



## NATO's nuclear sharing arrangement and related procurement: Newer bombs, better planes and loads more money

By Nigel Chamberlain, NATO Watch

### Newer bombs

Two senior [US Defense Department officials](#) told members of the House Armed Services Committee's Strategic Forces Subcommittee on 28 October 2013 about the programme to modernise the B61 nuclear gravity bomb, thus extending its 'lifespan'. The whole programme has been delayed by political turmoil, efforts to control the momentum of nuclear weapons laboratories and, more recently, possible funding reduction brought about by sequestration. Consequently, an initial starting date for deployment of 2017 has been put back to the early 2020s.

A key component of the 'life extension' programme is the replacement of a parachute system with Boeing's guided bomb Tail Kit Assembly, which will increase the new B61-12's accuracy and enable the weapon's yield to be decreased without reducing its capabilities. This addition will also allow the B61-12 to be carried by the new Lockheed Martin F-35 Lightning II Joint

Strike Fighter as well as existing F-16 Fighting Falcons, which will be progressively phased out.

Madelyn R. Creedon, Assistant Secretary of Defense for Global Strategic Affairs, told the subcommittee that: "The commitment we make to refurbish this nuclear weapon system will serve as a concrete signal to the world of our commitment to the nation's security and our position as a guarantor of nuclear deterrence and assurance to our allies and partners."

[Air Force Gen. C. Robert Kehler](#), Commander of US Strategic Command, told the subcommittee that: "The B61 arms the dual-capable aircraft that are forward stationed in Europe as well as those of our NATO allies. It's about deterring; it's about assuring our allies of our extended deterrent commitment to them and from a military standpoint it's about being able to offer the president a series of options that include nuclear options in extreme circumstances."



(Unclassified photo of the B-61 - credit: Google Images)

Democrats on the subcommittee asked the officials whether the expensive B-61 modernization is needed. They were told that it was 'urgently needed', partly to reassure Europeans of US commitment to their territorial defence. Their deployment in Europe falls into the 'neither confirm nor deny' category of military declarations, but it is believed there are currently about 180 based in Belgium, Germany, Italy, the Netherlands and Turkey, but have been withdrawn from Greece and the UK. Notably, France has never deployed US nuclear weapons on its territory.



(Conceptual drawing illustrating the principle of adding a guided tail kit assembly to the gravity bomb - credit: Hans Kristensen, FAS Strategic Security Blog, 28 November 2012)

Creedon disagreed with a [New York Times editorial](#) from 26 May that called the B-61 rebuilding programme "a nonsensical decision" and inconsistent with President Obama's call to eliminate all nuclear arms and promise not to field a new and improved warhead, adding that the B-61s role "in providing nuclear deterrence throughout the globe is extremely important". Subcommittee chairman Rep. Mike Rogers said: "We've seen massively uninformed editorials and articles out there on the B-61." Creedon said NATO last year affirmed its need for nuclear arms in a deterrence and posture review. The review confirmed nuclear arms as a 'core component' of NATO defence.

## NATO Watch comment

It is unknown how many B61-12s are earmarked for deployment at bases in Europe, but [Hans Kristensen at the Federation of American Scientists](#) believes that the number will be less than 200. However, US Administration officials are using the 'assuring our allies



(F-35 - photo credits: Google Images)

While not all the F-35s entering national service and being deployed in Europe will be nuclear-capable, a brief review of national commitments of numbers to be purchased by NATO Member States would be

of our extended deterrent commitment' to support their determination to press ahead with B61 modernisation.

While all discussions about NATO's nuclear sharing arrangements are conducted in absolute secrecy, there have been reliable reports of unease, diplomatic discomfort even, that some Member States might prefer to take this opportunity to go down the nuclear disarmament route rather than the nuclear rearmament route. Perhaps they will press their case more firmly, and collectively, during the 2014 NATO Summit in Newport, Wales to remove what the "massively uninformed" [New York Times editorial board](#) referred to as 'the detritus of the cold war'. But, of course, were that aspiration to come to fruition, the groundwork and public engagement needs to start in national capitals now.

