman says it is North Korea's sovereign right to test-fire satellites and missiles.

—"DPRK FM Spokesman Warns U.S. of Unpredictable Consequences," Korean Central News Agency, 3 August 1999, www.kcna.co.jp; "Wisŏnghwaltong Kŏl'go Wihyŏpkonggalhanŭn Coehn Pal'ŏn Pinan/Chosŏnoemusŏngdaebyŏn'in," Korean Central News Agency, 3 August 1999, www.kcna.co.jp; "North Korea

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Says It May Fire Missile, as Well as Satellite," Associated Press, 3 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Pyongyang Defends Satellite Launch as Sovereign Right," Xinhua News Agency, 3 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

10 August 1999

US Defense Department spokesman Kenneth Bacon says that North Korea is unlikely to conduct a missile flight-test within the next few weeks.

—Kyodo News Service, "N. Korean Missile Test Unlikely in Next Few Weeks: U.S.," Japan Economic Newswire, 10 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

11 August 1999

Ch'ŏn Yong T'aek, director of South Korea's National Intelligence Service, tells the National Assembly that North Korea has completed the preparations to launch the still untested Taepodong-2, which has an estimated range of 4,500km to 6,700km. However, Ch'ŏn says it takes about three-four weeks to launch the missile after the political decision is made to do so. Ch'ŏn also says that pipeline construction leading from the structures (believed to be propellant and oxidizer storage and fueling facilities) to the launch pad has been completed.

—Jun Kwan-Woo, "N. Korea Ready to Launch Missile with 6,700-Kilometre Range," Agence France Presse, 11 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Chŏng Ho Wŏn, "Puk Shihŏmbalsa Missile Sagŏri'nŭn 4500-6700km Ch'ujŏng," *Segye Ilbo*, 12 August 1999, p. 1, in KINDS, www.kinds.or.kr; Kim Chong Ch'ŏl, "'Pukhan Missile Palsa Tŭkshilddajyŏ Kyŏljŏnghaltŭt' Ch'ŏn Kukchŏngwŏnjang," *Hankyoreh Shinmun*, 12 August 1999, p. 1, in KINDS, www.kinds.or.kr; Kim Ho Kyŏng, "Puk Taepodong 2 Ho Palsajunbi Wallyo-Ch'ŏn'gukchŏngwŏnjang Pogo," *Kukmin Ilbo*, 12 August 1999, p. 1, in KINDS, www.kinds.or.kr; Lee Ji Un and Chu Hyŏn Jin, "Puk Missile Palsa Swipke Mothalgŏt," *Taehan Maeil*, 12 August 1999, p. 2, in KINDS, www.kinds.or.kr; Kim Ch'a Su, "Ch'ŏn'gukchŏngwŏnjang 'Puk Missile Palsajunbi Imi Kkŭtnaetda'," *Donga Ilbo*, 12 August 1999, p. 1, in KINDS, www.kinds.or.kr.

12 August 1999

Japan and South Korea threaten North Korea with punitive economic sanctions if it proceeds with a ballistic missile launch. The Japanese Diet submits legislation that would suspend cash remittances from ethnic Koreans and pro-Pyongyang groups in Japan to North Korea. North Korea earns an estimated $600 million annually, or more than its total export revenues, in the form of cash remittances from Japan. South Korean Minister of Foreign Affairs and Trade Hong Sun Yŏng has announced that South Korea would halt or reduce all trade with North Korea in the event of a North Korean ballistic missile test.

—Hae Won Choi, "North Korea Faces Pressure Over Missile," *Wall Street Journal*, 12 August 1999, p. A17.

Mid August 1999

North Korea conducts a live fire exercise with three Styx ship-to-ship missiles.

—Chŏng Byŏng Sŏn, "Puk, Styx Missile Shilchebalsahullyŏn," *Chosun Ilbo*, 3 September 1999, www.chosun.com.

17 August 1999

US Defense Department spokesman Kenneth Bacon says the United States and North Korea will meet later this

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month to discuss North Korea's suspected plan to test-launch a ballistic missile.
—Kyodo News Service, "U.S., N. Korea to Resume Missile Talks at End of Aug.," Japan Economic Newswire, 17 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Mi-Puk Missile Hoedam Idal Chaegae," *Chosun Ilbo*, 18 August 1999, www.chosun.com.

18 August 1999
A North Korean Foreign Ministry spokesman says that Pyongyang has a peaceful space program and a missile program for defense, and that North Korea has the sovereign right to have both.
—"FM Spokesman on Satellite Launch and Missile Development," Korean Central News Agency, 18 August 1999, www.kcna.co.jp; "Uri'ŭi Uryŏhaeso'ŭido'issŭmyŏn Missile Hyŏp'ŭiyong'ŭi' itta/Chosŏn'oemusŏngdaebyŏn'in," Korean Central News Agency, 18 August 1999, www.kcna.co.jp; "Puk 'Taemi Missile Hyŏpsang Yong'ŭi'," *Chosun Ilbo*, 19 August 1999, www.chosun.com.

23 August 1999
South Korean Foreign Affairs and Trade Minister Hong Sun Yŏng meets with his Japanese counterpart Masahiko Komura in Japan to discuss joint steps to be taken by the two countries if North Korea test-fires its new Taepodong-2 missile.
—C.W. Lim, "South Korea Launches Diplomatic Campaign Over North Korean Missile," Agence France Presse (Seoul), 22 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Shin Yong-bae, "Officials Expect Seoul's 3-Pronged Missile Diplomacy to Bear Fruit," *Korea Herald*, 25 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Cho Nam Kyu, "Han-Il Oemujanggwan, Puk Missile Chaebalsa Chŏji Wihan Taeŭngch'aek Hyŏp'ŭi," *Segye Ilbo*, 23 August 1999, p. 2, in KINDS, www.kinds.or.kr.

23 August 1999
The *Los Angeles Times* quotes a US official as having said that "it is highly probable" that North Koran technicians are working in Pakistani nuclear labs in a continuing deal between the two countries in which nuclear technology is exchanged for missile technology and components.
—Dexter Filkins, "N. Korea Aid to Pakistan Raises Nuclear Fears," *Los Angeles Times*, 23 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

23-29 August 1999
South Korean Defence Minister Cho Sŏng T'ae visits China to discuss North Korea's missile program. South Korea wants China to dissuade North Korea from testing its new intercontinental ballistic missile (ICBM; Taepodong-2).
—Shin Yong-bae, "Officials Expect Seoul's 3-Pronged Missile Diplomacy to Bear Fruit," *Korea Herald*, 25 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

25 August 1999
US State Department deputy spokesman James Foley announces that US Special Envoy Charles Kartman will lead a delegation to meet with a North Korean delegation led by Vice Foreign Minister Kim Gye Gwan in Berlin 7-11 September 1999.
—"US, North Korean Officials to Meet in Berlin Next Month," Agence France Presse, 25 August 1999, in Lexis-Nexis

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Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, "U.S., N. Korea to Resume Talks in Berlin in Early Sept.," Japan Economic Newswire, 25 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "US, N. Korean Officials to Meet in Berlin Next Month, *Korea Times*, 26 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

25 August 1999
US government officials and diplomatic sources say that North Korea will likely suspend its plans for a missile launch.
—Kyodo News Service, "N. Korea to Call off Missile Launch: U.S.," Japan Economic Newswire, 26 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Japanese Report Says N. Korea Delaying Missile Launch," *Korea Times*, 26 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

27 August 1999
South Korean Unification Minister Im Dong Wŏn and William Perry, the US policy coordinator for North Korea, meet to fine-tune the policies of the two governments regarding incentives for North Korea if it forgoes test-launching its new missile (Taepodong-2).
—Shin Yong-bae, "Officials Expect Seoul's 3-Pronged Missile Diplomacy to Bear Fruit," *Korea Herald*, 25 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

30 August 1999
Following a four-day visit to North Korea, US Congressman Tony Hall says that North Korea would likely forgo its missile program if the United States lifts economic sanctions. Hall says that North Korean Vice Foreign Minister Kim Gye Gwan told him that were the United States to lift sanctions, North Korea, "will certainly respond in good faith." Kim also told Hall that there was a good chance of resolving the missile problem at bilateral US-North Korean talks scheduled to take place in Berlin 7-11 September 1999. Delegates at the talks will also discuss North Korea's response to policy recommendations presented to North Korea by US policy coordinator William Perry.
—Son Key-young, "NK Likely to Shelve Missile Test If US Lifts Sanctions: Hall" *Korea Times*, 30 August 1999, www.koreatimes.co.kr.

30 August 1999
South Korean President Kim Dae Jung calls on North Korea to cease its military provocations and engage in constructive relations with the international community. Kim notes that although a ballistic missile launch does not seem imminent, North Korea's technical ability in missile development is a threat to stability in Northeast Asia. To that end, Kim says South Korea must "persuade and pressure" North Korea to give up its missile program. North Korea must understand that there would be a high price to pay in the form of economic and diplomatic sanctions if it carried out a missile test. At the same time, North Korea must know that not firing a missile will bring increased benefits from the international community.
—"Seoul Willing to Reward Pyongyang for Not Firing Missile: Kim" *Korea Times*, 30 August 1999, www.koreatimes.co.kr.

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2 September 1999
Japanese Foreign Minister Masahiko Komura says that Japan may ease sanctions on North Korea if progress is made in missile talks with the United States. Japan placed the sanctions on North Korea after a North Korean rocket flew over Japan on 31 August 1998, in a failed attempt to place a satellite into orbit.
—"Front Page: Komura Signals Easing of Sanctions Against N. Korea," *Asahi Shimbun*, 2 September 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

2 September 1999
Japan's Chief Cabinet Secretary Hiromu Nonaka and US Navy Pacific Commander-in-Chief Dennis Blair during a meeting agree that North Korea is unlikely to test-fire a missile in the immediate future.
—Kyodo News Service, 2 September 1999, in "Japanese Official, US Commander Agree No North Korean Missile Launch Soon," BBC Worldwide Monitoring, 3 September 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, "U.S., Japan: No N. Korean Missile Launch Soon," Japan Economic Newswire, 2 September 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

5 September 1999
North Korean television shows an image of the Paektusan-1 space launch vehicle (SLV) on the first anniversary of North Korea's constitutional revision that elevated Kim Jong Il de facto leader. The image shows the first stage with one engine. [Note: There had been speculation that the first stage used clustered Scud engines.]
—Park Chŏng Hun, "Pukhan, Taepodong Missile TV Konggae," *Chosun Ilbo*, 11 September 1999, www.chosun.com.

7 September 1999
US and North Korean negotiators complete the first day of talks in Berlin on Pyongyang's threat to conduct a missile launch. Kim Gye Gwan, head of the North Korean delegation, says the atmosphere of the meeting with Charles Kartman and the US delegation was good, but adds that the talks' success "depends on the attitude of the United States." North Korean demands are expected to include the lifting of sanctions and the expansion of aid.
—Shin Yong-bae, "North Korea, U.S. in Tense Tug-Of-War over Concessions at Berlin Negotiations" *Korea Herald*, 9 September 1999, www.koreaherald.co.kr; "NK and US Meet For Missile Talks in Berlin," *Joongang Ilbo*, 8 September 1999, http://english.joins.com.

9 September 1999
A study by the US National Intelligence Council concludes that during the next 15 years, the United States will face intercontinental ballistic missile (ICBM) threats from Russia, China, North Korea, probably Iran and possibly from Iraq. It also warns that the United States could be threatened by forward-based systems such as short- and medium-range missiles or land-attack cruise missiles launched from ships or other platforms. The report says that North Korea might assist Iran with the design of an Iranian ICBM patterned on the Taepodong-1 (Paektusan-1). The report claims North Korea is the country most likely to develop an ICBM capable of striking the United States during the next 15 years. Despite the failure of the Paektusan-1 space launch vehicle (SLV) to place a small satellite in orbit on 31 August 1998, North Korea demonstrated that it has mastered several technologies required for ICBMs. A three-stage Paektusan-1 would be very inaccurate and would almost certainly be incapable of striking US urban centers. The report, which was written before the United States and North Korea reached an agreement on

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a flight-test moratorium, claims most analysts expect North Korea to conduct a flight test of the Taepodong-2 this year unless it is delayed for political reasons.
—National Intelligence Council, "Foreign Missile Developments and the Ballistic Missile Threat to the United States Through 2015," September 1999, www.cia.gov; "North Korea, Iran and Iraq Could Develop ICBMs" *Jane's Missiles and Rockets*, October 1999, vol. 3, no. 10, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Yŏ Shi Dong, "[CIA] 'Pukhan 15 Nyŏnnae ICBM Kaebal...Iran Wihyŏpchŏkchonjae'," *Chosun Ilbo*, 10 September 1999, www.chosun.com.

9 September 1999
Japanese Chief Cabinet Secretary Hiromu Nonaka announces that Japan is willing to resume dialogue with North Korea if Pyongyang does not proceed with an anticipated ballistic missile launch. Nonaka tells reporters that if North Korea refrains from the missile launch, Japan would hold discussions with South Korea and the United States concerning, "the future of our stance to North Korea." Nonaka also hinted that Japan might consider dropping economic sanctions against North Korea. Talks between Japan and North Korea have been stalled since 1992.
—"Japan Seeks To Reopen Dialogue with North Korea," Agence France Presse, 9 September 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

12 September 1999
According to an understanding reached between the United States and North Korea following bilateral talks in Berlin, North Korea privately agrees to suspend its missile program and to carry out no further tests. While North Korea commits itself to improving relations, it says nothing publicly about its missiles.
—"US-North Korean Detente: A New Approach in Pyongyang," International Institute of Strategic Studies (IISS), vol. 5, no. 8, 1 October 1999; Philip Finnegan, "U.S. Officials Seek To Build on N. Korean Missile Agreement," *Defense News*, 4 October 1999, p. 20; "US-N. Korean Missile Talks End," Agence France Presse, 12 September 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

13 September 1999
US Department of State Spokesman James Rubin says that bilateral talks held in Berlin between the United States and North Korea resulted in a pledge by North Korea to refrain from testing a long-range ballistic missile. Rubin notes that the agreement stipulates "North Korea will refrain from testing any long-range missiles for the duration of negotiations that are aimed at improving relations between the United States and North Korea." Rubin says that the agreement is not a formal treaty, but that it is a positive step towards a permanent solution to problems on the Korean peninsula.
—James P. Rubin, Daily Press Briefing, US Department of State, 13 September 1999, www.state.gov; "US Agrees to Ease N. Korea Sanctions in Return for Missile Launch Halt," Agence France Presse, 13 September 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Philip Shenon, "North Korea Said to Agree to End Missile Tests," *New York Times*, 13 September 1999, p. A7, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Tyler Marshall and Edwin Chen, "N. Korea Missile Test Seen as Unlikely in Wake of Pact," *Los Angeles Times*, 13 September 1999, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; *Donga Ilbo* (Seoul), 3 May 2001, in "ROK Daily Sees DPRK Decision To Freeze Missile Launch as Gesture to US," FBIS Document ID

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KPP20010503000123; "North Korea, Iran and Iraq Could Develop ICBMs" *Jane's Missiles and Rockets*, October 1999, Vol. 3, no. 10, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

15 September 1999

During a seminar in Seoul, Korea National Defense University Professor Kim Ch'ŏl Hwan says that since 1991, North Korea has exported 160 Scud-B missiles to Iran, 100 to Iraq, and 18 to the United Arab Emirates. During the same period, Kim says that Pyongyang has exported 42 Scud-C missiles to Iran, 150 to Syria, and 20 to India.
—Kim Kwi Kŭn, "Puk, Scud Missile 490 Such'ul," *Chosun Ilbo*, 15 September 1999, www.chosun.com.

16 September 1999

Robert Walpole, CIA national intelligence officer for strategic and nuclear programs, tells the Senate Foreign Relations Committee, "I ended up working to help stop the Condor II program being worked on by Argentina, Iraq, and Egypt. Had it come to fruition, it would have made the Nodong and Taepodong-1 look like toys. It would have been a much better system." [Note: There is speculation that Egypt may have transferred technology from the Condor program to North Korea.]
—Steve Rodan, "Israel, USA Claim Egyptian Missile Links with N Korea," *Jane's Defence Weekly*, vol. 33, no. 8, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

16 September 1999

The 60-day detainment period for the crew of the *Ku Wŏl San* expires, and the crew is allowed to return to the ship. The Indian government has not yet pressed charges, but the case is still under investigation. Authorities say the cargo, which was detained on 25 June 1999, contained 148 boxes of missile manufacturing equipment. Furthermore, the Maltese Economic Corporation, which was the consignee, is found not to exist.
—Korean Ship's Crew Is Still Not Free, Says DRI," *Times of India*, 18 September 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com

17 September 1999

US President Bill Clinton makes public his intent to mitigate sanctions imposed by the United States on North Korea under the Trading with the Enemy Act, the Defense Production Act, and US Department of Commerce regulations. Clinton's announcement, which is to promote better US-North Korea relations and, "to support the Agreed Framework," is a consequence of talks between US and North Korea representatives from 7 to 12 September 1999 in Berlin and is made with the expectation that North Korea will not conduct further long-range missile tests. As a result, most imports of North Korean products, exports to North Korea of most non-sensitive items, investment in various North Korean industries, transfers of funds to North Korea, shipment of goods to North Korea, and flights between the United States and North Korea will be permitted, though it will take several months to make necessary regulatory changes. Other activities will continue to be prohibited, including the export of US Munitions List items, the unlicensed export of Commerce Control List dual-use items, various forms of assistance, unauthorized transfers of funds between the United States and the government of North Korea, and all activities restricted by US statutes or international agreements.
—Fact Sheet: Easing Sanctions Against North Korea, White House Office of the Press Secretary, 17 September 1999, www.pub.whitehouse.gov; White House Office of the Press Secretary, "Statement By The Press Secretary:

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Easing Sanctions Against North Korea," 17 September 1999, www.pub.whitehouse.gov; David E. Sanger, "Trade Sanctions on North Korea Are Eased by U.S.," *New York Times*, 18 September 1999, p. A1, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; John Connelly, "Clinton Eases N. Korea Curbs; Pyongyang Agrees to Give up Missile Test," *Boston Globe*, 18 September 1999, p. A1, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Tyler Marshall, "U.S. to Ease Commercial Sanctions on North Korea," *Los Angeles Times*, 18 September 1999, p. A1, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Terence Hunt, "After a Half-Century, Clinton Eases North Korea Sanctions," Associated Press, 17 September 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

17 September 1999

In remarks to the press, William Perry, coordinator for US policy on North Korea, describes the state of US-North Korea relations and his report to the US Congress. Perry says that since 1998, US intelligence had revealed "suspect nuclear sites" and the "production and deployment of long-range missiles in North Korea." Perry has also concluded that the fall of the North Korean government is not imminent and that the United States should therefore negotiate with North Korea, offering normalization of relations if North Korea gives up its long-range missiles. Perry indicates one long-term goal is to bring North Korea into compliance with Missile Technology Control Regime (MTCR) guidelines. He adds that for the purpose of confirming a suspension of flight-testing, the United States, "can verify unilaterally whether or not (North Korea is) testing long-range missiles, or deploying them." Perry doubts that the untested Taepodong-2 ballistic missile would be deployed.

—"Secretary of State Madeleine K. Albright and Dr. William Perry: Press Briefing on U.S. Relations with North Korea," US Department of State Office of the Spokesman, 17 September 1999, http://secretary.state.gov.

19 September 1999

The US claims that the easing of sanctions on North Korea will not continue if North Korea resumes missile testing. A diplomatic source stated, "If North Korea threatens to resume test-launching Taepodong-2 missiles or puts the threat into practice, the easing of sanctions will no longer be valid."

—*Joongang Ilbo*, 19 September 1999, in "USA to Reapply Sanctions if North Korea Test-Launches Missile," BBC Summary of World Broadcasts, 21 September 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

24 September 1999

A North Korean Foreign Ministry spokesman says that Pyongyang will not launch a missile as long as the US and North Korea remain engaged in high-level talks.

—"DPRK Not to Launch Missile," Korean Central News Agency, 24 September 1999, www.kcna.co.jp; "Chomihoedamjinhaenggigan'enŭn Missile Palsarŭl Haji Anhŭlgŏsida/Oemusŏngdaebyŏn'in," Korean Central News Agency, 24 September 1999, www.kcna.co.jp; Howard W. French, "North Korea Says It Will Halt Missile Tests During U.S. Talks," *New York Times*, 25 September 1999, p. A5, in Lexi-Nexis Academic Universe, http://web.lexis-nexis.com; Eric Prideaux, "N. Korea To Freeze Tests for Talks," Associated Press, 24 September 1999, in Lexi-Nexis Academic Universe, http://web.lexis-nexis.com; Philip Finnegan, "U.S. Officials Seek To Build on N. Korean Missile Agreement," *Defense News*, 4 October 1999, p. 20; "Puk Missile Palsajungdan Podojŏnmun Yoyak," *Chosun Ilbo*, 25 September 1999, www.chosun.com.

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25 September 1999
North Korean Foreign Minister Paek Nam Sun tells the UN General Assembly that North Korea will suspend missile launches while Pyongyang is engaged in high-level talks with Washington to resolve pending issues between the two sides. Paek says, "It is fortunate that the United States has recently decided to partially lift economic sanctions against the DPRK."
—"N. Korea Repeats Missile Pledge at UN General Assembly," *Korea Times*, 26 September 1999, in Lexi-Nexis Academic Universe, http://web.lexis-nexis.com; "N Korea Repeats Missile Pledge at UN General Assembly," AFX – Asia, 26 September 1999, in Lexi-Nexis Academic Universe, http://web.lexis-nexis.com; Ŏm Nam Sŏk, "Puk, Missile Shihŏmbalsa Chungdan Chaehwagin," *Chosun Ilbo*, 26 September 1999, www.chosun.com.

28 September 1999
South Korea's Ministry of National Defense submits a report to National Assemblyman Sŏ Ch'ŏng Wŏn that says North Korea is preparing to deploy 200 Scud-C missiles to forward areas near the Demilitarized zone (DMZ). The missiles are to be deployed at three bases: Kŭmch'ŏn, Anbyŏn-kun, Kangwŏn Province; "Sakkamol" (Sakkabbong), Koksan-kun, North Hwanghae Province; and "Kalgol." The report also says that North Korea has 162 missile engineers in five Middle Eastern countries. Pyongyang has also earned about $800 million in Scud-B and Scud-C missile sales to countries in the Middle East and South Asia since 1991. [Note: The report implies that "Kalgol" is in Hwanghae Province, but the location is actually "Kalgol-dong, Hŭich'ŏn, Chagang Province."]
—Chu Yong Chung, "Sajŏng 500km Scud C Missile 200 Ki," *Chosun Ilbo*, 29 September 1999, p. 1, in KINDS, www.kinds.or.kr; Yu Yong Wŏn, "Puk, Kigŭnsog'edo Mugigoman Ch'aewi, Kukpangbu Kukkamjaryo," *Chosun Ilbo*, 29 September 1999, p. 2, in KINDS, www.kinds.or.kr; Kyodo News Service, "N. Korea Sells 800 Mil. Dlrs in Weapons in 8 Years," Japan Economic Newswire, 28 September 1999, in Lexi-Nexis Academic Universe, http://web.lexis-nexis.com.

29 September 1999
The *Rodong Sinmun* publishes a commentary that says "missile launchs are a matter of North Korean sovereignty and that Pyongyang will launch a missile or satellite any time it feels it's necessary."
—"Namjosŏn <Oegyot'ongsangbujanggwan>ŭi Mangbal'ŭl Kyut'an/Rodongshinmun," Korean Central News Agency, 29 September 1999, www.kcna.co.jp; "North Korea Says It Still Has the Right to Launch New Missile," Associated Press, 30 September 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "U.S. Says No Reason to 'Disbelieve' N Korea Missile Pledge," AFX-Asia, 29 September 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Puk, 'Missile P'ilyohamyŏn Palsahagetta'," *Chosun Ilbo*, 29 September 1999, www.chosun.com.

October 1999
According to the *Washington Times*, a "Pentagon intelligence agency" reports that North Korea has offered to sell Sudan a factory for assembling Scud missiles. Citing another "intelligence report," the daily says North Korea has also recently sold 10 tons of aluminum powder, which was originally acquired from China, to Syria for missile and weapon development, and that Iranian officials have recently traveled to North Korea to discuss missile cooperation.

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—Bill Gertz, "N. Korea Continues to Develop Missiles; Sells Technology to Rogue Nations," *Washington Times*, 28 October 1999, p. A1.

October 1999

According to the *Washington Times*, US intelligence agencies report that North Korea had obtained fiber-optic gyroscopes from China several months ago.

—Bill Gertz, "China Breaks Vow, Sends N. Korea Missile Materials," *Washington Times*, 6 January 2000, p. 1.

October 1999

Citing sources in the White House, the *Washington Times* reports that Iran exports Scud missiles to the Democratic Republic of the Congo. This is Iran's first export of missiles after having received missile production technology from North Korea. This will mark the first time that ballistic missiles are deployed in central Africa.

—Bill Gertz, "Tehran Sold Scud Missiles to Congolese; U.S. Spies Discover Systems," *Washington Times*, 22 November 1999, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kim Chong Su, "Pukkisullo Mandŭn Missile Iran, Congo'e Such'ul," *Joongang Ilbo*, 24 November 1999, www.joins.com.

October 1999

General Abu Bakr Jaber, Libyan Defense Minister and army chief of staff, signs a contract for the delivery of 50 Nodong missiles and seven launchers. According to *Middle East Newsline*, the contract for the missiles is signed with North Korea's state-owned Ch'ŏngch'ŏn'gang Corporation. The deliveries are to begin in July 2000 and will continue in three more consignments over two years from the first delivery. The agreement includes the dispatch of nine North Korean engineers and technicians to assist with the project for two years in order to make the missile operational.

—Con Coughlin, "Missile Deal Puts Israel in Gaddafi Sights," *Sunday Telegraph*, Issue 1948, 24 September 2000, www.telegraph.co.uk; "Libya Acquires No-Dong Missiles from N. Korea," *Middle East Newsline*, vol. 2, no. 370, 24 September 2000, www.menewsline.com.

4 October 1999

Defense News reports that North Korea's annual export earnings from ballistic missiles sales have probably declined to $50 million from $100 million.

—Philip Finnegan, "U.S. Officials Seek To Build on N. Korean Missile Agreement," *Defense News*, 4 October 1999, p. 20.

11 October 1999

The South Korean Ministry of National Defense releases its *Defense White Paper 1999*. The report says that although North Korea failed to place a small satellite into orbit on 31 August 1998, "the missile's engine combustion, body separation, and guidance systems functioned without problems." The report estimates that the Taepodong-1 and Taepodong-2 will have ranges of 2,000-2,500km, and 6,700km, respectively.

—Republic of Korea Ministry of National Defense, *Defense White Paper 1999*, October 1999, pp. 57-58; "N. Korea Deploys 10 More Subs," *Korea Times*, 12 October 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

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13 October 1999
US Under Secretary of Defense for Policy Walter B. Slocombe reports to the US House Armed Services Committee that North Korea's agreement to suspend missile tests does not mean that it has stopped developing missiles. "North Korean missile development continues to progress through steps other than flight tests," said Slocombe. He added that US national missile defense (NMD) development would progress based, "on the assessment reflected in the NIE (National Intelligence Estimate) that North Korea probably will test the Taepodong-2 ballistic missile this year." According to Slocombe, the Taepodong-2 is "more deadly" than the Taepodong-1 (Paektusan-1), which North Korea launched in July 1998.
—"N. Korea Continues ICBM Program," *Middle East Newsline*, 14 October 1999, www.menewsline.com.

19 October 1999
Several classified reports produced by US intelligence agencies indicate that North Korea is continuing efforts to improve its missiles and export missile-related items. A report from the US Air Force National Air Intelligence Center issued on 19 October 1999 says that North Korea is working to develop its Taepodong ballistic missiles. A US intelligence official has stated that progress on the Taepodong-2 may already be sufficient to "make their use possible without any flight-tests."
—Bill Gertz, "North Korea Continues to Develop Missiles; Sells Technology to Rogue Nations," *Washington Times*, 28 October 1999, p. A1; Bill Gertz, "China Breaks Vow, Sends N. Korea missile Materials," *Washington Times*, 6 January 2000, p. 1.

20 October 1999
A classified report says that China's Changda Corporation recently requested high-technology fiber optic gyroscopes from the Russian company Fizoptika. China is said to have secretly provided the Russian gyroscope, a key component for China's and North Korea's missiles, to North Korea earlier this year.
—Bill Gertz and Rowan Scarborough, "China Connection," *Washington Times*, 19 November 1999, p.A12, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

24 October 1999
A South Korean government official says that North Korea has deployed four Nodong-1 missile battalions. Three of the battalions have been deployed to the T'ŏ'gol area in P'yŏngsan-kun, North Hwanghae Province. The other unit has been deployed to Shinori, Unjŏn-kun, in North Pyŏngan Province. The units are subordinate to the recently established Missile Division, and each Nodong-1 battalion is said to have nine launchers. The number of missiles per unit is unclear. [Note: There is another "T'ŏ'gol" in the adjacent kun (county), Kŭmch'ŏn-kun, but the unit is in P'yŏngsan-kun.]
—"Chŏng Kwŏn Hyŏn, "Sajŏng 1300km 'Nodong 1 Ho Missile Puk, Ch'oegŭn Shilchŏnbaech'i," *Chosun Ilbo*, 25 October 1999, p. 1, in KINDS, www.kinds.or.kr; "Report: North Korea Deploys Four Long-Range Missile Units," Associated Press, 25 October 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

26 October 1999
North Korea is reportedly building six bases for Scud-C missiles. The locations include T'ŏ'gol, P'yŏngsan-kun, North Hwanghae Province; Yŏngjŏ-ri, "Chagang Province;" Yongnim-ŭp, Chagang Province; "Sakkamol," North Hwanghae

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Province, and "Kŭmch'ŏn-ri," Kangwŏn Province. The missile base at T'ŏ'gol, P'yŏngsan-kun, North Hwanghae Province is said to have three missile battalions. [Note: Yŏngjŏ-ri is in Kimhyŏngjik-kun, Yanggang Province, and "Sakkamol," is actually "Sakkabbong" in Koksan-kun, North Hwanghae Province. "Kŭmch'ŏn" is a city and no longer a "ri (里)" This report says the bases are for Scud missiles, but Nodong and/or Taepodong-1 missiles are later deployed to Yŏngjŏ-ri, and the base at Yongnim-ŭp is probably being configured for the Nodong and/or Taepodong-1.]
—Kim Kwi Kŭn, "Puk, 6 Kos'e Scud Missile Kiji Kongsajung," *Chosun Ilbo*, 26 September 1999, www.chosun.com; "North Korea Building up Missile Capabilities," Agence France Presse, 27 October 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

27 October 1999
A US official states that the Taepodong-2 could be tested at any time.
—Bill Gertz, "North Korea Continues to Develop Missiles; Sells Technology to Rogue Nations," *Washington Times*, 28 October 1999, p. 1.

29 October 1999
South Korean government officials say that the selling price of a Taepodong-1 (Paektusan-1) is about $6 million. The officials also say that Pyongyang has demanded $500 million in compensation from the United States to stop its missile exports.
—"North Korea's Taepodong I Missile Priced at $6 Million," *Korea Times*, 29 October 1999, www.koreatimes.co.kr; "North Korea's Taepodong I Missile Priced at Six Million Dollars: Seoul," Agence France Presse, 29 October 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kim Ji-ho, "Reported N.K. Plan on Missile Export May Be Negotiation Ploy," *Korea Herald*, 30 October 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Chu Yong Sŏng, "Puk, Taepodong 1 Ho Taedang 600 Man Dallŏro Such'ulgyehoek," *Chosun Ilbo*, 29 October 1999, www.chosun.com.

November 1999
A US congressional report by the nine-member Republican North Korea Advisory Group states that North Korea is looking to export intermediate-range missiles to Iran and Syria. The report confirms Asian diplomatic assertions that Pyongyang has decided to export the Taepodong-1 (Paektusan-1), which has a range of up to 2,000km. The report suggests that North Korea, barring any political or economic intervention, will also export the long-range missiles it is developing to countries such as Pakistan, Iran, Syria, and Libya. The report indicates that North Korea did not demonstrate the capability to construct re-entry vehicle that can survive atmospheric reentry when Pyongyang attempted a satellite launch on 31 August 1998. It is uncertain how North Korea acquired the solid-fuel third stage for the August 1998 test, but some analysts speculate that it could have been procured from Pakistan, China, or Iran.
—US Congress, House, North Korea Advisory Group, *Report to The Speaker U.S. House of Representatives*, 106th Congress, 1st session, 1999; "N. Korea Likely to Export New Missiles to Iran, Syria," 4 November 1999, *Middle East Newsline*, www.menewsline.com; "Congressional Study Says North Korea Threat Increasing," *Korea Times*, 4 November 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

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November 1999
North Korea sells 12 missile engines to Iran. The engines are believed to be for Iran's new Shehab medium-range missiles.
—Bill Gertz, "China, N. Korea Hit With Sanctions," *Washington Times*, 28 June 2001, p. 1; Bill Gertz, "'Critical' N. Korean Missile Parts Seen Aiding Iran's Program," *Washington Times*, 10 February 2000, p. A3.

1 November 1999
Space Imaging's Ikonos satellite captures satellite imagery of North Korea's Musudan-ri missile test facility. The one-meter resolution photos are later released on CNN television and the Federation of American Scientists website, www.fas.org) in January 2000.
—Cable News Network, CNN Live Event/Special, 3 January 2000, in "Millennium 2000: CEO of Space Imaging Discusses Three-Dimensional Aerial Photographs," Transcript #00010354V54, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Ryuichi Otsuka, "N. Korean Missile Base Detailed U.S. Firm Gives Public Clear View of Taepodong Launch Site," *Daily Yomiuri*, 9 January 2000, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; William J. Broad, "Spy Photos of Korea Missile Site Bring Dispute," *New York Times*, 11 January 2000, p. A8, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Michael Evans, "Spy Pictures Show Korea's Empty Threat," *The Times* (London), 12 January 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

18 November 1999
Shin Sŏng T'aek, a researcher at the Korea Institute of Defense Analysis, says at an academic conference that North Korea is building a missile base in "Yŏngjŏ-dong" with about 10 underground launchers. Shin says that the construction is about 70% complete. [Note: The name of the location is actually "Yŏngjŏ-ri," which is in Kimhyŏngjik-kun, Yanggang Province.]
—Lee Yong Chong, "'Puk Yanggangdo Sae Missile Kiji 70% Chinch'ok' Kukpang'yŏn Shin Sŏng T'aek Ssi Palkyŏ," *Joongang Ilbo*, 19 November 199, www.joins.com.

19 November 1999
The National Imagery and Mapping Agency issues a report that includes imagery of "activities at a launch site called Namgung-ri." [Note: The report gives no date for the imagery, but the press report seems to indicate the imagery is associated with launch preparations for a missile test earlier this year.]
—Bill Gertz and Rowan Scarborough, "Inside the Ring," *Washington Times*, 17 December 1999, p. A11.

24 November 1999
British customs officials at London's Gatwick Airport seize missile parts bound for Tripoli via Malta. According to the *Sunday Telegraph*, the shipment originated in North Korea and passed through Taiwan. The shipment is said to include parts for the Nodong missile.
—Hugh Davies, "Protest to Libya after Scud Parts Are Seized," *Sunday Telegraph*, Issue 1690, 10 January 2000, www.telegraph.co.uk.

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29 November 1999
The Spot Satellite website, www.spot.com, publishes imagery of North Korea's launch facilities at Musudan-ri, Hwadae-kun, North Hamgyŏng Province. The site appears to have an assembly area, radar equipment, and underground facilities.
—*Chosun Ilbo* (Seoul), 29 November 1999, in "Satellite Photo of North Missile Launch Pad on the Internet," BBC Summary of World Broadcasts, 1 December 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Chu Yong Sŏng, "Puk Missile Palsagiji Wisŏngsajin Konggae," *Chosun Ilbo*, 29 November 1999, www.chosun.com.

November 1999-April 2000
Citing US government sources, the *Yomiuri Shimbun* reports that during this six-month period, North Korea has test-fired engines for its Taepodong-2 missile on several occasions. However, these static tests do not break North Korea's flight-test moratorium.
—O Yong Hwan, "Puk, ICBM Yong Rocket Engine Yŏnsoshilhŏm," *Joongang Ilbo*, 28 April 2000, www.joins.com.

1-3 December 1999
A Japanese delegation, headed by former Prime Minister Tomiichi Murayama, visits North Korea to discuss, among other things, North Korea's missile program and the freeze on food aid from Japan. During the negotiations, North Korea made no indication that it would stop testing its missiles.
—Jonathan Watts, "Japan Pins Peace Hopes on Korea Visit," *The Guardian* (London), 1 December 1999, p.17, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Gaku Shibata, "Mission to N. Korea Avoids Sensitive Issues," *Daily Yomiuri*, 5 December 1999, p.2, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

8 December 1999
The *Joongang Ilbo* reports that Choch'ŏngnyŏn, the pro-North Korea federation of Korean residents in Japan, estimates that Japanese compensation to North Korea for the past colonial period before normalizing diplomatic relations would total between $5 billion and $10 billion. However, Professor Okonoki Masao of Keio University says that Japan cannot normalize relations with North Korea as long as it threatens Japan with ballistic missiles.
—Kim Yŏng Hŭi, "Hanbando P'yŏnghwa'ŭi Taega," *Joongang Ilbo*, 8 December 1999, in KINDS, www.kinds.or.kr; Kim Yong-hui, "The Price for Peace in the Peninsula," *Joongang Ilbo*, 7 December 1999, in "ROK Paper Views DPRK-Japan Normalization Talks," FBIS Document ID FTS19991209000089.

12 December 1999
Yonhap News Agency quotes "a diplomatic source" as saying that North Korea intends to export its Taepodong-1 (Paektusan-1) for about $6 million each, and that the first client will probably be Iran. According to the report, North Korea has about 10 Paektusan-1 missiles in its inventory.
—Yonhap News Agency, 12 December 1999, in "DPRK Said To Plan To Export Daepo Dong Missile to Iran," FBIS Document ID FTS19991211000932; "North Korea Seeks Ballistic Missile Exports: Report," Agence France Presse, 12 December 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Yonhap News Agency, 12 December 1999, in "North Korea Reportedly Planning to Export Long-Range Missiles to Iran," BBC Summary of World Broadcasts, 13 December 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Cho Ho Yŏn, "Puk Taepodong Missile Iran Such'ul Kyehoik, 1Kidang 6 Paengmanbul'e," *Kyunghyang Shinmun*, 13 December

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1999, p. 2, in KINDS, www.kinds.or.kr; Chu Yong Sŏng, "Puk, Taepodong Missile Iran Such'ul Kyehoek," *Chosun Ilbo*, 12 December 1999, www.chosun.com.

14 December 1999

The Japanese government announces that it will lift economic sanctions that were imposed against North Korea following Pyongyang's missile launch that flew over Japanese territory in 31 August 1998.

—Kazuhiro Shimamura, "Japan Lifts Sanctions on North Korea," Agence France Presse, 14 December 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Gov't to Lift All N. Korea Sanctions," Mainichi Daily News, 15 December 1999, p.1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

15 December 1999

In a statement to parliament, Indian Foreign Minister Jaswant Singh says that China and North Korea are helping Pakistan with its missile program. According to Singh, North Korea is helping with missile technology, missile components, and liquid fuel, and that Pakistan's Ghauri missile is a copy of North Korea's Nodong. Singh also states that China supplied Pakistan with M-11 missiles in addition to components and technology related to M-11 production.

—"Pakistan Getting Missile Technology from China, North Korea: Minister," Agence France Presse, 15 December 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "India's Singh: Pakistan Getting Missile Technology from China, N. Korea," AFX – Asia, 15 December 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; [Puk-Chungguk] Pakistan Missile Kaebal Chiwŏn," *Chosun Ilbo*, 16 September 1999, www.chosun.com.

Late December 1999

The National Security Agency issues a report that claims to have discovered a deal for the transfer of missile-related products from China to North Korea, and that a Hong Kong company has been used for these types of transfers in the past.

—Bill Gertz, "China Breaks Vow, Sends N. Korea Missile Materials," *Washington Times*, 6 January 2000, p. 1.

Late December 1999

Im Ki Sŏng and his son, Im Hak Chin, both employed under the North Korean missile program, defect from North Korea. Im Ki Sŏng, 59, later says that North Korea has completed the development of a 6,000km-range ballistic missile, and that North Korea is trying hard to develop an intercontinental ballistic missile (ICBM) with a range of at least 10,000km, despite US pressure to abandon its missile program. Im learned basic missile technology when studying in the Soviet Union during the 1960s. In the 1990s, Im was also dispatched to a missile base in China. Im and his son both worked at a missile base in Yanggang Province. They reportedly flee to China and then leave for the United States in January 2000.

—Chi Hae Bŏm, "Puk Missile Chŏnmun'ga Mimangmyŏng 'Sajŏng 6000km Kaebal Wallyo'," *Chosun Ilbo*, 18 February 2000, p. 1, in KINDS, www.kinds.or.kr; Chi Hae Bŏm, "Puk Missile Chŏnmun'ga Mangmyŏng," *Chosun Ilbo*, 18 February 2000, p. 3, in KINDS, www.kinds.or.kr.

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December 1999-January 2000
North Korea conducts three or four engine tests for its Taepodong missile. The tests are conducted at the Musudan-ri missile facility. This is the first test following North Korea's announcement of a flight-test moratorium in September 1999.
—Kim Min Sŏk and Lee Yong Chong, "Puk Missile Shilhŏm Chaegae...Engine Yŏnsojinghu P'och'ak," *Joongang Ilbo*, 24 February 2000, www.joins.com. North Korea conducts three or four static engine tests for its Taepodong missile at the Musudan-ri missile facility. These tests follow North Korea's announcement of a flight-test moratorium in September 1999. [Note: This article is not clear whether this is a test for the Paektusan-1/Taepodong-1 or Taepodong-2, but it is probably for the latter.]

1998

First Half of 1998
According to Japan Defense Agency sources, North Korea produces 10 Nodong-1 missiles. [Note: See entries for 1997 and 2 January 1999.]
—"Report: North Korea Deploying Medium-Range Missiles," Associated Press, 2 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, 2 January 1999, in "North Korea Deploying, Exporting Medium-Range Missiles – Japanese Report," BBC Worldwide Monitoring, 2 January 1999, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

1998
North Korea merges its Scud missile regiment with its Nodong missile battalion to form a Missile Division. All ballistic missile units in North Korea are reportedly subordinate to the Missile Division.
—Kim Min Sŏk, "Puk Missile Kiji Kyesok Chŭngsŏl," *Joongang Ilbo*, 6 March 2001, p. 8, in KINDS, www.kinds.or.kr.

1998 or 1999
Vietnam reportedly obtains a small number of Hwasŏng-6 missiles from North Korea, as well as North Korean-made SA-16 Gimlet (9K310 Igla) surface-to-air missiles (SAMs).
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 19.

7 January 1998
The National Council of Resistance of Iran, an organization opposed to the current Iranian government, says that Chinese and North Korean technical personnel have assisted Iran in producing medium-range ballistic missiles, as well as increasing their range to 1,400km. The group claims there are "dozens of North Korean and Chinese missile experts" at Iran's Hermat Missile Industrial Complex. The report is said to be based on "unidentified sources within the Iranian government."
—Kyodo News Service, "China, N. Korea Allegedly Helping Iran Develop Missiles," Japan Economic Newswire, 8 January 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

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23 February 1998
The *Washington Times* reports that North Korea "has sold missiles and perhaps other military equipment to Iraq."
—Richard Halloran, "U.S. Keeps Eye on North Korea During Iraq Crisis," *Washington Times*, 23 February 1998, p. A11, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

24 February 1998
A senior US Defense Department official says that North Korea has deployed at least one Nodong-1 ballistic missile.
—Akinori Uchida, "U.S. Official Says N. Korea Deployed Rodong Missile," *Daily Yomiuri*, 26 February 1998, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

26 February 1998
The Pentagon denies a report in the *Yomiuri Shimbun* that cites an anonymous senior US Defense Department source as saying that North Korea has deployed at least one Nodong missile. Pentagon spokesman Kenneth Bacon says, "Whether or not there are preparations under way for deployment or whether it's been in fact deployed isn't clear. We don't have firm evidence...at this stage." The Pentagon does confirm, however, that the development of the Nodong has been completed.
—Akinori Uchida, "U.S. Official Says N. Korea Has Deployed Rodong Missile," *Daily Yomiuri,* 26 February 1998, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, "Pentagon Denies N. Korean Deployment of Rodong Missile," Japan Economic Newswire, 27 February 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

4 March 1998
General John H. Tilelli, commander of US Forces Korea, tells the House Committee on National Security that North Korea is continuing its research and development of ballistic missiles. Tilelli also says that Pyongyang "is believed to proliferate missile technology to anyone with hard currency."
—John H. Tilelli, Jr., "Prepared Statement of General John H. Tilelli, Jr. Commander in Chief, United Nations Command/Combined Forces Command & Commander, United States Forces Korea before the House Committee on National Security," Federal News Service, 4 March 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

13 March 1998
At a preparatory meeting held in Berlin to discuss the upcoming Korean Peninsula peace talks, the United States and North Korea agree to resume bilateral missile talks, but they fail to agree on a date.
—Kyodo News Service, 15 March 1998, in "North Korea, USA Reportedly to Resume Talks on Missiles," BBC Worldwide Monitoring, 15 March 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, 15 March 1998, in "Missile Talks with USA reportedly to be Resumed," BBC Summary of World Broadcasts, 16 March 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

Early April 1998
US government officials report that Pakistan's new 1,500km-range Ghauri intermediate-range ballistic missile (IRBM) has been developed with technology supplied by North Korea. The Ghauri is believed to be an enhanced

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version of North Korea's Nodong ballistic missile.
—Tim Weiner, "U.S. Says North Korea Helped Develop New Pakistani Missile," *New York Times*, 11 April 1998, p. 3.

6 April 1998
Pakistan conducts a flight-test of the Ghauri, with a claimed range of 1,500km. Although Pakistan claims it was designed and produced indigenously, it is a North Korean-produced Nodong launched from a mobile erector launcher (MEL). North Korean observers are present for the flight-test, the second for a Nodong.
—"Pakistan Test Fires New Long-Range Missile," Agence France Presse, 6 April 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Pakistan Test Fires Long-Range Missile," Deutsche Oresse-Agentur, 6 April 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Coomi Kapoor, "Knowhow 'Must Have Come from Abroad'," *The Times*, 7 April 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Tim Weiner, "U.S. Says North Korea Helped Develop New Pakistani Missile," *New York Times*, 11 April 1998, p. A3, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Chŏn Hyŏn, "Pakistan Kaebal Chunggŏri Missile 'Ghari'/Pukhan 'Nodong 2 Ho' Kanŭngsŏng/Ilchibodo," *Segye Ilbo*, 13 April 1998, p. 2, in KINDS, www.kinds.or.kr; Lee T'ae Yŏng, "Puk Missile Isŭllamguk Hwaeksan P'amun," *Chosun Ilbo*, 15 April 1998, p. 6, in KINDS, www.kinds.or.kr; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 24.

12 April 1998
Pakistan's Foreign Ministry denies reports that North Korea provided any assistance in the development of the Ghauri missile. The ministry says the missile is based on Pakistan's "own science and technology capability."
—"Pakistan Denies North Korea Supplied It Missile Technology," Deutsche Presse-Agentur, 12 April 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Pak Denies Reports on Ghauri's 'Foreign Links'," *The Hindu*, 13 April 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

14 April 1998
A US government official says that North Korea probably supplied components to Pakistan to help develop its new Ghauri missile. The official says, "We know Pakistan has tried to pursue this type of technology from a number of buyers and sellers, including North Korea."
—Kyodo News Service, "N. Korea Likely Gave Missile Parts to Pakistan: U.S.," Japan Economic Newswire, 15 April 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

15 April 1998
Abdul Qadeer Khan, a leading Pakistani scientist and head of Pakistan's defense-related research institutes, says that the Ghauri was developed indigenously, and that Pakistan received no assistance from China or North Korea.
—"Ace Scientist Promises New Pakistan Missile after 'Ghuari': Report," Agence France Presse, 16 April 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

17 April 1998
The United States imposes sanctions on North Korea's Ch'anggwang Shinyong Company and Pakistan's Khan Research Laboratories for collaborating in the development of the Ghauri ballistic missile. According to the US

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State Department, Ch'anggwang Shinyong sold missile parts to Khan Research Laboratories. The sanctions are for two years.
—Kyodo News Service, "U.S. Slaps Sanctions on Pakistani, N. Korean Entities," Japan Economic Newswire, 5 May 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "US Imposes Sanctions on Pakistan, N. Korea over Missile," *Asia Pulse*, 6 May 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Mi, Missile Such'ul Pukhan Kiŏp Chejae," *Segye Ilbo*, 7 May 1998, p. 10, in KINDS, www.kinds.or.kr; Hong Ŭn T'aek, "Mugisuch'ult'ongjebŏp Wiban/Mi, Puk Ch'anggwangmuyŏk Chejae," *Donga Ilbo*, 7 May 1998, p. 10, in KINDS, www.kinds.or.kr; Chidanand Rajghatta, "US Curbs on Pak Lab over Ghauri," *Indian Express*, 6 May 1998, www.expressindia.com; Kevin Sullivan, "N. Korea Admits Selling Missiles: Move Seen as Test of U.S. Embargo," *Washington Post*, 17 June 1998, p. A1.

21 April 1998
A senior Israeli intelligence officer tells the Foreign Affairs and Defense Committee in the Israeli Knesset that Iran's development of the Shehab-3 engine is nearing completion. The official says the engine development has been the most difficult part of the Shehab-3 program, which is based on North Korea's Nodong-1. Israeli sources say that Russia is providing Iran with technology to develop the missile, and that Russia took over the program from North Korea in 1994 following "failures in the program's development."
—"Iranian Middle-Range Ballistic Missile Near Completion: Israeli Officer," Xinhua News Agency, 21 April 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

7 June 1998
Kim Shin Ae, wife of North Korean diplomat and arms dealer Kang T'ae Yun, is murdered in her home in Islamabad. A senior Pakistani police source believes Kim was murdered by other North Koreans working at the Khan Research Laboratories. Pakistani police reports say she had been providing information about North Korean weapons sales to Western diplomats. Her husband works out of their home for Ch'anggwang Shinyong Company. [Note: Ch'angwang Shinyong has been the target of US economic sanctions for the sales of missiles and missile-related technology.]
—Dexter Filkins, "N. Korea Aid to Pakistan Raises Nuclear Fears," *Los Angeles Times*, 23 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Julian West, "Pakistan Murder Exposes Nuclear Link [*sic*] The Killing of a Diplomat's Wife Has Revealed the Sinister Connection Between the North Koreans and the Pakistanis," *Sunday Telegraph* (London), 1 November 1998, p. 32, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Park Chin Yong, "'Puk Pakistan Haek Connection' Sŏbang'e Nŏmgin Hyŏm'ŭi," *Hankook Ilbo*, 6 November 1998, p. 1, in KINDS, www.kinds.or.kr.

9 June 1998
The Pentagon believes that North Korea's Nodong missile has been "operationalized." Officials cannot give the exact number of deployed Nodongs, but the Nodong is said to be capable of carrying chemical warheads. An official claims that North Korea does not have the capability to arm the missiles with biological weapons.
—Bill Gertz, "Pentagon: N. Korea's Missiles Operational; U.S. Forces in Japan Now within Range," *Washington Times*, 10 June 1998, p. 9.

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Mid June 1998
According to US intelligence officials, Pakistan receives several shipments of warhead canisters and missile production components from North Korea. The warhead canisters are believed to be for Pakistan's Ghauri medium-range missile, a copy of the North Korean Nodong.
—Bill Gertz, "Pakistan Gets Help with Missile: North Korea Delivered Warhead Canisters for Ghauri Model," *Washington Times*, 14 September 1999, p. 1A, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

16 June 1998
The Korean Central News Agency says that North Korea will continue developing, testing, and deploying ballistic missiles. The commentary also says, "Our missile export is aimed at obtaining foreign money we need at present."
—"Nobody Can Slander DPRK's Missile Policy = KCNA Commentary =," Korean Central News Agency, 16 June 1998, www.kcna.co.jp; "Kŭ Nugudo Uri Missile Chŏngch'aeg'ŭl Hŭngjŏnghal Kwŏlli'ga Ŏpta/Chosŏnjungangt'ongshin Ronp'yŏng," Korean Central News Agency, 16 June 1998, www.kcna.co.jp; Kevin Sullivan, "N. Korea Admits Selling Missiles: Move Seen as Test of U.S. Embargo," *Washington Post*, 17 June 1998, p. A1; Chiharu Mori, "N. Korea Admits Exporting Missiles," *Daily Yomiuri*, 17 June 1998, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, "N. Korea Demands Compensation for Missile Export Halt," Japan Economic Newswire, 16 June 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Andrei Varlamov, "Pyongyang Wants Good Price for Giving up Missile Trade," ITAR-TASS, 19 June 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

23 June 1998
Japan releases its Defense White Paper, which says that North Korea has deployed Scud-B and Scud-C missiles, and that Pyongyang has biological and chemical warheads. The report also says that North Korea has completed development of the Nodong-1, which has a range of 1,000km.
—Reuters, "Japan Warns on N. Korean Nuclear Missile Threat," *The Australian*, 24 June 1998, p. 8, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Japan Warns of N. Korea Arms Threat," *The Advertiser*, 24 June 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Japan Warns of N. Korea Arms Threat," Australian Business Intelligence, 24 June 1998, p. 36, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

15 July 1998
A commission headed by former Defence Secretary Donald Rumsfeld submits a report to Congress that states the ballistic missile threat from North Korea has been underestimated by previous intelligence reports. The report cites evidence suggesting that North Korea is hard at work on the Taepodong-2 ballistic missile and could deploy the missile within five years. According to the report, "it is unlikely the US would know of such a decision much before the missile was launched." The Taepodong-2 would be able to strike US territory in Alaska and Hawaii, but lightweight variations of the missile reportedly would be capable of striking a significant portion of the western continental United States. Senior intelligence officials responded to the report by claiming that the commission had used the same information available to government analysts but had assumed the worst-case scenario for each country's missile program.
—Commission to Assess the Ballistic Missile Threat to the United States, Report to the 105th Congress Session 2, 15 July 1998; Eric Schmitt, "Panel Says U.S. Faces Risk of a Surprise Missile Attack," *New York Times*, 16 July 1998,

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p. A24, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, "Congress Warns of Missile Threat to U.S., Others," Japan Economic Newswire, 16 July 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "U.S. Underestimates Missile Attack Threat," Deutsche Presse-Agentur, 16 July 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

22 July 1998

Iran conducts the first flight-test of the Shehab-3, which is actually the third flight-test of the Nodong. The missile is believed to be an Iranian assembled Nodong that flew for about 100 seconds before exploding. North Korean observers are believed to be present for the test. The Shehab-3 is believed to contain some Russian technology in its design. [Note: It is unclear clear whether the missile explosion was a catastrophic failure or a deliberate detonation.]

—Tim Weiner, "Iran Said to test Missile Able to Hit Israel and Saudis," *New York Times*, 23 July 1998, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, "Ian Tests Rodong-Type Missile, U.S. Says," Japan Economic Newswire, 24 July 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Bill Gertz, "Longer Range on Iranian Missile: Shehab-4 Could Hit Central Europe," *Washington Times*, 29 July 1998, p. A12.

27 July 1998

Manouchehr Mottaki, Iran's ambassador to Japan, admits that Iran has received technical support from North Korea for its missile development program. The ambassador reportedly tells this to Japan's Foreign Ministry when he is summoned to receive a protest over Iran's ballistic missile flight test on 22 July 1998.

—"Iran Admits Missile technology Support from N. Korea," Jiji Press Ticker Service, 4 August 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

28 July 1998

A senior Israeli intelligence official tells the Knesset Foreign Affairs and Defense Committee that Iran's missile program could be halted or delayed by several years if Russian companies are pressured to stop providing technical assistance. Otherwise, the official says, Iran will complete a Shehab-3 prototype by next year. [Note: This report contradicts claims that the Shehab-3 is an indigenously produced missile, or that it is a Nodong clone produced solely with North Korean assistance.]

—Arieh O'Sullivan and Liat Collins, "Iran Expected to Complete Shihab-3 Prototype Next Year," *Jerusalem Post*, 29 July 1998, p. 2, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Voice of Israel, 28 July 1998, in "Israeli Intelligence Head, Defense Source Comment on Iranian Missile Test," BBC Worldwide Monitoring, 29 July 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

30 July 1998

Iranian television carries a recorded interview with Iranian Defense Minister Admiral Ali Shamkhani. He states that "the domestic production of the Shehab-3 is less dependent on foreign resources than the production of Iran's Paykan cars. The technology is truly domestic. We are able to produce them on the basis of our domestic capacities."

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—IRIB Television (Tehran), "The World of Politics," 30 July 1998, in FBIS Document ID: FTS19980805000854, 5 August 1998.

7 August 1998

North Korea begins preparations for attempted launch of the Kwangmyŏnsŏng-1 satellite on 31 August 1998.
—Lee Yŏng Chong, "'Puk Wisong Su'myŏng 2 Nyŏn Ro'kesŭn 3 Dankye'—Puk Sŏnjŏnhwabo Ch'ŏt Konggae," *Joongang Ilbo*, 13 February 1999, www.joins.com; Lee Yŏng Chong, *Joongang Ilbo*, 12 February 1999, in "DPRK Publishes Magazine on Details of Satellite Launch," FBIS Document ID FTS19990216000347; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 29.

Mid August 1998

According to South Korean Defense Minister Ch'ŏn Yong T'aek, the United States tells the South Korean government that North Korea is preparing to test a ballistic missile.
—Hwang Sŏng Ki, "Ch'ŏn Kukpang Taepodong Missile Kwallyŏn Ponji Hoe'gyŏn," *Taehan Maeil*, 2 September 1998, in KINDS, www.kinds.or.kr.

27 August 1998

US intelligence detects final preparations for Taepodong-1 (Paektusan-1) space launch vehicle (SLV) launch on 31 August.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 29.

29 August 1998

A South Korean Unification Ministry official says that North Korea is "having difficulties with its missile exports because of the lack of investment." The official says North Korea has asked for $500 million from the United States because "Pyongyang has realized there is no way to make money from weapons exports."
—"NK's Defense Industry Suffers from Lack of Exports," *Korea Times*, 30 August 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

31 August 1998

North Korea attempts to place a small satellite into earth orbit with the first flight test of its three-stage Paektusan-1 (Taepodong-1) space launch vehicle (SLV). The missile is fired from the Musudan-ri Missile Test Facility on the east coast, and flies east across the Sea of Japan. The first stage separates 300km east of the launch site. The second stage continues over the main Japanese island of Honshu, and impacts in the Pacific Ocean 330km east of the Japanese port city of Hachinohe, after flying approximately 1,380km. US intelligence agencies track debris from North Korea's failed satellite launch, nearly 6,400km into the Pacific Ocean. According to a US official, the satellite broke into several pieces just seconds before reaching orbit, indicating that a "warhead could potentially have gone that far." US Pentagon spokesman Kenneth Bacon says the solid-fueled, three-stage missile is estimated to have a range of about 3,800 km to 6,000km.
—Joseph Bermudez, "North Koreans Test Two-Stage IRBM over Japan," *Jane's Defence Weekly*, 9 September 1998;

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Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, pp. 29-31; Don Kirk, "North Korea Test-Fires a Missile off Japan's North," *International Herald Tribune*, 1 September 1998, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Bill Gertz, "N. Korean Missile Seen Posing Risk to U.S.; Rocket Might Reach Alaska, Hawaii," *Washington Times*, 16 September 1998, p. A1; Kyodo News Service, "N. Korea Fires Ballistic Missile into Pacific over Japan," Japan Economic Newswire, 31 August 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Martin Fackler, "North Korea Fires Missile across Northern Japan into Pacific," Associated Press, 31 August 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Sandra Sugawara, "N. Korea Fires Ballistic Missile toward Japan, Tokyo Reports; Pentagon Confirms Firing, Calling It 'Serious Development'," *Washington Post*, 31 August 1998, p. A17, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Yu Yong Wŏn, "Puk T'ando Missile 'Taepodong 1 Ho'/Aekch'eyŏllyo Sayong," *Chosun Ilbo*, 2 September 1998, p. 2, in KINDS, www.kinds.or.kr; O Yŏng Hwan, "'Puk Wisŏng' Sashil'inya...Sagi'nya/Uri Chŏngbu'nŭn Ŏddŏh'ke Pona," Joongang Ilbo, 5 September 1998, p. 3, in KINDS, www.kinds.or.kr; Kim Yŏng Ch'ŏl, "Puk In'gongwisŏng Palsa Sashil'ilkka," *Hankyoreh Shinmun*, 5 September 1998, p. 3, in KINDS, www.kinds.or.kr.

Late August-early September 1998

The National Security Agency allegedly discovers cooperation between North Korea and China in developing satellites. The cooperation is said to involve the exchange of scientists and technology, including scientists from the Chinese Academy of Launch Technology. US intelligence had previously noticed 200 North Korean missile specialists traveling to China for training in 1995.

