Lockheed Martin is a key contractor for components related to the U.S. ICBM Minuteman III system, including as the main producer of Minuteman III reentry systems, and producer of the Airborne Launch Control System Replacement.

Lockheed Martin is also responsible for the construction of the Trident II (D5) nuclear missiles for both the UK and the U.S. Some of these made between the U.S. government and Lockheed Martin are done with a stipulation that none of the funds will come from the U.S. and instead will come directly from the UK.

The U.S. Navy is also planning to use the Lockheed Martin C-130J-30 Hercules aircraft for nuclear weapons command and communications, specifically in a Take Charge And Move Out (TACAMO) role.

Lockheed Martin is currently involved in 16 contracts related to nuclear weapons work, with an estimated annual value of $1.9 billion.