

Is a New Nuclear Air-Launched Cruise Missile Necessary?

The U.S. nuclear arsenal, which features a triad of nuclear weapons on bombers, land-based ballistic missiles, and submarines, is undergoing an extensive and expensive modernization plan costing up to [\\$1.5 trillion](#) over the next three decades. The Pentagon plans to update all three legs of the triad by building a new class of ballistic missile submarines, a new stealth bomber, a modified nuclear gravity bomb, new cruise missiles, and a new intercontinental ballistic missile. Many experts worry that these modernization plans are excessive and unaffordable and could lead to underfunding of crucial conventional programs and the development of emerging defense technologies.

New Cruise Missile?

As part of this plan, the Pentagon plans to build 1,000 new air-launched cruise missiles (ALCMs) to replace the current model, which will reach the end of its operational life around 2030. An ALCM is a guided missile fired from an airplane and can travel long distances. The new ALCM, known as the Long-Range Standoff (LRSO), is projected to cost nearly \$11 billion in acquisition costs. In April 2020, the Air Force made a [surprise, early decision](#) to select Raytheon as the sole-source contractor on the LRSO.

Many nuclear policy experts question the necessity of building a new nuclear cruise missile for the bomber leg of the triad. Most notably, former Secretary of Defense William Perry (who helped develop the current air-launched cruise missile during his time at the Pentagon) and former Assistant Secretary of Defense Andrew Weber [penned an op-ed](#) urging the president to cancel the program, deeming the weapon both unnecessary and inherently destabilizing.

Unnecessary

A new ALCM is unnecessary to maintain a credible nuclear deterrent and would siphon funding from critical weapons acquisition plans.

- Without the LRSO, the United States still maintains a triad of thousands of nuclear weapons on ballistic missile submarines, intercontinental ballistic missiles, and bombers that carry nuclear gravity bombs.
- The new stealth bomber, which is designated to enter service by 2027, will be designed to penetrate air defenses. Building a new penetrating stealth missile on a new penetrating stealth bomber is a [redundancy for a redundancy](#).
- The Air Force has conventional non-nuclear standoff capabilities, like the [JASSM-ER cruise missile](#) produced in 2014, which are highly effective at destroying targets from outside contested airspace.

Destabilizing

A new nuclear cruise missile could amplify the risk of nuclear escalation.

- Deploying a new cruise missile increases the risk of miscalculation and unintended escalation, since other countries cannot determine if a launched missile is conventional or nuclear.
- While unnecessary for deterrence, the nuclear cruise missile is seen by some proponents as a tool for “limited” nuclear war. The world has avoided a nuclear war for 70 years because national leaders, regardless of ideology, recognize that any use of a nuclear weapon will likely lead to nuclear escalation that is impossible to control. The bright line between conventional and nuclear war should be assiduously maintained.
- The proliferation of nuclear cruise missile technology to other countries, like China, could increase the likelihood of a future nuclear exchange. Instead of motivating a spread of this technology, the U.S. could take a leadership role in negotiating a global ban on nuclear cruise missiles.

The Bottom Line

Canceling the new air-launched nuclear cruise missile will relieve budgetary pressure on other modernization priorities and decrease the likelihood of an unintended nuclear exchange, while still leaving the United States with a highly credible nuclear deterrent.