—Bill Gertz, "China Assists North Korea in Space Launches," *Washington Times*, 23 February 1999, p. A1.

1 September 1998

The *Joongang Ilbo* reports that the Taepodong-1 (Paektusan-1) missile has a Nodong missile as the first stage and a Scud missile as the second stage. The range is estimated to be 1,700-2,200km.

—Ch'oe Pyŏng Kŏn, "Pukhan 'Taepodong 1 Ho' Missile," *Joongang Ilbo*, 1 September 1998, www.joins.com.

1 September 1998

Former CIA Director James Woolsey says that North Korea could possibly deploy the Taepodong-1 within a year. Woosley says it is too early to determine, but deployment will depend upon the results of the flight test. He adds that the North Koreans might have lower standards for deployment.

—"Ex-CIA Chief Woolsey Sees Early Deployment of N. Korea Missile," Jiji Press Ticker Service, 2 September 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "'Puk Taepodong 1 Ho 1 Nyŏnnae Shilchŏnbaech'i'/Woolsey Chŏn CIA Kukchang Palkhyŏ," *Kyunghyang Shinmun*, 3 September 1998, p. 2, in KINDS, www.kinds.or.kr.

1 September 1998

According to the Yonhap News Agency, North Korea begins to focus on the acquisition of special metals after the Paektusan-1 launch in order to reduce the weight of the missile's airframe.

—Kim Kwi Kŭn, "Puk Missile Kaebalmit Such'ulhyŏnhwang," Yonhap News Agency, 6 February 2002, www.yonhapnews.co.kr.

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2 September 1998
A high-level South Korean government official says that the Taepodong-1 test-launch appears to have been successful. The official says that North Korea will be able to deploy the missile by 2000 at the earliest, and that it will be offered for sale to countries such as Iran, Iraq, and Pakistan for about $6 million per missile.
—Ch'ae Byŏng Gŏn, "Shihŏmbalsa Taepodong 1 Ho Missile/Puk, 2 Nyŏnnae Shilchŏnbaech'i'," *Joongang Ilbo*, 3 September 1998, p. 1, in KINDS, www.kinds.or.kr; Kim Dong Wŏn, "'Taepodong 1 Ho Missile Puk, 2 Chŏnnyŏn Shilchŏn Baech'i'/Chŏngbu Tanggukcha Chŏnmang," *Segye Ilbo*, 3 September 1998, p. 1, in KINDS, www.kinds.or.kr; Kim In Ch'ŏl, "'Taepodong 1 Ho Missile 2000 Nyŏnkke Shilchŏn Baech'i'/Chŏngbudangguk Chŏnmang," Taehan Maeil, 3 September 1998, p. 1, in KINDS, www.kinds.or.kr.

3 September 1998
South Korean Defense Minister Ch'ŏn Yong T'aek tells the National Assembly that it would now be difficult for North Korea to arm a Taepodong-1 missile with a nuclear warhead, but it would be possible if some technical problems are solved. Ch'ŏn also says that North Korea's Taepodong-1 is a serious threat to all of Northeast Asia.
—Kim Yŏn Kwang, "'Puk Taepodong Missile Haekt'andu T'apchaehal Sudo'/Ch'ŏn Yong T'aek Kukpang Palghyŏ," *Chosun Ilbo*, 4 September 1998, p. 2, in KINDS, www.kinds.or.kr; Kim Byŏng Ch'an and Kwŏn Hyŏk Pŏm, "Missile Such'ulp'ogi Taega/Puk, Mi'e 5 Ŏkpul Yogu/Kang In Dŏk T'ong'il Kukhoebogo," *Hankook Ilbo*, 4 September 1998, p. 1, in KINDS, www.kinds.or.kr.

3 September 1998
South Korea's Unification Minister Kang In Dŏk tells the National Assembly that North Korea told a visiting US House member on 11 August 1998 that Pyongyang wants at least $500 million in compensation to cease its missile exports. In a report Kang submits to the National Assembly, North Korea is said to be capable of producing about 100 Scud missiles a year and is continuing tests for the Taepodong-2 engine. The report also says that between 1987 and 1992, North Korea exported approximately 250 Scud missiles to countries such as Iran, Syria, and the United Arab Emirates for $580 million. [Note: Some press reports say North Korea is demanding $500 million to stop its exports, while others say the figure is $1 billion.]
—"N. Korea Demands Cash to Suspend Missile Exports: S. Korea," Agence France Presse, 4 September 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North Korea Demands Money in return for Missile Test Stop," Deutsche Presse-Agentur, 4 September 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Shin Yong-bae, "North Demands Money for Ending Missile Projects," *Korea Herald*, 4 September 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Mun Ch'ŏl, "Puk Missile P'ogi taiga Yogu/Kang In Dŏk Changgwan Palghyŏ," *Donga Ilbo*, 4 September 1998, p. 6, in KINDS, www.kinds.or.kr; Kim Byŏng Ch'an and Kwŏn Hyŏk Pŏm, "Missile Such'ulp'ogi Taega/Puk, Mi'e 5 Ŏkpul Yogu/Kang In Dŏk T'ong'il Kukhoebogo," *Hankook Ilbo*, 4 September 1998, p. 1, in KINDS, www.kinds.or.kr; Yŏ Hyŏn Ho, "Missile Such'ul P'ogi Taega/Puk, Mi'e 10 Ŏk Dollar Yogu," *Hankyoreh Shinmun*, 4 September 1998, p. 2, in KINDS, www.kinds.or.kr; Park Tae Ch'ul, "Puk, Missile P'ogidaega Mi'e 10 Ŏk Dollar Yogu," *Taehan Maeil*, 4 September 1998, p. 1, in KINDS, www.kinds.or.kr.

4 September 1998
The Korean Central News Agency says that North Korea launched a satellite into orbit via a multi-stage rocket on 31 August 1998. The purpose of the launch was to (1) confirm the calculation basis for future satellite launches,

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and (2) encourage the Korean people in the efforts to build a powerful socialist state under the wise leadership of General Secretary Kim Jong Il.
—"Successful Launch of First Satellite in DPRK," Korean Central News Agency, 4 September 1998, www.kcna.co.jp; "Uri Nara'esŏ Ch'ŏt In'gongjiguwisŏng Sŏggwajŏg'ŭro Palsa/Chosŏnjungangt'ongshin," Korean Central News Agency, 4 September 1998, www.kcna.co.jp; Nicholas D. Kristof, "North Koreans Declare They Launched a Satellite, Not a Missile," *New York Times*, 5 September 1998, p. A5, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

5 September 1998
North Korea's Supreme People's Assembly (SPA) revises the constitution, making the National Defense Commission (NDC) the highest authority over state affairs, and making Kim Il Sung "eternal president" of North Korea. The SPA also re-elects Kim Jong Il as chairman of the NDC.
—"DPRK Socialist Constitution," Korean Central News Agency, 5 September 1998, www.kcna.co.jp; Chosŏnminjujuŭiinmin'gonghwaguk Sahoejuŭihŏnbŏp," Korean Central News Agency, 5 September 1998, www.kcna.co.jp; Central Broadcasting Station, 5 September 1998, in "'Text' of North Korea's Socialist Constitution," BBC Worldwide Monitoring, 8 September 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Nicholas D. Kristof, "Death Doesn't End Rule of Kim Il Sung, 'Eternal President'," *New York Times*, 7 September 1998, p. A5, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Sang-Hun Choe, "North Korea Makes Kim Jong Il Head of State," Associated Press, 5 September 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North Korean Lawmakers Re-Appoint Kim Head of Military," Deutsche Presse-Agentur, 5 September 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Kim Jong Il Elected Head of State," *Mainichi Daily News*, 6 September 1998, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

5 September 1998
Russian "government sources" say that 20 Russian "nuclear scientists and missile experts" provided limited theoretical support for the North Korean nuclear and missile programs. The Russian Foreign Ministry reportedly has confirmed that North Korea has invited Russian scientists, but that all of them have now returned to Russia. The sources believe North Korea developed the Nodong-1 and Taepodong-1 missiles independently because of limited Russian support.
—"Russian helped N. Korea's Missile Development," Jiji Press Ticker Service, 7 September 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

13 September 1998
A senior South Korean government official says that the South Korean government has concluded that the North Korean Taepodong-1 flight-test on 31 August was an unsuccessful attempt to place a satellite into orbit.
—Chon Shi-yong, "Government Concludes North Korean Missile Was Failed Satellite Attempt," *Korea Herald*, 14 September 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

14 September 1998
The United States confirms that North Korea tried and failed to place a satellite in orbit during its rocket launch on

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31 August 1998. US State Department Spokesman James Rubin says that the military implications of the test are the same regardless of whether North Korea launched a missile or a satellite. North Korea has demonstrated the capability for delivering weapon payloads against surface targets at increasing ranges. According to Rubin, the United States regards the test as "a threat to us and this region."
—Lim Yun-Suk, "N. Korea Boasts of Satellite Launch after US Admits It Was Wrong," Agence France Presse, 15 September 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

16 September 1998
North Korea and the United States agree to resume missile talks from 1 October 1998.
—"USA and N. Korea Set to Resume Missile Talks," *Jane's Defence Weekly,* 16 September 1998, p. 1.

17 September 1998
Robert Walpole, the CIA's national intelligence officer for strategic and nuclear programs, says that the first and second stages performed successfully during the Taepodong-1 test-flight on 31 August 1998. However, the third stage failed to place a small satellite into orbit. Walpole says the Taepodong-1 has a range of 1,500-2,000km, and that North Korea might test-launch the Taepodong-2 by the end of the year.
—"CIA Official Warns against Threat of N. Korean Missiles," Jiji Press Ticker Service, 28 September 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

23 September 1998
Robert Smith, a Republican senator from New Hampshire, says that North Korea may be capable of striking Alaska with a missile, which is a greater capability than previously thought. The senator makes the statement after a classified briefing with CIA Director George Tenet.
—Kyodo News Service, "N. Korea Missiles May Be Capable of Reaching Alaska," Japan Economic Newswire, 24 September 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

25 September 1998
North Korea's *Nodong Sinmun* denounces the US allegation that North Korea has built underground nuclear facilities and threatens to attack the United States as an "unpardonable encroachment upon the sovereignty and dignity of North Korea." The commentary also states that "whether the launch of our artificial satellite is used for military purposes or not, entirely depends on the attitude of the United States and other hostile forces."
—"U.S. Hit for Frantic Anti-DPRK Campaign," Korean Central News Agency, 25 September 1998, www.kcna.co.jp; Mi'gug'ŭi Pan'gonghwa'gug'apsalch'aektong'ŭl Kyut'an/Rodongsihinmun Ronp'yŏng," Korean Central News Agency, 25 September 1998, www.kcna.co.jp; "Do Not Make Unnecessary Rackets," *Nodong Simun*, 25 September 1998, in "North Korea Says Use of Satellite Launch Depends on USA and 'Other Hostile Forces'," BBC Worldwide Monitoring, 26 September 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

1-2 October 1998
North Korea and the United States hold a third round of bilateral missile talks in New York. The United States offers North Korea improved relations if it restrains its missile tests and exports. North Korea rejects US demands, and claims that "missiles are tools for self-defense, which is the natural independent right of a sovereign state."

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—"U.S. Demand To End Testing, Exporting of Missiles Rejected," *Chicago Tribune,* 4 October 1998; Kim Tu-hwan, "Reemerging DPRK Missile Issue," Yonhap News Agency, 22 February 2001, in "DPRK Missile Development Reemerges as Pending Issue," FBIS Document ID KPP200010222000105; "U.S. Says Progress in Missile Talks 'Up to Pyongyang'," Deutsche Presse-Agentur, 2 October 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

2 October 1998

US State Department Spokesman James Rubin says that North Korea could face "very negative consequences" if it conducts further tests or exports long-range missiles. Rubin expresses concern over North Korea's export of Scud missiles to Iran, Syria, and Pakistan.

—"U.S. Says Progress in Missile Talks 'up to Pyongyang'," Deutsche Presse-Agentur, 2 October 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

November 1998

According to the *Washington Times*, "a report" claims China provides specialty steel for missiles to North Korea. The deal reportedly generates a note of diplomatic protest from the US State Department in December 1999.

—Bill Gertz, "China Breaks Vow, Sends N. Korea Missile Materials," *Washington Times*, 6 January 2000, p. 1.

November 1998

US intelligence detects North Korean preparations to conduct a missile flight-test.

—"2nd Missile Launch Likely, U.S. Govt Warns Tokyo," *Daily Yomiuri*, 2 December 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Greg Seigle, "Another N. Korean Missile Launch Near, Says USA," *Jane's Defence Weekly*, 9 December 1998, p. 4.

6 November 1998

South Korean Defense Minister Ch'ŏn Yong T'aek says that North Korea will probably deploy nine Nodong missiles by the end of the year. Ch'ŏn says the Nodong has a range of 1,000km, and that North Korea has 2,500 tons of chemical weapons. According to Ch'ŏn, the three-stage Taepodong-1 can deliver a small payload to a range of 6,000km.

—"N. Korea Likely to Bring 9 Rodong Missile into Operation," *Asia Pulse*, 9 November 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Song Sang Kŭn, "'Puk, Nodong 1 Ho 9 Ki Yŏnnae Shilchŏnbaech'i'/Chŏn Kukpang Chaehyanggun'inhoe Anbogang'yŏn," *Donga Ilbo*, 7 November 1998, p. 5, in KINDS, www.kinds.or.kr; Ch'ae Byŏng Gŏn, "'Nodong 1 Ho Missile 9 Ki Yŏnmalkkaji Shilchŏnbaech'i'/Chŏn Yong T'aek Kukpangjanggwan," *Joongang Ilbo*, 7 November 1998, p. 2, in KINDS, www.kinds.or.kr.

20 November 1998

The *Washington Post* quotes US intelligence and diplomatic sources as saying that North Korea is building two new launch facilities, at Yong'ŏ-dong and Chiha-ri, for its medium-range Taepodong-1 [Paektusan-1] missile. The sources further allege that North Korea has already completed the bunkers to store propellants at the Yong'o-dong site and that the facility could become operational as early as 1999. A similar facility is also being built at Chiha-ri, which is the technical support base for North Korea's Scud missile brigade. [Note: There is no "Yong'ŏ-dong" in

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North Korea. The actual site is Yŏngjŏ-ri, Kimhyŏngjik-kun, Yanggang Province.]
—Thomas W. Lippman and Dana Priest, "N. Korea Expanding Missile Programs," *Washington Post,* 20 November 1998, www.washingtonpost.com; Kang Hyo Sang, "Taepodong 1 Ho Palsa Shilsŏl/Puk, Ch'oeso Tugos'e Kŏnsŏlchung," *Chosun Ilbo*, 21 November 1998, p. 3, in KINDS, www.kinds.or.kr.

December 1998
US intelligence agencies believe that North Korea appears to have postponed a second test of its Taepodong-1 [Paektusan-1] missile. US intelligence analysts speculate that North Korea probably has a limited number of Taepodong-1 missiles or is waiting for better weather and political conditions.
—Bill Gertz, "North Korea Postpones Testing of New Long-Range Missile," *Washington Times,* 31 December 1998, p. A4; Kyodo News Service, "N. Korea May have Postponed 2nd Missile Launch: Daily," Japan Economic Newswire, 2 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

First week of December 1998
US intelligence officials tell Tokyo that North Korea may launch another Taepodong-1 (Paektusan-1) missile in December 1998. In November, US spy satellites detected movement of Taepodong-1 missile components from storage to a launch pad.
—"2nd Missile Launch Likely, U.S. Govt Warns Tokyo," *Yomiuri Shimbun*, 2 December 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Greg Seigle, "Another N. Korean Missile Launch Near, Says USA," *Jane's Defence Weekly*, 9 December 1998, p. 4.

8 December 1998
NHK Television in Japan quotes Defense Agency sources as saying North Korea is building three underground missile launch facilities in the northern part of the country. The report says a fuel storage facility will be completed in one or two years at one of the sites.
—"N. Korea Building Three Underground Launch Facilities," *Korea Times*, 8 December 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "US Warns New Launching Sites under Construction in N. Korea: Report," Agence France Presse, 7 December 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

9 December 1998
North Korean Vice-Foreign Minister Kim Kye Kwan claims that the planned launch of a Taepodong-1 (Paektusan-1) rocket is not a missile test, but part of North Korea's satellite program. He does not mention when the launch is scheduled.
—"N. Korea Preparing Second 'Satellite' Launch: Report," Agence France Presse, 11 December 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

12 December 1998
A European parliamentary delegation returning from North Korea reports that North Korea is prepared to launch a second satellite. Officials in the North Korean Foreign Ministry informed the delegation that North Korea has a second satellite.

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—Kyodo News Service (Tokyo), 12 December 1998, in "European Mission: DPRK Set To Launch 2d Satellite," FBIS Document ID FTS19981212000011.

17 December 1998

Russian Defense Ministry sources say that a medium-range ballistic missile is to be launched from a North Korean test site at Musudan-ri. The new rocket will have a range of about 3,500km. [Note: The test does not take place.]
—Vladislav Kuznetsov, "North Korea to Stage ballistic Missile Test," ITAR-TASS, 17 December 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Report: N. Korea to test Another Missile," AP Online, 17 December 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, "N. Korea to Test-Fire Missile: ITAR-TASS," Japan Economic Newswire, 17 December 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

18 December 1998

Japan's Defense Agency presents a report to the Liberal Democratic Party that says North Korea is building "two new missile sites in addition to one already confirmed." The confirmed site is at Taepo-dong [Musudan-ri], and one site near the Demilitarized Zone (DMZ) and another in the northern part of North Korea.
—Kyodo News Service, "N. Korea Building 2 New Missile Launch Sites: Report," Japan Economic Newswire, 19 December 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "N. Korea Building New Missile Launch Sites: Japan," *Korea Times*, 20 December 1998, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Yun Sang Sam, "Puk Haeg'ŭihokshijŏl Kyumyŏng Pujinhalddaen Mi Naenyŏnch'o Kanggyŏngnosŏn Ch'wihaltŭt," *Donga Ilbo*, 21 December 1998, p. 10, in KINDS, www.kinds.or.kr.

22 December 1998

Sasae Kenichiro, director of the Japanese Foreign Ministry's North Korean Division, demands an end to North Korea's ballistic missile tests in an informal meeting with the deputy head of the North Korean UN mission in New York.
—"Japan Demands End to N. Korea Missile Tests," *Korea Times*, 21 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Japan Had Unofficial Contact with N. Korea in Dec.," Jiji Press Ticker Service, 19 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

23 December 1998

According to Japan's Defense Agency, "it is highly likely that North Korea is building missile launch facilities at "Yong'ŏ-dong" near Mt. Paektu, and at Chiha-ri," which is in P'an'gyo-kun, Kangwŏn Province. The agency also says that North Korea is making rapid progress in the development of the Taepodong-1. [Note: There is no "Yong'ŏ-dong" in North Korea. The actual site is Yŏngjŏ-ri, Kimhyŏngjik-kun, Yanggang Province.]
—Yun Sang Sam, "Puk Yongŏdong Chihari'e Missile Kiji Kŏnsŏlchung," *Donga Ilbo*, 24 December 1998, p. 10, in KINDS, www.kinds.or.kr; Lee Jun, "Pukhan Missile Kiji Tu'got Kŏnsŏlchung'indŭt/Il Pangwich'ŏng, Yongodong Chihari Chimok," *Chosun Ilbo*, 24 December 1998, p. 1, in KINDS, www.kinds.or.kr.

25 December 1998

North Korea warns the United States that it is prepared to launch another medium-range missile. A US CIA source

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says that the United States has asked North Korea to reconsider future ballistic missile tests. The Korean Central News Agency carries a report from the *Rodong Sinmun* that says, "We are fully ready to launch an artificial satellite again when we think it necessary."
—David E. Singer, "North Korea Warns U.S. That It Could Launch Another Missile," *New York Times,* 26 December 1998, www.nytimes.com; "U.S. Warned Not to Try to Test DPRK," Korean Central News Agency, 25 December 1998, www.kcna.co.jp; "In'gongwisŏng'ŭl Ddodashi palsahal mandan'ŭi Chunbidoeyŏitta/Rodongshinmun," Korean Central News Agency, 25 December 1998, www.kcna.co.jp.

Late 1998
North Korea is reportedly building a new Nodong missile base at "Yŏngjŏ-dong," Kimhyŏngjik-kun, Yanggang Province. [Note: The actual name is "Yŏngjo-ri."]
—Kim Min Sŏk, "Puk Missile Kiji Kyesok Chŭngsŏl," *Joongang Ilbo*, 6 March 2001, p. 8, in KINDS, www.kinds.or.kr.
North Korea delivers 10 tons of powdered aluminum to Syria. The aluminum originally came from China, and is delivered to the Centre des Etudes et de Recherche Scientifique (CERS, Scientific Studies and Research Center), the institute in charge of Syria's missile and chemical weapons programs. Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 19.

1997

1997
Syria conducts several missile tests. Most are believed to be R-17s (Scud-Bs), but some may be Hwasŏng-6s.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 19.

1997
North Korea resumes low-level deliveries of missile components to Iran.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 25.

1997
Kang T'ae Yun, a North Korean diplomat in Pakistan, brokers a deal with the All Russian Institute of Light Alloys in Moscow for the delivery of maraging steel to Pakistan and North Korea. Customs officials in Gatwick Airport seized the maraging steel, addressed to Kang Thae Yun, when it was discovered on a British Airways flight from Moscow to Islamabad. Intelligence sources believe Kang T'ae Yun to be one of North Korea's busiest arms dealers.
—Dexter Filkins, "N. Korea Aid to Pakistan Raises Nuclear Fears," *Los Angeles Times*, 23 August 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Julian West, "Pakistan Murder Exposes Nuclear Link: The Killing of a Diplomat's Wife has Revealed the Sinister Connection Between the North Koreans and the Pakistanis," *Sunday Telegraph* (London), 1 November 1998, p.32, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Lee Ch'ŏl Min, "Pakistan, Puk'e Haekkisul Chegong," *Chosun Ilbo*, 25 August 1999, p. 10, in KINDS, www.kinds.or.kr.

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1997

According to Japan Defense Agency sources, North Korea produces 20 Nodong-1 missiles. [Note: See entries for first half of 1998 and 2 January 1999.]

—"Report: North Korea Deploying Medium-Range Missiles," Associated Press, 2 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, 2 January 1999, in "North Korea Deploying, Exporting Medium-Range Missiles – Japanese Report," BBC Worldwide Monitoring, 2 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

1997-98

North Korea may have begun initial production of the Taepodong-1 (Paektusan-1). About one Taepodong-1 (Paektusan-1) per month can be produced if Hwasŏng-6 and Nodong production were curtailed.

—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 29.

February 1997

NHK Television in Japan reports that a US reconnaissance satellite has detected the deployment of three mobile Nodong missile launchers on North Korea's east coast. The deployment follows the suspension of a Nodong flight test that was reportedly planned for October 1996.

—Makiko Tazaki, "North Korea Preparing for Another Test Firing," Agence France Presse, 11 April 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Puk, Missile Tonghaean Chaebaech'i/3 Ki Palsashihŏm Kanghaengt'aese...7 Ki Kot Ch'uga," *Segye Ilbo*, 12 April 1997, p. 2, in KINDS, www.kinds.or.kr.

5 February 1997

In testimony before the US Senate Intelligence Committee, CIA Director George Tenet and DIA Director Army Lt. General Patrick Hughes say that North Korea may be able to threaten the United States with intercontinental ballistic missiles (ICBMs) within 10-15 years. They say that the Taepodong-2, with a range of 4,000-6,000km, will be able to strike Alaska and Hawaii.

—Pak Tu Shik, "[Pukhan] 10-15 Nyŏnnae ICBM Kaebalganŭng...Mijŏngbogwan'gyejadŭl," *Chosun Ilbo*, 6 April 1997, www.chosun.com.

12 February 1997

Korean Workers Party Secretary Hwang Chang Hyŏp enters the South Korean Embassy in Beijing and asks for asylum, making him the highest-ranking North Korean to ever defect. North Korea initially denies Hwang's defection, claiming it is "an obvious abduction."

—"Blow to N. Korea as Senior Official Seeks Asylum in South," Agence France Presse, 12 February 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "N. Korea Denies Defector Seeks Asylum," United Press International, 13 February 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

March 1997

Ecuador's *Vistazo* magazine reports that Peru intends to acquire Taepodong missiles from North Korea and is negotiating with international weapons firms to purchase eight missile launchers and thirty-two North Korean

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missiles, worth approximately one million dollars each. Peruvian military sources deny the report.
—*Voz de los Andes* (Quito), 20 March 1998, in "Magazine Reports Peru to Buy North Korean Missiles," FBIS-LAT-97-080, 21 March 1997, Document ID FTS19970321002232.

24 March 1997
US satellite imagery detects three mobile Nodong missile launchers in northeastern North Korea. Analysts have also detected seven more deployed Nodongs at a base about 100km from Pyongyang, bringing the total of deployed Nodongs observed so far to ten.
—"Puk Nodong 1 Ho Missile Palsadae Paech'i," *Chosun Ilbo*, 31 May 1997, www.chosun.com; Paul Beaver, "Ten Nodongs Fielded but Accuracy is Low, Says USA," *Jane's Defence Weekly*, 28 May 1997, p. 4.

March-April 1997
North Korea sends at least seven shipments of material for Scud-C production to Egypt. [Note: The types of materials are not specified.]
—Bill Gertz, "CIA Seeks Missile Data from Defector," *Washington Times*, 27 August 1997, p. A1.

April 1997
US intelligence officials brief South Korean and Japanese officials on the North Korean deployment of Nodong ballistic missiles earlier this year. US intelligence sources surmise that North Korea may have deployed its Nodong-1 ballistic missiles prematurely, as the missiles lack a reliable guidance system. Without a reliable guidance system, the missile is more useful as a "terror weapon" rather than a strategic military weapon. US officials also believe that the principal difference between the Nodong-1 and -2 is the fuel supply system. The Nodong-2 may employ a redesigned fuel system to allow for longer burn times.
—Paul Beaver, "Ten Nodongs Fielded but Accuracy Is Low, Says USA," *Jane's Defence Weekly*, 28 May 1997, p. 4; "Puk Missile Nodong 1 Ho Terror Yong Mugi," *Chosun Ilbo*, 29 May 1997, www.chosun.com.

8 April 1997
The US State Department reveals that the second round of missile talks between the United States and North Korea will be held early next month in New York.
—Debra Lau, "N. Korea Moves Closer to 4-Party Peace Talks," *Daily Yomiuri*, 10 April 1997, p. 11, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; George Gedda, "U.S. Weighs Additional Food Aid to North Korea," AP Worldstream, 9 April 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Mi-Puk, Naedalch'o 2 Ch'a Missile Hyŏpsang Chaegae Hab'ŭi," *Chosun Ilbo*, 10 April 1997, www.chosun.com.

11 April 1997
The *Sankei Shimbun*, citing a source on the Korean peninsula, says a US reconnaissance satellite has detected the deployment of Nodong missiles on the North Korean east coast. According to the report, three missiles have been deployed and the deployment of seven more will be completed soon. North Korea had suspended deployments during the fall of last year.
—*Sankei Shimbum*, 11 April 1997, in "Japanese Source Says Missiles Deployed Along Sea of Japan Coast," BBC Summary of World Broadcasts, 12 April 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; *Sankei*

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Shimbun (Tokyo), 11 April 1997, in "Source: DPRK Deploys Nodong-1 Missile on Northeast Coast," FBIS-EAS-97-100, 10 April 1997, Document ID FTS199704100001252; "Pukhan Rodong 1 Ho Missile 10 Ki Tonghaean Paech'i," *Chosun Ilbo*, 11 April 1997, www.chosun.com.

11 April 1997

NHK Television in Japan, citing a US intelligence source, reports that North Korea is preparing to conduct a flight-test of a Nodong missile. The report also says three Nodong missiles have been deployed on North Korea's east coast, and seven more missiles will probably be deployed soon.

—Makiko Tazaki, "North Korea Preparing for Another Test Firing," Agence France Presse, 11 April 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North Korea Resumes Preparation for Nodong-1 Test-Firing: Reports," Agence France Presse, 11 April 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Puk, Missile Tonghaean Chaebaech'i/3 Ki Palsashihŏm Kanghaengt'aese...7 Ki Kod Ch'uga," *Segye Ilbo*, 12 April 1997, p. 2, in KINDS, www.kinds.or.kr; Park Chong Mun, "Puk Nodong 1 Ho Tonghaean Paech'i Hwag'in/NHK Podo," *Hankyoreh Shinmun*, 12 April 1997, p. 8, in KINDS, www.kinds.or.kr.

12 April 1997

A high-level source in the South Korean Foreign Ministry says that the Four Party Talks between the United States, China, North Korea and South Korea will resume in the middle of May. The source also says that the United States and North Korea will apparently establish liaison offices in mid-May. [Note: Subsequently, the United States and North Korea do not establish the liaison offices.]

—Ch'oe Sang Yŏn, "4 Chahoedam-Yŏllaksamuso Puk-Mi Naedal Habŭijŏpkŭn/Puk, Sŏnshingnyangjiwŏnyogu Ch'ŏlhoe," *Joongang Ilbo*, 13 April 1997, p. 1, in KINDS, www.kinds.or.kr.

14 April 1997

Japan's Foreign Minister Ikeda Yukihiko reveals reports that North Korea has deployed the Nodong-1 intermeditate-range ballistic missile (IRBM). However, Ikeda says the reports have not been confirmed.

—"Kwan Weng Kin, "Tokyo Gets Reports of N. Korea Missiles Targeted at Japan," *Straits Times* (Singapore), 15 April 1997, p. 2, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, "Japan Obtains Unconfirmed Info on N. Korean Missiles," Japan Economic Newswire, 14 April 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Japan Sees North Korean Missile Redeployment," Deutsche Presse-Agentur, 14 April 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Pukhan, 'Rodong-1' Missile Paech'i Iloesang Kukhoeso Chingboipsu Palkhyo," *Chosun Ilbo*, 14 April 1997, www.chosun.com.

14 April 1997

US State Department Spokesman Nicholas Burns says that the second round of US-North Korea missile talks will be held in New York 12-13 May 1997. Burns also says that the United States may respond on 15 May regarding North Korea's request at the United Nations for additional food aid.

—Sarah Jackson-Han, "US, North Korea Appear Ready to Strike a Deal," Agence France Presse, 15 April 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "U.S., North Korea Talks Scheduled," United Press International, 14 April 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "[Pukhan] Taumdal

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Mikukkwa Missile Hoedam Chaegaehapui," *Chosun Ilbo*, 15 April 1997; "Puk-Mi Naedal Missile Hoedam Kaech'oe Kukmububalp'yo: 12~13 Il New York'sŏ," *Chosun Ilbo*, 15 April 1997, www.chosun.com.

18 April 1997

A US government official says that North Korea "has either deployed or is about to deploy mobile-launched tactical ballistic missiles in quantities much larger than anticipated."

—Barbara Opall, "Japan Nears Commitment to BMD Buy," *Defense News*, vol. 12, no. 16, 21-27 April 1997, pp. 1, 82; "Puk, Idongshik Missile Susipki Paech'i'nŭngnyŏk," *Chosun Ilbo*, 22 April 1997, www.chosun.com.

24 April 1997

Ha'aretz reports that North Korea recently supplied Iran with a computer program enabling it to produce the 1,300km range Nodong missile.

—"North Korea Sold Missile Technology to Iran – Haaretz," *Mideast Mirror*, 24 April 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

28-30 April 1997

Japanese Defense Chief Kyuma Fumio travels to South Korea to conduct security talks with South Korean Defense Minister Kim Dong Jin and Prime Minister Ko Kŏn. During the talks, the two countries discuss reports of recent deployment of Nodong missiles in North Korea.

—Kyodo News Service, "Japanese, S. Korean Defense Chiefs to Start Talks Monday," Japan Economic Newswire, 27 April 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

29 April 1997

In an annual strategic report, the Pentagon states that, with the development of the Taepodong-2 missile, North Korea poses a missile threat to the United States, "but the likelihood of (the missile) being operational within five years is very low."

—Kohei Murayama, "Pentagon Report Eyes Continued Presence in E. Asia," Japan Economic Newswire, 30 April 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

5 May 1997

The US State Department announces that North Korea has requested the postponement of missile talks scheduled for 12-13 May due to "technical reasons." North Korea reportedly has asked that the talks be delayed for several weeks. The talks were supposed to address North Korean missile sales to Iran and Syria, as well as reports that North Korea is preparing to deploy Nodong-1 missiles. North Korea currently has deployed three Nodong missiles on its east coast and is planning to deploy seven more.

—"N. Korea Calls Off Missile Talks Set for Next Week," *Korea Times*, 8 May 1997, in KINDS, www.kinds.or.kr; Yu Hye Ju, "Taemihyŏpsang Uwi'norin Kodojŏnsul/Puk Missile Hoedam Yŏn'giyoch'ŏng Pae'gyŏng," *Segye Ilbo*, 8 May 1997, p. 2, in KINDS, www.kinds.or.kr; Na Yun Do, "Mibuk Missile Hoedam Tolyŏn Yŏn'gi/Puk Kisulchŏk Iyuro...Saedalch'o Yŏllildŭt," *Taehan Maeil*, 8 May 1997, p. 2, in KINDS, www.kinds.or.kr.

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5 May 1997
Egypt asks North Korea to supply spare parts for the guidance and control systems used in Egypt's Scud missiles.
—Bill Gertz, "CIA Seeks Missile Data from Defector," *Washington Times*, 27 August 1997, p. A1.

5 May 1997
North Korea has completed the deployment of seven Nodong missiles in the Pyongyang area and three Nodongs near its northeast coast.
—Kim Kyŏng Su, "Pukhan Missile Hyŏn'an: Chŏnmanggwa Taech'aek," *Chugan Kukpang Nondan (The Weekly Defense Review)*, 9 August 1999, p. 4.

6 May 1997
According to US military sources, North Korea has upgraded the warhead section of its Nodong missile. The missile's payload has been reduced from its original 1,000kg capacity to several hundred kilograms, making the missile less likely to break up on re-entry. The reduced payload will still allow the missile to carry chemical weapon payloads, but not a nuclear one. A Japanese defense official, however, cast doubt on the US information.
—Kyodo News Service, "N. Korea Improves Rodong Missile, U.S. Sources Say," Japan Economic Newswire, 7 May 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service (Tokyo), 7 May 1997, in "Defense Source Doubts U.S. Reports on Nodong Missiles," FBIS-EAS-97-126, 6 May 1997, Document ID FTS19970506001302.

9 May 1997
Yu Myŏng Hwan, director general of North America Affairs at the South Korean Foreign Ministry, says there is no firm evidence that North Korea has deployed Nodong missiles. Yu also says the United States is expected to propose that bilateral missile talks with North Korea be resumed next month.
—"U.S. to Discuss North Korean Missiles at Talks in June," *Korea Herald*, 10 May 1997, in KINDS, www.kinds.or.kr.

12 May 1997
The *Shankei Shimbun*, citing US military sources, says that US analysts now estimate the range of the Nodong to be 1,300km rather than earlier estimates of 1,000km. The estimates are based upon satellite imagery from October 1996 that showed a fuel truck preparing a Nodong for launch. Furthermore, US reconnaissance satellites have detected three Nodongs deployed on North Korea's east coast, with seven more expected to be deployed soon.
—"North Korean Missile Capable of Hitting Tokyo: Report," Agence France Presse, 13 May 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Nodong 1 Ho Sajonggori 1 Ch'on 3 Paek km," *Chosun Ilbo*, 13 May 1997, www.chosun.com; No Chae Hyon, "Pukhan Nodong 1 Ho Missile Sajŏnggŏri 1,300 km," *Joongang Ilbo*, 14 May 1997, www.joins.com; "N. Korea Missile Capable of Hitting Tokyo," *Korea Times*, 14 May 1997, in KINDS, www.kinds.or.kr; Kang Sŏng Bo, "Puk Nodong 1 Ho Sajŏnggŏri 1,300km/Ilchi 'Il Chŏn'yŏk Sajŏnggwŏn'," *Kyunghyang Shinmun*, 14 May 1997, p. 2, in KINDS, www.kinds.or.kr; No Jae Hyŏn, "Puk Nodong 1 Ho Missile/Sajŏnggŏri 1,300km," *Joongang Ilbo*,14 May 1997, p. 2, in KINDS, www.kinds.or.kr.

13 May 1997
Japan Defense Agency chief Kyuma Fumio says he is not sure where the 1,300km range figure for the Nodong,

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which was reported by the press on 13 May,originated. Kyuma says, "We tried our best to find out where this figure came from but absolutely nothing came up."
—Kyodo News Service, "Defense Chief Casts Doubt on N. Korean Missile Report," Japan Economic Newswire, 13 May 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

16 May 1997
According to the *Sankei Shimbun*, Minister Counselor Han Sŏng Ryŏl of North Korea's Permanent Mission to the United Nations says that North Korea is discussing the resumption of missile talks with the United States. Han says the later half of June has been proposed, but that it will depend on the response of the United States and South Korea to North Korea's request for food aid in the Four Party Talks.
—"Puk, Missile Hoedam 6 Wŏlhasun Kaech'oe Hyŏp'ŭi," *Chosun Ilbo*, 16 May 1997, www.chosun.com.

18 May 1997
Colonel-General Leonid Ivashov, chief of the Main Directorate for International Military Cooperation in the Russian Defense Ministry, says there is no evidence that North Korea has deployed its Nodong missile. General Ivashov does not believe that North Korea can produce a completely new missile that differs from the Scud. He acknowledges that countries might extend the range of missiles, such as Iraq did, but that he believes it is not possible to design and produce an entirely new missile, North Korea being no exception. Ivashov says there is no credible evidence to indicate that the Nodong can strike a target 1,300km away, and that these assumptions are designed to elicit Japanese and Taiwanese participation in US theater missile defense (TMD) plans.
—Alexander Kopnov, Vladimir Solntsev, and Mikhail Shevtsov, "Russia Has No Proof N. Korea Deploying Rodong-1 – General," ITAR-TASS, 18 May 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Pukhan, Nodong-1 Ho Missile Paech'I Chunggo Ŏpsŏ: Rŏ Kukpangbu," *Chosun Ilbo*, 19 May 1997, www.chosun.com.

19 May 1997
Colonel-General Leonid Ivashov, chief of the Main Directorate for International Military Cooperation in the Russian Defense Ministry, says on a Russian broadcast that the scope of technical cooperation in the military realm between Moscow and Pyongyang is small, but the cooperation is being maintained. Ivashov says that Russia is mainly supplying parts and accessories for weapons to North Korea. The same broadcast also quotes Russian Defense Minister Igor Rodionov as saying he acknowledges that North Korea cannot make a new improved missile [such as the Nodong] based on Soviet Scud missiles.
—"Pukhan-Russia Mugigŏrae Kwan'gye Yuji," *Chosun Ilbo*, 20 May 1997, www.chosun.com.

23 May 1997
North Korea tests its new AG-1 anti-ship cruise missile. Pentagon sources describe the missile as using "unimpressive, old technology" from Russian Styx and Chinese Silkworm cruise missiles.
—James R. Asker, "Hyperbolic Missile," *Aviation Week & Space Technology*, 7 July 1997, p. 21.

27 May 1997
The US State Department says North Korea has agreed to a second round of bilateral missile talks. The talks are to be held in New York 11-13 June 1997. The talks were originally scheduled for 12-13 May.

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—Debra Lau, "N. Korea, U.S. Set to Resume Missile Talks in June," *Daily Yomiuri*, 29 May 1997, p. 5, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Park Tu Shik, "[Mi-Puk] Missile Hoedam Naedal 11 Il New York Sŏ Kaech'oe," *Chosun Ilbo*, 28 May 1997, www.chosun.com; "Mi-Puk Missile Hoedam 6 Wŏl 11-13 Il Kaech'oe," *Chosun Ilbo*, 28 May 1997, www.chosun.com.

2 June 1997

A US government source says that the United States is prepared to ease sanctions on North Korea if it agrees to curb the development and export of missiles. The source claims that the US government would be prepared to allow US companies to invest in North Korea. In addition, the United States would support North Korea's participation in the Asian Development Bank and provide North Korea with low-interest loans to purchase food from US firms. The deal is to be discussed at missile proliferation talks scheduled for 11-13 June.

—"U.S. May Ease Sanctions on N. Korea for Peace," Jiji Press Ticker Service, 3 June 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

11-13 June 1997

The United States and North Korea hold the second round of missile talks in New York. The United States is seeking a halt to North Korea's development and production of Nodong and Taepodong missiles, a halt to North Korean missile exports, and North Korean entry into the Missile Technology Control Regime (MTCR). North Korea repeats that missile production is a matter of its right to self-defense. The sides agree to hold a third round of talks in July or August in New York. The first round of talks was held 20-21 April 1996 in Berlin.

—Robert H. Reid, "U.S., North Korea Open Missile Talks after Stinger Deal with Seoul," Associated Press, 11 June 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Associated Press, "World News Briefs; U.S. and North Korea Begin Missile Talks," *New York Times*, 12 June 1997, p. A15, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "U.S., North Korea End Missile Talks with No Agreement," Deutsche Presse-Agentur, 13 June 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Yonhap News Agency, 3 May 2001, in "ROK's Yonhap: Major Events in the N. Korean Missile Negotiations with U.S.," FBIS Document ID KPP20010503000091; Yonhap News Agency, 14 June 1997, in "U.S., DPRK Officials Produce No Agreements at Missile Talks," FBIS-TAC-97-164, 13 June 1997, Document ID FTS19970613001137; Yun Hŭi Yong, "[New York] Mi-Puk Missile Hoedam Sŏnggwa Ŏbsi Kkutna," *Chosun Ilbo*, 14 June 1997, www.chosun.com; "Mi-Puk, 7-8 Wŏlchung 3 Ch'a Missile Hyŏpsang," *Chosun Ilbo*, 14 June 1997, www.chosun.com.

6 August 1997

The United States suspends licensing on missile-related technology exports to North Korea for two years in response to reported missile technology exports by two North Korean firms, Ryong'aksan General Trading Company and Korea Pu'gang Trading Company. Sanctions preventing missile-related exports to North Korea were already in place, but the latest US sanctions are more stringent, including all items that could be used for "the development or production of electronics, space systems or equipment, and military aircraft." According to a State Department public notice released on 28 August, the United States "has determined that entities in North Korea have engaged in missile technology proliferation activities that require the imposition of sanctions."

—Kyodo News Service, "U.S. Adds Sanctions to N. Korean Missile Exports," Japan Economic Newswire, 29 August 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Mi Missile Such'ul Kwallyŏn/Mi, 2 Nyŏn'gan

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Chejaejoch'i," *Munhwa Ilbo*, 22 August 1997, p. 2, in KINDS, www.kinds.or.kr; "Mi, Puk Missile Kŏrae Chejae/Puk 2 Kaehoesa Such'ul Chŏkpal/2 Nyŏn'gan," *Kukmin Ilbo*, 22 August 1997, p. 2, in KINDS, www.kinds.or.kr.

26 August 1997

The United States announces that it will grant political asylum to two North Korean defectors, Chang Sŭng Gil, ambassador to Egypt, and his brother Chang Sŭng Ho, a trade envoy in France. Chang Sŭng Gil, the first North Korean ambassador to defect, is expected to provide the United States with information pertaining to North Korean missile sales to Egypt, Iran, and Syria. According to reports, Chang walked into the US Embassy in Cairo on 22 August and asked for asylum.

—Steven Lee Myers, "Defecting Envoy from North Korea to Get U.S. Asylum," *New York Times*, 27 August 1997, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North Korean Ambassador to Egypt Defects," Deutsche Presse-Agentur, 25 August 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Reuters, "N. Korea Envoy to Egypt Defects to West – Seoul But Pyongyang Denies Diplomat Has Disappeared," *Toronto Star*, 26 August 1997, p. A21, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "'Mangmyŏnghŏyong' Pŏnbokpae'gyŏng (Miro Kan Puk Taesa)," *Kyunghyang Shinmun*, 29 August 1997, p. 6, in KINDS, www.kinds.or.kr.

26 August 1997

A US official announces that North Korea has exported 370 Scud missiles to Arab countries and is capable of producing 150 Scuds per year.

—Barry Schweid, "North Korean Ambassador, Trade Official Defect, Given Asylum in United States," Associated Press, 26 August 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

27 August 1997

North Korea cancels missiles talks with the United States after the United States refuses to return two defectors, one of whom is expected to provide information pertaining to North Korean missile sales to Egypt, Iran, and Syria.

—Steven Lee Meyers, "North Koreans Quit Arms Talks over Defections," *New York Times*, 28 August 1997, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; R. Jeffrey Smith, "North Koreans Cancel U.S. Talks: Protesting Diplomats' Defection, Pyongyang Recalls Team on Missile Issues," *Washington Post*, 28 August 1997, p. A30, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Norman Kempster, "U.S. Accepts 2 Defecting N. Korean Diplomats," *Los Angeles Times*, 27 August 1997, p. A4, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; US Grants Asylum to Senior North Korean Defectors," Agence France Presse, 27 August 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North Korea Pulls Out of Missile Talks with US," Agence France Presse, 27 August 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Jennifer Hewett and Reuter, "N. Korea Demands Return of Defectors," *The Age* (Melbourne), 28 August 1997, p. 15, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Foreign Ministry Spokesman Interviewed," Korean Central News Agency, 27 August 1997, www.kcna.co.jp.

27-28 August 1997

During a visit to South Korea, Israeli Prime Minster Benjamin Netanyahu discusses North Korea's alleged missile sales to Iran.

—Jay Bushinsky, "PM: Korean DMZ Unfeasible for Golan," *Jerusalem Post*, 29 August 1997, p. 22.

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September 1997
North Korea deploys Nodong missiles to Shin'o-ri, Unjŏn-kun, North P'yŏng'an Province.
—Kim Yŏn Kwang, "'Puk Taepodong Missile Haekt'andu T'apchaehal Sudo'/Ch'ŏn Yong T'aek Kukpang Palg'hyŏ," *Chosun Ilbo*, 4 September 1998, p. 2, in KINDS, www.kinds.or.kr.

September 1997
According to an Israeli intelligence report, Iran's Shehab-3 and Shehab-4 ballistic missile programs have benefited from North Korea's assistance. Iran, according to the report, has received "at least a dozen" Nodong missiles from North Korea. The Shehab-4 reportedly has a range of 2,000km with a 1,000kg payload, and some believe it is based on the Russian SS-4.
—"Russia-Iran Ties Remain Issue at Gore-Chernomyrdin Meeting," *Arms Control Today*, September 1997, p. 29.

6 September 1997
North Korea denies allegations made by Israeli Prime Minister Benjamin Netanyahu during a visit to South Korea about North Korea's missile exports to the Middle East. A Foreign Ministry spokesman condemns the allegations as "a foolish effort to justify the military tie-up between Israel and South Korea."
—"DPRK Foreign Ministry Spokesman on Israeli Prime Minister's Tour of South Korea," Korean Central News Agency, 6 September 1997, www.kcna.co.jp; Korean Central News Agency, 6 September 1997, in "North Korea Rejects South's, Israeli Allegation of Arms Sale to Middle East," BBC Summary of World Broadcasts, 8 September 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

19 September 1997
Deputy Assistant Secretary of State Bob Einhorn claims that North Korea has exported missile technology to several countries in exchange for oil and hard currency. According to Einhorn, North Korea has earned close to $1 billion for their missile exports over the past decade and has become the world's largest missile exporter. Einhorn also claims that North Korea's 1,300km range Nodong missile is already "in the advanced stage" of development.
—Kyodo News Service, "N. Korea Earned 1 Bil Dlrs in Missile Exports," Japan Economic Newswire, 20 September 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

22 September 1997
Japanese media report that US reconnaissance satellites have detected the deployment of a North Korean Nodong ballistic missile for a possible test.
—Lee Hyŏk Chae, "Puk Nodong 1 Ho Missile Shiljŏnbaech'i Hwag'in," *Chosun Ilbo*, 22 September 1997, www.chosun.com.

26 September 1997
North Korea begins deploying military units with equipment designed to transport the Nodong missile. According to US Pacific Command Admiral, Joseph Prueher, the preparations indicate deployment, training exercises, or exercises for deception. According to Prueher, no missiles have been sighted.
—Bill Gertz, "North Korea Cited for Missile Activity: Preparation, Deception Are Possible," *Washington Times*, 27

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September 1997, p. A3; "[Mi T'aep'yŏngyang Saryŏnggwan] 'Puk Nodong Missile Hullyŏn Shilchŏnbaech'i'nŭn Anhandŭt," *Chosun Ilbo*, 27 September 1997, www.chousn.com.

October 1997
Iran successfully test-launches the Shehab-2, which has a range of about 1,000km. Western intelligence officials believe that the Shehab-2 was developed with North Korean assistance.
—Con Coughlin, "Iran Missile Test Launch Puts Israel within Range," *Sunday Telegraph*, 2 November 1997, p. 29.

October 1997
US and Israeli intelligence sources claim that Iran is making significant progress on the Shehab-3, a version of the North Korean Nodong, which has a range of 1,300km.
—Steve Rodan, "Israel in Iranian Missile Range by 1999," *Jerusalem Post*, 1 October 1997, p. 1.

22 October 1997
US State Department Spokesman James Rubin issues a statement calling for North Korea to return to missile talks with the United States at an early date.
—"MI, Puk'e Missile Hoedam Pokkwi Yogu," *Chosun Ilbo*, 23 October 1997, www.chousn.com.

Fall 1997
Intelligence sources begin monitoring North Korean flights to Pakistan. There are about three flights a month until January, when the number of flights increased three-fold. The aircraft were mostly Il-76 transports, and they carried technical exports, including telemetry crews in February and March 1998. The increase in the number of flights followed the visit of the North Korean chief of staff and the head of the strategic forces, which leads analysts to believe that Pakistan and North Korea have entered into an agreement for North Korean access to Pakistan's range facilities in exchange for military technology.
—"Pakistan's Missile 'Was a Nodong'," *Jane's Missiles & Rockets*, vol. 2, no. 5, May 1998, pp. 1-2.

November 1997
China and North Korea send a joint team of technicians to Iran to work on the final stages of the latter's ballistic missile program. The program involves more than 100 Chinese and North Korean technicians with the goal of giving Iran the indigenous capability to build ballistic missiles by the middle of 1998. The technicians are working to extend the range of the Nodong missile beyond 1,600km.
—Con Coughlin, "China, N. Korea Send Experts to Hone Iran's Long-Range Missiles," *Washington Times*, 23 November 1997, pp. 1, 5.

25 November 1997
The US Department of Defense releases "Proliferation: Threat and Response 1997." The report says North Korea has a capacity to produce four-eight Scud-B and/or Scud-C missiles per month, and that Pyongyang exports missiles and missile technology, principally to the Middle East and South Asia, to earn hard currency. North Korea has hundreds of Scud missiles in its inventory, and has developed the Nodong, "based on Scud technology." The Taepodong-1 and Taepodong-2 are two-stage missiles in the early stage of development, but these missiles "represent significant technical departure from the proven Scud designs." The ranges of the two missiles is

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estimated to be over 1,500km and 4,000-6,000km, respectively. Furthermore, the report says, "North Korea has little experience flight testing its missiles and has no experience testing multistage ballistic missiles or other related technologies. This lack of test experience could complicate North Korea's ability to evaluate, improve, or repair flaws in its missile designs."
—US Department of Defense, "Proliferation: Threat and Response 1997," 25 November 1997, www.defenselink.mil.

26 November 1997
A North Korean delegation led by Vice Foreign Minister Kim Kye Kwan meets with a US delegation headed by Deputy Assistant Secretary of State Charles Kartman at the State Department. During the six-hour meeting, various topics are discussed, including North Korea's missile development and past sales to Iran and Syria. This meeting marks the first time a senior North Korean official has held talks at the State Department.
—George Gedda, "U.S., North Korea Hold Talks," Associated Press, 27 November 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

27 November 1997
A senior official in Japan's Defense Agency says Japan has not yet confirmed whether North Korea has completed development of the Nodong-1 ballistic missile.
—"N. Korea Missile Completion Not Confirmed: Defense Official," Jiji Press Ticker Service, 27 November 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

3 December 1997
A "source close to the US military" says North Korea has recently completed several launch sites for the Nodong-1. The source says this indicates that development of the Nodong-1 is complete.
—"Rodong 1 Launch Bases Completed: U.S. Source," Jiji Press Ticker Service, 3 December 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

9 December 1997
US Secretary of Defense William Cohen says that North Korea has completed development of the Nodong missile. However, Cohen says it is not clear whether North Korea is preparing to deploy or has already deployed the Nodong.
—Kohei Murayama, "N. Korea Completes Rodong Missiles, Cohen Says," Japan Economic Newswire, 10 December 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

Late 1997
US federal agents raid the Alexandria, Virginia office of Vector Microwave Research Corporation. Vector had worked on secret US government contracts, but, apparently, the firm allegedly engaged in some illegal deals. Custom agents later investigate Vector's attempt to acquire North Korean ballistic missiles. According to the *Washington Post*, Vector "arranged for a South Korean consultant to approach a Seoul company to broker a $33 million deal to buy four missiles and a launcher from Pyongyang." They also had a US consultant acquire a fake "end-user certificate" to show that the missiles were going to Venezuela via Pakistan. The company had indirect contacts with North Koreans in Beijing, but any transaction would have been illegal under US law. The firm never

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acquired the missiles.
—John Mintz, "Secret Deals, Awkward Bargain; U.S. Probes Firm's Covert Acquisition of Arms for CIA, DIA," *Washington Post*, 30 December 1998, p. A1. According to Japan Defense Agency sources, North Korea produces 10 Nodong-1 missiles. [Note: See entries for 1997 and 2 January 1999.] "Report: North Korea Deploying Medium-Range Missiles," Associated Press, 2 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, 2 January 1999, in "North Korea Deploying, Exporting Medium-Range Missiles – Japanese Report," BBC Worldwide Monitoring, 2 January 1999, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

1996

Late 1990s

According to a South Korean military source, North Korea receives a number of DR-3 REYS unmanned aerial vehicles (UAV) from a country in the Middle East that has a military agreement with North Korea. The UAVs were manufactured in the Commonwealth of Independent States (CIS). The DR-3 REYS is 7.3 meters long and has a wingspan of 3 meters. According to the report, North Korea has been actively developing a UAV but has yet to deploy any.
—Yu Yŏng Wŏn, "Puk, Chŏngch'alyong Muinhanggonggi Chungdongsŏ Chegongbada," *Chosun Ilbo*, 22 April 2001, www.chosun.com; Yoo Young Won, "NK Acquires Aerial Drone," *Chosun Ilbo*, 22 April 2001, www.chosun.com.

Late 1990s

North Korea reorganizes its FROG and ballistic missile forces. A ballistic missile division is established directly subordinate to the General Staff Department. The organization has a FROG brigade (previously under the Artillery Command), a Hwasŏng-5/6 regiment, and the Nodong battalion.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper no. 2, Center for Nonproliferation Studies, November 1999, p. 23.

1996

Egypt claims missile cooperation with North Korea ends.
—"Up to 300 N. Koreans in Egypt for Missile Program, *World Tribune*, 21 June 2001, www.worldtribune.com; "Up to 300 N. Koreans Aid Egypt's Missile Program," *Middle East Newsline*, vol. 3, no. 242, 21 June 2001, www.menewsline.com "Egypt May Have Acquired No Dong Technology," *Janes Missiles and Rockets*, September 2001, p. 3.

January 1996

Thomas Hubbard, US Deputy Assistant Secretary of State for East Asian Affairs, contacts North Korea to request a meeting to discuss missile proliferation issues. North Korea agrees to the meeting in principle but says that economic sanctions will have to be loosened before Pyongyang agrees on a date for the talks.
—Evan S. Medeiros, "U.S., North Korea May Hold Talks on North's Missile Sales, MTCR Status," *Arms Control Today*, vol. 26, no. 1, February 1996, p. 25.

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12 January 1996

The *Jerusalem Post* reports that North Korea is assisting Syria construct a missile factory. According to the report, "intelligence sources" believe the factory could be operational by 1998. The report also says that Iran and Syria are cooperating in the production of Scud-C missiles.

—Steve Rodan, "Eye in the Sky," *Jerusalem Post*, 12 January 1996, p. 14, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

22 February 1996

CIA Director John Deutch tells a US Senate Select Committee that North Korea is developing long-range missiles. The United States should focus on stopping North Korea from acquiring guidance-and-control technology that could make its long-range missiles more accurate and lethal. Deutch says that North Korea has sold Scud-B and Scud-C missiles to Libya, Syria, and other countries. He also says that North Korea is developing a 1,000km Nodong missile that could be deployed in the near future, and that development continues on the Taepondong, which could reach Alaska and be operational after the turn of the century.

—John M. Deutch, "Worldwide Threat Assessment Brief to the Senate Select Committee on Intelligence by the Director of Central Intelligence, John M. Deutch," 22 February 1996, www.odci.gov.

March-April 1996

According to CIA sources, North Korea delivers seven shiploads of equipment and materials for producing Scud-C missiles to Egypt between March and April 1996. The missile shipments are part of a 1980s licensing agreement between Egypt and North Korea. According to the *Washington Times*, the shipments include "steel sheets for Scuds and support equipment," but the Korean press describes the shipments as containing "rocket motors and guidance systems." According to the *International Defense Review*, North Korea also provides assistance to produce Scud-C transporter erector launchers (TELs) and to "produce a variant with a greater range (450km) under Project T."

—Bill Gertz, "Cairo's Missile Buy Violates U.S. Laws; North Korea Sold Scuds, CIA Says," *Washington Times*, 21 June 1996, pp. A1, A22; Kim Chae Yong, "Puk 3-4 Wŏl Egypt'e Scud Missile Chaejoyong Mulcha Konggŭp," *Taehan Maeil*, 23 June 1996, www.kdaily.com; "Missile Chejoyong Mulchil Pukhan, Egypt'e Konggŭp," *Joongang Ilbo*, 22 June 1996, www.joins.com; "Ballistic Missile Threat Evolves," *International Defense Review*, vol. 33, no. 10, 1 October 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

12 March 1996

Taiwanese customs officials announce that a North Korean ship, the *Chŏn Sŭng*, bound for Pakistan, was found to be carrying 15 tons (200 barrels) of ammonium perchlorate, which is used in manufacturing rocket propellants. The shipment was discovered last week in Kaoshuing Harbor. The shipment was destined for Pakistan's Space and Upper Atmosphere Research Commission, but the ship will return to North Korea.

—"Puk Han, Pakistan'e Missile Chaejoyong Hwahagmulchil Such'ul Shido," *Chosun Ilbo*, 12 March 1996, www.chosun.com; "Rocket Chejoyong Kwayŏmsosanyŏm/Puk, Pakistan Such'ul'gido," *Hankyoreh Shinmun*, 13 March 1996, p. 2, in KINDS, www.kinds.or.kr.

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22 March 1996
During a luncheon at Ch'ŏnghwadae, the presidential residence in Seoul, South Korean President Kim Young Sam says that the Kim Ch'aek Iron and Steel Complex has completely shut down, and that the only North Korean factories operating are those for conventional weapons and long-range missiles. The South Korean Ministry of Unification issues a similar statement the following day. [Note: The Kim Ch'aek Iron and Steel Complex may produce steel for missiles.]
—Ch'oe Wŏn Ki, "Pukhan Kimch'aekchech'ŏlso Kadong Ol Sŭ't'op," *Joongang Ilbo*, 24 March 1996, p. 25, in KINDS, www.kinds.or.kr; Cho Min Ho, "Puk Ch'oedae 'Kimch'aekchech'ŏlso' Kadongjungdan/T'ongilwŏn Palp'yo," *Segye Ilbo*, 24 March 1996, p. 2, in KINDS, www.kinds.or.kr.

1 April 1996
A South Korean government source reveals that the United States and North Korea will hold bilateral missile talks in Berlin 20-21 April.
—Kyodo News Service, "U.S., N. Korea to Hold Talks on Missile Exports," Japan Economic Newswire, 1 April 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Pungmi 19 Il Missile Hoedam/I't'ŭltong'an/Berlin'sŏ 1 Ch'ahoeŭi Hab'ŭi," *Donga Ilbo*, 1 April 1996, p. 1, in KINDS, www.kinds.or.kr; Lee T'ae Hŭi, "Mibuk 19 Il Missile Hyŏpsang/Berlin'sŏ 1 Ch'ahoedam," *Kukmin Ilbo*, 1 April 1996, p. 2, in KINDS, www.kinds.or.kr.

2 April 1996
According to a US government source, the United States will demand that North Korea stop further development of its Nodong missile when the two sides meet for missile talks on 19 April in Berlin. The talks are also expected to cover exports to the Middle East, as well as missile deployments in North Korea. However, North Korea is expected to ask for compensation for lost revenues if it ceases missile exports.
—Kyodo News Service, "U.S. to Demand Halt to N. Korean Rodong Missile Program," Japan Economic Newswire, 3 April 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Mi-Puk, 19il Berlin'sŏ Missile Hoedam," *Chosun Ilbo*, 4 April 1996, www.chosun.com.

