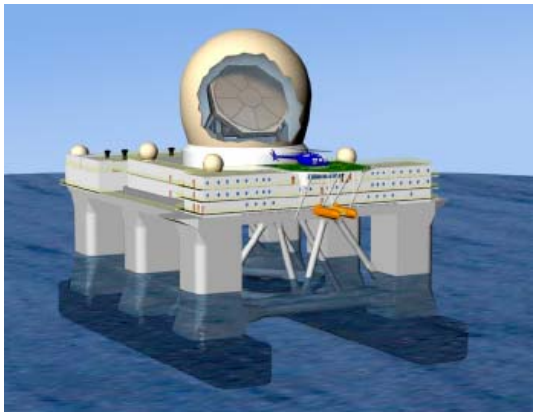
MISSILE DEFENSE AGENCY

MDA*facts*

Making Ballistic Missile Defense A Reality...

Sea-Based X-Band Radar (SBX)

The Sea-Based X-Band Radar (SBX) is the world's first combination of an advanced X-band radar and a state-of-the-art ocean-going, semi-submersible platform. Based on a fifth generation oil drilling platform, the SBX is a large twin-hulled, self-propelled vessel designed for exceptional stability in high winds and sea states equivalent to a so-called "Hundred Year Storm" condition. The structure is 240 feet wide, 390 feet long and 134 feet high. Once the radar is mounted, the SBX will tower more than 280 feet from its keel to the top of the radome, and will displace nearly 30,000 tons. The main deck is almost as big as two football fields and will house living quarters, workspaces, storage, power generation, bridge and control rooms, and the floor space and infrastructure necessary to support the 2,000 ton X-band radar antenna array, command control and communications suites, and an In-flight Interceptor Communication System Data Terminal (IDT).



Once integrated into the Ballistic Missile Defense System (BMDS), the SBX will be able to track, discriminate and assess incoming target missiles, and will greatly increase the Missile Defense Agency's (MDA's) ability to conduct more strenuous and operationally realistic testing of the Ground-Based Midcourse Defense element of the BMDS. Because of its mobility, it can be repositioned as needed to provide operational forward-based coverage or relocated for optimum coverage of various scenarios in the BMDS test program.

Currently undergoing superstructure fitting, the SBX platform, radar and support systems are scheduled to be fully integrated and available by the end of 2005. Sea trials will be conducted in the Gulf of Mexico before the vessel moves to its primary support base in Adak, Alaska.