

FROM THE ECONOMIST 23 JANUARY 2016

Nuclear weapons

Cruise control

Barack Obama's administration, which began with a vision to get rid of nuclear weapons, has a trillion-dollar plan to renew them

Jan 23rd 2016 | [From the print edition](#)

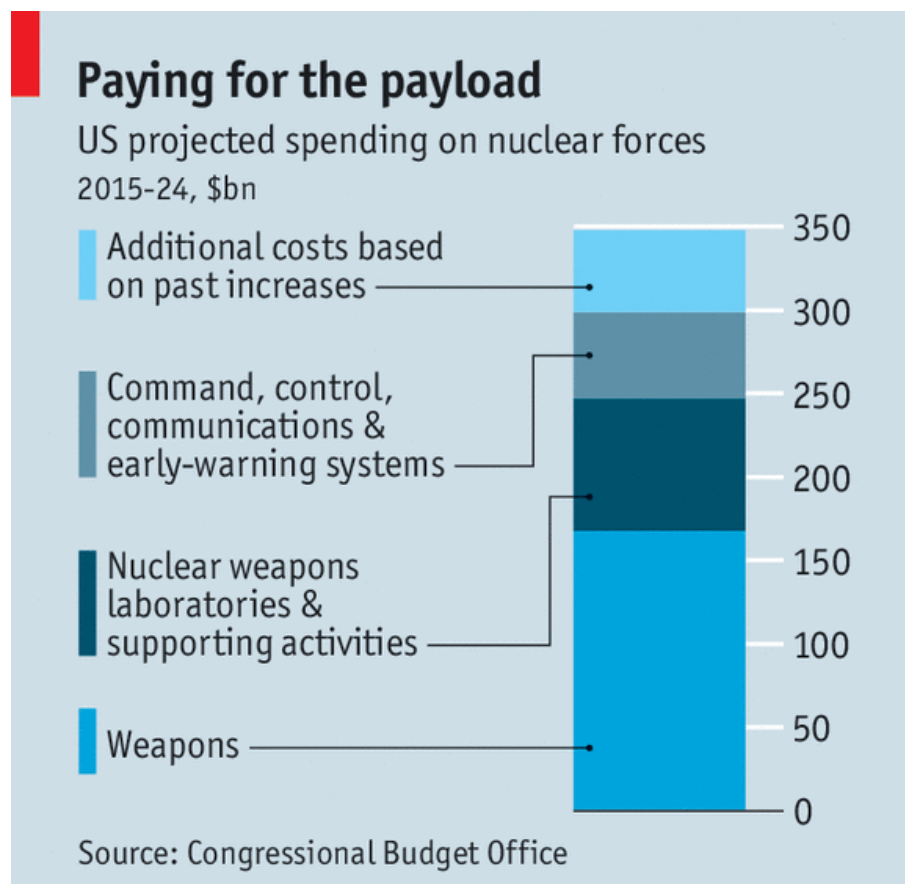


TWENTY-FIVE years ago, television viewers around the world were introduced to America's cruise-missile technology. As journalists stood filing their reports from the roof of the Al Rashid hotel in Baghdad, Tomahawk missiles were caught on camera sweeping through the city's streets on their way to targets struck with uncanny accuracy. Designed at the height of the cold war as a nuclear missile, subsequently armed with a conventional warhead, the Tomahawk has been in the vanguard of most American air campaigns since the first Gulf war. Yet plans to develop a successor, the long-range stand-off missile (LRSO), before the old ones are retired in 2030—part of the Obama administration's plan to overhaul America's nuclear deterrent over the next 30 years at a cost of \$1 trillion—are now under attack.

William Perry (defence secretary from 1994 to 1997, in charge of developing the air-launched cruise missile at the Pentagon during the late 1970s) and Andy Weber (the assistant secretary of defence responsible for nuclear programmes for five years, to 2014) caused a stir in October by calling for the cancellation of plans to build a fleet of 1,000 air-launched, nuclear-armed missiles. This would save \$25 billion.

Their argument is that nuclear-armed cruise missiles are a “uniquely destabilising type of weapon”, because potential foes cannot tell whether they are being attacked with a missile carrying a conventional warhead or a nuclear one. Scrapping the LRSO, they say, “would not diminish the formidable US nuclear deterrent in the least”. Arms-control experts fear that the justifications from the Pentagon for the new missile, and for a highly accurate new nuclear bomb, suggest that cold-war doctrines, controversial at the time, such as escalation control and limited nuclear-war-fighting, are being dusted off.