6 April 1996
According to a South Korean Foreign Ministry official, South Korea and the United States will seek limits on the transfer and indigenous development of North Korea's missile technology in negotiations between the United States and North Korea scheduled for April 1996.
—Yonhap News Agency (Seoul), 6 April 1996, in "ROK, U.S. Reportedly to Push Limits for DPRK Missile Development," FBIS-EAS-96-068, Document ID FTS19960406000168, 6 April 1996.

11 April 1996
A Pentagon report, "Nonproliferation: Threats and Response," highlights North Korea's ballistic missile and other weapons of mass destruction programs. The report says North Korea has "significantly advanced its ballistic missile program during the last 10 years." The report also says that Pyongyang acquires technology and resources from abroad, including from Choch'ongnyŏn (Chosen Soren), the pro-North Korea General Association of Korean Residents in Japan. North Korea produces Scud-B and Scud-C missiles with ranges of 300km and 500km, respectively. There are reportedly several hundred Scud variants in the North Korean inventory. North Korea is also

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nearing completion of development for the Nodong, which has an estimated range of 1,000km. The report also says that Pyongyang is designing the Taepodong-1 and Taepodong-2, with estimated ranges greater than 1,500km and 4,000km, respectively.
—US Department of Defense, "Proliferation: Threat and Response," 11 April 1996, www.defenselink.mil;; R. Jeffrey Smith, "Germ, Nuclear Arms Top Pentagon's List of Threats," *Washington Post*, 12 April 1996, p. A32, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Bill Gertz, "Weapons Spread Seen as 'Urgent Threat'; Perry: Reducing Nonproliferation Risk 'an Absolute Priority of the U.S.'," *Washington Times*, 12 April 1996, p. A3; Na Yun Do, "'Sajŏnggŏri 1 Ch'ŏn km Missile Kaebalwallo'/'Puk Mugigaebal' Mi Kukpangbubogo," *Taehan Maeil*, 14 April 1996, p. 6, in KINDS, www.kinds.or.kr.

13 April 1996
A US government source says there is a dispute between the North Korean Foreign and Defense Ministries over missile talks with the United States. Officials from the Foreign Ministry will represent North Korea in the talks.
—Kyodo News Service, "N. Korea Military Negative about Missile Talks with U.S.," Japan Economic Newswire, 14 April 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

16 April 1996
During a summit meeting in Korea, President Bill Clinton and President Kim Young Sam propose four-party talks with representatives from the United States, China, North Korea, and South Korea to seek a permanent peace settlement on the Korean peninsula.
—"Text of South Korea-U.S. Joint Statement on North Korea," Agence France Presse, 16 April 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; C.W. Lim, "Clinton Urges North Koreans to Accept 'Proposal for Peace'," Agence France Presse, 16 April 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

17 April 1996
Jane's Defence Weekly reports that North Korea may have suspended its Nodong-1 program for technical and financial reasons. However, other analysts say that Nodongs are in the early stage of production and that North Korea may have as many as 60 Nodongs ready for use, and that 20 Nodongs may have already been exported to Iran. North Korea continues to develop the long-range Taepodong-1 (Paektusan-1) and Taepodong-2 missiles, with the first test for the Taepodong-1 (Paektusan-1) expected in 1997.
—Lennox Duncan, "Ballistic Missiles," *Jane's Defence Weekly*, 17 April 1996, pp. 40, 43-44.

17 April 1996
A US government official says that North Korea is negotiating with the United Arab Emirates and possibly Vietnam to sell missiles and missile technology. He says that the talks with Vietnam are potentially for upgrading Vietnam's current system, and not for new missiles.
—Kyodo News Service, "U.S. Sees N. Korea Missile Exports to Vietnam, UAE," Japan Economic Newswire, 18 April 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Puk, Vietnam UAE Wa Missile Hyŏpsang/Kongdongt'ongshin Podo," *Segye Ilbo*, 19 April 1996, p. 10, in KINDS, www.kinds.or.kr; "Vietnam-UAE Wado/Puk, Missle Such'ulhyŏpsang," *Taehan Maeil*, 19 April 1996, p. 6, in KINDS, www.kinds.or.kr.

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20 April 1996
According to a report from South Korea's Korean Institute of Defense Analysis (KIDA), the Second Economic Committee under the Korean Workers Party controls all military production in North Korea. The Second Economic Committee, headed by Chairman Kim Chŏl Man, oversees three underground factories for the production of missiles and guided munitions.
—"Pukhan Kunsugongjang'ŭn Tang'i Kwalli," *Chosun Ilbo*, 20 April 1996, www.chosun.com.

20-21 April 1996
North Korean and US officials meet in Berlin to discuss missile proliferation issues. North Korean officials describe the talks as "comprehensive" although both delegations refuse to offer details. The United States is seeking to curb North Korean missile exports and technology transfers to the Middle East and would welcome North Korean admission to the Missile Technology Control Regime (MTCR). It is revealed in June 1996 that the United States indicated a willingness to lift economic sanctions in exchange for North Korea's halting the development and export of missiles. The North Korean delegation apparently expressed a willingness to negotiate on issues in addition to limiting missile development.
—Bill Gertz, "U.S. Will Pull Sanctions if Pyongyang Halts Missile Program," *Washington Times*, 5 June 1996, p. A20; "U.S. Is Optimistic At North Korea Talks, *New York Times*, 21 April 1996, p. 13, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "U.S. and North Korea End Two-Day Missile Programme Talks," Deutsche Presse-Agentur, 21 April 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "US, North Korea Halt Arms Talks," Agence France Presse, 21 April 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, "U.S., N. Korea make 'Useful' Start to Missile Talks," Japan Economic Newswire, 21 April 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "U.S., DPRK End First Round of Talks, Xinhua News Agency, 21 April 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Mi, Pukhan'gwa Onŭl Missile Hyŏpsang Shijak," *Chosun Ilbo*, 20 April 1996, www.chosun.com.

22 April 1996
A US State Department spokesman says the just concluded missile talks with North Korea were useful, but a new date has not been set for further talks.
—"US Says Talks with North Korea Were Useful," Agence France Presse, 22 April 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

23 April 1996
The Korean Central News Agency reports that North Korea will continue missile talks with the United States.
—"Puk 'Missile Hyŏpsang Kyesok'," *Kyunghyang Shinmun*, 24 April 1996, p. 1, in KINDS, www.kinds.or.kr; "Puk Changgŏri Missile Kaebal Migukkwa Hyŏpsang Kyesokhal'gŏt," *Donga Ilbo*, 24 April 1996, p. 2, in KINDS, www.kinds.or.kr; "Pyongyang Reports about Missile Talks with Washington," Agence France Presse, 25 April 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

8 May 1996
Robert G. Bell, senior director for defense policy and arms control at the White House, says a US National Intelligence Estimate, which concluded that no new strategic missile system would threaten the continental United

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States, reflects a consensus within the US intelligence community. Bell admits, however, that the intelligence community's knowledge of North Korea's Taepodong-2 program is incomplete.
—"NSC Aide Defends Intelligence Estimate's Missile Outlook," *Aerospace Daily*, 9 May 1996, pp. 233-234.

22 May 1996
Syria offers North Korea 100,000 tons of food in exchange for weapons such as missiles.
—Michael Sheridan, "Koreans Barter Missiles for Food to Beat Famine," *Sunday Times*, 16 June 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Michael Sheridan, "N. Korea May Trade Missiles for Arab Grain," *The Australian*, 17 June 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Syria, China to Offer Additional Food Aid to North Korea," Agence France Presse, 24 May 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Yonhap News Agency (Seoul), 17 June 1996, in "ROK: DPRK Said Negotiating With Syria To Exchange Missiles for Food," FBIS-EAS-96-117, 17 June 1996, p. 52.

24 May 1996
The United States imposes sanctions on North Korea and Iran for violation of the US Arms Export Control Act and the Missile Technology Control Regime (MTCR). The sanctions, effective 24 May 1996, prohibit US companies from engaging in missile-technology related exports, or contracts to export with Changgwang Shinyong Company of North Korea, and with the Ministry of Defense Armed Forces Logistics and the State Purchasing Office of Iran.
—*Federal Register*, vol. 61, no. 114, 12 June 1996, p. 29785.

Mid-1996
Syrian missile technicians spend two weeks training in North Korea. The visit was likely mostly concerned with the Hwasŏng-6 (Scud-C) program, but the Syrians may have also been interested in the Nodong. The Syrian technicians reportedly provide information on the 9K79 Tochka (SS-21 Scarab) missile to North Korea.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper no. 2, Center for Nonproliferation Studies, November 1999, pp. 19, 26, 32.

June 1996
An Iranian military delegation secretly visits Pyongyang to negotiate a contract for the purchase of North Korean missiles. Iranian Defense Minister Mohammed Foruzandeh later leads a delegation to Pyongyang on 31 August 1996 to sign the agreement.
—Lee Yŏng Chong, "Pukhan-Iran Kunsa'ŭijŏngsŏ Sŏ'myŏng," *Joongang Ilbo*, 3 September 1996, in KINDS, www.kinds.or.kr.

4 June 1996
US Assistant Secretary of State for East Asian Affairs Winston Lord announces that the United States is willing to lift sanctions imposed on North Korea, provided the latter agrees to terminate its missile production and export programs. According to Lord, North Korea was made aware of this policy in April 1996 during the first round of bilateral missile talks in Berlin.
—Bill Gertz, "U.S. Will Pull Sanctions if Pyongyang Halts Missile Program," *Washington Times*, 5 June 1996, p. A20.

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18 June 1996
A US government official says the United States and North Korea have agreed in principle to hold a second round of missile talks aimed at curbing Pyongyang's missile development program and missile exports.
—Kyodo News Service, "U.S., N. Korea to Hold 2nd Meeting on Missiles by August," Japan Economic Newswire, 19 June 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

24 June 1996
The *Joongang Ilbo* reports that North Korea receives $1 billion per year from missile sales, accounting for half of North Korea's export earnings.
—Ch'oe Wŏn Ki, "Shilche Tŭronaen Pukhan Missile Connection," *Joongang Ilbo*, 24 June 1996, p. 4, in KINDS, www.kinds.or.kr.

11 July 1996
According to a military source, North Korea has exported 370 missiles since July 1987. Between July 19897 and February 1988, North Korea exported about 100 Scud-B missiles for the first time. Beginning in 1991, North Korea exported about 100 Scud-C missiles to Iran. Missiles exports to Iran, Syria, and Libya have totaled 370. North Korea is also supporting the construction of missile assembly plants in Libya, Iran, and Syria. According to the military source, North Korea is also planning to export the Nodong-1 to countries in the Middle East.
—"Pukhanjae Scud Missile 3 Paek 70 Ki Arab Such'ul," *Taehan Maeil*, 12 July 1996, www.kdaily.com; "Scud Missile 370 Yŏdae Pukhan, Chungdongjiyŏge Such'ul," *Joongang Ilbo*, 12 July 1996, www.joins.com.

August 1996
Syria ships Soviet-built, 70km-range SS-21 Scarab missiles to North Korea. If North Korea is able to reverse-engineer the SS-21's sophisticated guidance package, it could use the technology to improve the accuracy of its Scud missiles. [Note: Reverse-engineering and adapting the SS-21's guidance system would be an exceedingly difficult proposition. Also, there is speculation that North Korea might have modified a Scarab to use as the third stage for its attempted satellite launch on 31 August 1998.]
—Wyn Bowen, Tim McCarthy, and Holly Porteous, "Ballistic Missile Shadow Lengthens," *Jane's IDR Extra*, vol. 2, no. 2, February 1997, pp. 1-3; Ch'oe Hong Sŏp, "'[Israel] Pukhan-Chungdong Missile Connection Magara'," *Chugan Chosun*, 12 April 2001, www.weekly.chosun.com.

31 August 1996
Iranian Defense Minister Mohammed Foruzandeh and his delegation arrive in Pyongyang to sign a military cooperative agreement and to discuss the procurement of North Korean missiles and other weapons. The agreement covers North Korean exports of missiles and the provision of missile technology to Iran, as well as the testing of North Korean-produced missiles in Iran.
—Lee Yŏng Chong, "Pukhan-Iran Kunsa'ŭijŏngsŏ Sŏ'myŏng," *Joongang Ilbo*, 3 September 1996, in KINDS, www.kinds.or.kr; Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), p. 291.

24 September 1996
In testimony before the US Senate, former CIA Director James Woolsey says that North Korea may be able to strike

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Alaska and Hawaii with the Taepodong-2 ballistic missile within 15 years.
—"Puk Kaebal Taepodong 2 Ho Missile/Mi Pont'o Konggyŏk Kanŭng," *Taehan Maeil*, 26 September 1996, p. 2, in KINDS, www.kinds.or.kr; "Pukhan Taepodong Missile/15 Nyŏnnae Mi Konggyŏk Kanŭng/CIA Kukchang," *Segye Ilbo*, 26 September 1996, p. 2, in KINDS, www.kinds.or.kr; Lee Sang Sŏk, "Puk Taepodong 2 Ho Missile/15 Nyŏnnae Mi'guk Konggyŏk Wihyŏp," *Hankook Ilbo*, 26 September 1996, p. 2, in KINDS, www.kinds.or.kr.

25 September 1996
South Korea's Ministry of National Unification submits a report to the National Assembly saying that North Korea can produce approximately 100 Scud-B and Scud-C missiles annually, and has exported approximately 400 missiles to Iran and Syria. The report also says that North Korea has also been transferring missile production plants and missile technology to Iran and Syria. Between 1980 and 1993, arms exports accounted for approximately 30 percent of all North Korean exports. North Korea's missile exports are valued at about $500 million annually.
—Yonhap News Agency, 25 September 1996, in "Scud Missiles Reportedly Being Exported to Iran and Syria," BBC Summary of World Broadcasts, 26 September 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, "N. Korea Said Capable of Making 100 Missiles a Year," Japan Economic Newswire, 25 September 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kim Yŏn Kwang, "Puk, Yŏn'gan Scud Paekki Saengsan/Kukkam Charyo," *Chosun Ilbo*, 26 September 1996, p. 2, in KINDS, www.kinds.or.kr; Kang Yŏng Chin, "Puk Missile Nyŏn 100 Yŏgi Saengsan Nŭngnyŏk," *Joongang Ilbo*, 26 September 1996, p. 15, in KINDS, www.kinds.or.kr; O Il Man, "Puk, 'Scud' Yŏn 1 Paekki Saengsan/T'ongilwŏn Kukkamjaryo," *Taehan Maeil*, 26 September 1996, p. 2, in KINDS, www.kinds.or.kr; Lee Dae Kun, "Puk Scud Missile Yŏn 1 Paeg'yŏgi Saengsannŭngnyŏk/Iran Tŭng'e 4 Paekki Such'ul," *Kyunghyang Shinmun*, 26 September 1996, p. 2, in KINDS, www.kinds.or.kr; Cho Min Ho, "Puk, Missile Yŏn 100 Ki Saengsannŭngnyŏk/Arapchiyŏk 4 Paekki Such'ul/T'ongilwŏn Charyo," *Segye Ilbo*, 26 September 1996, p. 2, in KINDS, www.kinds.or.kr; Lee Hŭng U, "Scud B-C Hyŏng Missile Puk Yŏn 1 Paekki Saengsan'ganŭng/T'ongilwŏn," *Kukmin Ilbo*, 25 September 1996, p. 2., in KINDS, www.kinds.or.kr.

October 1996
According to the *Philippine Star*, Korean Workers Party Secretary Hwang Chang Hyŏp sells information on the Nodong-2 and Nodong-3 missiles, which are under development, to Chinese authorities four months before going to the South Korean Embassy in Beijing and asking for political asylum. The report, quoting Philippine intelligence sources, says that Hwang sold classified pictures of the missiles to the Chinese and received payment in a foreign bank account. However, the report cannot be confirmed through other sources.
—"North Korean Defector Sold Missile Secrets to China: Philippine Report," Agence France Presse, 16 April 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "[Hwang Piso] Pukhan Rodong Missile Kukpijongbo Chungguke P'alanŏmgyo," *Chosun Ilbo*, 16 April 1997, www.chosun.com.

16 October 1996
Jiji Press and NHK Television in Japan report that North Korea is planning to test-launch a 1,000km-range missile in the Sea of Japan. According to Jiji Press, military representatives from Iran are present at the launch site to observe the missile's performance prior to purchase. The *Sankei Shimbum* later reports that Syrian officials are also present for a planned test. According to military sources, North Korea has sent a frigate to the Sea of Japan for the test. Furthermore, A US satellite imagery reportedly reveals a fuel truck loading fuel into the missile. This imagery is

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later used to estimate the Nodong's range, which is revised upward to 1,300km from 1,000km. The United States responds by sending an RC-135 reconnaissance aircraft to monitor the test, and Japan sends an escort ship to monitor the missile in its terminal phase. However, the flight test is cancelled.
—"North Korea Preparing Test-Fire Missile: Sources," Agence France Presse, 16 October 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North Korea Preparing Test-Launch of Missile over Sea of Japan: NHK," Agence France Presse, 16 October 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "N. Korea Plans Missile Test Near Japan," Jiji Press Ticket Service, 16 October 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; *Sankei Shimbum*, 11 April 1997, in "Japanese Source Says Missiles Deployed Along Sea of Japan Coast," BBC Summary of World Broadcasts, 12 April 1997, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Chŏn Hyŏn Il, "Puk Missile Kaebal Wihŏmsuwi/Miil Kunsadangguk Kyŏnggyue Kanghwa," *Segye Ilbo*, 14 May 1997, p. 7, in KINDS, www.kinds.or.kr; "[Puk Rodong 1 Ho] Il, Howiham 1 Ch'ŏk P'a'gyŏn," *Chosun Ilbo*, 20 October 1996, www.chosun.com; "'Puk Nodong 1 Ho Palsashilhŏm Chunbi'—Mi-Il Soshikt'ong," *Taehan Maeil*, 17 October 1996, www.kdaily.com; Joseph S. Bermudez, "N Korea Set for More Ballistic Missile Tests," *Jane's Defence Weekly*, 23 October 1996, p. 5.

17 October 1996
According to a report in Hong Kong's *Ming Bao* newspaper, North Korea produces 4-6 Scud-C missiles a month and exports them to Middle Eastern countries such as Libya, Iran and Syria. Missile exports are said to be an important source of foreign exchange for North Korea.
—"Puk Scud C Hyŏng Missile Wŏl 4-6 Kae Chungdong Such'ul," *Taehan Maeil*, 18 October 1996, www.kdaily.com.

24 October 1996
A North Korean broadcast announces that North Korea may be forced to test a missile in response to the joint US-South Korea military exercise "Foal Eagle," which will be held from 28 October to 10 November.
—"Puk, Nodong 1 Ho Shilhŏm Kanghaengsisa," *Taehan Maeil*, 26 October 1996, www.kdaily.com.

2 November 1996
According to Jiji Press in Japan, current North Korean missile test preparations may be for a Taepodong [Paektusan-1] instead of a Nodong. Jiji quotes a "reliable Washington source" as saying US electronic intelligence indicates the launch site has emitted an electronic signature for the Taepodong (Paektusan-1).
—"Pukso Shihŏmbalsa Chunbijung'in Missile 'Taepodong' Kanŭngsŏng," *Taehan Maeil*, 3 November 1996, www.kdaily.com.

8 November 1996
US State Department spokesman Nicholas Burns says that North Korea has decided not to conduct a missile test.
—US Department of State, Office of the Spokesman, "Daily Press Briefing," 8 November 1996, http://dosfan.lib.uic.edu.

11 November 1996
In testimony before the South Korean National Assembly, South Korean Defense Minister Kim Dong Chin says that North Korea may be able to deploy its Nodong-1 missile, with a range of over 1,000km, in 1997 or thereafter. Kim

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says that North Korea began development of the Nodong in 1988, and tested it in May 1990 and May 1993. The 1993 test failed. Kim said that in mid-October, North Korea had been making arrangements similar to those taken before other flight tests, but there was no test in October.
—Kim Dong Chin, "Kukpang 'Puk 'Nodong 1 Ho' Sajŏnggŏri 1 Ch'ŏn km Missile Shilch'ŏnbaech'i Kanŭng," *Taehan Maeil*, 12 November 1996, www.kdaily.com; Lee Yŏng Sŏng, "'Puk Nodong 1 Ho Naenyŏn Shilchŏn Paech'i'/Kim Kukpang," *Hankook Ilbo*, 12 November 1996, p. 2, in KINDS, www.kinds.or.kr; Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), p. 281.

4 December 1996
Former CIA Director Robert Gates tells the US Senate Intelligence Committee that North Korea is having problems developing its Taepodong class of ballistic missiles. North Korea will have to develop a new propulsion system and improved guidance and controls for the missile. Gates notes that economic, technical, and manufacturing problems in North Korea's infrastructure make the development of this new class of missiles unlikely. However, Gates criticizes the US intelligence community for underestimating the possibility of North Korea developing a missile that could strike Alaska or Hawaii. The US intelligence community is confident that the first flight tests of the missile will provide at least five years warning before deployment. [Note: Gates led an independent panel of experts that was formed in response to Republican charges that the Clinton administration "politicized" the drafting of the 1995 National Intelligence Estimate. Some believe the ballistic missile threat to the United States was underestimated in the 1995 report to undermine support for missile defense.]
—Barbara Starr, "Taepo Dong Set for Delays," *Jane's Defence Weekly*, 11 December 1996, p. 10; Walter Pincus, "Panel: Intelligence Estimate Wasn't Skewed," *Washington Post*, 5 December 1996, p. A12, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Tim Weiner, "Rejection of 'Star Wars' Not Political, Inquiry Says," *New York Times*, 5 December 1996, p. 17, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com. Syria conducts several missile tests. Most are believed to be R-17s (Scud-Bs), but some may be Hwasŏng-6s. Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 19.

1995

Mid-1990s
Iran acquires about 125 C-802 cruise missiles from China. Iran ordered about 250 of the missiles, but China suspends the transaction after the US demands a halt to the sales in 1996. Iran reportedly ships some of the missiles to North Korea in April or May 1999, and the two countries are reported to be jointly developing a copy of the missile in February 2000.
—Kyodo News Service, "N. Korea, Iran Jointly Developing Missile: Newspaper," Japan Economic Newswire, 16 February 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "N. Korea, Iran Jointly Develop Missile: Report," *Korea Times*, 17 February 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, 16 February 2000, in "Sankei Shimbun: DPRK, Iran Jointly Developing Missile," FBIS Document ID JPP20000217000006; Chŏn Hyŏn Il, "Puk-Iran, Chungje Sunhang Missile Kongdong Kaeryang Yŏn'gye," *Segye*

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Ilbo, 18 February 2000, p. 2, in KINDS, www.kinds.or.kr; Shim Kyu Sŏn, "Puk-Iran Missile Kongdonggaebal Ch'ujin," *Donga Ilbo*, 18 February 2000, p. 2, in KINDS, www.kinds.or.kr.

Mid-1990s

North Korea begins construction of six new missile bases, in addition to the two existing bases at Shin'gye-kun, North Hwanghae Province, and at Shin'o-ri, Unchŏn-kun, North P'yŏng'an Province. According to the South Korean Defense Ministry, the Nodong missile base at Shin'o-ri had already been built by the mid-1990s. [Note: Scud missiles were reportedly deployed at Shin'gye-kun in 1988.]

—Kim Min Sŏk, "Puk Missile Kiji Kyesok Chŭngsŏl," *Joongang Ilbo*, 6 March 2001, p. 8, in KINDS, www.kinds.or.kr.

1995

The North Korean Military Construction Bureau completes construction of a missile base in Chungganjin, Chagang Province. The construction began in 1990. [Note: The actual name of the location is Chunggang-kun, Chagang Province.]

—Testimony of Ko Yŏng Hwan, former North Korean Foreign Ministry official, before the US Senate, 21 October 1997.

1995

US intelligence discovers 200 North Korean missile specialists traveling to China for training.

—Bill Gertz, "China Assists North Korea in Space Launches," *Washington Times*, 23 February 1999, p. A1.

1995

According to an article by Kim Yŏng Hun, director of a South Korean research group, published in the May 1996 edition of *Kunsa'nondan* (Military Forum), North Korea begins development of the Taepodong-3, with an estimated range of 6,000-7,500km. Kim claims North Korea is aiming to complete development of the missile by 1998.

—"Pukhan Migukpont'o Kangt'a Missile Kaebal," *Joongang Ilbo*, 18 March 1996, www.joins.com.

1995

According to an official at the South Korean National Unification Board, North Korea completes development of the Paektusan-1 [Taepodong-1].

—Kim Yŏn Kwang, "Puk, Yŏn'gan Scud Paekki Saengsan/Kukkam Charyo," *Chosun Ilbo*, 26 September 1996, p. 2, in KINDS, www.kinds.or.kr; Kang Yŏng Chin, "Puk Missile Nyŏn 100 Yŏgi Saengsan Nŭngnyŏk," *Joongang Ilbo*, 26 September 1996, p. 15, in KINDS, www.kinds.or.kr; O Il man, "Puk, 'Scud' Yŏn 1 Paekki Saengsan/T'ongilwŏn Kukkamjaryo," *Taehan Maeil*, 26 September 1996, p. 2, in KINDS, www.kinds.or.kr; Lee Dae Kun, "Puk Scud Missile Yŏn 1 Paeg'yŏgi Saengsannŭngnyŏk/Iran Tŭng'e 4 Paekki Such'ul," *Kyunghyang Shinmun*, 26 September 1996, p. 2, in KINDS, www.kinds.or.kr; Cho Min Ho, "Puk, Missile Yŏn 100 Ki Saengsannŭngnyŏk/Arapchiyŏk 4 Paekki Such'ul/T'ongilwŏn Charyo," *Segye Ilbo*, 26 September 1996, p. 2, in KINDS, www.kinds.or.kr.

1995-96

North Korea probably produces the first Taepodong-1 (Paektusan-1) and Taepodong-2 prototypes.

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—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 29.

10 January 1995

In testimony before the US Senate Select Committee on Intelligence, CIA Director James Woolsey states, "We are moving from an era of Scuds of single-stage missiles into an area of Taepodong-1 (Paektusan-1) and Taepodong-2s with ranges in the few thousands of kilometers—not quite intercontinental yet, but the path is clear." Defense Intelligence Agency head Air Force Lt. Gen. James Clapper adds that while the Taepodong-1 and Taepodong-2 could potentially strike Alaska, these missiles pose no threat to the continental United States. Clapper believes many countries might be able to develop a ballistic missile and WMD warhead with a range of 500-1,000km by the year 2000, but no country would be able to develop a missile that could strike the US mainland within the next 10 years.

—Tony Capaccio, "DIA, CIA See No Immediate Threat from Long Range Missiles," *Defense Week*, 23 January 1998, pp. 8-9; US Senate Select Committee on Intelligence, "Special Report of the Select Committee on Intelligence United States Senate: January 4, 1995 to October 3, 1996," US Government Printing Office, 28 February 1997.

13 January 1995

"US officials confirm assertions by South Korean intelligence that Tehran has received the medium-range Nodong missile from North Korea."

—Steve Rodan, "What the US is Whispering to Israel about Iran," *Jerusalem Post*, 13 January 1995, p. 9, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

February-June 1995

US officials confirm that North Korea makes up to six Nodong-1 missiles operational on mobile launchers. The missiles are capable of delivering a payload of 500-750kg.

—Paul Beaver, "Flash Points," *Jane's Defence Weekly*, 24 June 1995, p. 22.

19 February 1995

The Director General of the Iranian Foreign Ministry's Far Eastern division, Hassan Taherian, denies missile cooperation with North Korea. According to Taherian, "we deny this...for lack of need and also self-sufficiency in military productions, our military cooperation is very limited. It is about zero."

—"Iran Denies Missile Cooperation with North Korea," Reuters, 19 February 1995, in Executive News Service, 20 February 1995.

30-31 March 1995

According to Japan's Chief Cabinet Secretary Igarashi Kozo, North Korea tests "Chinese-made" Silkworm anti-ship missiles (ASMs) on the Sea of Japan. Igarashi later says the tests are part of normal training exercises. There are conflicting reports on the missile's range. Agence France Presse quotes Japanese press reports as saying the range is about 80km, but the *Joongang Ilbo* quotes Igarashi as saying the range of Chinese Silkworm missiles is about 100km. Kyodo News Service quotes "military experts" as saying the modified version has a range of 200km.

—"North Korea Test-Fires Missile, Warns Against US Anti-Missile System," Agence France Presse, 7 April 1995, in

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Lexis-Nexis Academic Universe, www.lexis-nexis.com; "Japanese Government Confirms North Korean Naval Missile Test In March," Agence France Presse, 7 April 1995, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, "N. Korea Tested Missile over Japan Sea in Late March," Japan Economic Newswire, 7 April 1995, , in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kim Kuk Chin, "Puk Tto Missile Shilhŏm Chi'nandalmal Tonghaesŏ," *Joongang Ilbo*, 8 April 1995, p. 2, in KINDS, www.kinds.or.kr; "'Puk, Tonghaero Missile Shihŏmbalsa'/Il Kwanbang 'T'ongsangjŏk Hullyŏn'," *Kukmin Ilbo*, 8 April 1995, p., 2, in KINDS, www.kinds.or.kr.

5 April 1995

The CIA reports that North Korea has recently transferred at least four Scud transporter erector launchers (TELs) to Iran. The TELs were transferred in late-1994 and can launch Scud-B and -C missiles. The CIA report is in response to questions submitted by the US Senate Select Committee on Intelligence on 10 January 1995.

—Tony Capaccio, "North Korea Has Transferred Mobile Scud Launchers To Iran," *Defense Week*, 1 May 1995, pp. 1, 14; Barbara Starr, "Iran Gets 'Scud' TELs from North Korea," *Jane's Defence Weekly*, 13 May 1995, p. 5; Paul Mann, editor, "CIA Disclosures," *Aviation Week and Space Technology*," vol. 142, no. 19, 8 May 1995, p. 19, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

2 May 1995

An Israeli intelligence report cites Israeli and western intelligence sources as saying that North Korea has transferred a dozen or more Nodong-1 ballistic missiles to Iran. According to the report, the missiles were shipped to Iran earlier this year. Also referred to as the Scud-D, the Nodong-1 is said to have a range of 1,500km.

—Adel Darwish, "Tehran Missiles 'Can Reach Israel'," *Independent* (London), 2 May 1995, p. 10, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Adel Darwish, *Independent* (London), "2 May 1995, in "Israel Claims Government Received DPRK Missiles," FBIS-NES-95-085, 2 May 1995.

29 May-2 June 1995

North Korean Foreign Minister Kim Yŏng Nam visits Tehran, and Iran offers to pay for some $300 million worth of Scud missiles purchased from North Korea with oil. Previously, North Korea had insisted on hard currency for missile sales to Iran. According to US Secret Service sources, Iran may have paid in the past with counterfeit $100 bills.

—"Oil for Missiles with DPRK," *Iran Brief*, 1 August 1995, in Lexis-Nexis Academic Universe, http://web.lexis.nexis.com.

15 June 1995

Robert Galluci says that the United States intends to discuss North Korea's production and export of ballistic missiles in talks with Pyongyang.

—Yonhap News Agency, 16 June 1995, in "Gallucci on Talks, Liaison Office," FBIS-NEA-95-116, 16 June 1995, p. 33.

16 June 1995

US officials say that North Korea and China have sold Scud missiles to Iran, and that Iran has also tried to obtain Nodong missiles from North Korea.

—R. Jeffrey Smith, "Iran's Missile Technology Linked to China, Report Says," *Washington Post*, 17 June 1995, p.

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A14, in Lexis-Nexis Academic Universe, http://web.lexis.nexis.com; "Iran, Puk 'Nodong Missile' Kuipch'ujin/Washington Post Chi Podo," *Chosun Ilbo*, 18 June 1995, p. 15, in KINDS, www.kinds.or.kr; "Pukhan Nodong Missile/Iran'sŏ Kumaech'ujin," *Kyunghyang Shinmun*, 18 June 1995, p. 2, in KINDS, www.kinds.or.kr.

18 June 1995

A Japanese government source discloses that US reconnaissance satellites have identified cranes and trucks in North Korea transporting missiles for a possible test-launch that could occur as soon as the end of June 1995. According to Japanese government sources, North Korea might only conduct jet-propulsion tests rather than full-scale test launches to avoid complicating negotiations with the United States over the supply of nuclear reactors.
—"N. Korea Poised for Missile Test Firing," Jiji Press Ticker Service, 19 June 1995, in Lexis-Nexis Academic Universe, http://web.lexis.nexis.com; Andrei Varlamov, "North Korea Reported to Make Preparations for Missile Launching," ITAR-TASS, 19 June 1995, in Lexis-Nexis Academic Universe, http://web.lexis.nexis.com; *Sankei Shimbun*, 19 June 1995, p. 1, in "'Source': DPRK Preparing to Test Missiles," FBIS-EAS-95-117, 19 June 1995, p. 1; "'Puk, Wŏllae Missile Palsashilhŏm'/Mi Chŏngbowisŏng P'och'ak," *Taehan Maeil*, 20 June 1995, p. 4, in KINDS, www.kinds.or.kr; Lee T'ae Hyŏng, "Puk, Missile Palsashilhŏm Chunbi/Ilchi Podo/Bbarŭmyŏn Idalchung Shilshi Ka'nŭngsŏng," *Kukmin Ilbo*, 19 June 1995, p. 2, , in KINDS, www.kinds.or.kr; Kim Kuk Chin, "Puk, Missile Palsashihŏm Chunbi/Il Sank'eshinmun Podo," *Joongang Ilbo*, 20 June 1995, p. 2, in KINDS, www.kinds.or.kr.

Mid 1995-mid 1996

North Korea upgrades one of its Scud missile regiments to a brigade.
—Kim Sŏng Gŏl, "'Pukhan'gun Chŏ''yŏk Chŭnggang'/Kukpangbu Palp'yo," *Hankyoreh Shinmun*, 13 August 1996, p. 2, in KINDS, www.kinds.or.kr.

1 August 1995

Iranian President Rafsanjani says that Iran and North Korea "share identical views on their foreign policies as well as their internal issues." Rafsanjani also suggests that the two countries should increase economic cooperation, and cooperation in the oil sector.
—"Oil for Missiles with DPRK," *Iran Brief*, 1 August 1995, in Lexis-Nexis Academic Universe, http://web.lexis.nexis.com.

30 August 1995

According to Israeli sources, North Korea has halted development of the Nodong missile program due to either technical difficulties or political pressure from the United States.
—"North Korea Freezes No-Dong Programme," *Flight International*, 30 August 1995, p. 4, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

10 September 1995

South Korean intelligence officials, citing Russian intelligence, say that North Korea could deploy the Taepodong-2 missile by the year 2000. According to the US Defense Intelligence Agency's (DIA) computer simulations, the Taepodong-2 might have a range of 4,300-6,000km. According to Russian sources, however, North Korea could extend the range of the Taepodong-2 to 9,600km if it resolved difficulties related to the missile's inertial navigation

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system, warhead weight, and the fuel injection device. The Taepodong-2 is said to have a 16-meter long Nodong as the second stage. North Korea has reportedly been continuing research and development of the Taepodong-1 and Taepodong-2 at the San'ŭm-dong test facility, and has recently been conducting engine tests.
—Park Chae Bŏm, "Puk, Sajŏng 1 Man km Missile Kaebal/ 'Taepodong 2 Ho' Chŏngbo Russia'sŏ Ipsu," *Taehan Maeil*, 11 September 1995, p. 3, in KINDS, www.kinds.or.kr; Pak Chae Pom, *Seoul Shinmum*, 11 September 1995, p. 3, in "U.S. Reportedly Within New North Missile Range," FBIS-EAS-95-175, 11 September 1995, p. 49; Bill Gertz, "N. Korean Missile Could Reach U.S., Intelligence Warns," *Washington Times*, 29 September 1995, p. A3;

12 September 1995
South Korea's Yonhap News Agency reports that North Korea has deployed its Nodong-1 surface-to-surface missile (SSM).
—*Nihon Keizai Shimbun* (Tokyo), 15 September 1995, p. 8, in "JSC Head on DPRK Nodong Missile Deployment," FBIS-EAS-95-181, 19 September 1995, p. 7.

14 September 1995
In response to a Yonhap News Agency report on 12 September, Tetsuya Nishimoto, chairman of Japan's Joint Staff Council (JCS) of the Self Defense Forces, says that the "possibility of North Korea deploying these missiles [the Nodong-1] is low."
—*Nihon Keizai Shimbun* (Tokyo), 15 September 1995, p. 8, in "JSC Head on DPRK Nodong Missile Deployment," FBIS-EAS-95-181, 19 September 1995, p. 7.

22 September 1995
South Korea's National Unification Board submits a report to the National Assembly that says North Korea has about one ton of biological and chemical weapons, and that they can be delivered by FROG-5s, FROG-7s, and Scud missiles.
—Kang Sŏng Bo, "Puk Saenghwahangmugi 1 Ch'ŏnt'on Poyu/Yŏndaegŭpkkaji Hwahaksodae P'yŏnsŏng Hullyŏn," *Kyunghyang Shinmun*, 23 September 1995, p. 2, in KINDS, www.kinds.or.kr; Kim Rang Ki, "Puk, Saenghwahangmugi 1 Ch'ŏn t Poyu/T'ong'ilwŏn Kukkamjaryo," *Chosun Ilbo*, 23 September 1995, p. 2, in KINDS, www.kinds.or.kr; "Seang-Hwahangmugi/1 Ch'ŏn t Poyu/Pukhan/T'ong'ilwŏn Kukkamjaeryo," *Taehan Maeil*, 23 September 1995, p. 2, in KINDS, www.kinds.or.kr.

23 September 1995
South Korea's Foreign Ministry submits a report to the National Assembly that says North Korea has between 1,000 and 5,000 tons of biological and chemical weapons. The report says that most of North Korea's artillery and multiple rocket launchers are capable of delivering chemical weapons to Seoul. Furthermore, North Korea's Scud missiles are capable of striking all of South Korea.
—Kim Yŏn Kwang, "Puk Hwahangmugisudo'gwan'I Sajŏnggwan/Scud Changch'ak Ddaen Hanbando Chŏn'yŏk," *Chosun Ilbo*, 24 September 1995, p. 2, in KINDS, www.kinds.or.kr.

29 September 1995
US intelligence warns that North Korea could extend the range of its Taepodong-2 missile by the year 2000 to

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target the western United States. The missile is estimated to have a range of 10,000km. Intelligence officials believe that China is assisting North Korea in developing a long-range ballistic missile (LRBM) and training 200 North Korean missile engineers in China. In testimony before the National Assembly, General Kim Hong Rae, South Korean Air Force chief of staff, says that North Korea has deployed about 600 FROGs and Scuds. General Kim says that North Korea has chemical weapons and is developing nuclear weapons. Kim also says the United States has three intelligence satellites monitoring North Korean military activities.
—Bill Gertz, "N. Korean Missile Could Reach U.S., Intelligence Warns," *Washington Times*, 29 September 1995, p. A3; Pak Tu Shik, "Mi 'Puk Taepodong II Sajŏng 1 Man km'/5 Nyŏnnae Kaebal," *Chosun Ilbo*, 30 September 1995, www.chosun.com; Kyodo News Service, "N. Korea Said to Have Deployed Hundreds of Missiles," Japan Economic Newswire, 29 September 1995, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Puk, Scud 6 Paekki Paech'i/Kongch'amch'ongjang Kukkam Poko," *Joongang Ilbo*, 30 September 1995, p. 1, in KINDS, www.kinds.or.kr; Hwang Yu Sŏng, "'Puk Missile 6 Paekki Chakchŏn Paech'i'/Kongch'amch'ongjang Kukkam Tappyŏn," *Donga Ilbo*, 30 September 1995, p. 2, in KINDS, www.kinds.or.kr; Lee Chung Kŭn, "'Puk Scud 6 Paekki Chakchŏnbaech'i'/Hanbandojŏn'yŏk'I Sajŏnggwŏn/Konggunbonbu Kukkam," *Kyunghyang Shinmun*, 30 September 1995, p. 2, in KINDS, www.kinds.or.kr; Hŏ Yong Pŏm, Hong Sŏk Chun, and Kwŏn Sang Ŭn, "Puk, Scud Subaekki Paech'i/Kongch'amch'ongjang Kukkamdappyŏn/Namhan Chŏn'yŏk Sajŏnggwŏn," *Chosun Ilbo*, 30 September 1995, p. 1, in KINDS, www.kinds.or.kr.

2 October 1995
South Korea's Ministry of National Defense releases its *1995-1996 Defense White Paper,* which claims that North Korea can produce about 100 Scud-B missiles a year. Despite a serious food shortage, North Korea continues to develop its Taepodong-1 (Paektusan-1) and Taepodong-2 missiles. North Korea has also produced and deployed SA-16 surface-to-air missiles (SAMs) and is also developing a new version of the Silkworm anti-ship missile (ASM) with an extended range.
—The Ministry of National Defense, the Republic of Korea, *Defense White Paper 1995-1996* (Seoul: Ministry of National Defense, October 1993), p. 61; Choi Sang Yŏn, "Puk, Changgŏri Missile Kaebal Kyesok—'Scud' Nŭn Nyŏn Paeg'yŏ'gi Saengsan," *Joongang Ilbo*, 3 October 1995, www.joins.com.

4 October 1995
North Korea has approximately 30 launchers for its 300km Scud-B and 500km Scud-C ballistic missiles and approximately 500 high-explosive warheads.
—Son Tae Kyu (sic), *Hankook Ilbo*, 4 October 1995, p. 5, in "Seoul Paper Expresses Unease Over North's Scud Missiles," BBC Summary of World News, 6 October 1995, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Son Kyu T'ae (sic), "Sudogwŏn Chipchung Konggyŏkddaen K'ŭn P'ihae Ŭryŏ/Pur'anhan Puk Scud," *Hankook Ilbo*, 4 October 1995, p. 5, in KINDS, www.kinds.or.kr.

9 October 1995
A top South Korean National Defense Ministry source says that North Korea will be ready to deploy Nodong-1 missiles by the end of 1996. The official says that North Korea has 450 FROG rockets and a total of 500 Scud missiles.
—Son Tae Kyu, *Hankook Ilbo*, 10 October 1995, p. 1, in FBIS-EAS-95-195, "North To Deploy Nodong Missiles by 'End

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of 1996'," 10 October 1995, p. 61; Son T'ae Kyu, "Puk, Nodong 1 Ho Naenyŏn Shilchŏnbaech'i/Scud Kaeryanghyŏng/Kukpangbu Tanggukcha," *Hankook Ilbo*, 10 October 1995, p. 5, in KINDS, www.kinds.or.kr.

13 October 1995

In a press conference in Seoul, Ch'oe Ju Hwal, a former colonel who defected from North Korea, says that North Korea has been secretly manufacturing 1,000km-range ballistic missiles at the Toaeji (pig) Plant in Pyongyang since 1993. According to Ch'oe, North Korea has missiles with ranges of 400km to 500km and has tested a 1,000km-range missile. However, in a personal interview with Ch'oe, he reveals that he knows nothing about North Korean missile production or missile capabilities, and that others have provided him with information about North Korean missiles.

—Interview with Ch'oe Ju Hwal by Daniel A. Pinkston, analyst for the Center for Nonproliferation Studies, 9 April 2001, Seoul; Ko Chae hak, "Kwisun Ch'oe Ju Hwal Sangjwa Kija Hoegyŏn Ilmun'ildap," *Hankook Ilbo*, 14 October 1995, p. 10, in KINDS, www.kinds.or.kr; Sŏn Chong Ku, "'Pukch'eje 4~5 Nyŏnnae Munŏjilgŏt'/Kwisun Pukhan'gun Ch'oe Ju Hwal Sangjwa Ilmun'ildap," *Segye Ilbo*, 14 October 1995, p. 5, in KINDS, www.kinds.or.kr; Kim Yŏn Gwang and Sŏn U Jŏng, "Kwisun Pukhan'gun Ch'oe Ju Hwal Sangjwa/Ilmun'ildap," *Chosun Ilbo*, 14 October 1995, p. 3, in KINDS, www.kinds.or.kr; KBS-1 Television Network (Seoul), 13 October 1995, in FBIS-EAS-95-198, 13 October 1995, pp. 49-50; KBS Television, 13 October 1995, in "Defector Says North Korea Will Focus Attack on US Forces," BBC Summary of World Broadcasts, 16 October 1995, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

15 October 1995

A recent US intelligence study claims North Korea will soon be able to produce ballistic missiles with blast fragmentation warheads capable of carrying approximately 100 submunitions, with each bomblet weighing about 5kg. The submunitions, loaded with metal or chemicals, could be dispersed from an altitude of 60km above the launch [*sic*] area. All 100 submunitions would follow a ballistic trajectory, hitting the target over a span of 20 seconds. [Note: The reference to "launch area" should be "target area."]

—Re'uven Pedatzur, "A New Threat to the Arrow," *Ha'aretz* (Tel Aviv), 15 October 1995, p. B1, in "New Missiles Seen Making Arrow Obsolete," FBIS-NES-95-199, 16 October 1995, pp. 52-53.

November 1995

According to CIA Director John Deutch, North Korea may begin deploying the Nodong-1 by the end of 1996. The CIA believes that North Korea is working on acquiring the capability to arm its Nodong and Taepodong missiles with nuclear, chemical, and biological warheads.

—Barbara Starr, "CIA Expects Nodong Deployment Next Year," *Jane's Defence Weekly*, 11 November 1995, p. 16.

Late November 1995

Marshall Ch'oe Gwang, vice chairman of the National Defense Commission and minister of the People's Armed Forces, leads a North Korean delegation to Pakistan. Ch'oe is believed to have visited missile production facilities in the Faisalabad-Lahore area and possibly Jhelum, the site where the Ghauri was subsequently flight-tested. The visit is believed to have resulted in the conclusion of an agreement for North Korea to provide Pakistan with key components for the Nodong and/or Taepodong missile programs, about 12 to 25 Nodong missiles, and at least one transporter erector launcher (TEL) or mobile erector launcher (MEL).

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—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, pp. 23-24.

December 1995

Some 10 director-level officials from the Russian Foreign Ministry, Atomic Energy Ministry, and others meet in secret to assess the North Korean nuclear and missile development programs. Their report concludes that the Nodong-1 is "not useful as a military weapon since serious problems have been found in the engine design, performance, accuracy, target directional feature [*sic*] and flight safety" during a 1993 test-firing in the Sea of Japan. [Note: The translation is poor. "Accuracy" should be "precision" in reference to the specifications of various missile production parameters. "Target directional feature" means "accuracy" or "CEP."]

—Yu Min, *Seoul Shinmun*, 5 January 1996, p. 2, in "'South Korean Paper Quotes Russian Reporter on North's Nuclear Intentions," BBC Summary of World Broadcasts, 6 January 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Yu Min, "'Pukhan Haekkaebal P'ogi'anh'nŭnda'/Seoul Shinmun, Russia Chŏngbu P'yŏnggabogosŏ Ipsu," *Taehan Maeil*, 5 January 1996, p. 2, in KINDS, www.kinds.or.kr.

1 December 1995

In a letter to Senator Carl Levin regarding the future ballistic missile threat to the United States, CIA Director of Congressional Affairs Joanne Isham states, "A North Korean missile potentially capable of reaching portions of Alaska—but not beyond—may be in development, but the likelihood of it being operational within five years is very low."

—Joanne Isham letter to Carl Levin, 1 December 1995, cited in Harry L. Stimson Center Online, www.stimson.org.

19 December 1995

US intelligence sources say that from April to October 1995, Peru held clandestine meetings with North Korea to discuss a $52.5 million purchase of Scud-C missiles. On 20 December, the day after the *Washington Times* reported on the meetings, Peru's President Alberto Fujimori denies the allegations.

—Bill Gertz, "Peru Negotiating To Buy Scud Missiles From North Korea," *Washington Times*, 19 December 1995, p. A15, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; America Television (Lima), 20 December 1995, in "Peruvian President Denies Reported Negotiations By Peru To Buy Scud Missiles," BBC Summary of World Broadcasts, 21 December 1995, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "US Sidesteps Queries on Alleged Peru-N. Korea [*sic*] Missile Deal," Agence France Presse, 19 December 1995, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

30 December 1995

Iran denies that it ever bought long-range missiles from North Korea. According to Iranian Minister for Defense and Armed Forces Logistics Mohammad Foruzandeh, "Iran's policy is to ignore unfounded Western allegations." Foruzandeh says that if Iran had purchased the missiles, they would have publically revealed the acquisition. Western experts believe, however, that Iran is not only trying to buy 1,000km-range Nodong missiles from the North Korea, but is also working to jointly produce them.

—"Iran Denies Long-Range Missile Purchase from DPRK," Xinhua News Agency (Beijing), 30 December 1995, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

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30 December 1995
A South Korean "source" reveals that the United States and North Korea have agreed to begin talks concerning North Korea's Scud missiles exports. The final date and place have yet to be decided, but the talks may begin as early as the first half of 1996. South Korean officials believe that North Korea may be increasing its Scud sales to alleviate recent food shortages.
—Ku Song Chae, *Chosun Ilbo* (Seoul), 31 December 1995, p. 2, in "'Significant' USA-North Korea Talks Over Scud Missiles Sales," BBC Summary of World Broadcasts, 31 December 1995, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Ku Sŏng Chae, "Mibuk Kwan'gyegaesŏn 'Sokto' Naeltŭt/Scud Hyŏpsang Puktaepyodan Pangmi Ŭimi," *Chosun Ilbo*, 31 December 1995, p. 2, in KINDS, www.kinds.or.kr; Ku Sŏng Chae, "Puk Missile Such'ulgwallyŏn Mi, Pukkwa Tokchahyŏpsang/Such'ulhwaktaejedong P'ir'yoddara," *Chosun Ilbo*, 31 December 1995, p. 2, in KINDS, www.kinds.or.kr.

1994

Late 1993-Early 1994
Kim Il Sung expresses the desire to place a satellite in orbit at a meeting of the Central Committee of the Korean Workers' Party.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, pp. 28-29; Bill Gertz, "N. Korean Missile Seen Posing Risk to U.S.; Rocket Might Reach Alaska, Hawaii," Washington Times, 16 September 1998, p. A1.

1994
North Korea obtains information from Syria on missiles, missile technology and unmanned aerial vehicles (UAVs). Syria provides "access" to the 9K79 Tochka (SS-21 Scarab) SRBM, P-35 Redut (SSC-1b Sepal) cruise missile, P-20 Rubezh-A (SS-C-3 Styx) anti-ship missile, solid-fuel motor technology, and the DR-3 Reys UAV.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 32.

1994
North Korea begins mass production of the Nodong missile, with a capacity of 30-50 missiles a year. It appears that North Korea will be looking to test the missile in Iran, Libya or Syria.
—Kim Yong Il, "Puk Nodong 1 Ho Missile Yangsan—Chaknyŏnputo 30-50 Ki Saengsan," *Joongang Ilbo*, 17 May 1995, www.joins.com.

1994
North Korea begins construction of a missile bases at Yongnim-kun, Chagang Province, and at Sangnam-ri, Hŏch'ŏn-kun, South Hamgyŏng Province. The bases will be capable of launching either Nodong or Taepodong missiles, or both.
—Kim Min Sŏk, "Pukhan Missile Kiji Kyesok Chŭngsŏl," *Joongang Ilbo*, 6 March 2001, p. 8, in KINDS, www.kinds.or.kr.

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1994
North Korea reportedly begins construction on three "Scud" missile bases near the Demilitarized Zone (DMZ). [Note: Considering the timing of the construction, the bases may be for Nodong and or Taepodong missiles.]
—Kim Sŏng Gŏl, "'Pukhan'gun Chŏ''yŏk Chŭnggang'/Kukpangbu Palp'yo," *Hankyoreh Shinmun*, 13 August 1996, p. 2, in KINDS, www.kinds.or.kr.

4 January 1994
The Israeli daily *Ha'aretz* reports that North Korea has indefinitely postponed the sale of Nodong intermediate-range ballistic missiels (IRBMs) to Iran. The report does not reveal when the contract was cancelled.
—Ron Kampeas, "Report: North Korea Cancels Scud-D Sales to Iran," Associated Press, 4 January 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "'Puk Scud Iran P'anmae Ch'wiso'/Israel'chi Podo," *Chosun Ilbo*, 6 January 1994, www.chosun.com.

12 January 1994
North Korea's Korea Central News Agency reports that Air Force Commander Cho Myŏng Rok is leading a delegation on a visit to Iran. While the report does not mention the purpose of the visit, Western and Arab sources speculate that the two countries will engage in intense discussions about possible Nodong-1 test launches in Iran. Diplomatic sources also speculate that the North Koreans will likely visit military and nuclear facilities. [Note: The North Korean delegation remains in Iran until mid-February.]
—KBS-1 Radio Network (Seoul), 24 February 1994, in "Military Delegation Reportedly Returns form Visit to Iran," BBC Summary of World Broadcasts, 26 February 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

14 January 1994
Japanese police raid Anritsu Corp., Yokohama Machinery Trading Co., and one other Japanese company on suspicion of having sold spectrum analyzers to North Korea via China in 1989. The spectrum analyzers could be used to improve the precision of missile targeting and the accuracy of the Nodong-1. The Korean Central News Agency (KCNA) denies allegations that North Korea had imported spectrum analyzers from Japan, stating, "The so-called export of a spectrum analyzer is an utterly groundless fabrication against the DPRK." KCNA adds that it was impossible that spectrum analyzers were imported via a third country, and "preposterous" that it might be used in a the development of a ballistic missile.
—Terry McCarthy, "Japanese Hi-Tech in North Korean Missiles, *Independent* (London), 15 January 1994, p. 13; Michiyo Nakamoto, "Japan Police in Export Raid: Machinery Sales to N. Korea May Have Breached CoCom Rules," *Financial Times*, 15 January 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; David E. Sanger, "Tokyo Raids Seek to Halt Aid for North Korea on Missiles," *New York Times*, 15 January 1994, p. 5, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Japan Firms May Have Sold Missile Gauges to N. Korea," *Daily Yomiuri*, 15 January 1994, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "3rd Nation Used to Ship Goods to North Korea?" *Daily Yomiuri*, 15 January 1994, p. 2, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North Korea Missile Deal Cover-Up Seen," *Daily Yomiuri*, 16 January 1994, p. 2, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Lee Sŏk Ku, "Nodong 1 Ho Pupum Ilche Chupasubunsŏkki Chunggukkŏch'yŏ Milsu Ch'ujŏng," *Joongang Ilbo*, 15 January 1994, www.joins.com; "North

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Korea Raps Japan Over Police Search," Agence France Presse, 19 January 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

16 January 1994

The Japanese newspaper *Tokyo Shimbun* cites a Russian Pacific Fleet senior officer as saying that Russia has contracted with North Korea for the sale of 10 Golf II-class submarines.

—Yonhap News Agency (Seoul), 18 January 1994, in "Analysts Say Russian Submarines Sold to DPRK Can Carry Missiles," JPRS-TND-94-003, 31 January 1994, pp. 45-46; Hong Sŏng Kyun, "Pukhan Toip Rŏ Chamsuham/Koch'ŏlyong'inya Shilchŏn'yong'inya," *Kyunghyang Shinmun*, 31 January 1994, p. 4, in KINDS, www.kinds.or.kr.

17 January 1994

The Russian Defense Ministry denies the *Tokyo Shimbun* report regarding the Golf II-class submarine sale to North Korea and refuses to comment on the type of submarines involved or conditions of the contract. However, the Russian Foreign Ministry acknowledges the deal to South Korean embassy officials in Moscow with the assurance that the submarines are being sold for scrap only.

—Yonhap News Agency, 18 January 1994, in "Analysts Say Russian Submarines Sold to DPRK Can Carry Missiles," JPRS-TND-94-003, 31 January 1994, pp. 45-46; Hong Sŏng Kyun, "Pukhan Toip Rŏ Chamsuham/Koch'ŏlyong'inya Shilchŏn'yong'inya," *Kyunghyang Shinmun*, 31 January 1994, p. 4, in KINDS, www.kinds.or.kr.

18 January 1994

Western defense analysts in Moscow say that Russia is selling 10 ballistic missile-capable Golf II-class submarines to North Korea. The analysts maintain that North Korea could install modified Nodong-1 missiles on the submarines. Although the Russian navy insists that the submarines will be dismantled under Russian military observation, Western analysts believe that North Korea may cannibalize the submarines for parts and that knowledge of these submarines will help it to improve its own submarine technology. According to the *New York Times,* the purchase is for 40 submarines, mostly 20- to 30-year old diesel models in the NATO class "Foxtrot." Some experts believe the submarines may be used for spare parts. [Note: The concern that North Korea might use the submarines as a launch platform for its ballistic missiles is not as farfetched as it may at first appear. The first Soviet submarine launched ballistic missile (SLBM), the SS-N-4 Sark, was a Scud derivative, and was originally deployed on Golf-class submarines. A Scud-C may be adaptable to an SLBM role, but, at 15.5 meters in length, the Nodong-1 is one meter longer than the SS-N-4 and would not fit in a Golf launch tube without modification. The modification referred to may be a shortening of the missile, which would also shorten the range of the missile. It is not unreasonable to assume that North Korea may have had access to SLBM technology as the precursor to the SS-N-4, the R-11FM, was transferred to China in December 1959. China still uses the Golf-class submarine as an SLBM training and test platform. Additionally, it should be noted that the Russian scientists recruited in late 1992 were from the Makeyev Design Bureau, which is responsible for the design of all modern Russian SLBMs.]

—Yonhap News Agency (Seoul), 18 January 1994, in "Analysts Say Russian Submarines Sold to DPRK Can Carry Missiles," JPRS-TND-94-003, 31 January 1994, pp. 45-46.

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Late January 1994
The Japan Defense Agency issues a report on reconnaissance satellites following a secret study that began in October 1993. The report recommends that Japan put five-seven reconnaissance satellites into earth orbit.
—Kim Hyo Sun, "Ilbon 'ChŏngCh'alwisŏng' Ch'ujin," *Hankyoreh Shinmun*, 17 August 1994, p. 5, in KINDS, www.kinds.or.kr; Chŏn Hyŏn Il, "Il, Chŏngch'alwisŏng Poyu Kŭkpich'ujin/Pangwich'ŏng, Pimilgyehoek Surip," *Segye Ilbo*, 17 August 1994, p. 5, in KINDS, www.kinds.or.kr.

25 January 1994
CIA director James Woolsey tells the Senate Select Committee on Intelligence that North Korea would probably resort to its MiG-23 aircraft as a nuclear weapon delivery system, rather than the Nodong-1 missile.
—Kyodo News Service, "CIA Chief Says N. Korea Would Use MiGs for Nuke Attack," Japan Economic Newswire, 26 January 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

26 January 1994
The Massachusetts Institute of Technology releases a report that claims the circle of equal probability (CEP) value of the Nodong is between two and four kilometers.
—Lee Kyŏng Hyŏng, "Nodong 1 Ho Myŏngjungdo 'Sujun'iha'/MIT-Rŏ Kwahag'wŏn Yŏn'guwŏn Punsŏk," *Taehan Maeil*, 28 January 1994, p. 7, in KINDS, www.kinds.or.kr.

28 January 1994
The South Korean daily *Hankook Ilbo* reports that North Korea possesses 12 to 18 Nodong-1 missiles and is developing the Nodong-2. The report says the Nodong-1 was "developed from the former Soviet Union's surface-to-surface Scud missile developed in the 1980s and that the Nodong was reportedly deployed last year."
—Yi Sang Won, *Hankook Ilbo* (Seoul), 28 January 1994, p. 5, in "Press Overview of Deployment," JPRS-TND-94-005, 25 February 1994, p. 42; Lee Sang Wŏn, "Patriot Nodong 1 Ho Kyŏkch'u Kanŭnghalkka," *Hankook Ilbo*, 28 January 1994, p. 6, in KINDS, www.kinds.or.kr.

28 January 1994
Colonel General Mikhail Kolesnikov, chief of the Russian General Staff, denies allegations made by the Japanese weekly *Shukan Bunshun* regarding an alleged top secret Russian report. The *Shukan Bunshun* report claims that Russian nuclear and missile scientists have assisted North Korea in the development of nuclear bombs and ballistic missiles. But Kolesnikov says that the report's alleged issuing authority, the Center for Military Strategic Analysis at the Russian General Staff, does not exist, although the General Staff does have a "center for military strategic studies." Kolesnikov lists further discrepancies within the report, including the form used, the index number cited, the incorrect placement and terminology of the security classification, and, finally, the use of a serial number originating with the USSR Council of Ministers (a numbering system not used since 1991) rather than one used by the Ministry of Defense.
—Radio Moscow, 29 January 1994, in "Participation in DPRK Nuclear Program Denied," FBIS-SOV-94-020, 31 January 1994, p. 15; Pavel Felgengauer, "North Korea Has No Nuclear Bomb. The Publication in Shukan Bunshun Is Based on a Hoax. There will be No Official Investigation in the General Staff," *Segodnya* (Moscow), 29 January 1994, p. 1, in FBIS-SOV-94-020, 31 January 1994, pp. 15-16; Viktor Litovkin, "Russian Chief of General Staff

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Describes Piece in Japanese Weekly as 'Nonsense'," *Izvestiya* (Moscow), 29 January 1994, p. 3, in "Army Chief on Missile Document," FBIS-SOV-94-020, 31 January 1994, pp. 16-17; "General Staff Secret Report a Brazen Fake," Official Kremlin International News Broadcast, 28 January 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Alexander Golts, "'General Staff's Secret Report' Is Crude Forge," *Krasnaya Zvezda*, p. 1, in Lexis-Nexis Academic Universe, Russian Press Digest, http://web.lexis-nexis.com.

