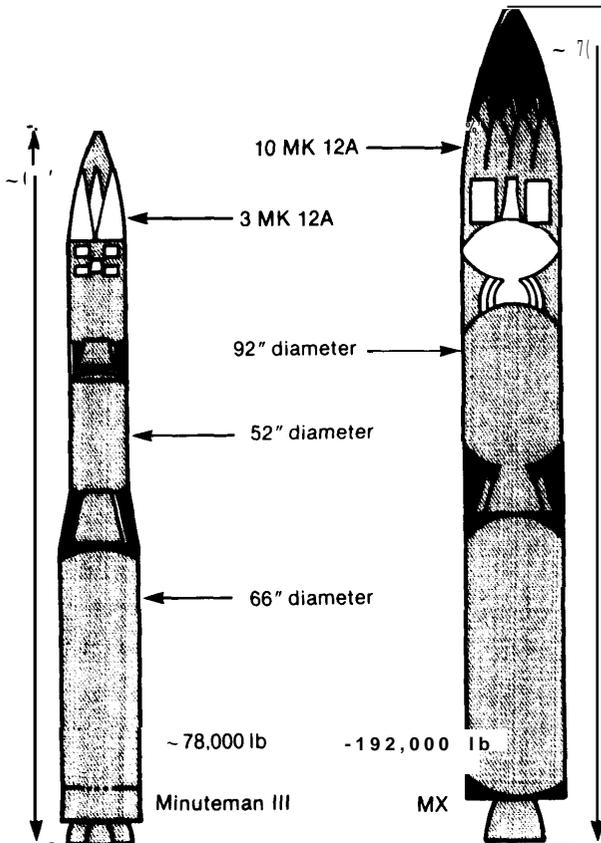


Appendix B MX MISSILE

The MX missile is a four stage intercontinental ballistic missile (ICBM) presently in full-scale engineering development. Like its predecessor, the Minuteman III, the first three rocket stages are solid propellant, with a liquid-fueled fourth stage/post-boost vehicle. Weighing about 192,000 lb, the missile will be 70 ft long, with a 92 inch diameter. The MX is a MIRVed (multiple independently targetable reentry vehicle) missile, and will carry 10 MK 12A warheads. The Minuteman III carries three MK 12As. A comparison between the MX and the Minuteman is given in figure B-1.

Figure B-1.—Missile Comparison



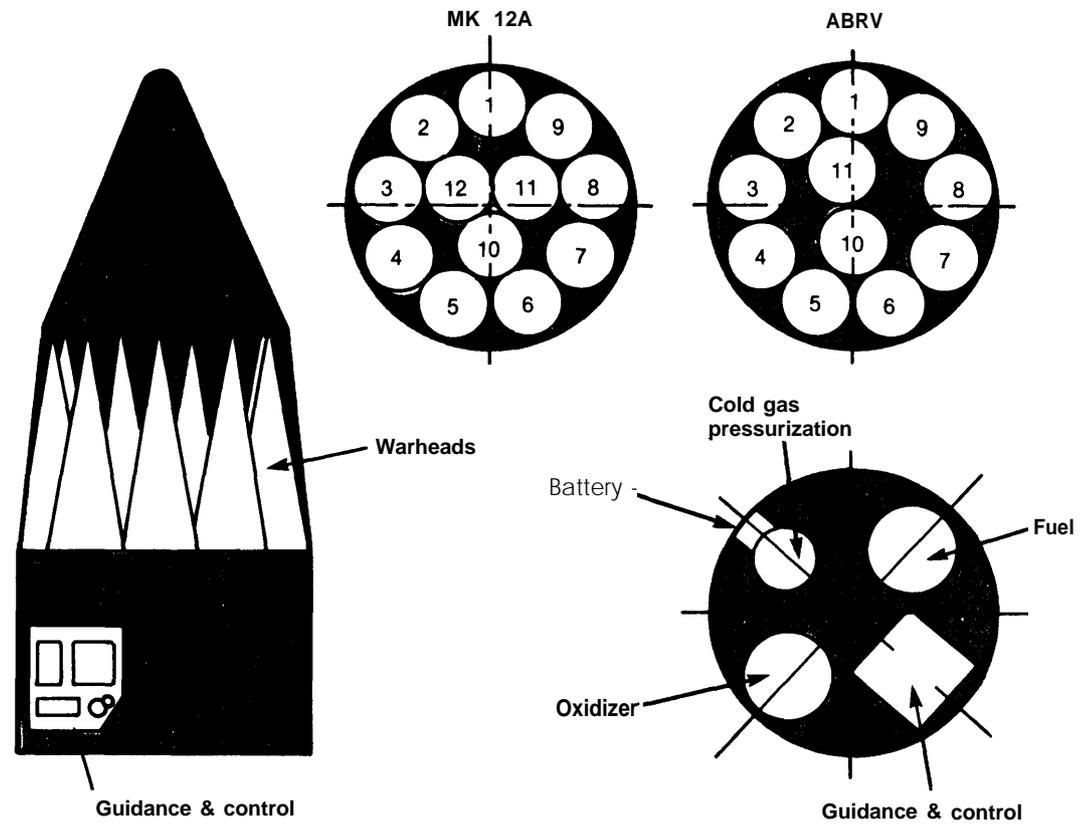
SOURCE: U.S. Air Force.

A drawing of the MX fourth stage postboost vehicle (PBV) is shown in figure B-2. We see that it is designed to be able to carry 12 MK 12A warheads, or alternatively, 11 advanced ballistic reentry vehicles [A BRV). SALT II would limit the number of reentry vehicles (RVS) to 10. The inertial measuring unit (IMU) of the MX'S guidance and control system is a significant advance in guidance technology over Minuteman, and is designed to give the MX much greater accuracy on target.

Also unlike Minuteman, the MX missile will be "cannisterized," to facilitate handling and movement of the missile, and to provide for the missile's environment control. The MX is also designed to be "cold launched" from the cannister. This means that for launch, the missile is first gas-expelled from the cannister, at which point it fires its first stage.

The MX missile is scheduled to begin flight testing in January 1983, for a total of 20 tests before system is in initial operating capability. The last flight test is scheduled for April 1986. These tests will check for a wide variety of missile functions and of associated equipment, including rocket stage performance, guidance and control, reentry system performance, range and payload capability, retargeting, and many others.

Figure B.2.—MX Post Boost Vehicle



SOURCE: U.S. Air Force.