

9/20/95

"A MODIFICATION OF THE B61 IS EXPECTED TO REPLACE THE B53."

--- Footnote in the public document, Stockpile Surveillance: Past and Future

The B53 gravity bomb originally was designed and manufactured in the 1960s. In subsequent years, we have developed weapon components that are inherently more safe. It is possible to address the need for a B53 gravity bomb and effect its retirement with a minor modification to existing B61-7s. The B53 is the oldest weapon in the stockpile and does not meet modern safety design criteria. The B61-7 does meet modern safety design criteria, including electrical nuclear detonation safety. It also has insensitive high explosives. This action, requested by the joint DoD-DOE Nuclear Weapons Council and approved by appropriate congressional committees, will improve the inherent safety of the stockpile.

What kind of a modification is this?

This modification involves no change to the nuclear package of the B61-7. Minor mechanical changes are required to adapt the existing B61 weapons so that they can fulfill the B53 mission.

Will or could this B61 modification be an earth penetrator?

Mission details of all the weapons in the stockpile are classified. Any changes to the B61-7 are minor. There is no new mission. The B61-11 is only a replacement for the B53. The B61 is a gravity bomb that is in the stockpile in many different modifications. It has always been inherently capable of limited earth penetration. This capability of the B61 has been recognized and unclassified for at least 8 years.

If this is not a new weapon, why does it have new name, B61-11?

Again, this modification involves no changes to the nuclear package. Weapons receive new names whenever the packaging, interface or the delivery system is changed. This modification of the B61 is intended to meet the need for a safer weapon to replace the B53.

What tests are needed to certify this modification?

The laboratories will use appropriate non-nuclear experiments and apply existing computer codes to revalidate that the modifications have not affected the performance of the system.

What's the schedule?

Work to complete the modification will take roughly two years. Schedules for replacing the B53 are still being developed.