February 1994

North Korean Air Force Commander General Cho Myŏng Rok, heading a 29-member delegation of military and nuclear experts, returns from Iran, where, according to the Paris-based *Al-Watan Al-Arabi*, "new agreements to intensify military and nuclear cooperation" were reached. Western and Arab diplomatic sources believe that the testing of the Nodong-2 in Iran was also discussed and that the delegation visited the Iranian missile test site at Sharoud. Some analysts believe Iran wants to purchase up to 150 Nodongs.

—KBS-1 Radio Network (Seoul), 24 February 1994, in "DPRK Military Delegation's Iran Visit Reported," JPRS-TND-94-007, 23 March 1994, pp. 27-28; "N. Korea's Air Force Chief Visits Iran for Closer Ties," *Washington Times*, 25 February 1994; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 25; Joseph S. Bermudez, Jr. "An Analysis of North Korean Ballistic Missile Testing," *Jane's Intelligence Review*, April 1995, p. 190; Ed Blanche, "North Koreans Visit Iran To Step Up Military Cooperation," Associated Press, 24 February 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

February 1994

US intelligence satellites detect a new "missile simulator" [hardware mock-up] at the Sanŭm-dong R&D facility in Pyongyang. The mock-up has been designated Taepodong-2, and appears to be a two-stage missile with the first stage resembling the Chinese CSS-2. The dimensions of Taepodong-2 indicate that its range could be as great as 3,500km. Also spotted is a second two-stage missile that has been designated Taepodong-1 (Paektusan-1), which is believed to have a Nodong-1 first stage and a Scud-B or -C second stage. South Korean and US intelligence officials believe that, considering the missile's potential range, the Taepodong-1 (Paektusan-1) may be the "Nodong-2." The majority view among analysts at the Defense Intelligence Agency (DIA) and CIA is that the missiles have been developed indigenously; a minority within the DIA contends that China may have assisted in the development of the missiles. The two missiles are named after the location of their development in North Korea.

—Barbara Starr, "N. Korea Casts a Longer Shadow with TD-2," *Jane's Defence Weekly*, 12 March 1994, p. 1; R. Jeffrey Smith, "CIA Confirms North Korea's New Missiles," *Washington Post*, 18 March 1994, p. A24; Yu Yong Won, *Chosun Ilbo* (Seoul), 20 March 1994, p. 4, in "Reporting on Status of Missile Development," JPRS-TND-94-008, 1 April 1994, pp. 12-13; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 28; Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), p. 293, 295; Yu Yong Wŏn, "Puk Shinhyŏngjidaeji 'Taepodong12ho' [*sic*] Saqjŏnggŏri 2Ch'ŏn ~ 3Ch'ŏn5Baek km," *Chosun Ilbo*, 20 March 1994, p. 4, in KINDS, www.kinds.or.kr.

February 1994

North Korea conducts a static test of a liquid-fuel engine at Musudan-ri (Taepo-dong), the location of North Korea's largest missile engine test facility. There are reports that the test is related to the Taepodong program.

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—Barbara Starr, "North Korean Missile R&D Gains New Pace," *Jane's Defence Weekly*, 25 June 1994, p. 10; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 28.

3 February 1994

The daily *Tokyo Shimbun* reports that Russia, under pressure from the international community, has halted the delivery of decommissioned Russian submarines to North Korea.

—Yi Sok-ku, *Joongang Ilbo*, 3 February 1994, p. 6, in "Russia Allegedly Stops Delivery of Submarines to DPRK," JPRS-TND-94-005, 25 February 1994, p. 51.

14 February 1994

Vladimir Kumachev, a senior official of Russia's Institute of National Security and Strategic Studies, states that, "according to information that we have received, North Korea has nuclear warheads." Kumachev adds, "We know they have carried out tests in certain African countries under totalitarian regimes." He maintains that Russia still has approximately 15 experts in North Korea working in the civil nuclear industry. According to Kumachev, in the late 1970s, the Soviet Union sent 10 conventional missiles to North Korea, and that additional shipments were sent via third parties such as Iraq. He also claims that North Korea indigenously produced transporter erector launchers (TELs).

—Agence France Presse (Paris), 14 February 1994, in "Russian Defense Official Says Pyongyang 'Has Nuclear Weapons'," JPRS-TND-94-006, 16 March 1994, p. 11-12; "'Puk Ajusŏ Haek Missile Shilhŏm'/Ro Chŏnmun'ga," *Chosun Ilbo*, 15 February 1994, www.chosun.com.

24 February 1994

Iran's Revolutionary Guards commander General Mohsen Rezai denies that Iran would ever allow North Korea to test missiles on Iranian territory. He states, "We are very sensitive to having our soil and military facilities used by foreigners. Iran will never opt for such cooperation no matter how friendly the countries are."

—"General Rezai Denies DPRK To Test Missiles In Iran," Tehran Times (Tehran), 24 February 1994, pp. 1, 14, in JPRS-TND-94-006, 16 March 1994, pp. 27-28; Agence France Presse, 24 February 1994, in "Iranian General Denies DPRK Testing Missiles in Iran," JPRS-TND-94-007, 23 March 1994, p. 28.

March 1994

Japan's Seishin Enterprise Co. reportedly sells jet mills and machinery to measure particle size to a machine company affiliated with the pro-Pyongynang General Association of Korean Residents in Japan (Choch'ŏngnyŏn). The machine company then reportedly transfers the equipment, valued at approximately $1 million, to North Korea aboard the Mangyongbong-92, a North Korean vessel that regularly transports cargo and passengers between North Korea and Japan. Jet mills are used to grind materials into a fine powder using compressed air. Jet mills have commercial applications in the pharmaceutical industry, but they are also used to make solid fuel for ballistic missiles, and thus are MTRC-controlled items. According to the Tokyo Metropolitan Police Department, Seishin Enterprise Co. also delivers other machinery necessary for making solid fuel for ballistic missiles, including equipment to measure particle size, a dryer for powdered material, and a centrifuge for blending powdered material. [Note: On 12 June 2003, Japanese police arrested the president of Seishin Enterprise Co. for selling jet

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mills to Iran. However, by the time Japanese authorities learned of the 1994 transfer to North Korea, the statute of limitations on the Foreign Exchange and Foreign Trade Control Law had expired.]
—"Seishin Syachora 5nin Taiho Iranni Gunjitenyohinyusyutu," Saneki Shimbun, 12 June 2003, www.sankei.co.jp; Kyodo World Service, 14 June 2003, in "Japan: Police Say Seishin Suspected of Selling Solid-Fuel Equipment to DPRK," FBIS Document ID JPP20030614000061; "Seishin Jet Mill Sale 'Aided' N. Korea; MPD Investigation Uncovers Exports of Missile-Development Equipment in 1994," *Daily Yomiuri*, 13 June 2003, p. 2, in Lexis-Nexis, http://web.lexis-nexis.com.

March 1994
Pentagon spokeswoman Kathleen de Laski, commenting on reports of North Korea's development of the Taepodong-1 (Paektusan-1) and Taepodong-2 two-stage missiles, states, "We have been aware that North Korea has been developing a follow-on missile to its Scud program," but it is "too early to speculate on when or if it could become operational." She refers to the Taepodong as "a weapon of the future."
—Barbara Starr, "North Korea Grasps at the Stage beyond Nodong 1," *Jane's Defence Weekly*, 19 March 1994, p. 18.

March 1994
Henry Sokolski, a nonproliferation specialist and former Bush administration Pentagon official, states, "A staged missile is a more ambitious proposition than anything North Korea has attempted so far." He outlines some of the difficulties inherent in missile staging, including engines with greater thrust to weight ratios, high-speed turbo pumps to feed clustered engines, sequencing system for stage separation, staging mechanism, airframe design, an advanced digital guidance system, and a reentry vehicle.
—Barbara Starr, "North Korea Grasps at the Stage beyond Nodong 1," *Jane's Defence Weekly*, 19 March 1994, p. 18.

March 1994
Russia expels five North Korean nationals from Moscow for "showing too much interest in nuclear components."
—Warren Strobel, "N. Korea Shops for Nuke Technology in Russia," *Washington Times*, 5 July 1994, pp. A1, A8.

9 March 1994
US officials confirm that North Korea is building two new medium-range missiles. DOD Spokeswoman Kathleen deLaski said the missiles are in the "early stages of development" and are only in the "concept stage." The Pentagon is downplaying the development of the missiles, designated the Taepodong-1 (Paektusan-1) and Taepodong-2, but US lawmakers are concerned that the reports are "understated."
—R. Jeffrey Smith, "N. Korean Conduct in Inspection Draws Criticism of U.S. Officials," *Washington Post*, 10 March 1994, p. A34; "Talk of New North Korean Missiles is Downplayed by Pentagon," *Aerospace Daily*, vol. 169, no. 50, 15 March 1994, p. 397.

17 March 1994
CIA Director R. James Woolsey confirms the existence of North Korea's Taepodong-1 (Paektusan-1) and Taepodong-2 IRBMs in a speech given at a CIA conference discussing the origins of the agency. Woolsey

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comments, "These new missiles have yet to be flown, and we will monitor their development, including any attempts to export them in the future to countries such as Iran." He remarks that these missiles could threaten major portions of East Asia and the Western Pacific, "and if exported to the Middle East, could threaten Europe as well." Woolsey says that North Korea has not yet exported any Nodong missiles to countries in the Middle East.
—R. Jeffrey Smith, "CIA Confirms North Korea's New Missiles," *Washington Post*, 18 March 1994, p. A24; Bill Gertz, "N. Korea Builds New Missiles," *Washington Times*, 19 March 1994, p. A3; Chŏng Hae Yong, "Puk Sae Missile 2 Chonggaebal/CIA Kukchang, Kongshikhwagin," *Chosun Ilbo*, 19 March 1994, www.chosun.com; "Puk ShinHyŏng Missile Kaebal—Mi CIA Kukchang Hwagin," *Joongang Ilbo*, 19 March 1994, www.joins.com.

17 March 1994
A Chinese foreign ministry spokesman states, "The report of the *Wall Street Journal* that China had possibly provided advanced missile technology to the Democratic People's Republic of Korea is totally groundless."
—"China Denies a Transfer of Data to North Korea," *Wall Street Journal*, 18 March 1994, p. A7.

19 March 1994
During bilateral talks between the two Koreas, North Korean delegate Pak Yŏng Su says, "Seoul is not very far from here. Seoul can be turned into a sea of fire. We will match dialogue with dialogue, and war with war."
—Cho Min Ho, "'Seoul Pulbada Toel'gŏt' Puk Tanjang Kŭg'ŏn/Nambuk 8 Ch'a Shilmujŏpch'ok P'anmunjŏm P'yojŏng," *Segye Ilbo*, 20 March 1994, p. 2, in KINDS, www.kinds.or.kr; R. Jeffrey Smith and Ann Devroy, "U.S. Backs Maneuvers In S. Korea," Washington Post, 20 March 1994, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Michael R. Gordon, "U.S. Will Urge U.N. To Plan Sanctions for North Korea," *New York Times*, 20 March 1994, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Norman Kempster, "U.S. to Urge Sanctions for N. Korea," Los Angeles Times, 20 March 1994, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; David Usborne, "North Korea 'Ready for War'," *The Independent*, 20 March 1994, p. 16, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

19 March 1994
The Clinton administration decides to ask the United Nations to get prepared to impose economic sanctions against North Korea. According to the *Washington Post*, the United States will ask for a Security Council vote on a resolution calling for complete access to North Korea's nuclear facilities. The administration also decides to reinstate joint military exercises with South Korea. North Korea has said it will consider economic sanctions an act of war.
—Michael R. Gordon, "U.S. Will Urge U.N. To Plan Sanctions for North Korea," *New York Times*, 20 March 1994, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; R. Jeffrey Smith and Ann Devroy, "U.S. Backs Maneuvers In S. Korea," Washington Post, 20 March 1994, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Norman Kempster, "U.S. to Urge Sanctions for N. Korea," Los Angeles Times, 20 March 1994, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; David Usborne, "North Korea 'Ready for War'," *The Independent*, 20 March 1994, p. 16, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

21 March 1994
According to Pentagon officials, a deployment order is signed directing the movement of up to six Patriot missile

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batteries from Ft. Bliss, Texas, to South Korea as a defense against North Korean ballistic missiles. The missiles are to be moved by sea from a US West Coast port.
—Bill Gertz, "U.S. Offers No Carrot to N. Korea on Patriot Missiles," *Washington Times*, 23 March 1994, p. A4.

22 March 1994
South Korean President Kim Young Sam places the South Korean military on high alert in response to a North Korean delegates remark that North Korea could turn Seoul into a "sea of fire." Kim is scheduled to leave for Japan and China tomorrow.
—Terry McCarthy and Teresa Poole, "Seoul Forces Put on Alert as Tension with North Grows, *The Independent*, 23 March 1994, p. 10, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; John Burton and George Graham, "S. Korean Forces Go on Alert as N-Plant Row with North Grows," *Financial Times*, 23 March 1994, p. 24, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; T.R. Reid, "North Korea Warns of 'Brink of War'," *Washington Post*, 23 March 1994, p. A23, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Steven Greenhouse, "Christopher Says U.S. Stays Firm on Korea, But Pledges Diplomacy," *New York Times*, 23 March 1994, p. A12, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

22 March 1994
Korean People's Army (KPA) Sgt. First Class Lee Ch'ung Guk, who defected to South Korea on 18 March 1994, states in a Seoul news conference that North Korea has enough chemical weapons to kill everyone in South Korea. Lee served as a "calculator" at the "Counter-Nuclear and Atomic Analysis Center" of the Nuclear and Chemical Defense Bureau under the KPA General Staff.
—Shin Chong Su, "'Puk Maengdokhwahangmugi Namhansŏmbyŏl Kanŭng'/Kwisunyongsa Lee Ch'ung Kuk Ssi Hoegyŏn," *Kukmin Ilbo*, 23 March 1994, p. 18, in KINDS, www.kinds.or.kr; Kim T'ae Kyun, "'Puk, 4 Kaegijisŏ Hwahakmugi Saengsan'/Haengmugi Kaebal Wallyohandŭt," *Taehan Maeil*, 23 March 1994, p. 22, in KINDS, www.kinds.or.kr; Kim Dong Ho, "Puk Chŏnjaengbunwigi Kojo/4 Ch'ŏnman Salsanghal Hwahangmugiboyu/Kwisun Haekpudaejungsahoegyŏn," *Joongang Ilbo*, 23 March 1994, p. 22, in KINDS, www.kinds.or.kr.

22 March 1994
An Israeli Foreign Ministry spokesman denies reports that Israel is engaged in secret talks with North Korea concerning missile sales to Iran. However, reports claim that Israeli diplomats met with senior North Korean officials several weeks ago in Beijing. The contacts supposedly began about two years ago, and Israel is said to be proposing to "help raise about $1 billion among American Jewish businessmen for civilian projects in North Korea."
—Udi Segal, "Allegations of 'Secret' Contacts with DPRK on Missiles to Iran," IDF Radio (Tel Aviv), 22 March 1994, in JPRS-TND-94-008, 1 April 1994, p. 34.

22-23 March 1994
North Korean print and broadcast media denounce the resumption of joint US-South Korean military exercises, and the US decision to deploy Patriot missiles in South Korea as "pushing the situation on the Korean Peninsula to the brink of war." North Korea continues to condemn the steps taken by the United States as unnecessarily aggressive and promises "to answer dialogue with dialogue and war with war."
—Korean Central Broadcasting Network (Pyongyang), 22 March 1994, in "Order Termed 'Provocative'," FBIS-EAS-

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94-056, 23 March 1994, p. 10; "Step To Drive Situation Into Extremes," Korean Central News Agency (Pyongyang), 23 March 1994, in "'Grave Threat' Noted," FBIS-EAS-94-056, 23 March 1994, p. 10-11; Peter Goodspeed, "Korean War of Words Heats Up Amid Gravest Crisis in 40 years," *Toronto Star*, 24 March 1994, p. A2, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Terry McCarthy and Teresa Poole, "Seoul Forces Put on Alert as Tension with North Grows, *The Independent*, 23 March 1994, p. 10, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

28 March 1994

A North Korean Foreign Ministry spokesman denounces the US decision to deploy Patriot missiles to South Korea as a violation of the Korean Armistice Agreement and "an open aggressive act to threaten the DPRK militarily." The spokesman also refutes the US claim that the Patriot is a purely defensive weapon. He states that the Patriot can be modified into an offensive weapon, and "it is known to everyone that its target can be changed by the kind of warhead it is tipped with."

—Korean Central Television (Pyongyang), 28 March 1994, in "North Korean Foreign Ministry Statement Denounces Patriot Missile Deployment," BBC Summary of World Broadcasts, 30 March 1994, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

30 March 1994

The Russian Federal Counterintelligence Service (FSK) detains three North Korean embassy employees for attempting to acquire samples of new Russian weaponry.

—NTV (Moscow), 31 March 1994, in FBIS-SOV-94-063, "Foreign Espionage in Russia Viewed," 1 April 1994, pp. 10-11; Lee Chang Hun, "Rŏ, Puk Oe'gyo'gwan 3 Myŏngch'epo/Ch'ŏmdanmugi Kuipkido...Ch'ubangga'nŭngsŏng," *Hankook Ilbo*, 2 April 1994, p. 7, in KINDS, www.kinds.or.kr.

Early April 1994

Kim Il Sung cancels a May 1994 meeting in Beijing with Chinese President Jiang Zemin designed to improve relations between the two countries. The cancellation is seen as a sign of North Korea's displeasure with China's lack of support in the United Nations regarding nuclear inspections.

—Bruce Cheesman, "Kim Cancels Visit to Peking," *The Times*, 8 April 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

April 1994

The Japanese Ministry of Foreign Trade and Industry [MITI] requests that Russia send a special representative to North Korea to monitor the scrapping of decommissioned Russian submarines. The Japanese government threatens to block the deal, which was arranged by the Japanese trading company Toen Shioji, if North Korea does not allow Russian monitoring. The 12 Russian submarines in question are reportedly rust-eaten and semi-submerged.

—Vasiliy Golvnin, ITAR-TASS, 27 April 1994, in "Japan Urges Control of Submarine Scrapping," FBIS-SOV-94-082, 28 April 1994, p. 23.

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April 1994
North Korean Foreign Ministry delegation led by Pak Chung Kuk travels to Iran and Pakistan.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 23.

6 April 1994
North Korea's ambassador to India, Cha Song Chu, tells the Yonhap News Agency that, "Our nuclear arms, if developed, would be primarily designed to contain Japan." Cha also says that North Korea would not target South Korea or mainland United States with any future nuclear missiles, and repeats North Korea's assertion that it will not build such weapons. Japanese military commentator Kensuke Ebata notes, however, that, "The first obvious target for these missiles [Nodong-1] are the US bases in Japan...Such an attack would serve two purposes: to take out their primary enemy forces in a preemptive strike and serve a warning to Japan."
—John Burton, "North Korea in Nuclear Warning to Tokyo," *Financial Times*, 7 April 1994, pp. 1, 14; Bruce Cheesman, "Kim Cancels Visit to Peking," *The Times*, 8 April 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

7 April 1994
South Korea's cabinet forms a crisis unit to deal with the nuclear threat posed by North Korea.
—Bruce Cheesman, "Kim Cancels Visit to Peking," *The Times*, 8 April 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

7 April 1994
The Japanese daily *Sankei Shimbun*, citing South Korean sources, reports that North Korea has targeted some of its surface-to-surface missiles (SSMs) at China. The South Korean sources, which allegedly received the information from Chinese intelligence, claim that Scud-C missiles launched from several North Korean missile sites could strike industrial centers in the northeastern China.
—Kyodo News Service, "N. Korea Targets Missiles Against China, Paper Says," Japan Economic Newswire, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

8 April 1994
Im Yŏng Sŏn, who defected to South Korea from the North Korean People's Army, says that North Korea is building a large missile base near the Chinese border. Im says the base is being built close to the border to discourage attacks from South Korea or the United States out of the fear that collateral damage could spill over into Chinese territory. Im also says about 5,000 people have been committed to the construction project in "Chunggangjin," Chagang Province to finish it by next year. [Note: There are references in the press calling the site both "Chunggangjin" and "Chunggang," but the correct location is Chunggang-kun, Chagang Province.]
—"Chagangdo Chunggangjin Dŭng Chungguk Kukkyŏng/Puk, Missile Kiji Kŏnsŏlchung," *Chosun Ilbo*, 9 April 1994, www.chosun.com; "Puk, Chunggukkukkyŏng'e Missile Kiji/ Naenyŏn Wan'gong/ Tongbuk3sŏng-Pukkyŏngdo Sajŏnggwŏn'e," *Taehan Maeil (Seoul Shinmun)*, 9 April 1994, p. 2, in KINDS, www.kinds.or.kr.

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11 April 1994
Paul Beaver, publisher of *Jane's Defence Weekly*, in an interview for a Japanese feature television program entitled "Areas of Dispute in the World," reveals that North Korea and Iran have agreed to establish a Nodong-1 missile production facility in Iran under the code name "Ronda-68." [Note: The "Ronda-68" project referred to is probably the Tondar-68 project.]
—KBS-1 Radio Network (Seoul), 11 April 1994, in, "DPRK, Iran Reportedly Agree to Build Missile Plant," JPRS-TND-94-010, 5 May 1994, p. 47.

19 April 1994
US government sources say North Korea is developing two new missiles, the Taepodong-1 (Paektusan-1) and Taepodong-2, with estimated ranges between 2,000km and 6,000km. The missiles have significantly longer ranges than the Nodong, and have two stages.
—"New North Korean Missiles Would Have Ranges of 2,000-6,000 km," *Aerospace Daily*, vol. 170, no. 15, 21 April 1994, p. 118; O Yong Hwan, "Puk Shinhyŏng Missile Taepodong 1.2 (sic) Ho Sajŏnggŏri 6 Ch'ŏn km Talhae," *Joongang Ilbo*, 24 April 1994, www.joins.com.

27 April 1994
The Israeli Home Front Commander Major General Ze'ev Livne states that Syria is continuing to acquire Scud missiles and launchers from North Korea. He further notes that missiles launched from Iran would pose a more difficult operational dilemma for the Home Front Command.
—*Qol Yisra'el* (Jerusalem), 27 April 1994, in "General: Syria Buying Scud Missiles in North Korea," FBIS-NES-94-082, 28 April 1994, p. 41.

Late April 1994
US intelligence discovers preparations for a missile test at Musudan-ri. The preparations are believed to be for a Nodong test, but activities suddenly stopped without explanation.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 22; Joseph S. Bermudez, Jr., "An Analysis of North Korean Ballistic Missile Testing," *Jane's Intelligence Review*, April 1995, p. 186.

28 April 1994
Korean People's Army (KPA) Sgt. Lee Ch'ung Guk, who defected to South Korea on 18 March 1994, states in a Tokyo news conference that North Korea has the technology to mount chemical, but not nuclear, warheads on Scud missiles, and further states that "Missile bases located in Myŏngch'on-kun and Hwadae-kun of North Hamgyŏng Province have Okinawa and Guam within their shooting range." Lee also states that missiles based in Chagang Province are targeted at China. Lee served as a "calculator" at the "Counter-Nuclear and Atomic Analysis Center" of the Nuclear and Chemical Defense Bureau under the KPA General Staff. In a later personal interview, Lee claims he has no special expertise in ballistic missiles. [Note: Lee did not mention missiles during his news conference in Seoul on 22 March 1994.]
—Interview with Lee Ch'ung Guk by Daniel A. Pinkston, Center for Nonproliferation Studies senior research associate, 7 April 2001, Seoul; "Chemical-Armed Scuds Said Aimed at Okinawa," *Washington Times*, 29 April 1994,

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p. A15; "N. Korea's Scuds Said Capable of Carrying Chemicals," Japan Economic News Service, 28 April 1994, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

Early May 1994

US intelligence imagery detects North Korean efforts to conceal the Taepodong-1 (Paektusan-1) and Taepodong-2 mock-ups at the San'ŭm-dong missile R&D facility.

—Barbara Starr, "North Korean Missile R&D Gains New Pace," *Jane's Defence Weekly*, 25 June 1994, p. 10.

May 1994

A US reconnaissance satellite notes movement of containers to a missile test site on North Korea's East Coast. The satellite also detects the installation of a launcher and the erection of a "giant shelter pad against propellant jets," as well as significant North Korean naval activity. [Note: At this time, North Korea appears to be preparing for two separate missile tests: a static test-firing of the Taepodong-2 first stage and a test-launch of the Nodong-1. The "giant shelter pad" may be an indication of a static test, while the TEL sightings and naval activity are possible signs of a flight test.]

—Shunji Taoka, *Aera*, 13 June 1994, in "Demonstration of Military Power Will Adversely Affect Negotiations with the United States," FBIS-EAS-94-111-A, 13 June 1994, p. 17; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 28.

2 May 1994

Yŏ Man Ch'ŏl, a former captain in the North Korean security forces who defected to South Korea in March 1994, states that he had heard of test firing of multi-stage missiles in North Hamgyŏng Province. In a subsequent interview, Yŏ says that he traveled to Hwadae-kun, North Hamgyŏng Province for an artillery firing exercise, but the exercise was cancelled. He clarified that he never heard of "multi-stage missile" exercises.

—Interview with Yŏ Man Ch'ŏl by CNS analyst Daniel A. Pinkston, 9 April 2001, Seoul; Teresa Watanabe, "Most N. Koreans on Brink of Starvation, Defector Says; Far East: Ex-Security Officer Describes Rapidly Waning Support for Regime," *Los Angeles Times*, 3 May 1994, p. A6;

7 May 1994

According to a *Jane's Defence Weekly* report, US intelligence officials believe that North Korea's Taepodong-1 (Paektusan-1) and Taepodong-2 missiles are too large to be transported by missile launchers available to North Korea. North Korea is believed to have two transporters of sufficient size to carry the missiles in sections, but this method of transport would necessitate reassembly and launch of the missile from a fixed launch site.

—"Taepo Dongs 'Cannot Be Moved Whole'," *Jane's Defence Weekly*, 7 May 1994, p. 1.

9 May 1994

NBC Television in the United States reports that a Russian intelligence satellite has collected imagery of the North Korean secret missile testing facility at Taepo-dong (Musudan-ri). The report says there are three launch facilities at the site, a rocket test stand, and black marks from a failed Nodong-1 test. The facility also has a missile assembly area, a repair or maintenance facility, and a "wharf" for tracking rocket flight paths.

—Kyodo News Service, "Russian Satellite Snaps N. Korean Missile Site, TV Says," Japan Economic Newswire, 10

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May 1994, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; "Rŏ Wisŏng, Puk Missile Kiji Ch'walyŏng/Taepodong Iltae," *Chosun Ilbo*, 11 May 1994.

13 May 1994

An official at the Russian Defense Ministry states that the Ministry has made several requests to North Korea for a Russian expert to be present at the dismantlement of decommissioned Russian submarines, but North Korea has not yet assented. Western sources in South Korea say that "as they [North Koreans] reject a Russian expert's presence, there is the strong possibility that they may recycle the submarine for military purpose[s]."
—Yonhap News Agency, 13 May 1994, in "DPRK Rejects Monitoring of Submarine Dismantling," FBIS-SOV-94-093, 13 May 1994, p. 17.

About 20 May 1994

According to an unidentified military source in Tokyo, a US reconnaissance satellite observes "crane trucks" at a North Korean missile base and vessels assembling at a port on North Korea's east coast. These movements indicate that North Korea might be preparing for a missile launch. The military source is quoted on 27 May as saying the satellite detected the movements about one week ago.
—"US Warns Japan Pyongyang May Test-Launch Missile," *Daily Yomiuri*, 29 May 1994, p. 1, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; David E. Sanger, "North Korea Foils Efforts to Halt Its Nuclear Plans," *New York Times*, p. 1, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Alison Smale, "IAEA: No Agreement Reached With North Korea, Team Returning," Associated Press, 28 May 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Pu Chi Yŏng, "Puk, Sae Missile Shilhŏm'umjig'im/Ilchibodo/Mi Chŏngch'alwisŏng'i Pal'gyŏn...Il'e T'ongbo," *Chosun Ilbo*, 29 May 1994, p. 2, in KINDS, www.kinds.or.kr; Hwang U Yŏn, "'Puk Shinhyŏng Missile/Shihŏmbalsa Chunbi'/Ilch'ibodo, Mi Wisŏngjaryo Il T'ongbo," *Kyunghyang Shinmun*, 29 May 1994, p. 2, in KINDS, www.kinds.or.kr.

23 May 1994

Former UK Royal Navy Captain Richard Sharpe, editor of *Jane's Fighting Ships*, claims that the launch tubes on the Golf-class submarines purchased by North Korea from Russia could be adapted for other weapons. The Russian navy decommissioned the Golf submarines in 1990. However, a South Korean Foreign Ministry official says the submarines have had their weapon systems removed and are obsolete; therefore, they are unusable for offensive purposes. The official indicates that the submarines were purchased for scrap and that of the 12 submarines contracted for, only one has been delivered. Commenting on the state of the equipment on the submarines, Toen Trading Company executive Ariyoshi Shibata states, "Everything is left as it is. Nothing is removed." This suggests that the weapon systems may not have been removed as stated by the South Korean official. In a related development, the ITAR-TASS news agency reports that Russia is reserving the right to sell weapons to North Korea. A Russian governmental official is quoted as saying that as long as there are no international sanctions, "Russia...has the right to ship to North Korea purely defensive systems of armaments and spare parts."
—Richard Sharpe, *Jane's Fighting Ships 1994-95*, (Jane's Information Group, Coulsdon, Surrey: 1994), p. 9; "World Datelines," *San Francisco Examiner*, 23 May 1994, p. A12; "Seoul Says Subs Sold to North Are Harmless," *Washington Times*, 24 May 1994, p. A15; "S. Korea Denies N. Korean Submarine Claim," Japan Economic Newswire, 23 May 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Official: Russian Subs Bought by

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North Korea Have No Military Use," Associated Press, 23 May 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

27 May 1994

A Japanese government source states that the United States has been aware that North Korea is preparing for a missile test. North Korea tests a Silkworm anti-ship missile (ASM) on 31 May 1994.
—"Puk Silkworm Missile Tonghaesŏ Palsa Shilhŏm," *Joongang Ilbo*, 1 June 1994, www.joins.com.

28 May 1994

It is revealed that US reconnaissance satellites have detected transporter erector launchers (TELs) operating near the North Korean coast and ships have been assuming positions off the coast, both of which may indicate preparation for an upcoming Nodong-1 test-launch. Another test of the missile would contribute to the validation of the Nodong-1's flight characteristics. The activities are first observed about one week earlier.
—David E. Sanger, "North Korea Foils Efforts to Halt Its Nuclear Plans," *New York Times*, 29 May 1994, pp. 1, 6; Paul Mann, "Korea Watch," *Aviation Week & Space Technology*, vol. 140, no. 25, 20 June 1994, p. 19; "Puk, Sae Missile Shilhŏmumjigim/Ilchibodo/Mi Chŏngch'alwisŏngi Palkyŏn Ile T'ongbo," *Chosun Ilbo*, 29 May 1994, www.chosun.com.

28 May 1994

The Japanese daily *Yomiuri Shimbun*, quoting Japanese military sources with knowledge of North Korea's movements acquired from US reconnaissance satellites, reports that trucks, launchers, and other vehicles assembling at the site suspected of being readied for an upcoming Nodong test-launch. Additionally, naval vessels are reportedly very active in North Korea's east coast ports, possibly to assist in determining the impact point of a tested missile. The sources indicate that North Korea may be planning the test to take advantage of the "warm seasonal weather conditions in the East Sea," not out of "any political intention of influencing nuclear negotiations."
—Yonhap News Agency, 28 May 1994, in "DPRK's Possible Missile Launching Reported," FBIS-EAS-94-104, 31 May 1994, p. 47.

31 May 1994

According to US and Japanese intelligence sources, North Korea test-fires a new anti-ship missile (ASM) from Wŏnsan Harbor on North Korea's east coast. The missile has been modified to extend its range from about 85km to 160km and is launched at a barge in the Sea of Japan, but it misses the target. One Pentagon official states that North Korea is believed to have been developing the missile over the last 18 months and that it is a low-flying subsonic cruise missile, which appears to be a derivative of Chinese and Russian systems. Japan Defense Agency and Foreign Ministry officials indicate that the missile is an upgraded Silkworm (HY-2) missile. Makoto Momoi, former head of the Japan Defense Agency's Defense Research Institute, states, "Since the test-firing was conducted in the open sea with proper warnings, I see a clear political motive with the things going on in New York."
—Michael R. Gordon, "North Korea Tests Cruise Missile Designed to Sink Ships," *New York Times*, 1 June 1994, p. A12, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Ian Brodie and James Bone, "Sanctions Threat to North Korea Grows," *The Times*, 2 June 1994, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Kevin

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Rafferty, "N. Korea Tests Missile and West's Nerve," *The Guardian* (London), 2 June 1994, p. 12, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Barry Schweid, "Sanctions Strategy Plotted With Japan, South Korea," Associated Press, 3 June 1994, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Steve Komaraw, Bill Nichols and Judy Keen, "N. Korea's Actions Draw U.S. Concern," *USA Today*, 1 June 1994, p. 4A, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; "N. Korea Test-Fires Silkworm Missile, *Daily Yomiuri*, 2 June 1994, p. 1, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Pu Chi Yŏng, "Puk Silkworm Missile/Tonghaesŏ Palsa Shilhŏm," *Chosun Ilbo*, 2 June 1994, www.chosun.com; "Puk Silworm Missile Tonghaesŏ Palsashilhŏm/Mi Kukpangbu, Kangnyŏngmeshijiyong Punsŏkto," *Joongang Ilbo*, 1 June 1994, p. 1, in KINDS, www.kinds.or.kr.

Mid-1994

Syria conducts a second flight test of the Hwasŏng-6 (Scud-C).
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, pp. 18-19.

Mid to Late 1994

North Korea delivers either Nodong components or a small number of complete missiles to Iran.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 25.

Early June 1994

Russian President Boris Yeltsin informs South Korean President Kim Young Sam that Russia no longer feels bound by the 1961 treaty in which the Soviet Union pledged to defend North Korea in case of hostilities.
—Warren Strobel, "N. Korea Shops for Nuke Technology in Russia," *Washington Times*, 5 July 1994, pp. A1, A8.

Early June 1994

Sergei Stepashin, chief of the Russian counter-intelligence service, reveals that three North Korean nationals have been detained in Primorskoye territory, which is near the Russia-North Korea border, on suspicion of attempting to acquire nuclear weapons components.
—Warren Strobel, "N. Korea Shops for Nuke Technology in Russia," *Washington Times*, 5 July 1994, pp. A1, A8; "Puk, Rŏ Haekkisul Milsuip Kido/Missile P'oham 3 Kŏn Taesagwan Chikwŏn 3 Myŏng Ch'epo," *Chosun Ilbo*, 6 July 1994, www.chosun.com.

Early June 1994

A US government official states, "The North Koreans have a reputation for exporting every weapon they've ever produced. If the North Koreans put a missile with a nuclear warhead on the world market, that's the ultimate nightmare scenario." US officials say that Iranian officials have been present for recent missile tests, including the test of an anti-ship cruise missile. The tests are said to be "sales demonstrations" for the Iranian observers."
—Bill Gertz, "N. Korea as Nuclear Exporter?" *Washington Times*, 8 June 1994, pp. A1, A9.

Early June 1994

Robert D. Walpole, deputy director of the CIA's Nonproliferation Center, states, "North Korea is the world's largest proliferator of ballistic missiles." According to Walpole, North Korea may sell the Nodong missile, which has a

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range of about 600 miles, to Iran and possibly to Libya.
—Thomas W. Lippman, "U.S. Hopes to Break a Pattern," *Washington Post*, 14 June 1994, p. A1.

Early June 1994
Modifications are currently underway at the Taepo-dong (Musudan-ri) rocket test stand facility in North Korea. These modifications are believed to be preparations for a static test of the Taepodong-2 first stage engine. There are several vehicles at the site, and it is anticipated that "new auxiliary tanks" will soon arrive there.
—Barbara Starr, "North Korea Missile R&D gains New Pace," *Jane's Defence Weekly*, 25 June 1994, p. 10.

Early June 1994
US intelligence sources report that, due to inadequate indigenous test facilities, North Korea might test-fire the Nodong-1 missile in Iran within 6 to 12 months. One analyst says, "Testing facilities don't exist for a full-range test in North Korea." The sources claim that Iran is interested in acquiring both the Nodong-1 and -2 missiles.
—Martin Sieff, "N. Korean Missiles May be Tested in Iran This Year; Pyongyang Seeks to Avoid Increasing International Criticism," *Washington Times*, 16 June 1994, p. A13.

Early June 1994
According to Japanese intelligence, Choch'ongnyŏn, the 250,000-member General Association of Korean Residents in Japan covertly purchases equipment for North Korea's nuclear and missile programs. If sanctions on North Korea resulting from the nuclear standoff on the Korean Peninsula are imposed, Japan will be forced to "shut down the money and technology pipeline" between Choch'ongnyŏn and North Korea. But one Japanese government official admits that Choch'ongnyŏn could continue to send cash and cargo to North Korea via third countries.
—Edward W. Desmond and Hiroko Tashiro, "Kim Il Sung's Money Pipeline," *Time*, 13 June 1994, p. 27.

Early June 1994
US analysts believe that North Korea may now be dependent upon imported ball bearings for military needs. Shortages of steel, coal, and electricity have affected production, and using lower quality commercial ball bearings could adversely affect the performance of armour, aircraft, and missiles.
—"Economics Could Undermine North Korean Capability," *Jane's Defence Weekly* 25 June 1994, p. 15.

1 June 1994
Japan's *Mainichi Shimbun* reports that, according to a Japanese government source, North Korea will conduct a second flight test of the Nodong missile on 7 June 1994. The Japanese official claims that a US reconnaissance satellite has detected a fuel truck and a crane assembly for a missile launch in northeastern North Korea. However, no launch takes place.
—Lee Sok Ku, "Nodong 1 Ho To 7 Il Shilhŏm," *Joongang Ilbo*, 1 June 1994, www.joins.com; "Puk, Ittan Missile Palsashilhŏm," *Segye Ilbo*, 2 June 1994, p. 2, in KINDS, www.kinds.or.kr.

2 June 1994
North Korea test-fires a second upgraded version of the Chinese Silkworm anti-ship missile (ASM) over the Sea of Japan. A senior Pentagon official confirms the test. [Note: This test follows the first test that was conducted on 31 May 1994.]

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.

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—"Another N. Korean Missile Test Confirmed," Jiji Press Ticker Service, 3 June 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Japan Confirms Second N. Korean Missile Test," Japan Economic Newswire, 3 June 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Barry Schweid, "Sanctions Strategy Plotted With Japan, South Korea," Associated Press, 3 June 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Pukhan Silkworm Missile/1 Il'edo Shihŏmbalsa/CNN Pangsong Podo," *Hankook Ilbo*, 4 June 1994, p. 2, in KINDS, www.kinds.or.kr; "'Puk Nodong 1 Ho 10 Illae Palsa'/Il Pangwich'ŏng," *Donga Ilbo*, 4 June 1994, p. 2, in KINDS, www.kinds.or.kr; "Puk, Silkworm Missile Ddo Palsashilhŏm," *Chosun Ilbo*, 4 June 1994, www.chosun.com; "'Puk Nodong 1 Ho 10 Illae Palsa'/Il Pangwich'ŏng," *Donga Ilbo*, 4 June 1994, p. 2, in KINDS, www.kinds.or.kr.

6 June 1994

Han Ch'ang Ŏn, North Korea's Deputy Ambassador to the United Nations, confirms the test of an anti-ship missile (ASM) on 31 May 1994, and states, "This was just an exercise, a normal, usual exercise." [Note: There were two flight tests—one on 31 May and one on 2 June 1994.]

—"N. Korean Envoy Confirms Missile Tests," Japan Economic Newswire, 7 June 1994, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; KBS-Radio (Seoul), 6 June 1994, in "North Korea's UN Envoy Confirms Missile Test," BBC Summary of World Broadcasts, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; "Silkworm Missile Shilhŏm/Puk 'T'ongsanghullyŏn' Chujang," *Chosun Ilbo*, 7 June 1994, www.chosun.com.

9 June 1994

While talking to reporters at Kiev Airport after a visit to Ukraine, North Korean Foreign Minister Kim Yŏng Nam states that his country will continue its missile testing and that North Korea has "the will and sufficient capability to defend itself from sanctions." He further states, "Missile launches occur in any country regularly. We don't understand why there is so much noise about it now."

—KBS Radio Network (Seoul), 9 June 1994, in "Foreign Minister Seeks Renewed Dialogue with USA," BBC Summary of World Broadcasts, 11 June 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "N. Korea Warns South of Devastation if War Starts," Reuters, 9 June 1994, in Executive News Service, 9 June 1994; "West Fears Devastation of New Korean War," Press Association, 9 June 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "'Puk Missile Shilhŏm Kyesok'/Kim Yŏng Nam Oegyobujang," *Kyunghyang Shinmun*, 10 June 1994, p. 1, in KINDS, www.kinds.or.kr.

9 June 1994

In a report to the South Korean National Assembly, South Korean Defense Minister Lee Byŏng T'ae states that since early March 1994, North Korea has been preparing to test-fire a 1,000km-range ballistic missile. He says that the missile is the Taepodong (Paektusan-1), an upgraded version of the Soviet Scud missile. Rhee states, "The North is continuously developing strategic weapons."

—"Seoul Says N. Korea Preparing To Test New Missile," Reuters, 9 June 1994, in Executive News Service, 9 June 1994.

12 June 1994

The Korean Central News Agency (KCNA) quotes an unnamed North Korean Foreign Ministry spokesman as stating

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that North Korea would not supply arms, such as aircraft, tanks, and tactical missiles, to separatist forces in southern Yemen, as had been rumored. According to KCNA, the official dismisses the rumors as "utterly groundless" and claims that the rumors are meant to influence the nuclear situation in Korea by isolating North Korea in the international arena.
—"DPRK FM Spokesman Refutes Reports About 'Arms Deal Contract' With Southern Yemen," Korean Central News Agency (Pyongyang), 11 June 1994, in "Spokesman Denies Yemeni Arms Contract Report," FBIS-EAS-94-113, 13 June 1994, p. 20, "North Korea Denies Yemen Arms Deal," United Press International, 12 June 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Korean Central News Agency, 11 June 1994, in "Foreign Ministry Spokesman Denies Arms Deal Contract Report," BBC Summary of World Broadcasts, 13 June 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

14 June 1994
Japan's Defense Agency Director General Atsushi Kanda tells the Diet Budget Committee "it is impossible to defend against the Nodong-1 once it reaches operational status. We believe it necessary to have a large-scale defense system such as the TMD [theater missile defense]."
—"Japan to Join US Missile Shield," *Jane's Defence Weekly*, 25 June 1994, p.10; "Kanda Says Defenses Inadequate to Ward Off N. Korean Attack," *Daily Yomiuri*, 15 June 1994, p. 2, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Lee Dong Kwan, "Puk Missile Kaebaltaeŭng/Il 'Pangwimang' Chŏkkŭk Ch'am'yŏ/Pangwich'ŏngjanggwan Palghyŏ" *Donga Ilbo*, 15 June 1994, p. 7, in KINDS, www.kinds.or.kr.

14 June 1994
A US intelligence satellite detects a North Korean engine test for the Taepodong-1 [Paektusan-1] and Taepodong-2 missiles at the Taepo-dong [Musudan-ri] missile testing facility.
—Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), p. 295; Yu Yong Wŏn, "Puk Taepodong 1-2 Ho Punsashihŏm/6 Wŏl Chungsun," *Chosun Ilbo,* 1 July 1994, www.chosun.com.

14 June 1994
Assistant Secretary of State Robert Pelletreau tells the US House Foreign Affairs Committee, "North Korea has in the past delivered Scud-Bs and Scud-Cs, primarily to Iran and Syria. We're concerned about press reports and other intelligence that they might, at some point, sell the Nodong missile—with a much longer range than the Scud-B and -C."
—Martin Sieff, "N. Korean Missiles May Be Tested in Iran This Year; Pyongyang Seeks to Avoid Increasing International Criticism," *Washington Times*, 16 June 1994, p. A13.

16 June 1994
Joseph Bermudez, an analyst of North Korean military and intelligence affairs, states that US intelligence expects a test-firing of the Nodong-1 missile "any day now."
—"North Korea OKs Nuclear Freeze for Talks," *St. Louis Post-Dispatch*, 23 June 1994, p. 1A, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Missile Shihŏmbalsa/Puk Kot Chaegaehalchido," *Joongang Ilbo*, 17 June 1994, P. 4, in KINDS, www.kinds.or.kr.

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16 June 1994

The *Washington Times*, citing US intelligence sources, reports that North Korea may test its Nodong-1 ballistic missile in Iran within the next 6 to 12 months.

—Martin Sieff, "N. Korean Missiles May Be Tested in Iran This Year; Pyongyang Seeks to Avoid Increasing International Criticism," *Washington Times*, 16 June 1994, p. A13; Chŏng Hae Yŏng, "Puk, Iran'sŏ Rodong 1 Ho Shihŏm Kanŭngsŏng/Mi Washington Times Podo," *Chosun Ilbo*, 17 June 1994, p. 7, in KINDS, www.kinds.or.kr; Shin Sang In, "Puk, Shinhyŏng Nodong 1 Ho Shilhŏmgyehoek/Bba'rŭmyŏn 6 Kaewŏlhu Iran'sŏ Shilshi," *Segye Ilbo*, 17 June 1994, p. 4, in KINDS, www.kinds.or.kr.

18 June 1994

A 1994 posture statement prepared for Rear Admiral Edward Shaefer, director of US naval intelligence, says that the Nodong missile will likely be equipped with a nuclear warhead by the year 2000, although this may be achieved as early as 1995.

—Barbara Starr, "No Dongs May Soon Be Nuclear, Warns USN," *Jane's Defence Weekly*, 18 June 1994, p. 1.

22 June 1994

Israeli Prime Minister Yitzhak Rabin states that North Korea has delivered Scud-B and Scud-C missiles to Syria, as well as the means to produce them. According to Rabin, the Syrian missile arsenal poses a much greater threat to Israel than the Iraqi missile attacks during the 1990-1991 Gulf War, and could potentially make Israel's Gulf War experience seem like "a children's game."

—Moshe Zak, "Just a Slip of the Tongue," *Jerusalem Post*, 27 June 1994, p. 6, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Clyde Haberman, "Peace Pact With Syria Needed to Prevent War, Says Rabin," *New York Times*, 25 June 1994, p. 4, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; "'Interesting Proposal' Made to Syria – Peres," *Mideast Mirror*, vol. 8, no. 119, 23 June 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Karin Laub, "Rabin: Arab World Still Poses a Military Threat to Israel," Associated Press, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; "'Pukhan Scud Kisulto Syria'e Such'ul'/Rabin Israel Ch'ongni," *Chosun Ilbo*, 24 June 1994, www.chosun.com.

July 1994

According to the Moscow-based *Komsomolskaya Pravda,* "... some of our scientists no longer need to risk and negotiate border checkpoints in order to work on the North Korean nuclear program. They sit at home and send their calculations to Pyongyang by computer mail, which it is not yet possible to monitor."

—Warren Strobel, "N. Korea Shops for Nuke Technology in Russia," *Washington Times*, 5 July 1994, pp. A1, A8.

8 July 1994

Kim Il Sung dies of heart failure at the age of 82. Kim's death comes during a period of bilateral negotiations with the United States to freeze the North Korean nuclear program, and shortly before a summit meeting with South Korean President Kim Young Sam that was scheduled to begin on 25 July 1994. His son Kim Jong Il later succeeds him as leader of North Korea.

—James Sterngold, "Death Adds a Dangerous Uncertainty to the Warming With U.S.," *New York Times*, 9 July 1994, p. 5, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Kim Il Sung, N. Korea's Longtime Leader, Dies,"

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Los Angeles Times, 9 July 1994, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Kim Il Sŏng Chusŏk Samang/Ŏje Saebyŏk Kapchagi/Pukhant'ŭkpyŏlbangsong," *Kukmin Ilbo*, 9 July 1994, p. 1, in KINDS, www.kinds.or.kr; Hŏ Nam Chin, "Kim Il Sŏng Samang/Nambukchŏngsanghwoedam Musan/P'yŏngyangbangsong 'Ŏje Saebyŏk Shimgŭn'gyŏngsaeg'ŭro'," *Joongang Ilbo*, 9 July 1994, p. 1, in KINDS, www.kinds.or.kr; Dr. Taeho Kim, "Kim Jong-il—North Korea's New Leader," *Jane's Intelligence Review*, September 1994, pp. 421-424.

27 July 1994

North Korean defector Kang Myŏng Do claims that North Korea has five nuclear weapons and plans to build an additional five weapons. Kang said that North Korea was using the negotiations to stall while it built missiles to deliver the weapons. Kang, who is allegedly the son-in-law of North Korea's Premier Kang Sŏng San, indicated that he had acquired his information from a "senior official at the Yŏngbyŏn nuclear complex." Kang says he met the official at the wedding of the official's son and that the official revealed the information after they had been drinking alcohol. Kang also says that North Kroea will announce that it has nuclear weapons after it produces about 10 bombs. This announcement comes only one week before North Korea is scheduled to meet with US officials in Geneva to discuss the North Korean nuclear program. [Note: Kang's credibility is very suspect.]

—James Sterngold, "Defector Says North Korea Has 5 A-Bombs and May Make More," *New York Times*, 28 July 1994, p. A7, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Terry McCarthy, "Defector Reports N. Korea Has Five Nuclear Bombs," *Independent* (London), 28 July 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Park Ch'an Ku, "Kwisun kang Myŏng Do-Cho Myŏng Ch'ŏl Ssi Kijahoe'gyŏn Ilmun'iltap," *Taehan Maeil*, 28 July 1994, p. 4, in KINDS, www.kinds.or.kr.

29 July 1994

Kim Hyŏng Ki, a spokesman for South Korea's Ministry of Unification, states that the claims of North Korean defector Kang Myŏng Do have "not been supported by solid proof." Kang claimed that North Korea has five nuclear bombs and plans to build five more.

—Zeno Park, "S. Korean Intelligence Agency Under Fire for Defector's Five-Bomb Claim," Agence France Presse, 29 July 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Associated Press, "Defector's 'Secrets' Downplayed; Seoul Says Claims N. Korea Has 5 A-Bombs Unproven," *Phoenix Gazette*, 29 July 1994, p. A3, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; John Burton, "Seoul Doubts N-Bomb Claim," *Financial Times* (London), 29 July 1994, p. 4, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "No Proof That Pyongyang Has Nuclear Weapons, Seoul Says," Deutsche Presse-Agentur, 29 July 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "IAEA Dismisses Defector's North Korea Nuclear Arsenal Claim," Agence France Presse, 29 July 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

August 1994

North Korea has an exercise in the deployment of indigenously modified transporter erector launchers (TELs) for the Nodong. The TELs have been modified from Scud-B/C TELs by extending the length of the body and axle. Military reconnaissance satellites detect the Nodong TELs in March 1997. Later in 1997, seven Nodong missiles with TELs are discovered deployed about 100km north of Pyongyang.

—Chang Chun Ik, *Pukhan Haek-Missile Chonjaeng* (Seoul: Somundang, May 1999), pp. 288-289.

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4 August 1994
Egypt's Al-Ahram newspaper quotes an Israeli radio broadcast as saying that North Korea has reached an agreement with Iran for the sale of Nodong-1 missiles. The report says that the United States provided this information to Israel, but the number of missiles is not revealed.
—"Rodong 1 Ho P'anmae/Puk, Iran'gwa Hap'ŭi," *Chosun Ilbo*, 5 August 1994, www.chosun.com.

11 August 1994
Xiandai Bingqi (Modern Arms), a monthly journal published by the China Arms Industry No. 210 Research Institute (Zhongguo Bingqi Gongye Di 210 Yanjiusuo), reports that the Nodong-1 is more accurate than Soviet Scuds, and that the Nodong is capable of carrying a nuclear warhead or VX nerve agent. The article also reports the Nodong that was flight tested in May 1993 only flew 500km because North Korea wanted to conceal its true range, which *Xiandai Bingqi* estimates to be 800-1,000km.
—"'Nodong 1 Ho Haekt'an Chokchae'/Chungguk Kunsajŏnmunji," *Chosun Ilbo*, 12 August 1994, www.chosun.com.

September 1994
A North Korean delegation, led by chairman of the North Korean State Commission of Science and Technology, travels to Pakistan.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 23.

September or October 1994
Former President Jimmy Carter receives a letter from Kim Jong Il thanking Carter for visiting Kim Il Sung, and giving his word that he will carry out all the promises his father had made.
—KBS-1 Television (Seoul), 10 August 2001, in "ROK's KBS-1 TV Interviews Former US President Carter on Korean Issues," FBIS Document ID: KPP20010811000003.

1 September 1994
Joseph Bermudez, during a seminar at the Research Institute on National Security Affairs at the Korea National Defense University, says that North Korea will be able to deploy the Taepodong-1 (Paektusan-1) in 1996, and the Taepodong-2 in 2000. He also says that North Korea will be able to deploy the Nodong-1 in 1995, and says that US intelligence claims they can be armed with nuclear warheads by 2000.
—Yu Yong Wŏn, "Puk Taepodong 1 Ho 96 Nyŏn Shilchŏn Paech'i/Yŏng Kunsa Chŏnmun'ga," *Chosun Ilbo*, 2 September 1994, www.chosun.com.

2 September 1994
Japanese Defense Minister Tamazawa Tokuichiro tells Japan's Diet that the Japan Defense Agency is interested in having reconnaissance satellites for obtaining defense information.
—Pae In Chun, "Il 'Chŏngch'alwisŏng Toip Kŏmt'o'/Pang'wichŏngjanggwan Palghyŏ," *Donga Ilbo*, 3 September 1994, p. 2, in KINDS, www.kinds.or.kr.

23 September 1994
A US federal immigration judge orders the deportation of Dr. Lee Jong Hun from the United States. Lee, an

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aerospace scientist and Canadian citizen, had worked at the Johnson Space Center in Houston for a NASA contractor from 1990 to 1992. Lee had previously worked at the NASA/Ames Research Center in Mountain View, California during the 1980s. The ruling was based upon the fact that Lee, a specialist in aerothermodynamics, had contact with scientists who were members of Choch'ongnyŏn in Japan, and that Lee has a younger brother living in North Korea. Lee visited North Korea about 15 years ago to attend his brother's wedding. Lee claims his last contact with the group of Choch'ongnyŏn scientists was in 1980, and that all the information he shared with them was in the public domain. The judge's ruling was also based upon secret FBI information, but no concrete evidence of espionage activities was presented in court.
—Jeff Urban, "Judge Orders Suspected N. Korean Agent Deported," *Houston Chronicle*, 24 September 1994, p. A1, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

26 September 1994
The National Unification Board submits a report to the National Assembly on North Korea's security threat. According to the report, North Korea is able to produce about 100-150 Scud-C missiles a year and has been able to do so since 1987. The missiles are said to have a range of 500km. Pyongyang conducted a successful flight test of the Nodong-1 in 1993 and is currently developing the Nodong-2 (range of 1,500-2,000km), the Taepodong-1 (range of 2,000km), and the Taepodong-2 (range of 3,500km). North Korea is also developing chemical and biological weapons and reportedly has about 1,000 tons of them. There are eight chemical weapons production plants, six storage facilities, and three biological research institutes in North Korea. Pyongyang reportedly began to invest in chemical and biological weapon infrastructure in the early 1960s, and is said to have been conducting experiments on political prisoners.
—South Korean News Agency [*sic*], 26 September 1994, in "Seoul Reports Pyongyang's Scud Missile, Chemical Weapons Production," BBC Summary of World Broadcasts, 27 September 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Park Che Kyun, "Puk Haekchaeraemugi Tongshigaebal/T'ong'ilwŏn Kukkamjaryo," *Donga Ilbo*, 27 September 1994, p. 5, in KINDS, www.kinds.or.kr; "Puk 'Scud C' Nyŏnbaek 50 Ki Saengsannŭngnyŏk/Saenghwahangmugi Ch'ŏn t...Saengch'eshilhŏm Shilshi," *Donga Ilbo*, 27 September 1994, p. 4, in KINDS, www.kinds.or.kr; "'Puk'e Saenghwahangmugi Ch'ŏn Ton/Chŏngch'ibŏm'e Saengch'eshilhŏmkkaji'/3 Dan'gyejŏnjaengjunbi Kuch'uk," *Hankook Ilbo*, 27 September 1994, p. 2, in KINDS, www.kinds.or.kr; Ku Sŏng Chae, "Puk Hwasaengjŏllyŏk Segye 3 Wi/'Scud' Yŏn Paek 50 Ki Saengsan/T'ong'ilwŏn Kukkamjaryo," *Chosun Ilbo*, 27 September 1994, p. 3, in KINDS, www.kinds.or.kr.

1 October 1994
In response to the South Korean National Unification Board's report of 26 September 1994, the Korean Central News Agency in Pyongyang denies that North Korea has been increasing the range of its missiles and exporting them to the Middle East. The news agency also calls the allegations of North Korea producing chemical and biological weapons, and conducting experiments on prisoners, "sheer fabrications."
—North Korean Central News Agency [*sic*], 1 October 1994, in "KCNA Denies Pyongyang Producing Missiles, Chemical-Biological Weapons," BBC Summary of World Broadcasts, 3 October 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

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October 1994
A reconnaissance satellite captures three Nodong-class missiles being assembled at an assembly site 25 miles north of Isfahan, Iran. According to an unidentified US official, the Iranian Nodong program with North Korea was halted in 1994 due to financial problems. This suspension was only temporary, and preparations for full-scale production and deployment of the Nodong continue.
—"U.S., Israel, Clash over 'Dual Containment'," *Iran Brief*, 5 December 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

October 1994
The South Korean Defense Ministry releases its *Defense White Paper 1994-1995*. The report says North Korea is capable of producing 100-150 Scud missiles a year, and that North Korea has exported missiles to Iran. According to the ministry, North Korea has successfully developed and test-launched the Nodong-1 with a range of 1,000km, and is developing the Taepodong-1 and Taepodong-2.
—The Ministry of National Defense, Republic of Korea, *Defense White Paper 1994-1995* (Seoul: Ministry of National Defense, 1994), p. 71; Robert Karniol, "ROK Assesses North's Nuclear Capabilities," *Jane's Defence Weekly*, 22 October 1994, p. 6.

4 October 1994
In testimony before the South Korean National Assembly, General Kim Dong Chin, chief of the South Korean Army General Staff, says that North Korea has moved a Scud missile brigade with 27 missiles towards the Demilitarized Zone (DMZ). Kim also says that North Korea has about 1,000 tons of chemical weapons.
—Im Ŭn Sun, Chang Hwa Kyŏng and Yang Kwŏn Mo, "Puk 20 Kae Kundan/Shilchŏnhyŏng Paech'i/Scud 27 Ki Chŏnbang Ch'ugabaech'ido," *Kyunghyang Shinmun*, 5 October 1994, p. 5, in KINDS, www.kinds.or.kr.

4 October 1994
In testimony before the US Senate, Assistant Secretary of State Robert Pelletreau says that in recent high-level talks with North Korea, the United States has requested that North Korea stop its missile exports. Pelletreau also says that North Korea has been providing technology and exporting Scud-B and Scud-C missiles to Iran and Syria. [Note: High-level bilateral talks between the United States and North Korea to resolve the North Korean nuclear issue began on 8 July 1994, but the talks were postponed only hours later after the delegations received the news of Kim Il Sung's death. The talks resumed on 5 August 1994.]
—Chin Ch'ang Uk, "Missile Tae'oepanmae/Mi, Puk'e Chungjich'okku/Kowigŭp Hoedamsŏ," *Joongang Ilbo*, 5 October 1994, p. 2, in KINDS, www.kinds.or.kr; Lee Kyŏng Hyŏng, "Pukhanje Scud Chungdongsuch'ul Chedong/Mijung Missile Kŭmsuhyŏpchŏng'ŭi Taebuk Yŏnghyang," *Taehan Maeil*, 6 October 1994, p. 3, in KINDS, www.kinds.or.kr.

21 October 1994
The United States and North Korea sign the Agreed Framework in Geneva. According to *Flight International*, which cites a "senior US DIA official, the agreement includes a secret clause that suspends the delivery of 150 North Korean Nodong missiles to Iran.

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—"Iranian Missile Deal with N. Korea Falters," Flight International, 23 October 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

November 1994

North Korea delivers Hwasŏng-6 (Scud-C) cluster warheads to Syria. Syria conducts another test firing of the Hwasŏng-6, but with a conventional warhead.

—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 19.

December 1994

Joseph Nye, US Assistant Secretary of Defense for International Security Affairs, tells *Jane's Defence Weekly* that the United States will begin discussing with North Korea limitations on its Nodong and Taepodong (Paektusan-1) ballistic missile programs.

