

B61 bombs in Europe and the US Life Extension Program

A briefing by BASIC

March 2016



British American Security
Information Council
www.basicint.org

What are B61 Bombs?

B61 are free-fall nuclear bombs carried by aircraft. They were first built in the 1960s, they are considered to be the oldest weapons in the US arsenal. The US possesses approximately 520¹ – about 200 are assigned to NATO's burden-sharing mission in Europe, hosted by NATO-member countries in Belgium, Germany, Italy, The Netherlands, and Turkey. The bombs are funded by US taxpayers.

These bombs are contained in six bases, two of which would utilize US aircraft (one air base in Incirlik, Turkey and one in Aviano, Italy). Non-US aircraft are assigned to other bases (Kleine Brogel, Belgium; Büchel, Germany; Ghedi Torre, Italy; and Volkel, The Netherlands).²

B61s and the NATO Alliance

- B61s are assigned to NATO as part of the Alliance's "nuclear deterrent", and are seen as part of allied burden-sharing. Some also see the basing of these bombs and related nuclear-sharing arrangements as a symbol of reassurance of allies' commitments to one another.
- NATO's 2010 Strategic Concept stipulates nuclear deterrence as a core component of the security alliance, highlighting the importance of the US, UK and France's strategic nuclear forces. However, compared to previous strategic concepts, the current one de-emphasised the role played by the B61s in Europe as an expression of the political vitality of the transatlantic link.

Plans to Modernize These Weapons

- US National Nuclear Security Administration (NNSA) wishes to upgrade and expand the lives of these weapons for about 20 years, through a Life Extension Program (LEP).³
- NNSA desires to transform the four variant types, or "MODs," of the B61 bombs (B61-3, 4, 7, and 10), and roll them into one MOD called the B61-12.⁴
- To make the bombs more accurate, the United States will remodel approximately 400 of these weapons with an additional tail kit adapted from the conventional JDAM bomb.⁵
- The first version of the B61-12 bomb is to be completed by 2020; all remaining bombs to be adapted by 2024.⁶



B61 bomb being moved before a test Photo (cc) NNSA

Reactions to the Life Extension Program

- The LEP is justified as a contribution towards President Obama's goals of reducing the amount of weapon variants and decreasing the overall number of nuclear weapons in the US stockpile.⁷ The B61 weapons require an upgrade in order to attain secure and accurate qualities.
- A report from the US House Armed Services Committee highlighted how some elements of these bombs must undergo refurbishment in order to maintain their full capacities for operating in the future.⁸
- Critics of the LEP have pointed to the escalating costs of the program, calling them unnecessary and politically driven.⁹ It is also suggested that the increased accuracy and lower yield of the B61-12 will make the weapon appear more usable to military planners.¹⁰

Estimated Costs

- The US Defense Department has estimated that the B61-12 LEP will cost at least \$10 billion. NNSA originally estimated the program to cost \$4 billion.¹¹ The production of a single bomb would cost about \$25 million, becoming the most expensive in the US arsenal.¹²

Opinion From European Host-States

- In order to meet US standards, European NATO members would need to spend \$100 million dollars to bring facilities up to US requirements, for “guns, guards, [and] gates.”¹³
- There have been domestic debates in some of the European host countries as to the future of the hosting arrangements, most notably in the Netherlands and in Germany. However, Russia’s actions in Ukraine seem to have steered positions toward maintaining the status quo.¹⁴
- In November 2013 the Dutch Parliament adopted a motion stating that the F-16 successor fighter jets may not have a nuclear task.¹⁵ However, in February 2015 the Dutch Parliament decided to order the F-35 fighter, which will be capable of integration with the B61-12.¹⁶
- In 2009 then foreign minister Guido Westerwelle (FDP) announced the coalition government’s position in support of the removal of US nuclear weapons from Germany.¹⁷ However, Chancellor Angel Merkel eventually veered from this course and approved the deployment of the new B61 on German soil. Additionally, the government decided to extend the life of its fleet of Tornados to mid 2020s to ensure Germany can still carry out its nuclear mission.¹⁸

B61-12 current status

- In July 2015 the first development flight test of the new B61 was completed. Russia deemed this test “utterly provocative”.¹⁹ It also reacted negatively to reports about the future deployment of the modernized B61 to Germany, threatening unspecified “countermeasures”.²⁰
- According to experts, analysis of footage of a drop test from October 2015 indicates that the B61-12 has been designed to also have earth-penetrating capabilities, increasing the range of targets the weapon can hold at risk.²¹

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