The W76-1 extends the life of the W76 submarine launched ballistic missile warhead to 60 years.

OVERVIEW

The W76-1 is a refurbished W76-0 warhead used on submarine launched ballistic missiles. The W76-0 was introduced into the stockpile for the Navy in 1978. The W76-1 Life Extension Program extended the originally designed warhead service life of 20 years to 60 years. The W76-1 meets all missions and capabilities of the original W76-0 warhead without providing new military capabilities. NNSA completed W76-1 warhead production at the Pantex Plant in December 2018.

CURRENT STATUS – STOCKPILE SURVEILLANCE

Completion of the W76-1 warhead production allows the continued deployment of the W76 warhead atop the Trident D5 missile in the Ohio-class ballistic missile submarines. NNSA currently conducts surveillance activities including the disassembly of selected warheads returned from submarines to assess reliability, safety, security, and performance. Some surveillance units are built into Joint Test Assemblies to conduct flight tests jointly with the Navy. Other units are built into test bed assemblies to conduct system-level ground tests. Ultimately, the data from these units is used to provide an annual assessment of the W76-1 to the President that the warhead remains safe, secure, and reliable.

NNSA NUCLEAR SECURITY ENTERPRISE ROLES

NNSA’s Los Alamos National Laboratory and Sandia National Laboratories were the design agencies for the refurbished W76-1 warhead. The W76-1 Life Extension Program also required the capabilities of scientists, engineers, technicians, and support personnel from the Pantex Plant, Y-12 National Security Complex, Savannah River Site, Kansas City National Security Campus, Lawrence Livermore National Laboratory, and Nevada National Security Site.