—Barbara Starr, "The Jane's Interview," *Jane's Defence Weekly*, 17 December 1994, p. 32.

December 1994

Zaire concludes a $100 million deal for the delivery of 18 Scud-C missiles from North Korea. The terms of the deal reportedly call for North Korea to deliver the missiles within the next 12 months. Half of the price appears to have been paid, but analysts believe the missile are probably actually destined for a third country.

—*Le Point* (Paris), 28 January 1995, p. 19, in "More on Reported Sale of Missiles to Zaire," FBIS-EAS-95-025, 7 February 1995, pp. 21-22.

7 December 1994

Israeli Deputy Defense Minister Mordechai Gur says that North Korea and Iran may be jointly producing "long-range" missiles that could strike Israel. Gur also says, "We know the Iranians are in contact with North Korea to purchase and produce together a missile that can reach the range of 1,300km, maybe a little farther." [Note: Gur is referring to the Nodong or, as it is known in Iran, the Shehab-3.]

—"Gur: Iran May Be Making Long-Range Missiles," *Jerusalem Post*, 8 December 1994, p. 12, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Iran Denies Missile Cooperation With North Korea," Reuters, 19 February 1995, in Executive News Service, 20 February 1995.

13 December 1994

News reports quote Robert Gallucci as saying that the United States would refuse to establish full diplomatic relations with North Korea until the latter stops exporting ballistic missiles and pulls its troops back from the border with South Korea.

—Richard Larma, "News; World Briefings," *Chicago Sun-Times*, 13 December 1994, p. 9, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

15 December 1994

Israeli Prime Minister Yitzhak Rabin says that North Korea has equipped Iran and Syria with 500km-range Scud-C missiles and that North Korea, with Iranian financing, was developing the 1,300km-range Nodong missile.

—David Makovsky and news agencies, "Rabin: Iran Helping N. Korea Develop Long-Range Missile," *Jerusalem Post*,

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16 December 1994, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Michael Sheridan, "Israel and Syria Move Closer to Peace Deal," *Independent* (London), 16 December 1994, p. 14, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Associated Press, "Rabin: Earlier Talks With N. Korea over Missiles Were 'Major Mistake'," *Jerusalem Post*, 18 December 1994, p. 2, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Iran Helping North Korea Develop Surface Missile With 1,300km Reach—Rabin," *Mideast Mirror*, vol. 8, no. 243, 15 December 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

16 December 1994

Israeli Prime Minister Yitzhak Rabin says it was a mistake to hold talks with North Korea in Beijing last year in an effort to persuade North Korea to stop missile exports to the Middle East. He says that instead of trying to solve the problem, "North Korea tried to fool Israel. Rabin reveals that North Korea demanded $1 billion to stop the sales, and he claims that Iran has provided North Korea with hundreds of millions of dollars to produce missiles with longer ranges. [Note: The talks were held in June 1993.]

—"Rabin: Earlier Talks with N. Korea over Missiles Were 'Major Mistake'," *Jerusalem Post*, 18 December 1994, p. 2, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

Late 1994-Early 1995

North Korea delivers at least four Hwasŏng-6 transporter erector launchers (TELs) to Iran. The TELs may have been delivered by air, and there may have been a Nodong mobile erector launcher (MEL) with the shipment.

—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, pp. 18, 25; Tony Capaccio, "North Korea Has Transferred Mobile Scud Launchers To Iran," *Defense Week*, 1 May 1995, pp. 1, 14; Barbara Starr, "Iran Gets 'Scud' TELs from North Korea," *Jane's Defence Weekly*, 13 May 1995, p. 5; Paul Mann, editor, "CIA Disclosures," *Aviation Week and Space Technology*," vol. 142, no. 19, 8 May 1995, p. 19, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

1993

Early 1993

Iran takes delivery of an unspecified number of Scud-C missiles and launchers as part of a deal with North Korea. According to the report, this shipment is in addition to about 250 Scud-B missiles that North Korea supplied to Iran before the Gulf War. [Note: The delivery in question may have been from the ship reported in late October 1992. The name of the ship was not provided in the report.]

—Jerusalem Israel Television Network, 9 February 1993, in "North Korean Scud-C Missiles Delivered," JPRS-TND-93-006, 5 March 1993, pp. 13-14.

Early 1993

Russia withdraws six nuclear experts from North Korea.

—*Joongang Ilbo* (Seoul), 20 September 1993, p. 1, in "Russia Withdraws Six Nuclear Experts from DPRK," JPRS-TND-93-032, 12 October 1993, pp. 38; *Joongang Ilbo* (Seoul), 22 September 1993, p. 2, in "Russia Says DPRK 'Incapable' of Developing Nuclear Weapons," JPRS-TND-93-032, 12 October 1993, pp. 38-39; "Pukhanp'a'gyŏn

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Haekhakcha/Russia Ch'ŏlsujoch'i," *Joongang Ilbo*, 20 September 1993, p. 1, in KINDS, www.kinds.or.kr; "'Pukhan Myŏtnyŏnnae Haekkaebalmothae'/Russia Wŏnjaryŏkpu/Uri Taesagwan'e T'ongbo," *Joongang Ilbo*, 22 September 1993, p. 2, in KINDS, www.kinds.or.kr.

1993

A Russian Federation Foreign Intelligence Service report on the proliferation of weapons of mass destruction states that North Korea is seeking specialists from overseas "in order to convert missile manufacturing into a competitive export sector." North Korea is using Egyptian technology to upgrade its Scud missiles for export to the Middle East. [Note: Egypt has a variety of technologies that might interest North Korea, including carbon-carbon, advanced gyroscopes, and solid-fuel. This may also refer to a leakage of UK technology obtained in the BAe/AOI joint development project.]

— Russian Foreign Intelligence Service (Moscow), 1993, in "A New Challenge After the Cold War: Nonproliferation of Weapons of Mass Destruction," JPRS-TND-93-007, 5 March 1993, pp. 1-39.

1993

North Korea deploys up to 18 Nodong missiles.

—Yi Sang Won, *Hankook Ilbo* (Seoul), 28 January 1994, p. 5, in "Press Overview of Deployment," JPRS-TND-94-005, 25 February 1994, p. 42; Lee Sang Wŏn, "Patriot Nodong 1 Ho Kyŏkch'u Kanŭnghalkka," *Hankook Ilbo*, 28 January 1994, p. 6, in KINDS, www.kinds.or.kr.

1993

Syria begins to manufacture North Korean Scud-C [Hwasŏng-6] missiles.

—*Al-Wasat* (London), 30 August 1999, in "Mideast Missile Race Detailed," FBIS Document ID FTS19990903000290.

1993-1994

North Korea's Nodong missiles are probably deployed or become operational. Small-scale production had begun by January 1991.

—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 22.

January 1993

The group of scientists that was detained in October 1992 when they tried to go to North Korea has returned to Miass after being held for two months at a rest house near Moscow.

—Evgeniy Tkachenko, ITAR-TASS (Moscow), 4 February 1993, in "Defense Workers Tried To Go to DPRK," JPRS-TND-93-005, 12 February 1993, pp. 14-15; Evgeniy Tkachenko, ITAR-TASS (Moscow), 10 February 1993, in "DPRK Reportedly Sought Russian Scientists To Modernize Missiles," FBIS-SOV-92-026, 10 February 1993, pp. 11-12.

12 January 1993

Islamic Revolution Guard Corps (IRGC) Commander Mohsen Rezai travels to Pyongyang from Beijing to finalize new agreements regarding weapon systems, including ballistic missiles. Shortly before Rezai's departure from Iran, a member of the Iranian parliament reveals that North Korea has demanded a cash payment of $2.4 to $2.7 billion for the 200 to 300 Scud-B missiles delivered to Iran during the Iran-Iraq War. [Note: The number of missiles

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mentioned may be excessive, given North Korean production capabilities and the level of Iranian Scud-B use during the two "Wars of the Cities." During that stage of the Iran-Iraq War, Iran fired approximately 91 Scud-B missiles. It is unlikely that North Korea would demand a cash payment given the financial arrangements already in place with Iran, and the price of about $10 million seems excessive.]
—Kenneth Timmerman, "Iran Seeks Missiles from China, North Korea," *Mednews*, vol. 6, no. 8, 25 January 1993, pp. 3-4.

24 January 1993
The German weekly *Focus* reports that North Korea is helping Iran develop nuclear missiles and that Iran has two 40-kiloton nuclear warheads. The report also claims that a German firm supplied guidance equipment to Iran.
—South Korean News Agency [*sic*], 26 January 1993, in "German Weekly Says DPRK Helping Iran Develop Nuclear Weapons," BBC Summary of Broadcasts, 29 January 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

29 January-1 February 1993
North Korea gives assurances to visiting Russian Deputy Foreign Minister Georgy Kunadze that it will not employ Russian missile and nuclear scientists and engineers. The North Korean decision follows threats by Kunadze to suspend diplomatic relations if demands not to employ Russian technicians were not met. According to reports, Russia gives the United States a detailed report about Kunadze's trip.
—Kyodo News Service, "N. Korea Urged Not to Hire Russian Nuclear Scientists," Japan Economic Newswire, 17 February 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

February 1993
CIA Director James Woolsey, in testimony before the Senate Governmental Affairs Committee, states, "North Korea apparently has no threshold governing its sales [of missiles]; it is willing to sell to any country with the cash to pay."
—"North Korea Seen Successful in Test of Nodong-1 Missile," *Aerospace Daily*, 29 June 1993, pp. 538-539.

February 1993
Russian scientists who were thwarted in their attempt to travel to North Korea in late 1992 to assist with weapons-development efforts tell ITAR-TASS they "had not intend to create modern strategic armaments in North Korea and were to train local personnel for designing such armaments."
—Evgeni Tkachenko, "Best Russian Missile Designers Wanted to Make Money in North Korea," ITAR-TASS, 24 February 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

24 February 1993
Yuriy Bessarabov, a leading expert from the Russian firm Unique Defense Enterprise, says that low wages were responsible for the attempt by 60 scientists from the machine design bureau in Miass (Makayev Design Bureau), Chelyabinsk region, to fly to North Korea to train personnel for strategic arms development programs. Most of the scientists were strategic missile experts, which may indicate that North Korea is seeking assistance in designing a warhead and delivery system for a nuclear device. Larry Niksch, a Congressional Research Service Asian specialist,

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says that it is possible that North Korea has developed a nuclear bomb but does not yet have a warhead.
—Michael Breen, "North Korea's Nuclear Denials Set Stage for Challenge," *Washington Times*, 19 February 1993, pp. A1, A6; Evgeniy Tkachenko, ITAR-TASS (Moscow), 24 February 1993, in "Missile Designers Explain Attempt to Work in DPRK," FBIS-SOV-93-035, 24 February 1993, pp. 11-12.

10 March 1993
North Korea sends a message to the IAEA that it is unable to accept special nuclear inspections because of the Team Spirit joint military exercise conducted by the United States and South Korea.
—KBS-1 Radio Network (Seoul), 11 March 1993, in "Refuses IAEA Inspections," FBIS-EAS-93-047, 12 March 1993, p. 17.

12 March 1993
Following the 7th session of the 9th Central People's Committee in Pyongyang, North Korea announces its intention to withdraw from the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). North Korea says the decision is made because of International Atomic Energy Agency (IAEA) efforts to conduct a special inspection of North Korean nuclear facilities, and because of the resumption of the joint Team Spirit military exercise conducted by the United States and South Korea. The NPT stipulates that a nation's withdrawal becomes effective 90 days after the intention to withdraw is announced.
—"International News Briefs," *IAEA Bulletin*, February 1993, pp. 44-45; "North Korea More Isolationist," *Daily Yomiuri*, 13 March 1993, p. 5, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Korean Central Broadcasting Network (Pyongyang), 12 March 1993, in "CPC Decision Reported," FBIS-EAS-93-047, 12 March 1993, pp. 17-18; Korean Central Broadcasting Network (Pyongyang), 12 March 1993, in "Statement Notes Withdrawal," FBIS-EAS-93-047, 12 March 1993, pp. 18-19; Korean Central News Agency, 12 March 1993, in "KCNA Reports Statement," FBIS-EAS-93-047, pp. 19-20; Korean Central News Agency, 12 March 1993, in "News Conference on Withdrawal," FBIS-EAS-93-047, 12 March 1993, pp. 20-22.

23 March 1993
German intelligence sources are quoted as saying that North Korea has clandestinely ordered a special metal in Berlin to be used in the manufacture of "ramps" for missile launchers. The metal is a controlled item under Germany's export control laws.
—"Puk, Missile Pupum Milsuip/Berlin Sŏ/Tŏk-Mi-Rŏ Chŏngbogi'gwan Kukpijosa," *Chosun Ilbo*, 23 March 1993, www.chosun.com.

28 March 1993
A 21-member Iranian delegation, headed by Brigadier General Hossein Mantequei, the Islamic Revolution Guard Corps (IRGC) commander in charge of the Iranian SSM force, and officials from the Iranian Defense Industries Organization and the missile division of the IRGC, visits Pyongyang in the fifth such visit in the past year. The delegation is to observe the final tests of the Nodong-1 missile and to be trained in its use. According to the People's Mujahedeen of Iran, some of the delegation will stay in North Korea for at least one month. The delegation's presence indicates that a final deal, which may include the purchase of fixed and mobile launchers, could be imminent. The delegation may also have established a timetable for the testing of Nodong-2 in Iran. US

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officials believe that Iranian oil may be exchanged for the missiles; Iran supplies approximately 40% of North Korea's oil needs. According to the *Chosun Ilbo*, the Iranian delegation is seeking to purchase 150 Nodong missiles.
—Douglas Jehl, "Iran Is Reported Acquiring Missiles," *New York Times*, 8 April 1993, p. A9, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Kevin Rafferty, "Iran and N. Korea 'To Test Missile'," *Guardian* (London), 26 October 1993, p. 20; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, pp. 24-25; Chŏng Hae Yŏng, "Puk Missile Nodong 1 Ho/Sajŏng 1 Ch'ŏn km Tongpug'aanbo 'Bisang'," *Chosun Ilbo,* 10 April 1993, p. 4 in KINDS, www.kinds.or.kr.

Late March 1993
North Korea completes development of the Nodong-1 missile.
—Yonhap News Agency, 16 July 1993, in "U.S. Report on DPRK-Iran Missile Deal Cited," FBIS-EAS-93-138, 21 July 1993, p. 33.

Early April 1993
Foreign diplomats in Beijing claim that North Korea is nearing final testing of a 1,000km-range [Nodong-1] missile. According to the sources, North Korea could begin serial production of the missiles by the end of the year.
—Vladimir Skosyrev, "DPRK Intends to Supply Iran with Intermediate-Range Missiles," *Izvestiya* (Moscow), 10 April 1993, p. 3, in FBIS-SOV-93-069 "DPRK Develops New Surface-to-Surface Missile," 13 April 1993, p. 6.

2 April 1993
During a defense industry conference in Seoul, Shin Sŏng T'aek, a researcher at the Korean Institute for Defense Analyses, says that North Korea is at the stage of developing a nuclear warhead for its ballistic missiles. Shin says that North Korea will not conduct a full-scale nuclear test, but that North Korea has already conducted secret nuclear-related tests underground.
—"'Puk, Haekt'an Missile Changch'ak Chikchŏn'/Kukpangyŏn Shin Sŏng T'aek Paksa," *Segye Ilbo*, 3 April 1993, p. 2, in KINDS, www.kinds.or.kr.

3 April 1993
North Korea denies reports that it is exporting to the Middle East missiles capable of delivering nuclear warheads, and dismisses the reports as a US propaganda plot.
—Korean Central News Agency, 3 April 1993, in "KCNA Denies North Shipping Missiles to Mideast," FBIS-EAS-93-063, 5 April 1993, p. 4.

6 April 1993
China's Foreign Ministry spokesman, Wu Jianmin, states that US threats of instigating UN economic sanctions against North Korea for missile proliferation will only serve to complicate the situation.
—Vladimir Skosyrev, "DPRK Intends to Supply Iran with Intermediate-Range Missiles," *Izvestiya* (Moscow), 10 April 1993, p. 3, in "DPRK Develops New Surface-to-Surface Missile," FBIS-SOV-93-069, 13 April 1993, p. 6.

7 April 1993
A US official suggests that the March 1993 Iranian delegation to North Korea may have explored the possibility of

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assembling the Nodong-1 in Iran from components produced in North Korea in order to more easily conceal the delivery of the missiles. US officials say Iran hopes to acquire up to 150 Nodong-1 missiles, and that deliveries could begin by the end of the year. The delegation is said to still be in North Korea.
—Douglas Jehl, "Iran Is Reported Acquiring Missiles," *New York Times*, 8 April 1993, p. A9, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Rupert Cornwell, "Iran 'Seeks Missile Deal' with N Korea," *The Independent* (London), 9 April 1993, p. 13, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Missile Mission," *The Times* (London), 9 April 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

8 April 1993
A US State Department spokesman says the United States is attempting to use diplomatic efforts to halt the North Korean sale of 1,000km-range [Nodong] ballistic missiles to Iran. An Iranian military delegation is reportedly in North Korea to negotiate a contract to acquire up to 150 Nodong missiles from North Korea. [Note: The sale is reportedly cancelled as part of a secret side agreement to the US-North Korea Agreed Framework that is signed in October 1994.]
—Rupert Cornwell, "Iran 'Seeks Missile Deal' with N. Korea," *The Independent* (London), 9 April 1993, p. 13, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Lee Kyŏng Hyŏng, "Pukhan Chunggŏri Missile Yangsan Imbak/NYT Podo," *Taehan Maeil*, 10 April 1993, p. 2, in KINDS, www.kinds.or.kr; Kim Ch'a Ung and Nam Ch'an Sun, "Puk Missile Iran P'anmae/Misŏ Chŏkkŭk Chŏji," *Donga Ilbo*, 10 April 1993, in KINDS, www.kinds.or.kr; O Sŭng Ho, "Nodong 1 Ho/Hwahakhaekt'andu Changch'ak/Pukhan Missile Ŏ'nŭ'sujun'in'ga," *Taehan Maeil*, 10 April 1993, p. 7, in KINDS, www.kinds.or.kr; Chŏng Hae Yŏng, "Puk Missile Nodong 1 Ho/Sajŏng 1 Ch'ŏn km Tongpug'aanbo 'Bisang,'" *Chosun Ilbo,* 10 April 1993, p. 4 in KINDS, www.kinds.or.kr.

9 April 1993
Lloyd's List International reports that North Korea and Iran are close to a deal for the exchange of intermediate-range missiles for oil. The report quotes US officials as saying that "North Korea may be hoping that the oil shipments will continue even if the UN imposes an embargo on the Asian country for refusing to let inspectors see its nuclear facilities." Iran reportedly supplies about 40% of North Korea's oil.
—"Iran May Swap Oil for North Korea Missiles," *Lloyd's List*, 9 April 1993, p. 10, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

10 April 1993
Izvestia, citing Foreign Ministry officials in Beijing, reports that North Korea's development of a 1,000km-range ballistic missile is imminent, and that North Korea will probably begin mass production of the missile by the end of the year. According to military specialists, the missile will be capable of carrying of carrying chemical and nuclear warheads. There are other reports that an Iranian military delegation is currently in North Korea to negotiate the sale of 150 of the missiles. [Note: The missile is the so-called Nodong-1, which is tested in late May 1993. According to *Flight International*, the deal to sell up to 150 Nodong missiles to Iran is called off as part of a secret side-agreement with the United States when North Korea signs the Agreed Framework in October 1994.]
—Vladimir Skosyrev, *Izvestia*, p. 3, in "North Korea to Sell Intermediate-Range Missiles to Iran," Russian Press Digest, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Iranian Missile Deal with N. Korea Falters," *Flight International*, 23 October 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

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17 April 1993
North Korea denies allegation made by Western news sourced that it intends to export medium-range missiles to Iran.
—Korean Central News Agency (Pyongyang), 17 April 1993, in "Pyongyang Denies Exporting Missiles to Iran," FBIS-EAS-93-073, 19 April 1993, p. 21.

18 April 1993
North Korea denies allegations by Western intelligence that North Korea and Iran are engaged in a cooperative effort to develop a ballistic missile system capable of striking Japan with nuclear and chemical warheads. Iran is allegedly providing North Korea $500 million for missile development in exchange for an unknown number of nuclear bombs and plans for nuclear weapons reprocessing plants. [Note: While North Korea may be able to offer some assistance in the area of nuclear weapon development, it is doubtful that it is in a position to provide any working models.]
—Charles Fenyvesi, ed., "Washington Whispers," *US News & World Report*, 29 March 1993, p. 18; "Fear of N. Korea Fuels Arms Race," *Washington Times,* 19 April 1993, p. A2.

21 April 1993
General Robert RisCassi, Commander, US Forces Korea, tells the US Senate Armed Services Committee that North Korea is unstable politically and economically, and that North Korea could launch an invasion of South Korea. RisCassi says that North Korea considers its nuclear weapons program as the key to state survival, and that North Korea appears to be selling missiles, missile technology, and chemical and biological weapons to countries in the Middle East for oil and hard currency.
—Douglass Jehl, "U.S. Agrees to Discuss Arms Directly With North Korea," *New York Times*, 23 April 1993, p. A5, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Kyodo News Service, "U.S. Commander in S. Korea Sees Threat from N. Korea," Japan Economic Newswire, 22 April 1993, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Lee Kyŏng Hyŏng, "'Pukhan'gunbu'nŭn Kim Jong Il Mitchi Anhnŭnda'/RisCassi Saryŏnggwan Mi Sangwŏn Chŭng'ŏnyoji," Taehan Maeil, 23 April 1993, p. 6, in KINDS, www.kinds.or.kr.

22 April 1993
The United States offers to hold high-level talks with North Korea to resolve the crisis caused by North Korea's announcement last month to withdraw from the Non-Proliferation Treaty (NPT).
—Douglass Jehl, "U.S. Agrees to Discuss Arms Directly With North Korea," *New York Times*, 23 April 1993, p. A5, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

23 April 1993
Kono Yohei, a "top Japanese government spokesman," says Japan does not see any evidence that North Korea is preparing a military attack against South Korea. The statement is in response to General Robert RisCassi's testimony before the US Senate Armed Services Committee on 21 April 1993.
—Kyodo News Service, "Japan Sees No Sign N. Korea Preparing to Invade South," Japan Economic Newswire, 23 April 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

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Late April 1993
According to anonymous analysts, Syrian production of North Korean Scud-C missiles at Aleppo and Hama begins. Some analysts believe that China also may have helped with the project.
—Robert S. Greenberger, "Washington Insight: North Korea's Missile Sales in Mideast, Along With Nuclear Issue, Raise Concern," *Wall Street Journal*, 19 July 1993, p. A10; "Pukhan, Syria Dŭng Chungdonggukka'e Missile Such'ul—WSJ Podo," *Joongang Ilbo*, 20 July 1993, www.joins.com.

Late April 1993
US intelligence discovers preparations for a missile test at Musudan-ri.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 21.

May 1993
Negotiations between North Korea and Iran over the sale of up to 150 Nodong missiles reach "an advanced stage" before the flight-test of the Nodong in late May. However, a US Defense Intelligence Agency official claims the sale is scrapped as part of a secret side agreement when the United States and North Korea sign the Agreed Framework in October 1994.
—"Iranian Missile Deal with N Korea Falters," *Flight International*, 23 October 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

29-30 May 1993
North Korea successfully launches four missiles from the Musudan-ri test facility in Hwadae-kun, North Hamgyŏng Province, two of which are thought to be Nodong-1 missiles. Later reports confirm that only one of the missiles was a Nodong. The missiles were reportedly fired in the direction of the Japanese Noto Peninsula at target buoys in the Sea of Japan. One missile traveled 500km; another traveled 100km; the remaining two fell short of 100km. Two North Korean naval vessels, a Najin-class frigate and a minesweeper, are positioned 30km apart about 350km off Noto, reportedly to monitor the launch. Israel's Mossad reportedly warned the United States and Japan of the test weeks in advance. Iranian and Pakistani observers are present for the tests.
—Kyodo News Service (Tokyo), 14 June 1993, in "DA: DPRK 'Appears' to Have Tested Missile," FBIS-EAS-93-112, 14 June 1993, p. 5; David E. Sanger, "Missile Is Tested by North Koreans," *New York Times*, 13 June 1993, p. 7; Kim Yong Kol, *Hankook Ilbo*, 16 June 1993, p. 4, in "Israel Makes Gesture to North Korea for Improvement of Relations," FBIS-EAS-93-114, "Possible Israeli Aid to DPRK Viewed," 16 June 1993, p. 20; "Defense Ministry: May Nodong-1 Test Successful," Yonhap News Agency (Seoul), 24 June 1993, in FBIS-EAS-93-120, 24 June 1993, p. 19; "North Korea Seen Successful in Test of Nodong-1 Missile," *Aerospace Daily*, 29 June 1993, pp. 538-539; Lee Jŏng Hun, "FROGesŏ Taepodong Kkaji: Pukhan Missile Game," *Shindonga,* August 1999, p. 203; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, pp. 17, 21; Joseph S. Bermudez, Jr., "An Analysis of North Korean Ballistic Missile Testing," *Jane's Intelligence Review*, April 1995, pp. 186-189; Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 283-286, 291; Yu Yong Wŏn, "'Puk Changgŏrip'o Chŏnbang Chŭnggang'/Kukpangbu, Rodong 1 Ho Palsasŏnggong Ch'ŏt Kongshikhwag'in," *Chosun Ilbo*, 25 June 1993, p. 2, in KINDS, www.kinds.or.kr.

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June 1993
Islamic Revolution Guard Corps (IRGC) Commander General Mohsen Rezai holds talks with North Korean defense chiefs in Pyongyang and urges closer ties between the two nations. [Note: This visit is most likely the same as that mentioned on 16 June 1993.]
—"Alarm Sounded Over Missile Plans Involving Tehran and North Korea," *Mideast Mirror*, vol. 7, no. 237, 7 December 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

8 June 1993
Japan's *Sankei Shimbun* quotes Itamar Rabinovitch, Israel's ambassador to the United States, as having said that North Korea's Nodong missile has a range of 1,300km and that North Korea is exporting the missile to Iran. Rabinovitch claims the Nodong can be modified to extend the range from 1,000km to 1,300km. [Note: This report does not explain how the range is extended. It does not say if it is simply from a reduction in the payload, or other modifications.]
—"Pukhan, Nodong 1 Ho Missile Sajŏnggŏri 1 Ch'ŏn 3 Paek KM Ro Yŏnjang," *Joongang Ilbo*, 8 June 1993, www.joins.com.

11 June 1993
North Korea announces the suspension of its decision to withdraw from the Non-Proliferation Treaty (NPT). The announcement follows five days of bilateral talks with the United States. [Note: According to North Korea, this decision does not return North Korea to International Atomic Energy Association (IAEA) safeguards. North Korea characterizes its position as somewhere between full-member and non-member status. However, the IAEA considers North Korea subject to full safeguards.]
—R. Jeffrey Smith, "N. Korea Won't Quit Nuclear Ban Treaty, Inspection of Two Key Sites Still Rejected," *Washington Post*, 12 June 1993, p. A1.

11 June 1993
North Korea denies negotiating with Israel to halt its missile exports for aid and denies ever having sold weapons or missiles to Arab nations in the Middle East. North Korea also denies sending any invitation to Israeli Foreign Minister Shimon Peres in December 1992.
—"North Korea Denies Reported Arms for Aid Deal with Israel," Agence France Presse, 11 June 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; *Korea Times*, 16 June 1993, p. 2, in FBIS-EAS-93-114, "Seoul 'Concerned' with Israel-DPRK Contacts," 16 June 1993, p. 20; "Israel Gwa Kyŏngwŏnhyŏpsang/Pukhan, T'aimji Podo Puin," *Joongang Ilbo*, 12 June 1993, p. 2, in KINDS, www.kinds.or.kr.

11 June 1993
Japanese government sources for the first time confirm North Korea's flight test of the Nodong ballistic missile in late May 1993.
—Sam Jameson, "N. Korea Tests Missile Able to Reach Japan," *Los Angeles Times*, 12 June 1993, p. A13, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "N. Korea Tests Missiles; Capable of Hitting Japan," *Yomiuri Shimbun*, 12 June 1993, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

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14 June 1993
Israeli foreign minister Shimon Peres expresses his desire to visit North Korea in order to convince Pyongyang not to sell missiles to Iran. Sources say Peres is expected to offer economic aid in exchange for halting the missile exports. The amount of aid is said to be $1 billion.
—"Israel Seeks to Block North Korean Missile Sales to Iran," Agence France Presse, 14 June 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Martin Sieff, "Israel to Woo North Korea to Keep Missiles from Iran," *Washington Times*, 15 June 1993, p. A8, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; *Korea Times*, 16 June 1993, p. 2, in FBIS-EAS-93-114, "Seoul 'Concerned' with Israel-DPRK Contacts," 16 June 1993, p. 20; Kim Yŏng Kŏl, "Israel, Pukhan'e Kwan'gyegaesŏn 'Sonjit'/Peres Oemu Pangbukkyehoek Palghyŏ," *Hankook Ilbo*, 16 June 1993, p. 4, in KINDS, www.kinds.or.kr; "Israel Oemu P'yŏnghwabangmun Ch'ujin/ 'Tae Iran Missile P'anmae Chungji Sŏltŭk'," *Kukmin Ilbo*, 15 June 1993, p. 5, in KINDS, www.kinds.or.kr; "I Oemu Pukpangmun Kyehoek/'Missile Tae Iran P'anmaep'ogi Sŏltŭk'," *Taehan Maeil*, 15 June 1993, p. 2, in KINDS, www.kinds.or.kr; "Pukhan Missile Such'ul Chŏji/Israel Owmu Kot Pangbuk," *Segye Ilbo*, 15 June 1993, p. 2, in KINDS, www.kinds.or.kr; "Israel Oemu/Pukhanbangmun Kyehoek," *Donga Ilbo*, 15 June 1993, p. 7, in KINDS, www.kinds.or.kr.

14 June 1993
Japan's Defense Agency confirms North Korea's successful flight test of the Nodong in late May 1993. The agency says the missile is almost fully developed and will be deployed in the near future.
—Kyodo News Service, "Japan Confirms N. Korea's Test Firing of New Missile," Japan Economic Newswire, 14 June 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Agency Believes Nodong-1 Fully Developed," *Daily Yomiuri*, 15 June 1993, p. 2, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Japan Confirms North Korea's Test Firing of New Missile," United Press International, 14 June 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Lee Jae Mu, "Shilhŏmsŏnggong Nodong 1 Ho/Puk, Kot Shilchŏnbaech'i Kanŭng," *Hankook Ilbo*, 16 June 1993, p. 2, in KINDS, www.kinds.or.kr; Pu Ji Yŏng, "'Pukhan Rodong 1 Ho Shilchŏnbaech'i Imbak'/Il Pangwich'ŏng," *Chosun Ilbo*, 16 June 1993, p. 1, in KINDS, www.kinds.or.kr.

16 June 1993
In Pyongyang, North Korea and Iran sign a 1993-94 plan for scientific, technological, educational, and cultural exchanges.
—Korean Central News Agency (Pyongyang), 16 June 1993, in FBIS-EAS-93-114, "Technological Exchange Plan Signed with Iran," 16 June 1993, p. 16.

17 June 1993
Al-Sharq Al-Awsat, a Saudi paper based in London, reports that there is a tripartite deal between Iraq, Iran, and North Korea in which Iran will transship Iraqi oil to North Korea through the Iranian port of Bandar Abbas. The deal is worth $120 million, and its proceeds are to be divided equally between Iran and Iraq. The Iranian portion will be transferred to the North Korean firm Changgwang Shinyong, and is to finance the purchase of "long-range" missiles from North Korea. Iranian deputy defense minister Ahmad Wahedi is handling the Iran-North Korean negotiations with the assistance of the head of the defense ministry's missile department, Montaqi, and the Islamic Revolution Guard Corps (IRGC) representative in Pyongyang, Tabaqi. The Iranian foreign ministry advisor is

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conducting negotiations between Iraq and Iran. Under the agreement, North Korea is to receive 15,000 barrels of crude oil per day.
—Walid Abi-Murshid, "In Three-Way Trade Operation, Korean Missile Deal for Iran to Be Financed by Iraqi Oil Exports," *Al-Sharq Al-Awsat* (London), 17 June 1993, p. 1, in FBIS-NES-93-118, "DPRK Missiles for Iran in Secret Deal with Iraqi Oil," 22 June 1993, p. 53.

24 June 1993
South Korean defense officials announce that the North Korean missile tests on 29 and 30 May 1993 were successful. The announcement claims that there were a total of four launches from the Hwadae-kun [Musudan-ri] missile test facility over the two days. Two of the missiles flew 500km, and the other two flew 100km.
—"Kukpangbu, Pukhan Nodong 1 Ho Shihŏmsagyŏk Sŏnggong Hwagin," *Joongang Ilbo*, 24 June 1993, www.joins.com; Yonhap News Agency, 24 June 1993, in FBIS-EAS-93-120, "Defense Ministry: May Nodong-1 Test Successful," 24 June 1993, p. 19.

25 June 1993
In Beijing, Israeli Foreign Ministry Deputy Director-General Eitan Bentsur meets with North Korean officials in an attempt to dissuade them from concluding a reported deal to provide Iran with 150 Nodong-1 missiles in exchange for oil and cash. The meeting reportedly ends with the North Korean officials demanding cash for compliance. [Note: There are additional reports that place Bentsur in Pyongyang at about this time performing the same mission. It is uncertain whether this visit was in conjunction with, or confused with the Beijing visit.]
—Asher Wallfish, "Israel 'Cannot Ignore Missile Sales to Iran'," *Jerusalem Post*, 30 June 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Jon B. Wolfsthal, "U.S. Prods Israel to Halt Talks With North Korea on Missile Sales," *Arms Control Today*, September 1993, p. 24; Clyde Haberman, "Israel Again Seeks a Deal With an Outcast," *New York Times*, 11 July 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Leslie Susser, "Peres: Korea-Bound?" *Jerusalem Post*, 15 July 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Steve Rodan, "All Eyes Are On Israel's North Korean Connection," *Jerusalem Post*, 25 March 1994, p. 3B, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

July 1993
CIA Director James Woolsey, in testimony before Congress, states that the Nodong-1 missile, which could be fitted with nuclear, biological, chemical (NBC) as well as high-explosive (HE) warheads, had been tested, and that "of greatest concern is North Korea's continued efforts to sell the missile abroad particularly to dangerous and potentially hostile countries such as Iran." Director Woolsey also says, "With this missile, North Korea could reach Japan; Iran could reach Israel; and Libya could reach US bases and allied capitals in the Mediterranean Region."
—Associated Press, "US Officials Welcome Delay In N. Korean Missile Sale," *Christian Science Monitor*, 27 December 1993, p. 4.

3 July 1993
North Korea's ambassador to China tells reporters that if it were true that North Korea tested a missile on 29 May 1993, then it was a normal event, as countries often need to conduct military exercises.

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—Kyodo News Service (Tokyo), 24 September 1993, in FBIS-EAS-93-185, "Test of Nodong-1 Missile Said 'Confirmed'," 27 September 1993, p. 13.

14 July 1993

According to the Japanese daily, *Sankei Shimbun*, the 21-member Iranian delegation of April 1993 was to sign a contract for the purchase of 150 Nodong-1 missiles, which reportedly have a CEP of 2,000m. The missile was originally designed with a range of 1,000km in 1991, but, at Iranian request, this was increased to 1,300km so that the missile could reach Israel. Iran reportedly supplied financial support to extend the range. According to the *Joongang Ilbo*, the Iranian delegation signed a contract with North Korea for the purchase of 150 Nodong missiles and part of the delegation is still in North Korea.

—Yonhap News Agency (Seoul), 14 July 1993, in "Iran Said to Place Order for 150 DPRK Missiles," FBIS-EAS-93-134, 15 July 1993, p. 18; "Pukhan Nodong 1 Ho Pan'gyŏngmyŏngjungbŏmwi 2 Ch'ŏn M—Sankei Shinmun Podo," *Joongang Ilbo*, 15 July 1993, www.joins.com.

19 July 1993

The *Wall Street Journal* reports that North Korea is assisting Libya to establish a Scud production facility near Tripoli known as the "Central Repair Workshop." The report also says that North Korea is selling Scud-B and Scud-C missiles to Iran, Libya, and Syria.

—Robert S. Greenberger, "Washington Insight: North Korea's Missile Sales in Mideast, Along With Nuclear Issue, Raise Concern," *Wall Street Journal*, 19 July 1993, p. A6.

2 August 1993

US Undersecretary of Defense for Policy, Frank Wisner, and his Japanese counterpart, Administrative Vice-Defense Minister Shigeru Hatakeyama, agree to form a joint committee to monitor development of the Nodong-1 missile. The committee will comprise officials from the Ballistic Missile Defense Organization (BMDO) and the Japanese Defense Agency's (JDA) Policy Bureau.

—Naoaki Usui, "U.S., Japan Monitor Korean Missile," *Defense News*, 9-15 August 1993, p. 28; Kyodo News Service, 2 August 1993, in "Tokyo and Washington Agree Measures to Counter North Korean Missile Development," BBC Summary of World Broadcasts, 3 August 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Japan, U.S. to Counter N. Korean Missiles," Agence France Presse, 2 August 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, "Wisner Expresses Concern over N. Korean Missile Program," Japan Economic Newswire, 2 August 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Japan, U.S. to Cooperate in Missile Defense," Jiji Press Ticker Service, 2 August 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

4 August 1993

Two Russian civilian Condor transport aircraft and crews, leased by Syrians, depart with seven MAZ 543 "chassis" from Sunan airfield in North Korea, landing in Damascus, Syria on 5 August 1993. According to US intelligence sources, the MAZ 543s are probably taken from Damascus to a missile plant in Nasariya for use as mobile missile launchers. North Korea reportedly has several types of missile launchers for its Scuds. The MAZ 543 chassis is manufactured in Minsk, Belarus, and is used for Scud transporter erector launchers (TELs) and heavy trucks for

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both military and civilian use. According to US intelligence reports, North Korea has imported vehicles from the German MAN truck company, and used them to make TELs. [Note: There are unconfirmed reports that the two aircraft carried spare parts for Scud missiles. The MAZ 543s were not complete mobile missile launchers, and may have been delivered to Nasariya for the attachment of the erector unit.]
—Jack Katzenell, *Qol Yisra'el* (Jerusalem), 20 September 1993, in "Russia Did Not Transport Missiles From DPRK to Iran," JPRS-TND-93-032, 12 October 1993, p. 34; Michael R. Gordon, "U.S. Says Russians Helped Damascus in a Missile Plan," *New York Times*, 12 December 1993, pp. 1, 20; David E. Sanger, "North Korea Buying Old Russian Subs," *New York Times*, 20 January 1994, p. A6.

8 August 1993
According to Israeli Prime Minister Yitzhak Rabin, Syria receives Scud-C missiles from North Korea via Russian aircraft, and Iran may also have received Scud-Cs in this fashion. [Note: Rabin says the shipment was on 8 August, but it is not clear if this could be the 5 August 1993 delivery of MAZ 543 transporter erector launchers (TELs) to Syria or if this is a second delivery.]
—KBS-1 Radio Network (Seoul), 15 August 1993, in "DPRK Shipped Scuds to Syria on Russian Airplanes," JPRS-TND-93-027, 26 August 1993, p. 9; "'Pukhan, Nodong 1 Ho Syria'e Such'ul'—Rabin Israel Ch'ongni P'ongno," *Joongang Ilbo*, 16 August 1993, www.joins.com; "Iran Will Soon Have Korean Missiles Able to Hit Israel: Report," Agence France Presse, 20 December 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

11 August 1993
North Korean army First Lieutenant Im Yŏng Sŏn defects. He later discloses in a news conference on 24 August 1993 that North Korea is currently constructing two additional underground long-range missile launch bases, one at Chunggang-kun, Chagang Province and the other at Wŏnsan, Kangwŏn Province. Im states that missiles launched from these bases will be able to strike US military facilities in Japan and Guam. He says that North Korea already has underground missile bases at Mt. Komdŏk, Hwadae-kun, North Hamgyŏng Province, and at Okpyŏng-nodongjagu, Munchŏn, Kangwŏn Province. [Note: The actual name is "Okp'yŏng-dong."]
—KBS-1 Radio Network (Seoul), 24 August 1993, in "Says Long-Range Missile Bases Built," FBIS-EAS-93-162, 24 August 1993, p. 23; "2 N. Korean Missile Bases Allegedly Target Japan," Jiji Press, 24 August 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

16 August 1993
At the behest of the United States, Israeli Prime Minister Yitzhak Rabin announces that Israel will break off discussions with North Korea, which were designed to halt the sale of North Korean missiles to Iran and Syria. Foreign Minister Shimon Peres had told the Knesset Foreign Affairs and Defense Committee that North Korea wants $500 million to stop the sales.
—Dan Izenberg and Batsheva Tsur, "Israel Heeds US Request To Stop Talks With N. Koreans on Missile Shipments, *Jerusalem Post*, 17 August 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Jon B. Wolfsthal, "U.S. Prods Israel to Halt Talks With North Korea on Missile Sales," *Arms Control Today*, September 1993, p. 24.

14 September 1993
US Army General (ret.) Robert W. RisCassi (former Commander, US Forces Korea), commenting on the 29 May

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1993 test-launch of the Nodong-1 missile, states, "there was no telemetry with the shots, which was strange, in that there was no close-down of the sea and air space in that direction, which is odd when you are making a missile that you've not tested before and are firing at any extended ranges." Because of this, RisCassi suspects that the test was a demonstration for Middle East buyers, rather than a serious technical evaluation. [Note: Although there was no intercepted telemetry, the North Koreans would have almost certainly launched the missile with the intent of receiving test data. The United States and others either might have failed to intercept the telemetry, or there could have been a transmission failure. Another explanation could be that North Korean engineers used an on-board data recording and recovery package, which the Chinese have been known to use in missile testing. Furthermore, the flight path was lined with North Korean naval vessels, and the flight took place within range of coastal monitoring stations, either of which could provide valuable data.]
—Bill Gertz, "General Spotlights N. Korean Threat," *Washington Times*, 15 September 1993, p. A6.

14 September 1993
In testimony before the Subcommittee on International Operations and Human Rights in the US Congress, Joseph Bermudez states that North Korea is developing the Nodong-2 missile with a range of 1,500-2,000km, and is trying to complete development between 1995 and 1998. Regarding the failure of Russian engineers' to complete their intended travel to North Korea in late 1992, Bermudez says this is evidence that North Korea may not have the indigenous technology to complete the development of the new missile. [Note: The "Nodong-2" is also known as the "Taepodong-1," until the real name "Paektusan-1" is revealed in September 2001.]
—Chin Ch'ang Ŭk, "Pukhan, Nodong 2 Ho Scud Missile Kaebalchung—95~98 Nyŏn Wallyo," *Joongang Ilbo*, 16 September 1993, www.joins.com; Kim Yŏng Chin, "Puk, Nodong 2 Ho Kaebalchung'/Mihawŏnbogosŏ/Sajŏng 2 Ch'ŏn km...95 Nyŏnkke Saengsan," *Kukmin Ilbo*, 16 September 1993, p. 2, in KINDS, www.kinds.or.kr.

15 September 1993
North Korea is currently building launch positions for six SA-2 surface-to-air missiles (SAMs) near its Yŏngbyŏn nuclear complex. There are already 47 SAM positions within a 6km radius of Yŏngbyŏn.
—"Pukhan Yŏngbyŏn Iltaee Missile Kiji Kŏnsŏl—Haeksisŏlboho Taebi," *Joongang Ilbo*, 15 September 1993, www.joins.com.

20 September 1993
An Israeli press report quotes Russian Deputy Foreign Minister Anatoliy Adamishin responding to questions about the use of Russian aircraft to transport North Korean missiles to Iran. During the interview, Adamishin said, "To my knowledge there were no ballistic missiles...you cannot check them all, but to my knowledge there were no military equipment [*sic*] in these flights."
—Jack Katzenell, *Qol Yisra'el* (Jerusalem), 20 September 1993, in "Russia Did Not Transport Missiles from DPRK to Iran," JPRS-TND-93-032, 12 October 1993, p. 34.

20 September 1993
According to a South Korean government official, a Russian intelligence official recently informed the South Korean government that Russia is keeping watch over 3,500 nuclear physicists to prevent the transfer of nuclear technology abroad. According to reports, Russia withdrew six nuclear experts from North Korea in early 1993.

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—*Joongang Ilbo*, 20 September 1993, p. 1, in "Russia Withdraws Six Nuclear Experts From DPRK," JPRS-TND-93-032, 12 October 1993, p. 38; "Pukhan P'a'gyŏn Haekhakcha/Russia Ch'ŏlsujoch'i," *Joongang Ilbo*, 20 September 1993, p. 1, in KINDS, www.kinds.or.kr.

24 September 1993

The North Korean Foreign Ministry formally confirms the missile test firing [on 29 May 1993 at Musudan-ri], stating that Japan was fomenting anti-North Korean sentiment in reference to the "normal missile drill." The statement is the first North Korean acknowledgement that it has been developing the Nodong, which the spokesman says is "necessary and an issue of national sovereignty."

—Kyodo News Service (Tokyo), 24 September 1993, in "Test of Nodong-1 Missile Said 'Confirmed'," FBIS-EAS-93-185, 12 October 1993, p. 34; "Puk Nodong 1 Ho Kaebal Ch'ŏt Shiin, Chŏngdanghan Pangwiryŏk Kanghwa Chujang," *Joongang Ilbo*, 25 September 1993, www.joins.com.

October 1993

Japanese Foreign Minister Tsutomu Hata meets with Iranian Foreign Minister Ali Akbar Velayati in New York. Although Velayati denies any Iranian involvement in North Korea's missile program, Hata claims that the Iranian presence at the May 1993 North Korean missile test indicates that they were involved. Hata warns Velayati that Iran will find itself isolated if it persists in this relationship with North Korea.

—Lally Weymouth, "Shadow Over Japan," *Washington Post*, 1 November 1993, p. A17.

October 1993

The Japanese Defense Agency begins a secret study of the feasibility of developing five to seven military reconnaissance satellites to give the Japanese Self-Defense Forces the ability to track North Korean activity, such as ballistic missile launches, 24 hours a day. The study is in response to the May 1993 North Korean launch of a Nodong-1 missile that impacted in the Sea of Japan off the Noto Peninsula. The report is issued in January 1994.

—Kim Hyo Sun, "Ilbon 'ChŏngCh'alwisŏng' Ch'ujin," *Hankyoreh Shinmun*, 17 August 1994, p. 5, in KINDS, www.kinds.or.kr; Chŏn Hyŏn Il, "Il, Chŏngch'alwisŏng Poyu Kŭkpich'ujin/Pangwich'ŏng, Pimilgyehoek Surip," *Segye Ilbo*, 17 August 1994, p. 5, in KINDS, www.kinds.or.kr.

October 1993

The South Korean Ministry of National Defense releases its *Defense White Paper 1993-1994*. The report says North Korea "is currently estimated to possess the production capability of more than 100 Scuds per year." The report also says that North Korea has exported Scud missiles to the Middle East and has developed the Nodong-1, which has an estimated range of 1,000km.

—The Ministry of National Defense, the Republic of Korea, *Defense White Paper 1993-1994* (Seoul: Ministry of National Defense, October 1993), p. 68.

22 October 1993

Quoting reports that first appeared in the London-based Saudi newspaper *Al-Sharq Al-Awsat, The Guardian* of London reports that the Nodong-2 is to be tested in the Lut Desert in southeast Iran in "the next few days." The Nodong-2 is said to be an improved version of the Nodong-1, with a range of 1,500-2,000km. A North Korean

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military delegation is reportedly in Iran to witness the test. North Korea and Iran are believed to have signed a contract for the delivery of 150 Nodong missiles, with deliveries to Iran to begin by the end of the year. [Note: There are conflicting reports about the missile's range and payload, and no test takes place. The range of 1,500-2,000km indicates this may be a reference to the Shehab-4/Paektusan-1.]
—Ed Balnche, "Iran, North Korea to test New Missile In Desert: Report," Associated Press, 22 October 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kevin Rafferty, "Iran and N Korea 'To Test Missile'," *The Guardian* (London), 26 October 1993, p. 20; Pu Chi Yŏng, "Puk, Iran'sŏ Rodong 2 Ho Palsashilhŏm/Idalmalkke Namdongbu Samaksŏ," *Chosun Ilbo*, 24 October 1993, p. 5, in KINDS, www.kinds.or.kr; "Paper: N. Korea, Iran to Test Missile with Range of About 2,000 Kilometers," *Daily Yomiuri*, 24 October 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; KBS Radio, 23 October 1993, in "North Korea Reportedly to Test-Fire Nodong-2 Missile in Iran," BBC Summary of World Broadcasts, 25 October 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

22 October 1993
A 36-page top-secret memorandum, by the Center for Military Strategic Analysis at the Russian General Staff, entitled "The Russian Federation Military Policy in the Asia Pacific Region under the New Military Political Conditions" states that 160 Russian "scholars" have assisted North Korea's missile and nuclear programs since the mid-1980s. The memorandum clearly states that Russia was assisting North Korea's nuclear missile program in the late 1980s, and that Russian experts participated in the manufacture of the Nodong-1. The Japanese weekly *Shukan Bunshun* disclosed the contents of the memorandum in January 1994.
—Akira Kato, "Kitachosenwa Sudeni Genbakuwo Motteiru," *Shukan Bunshun*, 27 January 1994, pp. 50-55; Sergey Agafonov, *Izvestiya* (Moscow), 27 January 1994, pp. 1, 4, in "'Active' Russian Participation Claimed," JPRS-TND-94-005, 25 February 1994, pp. 48-49; Radio Moscow, 29 January 1994, in "Participation in DPRK Nuclear Program Denied," FBIS-SOV-94-020, 31 January 1994, p. 15; Pavel Felgengauer, "North Korea Has No Nuclear Bomb. The Publication in Shukan Bunshun Is Based on a Hoax. There Will Be No Official Investigation in the General Staff," *Segodnya* (Moscow), 29 January 1994, p. 1, in "General Staff on 'Hoax'," FBIS-SOV-94-020, 31 January 1994, pp. 15-16; Sergey Agafonov, "...And the Japanese Weekly Has Other Documents in Store," *Izvestiya* (Moscow), 29 January 1994, p. 3, in "Further on Russian Involvement," FBIS-SOV-94-020, 31 January 1994, p. 17.

23 October 1993
Iran's Foreign Ministry denies allegations that Iran will test a Nodong-2 over the southeastern part of the country by the end of this month.
—"Iran Denies Planning Joint Missile Test with N. Korea," Agence France Presse, 24 October 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Xinhua General Overseas News Service, "Iran Denies Missile Test-Fire," Xinhua News Agency, 23 October 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

28 October 1993
North Korea denies claims made in the Western press that it intends to test a ballistic missile in Iran, stating, "It is inconceivable that the DPRK, making consistent efforts for world peace and security, intends to conduct a missile launching test in a far-off foreign country." The Islamic Republic News Agency (IRNA) also denies these claims.
— Kevin Rafferty, "Iran and N Korea 'To Test Missile'," *The Guardian* (London), 26 October 1993, p. 20; Korean

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Central News Agency, 28 October 1993, in "Japanese, U.K. Reports on DPRK Missile Test in Iran Denied" ["Groundless Rumor of 'Missile Launching Test''—KCNA Headline], JPRS-TND-93-035, 10 November 1993, p. 13.

November 1993

The scheduled test of a Nodong missile in Iran is postponed.

—"N. Korea's Air Force Chief Visits Iran for Closer Ties," *Washington Times*, 25 February 1994; *Ed* Blanche, "North Koreans Visit Iran to Step up Military Cooperation," Associated Press, 24 February 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

November 1993

Syria and Iran are reportedly cooperating to develop a cruise missile with Chinese and North Korean technology as well as technology from Germany and other European nations. The development of the missile is reportedly "centered on Iran's Ministry of Heavy Industries factories with imported technology from Germany and other European nations."

—Paul Beaver, "Flash Points," *Jane's Defence Weekly*, 11 December 1993, p. 18.

November 1993

North Korea signs a contract with Russia to purchase 12 discarded submarines as "scrap." There are concerns that North Korea may attempt to use the submarines for military purposes.

—Yonhap News Agency, 13 May 1994, in "DPRK Rejects Monitoring of Submarine Dismantling," FBIS-SOV-94-093, 13 May 1994, p. 17.

11 November 1993

A Japan Defense Agency official states that the Nodong-1 missile is almost ready for deployment. The official says it is not clear when deployment of the missiles will be completed, but he "feels North Korea is nearing the stage of completing deployment." He says North Korea is very close to completing development of the missile and also claims that Pyongyang could possibly produce several Nodong missiles next year.

—"Development of North Korean Missile Close to Completion," Agence France Presse, 11 November 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North Korea 'Very Close' to A Missile," *Toronto Star*, 12 November 1993, p. A3, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "N. Korea's Rodong Missile Nears Completion," *Daily Yomiuri*, 13 November 1993, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Puk Rodong 1 Ho Missile Paech'iwallyo/Il T'ongshin, Pangwich'ŏngsoshikt'ong Inyongbodo," *Chosun Ilbo,* 12 November 1993, www.chosun.com.

12 November 1993

South Korea's KBS-1 Radio cites the Russian newspaper *Izvestiya* as having reported that North Korea has provided Iran with the technology to manufacture Nodong-1 missiles in exchange for Western technology and equipment.

—KBS-1 Radio Network (Seoul), 12 November 1993, in "DPRK Reportedly Transfers Missile Technology to Iran," JPRS-TND-93-037, 8 December 1993, p. 22.

12 November 1993

The Times of London reports that Iran is assembling Scud-C missiles supplied by North Korea, and funding the

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development of the Nodong-1. The report also claims that Iran and Syria are cooperating on the development of a cruise missile.
—Michael Evans, "Iran and Syria 'Plan Missile'," *The Times* (London), 12 November 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

13 November 1993
Iran denies claims made in *The Times* of London on 12 November 1993 that it is financing the North Korean production of the Nodong-1. Iran also denies allegations that it is jointly producing an advanced cruise missile with Syria.
—"Iran Denies Report on Missile Production," Moneyclips, 15 November 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Iran Denies Missile Production," Xinhua General Overseas News Service, 13 November 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Islamic Republic News Agency (Tehran), 13 November 1993, in "Report on Missile Production Denied," FBIS-NES-93-21815, November 1993, p. 75.

15 November 1993
Russia's First Deputy Security Minister Sergey Stepashin announces the uncovering of a large-scale North Korean Special Services operation intended to recruit a large number of Russian missile and space specialists for work in North Korea. The organizer of the operation, Major General Nam Gye Uk, a counselor at the North Korean in Moscow, was expelled from Russia. Alexei Kandaudov, a Russian Security Ministry official, cites this as "the first case when a foreign diplomat has been asked to leave the country for an attempted recruitment of Russian scientists."
—Moscow Radio Rossii Network, 15 November 1993, in FBIS-SOV-93-219, "DPRK Diplomat Expelled After Efforts to Recruit Experts," 16 November 1993, p. 5; Michael R. Gordon, "U.S. Says Russians Helped Damascus in a Missile Plan," *New York Times*, 12 December 1993, pp. 1, 20; "North Korean Diplomat Expelled for Recruiting Russian Scientists," Associated Press, 16 November 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Anne McElvoy and Wolfgang Munchau, "Russia Foils North Korea Plot to Hire Nuclear Team," *The Times* (London), 17 November 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Agence France Presse, "N. Korean Envoy Warns Against Threats on Suspected Nuke Program," 17 November 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; O Chung Sŏk, "Rŏ, Pukhan'oegyogwan Ch'ubang Hwag'in Sodong/3 Gaewŏlchŏn Missile Kisulcha Yuch'i Sa'gŏn," *Chosun Ilbo*, 17 November 1993, p. 7, in KINDS, www.kinds.or.kr.

December 1993
Middle Eastern intelligence sources claim that North Korea is expected to deliver Nodong intermediate range ballistic missiles (IRBMs) to Iran "within months." A full test of the missile is expected to take place under North Korean supervision in the southern Iranian desert by early 1994.
—"No-Dong Delivery," *Flight International*, 8 December 1993, p. 14, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

December 1993
US government officials believe that North Korea has postponed a missile sale to Iran. One explanation is that

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North Korea is doing it for diplomatic reasons in regard to US demands for nuclear inspections. Another possible reason is that there have been production problems or a snag in the terms of the export contract. North Korea's Deputy Permanent Representative to the United Nations, Hŏ Jong, says that North Korea never had any intention of selling missiles to Iran, stating, "There is no sale. It is entirely false." [Note: According to *Flight International*, the deal to sell up to 150 Nodong missiles to Iran is called off as part of a secret side-agreement with the United States when North Korea signs the Agreed Framework in October 1994.]
—Associated Press, "US Officials Welcome Delay In N. Korean Missile Sale," in *Christian Science Monitor*, 27 December 1993, p. 4; "Iranian Missile Deal with N Korea Falters," *Flight International*, 23 October 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

December 1993
Pakistani Prime Minister Benazir Bhutto travels to China and North Korea two months after being elected. There is evidence she is seeking cooperation in missile development. Soon after her visit, Pakistan begins a project to purchase and produce the Nodong, known in Pakistan as the "Ghuari."
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 23.

1 December 1993
A Japanese Foreign Ministry official states that Japan has made repeated overtures to Iran not to assist North Korea in the testing of the Nodong missile. He suggests that Japan could suspend a yen credit of about $38.6 million in economic aid to Iran if such a test occurs in Iran.
—"Japan Mulls Halt in Iran Loans," Jiji Press Ticker Service, 2 December 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Igor Shchogolev, "ITAR-TASS Foreign News Summary," ITAR-TASS, 1 December 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Puk Nodong 1 Ho Shilhŏmjangso ChegongDdaen/Il, Iran'e Ch'a'gwanch'wiso Kyŏnggo," *Joongang Ilbo*, 2 December 1993, p. 6, in KINDS, www.kinds.or.kr.

2 December 1993
A high-ranking South Korean intelligence official confirms that North Korea conducted its first successful test-launch of the Nodong-1 missile from a mobile launcher in late May 1993 [29 May 1993], striking a target 500km distant.
—Yu Yong Wŏn, "Puk Rodong 1 Ho/Idongshik Palsa Sŏnggong," *Chosun Ilbo*, 3 December 1993, p. 1, in KINDS, www.kinds.or.ke; *Chosun Ilbo*, 3 December 1993, p. 1, in "Official Confirms North's Mobile Test Launch," FBIS-EAS-93-231, 3 December 1993, pp. 30-31.

2 December 1993
The Islamic Republic News Agency (IRNA) quotes an "informed source in Tehran" as having said that Tehran and Pyongyang have signed no contract either on testing or the purchase of North Korean long-range missiles.
—Oleg Kuzmin, "Iran Denies Acquisition of Missiles from North Korea," ITAR-TASS News Agency, 3 December 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

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6 December 1993

As part of the sixth high-level delegation to North Korea in 15 months, Iranian Defense Minister Mohammad Fourouzndeh visits North Korea to discuss technological cooperation. The visit is for a meeting of a joint commission on economic, scientific, and technical cooperation established in 1992. According to reports, there is extensive cooperation between the two countries in the areas of nuclear, biological, and chemical weapons. Fourouzndeh is allegedly seeking unmanned areial vehicles (UAVs) and North Korean assistance in building 18 underground missile silos in Iran.

—"N. Korea's Air Force Chief Visits Iran for Closer Ties," *Washington Times*, 25 February 1994; Ed Blanche, "North Koreans Visit Iran To Step Up Military Cooperation," Associated Press, 24 February 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Alarm Sounded Over Missile Plans Involving Tehran and North Korea," *Mideast Mirror*, vol. 7, no. 237, 7 December 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

15 December 1993

The director of the Modern Korea Institute, Katsumi Sato, states that Choch'ongnyŏn, the 150,000 member pro-North Korea association of Korean residents in Japan, has exported "key high-tech components North Korea needs for its war machine," and adds that institute analysis shows that North Korea is "now trying to downsize a missile warhead, so that the Nodong-1 missile could deliver a nuclear bomb to Japan." Sato quotes Im Yŏng Sŏn, a North Korean defector, as saying that 75% of construction equipment used for military facilities in North Korea comes from Japan. According to Sato, Lim said whenever something breaks, the North Koreans take a photograph of the part and fax the photo and part information to Choch'ongnyŏn in Japan, which then ships the parts to North Korea on the *Man'gyŏngbong* ferry. Tsutomu Nishioka, editor of the Institute's monthly news magazine, notes that ¥16 billion are sent to the DPRK annually in remittances, dwarfing the North Korean budget of 35 billion won, and that "although a ban on cash gifts to North Korean relatives may raise humanitarian problems, to prevent North Korea from developing a nuclear missile should take precedence, as a nuclear attack would snuff out so many people."

—Kyodo News Service, "Pyongyang Watcher Urges Japan to Ban 'High-Tech' Flow," Japan Economic Newswire, 15 December 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North Korean Bombs Can Destroy Loyalists: Expert," Agence France Presse, 15 December 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Japan Urged to Halt High-Tech Flow to North Korea," United press International, 15 December 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "'Rodong 1 Ho T'andu Sohyŏnghwa'/Il Yŏn'guso Chujang," *Chosun Ilbo*, 17 December 1993, www.chosun.com.