## Better planes

NATO Member States Canada, Denmark, Italy, the Netherlands, Norway, Turkey, the United Kingdom and the United States, along with Australia, form the F-35 Joint Strike Fighter consortium (The JSF Security Cooperation Participation Concept) and have [cooperative industrial procurement programmes](#). However, by 2012, many changes had occurred in Lockheed Martin's order book, while NATO members Germany, Belgium and France are notably absent from the ledger.

instructive for the purpose of this briefing. The initial 2001 projection figures are stated in brackets at the end of each national review:



aircraft for planned delivery in 2018, in addition to the 10 aircraft already approved. The country plans to purchase a total of 52 F-35s after earlier hesitancy. (48)

(Lockheed Martin logo for the F-35 - photo credit: Google Images)

- **Canada** has suspended its purchase of 65 F-35s. On 3 April 2012, the [Auditor General of Canada](#) published a report outlining problems with [Canada's procurement of the jet](#), including misinformation over the final cost. They were to be delivered over a seven-year period beginning in 2017. (80)
- In March 2013, **Denmark** [decided to review](#) its purchase of 48 F-35s and make a decision in 2015. It has been suggested that Denmark's dwindling defence budget and escalating F-35 costs might leave it unable to afford even half of the planned total. (48)
- **Italy** was the [first country](#) to announce a reduction of its overall fleet procurement, cutting it from 131 to 90 aircraft in a Defence Ministry statement on 15 February 2012. Confirmation of any purchase of F-35s is unlikely before further parliamentary review. (160)
- The F-35 has faced [substantial opposition](#) in the **Netherlands** and Parliament voted to scrap its purchase in June 2012. Dutch participation, including the purchase of two test aircraft, was subsequently restored but a final decision was deferred until 2015. More recently it has been reported that [the Dutch Parliament](#) will debate the purchase of 37 F-35s before the end of 2013. Deliveries of the first planes are expected to begin in 2019 and be completed by 2023. (85)
- **Norway's** [budget proposal](#) for 2014 includes procurement of a further six F-35s
- **Turkey** [announced](#) in March 2011 that it was placing its order for 100 F-35s on hold due to a US refusal to provide adequate access to the aircraft's source codes. A further decision is expected in January 2014. (100)
- The **UK** [initially announced](#) it would buy 138 F-35s. The commitment so far is for 48, but no further decision is expected before the next Strategic Defence and Security Review in 2015. (150)
- The **United States** is [by far the largest customer](#) for the F-35, with more than 2,457 planes of the three different models on order. (2,852)
- **Belgium** has spoken to the Pentagon about [possible purchase](#) of from 35 to 55 F-35s and may make a decision in 2014. (48)
- **Germany** has [dropped its initial interest](#) in purchasing F-35s and is likely to have its existing Tornado jets adapted to carry a variant of the B61-12. (100).
- **Australia, Israel, Japan** and **Singapore** are among the non-NATO nations who will, or are likely to buy F-35s. A much longer list of possible purchasing nations can be seen on the [Global Security website](#).



(F-35 unveiled - photo credit: Google Images)



## NATO Watch comment

The initial Lockheed Martin projection envisaged a [production run of around 6,000 F-35s](#). For whatever reasons, lower than expected demand may partly explain why [the US State Department](#) has been actively engaged in marketing the F-35 internationally through diplomatic channels and that political coercion has allegedly been applied in some cases.

NATO Member States bought heavily into the F-16 project and some of them have been used as the platform for national pilots to train in and deliver early variants of the B61 nuclear gravity bomb, provided by the United States. Many commentators believe NATO's 'Nuclear Sharing' arrangement to be a demonstrable and flagrant breach of the provisions of the UN Non-Proliferation Treaty (NPT).

As the F-16 is being 'phased-out' and progressively replaced by F-35s, perhaps Belgium (if an order is confirmed), Italy, the Netherlands and Turkey should agree to inform Lockheed Martin that they will not need any of their purchased aircraft to be modified to be able to carry B61-12s?

(The B61-7, which completed a limited life-extension programme in 2006, will be retired by the more extensive B61-12 programme - photo credit: Hans Kristensen, FAS Strategic Security Blog, 21 February 2013)



## Loads more money

President Obama put \$537 million in his 2014 budget proposal to upgrade the B61 bombs. But that is just for one year. [Estimates of the overall cost of the warhead 'life extension programme'](#) are currently running at around \$10 billion, which is a rather significant increase on the \$4 billion cost estimate provided by the National Nuclear Security Administration (NNSA) in the [FY2011 Stockpile Stewardship Management Plan](#).