Hillary Clinton, who is generally thought to be more hawkish than Barack Obama, was asked while campaigning in Iowa for her take on the “trillion-dollar” nuclear programme. She replied: “Yeah, I’ve heard about that. I’m going to look into that. It doesn’t make sense to me.” Mrs Clinton’s remark betrays the pressure she is under from her left-wing rival, Bernie Sanders. But many Democrats feel a sense of acute disappointment that Mr Obama has not, in their eyes, lived up to the vision of a world free of nuclear weapons, one he described in the speech in Prague in 2009 that helped to win him his somewhat premature Nobel peace prize.



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Some of the most expensive parts of the nuclear programme are not disputed, even by liberal Democrats. Few argue against the replacement of the 14 Ohio-class ballistic-missile

submarines which will begin to wear out in the late 2020s. The bill for that is likely to be around \$140 billion for 12 new boats. More questionable is the air force's bid last year to replace the 440-strong Minuteman III land-based missile force at a cost of \$62 billion. A study in 2014 by the RAND Corporation judged that incremental modernisation might cost only a third as much, and could sustain the missile system for several more decades. Some, like Gordon Adams of the Stimson Centre, a think-tank, argue that land-based missiles are no longer necessary to maintain nuclear deterrence. They are the minority. The counter-argument is that as long as Russia builds all the 700 deployed missiles and bombers it is allowed under the New START treaty, America's land-based force will still be needed—if only as a “sink” providing targets to absorb a nuclear strike.

The arguments are therefore focused on the new cruise missile and a \$10 billion new version of the free-fall nuclear bomb called the B61-12, which will replace four older variants. The venerable B-52 bomber will be adapted to take the missile and will soldier on until 2040. The stealthy B-2 bomber, which entered service in 1997, will be able to carry both weapons. A nuclear-capable version of the much-delayed F-35 Joint Strike Fighter will be fitted to take the bomb. In addition a new aircraft, the Long Range Strike Bomber, (LRS-B) will be built as the principal carrier for the two weapons. In October the air force awarded Northrop Grumman the \$55 billion contract to develop and build around 100 of these bombers, which should enter service in 2025 as the B-3.

With such an advanced bomber flying into view, the argument for a new long-range missile is now weaker. Besides, the new bombs the B-3 will carry are much more sophisticated than their predecessors. With computerised guidance, manoeuvrable tailfins and a warhead whose explosive power can be dialled up and down from 50 to 0.3 kilotons (from three times the yield of the Hiroshima bomb to 2% of it) to reduce collateral damage, they will be accurate to within 30 metres.

Yet in nuclear deterrence such technological advantages bring their own problems. Precisely because it is so accurate and its yield can be made so small, the new bomb could make crossing the nuclear threshold a lot easier and therefore more tempting for commanders. Critics see it as encouraging a return to something like “flexible response”, a cold-war concept which many at the time thought risky, because it unsettled the apocalyptic logic of deterrence.

But advocates of both weapons reckon that it is their detractors who are stuck in the past. Clark Murdock of the Centre for Strategic and International Studies led three other think-tank teams in “Project Atom”, a report on America's nuclear future published last June. Mr Murdock concluded that if the extended deterrence America offers close allies is to remain credible, it will need smaller, more discriminating weapons as part of its nuclear arsenal.

That is because, despite the Iran deal, more rogue states may acquire nuclear capability. Russia, too, is placing a greater emphasis on low-yield nuclear weapons as a way of offsetting America's still-overwhelming conventional military superiority. Mr Murdock and Pentagon strategists fear that if America only has hugely powerful ballistic missiles at its disposal, it will be, in effect, "self-deterred" from responding to limited nuclear attacks (or threats of them) from opponents.

Other factors, too, suggest that new nuclear weapons will survive the campaign against them. Franklin Miller, a veteran nuclear strategist now at the Scowcroft Group, points out that Mr Obama would never have persuaded the Senate to ratify the New START treaty in 2010 had he not pledged to renew America's nuclear weapons on land, sea and in the air. That agreement allows for what is known as the "bomber discount", which counts an aircraft carrying several bombs as a single warhead. The LRS-B will be able to carry internally a payload of cruise missiles, the new B61-12 bombs or a smaller stand-off missile with a conventional warhead. It is improbable that any president would forgo that option while Russia retains it.

Nor is cost destined to loom as large as some expect. Kori Schake of the Hoover Institution says that with sequestration budgets caps now more or less abandoned, future defence budgets will be under less strain. The Centre for Strategic and Budgetary Assessments estimates that even at its peak in 2027, the complete modernisation plan will claim only 5% of the Pentagon's budget. Nuclear deterrence follows its own logic. So does paying for it.