20 December 1993

According to the *Israeli Air Force Review*, an Israeli "Colonel A" says, "Iran will have [North] Korean Nodong missiles in a year which could be deployed in the west of the country and reach Israel." The colonel also states, "There is no doubt that Iran is trying to obtain the capacity to produce chemical and nuclear warheads," which could be delivered by the Nodong.

—"Iran Will Soon Have Korean Missiles Able to Hit Israel: Report," Agence France Presse, 20 December 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

22 December 1993

A senior Japan Defense Agency spokesman is quoted as saying that "when North Korea succeeded in test-firing the

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Nodong-1 in late May, it was launched from a fixed platform, so we thought that changing the location was very difficult, but later the United States and Japan learned that a mobile launch was possible by analyzing intelligence." He adds that the mobility of the Nodong-1, and the fact that North Korea has relocated most of its military facilities underground, make detection and destruction of the missiles extremely difficult. The official also states that the Nodong-1 is too large to be launched from a ship. According to international military sources, "North Korea will put the Nodong-1 missile into operational deployment next year [1994]."
—"Rodong 1 Ho Idongshik Hwagin/Ilchi 'Yo'gyŏkkollan,'" *Chosun Ilbo*, 25 December 1993, www.chosun.com; "Rodong 1 Can Be Fired From Mobile Launchers," *Daily Yomiuri*, 24 December 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Pukhan Nodong 1 Ho Missile Idongbalsashik Kongshikhwag'in—Il Yomiuri Shinmun," *Joongang Ilbo*, 24 December 1993, www.joins.com; South Korean News Agency [*sic*], "North Korea Reportedly Able to Fire Nodong-1 from Mobile Launcher," BBC Summary of World Broadcasts, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

22 December 1993
In a recent secret report to the US House Armed Services Committee, the CIA claims that North Korea will have the capability to produce an intercontinental ballistic missile (ICBM) that could strike the United States with biological or chemical weapons within 10 years, and with a nuclear warhead within 10-15 years. The report concludes that even though the North Korean government has made the development of ICBMs a priority, the probability is low because North Korean military plans are emphasizing the efficient use of resources. The report also stated that North Korea could acquire a complete ICBM missile system from another country.
—"'Puk, ICBM Kaebal Chamjaeryŏk'/15 Nyŏnnae Misajŏnggwŏn Kanŭng," *Chosun Ilbo*, 24 December 1993, www.chosun.com; "Puk, Haekt'andu Changch'ak Taeryukkant'ando Missile Saengsannŭngnyŏk Poyu," *Joongang Ilbo*, 23 December 1993, www.joins.com.

25 December 1993
Officials in Washington say that North Korea has delayed plans to sell Iran the Nodong-1 missile. The reason for the delay is unclear, but officials have a number of theories, among them diplomatic maneuvering linked to nuclear inspections, production problems, or final arrangement problems with Iran. [Note: According to *Flight International*, the deal to sell up to 150 Nodong missiles to Iran is called off as part of a secret side-agreement with the United States when North Korea signs the Agreed Framework in October 1994.]
—Associated Press, "US Officials Welcome Delay In N. Korean Missile Sale," *Christian Science Monitor*, 27 December 1993, p. 4; "Korea (DPRK): Missile Sale Off," *Asian Recorder*, 15-21 January 1994, p. 23686; "Iranian Missile Deal with N. Korea Falters," *Flight International*, 23 October 1996, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

26 December 1993
Pakistani Prime Minister Benazir Bhutto denies international media reports that she will be discussing missile procurement or development during her two-day visit to North Korea, which is to begin on 29 December 1993. The Pyongyang visit, which immediately follows a meeting in Beijing, is at the invitation of the North Korean President Kim Il Sung.
—Radio Pakistan Network, 26 December 1993, in "Denies Possible Talks on Missiles," FBIS-NES-93-246, 27

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December 1993, p. 57; Radio Pakistan Network, 27 December 1993, in "Departs for China," FBIS-NES-93-246, 27 December 1993, p. 57.

Late 1993-Early 1994

Kim Il Sung expresses the desire to place a satellite in orbit at a meeting of the Central Committee of the Korean Workers Party.

—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, pp. 28-29; Bill Gertz, "N. Korean Missile Seen Posing Risk to U.S.; Rocket Might Reach Alaska, Hawaii," *Washington Times*, 16 September 1998, p. A1. Kim Il Sung expresses the desire to place a satellite in orbit at a meeting of the Central Committee of the Korean Workers' Party. Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, pp. 28-29; Bill Gertz, "N. Korean Missile Seen Posing Risk to U.S.; Rocket Might Reach Alaska, Hawaii," *Washington Times*, 16 September 1998, p. A1.

1992

1992

Pakistani officials are seen in North Korea examining a prototype model of the Nodong-1. [Note: This report is unsubstantiated.]

—Bill Gertz, "Iran-Bound Mystery Freighter Carried Parts for Missiles," Washington Times, 16 July 1992, p. A3.

1992-1996

North Korea imports 35 Styx anti-ship missiles from Russia. [Note: North Korea reportedly ordered the missiles in 1979 but did not receive them after the breakup of the Soviet Union.]

—*SIPRI Yearbook 2002: Armament and Disarmament and International Security*, Stockholm International Peace Research Institute, (Oxford: Oxford University Press, 2002).

4 January 1992

Citing US government sources, Japan's *Yomiuri Shinbum* reports that North Korea will probably be able to develop and deploy its new 1,000km-range missile within two years. According to the report, the missile is called a "Scud-D" or "Nodong-1." The report says that a flight test of the missile in June 1991 failed.

—"Pukhan, Shinhyŏng Missile Kukpigaebal," *Joongang Ilbo*, 4 January 1992, www.joins.com.

15 January 1992

In testimony before the US Senate Governmental Affairs Committee, CIA Director Robert Gates states that, "North Korea's [nuclear and ballistic missile] programs are our most urgent national security threat in East Asia. North Korea has invested heavily in the military and depends on arms sales for much of its hard currency earnings." North Korea has sold indigenously produced Scud-Cs to Iran and Syria, and is not far from having a more advanced missile with a range of at least 1,000km (Nodong-1).

—Legislative Report for the 102nd Congress (unofficial), testimony of CIA Director Robert Gates before the Senate

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Government Affairs Committee, 15 January 1992; Bill Gertz, "Threat Forces N. Korea Ship to return Home with Scuds," *Washington Times*, 24 January 1992, p. A3, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

Early 1992

According to Western intelligence sources, Iran and North Korea sign a financial agreement for the development of the Nodong-1 missile. A Pentagon analyst speculates that North Korea will need "a substantial input of foreign technology," especially with regard to guidance technology, in order to complete development of the new missile.
—Kenneth Timmerman, "Iran's Ballistic Missile Program," *Mednews*, 21 December 1992, pp. 4-5; "Ballistic Missile Threat Evolves," *International Defense Review*, vol. 33, no. 10, 1 October 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

Early February 1992

According to US administration officials, the North Korean ship *Tae Hŭng Ho* departs North Korea bound for Syria with an unknown number of Scud-C missiles and associated production or assembly equipment, such as machine tool "parts." The shipment is worth a reported $100 million and is part of an overall missile sale worth $250 million.
—Elaine Sciolino, "U.S. Tracks a Korean Ship Taking Missile to Syria," *New York Times*, 21 February 1992, p. A9; Bill Gertz, "Iran-Syria Deal Revealed as Scuds Near Gulf Ports," *Washington Times*, 10 March 1992, p. A3; "Pukhan, Scud Missile Syria Ro Susongjung—New York Times Podo," *Joongang Ilbo*, 22 February 1992, www.joins.com.

February 1992

US satellite imagery reveals that North Korea is digging "deep tunnels" around the nuclear complex at Yŏngbyŏn. Some analysts believe this is part of a program to harden the facility against possible South Korean or US attacks. Others believe the tunnels may be part of a program to hide materials or components from International Atomic Energy Agency (IAEA) inspectors. South Korea's ambassador to the United States, Hyŏn Hong Chu, cites North Korea's extensive missile production as "corroborative evidence" that North Korea is determined to develop nuclear weapons.
—Bill Gertz, "North Korea Digs Tunnels for Nuclear Arms," *Washington Times*, 21 February 1992, p. A9.

February 1992

Anatoliy Rubtsov, a Russian solid-state physicist who, according to ITAR-TASS (Russian News Agency), is posing as a Russian government official, begins efforts to recruit strategic weapons specialists in Miass for employment abroad, including in North Korea, offering wages of $1,500 to $4,000 per month. The Russian engineers are sought to "modernize North Korean missiles in a short period of time." The number of Russian specialists eventually involved is at least 60. Ten from this group made an initial visit to North Korea in August 1991.
—Evgeni Tkachenko, "Korea Tried To Employ Russians To Modernise Its Missiles," ITAR-TASS, 10 February 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

February 1992

According to a US expert, "the North Korean missile development program proceeded in parallel with the nuclear development program," and "therefore, we assume that a weapon ultimately would be mated with a missile

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delivery system."
—Don Oberdorfer, "N. Korea Seen Closer To A-Bomb: U.S. Officials Say Weapon Capability May Come in Months," *Washington Post*, 23 February 1992, pp. A1, A26.

February 1992
Defense News reports that North Korea has configured the Scud-C to accurately deliver a chemical warhead.
—Dennis Gormley, "Prevent a Ballistic Missile Fire Sale," *Defense News*, 17 February 1992, pp. 31-32.

16 February 1992
The German Sunday paper *Welt am Sonntag* reports that North Korea and Libya are to build a missile test site as part of an effort to jointly develop a new 1,000km-range intermediate range ballistic missile (IRBM) based on the Scud missile.
—Hwang Pyong Tae, *Hankook Ilbo* (Seoul), 17 February 1992, p. 1, in "North Reportedly to Develop Missiles with Libya," JPRS-TND-92-005, 3 March 1992, p. 4.

Late February 1992
The Iranian freighter, *Iran Salam*, which is suspected of carrying North Korean missile-related cargo, is being tracked by US intelligence between Singapore and the Iranian port of Bandar Khomeini.
—Bill Gertz, "Iran-Syria Deal Revealed as Scuds Near Gulf Ports," *Washington Times*, 10 March 1992, p. A3.

9 March 1992
The North Korean freighter *Tae Hŭng Ho* docks at the Iranian port of Bandar Abbas with what is believed to be a load of Scud-C missiles and missile equipment. The missiles are unloaded and will allegedly be airlifted to Syria. The ship evaded a US naval task force in the Arabian Sea assigned to "dissuade" the ship from delivering its cargo. A report says the shipment includes 24 missiles bound for Syria, and the contract is for North Korea to deliver 150.
—Barton Gellman, "U.S. Failed to Detect Ship," *Washington Post*, 12 March 1992, pp. A1, A23; Douglas Waller, et al., "Sneaking in the Scuds," *Newsweek*, 22 June 1992, pp. 42-46; "Increase in Egypt's 'Scuds' Leads to BAe Pull-Out," *Jane's Defence Weekly*, 5 September 1992, p. 31; Im Hang, "Pukhan Taehŭngho Sagŏn Anp'akk/Han'gye Tŭrŏnan Mi Wihyŏp," *Kukmin Ilbo*, 11 March 1992, p. 5, in KINDS, www.kinds.or.kr; "Missile Chŏkchae Pukhwamulsŏn/Iran Hang'e Iphang," *Joongang Ilbo*, 11 March 1992, p. 1, in KINDS, www.kinds.or.kr.

11 March 1992
The *Tae Hŭng Ho* departs Bandar Abbas and travels through the Suez Canal to Tartus, Syria, where it reportedly delivers manufacturing equipment for underground Scud missile factories that the United States says Syria is building in Hama and Aleppo. There are two fuel plants at Hama: one liquid-fuel plant for Scud-type missiles and one solid-fuel plant for M-9 type missiles. Other reports indicate that there is a plant near Hama dedicated to guidance systems. The *Tae Hŭng Ho* cargo off-loaded at Bandar Abbas in Iran is reportedly destined for the Syrian liquid-fuel plant.
—George Lardner Jr., "Probe Ordered in Failure to Track N. Korean Ship," *Washington Post*, 14 March 1992, p. A17; Douglas Waller, et al., "Sneaking in the Scuds," *Newsweek*, 22 June 1992, pp. 42-46; Bill Gertz, "Iran-Bound Mystery Freighter Carried Parts for Missiles," *Washington Times*, 16 July 1992, p. A3; Neal Sandler, "Israeli Concern

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over Syrian 'Scud' Tests," *Jane's Defence Weekly*, 22 August 1992, p. 1; "Increase in Egypt's 'Scuds' Leads to BAe Pull-Out," *Jane's Defence Weekly*, 5 September 1992, p. 31.

11 March 1992

The *Donga Ilbo* reports that the United States is really not sure about the contents of the *Tae Hŭng Ho's* cargo. According to the South Korean daily, some sources are saying that there have been secret contacts between the United States, North Korea, Iran, and Syria, and that the parties have assured the United States that the ship's cargo does not contain missiles. The report says that Israeli officials told the United States that the ship is transporting missiles, and that US Defense Department officials are intentionally spreading the rumor.
—Nam Ch'an Sun, "Pukhan Hwamulsŏn/Mi Kŏmsaek'anhaettna Mothaettna," *Donga Ilbo*, 11 March 1992, p. 6, in KINDS, www.kinds.or.kr.

11 March 1992

A source in Macao reveals that North Korea has been evading the Coordinating Committee for Multilateral Export Controls (CoCom) by using an agent in Macao. North Korea is said to be using a Macao branch of the Bank of China and paying in cash to acquire tracking instruments for missiles, underwater communications equipment and night vision goggles. North Korea is said to have spent $100 million on these purchases late last year. [Note: The article uses "ch'ujŏk changch'i," or "tracking," instead of "yudo changch'i," or "guidance."]
—"Pukhan, Macao T'onghae Mugiguip," *Joongang Ilbo*, 11 March 1992, www.joins.com.

12 March 1992

North Korean Vice President Lee Chong Ok says that the *Tae Hŭng Ho* does not have missiles in its cargo.
—"'Taehŭngho Scud Anshil'ŏtta'/Lee Chong Ok Pukhan Pujusŏk/Mi'gukjjok Chujang Maengbi'nan," *Hankyoreh Shinmun*, 13 March 1992, p. 4, in KINDS, www.kinds.or.kr.

13 March 1992

The *Iran Salam*, which US officials believe is carrying Scud missiles from North Korea, docks and unloads its cargo at the Iranian port of Char Bahar.
—"Syria Blasts U.S. Over Missile Affair," *Facts on File World News Digest*, 2 April 1992, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Eric Schmitt, "North Korea Ship Delivers to Iran," *New York Times*, 18 March 1992, p. A12, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

13 March 1992

US Assistant Secretary of State Richard Clark states that North Korea is now the only country selling complete missile systems that exceed Missile Technology Control Regime (MTCR) parameters to the Third World. He also states that North Korea will most likely test its Nodong-1 missile early this year, and that it may already be trying to make advance sales in the Middle East.
—Statement of Richard A. Clarke, Assistant Secretary of Politico-Military Affairs, Department of State, Before the Joint Economic Committee Subcommittee on Technology and National Security, 13 March 1992; Reuters, 13 March 1993, in Executive News Service, 16 March 1992.

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13 March 1992
According to a CNN broadcast, North Korea is assisting in the construction of Scud missile production facilities in Egypt, Iran, Libya, and Syria. North Korea is said to be supporting the construction of a "Scud-D" production facility in Libya.
—"Pukhan, Arab Kukdŭl'e Scud Kongjang Kŏnsŏlchiwŏn," *Joongang Ilbo*, 14 March 1992, www.joins.com.

17 March 1992
US Defense Secretary Dick Cheney says that the United States has been unable to confirm whether the North Korean ship *Tae Hŭng Ho* unloaded missiles at an Iranian port of Bandar Abbas. US intelligence officials believe the ship was carrying missiles, but US Navy vessels were never given permission to board the ship.
—"Cheney: U.S. Not Sure if DPRK Ship Carried Scud Missiles," Xinhua General Overseas News Service, 17 March 1992, Item No: 0317103, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Puk Missile Sŏn Kangje Susaekhaeya/Mi Chŏ'nŏlchi," *Kukmin Ilbo*, 18 March 1992, p. 2, in KINDS, www.kinds.or.kr.

27 March 1992
The United States announces the imposition of sanctions on Iran and North Korea on grounds that the Iranian Ministry of Defense and Armed Forces Logistics and the North Korean firms Ryonggaksan Machineries and Equipment Export Corporation and Ch'anggwang Credit Corporation have been involved in "missile technology proliferation." The sanctions will last for two years beginning 6 March 1992.
—*Federal Register*, vol. 57, no. 67, 7 April 1992, pp. 1167-1168.

12 April 1992
Russia 1 TV reports that Iraq's medium-range ballistic missiles appear to be Iraqi, but were actually purchased from North Korea and then modified to extend their range. The report does not say when the missiles were transferred or how many were acquired from North Korea.
—"Iraq, Pukhanŭrobut'ŏ Chunggŏri Missile Kumae," *Joongang Ilbo*, 13 April 1992, www.joins.com.

May 1992
Meeting with a Carnegie Endowment delegation visiting Pyongyang from 28 April 1992 to 4 May 1992, North Korean Foreign Minister Kim Yŏng Nam states, "Other countries have associated themselves with it [the Missile Technology Control Regime (MTCR)]—why not us? It would be no problem for our country to associate itself with such a regime because we oppose the proliferation of missiles."
—"Preliminary Report: Carnegie Endowment Delegation Visit to Pyongyang, Democratic People's Republic of Korea, 28 April 1992– 4 May 1992."

May 1992
North Korea signs an agreement with the V. P. Makayev engineering design office to develop "a small carrier that would put commercial communications satellites into orbit." The Russian Ministry of General Machine Building and the Ministry of Security allegedly approve the agreement, but 20 Makayev engineers are later stopped at the Sheremetyevo-2 Airport as they attempt to travel to North Korea in December 1992. The design office is to be paid $3 million for the initial period of work, and the engineers are told that the carrier could be manufactured in Russia

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after completion of its design.
—"Russian Scientists Accused of Wanting to Help North Korea Become a Nuclear Power," *Moscow News*, 2 April 1993; Daniel Sneider, "The Trail of N. Korea's Nuclear Bid," *The Christian Science Monitor*, 17 June 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

29 May 1992
According to an anonymous high-level source in the US State Department, North Korea has concluded another contract to sell Scud missiles in the Middle East. Furthermore, the source says that North Korea is also trying to reach an agreement to sell the new missile it is developing to the Middle East. However, the source did not reveal the countries in the Middle East.
—"'Pukhan, Chungdong Such'ulyong Shinhyŏng Missile Kaebal'/Mi Kungmubu Kwalli," *Segye Ilbo*, 31 May 1992, p. 4, in KINDS, www.kinds.or.kr; "Pukhan, Shinhyŏng Missile Kaebal/Taejungdong Such'ulyong...Sagŏri 1 Ch'ŏn 5 Baek km," *Taehan Maeil*, 31 May 1992, p. 2, in KINDS, www.kinds.or.kr; "Pukhan, Sae Missile Kaebal/Tae Chungdong Such'ulyong'ŭro," *Hankook Ilbo*, 31 May 1992, p. 1, in KINDS, www.kinds.or.kr; "Pukhan, Taejungdong Such'ulyong Shinhyŏng Missile Kaebal," *Joongang Ilbo*, 1 June 1992, www.joins.com.

June 1992
According to unnamed military sources in Tokyo quoted by the Japanese daily *Sankei Shimbun*, North Korea conducts an unsuccessful test firing of the Nodong-1 missile. However, the test may have actually been cancelled.
—Reuters, 24 March 1993, in Executive News Service, 24 March 1993; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 21; Joseph S. Bermudez, Jr., "An Analysis of North Korean Ballistic Missile Testing," *Jane's Intelligence Review*, April 1995, p. 186.

2 June 1992
The JANA international affairs editor denies a report alleging that Libya is attempting to acquire the Nodong-1 and to establish an indigenous production capability for the missile. [Note: JANA is the official Libyan news agency.]
—JANA (Tripoli), 2 June 1992, in "Report on DPRK 'Nodong-1' Missile Deal Denied," JPRS-TND-92-018, 10 June 1992, pp. 9-10.

Second Half of 1992
North Korea exports a few Nodong-1 prototypes to Iran.
—"Puk, Nodong 1 Ho Iran Chaegong/Sajŏnggŏri 1 Ch'ŏn km Sugi/Mi Ŭihoe Pogosŏ," *Chosun Ilbo*, 17 July 1993, www.chosun.com.

July 1992
The CIA Nonproliferation Center provides information to US policymakers confirming that the cargo delivered by the North Korean ship *Tae Hung Ho* consisted of "missile manufacturing components" that were subsequently transferred to Syria from Tehran by Syrian aircraft. The shipment is allegedly valued at $100 million. Other information indicates that in exchange for allowing the transshipment, Iran is to be permitted to supply weapons to Hezbollah militia in Lebanon. The deal is enabling Syria to build two missile-propellant production facilities at

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Hamah; one plant will produce liquid fuel, and the other will produce solid fuel.
—Bill Gertz, "Iran-Bound Mystery Freighter Carried Parts for Missiles," *Washington Times*, 16 July 1992, p. A3; Terrence Kiernan, "N. Korea Considers Scud Export Boost," *Defense News*, 26 April-2 May 1993, p. 3.

July-August 1992
North Korean Deputy Premier Foreign Minister Kim Yong Nam visits Syria (27-30 July), Iran (30 July-3 August), and Pakistan (4-7 August). Missile cooperation and North Korean sales of the Hwasŏng-6 and possibly Nodong missiles are on the agenda.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 23.

Late July-early August 1992
Syria conducts two tests of Scud-C missiles acquired from North Korea via Iran. North Korean military personnel are present in Syria for the tests. Israel claims that these tests are the last tests before the missile becomes operational.
—Bill Gertz, "Israelis Say Syrians Test-Fired New Scud," *Washington Times*, 14 August 1992, p. A25; Neal Sandler, "Israeli Concern over Syrian 'Scud' Tests," *Jane's Defence Weekly*, 22 August 1992, p. 11; "Increase in Egypt's 'Scuds' Leads to Bar Pull-Out," *Jane's Defence Weekly*, 5 September 1992, p. 31; Allison Kaplan and David Makovsky, "Rabin Blasts Proposed US Arms Sales to Saudis: PM Rejected US Deal," *Jerusalem Post*, 13 August 1992, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Syria, Ch'oech'ŏmdan Missile Saengsandan'gye/Israel Chŏn'yŏk Sajŏng'gwŏn'e," *Chosun Ilbo*, 14 August 1992, p. 5, in KINDS, www.kinds.or.kr; "Pukhanje Scud Missile/Syria, Shilhŏmbalsa Sŏnggong," *Donga Ilbo*, 14 August 1992, p. 5, in KINDS, www.kinds.or.kr.

August 1992
North Korean deputy Premier Foreign Minister Kim Yŏng Nam travels to Pakistan, where missile cooperation and the Nodong missile are on the agenda.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 21.

15 August 1992
North Korean engineers are said to be assisting Syria with the construction of two Scud-C production plants. Reports say one plant will produce missiles and the other will produce guidance equipment.
—"'Pukhan'gisulchadŭl Chiwŏn Syria, Missile Saengsan'/Pul Pigaroji Podo," *Segye Ilbo*, 16 August 1992, p. 2, in KINDS, www.kinds.or.kr; "Scud Saengsan'gongjang Kŏnsŏl/Syria, Pukhan Toumbada," *Hankook Ilbo*, 16 August 1992, p. 4, in KINDS, www.kinds.or.kr.

Late August 1992
Vladimir Usachev leads 10 Russian scientists from the Machine Design Bureau in Miass [Makeyev Design Bureau] on a visit to North Korea to hold discussions on "modernizing North Korean missiles" and "investigate the potential working situation." One of the scientists later says, "The Koreans wanted us to teach, to train students about

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durability, pressure, dynamics...they never talked about nuclear weapons, about missiles." The plan is to have the scientists work in a "research institute." Some of the scientists are specialists in missile design and production, as well as warhead production. Anatoliy Rubtsov began to recruit the strategic weapons specialists in February 1992.
—Evgeni Tkachenko, "Korea Tried To Employ Russians To Modernise Its Missiles," ITAR-TASS, 10 February 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Yevgeniy Tkachenko, ITAR-TASS (Moscow), 10 February 1993, in "DPRK Reportedly Sought Russian Scientists to Modernize Missiles," FBIS-SOV-93-026, 10 February 1993, pp 11-12; Daniel Sneider, "The Trail of N. Korea's Nuclear Bid," *Christian Science Monitor*, 17 June 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

24 August 1992
Chŏng Ju Yŏng, presidential candidate of the United People's Party and honorary chairman of the Hyundai Group, says that North Korea has completed the development of its 1,000km-range ballistic missile. Chŏng makes the comments following a luncheon on the 23rd with General Riscassi and other military officials at Suwŏn Airbase, where they discussed North Korea's missile capabilities.
—"Pukhan, Sajŏnggŏri 1 Ch'ŏn km Missile Kaebal—Kungmin Chung Taepyo Palgyŏ," *Joongang Ilbo*, 24 August 1992, www.joins.com.

October 1992
About 10 Russian nuclear physicists are prevented from traveling to North Korea.
—Yonhap News Agency, 21 December 1992, in "Scientists Barred From Leaving Moscow," JPRS-TND-93-002, 15 January 1993, p. 6.

October 1992
According to the *Chelyabinski Rabochij* newspaper, more than 60 Russian researchers attempt to leave for North Korea, but they are detained at the Sheremetyevo-2 Airport near Moscow. The group includes more than 40 researchers from the Machine Design Bureau in Miass. The paper quoted officials in the Russian security ministry as saying the group is capable of designing a nuclear warhead for a missile. The *Christian Science Monitor* later reports the number of scientists is 64. The *Hankook Ilbo* later reports the engineers are nuclear specialists that have been approached to design a nuclear warhead for ballistic missiles.
—ITAR-TASS (Moscow), 4 February 1993, in "Defense Workers Reportedly Tried to Go to DPRK," JPRS-TND-93-005, 12 February 1993, pp. 14-15; Daniel Sneider, "The Trail of N. Korea's Nuclear Bid," *Christian Science Monitor*, 17 June 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Pukhanhaeng Rŏ Kwahakcha/Haekt'anjejo Chŏnmun'ga/Rŏ Ilganji Podo," *Hankook Ilbo*, 9 February 1993, p. 2, in KINDS, www.kinds.or.kr; "Rŏ Kukpangyŏn'guwŏn 60 Myŏng/Changnyŏn 10 Wŏl Ipkuk Shido," *Kukmin Ilbo*, 5 February 1993, p. 1, in KINDS, www.kinds.or.kr.

October 1992
Yonhap News Agency, quoting *Komsomolskaya Pravda* (Communist Youth's Truth), reports that 36 Russian engineers, many of them rocket specialists, are detained at Sheremetievo Airport near Moscow as they attempt to go to North Korea. The engineers were recruited by Anatoly Rubtsov, a Russian solid-state physicist and member of North Korea's Academy of Sciences, after North Koreans approached Rubtsov at a Beijing seminar in April 1991.

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Nevertheless, the Yonhap News Agency report says more than 20 Russian scientists have made their way to North Korea via China by April 1994. The engineers and scientists are paid $3,000-4,000 a month, and others are said to be providing information to North Korea through e-mail.
—Yonhap News Agency, 23 April 1994, in "Russian Scientists Assisting DPRK in Nuclear Program," JPRS-TND-94-011, 16 May 1994, pp. 51-52.

October 1992
A group of Israeli officials, including Foreign Ministry Deputy Director General Eitan Bentsur, visits Pyongyang, where he is given assurances that in exchange for economic assistance, North Korea will not sell missiles. According to one report, North Korea invited Foreign Minister Shimon Peres to visit at this time, but he declined. North Korean representatives also reportedly request assistance in mining gold. Israel offers to help raise $1 billion in funds for foreign investment from American Jews if North Korea would stop its plans to export Nodong missiles to Iran.
—*Korea Times*, 16 June 1993, p. 2, in "Seoul 'Concerned' With Israel-DPRK Contacts," FBIS-EAS-93-114, 16 June 1993, p. 20; Kim Yong Kol, *Hankook Ilbo*, 16 June 1991, p. 4, in "Israel Makes Gesture to North Korea for Improvement of Relations," FBIS-EAS-93-114, 16 June 1993, p. 20; Jon B. Wolfsthal, "U.S. Prods Israel to Halt Talks With North Korea on Missile Sales," *Arms Control Today*, September 1993, p. 24; Steve Rodan, "All Eyes Are On Israel's North Korean Connection," *Jerusalem Post*, 25 March 1994, p. 3B, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Abraham Rabinovich, "Surly Pyongyang warms up to Jerusalem," *Jerusalem Post*, 18 June 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

October 1992
The South Korean Ministry of National Defense releases its *Defense White paper 1992-1993*. According to the ministry, North Korea has the capacity to produce more than 100 Scud missiles per year and has exported an improved version of the Scud to countries in the Middle East, such as Iran. The report also says that North Korea has developed a new ballistic missile, the so-called Nodong, with a range of 1,000km.
—The Ministry of National Defense, the Republic of Korea, *Defense White paper 1992-1993* (Seoul: Ministry of National Defense, October 1992), p. 72.

October-November 1992
Russian security officials prevent 64 Russian scientists from traveling to "another country that had hoped to use them to create missile systems capable of delivering nuclear warheads." Russian Security Minister Viktor Barannikov makes this comment in an address before the Russian legislature in early December 1992.
—"Paper: Russia Stopped Weapons Experts on Jet To North Korea," Associated Press, 19 December 1992, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Russians Detain Atomic Experts Headed for North Korea: Report," Agence France Presse, 20 December 1992, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

14 October 1992
Japan's *Sankei Shimbun* reports that North Korea has begun a search for a country that will test its new 1,000km ballistic missile. North Korea is unable to test the missile to its full range because of geographic constraints.

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—"Pukhan, Sajŏng 1 Ch'ŏn km Missile Shilhŏmjangso Mulsaek—Sankei Shinmun Podo," *Joongang Ilbo*, 14 October 1992, www.joins.com.

15 October 1992

A group of 32 Russian engineers planning to fly to North Korea to assist in the modernization of ballistic missiles is intercepted by Russian police at Moscow International Sheremetyevo-2 Airport. Most of the engineers were from the Makeyev Design Bureau in Miass, which is responsible for submarine launched ballistic missiles (SLBMs) and Scud tactical ballistic missiles. The recruiting agent was Anatoliy Rubtsov, a Russian posing as a government official, who was actually employed by North Korea.

—KBS-1 Radio Network (Seoul), 21 December 1992, in "Missile Technicians Held in Moscow," JPRS-TND-93-001, 7 January 1993, p. 6; UPI, 10 February 1993, in Executive News Service, 10 February 1993; Evgeniy Tkachenko, ITAR-TASS (Moscow), 24 February 1993, in "Missile Designers Explain Attempt to Work in DPRK," FBIS-SOV-93-035, 24 February 1993, pp. 11-12; Steven Zaloga, "Russian Reports," *Armed Forces Journal International*, April 1993, p. 17.

Late October 1992

A North Korean ship laden with up to 100 Scud-C missiles departs North Korea, likely bound for the Iranian port of Bandar Abbas; half of the delivery is to be transported overland to Syria, the other half is to go to Iran.

—Charles Fenyvesi, ed., "Washington Whispers: North Korea Sends Another Scud Cargo to Iran, Syria," *US News & World Report*, 9 November 1992, p. 30.

Early November 1992

Israeli Foreign Ministry Deputy Director-General Eitan Bentsur reportedly meets in secret with North Korean officials in Pyongyang to protest North Korea's Scud-C missile sales to Syria.

—David Makovsky, "Top Diplomat Secretly Visits North Korea," *The Jerusalem Post*, 5 November 1992, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Leslie Susser, "Peres: Korea-Bound?" *The Jerusalem Post*, 15 July 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Israel-Pukhan Su'gyo Pimilchŏpch'ok," *Hankook Ilbo*, 5 November 1992, p. 1, in KINDS, www.kinds.or.kr; "Puk Israel Pimilhoedam/Su'gyonon'ŭi Kanŭngsŏng," *Kyunghyang Shinmun*, 5 November 1992, p. 2, in KINDS, www.kinds.or.kr.

November 1992

North Korea supplies Iran with 220 Scud missiles, and a few early model Nodong missiles.

—"Puk, Nodong 1 Ho Iran Chaegong/Sajŏnggŏri 1 Ch'ŏn km Sugi/Mi Ŭihoe Pogoso," *Chosun Ilbo*, 17 July 1993, www.chosun.com; Yonhap News Agency, 16 July 1993, in "U.S. Report on DPRK-Iran Missile Deal Cited," FBIS-EAS-93-138, 21 July 1993, p. 33.

5 November 1992

A second group of Russian missile technicians is stopped from flying to North Korea. This group brings the total number of missile technicians detained to 64.

—KBS-1 Radio Network (Seoul), 21 December 1992, in "Missile Technicians Held in Moscow," JPRS-TND-93-001, 7 December 1993, p. 6.

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Early December 1992
Kim Tal Hyŏn leads a delegation to Iran for the signing of a military agreement worth several hundred million dollars to develop a new missile that is capable of carrying nuclear warheads. The agreement stipulates that Iran will provide North Korea with $500 million to "jointly develop nuclear weapons and ballistic missiles." The agreement also provides for missile flight tests in Iran and the cooperation of Libya in the acquisition of Western electronics systems from Libya's al-Fatah program. The al-Fatah program is reported to have the support of German firms and technical experts.
—"Puk, Nodong 1 Ho Iran Chaegong/Sajŏnggŏri 1 Ch'ŏn km Sugi/Mi Ŭihoe Pogoso," *Chosun Ilbo*, 17 July 1993, www.chosun.com; Yonhap News Agency, 16 July 1993, in "U.S. Report on DPRK-Iran Missile Deal Cited," FBIS-EAS-93-138, 21 July 1993, p. 33.

December 1992
Twenty members of the V. P. Makayev engineering design office are detained at the Sheremtyevo-2 Airport when they attempt to travel to North Korea. The group is supposed to work on a rocket code-named "Zyb," and the contract was supposedly offered at the end of 1992. The details of the project were not clear, but according to one of the engineers, there was "talk about developing a small carrier that would put a commercial communications satellite in orbit." The Russian Ministry of General Machine Building and the Ministry of Security allegedly approve the invitation for the engineers to work in North Korea. For the initial period of the contract, the design office was to be paid $3 million. The engineers were told that the design office could receive an order to manufacture the carrier in Russia upon the completion of its design.
—"Russian Scientists Accused of Wanting to Help North Korea Become a Nuclear Power," *Moscow News*, 2 April 1993; Chang Haeng Hun, "Puk Ch'wiŏpkido Rŏ Kwahakcha Interview/Moscow News Podo," *Donga Ilbo*, 1 April 1993, p. 4, in KINDS, www.kinds.or.kr; Russia Ch'ulshin Kwahakcha Puk Missile Chejoch'amyŏ," *Joongang Ilbo*, 1 April 1993, p. 7, in KINDS, www.kinds.or.kr.

December 1992
North Korea invites Israeli Foreign Minister Shimon Peres to North Korea to discuss aid in exchange for abandoning its missile program. On 14 June 1993, Peres says that he wants to visit North Korea to dissuade them from selling missiles to Iran.
—*Korea Times*, 16 June 1993, p. 2, in "Seoul 'Concerned' with Israel-DPRK Contacts," FBIS-EAS-93-114, 16 June 1993, p. 20.

8 December 1992
Russian special forces board a jet before it is to take off from a Moscow airport and arrest 36 "senior weapons scientists" as they attempt to travel to North Korea. The scientists are said to be from a "number of nuclear weapons research institutes, including the top secret Arzamas-16 and Chelyabinsk-70 facilities in the Urals." North Korea offered to pay the scientists between $1,500 and $3,000 a month.
—Matthew Campbell, "Russians Storm Jet to Stop Korean Bomb," *Sunday Times*, 20 December 1992; "Paper: Russia Stopped Weapons Experts on Jet To North Korea," Associated Press, 19 December 1992, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Russians Detain Atomic Experts Headed for North Korea: Report," Agence France Presse, 20 December 1992, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; KBS-1

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Radio (Seoul), 20 December 1992, in "Pyongyang Attempt to Hire Russian Scientists," FBIS Document FBIS-EAS-92-245, p. 32; Yonhap News Agency, 21 December 1992, in "Plans to Recruit Nuclear Scientists," FBIS Document FBIS-EAS-92-245, p. 32; Yonhap News Agency, 21 December 1992, in "Hong Kong Paper Cited," FBIS Document FBIS-EAS-92-245, pp. 32-33; KBS-1 Radio Network (Seoul), 21 December 1992, in "Missile Technicians Held in Moscow," JPRS-TND-93-001, 7 January 1993, p. 6; Ostankino Television First Channel Network (Moscow), 2 April 1993, in "Controls Stepped Up to Halt Scientists Leaving for DPRK," FBIS-SOV-93-064, 6 April 1993, pp. 27-28; "Puk-Rŏ Oe'gyo'mach'alshimhwa/Missile Chŏnmun'ga Ch'ulguk/Russia Chŏngbu Chŏjiro," *Kyunghyang Shinmun*, 26 January 1993, p. 2, in KINDS, www.kinds.or.kr; Rŏ Pukhan Oe'gyo'mach'al Shimhwa/ Missile Chŏnmun'ga P'yŏngyanghaengjŏji Panbal," *Taehan Maeil*, 26 January 1993, p. 2, in KINDS, www.kinds.or.kr; "Puk Russia Oe'gyo'mach'al Shimhwa/Rŏ Missile Chŏnmun'ga PukhanHaeng Kŭmjissago Taerip," *Joongang Ilbo*, 25 Janaury 1993, p. 2, in KINDS, www.kinds.or.kr.

25 December 1992

North Korea denies recent reports of Russian scientists attempting to travel to North Korea to assist with its nuclear and missile development programs.

—Korean Central News Agency, 25 December 1992, in "Reports Labeled as 'Rumor'," JPRS-TND-93-002, 15 January 1993, p. 6.

Late 1992

Iran is attempting to extend the range of the Silkworm missile to 400km at a Silkworm assembly facility near Bandar Abbas. Iran began to assemble Silkworm missiles here in 1988 under Chinese supervision.

—Kenneth Timmerman, "Iran's Ballistic Missile Program," *Mednews*, 21 December 1992, pp. 4-5.

Late 1992

According to Im Yŏng Sŏn, a former North Korean Army lieutenant who defected to South Korea on 11 August 1993, North Korea executes 10 general officers for a failed coup attempt. According to Im, the Security Bureau of the Ministry of the People's Armed Forces discovered the coup plans.

—Yonhap News Agency, 24 August 1993, in "Defector Claims DPRK Coup Attempt, Executions," FBIS-EAS-93-162, 24 August 1993, p. 23; Jon Swain, "Crisis in the Land of Fear," *Sunday Times*, 5 September 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Terry McCarthy, "North Korea 'Coup' Fuels Security Fears; Defector's Story of Failed Military Takeover Adds to Speculation over Pyongyang's Regional Ambitions," *The Independent*, 26 August 1993, p. 15, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

Late 1992

According to the German news agency ADN, the freighter MS Waalhaven is seized on its way to Syria from Hamburg. In Sicily, German experts board the ship and discover 27 crates of German "machine parts" that were to be delivered to a North Korean firm involved in the export of North Korean Scud-C missiles. The shipment is said to include at least one flow forming machine without special mandrels, a revetting machine, and equipment for salt bath hardening. All of the equipment is dual use, but together it appears to be applicable for ballistic missile production. There are reportedly four German firms involved with the shipment, and two are requested "to distance themselves from further deliveries."

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—PRAP confidential interview data, ADN News Agency, 16 January 1993, in "North Korea: German Firms Allegedly Involved in Syrian-North Korean Weapon Production," BBC Summary of World Broadcasts, 19 January 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com. Germany's Bundesnachrichtendienst (Federal Intelligence Agency) reports that North Korea commissioned three international shipping companies to transport "special metals" acquired on Berlin's gray market for the production of missile "launch pads," and that the materials have been shipped; *Focus* (Munich), 22 March 1993, p. 15, in FBIS-WEU-93-053, "BND Reports DPRK Purchases Missile Materials," 22 March 1993, p. 6.

1991

1991

The North Korean Military Construction Bureau's 111th regiment begins construction of an underground missile base in Okp'yŏng-nodongjagu, Munch'ŏn-kun, Kangwŏn Province. The base is scheduled for completion in six or seven years. [Note: Munch'ŏn-kun became a city, or "shi," in May 1991.]
—Testimony of Ko Yŏng Hwan, former North Korean Foreign Ministry official, before the US Senate, 21 October 1997.

1991

Syria receives Scud-C missiles and missile-production equipment worth an estimated $250 million from North Korea. Iran has agreed to transship about $100 million worth of the missiles to Syria.
—Bill Gertz, "Iranian-Syria Deal Revealed as Scuds Near Gulf Ports," *Washington Times* 10 March 1992, p. A3.

1991

North Korea's Ministry of the People's Armed Forces establishes a college or university specializing in rocket technology. "Soviet-trained scientists" are assigned to the institution to develop new missiles.
—Kyodo News Service, "N. Korea Said to Have Underground Missile Launchpads [*sic*]," *Japan Economic Newswire*, 24 August 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

1991-1993

Kim Il Sung sends special envoys to meet former President Jimmy Carter. The envoys invite Carter to visit Pyongyang because the US government will not recognize or negotiate with Kim Il Sung. Carter continually asks the White House for approval to visit, but is denied until the nuclear crisis in June 1994. [Note: Jimmy Carter travels to Pyongyang in June 1994 during the US-North Korean nuclear crisis.]
—KBS-1 Television (Seoul), 10 August 2001, in "ROK's KBS-1 TV Interviews Former US President Carter on Korean Issues," FBIS Document ID: KPP20010811000003.

Early 1991

North Korea is believed to have completed the initial prototypes of the Nodong-1.
—Joseph S. Bermudez, Jr., "Ballistic Ambitions Ascendant," *Jane's Defence Weekly*, 10 April 1993, pp. 20, 22.

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January 1991
Libya is allegedly financing a Syrian purchase of several dozen Scud-C missiles from North Korea.
—John Fricker, publisher, *Milavnews*, vol. 30, no. 353, March 1991, p. 23; Michael Evans, "Scud Deal Caution," *The Times*, 7 February 1991, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Charles Fenyvesi, "Washington Whispers," *U.S. News & World Report*, vol. 110, no. 2, 21 January 1991, p. 16, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

January 1991
The ship *Al-Yarmouk*, co-owned by Jordan and Syria, departs North Korea bound for Syria carrying 24 Scud-C missiles and 20 mobile launchers. The ship sails around the Cape of Good Hope, bypassing the Suez Canal, in order to avoid inspection by Coalition Forces. The ship declares to Lloyds of London that its destination is Cyprus.
—Gary Milhollin and Gerard White, "Bombs from Beijing," Wisconsin Project on Nuclear Arms Control, May 1991, p. 12; John Fricker, publisher, *Milavnews*, vol. 30, no. 355, May 1991, p. 23; Steven Emerson, "The Postwar Scud Boom," *Wall Street Journal*, 10 July 1991, p. A12; "Pukhan, Chungdong'e Scud Taeryangsuch'ul—Syria Wa 5 Ok Dollar Kyeyak," *Joongang Ilbo*, 12 July 1991, www.joins.com.

January 1991
Small-scale production of the Nodong has begun.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 22.

January 1991
Iran acquires Scud-C missile components from North Korea.
—Steven Emerson, "The Postwar Scud Boom," *Wall Street Journal*, 10 July 1991, p. A12; Lee Chae Hak, "Kkorimunŭn Pukhan Scud Such'ul/Shimsangch'anh'ŭn Taechungdong P'anmaesŏl," *Joongang Ilbo*, 13 July 1991, p. 2, in KINDS, www.kinds.or.kr.

29 January 1991
The Islamic Republic News Agency (IRNA) announces that, "...from 4 February 1991 Iran's munitions industry will launch the production of its own long-range, powerful 'surface-to-surface' missiles [SSMs]." [Note: This production capability is probably a reference to the facilities at Isfahan, which assemble missiles from DPRK components.]
—Ed Blanche, "Iran Says It Will Start Missile Production," Associated Press, 29 January 1991, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Iran To Mass Produce Long-Range Missiles, Launch Second Submarine," Xinhua News Agency, 29 January 1991, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

February 1991
Iraqi deputy foreign minister Saadoun Hamadi flies to Pyongyang in an attempt to speed the delivery of Scud-B and Scud-C missiles. North Korea reneges on the December 1990 deal because Iraq is unable to pay in hard currency or oil.
—Steven Emerson, "The Postwar Scud Boom," *Wall Street Journal*, 10 July 1991, p. A12.

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2 February 1991
South Korean military officials reveal that North Korea has deployed 12 mobile missile launchers about 40-50km north of the Military Demarcation Line (MDL).
—Yonhap News Agency, 2 February 1991, in "Information Provided on DPRK Scud Missiles," JPRS-TND-91-003, 25 February 1991, pp. 6-7.

16 February 1991
Japan's Jiji News Agency reports that according to a US intelligence source, two Iranian aircraft arrived in Pyongyang the previous week and that each aircraft was loaded with 50 Scud missiles. The source reportedly says that the missiles were transferred to Iraq. [Note: This report is not credible. It is not plausible that Iran would transfer missiles to Iraq at this time. Furthermore, 50 Scud missiles could not fit into one transport aircraft.]
—"Pukhan, Iran T'onghae Iraq E Scud 1 Baekki Panmae—Ilchijit'ongshin Podo," *Joongang Ilbo*, 16 February 1991, www.joins.com.

March 1991
Syria contracts for the delivery of more than 150 Scud-C missiles from North Korea worth an estimated $500 million. According to Western intelligence officials, "Saudi Arabia gave Syria prior approval" for the missile purchase. The sale was supported by $2 billion that Saudi Arabia gave Syria for contributing coalition forces in the Gulf War.
—Steven Emerson, "The Postwar Scud Boom," *Wall Street Journal*, 10 July 1991, p. A12; Lee Ki Dong, "'Chungdong Sae Pulssi' Pukhan Scud Missile/Miji'ga Palk'hin Ch'unggyŏk'ŭi Such'ulshilt'ae," *Taehan Maeil* (*Seoul Shinmun*), 12 July 1991, p. 5, in KINDS, www.kinds.or.kr; Lee Chae Hak, "Kkorimunŭn Pukhan Scud Such'ul/Shimsangch'anh'ŭn Taechungdong P'anmaesŏl," *Joongang Ilbo*, 13 July 1991, p. 2, in KINDS, www.kinds.or.kr.

March 1991
North Korea signs a five-year contract with Iran for the supply of 20,000 barrels of oil per day.
—"A Lonely State of Defiance," *Jane's Defence Weekly*, 8 August 1992, pp. 26-27.

March 1991
North Korea delivers more than two dozen Scud-Cs to Syria.
—Bill Gertz, "China, N. Korea Secretly Deliver Missiles to Mideast via Cyprus," *Washington Times*, 2 July 1991, p. A4.

13 March 1991
The *Al-Yarmouk* docks in Latakia, Syria, laden with 24 North Korean Scud-C missiles and 20 launchers. The ship arrives the same day US Secretary of State James Baker arrives in Damascus to meet with Syrian President Haffez al-Assad for the first time. Syria has reportedly "contracted for the delivery of more than 150 North Korean Scud-C missiles at an estimated cost of $500 million. The money reportedly comes from $2 billion that Saudi Arabia had given Syria for supplying combat troops during the Gulf War. The missiles are capable of carrying chemical warheads. [Note: the *Wall Street Journal* report says there are 24 missiles, but is not clear about the number of launchers.]

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—Bill Gertz, "Libya May Buy N. Korean Missiles," *Washington Times*, 4 June 1991, p. 4; Steven Emerson, "The Postwar Scud Boom," *Wall Street Journal*, 10 July 1991, p. A12; Adel Darwish, "N. Korea 'Selling Scuds'," *The Independent*, 6 April 1991, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Syria 'Signed for N Korean Scuds'," *Flight International*, 13 March 1991, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

19 March 1991

North Korea signs an arms agreement with Cuba that reportedly calls for the sale of surface-to-air missiles (SAMs; presumably SA-14s and SA-16s) and other anti-aircraft weapons.

—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 32.

April 1991

Yonhap News Agency, quoting *Komsomolskaya Pravda* (Communist Youth's Truth), reports that North Korea approaches Anatoliy Rubtsov, a Russian solid-state physicist, at a seminar in Beijing. Rubtsov is paid by the North Korean embassy in Moscow to recruit Russian scientists for work in North Korea. He later obtains 200 blank passports and convinces 36 Russian engineers, many of them rocket specialists, to go to North Korea. However, the engineers are later detained at Moscow's Sheremetievo Airport in October 1992.

—Yonhap News Agency (Seoul), 23 April 1994, in "Russian Scientists Assisting DPRK in Nuclear Program," JPRS-TND-94-011, 16 May 1994, pp. 51-52.

April 1991

North Korea begins deliveries of an estimated 60 Hwasŏng-6 (Scud-C) missiles and 12 transporter erector launchers (TELs) to Syria via Iran. North Korea and Syria conclude an agreement for long-term deliveries that continue until at least 1995. There is also a report that North Korea has agreed to build new facilities in Iran to produce three types of Scuds.

—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 18; Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), p. 277; "Ballistic Missile Threat Evolves," *International Defense Review*, vol. 33, no. 10, 1 October 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Adel Darwish, "N. Korea 'Selling Scuds'," *The Independent*, 6 April 1991, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

12 April 1991

South Korean Defense Minister Lee Chong Ku says that South Korea is prepared to respond to North Korea in case it does not accept nuclear safeguards inspections. [Note: Lee's remarks are interpreted by some to mean that South Korea is considering a pre-emptive strike against North Korea's nuclear facilities at Yŏngbyŏn.]

—"Sabyŏng Pongmudanch'uk Kŏmt'o/Lee Kukpang/Pang'wibyŏngjedo Kaesŏndŭng P'oham," *Hankook Ilbo*, 13 April 1991, p. 2, in KINDS, www.kinds.or.kr.

May 1991

US satellites observe the launch of a Scud-C missile from a mobile launcher near Qom in Iran. The missile flies 500 km before impacting south of Shahroud (Emamshahr) in the Salt Desert (Dasht-e Kavir). The missile was assembled

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in Iran from components provided by North Korea in a series of shipments tracked by Western intelligence agencies since January 1991. Iran has thus far purchased 170 Scud-C missiles, and is assembling them from "knock-down kits" at the Isfahan facility. [Note: This test may have been an Iranian test of the missile, a joint Iranian-North Korean test, or an early example of North Korea making use of the larger test areas in Iran, as was later planned for Musudan-ri in October or November of 1993. As for the 170 Scud-C missiles, it is unlikely that all 170 could have been delivered. According to production estimates, North Korea would not have been able to produce that many Scud-Cs by this time.]
—Bill Gertz, "U.S.:Iran Fired Ballistic Missile," *Washington Times*, 24 May 1991, p. A5; Steven Emerson, "The Postwar Scud Boom," *Wall Street Journal*, 10 July 1991, p. A12; Kenneth Timmerman, "Iran's Ballistic Missile Program," *Mednews*, 21 December 1992, p. 4-5; Lee Jŏng Hun, "FROGesŏ Taepodong Kkaji: Pukhan Missile Game," *Shindonga,* August 1999, p. 203.

May 1991
According to Israeli Ministry of Defense Director-General David Ivry, Syria takes delivery of a shipment of Scud-C missiles from North Korea. The missiles were carried aboard a Yugoslavian freighter. *The Jerusalem Report* claims the number of Scud missiles is 36.
—Bill Gertz, "China, N. Korea Secretly Deliver Missiles to Mideast via Cyprus," *Washington Times*, 2 July 1991, p. A4; Leslie Susser, "How to Control the Arms Race and Stay on Top," *The Jerusalem Report*, 13 June 1991, p. 27, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

May 1991
Mid-level North Korean diplomat Ko Yŏng Hwan defects to South Korea and reports that North Korea has "vast underground plants" for the manufacture of missiles and the testing of nuclear weapons.
—Michael Breen, "N. Korea Goes Underground with Nuclear Plants," *Washington Times*, 25 October 1991, p. A11.

Late May 1991
According to US administration officials, North Korean military officials visit Libya to negotiate the sale of a new 1,000km-range intermediate-range ballistic missile (IRBM; Nodong-1) at an estimated unit cost of $7 million. Under the terms of the agreement, Libya is to finance development of the system in exchange for production models and related technology. The missile is not expected to be ready for export until 1994.
—Yonhap News Agency (Seoul), 3 June 1991, in "DPRK Reportedly to Build New Scud Missile," JPRS-TND-91-009, 24 June 1991, pp. 7-8; Bill Gertz, "Libya May Buy N. Korean Missiles," *Washington Times*, 4 June 1991, p. 4; "Pukhan, Libya'wa Missile P'anmaehyŏpsang—Sajŏnggŏri 1KM Chunggŏri," *Joongang Ilbo*, 5 June 1991, www.joins.com.

31 May 1991
Israeli Defense Minister Moshe Arens tells visiting Japanese Foreign Minister Taro Nakayama that Israel is concerned about North Korean missile sales to Syria and other countries. Nakayama says that Japan will ask North Korea to cease exporting Scud missiles to these countries.
—Kyodo (Tokyo), 31 May 1991, in "Japanese Foreign Minister Concludes Visit: Reviews DPRK Missile Sales," FBIS-

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NES-91-106, 3 June 1991, p. 31; "'Pukhan Mugisuch'ul Uryŏ'/Israel Kukpangjanggwan," *Joongang Ilbo*, 2 June 1991, p. 1, in KINDS, www.kinds.or.kr.

31 May 1991

A senior Israeli military official tells reporters that Syria is spending between $200 and $400 million to acquire a brigade of Scud-C missile launchers from North Korea by 1992, and is also interested in procuring "an indigenous missile production capability." [Note: This is probably just a confirmation of the March 1991 deal. Also, while the source only indicates launchers as part of the sale, given the amount of money involved, it is likely that missiles are included as well. A Soviet-style brigade would consist of 12 to 18 launchers.]

—R. Jeffrey Smith, "Israel to Get F-15s, Aid for Missile Program," *Washington Post*, 31 May 1991, pp. A12, A26.

Summer 1991

The North Korean ship *Mupo* departs Namp'o bound for Syria allegedly carrying eight launchers and an additional missile shipment as part of the Syrian order for 150 Scud-C missiles; the first 24 were delivered in March 1991.

—Bill Gertz, "Ship with Scud Cargo for Syria Alters Course," *Washington Times*, 9 November 1991, p. A6; Bill Gertz, "N. Korean Missiles Likely on 2nd Ship," *Washington Times*, 10 December 1991, p. A6; Bill Gertz, "Iran-Syria Deal Revealed as Scuds Near Gulf Ports," *Washington Times*, 10 March 1992, p. A3.

June 1991

According to Bush administration officials, a large shipment of North Korean Scud-C missiles arrives in Cyprus and is transferred to smaller vessels for transshipment to Syria.

—Bill Gertz, "China, N. Korea Secretly Deliver Missiles to Mideast Via Cyprus," *Washington Times*, 2 July 1991, p. A4.

June 1991

US intelligence agencies monitor up to 10 Soviet-made Scud-C missiles being delivered to North Korea by rail. US officials believe this may be an attempt to replenish stocks depleted by sales to Syria.

—Bill Gertz, "China, N. Korea Secretly Deliver Missiles to Mideast Via Cyprus," *Washington Times*, 2 July 1991, p. A4.

June 1991

According to a Kyodo report, Israeli Defense Minister Moshe Arens says during a trip to the United States that North Korea has begun to ship Scud missiles, launchers, and production technology to Syria. On 26 June, Arens says that the shipment began 2-3 weeks before and that another shipment will soon follow.

—"Pukhan, Syria E Scud Missile Kot 2 Ch'agonggŭp," *Joongang Ilbo*, 27 June 1991, www.joins.com.

2 June 1991

A South Korean military source says North Korea and Libya have concluded a contract on the development of a "new model Scud missile" that will have a range of about 1,000km. The terms of the contract reportedly stipulate that Libya will provide financing for the missile's development, and if successful, North Korea will export missiles to Libya and provide technical assistance for its manufacture at a later date. [Note: This is the so-called "Nodong" missile.]

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—"Pukhan, Sajŏng 1 Chŏn Kilometer Missile Kaebal Ch'aksu—Libya Sŏ Chakŭm Chegong," *Joongang Ilbo*, 3 June 1991, www.joins.com; Yonhap News Agency (Seoul), 3 June 1991, in "DPRK Reportedly to Build New Scud Missile," JPRS-TND-91-009, 24 June 1991, pp. 7-8; "Pukhan, Sajŏng Ch'ŏn km Missile Kaebal Ch'aksu/Scud Shinhyŏng," *Chosun Ilbo*, 3 June 1991, p. 1, in KINDS, www.kinds.or.kr.

26 June 1991

A South Korean military intelligence source says that North Korea is developing its Nodong-1 ballistic missile, and that North Korea has probably exported about 200 Scud missiles to date.

—"Pukhan, Yŏngbyŏnsŏ Kop'okpalshilhŏm/Kunchŏngbodangguk/Ch'oegŭn Haekshilhŏm Chŏndan'gyech'uchŏng Hŭnjŏk," *Hankook Ilbo*, 27 June 1991, p. 1, in KINDS, www.kinds.or.kr.

Late June 1991

The BBC investigative television news program "Panorama" reports that Arab-British Dynamics, a British Aerospace and Arab Organization for Industrialization joint venture, is cooperating with North Korea in Egypt to develop and manufacture an extended-range version of the Scud-B, or Scud-C. The report also cites unidentified "intelligence sources" as saying that the program is nearing the production stage. According to the *Wall Street Journal*, the plant will begin producing missiles in 8 to 12 weeks.

—Alan Cowell, "Egypt's Arms Control Plan for Region," *New York Times*, 5 July 1991, p .A5; Steven Emerson, "The Postwar Scud Boom," *Wall Street Journal*, 10 July 1991, p. A12.

July 1991

According to the head of South Korea's Agency for National Security Planning, Sŏ Dong Kwŏn, North Korea successfully test-fires a mobile Scud-C (Hwasŏng-6) missile, with a range of 500km, from a Korean Peoples' Army (KPA) base in Kangwŏn Province on the east coast of North Korea. The missile reportedly strikes a target in the Sea of Japan. The mobile launch equipment consisted of a launcher, a transport vehicle, and a "lifting device" (crane). Sŏ says the transporter is capable of traveling at 70km per hour. Furthermore, Sŏ says that it is believed that North Korea is capable of producing its own mobile launcher. He also reveals that North Korea has stationed 36 Scud-C missiles with its regiment at Sariwŏn.

—Yonhap News Agency (Seoul), 4 October 1991, in "North Said To Develop Scud Mobile Launcher," FBIS-EAS-91-193, 4 October 1991, p. 19; "N. Korea Test Fires 'Scud C'," *Jane's Defence Weekly*, vol. 16, no. 15, 12 October 1991, p. 651; John Fricker, publisher, *Milavnews*, vol. 30, no. 360, October 1991, p. 17; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 17; "Pukhan Idong Scud Missile Shihŏmsŏnggong—Sŏ An'gibujang Kukkambogo," *Joongang Ilbo*, 4 October 1991, www.joins.com; "Pukhan, Idong Scud Palsa Sŏnggong/Sŏ An'gibujang," *Taehan Maeil (Seoul Shinmun)*, 5 October 1991, p. 2, in KINDS, www.kinds.or.kr.

July 1991

According to *Seoul Shinmun (Taehan Maeil),* North Korea conducts a flight test of medium-range ballistic missile at Yinchuan in China. Citing a "South Korean military source," the missile is said to have a range of 800km. North Korea reportedly produced the missile with Chinese assistance. The military source says that North Korea has sent 90 military officials and weapons specialists to Yinchuan since 1988 to learn "nuclear testing technology" and

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"missile flight testing technology."
—"Pukhan, Chungguksŏ Tat'andu Missile Shilhŏm/Sajŏng 8 Baek km Chunggŏriyong," *Seoul Shinmun (Taehan Maeil)*, p. 1, 7 December 1991, in KINDS, www.kinds.or.kr.

July 1991
The *Mupo* departs North Korea for the Middle East with $100 million worth of Scud-C missiles. The ship is later forced to have engine repairs in Singapore and Sri Lanka.
—Charles Fenyvesi, "Washington Whispers," *U.S. News & World Report*, vol. 111, no. 20, 11 November 1991, p. 30, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

3 July 1991
According to a report from Japan's *Sankei Shimbun*, Israel's ambassador to Japan, Nahum Eshkol, says that the North Korean missiles recently sold to Syria have a range of 900km. According to Eshkol, the North Koreans have not reduced the size of the warhead of a Scud to extend the range as Iraq did, but instead have maintained the size of the warhead. [Note: This is most likely a reference to the Nodong.]
—"Pukhan, Sajŏng 9 Baek KM Missile Kaebalsŏl—Ilbon Kkaji Sajŏnggwŏnnae," *Joongang Ilbo*, 3 July 1991, www.joins.com.