The cost estimate for that Tail Kit Assembly has recently increased by 50 percent from \$800 million to \$1.2 billion. Not included, is the cost of equipping the F-35 Joint Strike Fighter with the

capability to carry the new weapons, recently estimated at around \$340 million, and rising, and the cost of training pilots to deliver them from the new F-35s. [Hans Kristensen](#) believes that 400 B61-12s could be constructed and has estimated that each one could cost \$28 million, so far.

[In 2003 Lockheed Martin envisaged](#) a total programme cost of more than \$200 billion over 25 years. On 20 July 2012, [the BBC reported](#) that "the F-35 has flown into a storm of criticism, particularly in the US where it has gained unwelcome notoriety as the most expensive equipment project ever undertaken by the Pentagon"... and ... "the US is spending around \$400bn (£254bn) to buy 2,500 F-35s for the navy, air force and marine corps". Shortly afterwards, it was reported that leaked documents from a [Pentagon budget review](#) suggest that the agency considered cancelling the entire project after revealing that the projected cost had risen to over \$1 trillion over 50 years.

Over two years ago, [The Economist](#) warned that the F-35 was in danger of slipping into a 'death spiral' where increasing per-aircraft costs would lead to cuts in the number of aircraft ordered, leading to further cost increases and further order cuts. And, according to a June 2012 US Government Accountability Office report, the F-35's unit cost has almost doubled to over \$600 million per plane, an increase of 93% over the programme's 2001 baseline

cost estimates.

The JSF Security Cooperation Participation Concept required [each participating country to invest \\$50 million](#) at the outset. Eight countries agreed to invest a total of \$4.375 billion over 10 years. The UK pledged \$2 billion, Italy pledged \$1 billion, the Netherlands pledged \$800 million, Canada pledged \$150 million, Turkey pledged \$175 million and Denmark and Norway pledged \$125 million each.

According to [Canada's Auditor General](#), the government knowingly understated the final price of the 65 jets by \$10 billion and could eventually cost over \$70 billion (to include

purchase, maintenance and operations over a period of 36 years). Testifying before a [Canadian parliamentary committee](#) in 2011, Rear Admiral Arne Røksund of Norway estimated that his country's 52 F-35 fighter jets will cost \$769 million each over their [operational lifetime](#).

In April 2012, [Turkey's Defence Minister Ismet Yilmaz](#) said the cost of each F-35 would be around \$120 million for Turkey, much higher than a cost estimate of \$40-50 million calculated in 2002. Having decided to reconsider its position on 17 September 2013, the Dutch Government has set a budget of 4.5 billion euros, or \$6 billion, for 37 aircraft and a further 270 million euros a year for maintenance and operating costs.

[Lorraine Martin, Lockheed Martin Executive Vice President and General Manager of the F-35 Lightning II Program](#), seized on the Dutch announcement to announce that her company was preparing for more international sales of the aircraft and that production costs and projected operating expenses have continued to decline. "This is no longer the trillion-dollar" project, she said, seemingly a recent reference to the Pentagon's disclosure that the projected costs over 50 years was now 'only' \$857 billion!

Seemingly responding to pressure, the CEOs of Lockheed Martin, BAE Systems, Northrop Grumman and United Technologies agreed to seek to cut the average price of the F-35 by 2019. US

Lt Gen. Bodgan was fiercely critical of the relationship between the Pentagon and the contractors when he took over the programme last year, but said "slow and steady progress [had been] made on all fronts .... the price needs to come down, no matter what". The average price of an F-35 air frame—excluding the engines—is now estimated at below \$100 million.

## NATO Watch comment

So, the cost of modernising the US nuclear gift to contracting countries within NATO (Belgium, Germany, Italy, the Netherlands and Turkey) is going to be around \$28 million (over 20 million Euros) apiece. However, 'the host' nations may

have to pay as much as, or more than, 400 million Euros per aircraft over the next 25 years (clearly, price estimation in this field is a bit like estimating the length of a piece of string) in order to be able to provide nuclear 'deterrence' for their populations. Perhaps the electorates in those five countries could be consulted on whether this is a price worth paying or asked if they might prefer their security to be delivered in a different way? Of course, their governments could also assert national sovereignty

and cordially decline to accept the embarrassingly expensive transatlantic nuclear gifts.

(B61 'weight in gold' graphic - credit Ploughshares Fund)

