



The Nuclear Sea-Launched Cruise Missile

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The proposal to return nuclear-armed sea-launched cruise missiles (SLCM-N) to American naval vessels has been touted as a solution to a narrowly imagined deterrence problem. Instead, SLCM-N could undermine deterrence and create operational complications, and its presence alone in regional conflict zones would serve to destabilize—and potentially escalate—conflict between nuclear powers and continue a dangerous capability-chasing trend. A full accounting of its various risks is needed.

KEY RISKS:

- 1 The Operational Challenge:** The United States possessing nuclear-armed sea-launched cruise missiles would create significant complications for conventional operations and undermine key aspects of U.S. defense strategy for the Indo-Pacific.
- 2 The Discrimination Problem:** The inability of states to distinguish whether an incoming cruise missile is nuclear or conventional will compound doubt and uncertainty, posing a serious threat to crisis communication, stability, and control—ultimately eroding the deterrence mission itself.
- 3 The Proliferation Threat:** Any increased reliance on so-called “nonstrategic” nuclear weapons reinforces a dangerous norm of centering nuclear weapons in small-scale conflict planning and could incentivize other states to seek these weapons and consider them more “usable.”

Risk 1: The Operational Challenge

The revival of nuclear sea-launched cruise missiles after a 31-year absence would drive significant new operational challenges for the United States. Their presence on surface ships or submarines would sharply increase costs and add to the Navy's daunting logistical and manpower issues, given the need for specialized equipment and training. Their deployment would also hinder the Navy's ability to operate and dock in certain locations, threatening regular operations in various theaters.

Plans to deploy SLCM-N also present a potential roadblock in the expansive AUKUS agreement that is pivotal to American interests in the Indo-Pacific. The U.S. has regularly used conventionally armed Tomahawk cruise missiles in modern conflicts, and is moving to sell them to Australia as part of the AUKUS deal. Such a sale will become even more fraught with complications—and be even more strongly challenged by China—if the U.S. Navy is made to intermingle conventional and nuclear-specific supply lines for the SLCM-N variant on its own ships.

U.S. and allied security strategies and military operations would be further complicated if the SLCM-N move drives additional states (such as China) to seek and field this type of nuclear weapon. This is a serious risk in an environment in which multiple nuclear-armed states are showing a dangerous pattern of arms-racing behavior that they try to cloak as capability-matching.

In addition to these operational and logistical challenges, the SLCM-N is itself a redundant capability, as described in both the Navy's most recent budget request, and in the analysis of U.S. allies like Japan. Other existing nuclear weapons (and conventional capabilities) provide an equal and stable deterrence package for the region.

LEARN MORE:

Parthemore, Christine. [Critical Steps in Biden's Nuclear Posture Review](#). The Council on Strategic Risks, April 12, 2022.

Nishida, Michiru. [Are U.S. Nuclear Sea-Launched Cruise Missiles Necessary? A Japanese Security Analysis](#). The Council on Strategic Risks, February 9, 2022.

“Ending plans to bring back U.S. sea-launched cruise missiles ends a possible hindrance to potential future U.S. efforts in the Indo-Pacific.”

Risk 2:

The Discrimination Problem

A particular challenge of nuclear weapons which share a common launch platform with conventional weapons is the so-called “Discrimination Problem”—the challenge an observer faces in identifying (and thus appropriately responding to) a detected weapons launch on a condensed timeline.

For the SLCM-N, the fact that both its missile system (likely a restoration of the nuclear-armed Tomahawk variant) and its launch platforms (guided-missile or attack submarines and/or cruisers and destroyers) would be identical to those used in conventional operations means an adversary would have no way to tell upon detection if a conventional or a nuclear strike has been made.

Across the various scenarios in which a “nonstrategic” nuclear strike using SLCM-N may feasibly be ordered, any adversary would be faced with a dire choice: to wait for the missile’s impact to assess intent, or to anticipate a nuclear strike and mobilize a counterstrike before serious damage could be done. Additionally, the SLCM-N is inherently stealthy compared to ballistic missiles, further cutting reaction times and quality of intelligence-under-fire. Importantly, these highly destabilizing effects are present where SLCM-N is deployed, whether or not actual use is imminent in a given conflict.

Yet such crisis scenarios featuring high tensions and short reaction times are in fact the primary military justification for the SLCM-N: bridging an imagined gap in nuclear deterrence where a perceived inability for the U.S. to deliver nuclear weapons on the battlefield would lead to an adversary taking escalatory steps.

However, intermingling nuclear and conventional weapons on forward-deployed vessels comes at a great cost to communicating intent and controlling an unfolding crisis, and ultimately undermines deterrence and strategic stability.

LEARN MORE:

Owens, Jasmine. [BRIEFER: The Next Great Idea in Arms Control – An End to Nuclear Sea-Launched Cruise Missiles](#). The Council on Strategic Risks, May 19, 2021.

Narang, Vipin. [The Discrimination Problem: Why Putting Low-Yield Nuclear Weapons on Submarines is so Dangerous](#). *War on the Rocks*, February 8, 2018.

“In the fog of conflict, this ambiguity can heighten the chance of miscalculation: it may drive a ‘use them or lose them’ mentality.”

Risk 3:

The Proliferation Threat

Today, Russia is the only state with a concerted nuclear sea-launched cruise missile program. This alone is not a reason for the United States to mimic Russia's possession of this dangerous and unnecessary nuclear capability; rather, it is an opportunity to further highlight that Russia does not presently behave as a responsible world power, and bolster efforts to promote important nonproliferation goals.

There is a real risk that a U.S. revival of nuclear-armed SLCMs would incentivize China, India, and/or Pakistan to subsequently add this type of nuclear weapon to their own arsenals. This future would have far greater ambiguity, reduced crisis stability, and even more-complicated security dynamics among nations, in particular in the Indo-Pacific, where any future conflict would certainly feature a strong naval component.

The United States bringing back the SLCM-N could also push other nations further toward so-called nonstrategic nuclear weapons, and the types of lower-yield nuclear capabilities that previously drove incredibly dangerous dynamics in Europe during the Cold War. The SLCM-N and other nuclear weapons with similar characteristics would heighten concern among nations that their possessors consider nuclear weapons to be acceptable warfighting weapons—potentially leading to the threshold for nuclear weapons use being lowered.

Conversely, the United States ending plans to bring back the SLCM-N will send a strong signal that responsible nations can and should avoid steps that worsen the global security environment through nuclear risk-taking. Constraint in this area has long been a key pillar of both nuclear deterrence and in arms control, and should be upheld.

LEARN MORE:

Weber, Andrew. [Here is the nuclear triad we actually need for deterrence](#). *The Hill*, May 20, 2021.

Parthemore, Christine and Andrew Weber. [Is Change Coming? Smartly Reshaping and Strengthening America's Nuclear Deterrent](#). *War on the Rocks*, October 14, 2020.

“As Presidents Reagan and Gorbachev well understood, smaller nuclear weapons with short flight times make nuclear war more likely.”