10 July 1991
According to Iranian exile sources, an Iranian scientific and technical delegation travels to China and North Korea to negotiate an increase in the transfer of nuclear and ballistic missile technologies.
—Kenneth R. Timmerman, "Unmask Saddam's Nuclear Lies," *Wall Street Journal*, 24 July 1991, p. A10.

13 July 1991
The *Joongang Ilbo* reports that the Scud-C missiles sold by North Korea to Syria earlier this year are "different from other Scud-C missiles." The report says the Scud-C missiles sold to Syria have a length of 15.1m, a diameter of 1.3m, a weight of 10 tons, and a range of 600km. [Note: The length and diameter dimensions are similar to those of the Nodong.]
—Lee Chae Hak, "Kkorimunŭn Pukhan Scud Such'ul/Shimsangch'anh'ŭn Taechungdong P'anmaesŏl," *Joongang Ilbo*, 13 July 1991, in KINDS, www.kinds.or.kr.

15 July 1991
South Korea's Ministry of Defense reports to the National Assembly that North Korea has formed its first surface-to-surface missile (SSM) brigade presumably armed with indigenously produced Scud-C missiles. The ministry also indicates that North Korea has produced more than 1,000 tons of chemical warheads for its missiles. [Note: It is quite possible that North Korea produced enough Scud-Cs to both outfit the SSM brigade and fill the Syrian order of January 1991. Depending on when in 1991 full-scale Scud-C production began, North Korea may have been able to outfit the brigade before filling the Syrian order.]
—Yonhap News Agency (Seoul), 15 July 1991, in "North Said To Possess 1,000 Tons of Warheads," FBIS-EAS-91-135, 15 July 1991, p. 23; John Fricker, publisher, *Milavnews*, vol. 30, no. 358, August 1991, pp. 17-18.

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16 July 1991
South Korean Defense Minister Lee Chong Ku tells the National Assembly that North Korea has reorganized its Scud regiment into a brigade, and that North Korea is now focusing on the development of its 1,000km-range Nodong-1 ballistic missile. He also says that North Korea is producing chemical weapons and that Defense Ministry analysis indicates Pyongyang has over 1,000 tons of chemical weapons.
—"Wŏlgyesuhoedŭng Insa Amnyŏk/Chilŭi/Pukhan Scud Pudae Chŭnggang/Pogo," *Joongang Ilbo*, 16 July 1991, p. 1, in KINDS, www.kinds.or.kr; "'Hanbo't'ŭkhye' Susa Yong'ŭi'nŭn/Kukhoesangwi/Pukhan Scud Pudae Chŭngp'yŏn," *Hankook Ilbo*, 17 July 1991, p. 1, in KINDS, www.kinds.or.kr.

25 July 1991
US Undersecretary of State Reginald Bartholomew declares in testimony before the US House Foreign Affairs Subcommittee on Arms Control and the Subcommittee on Europe and the Middle East that "North Korea has sold Scud missiles to Syria this year" and that "North Korea is emerging more and more as a major supplier of missiles of this type around the world."
—Federation of American Scientists, *Arms Sales Monitor*, July 1991, p. 2, www.fas.org.

Late July 1991
Syria conducts flight tests of two Hwasŏng-6 missiles.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 18.

August 1991
Ko Yŏng Hwan, a mid-level North Korean diplomat and former interpreter for Kim Il Sung who defected in May 1991, identifies underground missile manufacturing plants. One is the January 18th Machine Plant in Kag'am-ri, Kaech'ŏn-kun, South Pyŏngan Province. Another is at Man'gyŏngdae, where ground-launched anti-ship missiles are produced.
—*Seoul Shinmun* (Seoul), 9 October 1991, p. 5, in "Defector on North's Nuclear Development," JPRS-TND-91-017, 7 November 1991, pp. 8-9; Kim In Ch'ŏl, "Chŏn Kim Il Sŏng T'ong'yŏkkwan'gyŏm Kowioegyogwan/Ko Yŏng Hwan ŭn Malhanda: 6," *Taehan Maeil*, 9 October 1991, p. 5, in KINDS, www.kinds.or.kr; Michael Breen, "N. Korea Goes Underground with Nuclear Plants," *Washington Times*, 25 October 1991, p. A11.

24 August 1991
A Russian publication quotes "an unidentified Soviet military specialist who had worked for a long time in North Korea" as saying, "having encountered great difficulties [in their efforts to build an atomic bomb], the North Koreans resolved to primarily emphasize their missile program."
—A. Platkovskiy, *Komsomolskaya Pravda* (Moscow), 24 August 1991, p. 5, in "North Korean Nuclear Program Viewed," JPRS-TND-91-014, 12 September 1991, pp. 24-25.

25 August 1991
A high-ranking intelligence official in South Korea's Ministry of Defense states that North Korea is expanding its improved Scud missile regiment into a brigade, and is now developing and testing the Nodong-1 missile. The

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brigade is reportedly located near Sariwon, 50km from the Demilitarized Zone (DMZ), in the IV Corps area. The official also says that North Korea has the capability to produce around 4,500 tons of chemical agents each year.
—"Pukhan 'Scud Missile Yŏdan' Ch'angsŏl/Kukpangbu Wisŏngjaryobunsŏk Palghyŏ," *Donga Ilbo*, 25 August 1991, p. 2, in KINDS, www.kinds.or.kr; *Donga Ilbo*, 25 August 1991, p. 2, in "North Reportedly Expands Scud Unit," FBIS-EAS-91-16526, August 1991, pp. 32-33; Joseph S. Bermudez, Jr., "Ballistic Ambitions Ascendant," *Jane's Defence Weekly*, 10 April 1993, pp. 20-22.

29 August 1991
During a lecture at the Korea National Defense University, South Korean Defense Minister Lee Chong Ku says that North Korea is developing the 1,000km-range Nodong-1 ballistic missile. Minister Lee also says that North Korea's Scud regiment has been reorganized into a brigade, and that North Korea has forward-deployed 36 Scud missiles.
—"Pukhan Mig21 95Nyŏn Saengsan/Lee Chong Ku Kukpang Palkhyŏ," *Kyunghyang Shinmun*, 30 August 1991, p. 2, in KINDS, www.kinds.or.kr; "Pukhan, Mig21ki Tokchasaengsan/95Nyŏnbut'ŏ," *Chosun Ilbo*, 30 August 1991, p. 2, in KINDS, www.kinds.or.kr.

September 1991
North Korean Vice Prime Minister and Foreign Minister Kim Yong Nam denies allegations that North Korea has sold missiles to Syria commenting that, "...the DPRK is not in a position to sell missiles, simply because we have no surplus in armaments to sell to the Middle East."
—Mushahid Hussain, "The JDW Interview," *Jane's Defence Weekly*, 14 September 1991, p. 492.

20 September 1991
Kyodo News Service, quoting "international military sources," reports that North Korea could develop the Nodong-1 by the middle of 1992. According to this report, the new missile is estimated to have a range of 900km.
—"Pukhan, Sae Missile Kaebalchunug/Naenyŏnkkaji/9Paek km ... Il Taebubun Sajŏnggwŏn," *Hankook Ilbo*, 21 September 1991, p. 4, in KINDS, www.kinds.or.kr; "Pukhan Shinhyŏng Missile Kaebalbakch'a/sajŏng 9Paek km 'Nodong 1 Ho' ... Naenyŏnwallyo Chŏnmang," *Hankyoreh Shinmun*, 21 September 1991, p. 6, in KINDS, www.kinds.or.kr; "Pukhan Sae Missile Kaebal/Chidaeji SSM Ilbonkkaji Sajŏnggwŏn," *Kukmin Ilbo,* 23 September 1991, p. 1, in KINDS, www.kinds.or.kr; Pu Chi Yŏng, "Puk'e Shinhyŏng Chidaeji Missile/Sajŏnggŏri 9 Paek km," *Chosun Ilbo*, 24 September 1991, p. 2, in KINDS, www.kinds.or.kr.

21 September 1991
The Egyptian government-controlled newspaper *Al-Ahram* reports that North Korea has sold 300 Scud missiles to Iran and 20 Scud missiles to Syria, and that Libya has signed a contract for the purchase of an unspecified number of missiles. [Note: There is also a report claiming that the 20 Scud missiles were actually delivered to Iran, but this is probably the same delivery.]
—KBS-1 Radio Network (Seoul), 21 September 1991, in JPRS-TND-91-016, 29 October 1991, p. 19; "Pukhan, Iran E Scud Missile 1 Baekki Konggŭp—Egypt Shinmun," *Joongang Ilbo*, 23 September 1991, www.joins.com.

Late September 1991
According to Israeli intelligence, during a visit by Syrian Chief of Staff General Hikmat Shihabi to Tehran, Syria and

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Iran finalize an agreement for increased military cooperation, which may be part of Syria's ongoing efforts to acquire North Korean missile technology. The agreement may result in the Iranian financing of the construction of a surface-to-surface missile (SSM) joint development and production center in Syria.
—"Syria and Iran Pool SRBM Resources," *Flight International*, 16-22 October 1991, p. 15.

Fall 1991
According to Yossef Bodansky and Vaughn S. Forrest, who cite *Seoul Shinmun (Taehan Maeil),* a joint Chinese-North Korean medium-range ballistic missile prototype is tested at Yinchuan in China. However, the *Seoul Shinmun* actually reports that the test took place in July 1991.
—*Seoul Shinmun*, 7 December 1991, cited in Yossef Bodansky and Vaughn S. Forrest, "Task Force on Terrorism & Unconventional Warfare," in House Republican Research Committee, *Executive Summary: North Korean Weapons of Mass Destruction*, 11 March 1992, p. 7; "Pukhan, Chungguksŏ Tat'andu Missile Shilhŏm/Sajŏng 8 Baek km Chunggŏriyong," *Seoul Shinmun (Taehan Maeil)*, p. 1, 7 December 1991, in KINDS, www.kinds.or.kr.

1 October 1991
Ha'aretz, citing "unidentified but reliable" American sources, reports that North Korea is going to "set-up" a Scud-C production facility in Syria for joint production. Iran is to finance the facility's construction.
—"Iran, Syria Reportedly Will Build Missiles Together," Associated Press, 1 October 1991, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Syrian Commander, in Iran, Denounces U.S.-Kuwait Pact," Associated Press, 1 October 1991, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

October 1991
North Korean President Kim Il Sung visits Beijing to request China's technical assistance in order to accelerate North Korea's nuclear weapons development program. Chang Chun Ik, a retired lieutenant general and former National Assembly member, claims that Kim requested assistance for the missile program, which is more likely.
—Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 282-283; Yonhap News Agency (Seoul), 29 October 1991, cited in Yossef Bodansky and Vaughn S. Forrest, "Task Force on Terrorism & Unconventional Warfare," in House Republican Research Committee, *Executive Summary: North Korean Weapons of Mass Destruction*, 11 March 1992, p. 7.

October 1991
South Korean Ministry of Defense considers purchasing four Patriot anti-tactical ballistic missile (ATBM) batteries following North Korea's deployment of 36 Scud-C ship-to-ship missiles within 50km of the Demilitarized Zone (DMZ). [Note: The deployment is most probably a reference to the surface-to-surface missile (SSM) brigade mentioned in entries from August 1991 and possibly to the launch sites mentioned in the entry for June 1990.]
—John Fricker, publisher, *Milavnews*, vol. 30, no. 360, October 1991, p. 17.

4 October 1991
In testimony before the South Korean National Assembly, Sŏ Dong Kwŏn, director of the National Security Planning Agency, says that North Korea is in the process of deploying 36 Scud-C missiles in the Sariwŏn area. Sŏ also says that since 1989, North Korea has been exporting these missiles to the Middle East and is now developing a ballistic

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missile with a range of 1,000km.
—"Pukhan, Idong Scud Palsa Sŏnggong/Sŏ An'gibujang," *Taehan Maeil (Seoul Shinmun)*, 5 October 1991, p. 2, in KINDS, www.kinds.or.kr.

13 October 1991
According to *The Times* of London, Western intelligence sources have indicated that North Korea has exported 20 Scud missiles to Iran, some of which have already arrived and are fully assembled. It reports that missiles bound for Syria will arrive in the near future. According to the report, analysts say that North Korea is exporting the missiles to help alleviate its foreign exchange shortage.
—KBS-1 Television Network, 13 October 1991, in "DPRK Scuds Said To Arrive in Iran," FBIS-EAS-91-199, 15 October 1991, pp. 26-27.

28 October 1991
The South Korean Ministry of Defense publishes its *Defense White Paper 1991-1992*. The report states that North Korea has the ability to produce approximately 100 Scud-type ship-to-ship missiles annually and has deployed additional Scuds and their related radar sites. The ministry also says that North Korea has been "developing and experimenting" with the new Nodong-1 ballistic missile.
—Ministry of National Defense, Republic of Korea, *Defense White Paper 1991-92* (Seoul: Ministry of National Defense, 1991), p. 98; John Fricker, publisher, *Milavnews*, vol. 30, no. 361, November 1991, pp. 13-14.

30 November 1991
According to 32-year-old Ko Ch'ŏng Song, who defected from North Korea in June 1993, an explosion takes place at the Kanggye No. 26 General Plant at about 9:30 PM. According to Ko, the plant is underground, in tunnels at the base of a mountain, and the missile assembly area is called the "Number 11 Workplace" (Chae 11 Ho Chikchang). Ko says explosions continue until about 10:00 AM the next morning, destroying several homes in the area. The official death toll is said to be 127, and that the total number of casualties is about 200, including nearby citizens. The plant, which Foreign Broadcast Information Service (FBIS) quotes KBS-1 as saying is the largest of its kind in North Korea, produced missiles, artillery shells, depth charges, mines, and torpedoes. The factory produced surface-to-air missiles (SAMs) with a range of 200km, ship-to-ship missiles, and air-to-surface missiles (ASMs). The missiles are reportedly called Hwasŏng-1, Hwasŏng-2, and Hwasŏng-3, but the designations for each missile are not exactly clear. Ko says there are about 20,000 workers employed at the site, and he claims to have been about 2km from the explosion.
—KSB-1 Radio Network (Seoul), 19 March 1994, in "Japanese Paper Reports 1991 Explosion at Missile Plant," JPRS-TND-94-007, 23 March 1994, pp. 2-3; "Puk Nodongja 2 Baeg'yŏ'myŏng Ch'ambyŏn/Chiha Missile Kongjang P'okpal/91 Nyŏn 11 Wŏl 30 Il," *Chosun Ilbo*, 20 March 1994, p. 6, in KINDS, www.kinds.or.kr; "Pukhan Kanggye Chiha Missile Kongjang/91 Nyŏn Taepokpal 2 Baeg'yŏ'myŏng Sa'mang/Ilchi Podo," *Kukmin Ilbo*, 19 March 1994, p. 19, in KINDS, www.kinds.or.kr; "Kanggye Missile Kongjang 91 Nyŏn Taepokpal Sago/Ilchi '2 Baeg'myŏng Sa'mang'," Donga Ilbo, 20 March 1994, p. 2, in KINDS, www.kinds.or.kr; "Pukhan 91 Nyŏn Missile Kongjang P'okpal Ch'amsa/Changnyŏn Kwisun Ko Ch'ŏng Song Ssi Palghyŏ," *Kyunghyang Shinmun*, 20 March 1994, p. 5, in KINDS, www.kinds.or.kr; "Puk Missile Kongjang 91 Nyŏn Taepokpal/Nodongja 2 Baeg'yŏ'myŏng Sa'mang," *Segye Ilbo*, 20 March 1994, p. 4, in KINDS, www.kinds.or.kr.

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December 1991
US government officials announce that the North Korean ship *Mupo* has returned to the port of Namp'o, reportedly without delivering its cargo of missiles to Syria. The *Mupo* followed a circuitous route similar to that of the *Al-Yarmouk* out of fear of Israeli interception. However, there is some speculation that the *Mupo's* cargo was transferred to another freighter at Gibraltar to complete its voyage to Tartus, Syria.
—Bill Gertz, "Ship with Scud Cargo for Syria Alters Course," *Washington Times*, 9 November 1991, p. A6; Bill Gertz, "North Korean Missiles Likely on 2nd Ship," *Washington Times*, 10 December 1991, p. A6.

2 December 1991
German intelligence service head Konrad Porzner reveals in an interview that North Korea not only sells Scud missiles to other countries, but also assists in extending the range of these missiles and establishing production facilities for them.
—Heinz Schulte, "Nonproliferation Warning from Intelligence Head," *Jane's Defence Weekly*, 14 December 1991, p. 1134; "Pukhan Missile Kisulgaebale Ap'chang—Tŏgiltaeoejŏngbobŏnbujang Palkhyŏ," *Joongang Ilbo*, 3 December 1991, www.joins.com.

6 December 1991
A "South Korean military source" claims there are 230 North Korean military personnel and weapons specialists at China's Dalian naval base to acquire technology for ship-to-ship missiles, ballistic missiles, and surface-to-air missiles (SAMs). [Note: If this report is true, the North Korean engineers may be attending the Dalian Institute of Chemical Physics, under the Chinese Academy of Sciences. The institute studies rocket propellant combustion and laser devices.]
—"Pukhan, Chungguksŏ Tat'andu Missile Shilhŏm/Sajŏng 8 Baek km Chunggŏriyong," *Seoul Shinmun (Taehan Maeil)*, p. 1, 7 December 1991, in KINDS, www.kinds.or.kr. Pakistani officials are seen in North Korea examining a prototype model of the Nodong-1. [Note: This report is unsubstantiated.] Bill Gertz, "Iran-Bound Mystery Freighter Carried Parts for Missiles," *Washington Times*, 16 July 1992, p. A3.

1990

Early 1990
Iran purchases 20 Scud-B missiles from North Korea.
—Steven Emerson, "The Postwar Scud Boom," *Wall Street Journal*, 10 July 1991, p. A12.

Early 1990
North Korea's first test of its modified Scud-C is believed to have been a failure. [Note: This conflicts with the first report of a North Korean Scud-C flight test in May 1986.]
—"A Lonely State of Defiance," *Jane's Defence Weekly*, 8 August 1992, pp. 26-27.

1990
The North Korean Navy completes construction of a surface-to-ship missile base at Mt. Kanggamch'an, across from the Kanepo Fisheries Cooperatives in Chungsan-kun, South Pyŏngan Province. This facility also has an

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intermediate-range missile base that was completed around 1985.
—Testimony of Ko Yŏng Hwan, former North Korean Foreign Ministry official, before the US Senate, 21 October 1997.

1990
According to Ko Yŏng Hwan's testimony before the US Senate, the North Korean Military Construction Bureau begins construction of a missile base in "Chungganjin, Huch'ang-kun, Chagang Province." According to Im Yŏng Sŏn, North Korea plans to finish the construction by 1995. [Note: Ko's reference is incorrect. There is no "Chungganjin, Huch'ang-kun" in Chagang Province. There is a "Hŭich'ŏn City," but it is at the southern end of the province, and this conflicts with other reports of the missile base's location. The base is probably located at Chunggang-kun, Chagang Province, near the Chinese border. There are references to both "Chinggang" and "Chungangjin" in South Korean press reports.]
—Testimony of Ko Yŏng Hwan, former North Korean Foreign Ministry official, before the US Senate, 21 October 1997; "Chagangdo Chungganjin Dŭng Chungguk Kukkyŏng/Puk, Missile Kiji Kŏnsolchung," *Chosun Ilbo*, 9 April 1994, p. 7, in KINDS, www.kinds.or.kr; "Puk, Chunggukkukkyŏng'e Missile Kiji/Naenyŏn Wan'gong/Tongbuk 3 Sŏng-Pukkyŏngdo Sajŏnggwŏn'e," *Taehan Maeil*, 9 April 1994, p. 2, in KINDS, www.kinds.or.kr; Lee T'ae Hyŏng, "Puk, Chungguk Kukkyŏng'e Missile Kiji/Han-Mi P'okkyŏk Ŏkche Noryŏ/Ilchi Podo," *Kukmin Ilbo*, 8 April 1994, in KINDS, www.kinds.or.kr.

1990-91
Full-scale production of Hwasŏng-6 begins with about four to five missiles per month.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 16.

1990-91
According to a BBC documentary broadcast in July 1991, North Korea is helping Egypt establish a Scud-C missile production plant outside Cairo. The facility "is operated and developed by Arab-British Dynamics Co., a consortium owned by Egypt, Saudi Arabia, Abu Dhabi and Britain."
—Steven Emerson, "The Postwar Scud Boom," *Wall Street Journal*, 10 July 1991, p. A12.

1990-1992
Approximately 30-50 specialists from Russia and Eastern Europe secretly visit North Korea to work on heat-resistant materials for re-entry vehicles.
—Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), p. 295.

Early 1990s
North Korea begins development of the Paektusan-1 (Taepodong-1) and Taepodong-2 missiles. The Korean name for the Taepodong-1 is unknown until September 2001; the missiles are named after two areas (dongs) in Hwadae-kun. The missiles are designed to carry a 1,000-1,500kg warhead 1,500-2,500km, and the same warhead 4,000-8,000km respectively.

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—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 26.

Early 1990s

North Korean FROG battalions are reorganized into a brigade subordinate to the Artillery Command.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 14.

Early 1990s

North Korea begins to deploy long-range artillery and rockets near the northern side of the Demilitarized Zone (DMZ), which would reduce the warning time available to South Korea in case of an attack.
—John M. Deutch, "Worldwide Threat Assessment Brief to the Senate Select Committee on Intelligence by the Director of Central Intelligence, John M. Deutch," 22 February 1996, www.odci.gov.

22 February 1990

According to the newspaper *Izvestia*, Vladimir Kryuchkov, head of the KGB, issues a memo to the Soviet leadership that says North Korea "has completed the development of its first atomic explosive device." According to the memo, the development was completed at the nuclear research center in Yŏngbyŏn."
—Yevgenia Albats, *Izvestia*, 24 June 1990, p. 4, in "Pyongyang and the Bomb: When Did Moscow Hear?" *Current Digest of the Post-Soviet Press*, 20 July 1994, p. 16, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Report Suggests N. Korea Has Nuke Weapon," United Press International, 23 June 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Verbatim: And that Was in 1990," *Air Force Magazine*, Vol. 77, No. 8, August 1994, www.afa.org; Warren Strobel, "N. Korea Shops for Nuke Technology in Russia," *Washington Times*, 5 July 1994, p. A1.

23 February 1990

South Korean Defense Minister Lee Jŏng Hun tells the National Assembly's National Defense Committee that North Korea is extending the range of its Scud missiles to over 500km. Minister Lee also says that North Korea is building nuclear facilities in Yŏngbyŏn-kun on a large scale and that North Korea could produce nuclear weapons in mid 1990's.
—"Nambuk Kunch'ukhyŏpsang Ch'ujin/I Kukpang, 3 Tan'gyero/Sangho Shilloeguch'uk Hotline Sŏlch'ido," *Kyunghyang Shinmun*, 24 February 1990, p. 2, in KINDS, www.kinds.or.kr.

26 March 1990

News reports announce that South Korea and the USSR will accelerate moves to establish full diplomatic relations. The announcement follows a week-long trip to the USSR by Kim Young Sam, co-chairman of South Korea's Democratic Liberal Party.
—Mary Dejevsky, "Moscow Hastens Seoul Ties," *The Times*, 27 March 1990, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

May 1990

A US intelligence satellite photographs a new intermediate-range ballistic missile (IRBM), with an estimated range

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of 1,000km, on its launcher at the Musudan-ri Range in Hwadae-kun in eastern North Korea. Analyses of subsequent photographs of the launch pad reveal burn marks, which are believed to indicate that the missile exploded on the pad. [Note: This is very likely the so-called "Nodong-1."]
—Bill Gertz, "Libya May Buy N. Korean Missiles," *Washington Times*, 4 June 1991, p. 4; Yonhap News Agency (Seoul), 24 June 1993, in "Defense Ministry: May Nodong-1 Test Successful," FBIS-EAS-93-120, 24 June 1993, p. 19; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 21; Joseph S. Bermudez, Jr., "An Analysis of North Korean Ballistic Missile Testing," *Jane's Intelligence Review*, April 1995, p. 186; Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 280-281; "Pukhan, Sae T'ando Missile Saengsan-Haekt'apchae Kanŭng," *Joongang Ilbo*, 5 June 1990, www.joins.com; "Pukhan Kaebal T'ando Missile Ch'otshihŏmbalsa—Mijŏngbogigwandŭl Punsŏk," *Joongang Ilbo*, 6 July 1990, www.joins.com.

May 1990
Egyptian President Hosni Mubarak visits Pyongyang. He is believed to have visited the 125 Factory where the Hwasŏng-6 is assembled.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 19.

Early June 1990
North Korea is reported to be building two launch sites near the MDL. According to the *Washington Times,* imagery shows two concrete launch pads under construction with SA-5 surface-to-air missiles (SAMs) and support radar near the site. The sites are expected to become operational in mid-1991. [Note: The site is probably one of the missile bases at Sariwŏn, Chiha-ri, or Shin'gye. Shin'gye is about 50km north of the MDL in North Hwanghae Province.]
—Bill Gertz, "North Korea Builds 2 Missile Launch Sites," *Washington Times*, 14 June 1990, p. A4; "Pukhan, DMZ Pu'gŭn Sae Missile Kiji Haekt'andu Changch'ak Kanŭng," *Joongang Ilbo*, 15 June 1990, www.joins.com; "Pukhan'ŭi DMZ Haekkiji Kŏnsŏl (Sasŏl)," *Taehan Maeil (Seoul Shinmun)*, 16 June 1990, p. 2, in KINDS, www.kinds.or.kr; Kim Pyŏng Mu, "Haekchangch'ak Kanŭng T'ando Missile Palsadae 2Ki/Pukhan, DMZ Pugŭn Kŏnsŏlchung," *Segye Ilbo*, 15 June 1990, p. 1, in KINDS, www.kinds.or.kr; Kim Ch'ang Ki, "Pukhan, DMZ Pugŭn Sae Missile Kiji," *Chosun Ilbo*, 15 June 1990, p. 1, in KINDS, www.kinds.or.kr.

June 1990
North Korea conducts its first successful test of a Scud-C, launching from the Hwadae-kun (Musudan-ri) missile test site south over the Sea of Japan.
—Joseph S. Bermudez, "Ballistic Ambitions Ascendant," Jr., *Jane's Defence Weekly*, 10 April 1993, pp. 20, 22; Joseph S. Bermudez, Jr., "An Analysis of North Korean Ballistic Missile Testing," *Jane's Intelligence Review*, April 1995, p. 185; Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 272-273; Lee Jŏng Hun, "FROGesŏ Taepodong Kkaji: Pukhan Missile Game," *Shindonga,* August 1999, p. 203; "A Lonely State of Defiance," *Jane's Defence Weekly*, 8 August 1992, pp. 26-27; "Ballistic Missile Threat Evolves," *International Defense Review*, vol. 33, no. 10, 1 October 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

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4 June 1990
South Korean President Roh Tae Woo meets with Soviet President Mikhail Gorbachov in San Francisco, where they agree in principle to establish diplomatic relations, and "to expand economic, scientific, and technical links." The meeting infuriates the North Korean leadership, and seriously worsens already deteriorating North Korea-USSR bilateral relations. North Korean media later criticized Roh for his "flunkeyist, submissive and traitorous trip," and also say, "Our people cannot but have a doubt about the attitude of the Kremlin which sat face-to-face with such a dictator."
—Martin Fletcher, "Moscow Ties with Seoul to Thaw Ice," *The Times*, 6 June 1990, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Joe Joseph, "North Korea Hits at 'Traitorous Pair'," *The Times*, 8 June 1990, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Martin Fletcher, "Boost for 'Gorby' as Mania Factor Continues," *The Times*, 5 June 1990, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

August 1990
Yonhap News Agency, quoting *Komsomolskaya Pravda* (Communist Youth's Truth), reports that the USSR signs a contract with North Korea for the provision of 200 rocket experts. The deal is reportedly called off in exchange for a South Korean loan when the USSR normalizes relations with South Korea.
—Yonhap News Agency (Seoul), 23 April 1994, in "Russian Scientists Assisting DPRK in Nuclear Program," JPRS-TND-94-011, 16 May 1994, pp. 51-52.

Early November 1990
The US detects North Korean preparations for a second attempt to test-launch its intermediate-range ballistic missile (IRBM; Nodong-1). According to the *Washington Times,* "vehicular activity" near the launch pad is detected, as well as activity at nearby radar stations that could track the missile's flight. However, radar-tracking ships positioned in the Sea of Japan, the likely impact zone, observe no launch.
—Bill Gertz, "North Korea Set to Test Missiles," *Washington Times*, 12 November 1990, p. A3; "Pukhan, Sae Missile Kot Shilhŏmbalsa—Washington Times Ji Podo," *Joongang Ilbo*, 13 November 1990, www.joins.com; Bill Gertz, "Libya May Buy N. Korean Missiles," *Washington Times*, 4 June 1991, p. 4; Joseph S. Bermudez, Jr., "An Analysis of North Korean Ballistic Missile Testing," *Jane's Intelligence Review,* April 1995, pp. 185-186.

November 1990
According to the Central News Network, Iraq sends a delegation to North Korea to discuss the purchase of Scud missiles and launchers, and to consult on the establishment of Scud missile production facilities.
—Central News Network, "CNN Specials," Transript #53, 11 March 1991, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Pukhan, Sajŏng 6 Baek Mile Isang Shinhyŏng Scud Missile Kaebal," *Joongang Ilbo*, 12 March 1991, http://web.joins.com.

29 November 1990
A North Korean team led by Defense Minister O Jin U, visits Tehran, where they meet with senior Iranian officials, including the head of the IRGC, Mohsen Rezai, and the Ayatollah's son, Ahmed Khomeini. The visit culminates in a second series of agreements between the two countries, which are believed to include the purchase of North Korea's Scud-C missile and the conversion of a missile maintenance facility in eastern Iran (Ishafan) into a

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production facility.
—Steven Emerson, "The Postwar Scud Boom," *Wall Street Journal*, 10 July 1991, p. A12; Joseph S. Bermudez, Jr., "Iran's Missile Developments," in William C. Potter and Harlen W. Jencks, eds., *International Missile Bazaar: The New Supplier's Network*, (Boulder, San Francisco and Oxford: Westview Press, 1994), p. 57; Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 273, 276-277; "Ballistic Missile Threat Evolves," *International Defense Review*, vol. 33, no. 10, 1 October 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

Late 1990
Intelligence reports indicate that missile launchers have been spotted in Syria, but it is not clear whether they are for the Chinese M-9 or the North Korean Scud-C.
—Elaine Sciolino and Eric Schmitt, "Algerian Reactor Came from China," *New York Times*, 15 November 1991, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

Late 1990
North Korea deploys 12 Scud missile launchers near the Demilitarized Zone (DMZ). [Note: The missiles are probably deployed at Sariwŏn, Chiha-ri, or Shin'gye. Shin'gye is about 50km north of the MDL in North Hwanghae Province.]
—Kim Chun Pŏm, "Pukhan'ŭi Haek-Missile Kisulsujun Ŏddŏn'ga," *Joongang Ilbo*, 19 March 1992, p. 6, in KINDS, www.kinds.or.kr.

December 1990
North Korean technical advisors arrive in Iran to fulfill the 29 November 1990 conversion agreement. The North Korean technicians work on changing "a missile maintenance facility in eastern Iran into a missile production site." Iranian military officials are trained in North Korea to manufacture and launch ballistic missiles.
—Steven Emerson, "The Postwar Scud Boom," *Wall Street Journal*, 10 July 1991, p. A12.

December 1990
North Korea agrees to sell Scud-B and Scud-C missiles to Iraq.
—Steven Emerson, "The Postwar Scud Boom," *Wall Street Journal*, 10 July 1991, p. A12.

December 1990
An Israeli official comments that Syria, using the $2 billion that it received for participation in the 1990-91 Gulf War, has purchased extended-range Scud-C missiles from North Korea as part of a program to acquire advanced weapons systems. According to *Flight International,* Israel claims the two-sides are "about to sign a contract" for the missiles.
—John Fricker, publisher, *Milavnews*, vol. 30, no. 351, January 1991, pp. 22-23; "Syria 'Signed for N Korean Scuds'," *Flight International*, 13 March 1991, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com. Full-scale production of the North Korean Scud-C at four to eight units per month is reached. Joseph S. Bermudez, Jr., "Ballistic Ambitions Ascendant," *Jane's Defence Weekly*, 10 April 1993, pp. 20, 22; Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), p. 277.

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1989-1960

1989-1990

North Korea produces a small number of Nodong missile prototypes.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 22.

Late 1980s-1990s

North Korea receives 9M111 Fagot (AT-4 Spigot) and 9M113 (AT-5 Spandral) anti-tank guided missiles (ATGMs), and the 9K34 Strela 3 (SA-14 Gremlin) and 9K310 Igla-1 (SA-16 Gimlet) surface-to-air missiles (SAMs) from Russia. Pyongyang is believed to have produced at least the 9M111 Fagot and the 9K34 Strela 3.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 32.

Late 1980s

According to North Korea's First Lieutenant Im Yŏng Sŏn, who defected on 11 August 1993, North Korea has completed construction of two underground long-range missile launch bases, one at Mount Komdŏk, Hwadae-gun, North Hamgyŏng Province and another at Okp'yŏng-nodongjagu, Munch'ŏn, Kangwŏn Province. Im also says that North Korea is currently building two missile bases at Chunggang, Chagang Province and at Wonsŏn, Kangwŏn Province. [Note: There are reports of the location being "Chunggang" and "Chunggangjin." The locations given are near Scud development facilities on North Korea's east coast. The sites are not related to North Korea's Scud regiment, which is reportedly located in the IV Corps area near Sariwŏn in the southwest of the country.]
—Kim Hŭi Ch'ŏl, KBS-1 Radio Network (Seoul), 24 August 1993, in "Says Long-Range Missile Bases Built," FBIS-EAS-93-162, 24 August 1993, p. 23; "2 N. Korean Missile Bases Allegedly Target Japan," Jiji Press, 24 August 1993, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Hankook Ilbo, "Puk Missile Kiji 2 Kot Wan'gong/Haengmugi Poyu...Yusashi Shiljŏnsayong Midŏ," 25 August 1993, p. 22, in KINDS, www.kinds.or.kr; Taehan Maeil (Seoul Shinmun), "'Pukhan, Yŏngbyŏnsŏ Chiha Haekshilhŏm'/Changgŏri Missile Kiji Sugot Kŏnsŏl," 25 August 1993, p. 22, in KINDS, www.kinds.or.kr; Kim Hong Chin, "Guam Dŭng Migun'gonggyŏk Missile Kiji/Puk, 2 Kot Wan'gong 2 Kot Kŏnsŏlchung," Chosun Ilbo, 25 August 1993, p. 30, in KINDS, www.kinds.or.kr.

1989

The (North) Korea International Joint Venture Corporation (朝鮮國際合營總公社) and Choch'ongnyŏn's [the General Federation of Korean Residents in Japan] Committee for the Promotion of Joint Venture Business (朝總聯合營事業促進委員會) establish the Korea Joint Venture Bank (朝鮮合營銀行). The Korea Joint Venture Bank is mainly involved in international banking and has cooperation agreements with about 40 banks in countries such as Australia, Austria, Canada, China, Belgium, Germany, Japan, Malaysia, Russia, the United Kingdow, and Hong Kong. There is no direct evidence that the Korea Joint Venture Bank has been involved in missile-related transactions; however, Choch'ongnyŏn has reportedly provided components for the production of ballistic missiles. Therefore, there is a possibility that the Korea Joint Venture Bank could be involved in the financial services for any of these types of transactions. [Note: The Korea Ch'anggwang Credit Bank (朝鮮創光信用銀行) has been identified as the recipient of payments from the importers of North Korean ballistic missiles.]
—Ha Sŭng Pŏm, "Pukhanŭi Kiŏp List," Korea Trade-Investment Promotion Agency, April 2002, www.kotra.or.kr; M. O. Cho, "North Korean Company List," Korea Trade-Investment Promotion Agency, 10 January 2001, www.kotra.or.kr; Choch'ongnyŏn, "Ch'ongnyŏnhab'yŏngsaŏpch'ujinwiwŏnhoe," 2001, www.chongryon.com; Web Kaigaijigyobu, "Chosenminsyusyugijinminkyowakokuhen: Kinyu," Tokyo Outosourcing Co. [sic], Ltd., 2001, www.eeyo.net.

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1989
North Korea begins development of the Nodong intermediate-range ballistic missile (IRBM).
—Yu Yong Won, Chosun Ilbo, 20 March 1994, p. 4, in "Reporting on Status of Missile Development," JPRS-TND-94-008, 1 April 1994, pp. 12-13; Yu Yong Wŏn, "Puk Shinhyŏngjidaeji 'Taepodong12ho' [sic] Sajŏnggŏri 2Ch'ŏn ~ 3Ch'ŏn5Baek km," Chosun Ilbo, 20 March 1994, p. 4, in KINDS, www.kinds.or.kr.

1989
Anritsu Corp., Yokohama Machinery Trading Co., and one other Japanese company allegedly sell spectrum analyzers to North Korea via China. Yokohama Machinery Trading Company transfers three spectrum analyzers and an accessory device to Beijing between January and March, but does not register the transfer with Japanese authorities. The spectrum analyzers are capable of discerning differences in UHF waves down to one wave per a few hundred million.
—Michiyo Nakamoto, "Japan Police in Export Raid: Machinery Sales to N. Korea May Have Breached Cocom Rules," Financial Times, 15 January 1994, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Terry McCarthy, "Japanese Hi-Tech in North Korean Missiles, Independent (London), 15 January 1994, p. 13; Lee Sŏk Ku, "'Nodong 1 Ho' Pupum Ilche Chupasubunsŏkki/Chungguk Kŏch'yŏ Milsu Ch'ujŏng," Joongang Ilbo, 15 January 1994, p. 4, in KINDS, www.kinds.or.kr.

1989
According to retired Israeli Brigadier General Aharon Levran, now an independent military analyst, Egypt turns to North Korea for assistance in upgrading its arsenal of Soviet-supplied Scud missiles. The nature of the assistance is not known but may consist of provision of spare parts or installation of improved components, including guidance. Levran also says that North Korea is helping Iran develop ballistic missiles. [Note: It has been five years since the Egypt-North Korean deals of the early 1980s. It is unclear what brought on the five-year lapse in the relationship.]
—Korea Times, 30 December 1989, p. 4, in "Missile Cooperation with North Korea Alleged," JPRS-TND-90-002, 17 January 1990, p. 12.

1989
North Korea and the United Arab Emirates (UAE) conclude an arms sales agreement worth $160 million. The deal stipulated that North Korea supply "25 Hwasŏng-5 missiles, self-propelled artillery, multiple-rocket launchers, and munitions." Some analysts claim the sale was a covert operation by the United States to acquire North Korean weapon systems.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 12.

January-March 1989
Yokohama Machinery Trading Company transfers three spectrum analyzers and an accessory device to Beijing, but does not register the transfer with Japanese authorities. The spectrum analyzers are capable of discerning differences in UHF waves down to one wave per a few hundred million.
—Lee Sŏk Ku, "'Nodong 1 Ho' Pupum Ilche Chupasubunsŏkki/Chungguk Kŏch'yŏ Milsu Ch'ujŏng," Joongang Ilbo, 15 January 1994, p. 4, in KINDS, www.kinds.or.kr.

May 1989
North Korea and Iran reportedly reach an agreement for the continued delivery of Scud-B missiles, and an extension of Iranian financing of North Korea's Scud development program.

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—Joseph S. Bermudez, Jr., "Iran's Missile Developments," in William C. Potter and Harlan W. Jencks, eds., International Missile Bazaar: The New Supplier's Network (Boulder, San Francisco and Oxford: Westview Press, 1994), p. 57.

October 1989
Islamic Revolution Guards Corps (IRGC) commander Mohsen Rezai travels to Pyongyang to meet with North Korean leader Kim Il Sung regarding final plans for the expansion of the Isfahan missile complex, and to address the development project for an extended-range Scud-B (Scud-C).
—Kenneth Timmerman, "Iran's Ballistic Missile Program," Mednews, 21 December 1992, p. 5.

8 December 1989
South Korea and the USSR announce they will establish consular relations. The announcement is a blow to North Korea-Soviet bilateral relations.
—"Seoul and Moscow Set Up Partial Ties," New York Times, 9 December 1989, p. 3, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

29 December 1989
Israeli military sources say that Syria is approaching North Korea for assistance in the development of surface-to-surface missiles (SSMs) after China, under US pressure, withdrew from a similar deal. The sources also indicate that Egypt and North Korea are engaged in a project to develop a missile based on the Soviet Scud missile; part of this project is being developed in Egypt. Retired Israeli Brigadier General Aharon Levran says that published reports indicate that North Korea is assisting Iran in the development of an indigenous SSM.
—Associated Press, "Syrian Bid for N. Korea Arms Aid Reported," Los Angeles Times, 30 December 1989, p. A8, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Syria Is Reported to Seek Help from N. Korea to Get Missiles," St. Louis Post-Dispatch, 31 December 1989, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Korea Times, 30 December 1989, p. 4, in "Missile Cooperation With North Korea Alleged," JPRS-TND-90-002, 17 January 1990, p. 12.

Late 1989
Pilot production of the North Korean Hwasŏng-6 (Scud-C) begins, and the first systems become operational.
—Joseph S. Bermudez, Jr., "Ballistic Ambitions Ascendant," Jane's Defence Weekly, 10 April 1993, pp. 20, 22; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 16; Chang Chun Ik, Pukhan Haek-Missile Chŏnjaeng (Seoul: Sŏmundang, May 1999), p. 273.

1988
According to Jane's Intelligence Review, US Department of Defense sources claim that North Korea "is still importing rocket engine technology and guidance components from China."
—Gordon Jacobs and Tim McCarthy, "China's Missile Sales—Few Changes for the Future," Jane's Intelligence Review, December 1992, p. 560.

1988
A "South Korean military source" claims that North Korea sends 90 military officials and weapons specialists to Yinchuan, China to learn "nuclear testing technology" and "missile flight testing technology." The claim is made in December 1991, but the length and type of training is uncertain. [Note: The number is most likely a cumulative total between 1988 and December 1991.]

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—"Pukhan, Chungguksŏ Tat'andu Missile Shilhŏm/Sajŏng 8 Baek km Chunggŏriyong," Seoul Shinmun (Taehan Maeil), p. 1, 7 December 1991, in KINDS, www.kinds.or.kr.

1988
Iran begins limited-scale assembly of North Korean Scud-B missiles from "knock-down kits" at a facility near Isfahan, Iran's largest ballistic missile plant.
—Kenneth Timmerman, "Iran's Ballistic Missile Programs," Mednews, 21 December 1992, pp. 4-5; Andrew Rathmell with contributions by James Bruce and Harold Hough, "Iran's Weapons of Mass Destruction," Jane's Intelligence Review, Special Report No. 6, 1995, p. 20.

1988
North Korea establishes a Scud-B regiment within the IV Corps in the southwest of the country. One source indicates that North Korea deploys Scud missiles at Shin'gye, North Hwanghae Province, which is located in the II Corps area. A Yonhap News Agency report in 1993 claims the deployment consisted of Scud-C missiles. [Note: This could be the first deployment of North Korean produced Hwasŏng-5 (Scud-B) missiles in North Korea.]
—Joseph S. Bermudez, Jr., "Ballistic Ambitions Ascendant," Jane's Defence Weekly, 10 April 1993, pp. 20, 22; Chang Chun Ik, Pukhan Haek-Missile Chŏnjaeng (Seoul: Sŏmundang, May 1999), p. 270; Yonhap News Agency, 24 June 1993, in "Defense Ministry: May Nodong-1 Test Successful," FBIS-EAS-93-120, 24 June 1993, p. 19.

1988
North Korea begins its Scud-B upgrade (Scud-C) program to double the missile's range to 600km. The program includes extending the length of the missile, fuel, and oxidizer tanks by one meter. The size of the warhead is reduced from 985kg to 700kg, and an improved inertial guidance system is installed. [Note: This conflicts with reports of a Scud-C flight test in May 1986.]
—Chang Chun Ik, Pukhan Haek-Missile Chŏnjaeng (Seoul: Sŏmundang, May 1999), pp. 272-273; Kyodo News Service, "Asian News; N. Korea Deploys Scuds, May Reach Whole S. Korea in 1992," Japan Economic Newswire, 2 February 1991, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; United Press International, "North Korea Builds Own Scud Missiles," 2 February 1991, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Yonhap News Agency, 2 February 1991, in "Information Provided on DPRK Scud Missiles," JPRS-TND-91-003, 25 February 1991, pp. 6-7.

1988
Iran provides North Korea with wreckage of Al-Hussein missiles used by Iraq in the "war of the cities." This may have helped with the North Korean program to produce the Scud-C.
—Chang Chun Ik, Pukhan Haek-Missile Chŏnjaeng (Seoul: Sŏmundang, May 1999), p. 275-276.

1988
North Korea begins development of the Nodong missile.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 20; Yonhap News Agency, 24 June 1993, in "Defense Ministry: May Nodong-1 Test Successful," FBIS-EAS-93-120, 24 June 1993, p. 19.

1988
The North Korean Military Construction Bureau's 117th Regiment completes construction of a missile base in Hwadae-kun, North Hamgyŏng Province. The base has underground facilities with missiles designed to strike Japan.

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—Testimony of Ko Yŏng Hwan, former North Korean Foreign Ministry official, before the US Senate, 21 October 1997.

Early 1988
Iran purchases 40 Scud-B missiles from North Korea. The missiles are employed during the War of the Cities from February 1988 to April 1988. [Note: These missiles may be part of the June 1987 purchase rather than an additional purchase. This may also be a reference to one of the missile deliveries taking place from July 1987 to February 1988.]
—Steven Emerson, "The Postwar Scud Boom," Wall Street Journal, 10 July 1991, p. A12.

Early January 1988
According to US intelligence sources, Iran receives a large shipment of arms from North Korea. The shipment arrives at the Iranian naval base at Bandar Abbas and contains "four Soviet Styx anti-ship missiles and at least one Silkworm anti-ship missile."
—John M. Broder, "Five Key Nations Sold Arms to Iran Last Year," Los Angeles Times, 20 January 1988, p. 5, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

19 January 1988
North Korea denies allegations made in the US news media that Chinese-made Silkworm missiles are being supplied to Iran via North Korea.
—Korean Central News Agency, 19 January 1988, in "KCNA Denies Silkworms Shipped to Iran," FBIS-EAS-88-011, 19 January 1988, pp. 14-15.

Early February 1988
Deliveries from the June 1987 North Korean Scud-B sale to Iran are completed. The deliveries began in 1987 and total about 100 missiles.
—Joseph S. Bermudez, Jr., "New Developments in North Korean Missile Program," Jane's Soviet Intelligence Review, August 1990, pp. 343-345; Chang Chun Ik, Pukhan Haek-Missile Chŏnjaeng (Seoul: Sŏmundang, May 1999), p. 270.

Late February 1988
According to British and US military sources quoted by the United Arab Emirates newspaper Al-Ittihad, the Iranian ship Iran Teyfouri delivers "80 HY-2 Silkworm and 40 Scud-B missiles from China and North Korea" to the Iranian port of Bandar Abbas. The report says, "China and North Korea recently sold Iran 80 surface-to-surface Silkworm missiles and 40 Soviet-made Scud Missiles." [Note: The report does not clearly define "Soviet-made" as "Soviet-manufactured" or "Soviet-designed and North Korean produced."]
—Agence France Presse (Paris), 1 April 1988, in "Government Buys Chinese, N. Korean Missiles," FBIS-NES-88-063, 1 April 1988, p. 45.

14 April 1988
Iranian First Deputy Defense Colonel Rahimi states, "We have also succeeded in manufacturing missiles with a range of 320km." He also says that Iran is now "manufacturing different types of batteries for missile-launchers that they once purchased." [Note: The range given is consistent with the North Korean-upgraded Scud-B missile.]
—Tehran Domestic Service, 14 April 1988, in "Radio Phone-In Program with Defense Officials," FBIS-NES-88-073, 15 April 1988, p. 51.

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October 1988
Partially in response to North Korean efforts to acquire missile technology, the Japanese Ministry of International Trade and Industry (MITI) bans the export of missile-related components abroad.
—Joseph S. Bermudez, Jr. and W. Seth Carus, "The North Korean 'Scud B' Programme," Jane's Soviet Intelligence Review, April 1989, pp. 177-181.

Late 1988
North Korea and Iran establish a secret joint military commission to facilitate military cooperation.
—Steven Emerson, "The Postwar Scud Boom," Wall Street Journal, 10 July 1991, p. A12.

1987-1992
North Korea exports 250 missiles worth $580 million to countries in the Middle East, including Iran and the United Arab Emirates.
—Lim Yun-Suk, "US and N. Korea to Hold Talks on Pyongyang's Missile Exports," Agence France Presse, 28 March 1999.

1987-1992
According to Jane's Intelligence Review, North Korea exports 200-300 Scud-B missiles to Iran.
—Andrew Rathmell, with contributions by James Bruce and Harold Hough, "Iran's Weapons of Mass Destruction," Jane's Intelligence Review, Special Report No. 6, 1995, p. 20.

1987-88
North Korea begins working on development of the Hwasŏng-6 (Scud-C).
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, pp. 14-15.

1987-88
North Korea exports about 100 Scud missiles to Iran.
—Kim Chun Pŏm, "Pukhan'ŭi Haek-Missile Kisulsujun Ŏddŏn'ga," Joongang Ilbo, 19 March 1992, p. 6, in KINDS, www.kinds.or.kr.

1987-88
North Korea delivers HY-2 anti-ship missiles (ASMs) to Iran. [Note: The agreement for the shipments was signed in 1986.]
—Christopher F. Foss, ed., Jane's Armour and Artillery 1991-92 (Coulsdon, Surrey: Jane's Information Group, 1991), p. 749.

1987
Scud-B production facilities are established near Pyongyang with an annual capacity of 50 missiles. According to Chang Chun Ik, the facility is located in Tok'kol-dong, Sŭngho-kuyŏk, Pyongyang. South Korean military officials say North Korea has at least 12 mobile launchers about 40-50km north of the Demilitarized Zone (DMZ).
—Yonhap News Agency (Seoul), 2 February 1991, in "Information Provided on DPRK Scud Missiles," JPRS-TND-91-003, 25 February 1991, pp. 6-7; Nam Yong Chin, Hankook Ilbo (Seoul), 8 February 1991, p. 8, in "DPRK's Advanced Weapons Analyzed," JPRS-TND-91-008, 31 May 1991, pp. 7-9; Chang Chun Ik, Pukhan Haek-Missile Chŏnjaeng (Seoul: Sŏmundang, May 1999), p. 272; Kyodo News Service, "Asian News; N. Korea Deploys Scuds, May Reach Whole S. Korea in 1992," Japan Economic Newswire, 2 February 1991, in Lexis-Nexis Academic Universe,

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http://web.lexis-nexis.com; United Press International, "North Korea Builds Own Scud Missiles," 2 February 1991, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Pukhan, Yŏngbyŏnsŏ Kop'okpalshilhŏm/Kunchŏngbodangguk/Ch'oegŭn Haekshilhŏm Chŏndan'gyech'uchŏng Hŭnjŏk," Hankook Ilbo, 27 June 1991, p. 1, in KINDS, http://web.lexis-nexis.com.

1987
North Korea provides assistance to establish a Scud-B production plant in Egypt.
—Lee Chae Hak, "Kkorimunŭn Pukhan Scud Such'ul/Shimsangch'anh'ŭn Taechungdong P'anmaesŏl," Joongang Ilbo, 13 July 1991, in KINDS, www.kinds.or.kr.

1987
North Korea helps Iran set up a modified Scud-B assembly plant, which becomes operational by the spring of 1988.
—Andrew Rathmell, with contributions by James Bruce and Harold Hough, "Iran's Weapons of Mass Destruction," Jane's Intelligence Review, Special Report No. 6, 1995, p. 20.

1987
North Korea provides Iran with technical assistance to begin producing Scud-B (Shehab-1) missiles.
—Al-Wasat (London), 30 August 1999, in "Mideast Missile Race Detailed," FBIS Document ID FTS19990903000290.

1987
North Korea exports 100 Scud-B missiles to Iran.
—Andrew Rathmell, with contributions by James Bruce and Harold Hough, "Iran's Weapons of Mass Destruction," Jane's Intelligence Review, Special Report No. 6, 1995, p. 20.

28 January 1987
South Korean Defense Minister Lee Ki Baek announces that North Korea has conducted a secret test of a "long-range guided missile" north of the city of Wŏnsan in South Hamgyŏng Province. South Korean Defense Ministry officials refuse to release details of the missile test. [Note: The missile test was most likely conducted in May 1986 at the Musudan-ri test facility.]
—Korea Herald, 29 January 1987, p. 1, in "Defense Minister on DPRK Submarine, Rocket Test," FBIS-APA-87-020, 30 January 1987, pp. E4-E5.

29 January 1987
The Guardian reports that the USSR has secretly agreed to sell SS-21 ballistic missiles to North Korea in response to the US deployment of Lance missiles in South Korea. [Note: The SS-21, or a modified version, could be the third stage of the Paektusan-1 launch on 31 August 1998 that failed to place the Kwangmyŏngsŏng-1 satellite into earth orbit.]
—Jasper Becker, "Missile Deal for N Korea/Soviet Union to Supply SS-21s to Counter US Deployment in South Korea," The Guardian (London), 29 January 1987, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

8 April 1987
North Korea holds an opening ceremony for a new integrated circuit factory about 30km north of Pyongyang. The factory is affiliated with the Electronic Engineering Industry Research Institute under the Academy of Sciences. The factory is a joint venture with the United Nations Development Program.
—"DPRK-UNDP Joint Venture to Make Electronics," Xinhua General Overseas News Service, 9 April 1987, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

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11 April 1987
Kim Jong Il visits the Second Natural Science Academy (Chae 2 Chayŏn'gwahag'wŏn). Kim says "there will be nothing to fear if the Hwasŏng-6 is developed; the American bastards won't be able to do anything." [Note: Kim Kil Sŏn claims the Nodong missile is called the "Hwasŏng-5" and that the Paektusan-1/Taepodong-1 is called "Hwasŏng-6."]
—Kim Kil Sŏn interview by Daniel A. Pinkston, Center for Nonproliferation Studies senior research associate, 10 April 2001, Seoul; "Taepodong 2 Ho Optta," Joongang Ilbo, 12 January 2000, www.joins.com.

June 1987
In response to a Reagan administration protest over the sale of HY-2 Silkworm missiles to Iran, China denies that it made the sale. According to the New York Times, US officials do not believe the denial, but one anonymous White House source says China contends the missiles are coming from North Korea.
—Gerald B. Boyd, "U.S. Says China Is Arming Iran, Despite Denial," New York Times, 7 June 1987, pp. A1, A15.

June 1987
As a continuation of their 1985 bilateral accord, Iran and North Korea complete a $500 million military assistance agreement, which includes the purchase of 90-100 North Korean Scud missiles, 12 transporter erector launchers (TELs), and an unknown number of North Korean-built HY-2 Silkworm missiles.
—Joseph S. Bermudez, Jr., "North Korea's HY-2 'Silkworm' Programme," Jane's Soviet Intelligence Review, May 1989, pp. 203-207; Joseph S. Bermudez, Jr., "Ballistic Missiles in the Third World—Iran's Medium-Range Missiles," Jane's Intelligence Review, Vol. 4, No. 4, April 1992, pp. 147-148; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 12.

10 June 1987
North Korea denies Western press reports that it is acting as a conduit for Chinese Silkworm missile deliveries to Iran.
—Korean Central News Agency, 10 June 1987, in "Rumor of Arms to Iran Called 'Malicious Lie'," FBIS-EAS-87-111, 10 June 1987, p. C1.

July 1987
Deliveries of Scud-B (Hwasŏng-5) missiles from the Iranian order begin. The deliveries are believed to have been made by sea and continue through February 1988. The missile is called "Shehab-1" in Iran. According to the International Defense Review, the first batch of shipments total 100 for use in the Iran-Iraq War, and the number eventually reaches 400 missiles.
—Joseph S. Bermudez, Jr., "New Developments in North Korean Missile Programme," Jane's Soviet Intelligence Review, August 1990, pp. 343-345; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 12; Chang Chun Ik, Pukhan Haek-Missile Chŏnjaeng (Seoul: Sŏmundang, May 1999), p. 270; "Ballistic Missile Threat Evolves," International Defense Review, Vol. 33, No. 10, 1 October 2000, in Lexis-Nexis Acacemic Universe, http://web.lexis-nexis.com.

About November 1987
US intelligence satellites spot Silkworm missiles at a North Korean port.
—Robert S. Greenberger, "Chinese Missiles Are Apparently on Way to Iran," Wall Street Journal, 21 December 1987, p. 15.

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8 November 1987
Keyhan, a conservative Iranian daily, quotes the Islamic Revolution Guards Corps minister as having said, "At present we are copying Scud-B missiles. A factory is about to be completed." [Note: The missiles are most likely North Korean Scud-B "clones."]
—Keyhan (Tehran), 8 November 1987, p. 2, in "IRGC Commander, Minister Outline Arms production," FBIS-NES-87-222, 18 November 1987, p. 55.

13 December 1987
A spokesman for the Chinese Embassy in Washington, D.C. says, "We have never sold Silkworms to Iran, and we have already taken measures to stop sales of Silkworm missiles on the international market."
—Robert S. Greenberger, "Chinese Missiles Are Apparently on Way to Iran," Wall Street Journal, 21 December 1987, p. 15.

14 December 1987
The Wall Street Journal reports that US intelligence satellite photographs last week have revealed that the Silkworm missiles spotted at a North Korean port in November 1987 are now gone, as is an Iranian vessel that is known to have made previous Silkworm deliveries to Iran.
—Robert S. Greenberger, "Chinese Missiles Are Apparently on Way to Iran," Wall Street Journal, 21 December 1987, p. 15.

1986
A special North Korean missile unit is established and becomes operational. It is presumed to have derived from a special test and evaluation unit, and is believed to have been stationed at T'ŏgol, Pyŏngsan-kun, North Hwanghae Province.
—Joseph S. Bermudez, Jr., "Ballistic Ambitions Ascendant," Jane's Defence Weekly, 10 April 1993, pp. 20, 22.

1986
The North Korean Military Construction Bureau completes the construction of a long-range missile base in "Paeg'un-dong, Kusŏng," North Pyŏngan Province in 1986. [Note: According to North Korean defector Im Yŏng Sŏn, this was the surface-to-air missile (SAM) base that fired an SA-2 at a US SR-71 reconnaissance plane in August 1981. Ko refers to Kusŏng as a "kun," but it became a city, or "shi," in October 1967. He also refers to "Paeg'un-dong" as "Paeg'un-ri." However, "Paeg'un" is now a "dong," which is an administrative area within a city.]
—Testimony of Ko Yŏng Hwan, former North Korean Foreign Ministry official, before the US Senate, 21 October 1997; interview with North Korean defector Im Yŏng Sŏn by Daniel A. Pinkston, Center for Nonproliferation Studies senior research associate, 14 December 2001, Seoul.

1986
North Korea begins mass-producing about 4-5 modified Scud-Bs (Hwasŏng-5) per month, later increasing production to 8-12 missiles per month. Bermudez estimates that production is about 4 or 5 a month in the early stages, but increases to about 8-10 per month in 1987-88.
—Chang Chun Ik, Pukhan Haek-Missile Chŏnjaeng (Seoul: Sŏmundang, May 1999), p. 270; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 11; Joseph S. Bermudez, Jr., "Ballistic Missile Development in the DPRK," paper presented at the Research Institute on National Security Affairs (RINSA) International Symposium, National

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Defense University, Seoul, 1 September 1994, p. 24; "Ballistic Missile Threat Evolves," International Defense Review, vol. 33, no. 10, 1 October 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

1986
North Korea and Iran sign an agreement for North Korea to supply Iran with HY-2 anti-ship missiles (ASMs). [Note: The deliveries begin in 1987-1988.]
—Christopher F. Foss, ed., Jane's Armour and Artillery 1991-92 (Coulsdon, Surrey: Jane's Information Group, 1991), p. 749.

May 1986
North Korea conducts a successful flight test of its Scud-C. [Note: This report is unsubstantiated and probably in error.]
—Yonhap News Agency, 24 June 1993, in "Defense Ministry: May Nodong-1 Test Successful," FBIS-EAS-93-120, 24 June 1993, p. 19.

22 October 1986
North Korean President Kim Il Sung travels to Moscow to meet with Soviet President Mikhail Gorbachov for the first time. Kim is believed to ask for advanced weapons from the USSR.
—Jasper Becker, "Missile Deal for N. Korea/Soviet Union to Supply SS-21s to Counter US Deployment in South Korea," The Guardian (London), 29 January 1987, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; David Watts, "Joint Military Exercise Between Japan and US Worries Russians," The Times (London), 29 October 1986, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

December 1986
The United Nations Development Program (UNDP) transfers control of the completed integrated circuit pilot factory, the Pyongyang Semiconductor Manufacturing Factory, to North Korea's Electronics Institute.
—Terminal Report on Project: DP/DRK/79/003; Establishment of Digital Bi-Polar Integrated Circuit Plant in DPR of Korea, (New Delhi: ET&T Development Corporation Ltd.).

7 December 1986
The Iranian parliament restructures all of North Korea's $170 million oil purchase debt to Iran. The debt will be paid back over the next five years starting retroactively from January 1985. During this period, Iran will deduct 70% of the cost of North Korean merchandise purchased from the debt, paying only the remaining 30% in cash.
—IRNA (Tehran), 7 December 1986, in "Majlis Reschedules 'Entirety' of DPRK Debt," FBIS-NES, 10 December 1986, p. 15.

1985
In a bilateral accord, Iran agrees to finance North Korea's reverse-engineering of the Scud-B and offers assistance in the covert procurement of Western critical technologies in exchange for production technology and missiles. The agreement also calls for mutual support in missile development and for Iran to have the first right to purchase North Korean-produced modified Scud-B missiles.
—Kenneth Timmerman, *Mednews*, 21 December 1992, p. 5; Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 269-270; Joseph S. Bermudez, Jr., "Ballistic Missiles in the Third World—Iran's Medium-Range Missiles," *Jane's Intelligence Review*, vol. 4, no. 4, April 1992, p. 147.

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1985
"Pilot production" of the Scud-B is believed to have begun, replacing that of North Korea's Scud-B prototype. The new missiles have a an extended range of about 20-40km more than the Soviet Scud-B, and the missile is named "Hwasŏng-5."
—Joseph S. Bermudez, Jr., "Ballistic Ambitions Ascendant," *Jane's Defence Weekly*, 10 April 1993, pp. 20, 22; Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 268-269; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 11.

1985
North Korea and the USSR reach an agreement for the Soviets to assist in the modernization of the North Korean military. As a result, North Korea eventually receives SA-3b Goa and SA-5 Gammon missiles.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 13.

1985
North Korea begins production of modified Scud-B missiles and deploys them at a newly established missile unit near Hwadae-kun, North Hamgyŏng Province.
—Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), p. 270.

1985
"North Korea, China and others" provide assistance as Iran begins work on the Mushak-120 missile at a Chinese-built factory near Semnan, Iran.
—Raytheon, "Strategic: Mushak 120," *Missile Systems of the World* (Lexington: Raytheon, 1999), p. 456.

1985
North Korea agrees to supply Iran with HN-5A surface-to-air missiles (SAMs), and to help build assembly plants for the HN-5A, HQ-2 SAM and Scud-B. North Korea also offers to provide advisors and technology transfers for Iran's missile and rocket program.
— Joseph S. Bermudez, Jr., "Ballistic Missiles in the Third World—Iran's Medium-Range Missiles," *Jane's Intelligence Review*, vol. 4, no. 4, April 1992, p. 147; Joseph S. Bermudez, Jr., "Iran's Missile Development," in William C. Potter and Harlan W. Jencks, eds., *The International Missile Bazaar: the New Suppliers' Network* (San Francisco: Westview Press, 1994), pp. 53-55.

1985
North Korea begins breaking ground for the construction of a missile base near Shin'gye-kun, North Hwanghae Province. The site is located in the eastern part of Shin'gye-kun near the border with Kangwŏn Province. The North Korean Air Force Construction Department under the Ministry of the People's Armed Forces Construction Bureau does the construction. During the construction, the construction unit calls the missiles that are to be deployed to the base, "Kuksan" (literally "national product") or "Hwasŏng," but with no number designation. The missiles are said to be capable of striking the Kŭm River in South Korea, which is approximately 300km away. According to North Korean defector Im Yŏng Sŏn, based on his readings of construction plans and his conversations with officers responsible for the construction, there would be two ways to launch missiles from the base: (1) from an underground "launch site" or pad; or (2) by moving the missiles from an underground storage area. Im says they built the underground tunnels for the missiles "like the Russians did." North Korea halts construction of the base in late 1985 according to Im, who believes there is a problem in obtaining the missiles for deployment. [Note: The

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indirect reference to the range of the missiles indicates they are Scud-Bs. The US Air Base at Kunsan is at the mouth of the Kŭm River and within range of any Scud-B missiles deployed at Shin'gye.]
—Interview with North Korean defector Im Yŏng Sŏn by Daniel A. Pinkston, Center for Nonproliferation Studies senior research associate, 14 December 2001, Seoul.

27 March 1985
The *Los Angeles Times* quotes *Jane's Defence Weekly* as reporting, "The Soviet Union's Scud missiles are sold, however, to Libya, Syria and North Korea...." However, the *Jane's* report says, "Scuds have been supplied to Libya, Syria, and North Korea...." [Note: The *Jane's* report is unclear about the origin of the North Korean Scuds, which may have been supplied by Egypt instead of the Soviet Union.]
—"Iraqi Jets Attack Ship in Gulf, Kill 9 in Raid on Tehran," *Los Angeles Times*, 27 March 1985, p. 17, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Derek Wood, "Iran Uses Scud Missile Against Iraq," *Jane's Defence Weekly*, 30 March 1985, p. 532.

Summer 1985
Iran approaches both North Korea and China looking for ballistic missiles and missile technology.
—Gordon Jacobs and Tim McCarthy, "China's Missile Sales—Few Changes for the Future," *Jane's Intelligence Review*, December 1992, p. 560.

23 July 1985
Ten members, five each from the South Korean National Assembly and the North Korean Supreme People's Assembly meet at P'anmunjŏm. The meeting is the first ever between legislators from the two sides. The North Koreans say the meeting should address a non-aggression declaration, while the South Koreans say the agenda should focus on a standing South Korean proposal for a unified constitution. Although no significant agreements are reached, the two sides agree to meet again on 25 September 1985.
—Paul Shin, "South, North Korea Lawmakers Hold First Talks in 40 Years," United Press International, 23 July 1985, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North and South Koreans Meet," *Washington Post*, 23 July 1985, p. A11, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Around the World: After 40 Years, 2 Koreas Meet but Still Disagree," *New York Times*, 24 July 1985, p. 7, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "The World: Korean Foes Hold Meeting," *Los Angeles Times*, 24 July 1985, p. 2, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

September 1985
Sources in Seoul report that North Korea has been receiving Scud missiles and other weapons, including MIG-23 fighter aircraft, from the USSR as part of expanded military ties. In return, North Korea has granted the USSR access to its air space.
—"'Soviet Base' in North Korea," *Jane's Defence Weekly*, 21 September 1985, p. 3.

20-23 September 1985
North and South Korea allow family visits across the border for the first time. Fifty Koreans from each side cross the Military Demarcation Line (MDL) at P'anmunjŏm to visit family members in Seoul and Pyongyang. North Korea also sends an "art troupe" to Seoul for the historic exchange.
—Clyde Haberman, "Korean Families Visit After Border Is Opened," *New York Times*, 21 September 1985, p. 7, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Sam Jameson, "North, South Koreans Exchange Visits: 151 From Either Side in 1st Crossing Since Country's Split in 1945," *Los Angeles Times*, 21 September 1985, p. 19, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Steven B. Butler, "North and South Koreans Reunite,"

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Christian Science Monitor, 23 September 1985, p. 11, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Sam Jameson, "Sorrow Outweighs Joy as Koreans End Their Visits," *Los Angeles Times*, 24 September 1985, p. 13, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Korean Central News Agency, 23 September 1985, in "South Korean Red Cross Group Leaves Pyongyang," in BBC Summary of World Broadcasts, 25 September 1985, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Li Tu and Cao Haorong, "Happy Meetings Between Family Members after Long Separation," Xinhua General Overseas News Service, 22 September 1985, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Xinhua News Agency, "Pyongyang Art troupe Gives Premiere in Seoul," Xinhua General Overseas News Service, 22 September 1985, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Clyde Haberman, "Groups of Koreans Cross Border, Ending Kin Visit," *New York Times*, 24 September 1985, p. 3, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

25 September 1985

A second round of talks between North and South Korean legislators is held, but the meeting ends without an agreement for a future agenda. The North Koreans insist on a broad agenda to reduce tension, which the South Koreans call "vague." The South Koreans repeat their suggestion that the two sides should focus on drafting a constitution for a unified Korea.

—Kyodo News Service, "Parliamentarians Meeting Ends With No Progress," Japan Economic Newswire, 25 September 1985, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Li Tu and Qu Benjin, "2nd Meeting for North-South Korean Parliamentary Talks," Xinhua General Overseas News Service, 25 September 1985, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Xinhua News Agency, "DPRK Stresses Publication of Declaration of Non-Aggression," Xinhua General Overseas News Service, 25 September 1985, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Koreas' Legislators Meet," *Washington Post*, 26 September 1985, p. A29, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

28 September 1985

North Korea denies recent news reports that the USSR "has begun shipping about 70 surface-to-surface missiles [(SSMs)] and about 60 surface-to-air missiles [(SAMs)] to Iran via Syria and North Korea." The Korean Central News Agency in Pyongyang calls the allegations "a wholly groundless lie" and a "fabrication of the Western trumpeters...."

—Korean Central News Agency, 28 September 1985, in BBC Summary of World Broadcasts, 30 September 1985, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "N Korea Denies Tehran Reports" *Jane's Defence Weekly*, 19 October 1985, p. 857.

1985-88

North Korea receives delivery of approximately 240 Scud-B missiles that were ordered from the USSR in 1984. About 100 are re-sold to Iran. This report is unsubstantiated, but it establishes a "lower bound" for North Korea's program to reverse-engineer the Scud-B.

—SIPRI, *SIPRI Yearbook 1989: World Armaments and Disarmament* (Oxford: Oxford University Press, 1989), p. 256.

Circa 1985

The North Korean Military Construction Bureau completes construction of an "intermediate-range" missile base on Mt. Kanggamch'an across from the Kanep'o Fisheries Cooperative in Chŭngsan-kun, South Pyŏngan Province. The North Korean Navy also completed the construction of a surface-to-ship missile base in early 1990 at this site.

—Testimony of Ko Yŏng Hwan, former North Korean Foreign Ministry official, before the US Senate, 21 October 1997.

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Late 1985
North Korea halts construction of a missile base in Shin'gye-kun, North Hwanghae Province. The site is located in the eastern part of Shin'gye-kun near the border with Kangwŏn Province. North Korean defector Im Yŏng Sŏn, who was working at the construction site, believes the project is stopped because there is a problem in obtaining the missiles for deployment at the base. [Note: See "1985 entry on the construction of the Shin'gye missile base".]
—Interview with North Korean defector Im Yŏng Sŏn by Daniel A. Pinkston, Center for Nonproliferation Studies senior research associate, 14 December 2001, Seoul.

Mid 1980s
North Korea acquires HJ-73 and HN-5A surface-to-air missiles (SAMs) from China.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 13.

Late 1984-early 1985
North Korea helps establish a Hwasŏng-5 assembly plant in Iran. [Note: The type of assistance is unclear. However, North Korea does not establish its own Scud-B production plant until 1987, and a subsequent report says North Korea assists Iran in the building of a Scud-B production plant in 1987.]
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 13.

1984
North Korea produces first prototypes of the R-17E (Scud-B), which are named "Hwasŏng-5." According to Kim Kil Sŏn, the missiles are named "Hwasŏng-1."
—Interview with Kim Kil Sŏn by Daniel A. Pinkston, Center for Nonproliferation Studies senior research associate, 10 April 2001, Seoul; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 10.

1984
North Korea signs an agreement to provide technical assistance in Egypt's attempt to produce its version of the SA-2b, the "Tair al-Sabah."
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 13.

1984
North Korea orders approximately 240 Scud-B missiles from the USSR; the missiles are delivered from 1985 to 1988. About 100 are re-sold to Iran. [Note: This report, though unsubstantiated, establishes a "lower bound" for North Korea's efforts to reverse-engineer the Scud-B.]
—SIPRI, *SIPRI Yearbook 1989: World Armaments and Disarmament* (Oxford: Oxford University Press, 1989), p. 256.

1984
North Korea begins flight tests of indigenously produced Scud-Bs and modified (extended range, 330km) Scud-Bs. [Note: Compare with Hajime's reference to an April 1983 flight test of a Scud-B prototype.]
—Hajime Ozu, *Missile 2000: Reference Guide to World Missile Systems* (Tokyo: Shinkigensha, 2000), p. 95.

1984-85
The North Korean Ministry of People's Armed Forces is believed to have established a Hwasŏng missile regiment

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subordinate to the Artillery Command. This unit was probably first deployed near Pyongyang and later moved to Chiha-ri.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 11.

March 1984
According to an indictment issued by the US Federal District Court in New York City, Babak Soroush, president of the exporting firm International Processing Systems, sends a preliminary shipment of 143 semiconductors to North Korea. The components allegedly can be used in weapon-guidance systems. Yuri Geifman, owner of Industrial and Scientific Parts Services in New York City, later pleads guilty to charges that he sent the components to Soroush for transshipment to North Korea.
—Ellan Cates, "Iranian Businessman Faces Conspiracy Charges," United Press International, 6 November 1984, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Paul Taylor, "Iranian Accused of 'Chip Smuggling' by Grand Jury," *Financial Times* (London), 9 November 1984, p. 4, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; "West German Indicted in Smuggling Scheme," United Press International, 28 May 1985, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Manhattan Executive Guilty in Exports Case," *New York Times*, 6 November 1985, p. B2, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kenneth R. Timmerman, *Weapons of Mass Destruction: The Case of Iran, Syria and Libya* (Los Angeles: Simon Wiesenthal Center, 1992), p. 21.

April 1984
North Korea conducts its first successful test of a Scud-B missile. During 1984, additional tests are conducted with at least two known failures.
—Joseph S. Bermudez, Jr., "New Developments in North Korean Missile Programme," *Jane's Soviet Intelligence Review*, August 1990, pp. 343-345; Joseph S. Bermudez, Jr., "An Analysis of North Korean Ballistic Missile Testing," *Jane's Intelligence Review,* April 1995, p. 184-185; Yonhap News Agency, 24 June 1993, in "Defense Ministry: May Nodong-1 Test Successful," FBIS-EAS-93-120, 24 June 1993, p. 19; Yu Yin-taek, *Pukan*, No. 6, June 1985, pp. 132-141, in "North's Military Reorganization, Mobilization Analyzed," JPRS-KAR-85-070, 31 October 1985, pp. 1-9.

9 April 1984
North Korea conducts at least three tests of its indigenously produced Scud-B missile at the Hwadae-kun (Musudan-ri) missile test center.
—Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 266-267.

11 May 1984
Yuri Geifman, owner of Industrial and Scientific Parts Services in New York City, sends a package containing 392 controlled electronics components to West Germany for transshipment to North Korea. The components allegedly can be used in weapon-guidance systems.
—Ellan Cates, "Iranian Businessman Faces Conspiracy Charges," United Press International, 6 November 1984, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Paul Taylor, "Iranian Accused of 'Chip Smuggling' by Grand Jury," *Financial Times* (London), 9 November 1984, p. 4, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "West German Indicted in Smuggling Scheme," United Press International, 28 May 1985, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Manhattan Executive Guilty in Exports Case," *New York Times*, 6 November 1985, p. B2, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Kenneth R. Timmerman, *Weapons of Mass Destruction: The Case of Iran, Syria and Libya* (Los Angeles: Simon Wiesenthal Center, 1992), p. 21.

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16 May 1984
Kim Il Sung departs North Korea for Moscow by train. The delegation includes Kim Jong Il, Premier Kang Sŏng San, and North Korean Defense Minister O Jin U. South Korean Foreign Minister Lee Wŏn Kyŏng suspects that Kim will seek weapons such as MIG-25 fighters and surface-to-air missiles (SAMs), as well as economic and Soviet technical assistance while in Moscow.
—"North Korean Leader Seeks Soviet Support," United Press International, 18 May 1984, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Xinhua News Agency, "President Kim Il Sung Passes Through Northeast China on way to Soviet Union," Xinhua General Overseas News Service, 18 May 1984, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "International," United Press International, 17 May 1984, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

23-25 May 1984
Kim Il Sung holds three rounds of talks with Soviet President Konstantin Chernenko in Moscow. The two leaders agree to increase security cooperation in Northeast Asia, and sources say Chernenko agrees to increase military aid to North Korea. After Kim departs Moscow for Poland, North Korean Defense Minister O Jin U remains in Moscow, presumably to continue details talks on military cooperation.
—Xinhua News Agency, "Kim Il Sung Arrives in Moscow for Visit," Xinhua General Overseas News Service, 23 May 1984, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Kyodo News Service, "North Korean, Soviet Premiers Meet," Japan Economic Newswire, 25 May 1984, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Kyodo News Service, "Russo-N. Korean Summit Talks End," Japan Economic Newswire, 26 May 1984, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; John F. Burns, "Moscow Talks End for North Korean," *New York Times*, 26 May 1984, p. 3, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Kyodo News Service, "Kim Arrives in Poland, His Top Aide Remaining in Moscow," Japan Economic Newswire, 28 May 1984, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Dusko Doder, "N. Korean Leader Concludes First Moscow Visit in 19 Years," *Washington Post*, 27 May 1984, p. A18, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

September 1984
Since the April 1984 test-launch, there have been at least two additional "confirmed" launches of North Korean-built Scud-B prototypes from the Musudan-ri test facility. The first successful Scud-B launches occur during this time frame. Joseph Bermudez cites interview data in 1999 that claims there were three successful and three failed flight tests in April and September 1984.
—Yu Yin-taek, *Pukan*, No. 6, June 1985, pp. 132-141, in "North's Military Reorganization, Mobilization Analyzed," JPRS-KAR-85-070, 31 October 1985, pp. 1-9; Joseph S. Bermudez, Jr., "Ballistic Ambitions Ascendant," *Jane's Defence Weekly*, 10 April 1993, pp. 20, 22; Lee Jŏng Hun, "FROGesŏ Taepodong Kkaji: Pukhan Missile Game," *Shindonga,* August 1999, p. 202; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, pp. 10-11.

29 September- 4 October 1984
North Korea delivers rice, textiles, cement, and medicine to South Korea as aid in response to torrential rains that killed over 200 and left over 200,000 homeless in South Korea. [Note: The unprecedented delivery of goods marks a sudden and drastic, but short-lived, thaw in inter-Korean relations.]
—John Burgess, "Seoul Accepts North Korea's Offer of Aid," *Washington Post*, 15 September 1984, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "North Korea Agrewwes to South Korean Demands on Relief Aid," United Press International, 20 September 1984, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; John Burgess and Young Ho Lee, "N. Korean Aid, In Historic trip, Reaches South," *Washington Post*, 30 September 1984, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Robert Whymant, "North

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Korean Aid Arrives in South," *The Guardian* (London), 1 October 1984, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Xinhua News Agency, "KCNA Issues Press Communique on Completion of Goods-delivery for South Korean Flood-Victims," Xinhua General Overseas News Service, 5 October 1984, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Facts on File, "South Korea Gets Relief Supplies from North Korea: Seoul Had Charged Propaganda Ploy," Facts on File World News Digest, 5 October 1984, p. 726 C2, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

10 October 1984
Yuri Geifman and Iranian businessman Babak Soroush are indicted in New York for conspiracy to smuggle components used in missile guidance to North Korea. Geifman later pleads guilty to having shipped $9,000 worth of controlled electronics components to Soroush's firm in West Germany for transshipment to North Korea. West Germany later refuses to extradite Seroush to the United States.
—Ellan Cates, "Iranian Businessman Faces Conspiracy Charges," United Press International, 6 November 1984, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Paul Taylor, "Iranian Accused of 'Chip Smuggling' by Grand Jury," *Financial Times* (London), 9 November 1984, p. 4, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "West German Indicted in Smuggling Scheme," United Press International, 28 May 1985, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Manhattan Executive Guilty in Exports Case," *New York Times*, 6 November 1985, p. B2, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kenneth R. Timmerman, *Weapons of Mass Destruction: The Case of Iran, Syria and Libya* (Los Angeles: Simon Wiesenthal Center, 1992), p. 21; Joseph S. Bermudez, Jr. and W. Seth Carus, "The North Korean 'Scud B' Programme," *Jane's Soviet Intelligence Review*, April 1989, pp. 177-181; Lee Jŏng Hun, "FROGesŏ Taepodong Kkaji: Pukhan Missile Game," *Shindonga,* August 1999, p. 202; Knut Royce, "FBI Tracked Alleged Russian Mob Ties of Guiliani Campaign Supporter," The Public for Public Integrity, 14 December 2000, www.public-1.org.

9 November 1984
North Korean Defense Minister O Jin U arrives in Egypt for a 12-day visit during which an agreement to provide technical assistance to the Egyptian SA-2b Mod 1 surface-to-air-missile (SAM) program may have been reached.
—Korean Central News Agency, 8 November 1984, in "Military Delegation Leaves for Egyptian Visit," FBIS-APA, 8 November 1984, pp. D19-D20; KCNA, 21 November 1984, in "O Chin-U-Led Military Group Returns from Egypt," FBIS-APA, 27 November 1984, p. D14; Joseph S. Bermudez, Jr., "Ballistic Missile Development in Egypt," *Jane's Intelligence Review*, October 1992, pp. 452-458.

23 November 1984
A gun battle erupts at the Joint Security Area in P'anmunjŏm when a Soviet citizen defects during a tour. Three North Korean soldiers and one South Korean soldier die, and one American soldier is wounded in the shootout. Four days later, North Korea calls off economic talks with South Korea scheduled for 5 December at P'anmunjŏm.
—Clyde Haberman, "3 Koreans Killed as Soldiers Trade Shots in the DMZ," *New York Times*, 24 November 1984, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; John Burgess, "U.S. Says Defector Will Not Return: DMZ Shoot-out Discussed at Panmunjom," *Washington Post*, 25 November 1984, p. A30, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Clyde Haberman, "U.S. and North Korea Trade Charges on DMZ Clash," *New York Times*, 25 November 1984, p. 3, , in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; John Burgess, "N. Koreans Cancel Talks With South: Shoot-out Is Said To Spoil Prospects," *Washington Post*, 28 November 1984, p. A23, , in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

April 1983
North Korea successfully flight tests an indigenously produced Scud-B prototype. [Note: This report is highly

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suspect without significant technical and other assistance from abroad.]
—Hajime Ozu, *Missile 2000: Reference Guide to World Missile Systems* (Tokyo: Shinkigensha, 2000), p. 95.

5 April 1983
In Pyongyang, Egyptian President Hosni Mubarak discusses arms purchases and signs an agreement to extend the 1981 technological exchange agreement between Egypt and North Korea. The agreement contains several references to "other fields as to be agreed upon by the governments of the two countries."
—Korean Central News Agency, 5 April 1983, in "Text of General Agreement," FBIS-APA-83-067, 6 April 1983, pp. D11-D13.

6 September 1983
Egyptian Defense Minister Marshal Abdal-Halim Abu Ghazhala, leading a military delegation, arrives in Pyongyang.
—Korean Central News Agency, 6 September 1983, in "Egyptian Military Delegation Arrives for Visit," FBIS-APA-83-174, 7 September 1983, p. D11; KCNA (Pyongyang), 7 September 1983, in "Further Reportage on Visit of Egyptian Defense Minister," FBIS-APA-83-175, 8 September 1983, pp. D11-D15.

9 October 1983
North Korean commandos detonate a remote-controlled bomb in Rangoon that kills 21 people, including four South Korean cabinet ministers. The bomb is intended for South Korean President Chun Du Hwan, who escaped unharmed when he arrives late for a wreath-laying ceremony at the Martyrs' Mausoleum. Two North Korean army officers are later captured, and a third is shot and killed. The Korean Central News Agency in Pyongyang later calls Chun's statement linking North Korea to the blast as "a preposterous and ridiculous act." [Note: The incident is the reason for Chun's decision to restart South Korea's Hyŏnmu ballistic missile program.]
—Don Oberdorfer, "Blast Kills Top Aides To South Korean President: Tensions Likely to Rise," *Washington Post*, 10 October 1983, p. A1, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Anne Charters and Chris Sherwell, "Burma Bomb Kills Four Key members of South Korean Cabinet," *Financial Times* (London), 10 October 1983, p. 1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Korean Central News Agency, 12 October 1983, in "North Korean Statement on Rangoon Bombing," BBC Summary of World Broadcasts, 13 October 1983, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; Chit Tun, "North Koreans Sentenced to Death for Burmese Bombing," United Press International, 9 December 1983, in Lexis-Nexis Academic Universe, www.lexis-nexis.com; William Branigin, "Burmese Accused of Aiding N. Korean Bombers May Face Trial," *Washington Post*, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Chong Dok Sang, "[Missile] Kaebal Kyesokhaettdamyŏn Tomahawk Nŭngga," *Hankook Ilbo*, 15 July 1999, www.hankooki.com.

25-26 October 1983
Iranian Prime Minister Ruhollah Musavi and Defense Minister Colonel Mohammed Salimi hold talks with North Korean Prime Minister Lee Chong Ok and Minister of the People's Armed Forces O Jin U. The parties reach an arrangement for the long-term Iranian financing of North Korea's Scud-B development program in exchange for Iran's option to purchase production models. Musavi and Salimi depart North Korea on 26 October after a three-day visit.
—Korean Central News Agency, 25 October and 26 October 1983, in "Iranian Prime Minister's Visit to North Korea," BBC Summary of World Broadcasts, 29 October 1983, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Joseph S. Bermudez, Jr., "Ballistic Missile Development in Egypt," *Jane's Intelligence Review*, 1 October 1992, pp. 452-458; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 10; Lee Jŏng Hun, "FROGesŏ Taepodong Kkaji: Pukhan Missile Game," *Shindonga,* August 1999, p. 202.

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1982-83
North Korean engineers continue to reverse-engineer the Soviet-made R17Es (Scud-Bs) received from Egypt.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 10.

1982
North Korea opens its missile test center at Musudan-ri, North Hamgyŏng Province.
—Hajime Ozu, *Missile 2000: Reference Guide to World Missile Systems* (Tokyo: Shinkigensha, 2000), p. 95.

April 1982
North Korea attempts first flight-test of an indigenously modified Scud, but the test fails.
—Hajime Ozu, *Missile 2000: Reference Guide to World Missile Systems* (Tokyo: Shinkigensha, 2000), p. 95.

1981
North Korea and Egypt agree to cooperate on the development of ballistic missiles. Egypt transfers two Soviet-built Scud-B missiles and MAZ 543 transporter erector launchers (TELs) to North Korea.
—Joseph S. Bermudez, Jr., "Ballistic Ambitions Ascendant," *Jane's Defence Weekly*, 10 April 1993, pp. 20, 22; Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 249-250, 257, 266; Lee Jŏng Hun, "FROGesŏ Taepodong Kkaji: Pukhan Missile Game," *Shindonga,* August 1999, p. 202; Hajime Ozu, *Missile 2000: Reference Guide to World Missile Systems* (Tokyo: Shinkigensha, 2000), p. 95; "Ballistic Missile Threat Evolves," *International Defense Review*, Vol. 33, No. 10, 1 October 2000, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

1981
According to information provided by North Korean defector Kim Kil Sŏn in an April 2001 interview, North Korea had received copies of Soviet-made Scud missiles by 1981. She is not sure of the number, where they came from, or when they arrived. However, she claims the first North Korean version of the Scud-B was produced in 1984 and named "Hwasŏng-1." However, in December 1999, Kim was quoted in the *Chugan Donga* as saying that North Korea produced its first copies of the Scud-B in 1981. [Note: Kim is a former writer and journalist assigned to North Korea's Second Natural Science Academy, which is responsible for weapons R&D in North Korea. Kim defected to South Korea in January 1999. The interview data represent the correct version of her interpretation of events.]
—Kim Kil Sŏn interview by Daniel A. Pinkston, Center for Nonproliferation Studies senior research associate, on 10 April 2001, Seoul; Lee Jŏng Hun, "Pukhan Missile Silche Irŭmŭn 'Hwasŏng,'" *Chugan Donga*, 9 December 1999, p. 30.

1981
According to Yun Dŏk Min of South Korea's Institute of Foreign Affairs and National Security, North Korea produces its first copy of the Scud-B.
—Yun Dŏk Min, "Mi-Puk Missile Hyŏpsangŭi Hyŏnhwanggwa Chŏnmang" IFANS policy paper, 22 November 2000, p. 1.

21 August 1981
Egypt and North Korea sign an agreement for technological cooperation and exchange through 1983. The technology in question may have included missile-related technologies.
—Korean Central News Agency, 21 August 1981, in "Other Reports; N Korean Scientific Agreement with Egypt,"

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BBC Summary of World Broadcasts, 26 August 1981, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "International Relations; Egypt—Scientific Technical Co-operation," BBC Summary of World Broadcasts, 2 September 1981, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Joseph S. Bermudez, Jr., "Ballistic Missile Development in Egypt," *Jane's Intelligence Review*, 1 October 1992, pp. 452-458.

26 August 1981
North Korea fires an SA-2 SAM at a US SR-71 reconnaissance plane. However, the missile fails to hit the aircraft, which returns safely to Kadena Air Base in Okinawa, Japan. The US State Department condemns the launch, claiming the aircraft was operating in international airspace, and that the launch violates international law and the Korean War Armistice. According to news reports, the missile is fired from Chokta-ri; however, North Korean defector Im Yŏng Sŏn claims the missile is fired from Paeg'un-dong, Kusŏng, North P'yŏng'an Province.
— Interview with North Korean defector Im Yŏng Sŏn by Daniel A. Pinkston, Center for Nonproliferation Studies senior research associate, 14 December 2001, Seoul; David Shribman, "Missile Fired by North Koreans at U.S. Spy Plane Near the DMZ," *New York Times*, 27 August 1981, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Lee Lescaze, "U.C. Calls N. Korea 'Lawless' in Firing Missile at Spy Plane: U.S. Says North Korea Perpetrated 'Act of Lawlessness' in Missile Firing," *Washington Post*, 28 August 1981, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Bernard Gwertzman, "U.S. Expresses 'Serious Concern' Over Firing of North Korea Missile," *New York Times*, 28 August 1981, p. A1, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; David Binder, "Radar Detector Aboard SR-71 Alerted Pilot to Missile Attack," *New York Times*, 29 August 1981, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Milt Freudenheim and Barbara Slavin, "The World in Summary: A Long Shot Fired Over Korea," *New York Times*, 30 August 1981, Section 4, p. 3, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; "Foreign Office Concedes SR-71 Departed from Okinawa," Jiji Press Ticker Service, 27 August 1981, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Paul Shin, "U.S. Warns North Korea on Missile Crisis," United Press International, 1 September 1981, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

28 August 1981
The North Korean media deny the surface-to-ari missile (SAM) launch of 26 August, accusing the United States of "slandering North Korea."
—Henry Scott Stokes, "North Korea Disputes U.S. Over Missile-Firing Incident," *New York Times*, 29 August 1981, Section 1, p. 3, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com; Kyodo News Service, "North Korea Denies Missile Firing," Japan Economic Newswire, 29 August 1981, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

1 September 1981
During the 407th meeting of the Military Armistice Commission at P'anmunjŏm, North Korean Army Major General Han Ju Kyŏng denies the charges that North Korea fired a SAM at a US SR-71 reconnaissance plane on 26 August. Han calls the accusation "a sheer fabrication to find a pretext for an arms buildup and to unleash another war on the Korean peninsula."
—Paul Shin, "U.S. Warns North Korea on Missile Crisis," United Press International, 1 September 1981, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

2 September 1981
South Korean Defense Minister Chu Yŏng Bok tells the South Korean National Assembly that North Korea has various SAMs, including the SA-2 and SA-7, and anti-ship missiles (ASMs). Chu says that North Korea has deployed SA-2 SAMs at 45 sites along its border with South Korea.

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—"Spyplanes Fly Again Over Korea," United Press International, 2 September 1981, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com.

1980s
According to an anonymous US intelligence official, North Korea sells about 100 Scud missile launchers to Iran. [Note: The January 1991 report also quotes the official as saying that Iraq wants to buy the launchers from Iran. Any North Korean Scud launcher sales almost certainly took place after 1985.]
—Associated Press, "U.S. Says Iraq Trying to Buy Scud Launchers," *Toronto Star*, 30 January 1991, p. A30, in Lexis-Nexis Academic Universe, www.lexis-nexis.com.

Early 1980s
North Korea is indigenously producing many parts of the Chinese HY-2 missile except for the sustainer motors and guidance systems, which are still provided by China.
—Joseph S. Bermudez, Jr., "North Korea's HY-2 'Silkworm' Programme," Jane's Soviet Intelligence Review, May 1989, p. 206; Christopher F. Foss, ed., Jane's Armour and Artillery 1991-92 (Coulsdon, Surrey: Jane's Information Group, 1991), p. 749.

Early 1980s
Citing a "CIA report that was leaked to the press in 1996," the Joongang Ilbo reports that China, Egypt, and North Korea begin to cooperate in the production of ballistic missiles. The report claims that Egypt begins to acquire advanced US technology and components and then transfers them to China, which then transfers them to North Korea. North Korea then produces Scud missiles at armament factories in Chagang Province, near the Chinese border, and ships the missiles to Egypt. This report suggests that the North Koreans are merely a subcontractor for the Chinese.
—Ch'oe Wŏn Ki, "Shilche Tŭronaen Pukhan Missile Connection," Joongang Ilbo, 24 June 1996, p. 4, in KINDS, www.kinds.or.kr.

Early 1980s
North Korea is receiving Chinese assistance in the areas of rocket engine design, metallurgy, and airframe technology as part of North Korea's effort to reverse-engineer the Scud-B.
—Gordon Jacobs and Tim McCarthy, "China's Missile Sales—Few Changes for the Future," Jane's Intelligence Review, December 1992, p. 560.

Circa 1980
North Korea possibly reverse engineers Scud-B without approval from the USSR.
—SIPRI, *SIPRI Yearbook 1989: World Armaments and Disarmament* (Oxford: Oxford University Press, 1989), p. 275.

1980
North Korea is believed to have completed the replacement of the HY-1 with the HY-2 missile.
—Joseph S. Bermudez, Jr., "North Korea's HY-2 'Silkworm' Programme," *Jane's Soviet Intelligence Review*, May 1989, p. 206; Christopher F. Foss, ed., *Jane's Armour and Artillery 1991-92* (Coulsdon, Surrey: Jane's Information Group, 1991), p. 749.

1980
North Korea and Egypt sign an agreement to jointly develop missiles. The agreement stipulates that Egypt will supply North Korea with Soviet-made Scud-B missiles and MAZ-543 transporter erector launchers (TELs). According

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to Lee Jŏng Hun, a South Korean journalist, North Korea and Egypt finalize a bilateral agreement following Vice President Hosni Mubarak's visit to Pyongyang and meeting with Kim Il Sung in January 1980. The agreement provides for the delivery of two Soviet-made Scud-B missiles. Egypt's provision of the missiles violates an Egyptian agreement with the USSR. According to Chang Chun Ik, a retired lieutenant general and former National Assembly member, North Korea commits to expanding its missile development facilities in the Pyongyang area, and to establishing missile-testing facilities at Hwadae-kun in North Hamgyŏng Province upon signing this agreement.
—Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 249, 266; Lee Jŏng Hun, "FROGesŏ Taepodong Kkaji: Pukhan Missile Game," *Shindonga,* August 1999, p. 202.

Late 1980
The North Korean Military Construction Bureau's 110th and 115th regiments complete construction of a missile base on Mayang-do, Mayang-dong, Shinp'o, South Hamgyŏng Province. Anti-ship missiles (ASMs) are later deployed to this base. According to North Korean defector Im Yŏng Sŏn, the base already existed in the 1970s and was not fortified with tunnels and underground facilities until 1980. Im says the base has anti-ship missiles to protect North Korea's largest submarine base at Mayang-do.
—Im Yŏng Sŏn interview by Daniel A. Pinkston, Center for Nonproliferation Studies senior research associate, 14 December 2001, Seoul; Testimony of Ko Yŏng Hwan, former North Korean Foreign Ministry official, before the US Senate, 21 October 1997.

1979-1980
North Korea receives a small number of Soviet-made R-17E (Scud-B) missiles, MAZ-543 transporter erector launchers (TELs), and other equipment from Egypt. [Note: There is still a debate over the exact delivery date of the equipment.]
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 10.

Late 1970s
North Korea begins reverse-engineering of FROG rockets in the "January 18th Machinery Factory," an underground production facility in Kagam-ri, Kaech'on-kun, South P'yŏng'an Province. The facility may employ over 10,000 workers. [Note: This conflicts with a report that North Korea began to reverse-engineer FROGs in the mid-1970s.]
—Testimony of Ko Yŏng Hwan, former North Korean Foreign Ministry official, before the US Senate, 21 October 1997.

Late 1970s
North Korea probably gains indigenous capability to produce the HQ-2 and HY-1 but is probably dependent upon China for some components.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 4.

Late 1970s
North Korea deploys indigenously produced AT-3 Sagger anti-tank guided missiles (ATGMs) and SA-7 Grail surface-to-air missiles (SAMs). These weapons systems were reverse engineered after having been acquired from Egypt in 1974.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 8.

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Late 1970s
North Korea begins to acquire Silkworm (HY-2) anti-ship missiles (ASMs) from China. North Korea later develops a modified version with an extended range of 160km and exports it to countries in the Middle East such as Iran and Iraq. The export price for the North Korean modified version is said to be $300,000-400,000 in 1994.
—Kim Chong Tu, "Silkworm Missile Iran/Kuso Kaebalhan 'Styx' Kaeryanghyŏng," Kyunghyang Shinmun, 2 June 1994, p. 2, in KINDS, www.kinds.or.kr.

1979
Negotiations begin between North Korea and the United Nations Development Program (UNDP) for the construction of a digital bipolar integrated circuit factory in North Korea.
—Terminal Report on Project: DP/DRK/79/003; Establishment of Digital Bi-Polar Integrated Circuit Plant in DPR of Korea, (New Delhi: ET&T Development Corporation Ltd., n.d.).

1979
North Korea drafts a plan to indigenously develop a missile "similar to the DF-61."
—Chang Chun Ik, Pukhan Haek-Missile Chŏnjaeng (Seoul: Sŏmundang, May 1999), pp. 248-249, 265-266.

1978
The joint Chinese-North Korean DF-61 missile project collapses when its primary Chinese supporter, Chen Xilian, is ousted from office. After the project is cancelled, North Korea turns to the USSR for technical assistance, but the Soviets deny the request. However, participation in the DF-61 project enabled North Korean personnel to gain experience with guided missile systems. [Note: While the program was never completed, North Korean technicians and scientists who worked on the project may have brought back valuable knowledge on missile design. Given that the Chinese acquired restricted missile information during training with the Soviets in the 1960s, it is plausible that North Korea might have duplicated this feat while working with the Chinese.]
—John Wilson Lewis and Hua Di, "Beijing's Defense Establishment: Solving the Arms Export Enigma," *International Security*, Fall 1992, pp. 5-40; Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 248-249, 265-266; Lee Jŏng Hun, "FROGesŏ Taepodong Kkaji: Pukhan Missile Game" *Shindonga,* August 1999, pp. 201-202.

March 1977
Korean Workers Party Secretary Kang Sŏng San attends a reception hosted by China's Seventh Machine Industry Ministry, which develops China's ballistic missiles.
—Joseph S. Bermudez, Jr., "North Korea's Nuclear Programme," *Jane's Intelligence Review*, September 1991, pp. 404-411.

31 March 1977
A North Korean delegation that includes 27 "nuclear missile specialists" participates in a reception given by China's Seventh Machine Industry Ministry (第7機械工業省). The delegation later departs for a nuclear test site in the Xinjiang (新疆) Uighur Autonomous Region. [Note: The site is almost certainly the "Lop Nur Nuclear Weapon Test Site"].
—"Pukkoe'sŏhaek Missile Yŏn'gu," *Donga Ilbo*, 9 April 1977, p. 1, in KINDS, www.kinds.or.kr; So Yong-ha, "Capacity for Nuclear Weapons Development," *Hoguk*, July 1989, pp. 119-122, in "North's Nuclear Capability Assessed," FBIS-EAS-89-148, 3 August 1989, pp. 23-26.

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6 July 1977
North Korea and Libya sign a cooperative agreement on science and technology.
—Lee Chae Sŭng, *Pukhan'ŭl Umjig'i'nŭn Technocrat* (Seoul: Ilbit, 1998), p. 442.

1976
North Korea purchases two Scud-B missiles from Egypt. [Note: There is conflicting information on whether North Korea received its first Scud-Bs from Egypt in 1976 or later, possibly in 1979, 1980, or 1981. One North Korean defector claims that North Korea received its first Scud missiles from the USSR in 1972.]
—Yonhap News Agency (Seoul), 24 June 1993, in "Defense Ministry Says Nodong-1 Test in May Successful," JPRS-TND-93-020, 28 June 1993, p. 1; ROK Ministry of Unification, Information Analysis Bureau, "Pukhan Missile Munjae Kwallyŏn Ch'amgojaryo," press release, 3 November 2000, p. 1; "Pukhan, Sajong 1 Ch'ŏn Kilometer Isang Missile Kaebalchung," *Joongang Ilbo*, 8 November 1991, www.joins.com.

1976
North Korea probably begins full-scale production of the HY-2 anti-ship missile (ASM).
—Christopher F. Foss, ed., *Jane's Armour and Artillery 1991-92* (Coulsdon, Surrey: Jane's Information Group, 1991), p. 749.

18 August 1976
North Korean soldiers use axes to kill two US Army officers in the Joint Security Area at P'anmunjŏm. The confrontation between a United Nations Command (UNC) work crew and North Korean soldiers takes place as the crew is beginning to trim a tree that was blocking the view of a guard post. The tree-cutting operation is completed three days later after UNC forces go on full alert and the two sides go to the brink of war.
—Don Oberdorfer, *The Two Koreas* (Reading: Addison-Wesley, 1997), pp.74-83; Chuck Downs, *Over the Line* (Washington, D.C.: AEI Press, 1999), pp. 151-158.

24 November 1976
North Korea and Pakistan sign a protocol on technical cooperation.
—Lee Chae Sŭng, *Pukhan'ŭl Umjig'i'nŭn Technocrat* (Seoul: Ilbit, 1998), p. 442.

Late 1976
China agrees to an April 1975 North Korean proposal for joint development of the DF-61 single-stage mobile tactical missile, which may carry cluster munitions or fuel-air explosive warheads. The maximum range of the missile is estimated to be 600km with a 1,000kg payload, with guidance to be supplied by a new Chinese-developed gyro.
—Hua Di, "One Superpower Worse than Two," *Asia-Pacific Defense Reporter*, September 1991, pp. 14-15; John Wilson Lewis and Hua Di, "Beijing's Defense Establishment: Solving the Arms Export Enigma," *International Security*, Fall 1992, pp. 5-40; Lee Jŏng Hun, "FROGesŏ Taepodong Kkaji: Pukhan Missile Game," *Shindonga,* August 1999, p. 201.

Mid-1970s
North Korea begins producing Soviet model BM-21 122mm-caliber multiple rocket launchers (MRLs). [Note: It takes North Korea at least five years to begin production following procurement from the USSR. See "entry for late 1960s on North Korea taking delivery of Soviet MRLs".]
—Christopher F. Foss, *Jane's Armour and Artillery 1991-92* (Coulsdon, Surrey: Jane's Information Group, 1991), p. 719.

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Mid-1970s
North Korea acquires HJ-73 anti-tank missiles (ATMs) and HN-5A surface-to-air missiles (SAMs; Chinese version of the Soviet SA-7).
—Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 246-247.

Mid-1970s
North Korea begins a program to reverse-engineer FROG-7A rockets. The program is eventually cancelled when North Korea begins its Scud-B reverse-engineering program.
—Joseph S. Bermudez, Jr., "The North Korean 'Scud B' Program," *Jane's Soviet Intelligence Review*, May 1989, pp. 203-207.

Mid-1970s
North Korea begins to acquire the HY-1 missile in both the coastal defense version (CSSC-2 Silkworm) and ship-launched version (CSS-N-2 Safflower).
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 4.

1975-76
North Korea acquires "approximately 24 to 56" FROG-7B (9M21E Luna-M) artillery rockets from Egypt. Syria may have been involved in this transfer or may have separately transferred a small number of FROG-7Bs.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 6.

1975
North Korea begins to produce an indigenous version of the Soviet AT-1 Snapper anti-tank guided missile (ATGM).
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 8; Joseph S. Bermudez, Jr., "Ballistic Missile Development in the DPRK," paper presented at the Research Institute on National Security Affairs (RINSA) International Symposium, National Defense University, Seoul, 1 September 1994, p. 18.

17 April 1975
North Korean President Kim Il Sung leads a delegation to Beijing where Defense Minister O Jin U expresses a desire to purchase tactical ballistic missiles from China. China does not have that class of missile at this time, but the North Korean query coincides with growing Chinese interest in developing such a missile. China later begins a program to development the DF-61, a liquid-propelled tactical ballistic missile (TBM). The single-stage DF-61 is to have a range of about 600km with a 1,000kg warhead, a length of nine meters, a diameter of one meter, and an inertial guidance system. North Korean engineers participate in the design of the missile for about one year before the project is cancelled in 1978.
—Hua Di, "One Superpower Worse that Two," Asia-Pacific Defense Reporter, September 1991, pp. 14-15; John Wilson Lewis and Hua Di, "Beijing's Defense Establishment: Solving the Arms Export Enigma," International Security, Fall 1992, pp. 5-40; Chang Chun Ik, Pukhan Haek-Missile Chŏnjaeng (Seoul: Sŏmundang, May 1999), pp. 248-249.

1974-1975
North Korea's HY-1 production facility is converted to produce HY-2 missiles.

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—Joseph S. Bermudez, Jr., "The North Korean 'Scud B' Program," Jane's Soviet Intelligence Review, May 1989, pp. 203-207; Christopher F. Foss, ed., Jane's Armour and Artillery 1991-92 (Coulsdon, Surrey: Jane's Information Group, 1991), p. 749.

1974
North Korea is believed to have acquired a few Soviet AT-3 Sagger ATGMs and SA-7 Grail (9K32 Strella) surface-to-air missiles (SAMs) from Egypt. North Korea reverse-engineered these weapon systems and deployed them by the late 1970s.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 8; Joseph S. Bermudez, Jr., "Ballistic Missile Development in the DPRK," paper presented at the Research Institute on National Security Affairs (RINSA) International Symposium, National Defense University, Seoul, 1 September 1994, p. 18.

1974
North Korea acquires SA-7 surface-to-air missiles (SAMs) from the USSR.
—Nam Yong Chin, Hankook Ilbo, 8 February 1991, p. 8, in "DPRK's Advanced Weapons Analyzed," JPRS-TND-91-008, 31 May 1991, pp. 7-9.

1974
According to the International Institute for Strategic Studies, North Korea possesses 12 unguided FROG-5 and FROG-7 rockets. Furthermore, the North Korean navy reportedly has 10 Komar-class and 8 Osa-class missile boats armed with Styx anti-ship missiles (ASMs).
—The International Institute for Strategic Studies, The Military Balance: 1974-75 (London: Chatto & Windus, 1973), p. 53.

1973
According to the International Institute for Strategic Studies, North Korea possesses 24 unguided FROG-5 and FROG-7 rockets and operates six SSC-2b sites. Furthermore, the North Korean navy reportedly has 10 Komar-class and 8 Osa-class missile boats armed with Styx anti-ship missiles (ASMs).
—The International Institute for Strategic Studies, *The Military Balance: 1973-74* (London: Chatto & Windus, 1973), p. 53.

1972
North Korea establishes an indigenous SY-1/HY-1 production facility. However, many major components are still provided by Chinese factories.
—Joseph S. Bermudez, Jr., "The North Korean 'Scud B' Program," *Jane's Soviet Intelligence Review*, May 1989, pp. 203-207.

1972
North Korea begins production of SS-N-2 Styx anti-ship and SA-2 surface-to-air missiles (SAMs).
—Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 246-247.

1972
North Korea receives 20 Scud-B missiles from the USSR. North Korea asked for Scud missiles in the mid-1960s, but the USSR refused. Following the capture of the *USS Pueblo* in 1968, North Korea offered to grant Soviet analysts and technicians access to the equipment onboard in exchange for the right to purchase Scud-B missiles. Soviet

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technicians spent about six months analyzing the equipment from the *Pueblo* before negotiations on the missile sales began. After receiving the Scud-Bs, North Korean engineers spent one to two months taking apart one of the missiles and sketching the internal design. This delivery has not been confirmed, but this would establish an "upper bound" for the beginning of North Korea's program to reverse-engineer the Scud-B.
—Interview with North Korean defector by Daniel A. Pinkston, senior research associate, Center for Nonproliferation Studies, 1 November 2000, Seoul.

2-5 May 1972
South Korean Central Intelligence Agency Director Lee Hu Rak secretly visits Pyongyang and meets with Kim Il Sung. The two men discuss the eventual unification of Korea, and Kim tells Lee to convey his apology for the attempted assassination of Park Chung Hee in January 1968, saying he was unaware of it. Kim blamed the attempt on "leftist chauvinists" who were purged following the incident.
—Don Oberdorfer, *The Two Koreas* (Reading: Addison-Wesley, 1997), pp. 23-26; "South-North Joint Communiqué," 4 July 1972, www.unikorea.go.kr.

29 May- 1 June 1972
North Korean Deputy Premier Park Sŏng Ch'ŏl makes a secret visit to Seoul and meets with Park Chung Hee and South Korean Central Intelligence Director Lee Hu Rak.
—Don Oberdorfer, *The Two Koreas* (Reading: Addison-Wesley, 1997), pp. 23-26; "South-North Joint Communiqué," 4 July 1972, www.unikorea.go.kr.

4 July 1972
North and South Korea sign a joint communiqué that declares three principles for Korean unification: (1) unification shall be achieved independently, without depending on foreign powers and without foreign interference; (2) unification shall be achieved through peaceful means, without resorting to the use of force against each other; and (3) a great racial unity as one people shall be sought first, transcending differences in ideas, ideologies, and systems. The communiqué also provides for the establishment of a direct telephone line between Seoul and Pyongyang to prevent the inadvertent outbreak of military conflict. [Note: Following the signing of the joint communiqué, both Kim Il Sung and Park Chung Hee are able to push through constitutional revisions that concentrate power in the executive branch.]
—Don Oberdorfer, *The Two Koreas* (Reading: Addison-Wesley, 1997), pp. 23-26; "South-North Joint Communiqué," 4 July 1972, www.unikorea.go.kr.

1971
According to the International Institute for Strategic Studies, North Korea possesses six Komar-class and nine Osa-class missile boats armed with Styx anti-ship missiles (ASMs).
—The International Institute for Strategic Studies, *The Military Balance: 1971-72* (London: Chatto & Windus, 1973), p. 48.

September 1971
North Korea signs military agreement with China to acquire, develop, and produce modern weapons systems, including ballistic missiles.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 3.

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Early 1970s
Soviet deliveries of SSC-2b (Samlet) anti-ship missiles (ASMs) continue. The missiles are supplied in "knock-down" kits, which the North Korean military can assemble and test after having received training from the USSR. However, the USSR refuses to supply more modern missiles due to political differences. This leads North Korea to approach China for assistance, which it receives in the form of transfers of reverse-engineered Soviet-designed missile systems and Chinese missile research and development technology.
—Joseph S. Bermudez, Jr., "The North Korean 'Scud B' Program," *Jane's Soviet Intelligence Review*, May 1989, pp. 203-207; Christopher F. Foss, ed., *Jane's Armour and Artillery 1991-92* (Coulsdon, Surrey: Jane's Information Group, 1991), p. 749.

Early 1970s
North Korea receives assistance from China to "reorganize maintenance and assembly programs for the SA-2b SAMs, SS-N-2b (Styx) and SSC-2 (Samlet) anti-ship cruise missiles (ASCMs), and FROG-5 tactical ballistic rockets, all originally provided by the former USSR."
—Gordon Jacobs and Tim McCarthy, "China's Missile Sales—Few Changes for the Future," *Jane's Intelligence Review*, December 1992, p. 560.

15 April 1969
The North Korean air force shoots down a US Navy EC-121 reconnaissance plane in international air space over the Sea of Japan, killing all 31 crewmembers.
—Chuck Downs, *Over the Line* (Washington, DC: AEI Press, 1999), pp. 146-148.

1969-70
China assists North Korea in the reorganization and expansion of the Soviet-built Samlet maintenance and assembly facilities. North Korea acquires and fields the Chinese-built HY-1 (a reverse-engineered Soviet SS-N-2 Styx surface-to-surface anti-ship missile [ASM]). Some HY-1 deliveries are made directly from Chinese naval stocks and some are shipped as "knock-down" kits for assembly.
—Joseph S. Bermudez, Jr., "The North Korean 'Scud B' Program," *Jane's Soviet Intelligence Review*, May 1989, pp. 203-207; Christopher F. Foss, ed., *Jane's Armour and Artillery 1991-92* (Coulsdon, Surrey: Jane's Information Group, 1991), p. 749.

1969-70
North Korea receives FROG-3, FROG-5 and FROG-7 rockets from the USSR.
—Lee Jŏng Hun, "FROGesŏ Taepodong Kkaji: Pukhan Missile Game," *Shindonga,* August 1999, p. 201.

Late 1960s
North Korea takes delivery of Soviet BM-21 122mm-caliber MRLs. [Note: North Korea had plans to manufacture 132mm artillery rockets in 1957 but is still buying Soviet multiple rocket launchers (MRLs) in the late 1960s.]
—Christopher F. Foss, *Jane's Armour and Artillery 1991-92* (Coulsdon, Surrey: Jane's Information Group, 1991), p. 719.

Late 1960s
North Korea receives HQ-2 surface-to-air missiles (SAMs; Chinese version of Soviet SA-2) and HY-1 anti-ship missiles (ASMs) from China.
—Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 246-247.

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Late 1960s
North Korea begins production of 107 mm, 132mm, and 140mm rockets and launchers. [Note: It takes North Korea about 10 years to move from planning to production.]
—Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 246-247; ROK Ministry of Unification, *Pukhan Kaeyo 2000* (Seoul: Ministry of Unification, December 1999), p. 180.

1968-70
North Korea acquires FROG-5 and FROG-7 rockets from the USSR.
—Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 246-247.

1968-69
North Korea receives S-2 Sopka (SSC-2b Samlet) coastal-defense missiles (CDMs) from the USSR. The missiles are sufficient to outfit five batteries. The missiles are deployed on the east coast of North Korea, where they replace coastal artillery.
—Joseph S. Bermudez, Jr., "The North Korean 'Scud B' Program," *Jane's Soviet Intelligence Review*, May 1989, pp. 203-207; Christopher F. Foss, ed., *Jane's Armour and Artillery 1991-92* (Coulsdon, Surrey: Jane's Information Group, 1991), p. 749.

1968
North Korea receives 27 to 63 FROG-5 (3R10 Luna-2) artillery rockets, 9 transporter erector launchers (TELs), and approximately 12 FROG-6 trainer vehicles from the USSR. The agreements for the delivery of this equipment were signed in 1965 and 1967.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, pp. 4-5.

18 January 1968
Thirty-one North Korean commandos secretly cross the Demilitarized Zone (DMZ) on a mission to assassinate South Korean President Park Chung Hee. The commandos approach within about 800m of the presidential residence, but fail to assassinate Park. All but one of the commandos are eventually killed or commit suicide. Thirty-one South Koreans die in the fire fights, and 44 are wounded. North Korea later denies it is responsible for the attack, claiming the perpetrators are South Korean citizens rising up against the government.
—Chuck Downs, *Over the Line* (Washington, DC: AEI Press, 1999), pp. 121-122; 124.

23 January 1968
North Korea captures the *USS Pueblo* off Wŏnsan on North Korea's east coast. North Korea claims the ship was in North Korea's territorial waters, but the United States claims it was in international waters. One American crewman dies and 82 are captured by the North Korean navy. North Korea releases the crew exactly 11 months later.
—Chuck Downs, *Over the Line* (Washington, DC: AEI Press, 1999), pp. 122-146; "U.S. Warned Not to Forget Lesson from 'Pueblo' Incident," Korean Central News Agency, 23 January 2002, www.kcna.co.jp; "Migug'ŭn <Pueblo> Hoŭi Kyohun'ŭl Itchi Mar'aya Handa/Oegug'indŭl'ŭi Panhyang," Korean Central News Agency, 23 January 2002, www.kcna.co.jp; Anti-U.S. Education Intensified in DPRK," Korean Central News Agency, 23 January 2002, www.kcna.co.jp; "Chosŏn'esŏ'ŭi Panmi'gyoyang," Korean Central News Agency, 23 January 2002, www.kcna.co.jp.

1967-68
North Korea probably receives the first deliveries of SS-N-2 Styx missiles.

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—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 3.

1967
North Korea receives SS-N-2 Styx anti-ship missiles (ASMs) from the USSR.
—Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 246-247.

1967
North Korea concludes another agreement with the USSR to acquire weapon systems, including artillery rockets and transporter erector launchers (TELs). The systems are to be delivered in 1968.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, pp. 4-5; Chang Chun Ik, *Pukhan Haek-Missile Chŏnjaeng* (Seoul: Sŏmundang, May 1999), pp. 246-247.

1966-67
Kim Il Sung issues directive to develop nuclear warheads for missiles.
—Interview with North Korean defector by Daniel A. Pinkston, Center for Nonproliferation Studies senior research associate, 1 November 2001, Seoul.

October 1966
The Korean Workers Party holds its second conference for party leaders. Kim Il Sung emphasizes the need to develop economic and military capabilities together. Following Kim's announcement, North Korea establishes the Second Machine Industry Ministry under the party secretary in charge of military industries. The Second Machine Industry Ministry is later renamed the Second Economic Committee in 1971.
—Joseph S. Bermudez, *The Armed Forces of North Korea* (New York: I. B. Tauris, 2001), pp. 45-46; "Minsaeng Hŭisaengwi Kunsusanŏp Pŏnch'ang," *Hankyoreh Shinmun*, 31 March 1997, p. 6, in KINDS, www.kinds.or.kr; Kim Kwang In, "'Twaejigongjang' Sŏn Missile Saengsan," *Chosun Ilbo*, 11 February 2001, www.chosun.com; "'Pyongyang Pig Factory' Produces Missiles," *Chosun Ilbo*, 12 February 2001, www.chosun.com.

1965
The Hamhung Military Academy is established to train personnel for missile development. Kim Il Sung determines that North Korea must be able to produce missiles that can strike Japan to prevent the intervention of US and Japanese military forces in the case of another Korean war. [Note: This could mark the beginning of the North Korean missile program].
—Yun Dŏk Min, "Mi-Puk Missile Hyŏpsang'ŭi Hyŏnhwanggwa Chŏnmang," ROK IFANS policy paper, 22 November 2000, p. 2; Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, p. 2; Testimony of Ko Yŏng Hwan, former North Korean Foreign Ministry official, before the US Senate, 21 October 1997.

1965
North Korea concludes an agreement with the USSR to acquire weapon systems, including artillery rockets and transporter erector launchers (TELs). The systems are to be delivered in 1968.
—Joseph S. Bermudez, Jr., "A History of Ballistic Missile Development in the DPRK," Occasional Paper No. 2, Center for Nonproliferation Studies, November 1999, pp. 4-5.

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Late 1962-Early 1963
North Korea receives a battalion of SA-2 surface-to-air missiles (SAMs) from the USSR. The missiles are deployed near Pyongyang.
—Joseph S. Bermudez, Jr., "Ballistic Missile Development in the DPRK," paper presented at the Research Institute on National Security Affairs (RINSA) International Symposium, National Defense University, Seoul, 1 September 1994, p. 15.

December 1962
The Central Committee of the Korean Workers Party adopts a policy to strengthen the military along "four lines." The party seeks to: (1) improve political and technical discipline in the military; (2) modernize the military; (3) "arm" all the people with "class conscientiousness and military technology;" and (4) fortify the "whole country." The military modernization program is a response to the modernization program in South Korea that followed the 1961 military coup d'état. The North Korean military modernization program includes expanded missile procurement and import substitution plans for arms production in general.
—Chang Chun Ik, Pukhan Haek-Missile Chŏnjaeng (Seoul: Sŏmundang, May 1999), p. 246; ROK Ministry of Unification, Pukhan Kaeyo 2000 (Seoul: Ministry of Unification, December 1999), pp. 160-161; 262-263.

Late 1962
North Korea receives a battalion of SA-2 surface-to-air missiles (SAMs) from the USSR.
—Chang Chun Ik, Pukhan Haek-Missile Chŏnjaeng (Seoul: Sŏmundang, May 1999), pp. 246-247.

Early 1960s
North Korea begins producing a version of the Chinese Type 63 107mm multiple rocket launcher (MRL).
—Christopher F. Foss, ed., Jane's Armour and Artillery 1991-92 (Coulsdon, Surrey: Jane's Information Group, 1991), p. 719.

1957-1961
North Korea's First Five-Year Plan (1957-1961) includes the production of 132mm artillery rockets. [Note: The 132mm size of the artillery is unusual, but other sources substantiate it.]
—Joseph S. Bermudez, Jr., "Ballistic Missile Development in the DPRK," paper presented at the Research Institute on National Security Affairs (RINSA) International Symposium, Korea National Defense University, Seoul, 1 September 1994, p. 13.

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