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<u>ACTION</u>

17 January 2025

MEMORANDUM FOR THE PRESIDENT

VIA: BULLETIN OF THE ATOMIC SCIENTISTS

FROM: DAVID KEARN

PURPOSE: CANCEL THE SEA-LAUNCHED NUCLEAR CRUISE MISSILE (SLCM-N)

Mr. President, we urge the cancellation of the SLCM-N program. It is unnecessary, costly, and makes the job of rebuilding our military more difficult.

As you know, the SLCM-N program was initiated during your first term. It was canceled by the Biden administration, but Congress allocated funds to revive the program in the 2024 National Defense Authorization Act. However, with the benefit of study and analysis, the Navy has signaled opposition to the program, viewing it as costly distraction from pressing modernization priorities, a strain on the already struggling defense industrial base, and an unnecessary complication of the missions of the fast attack submarine fleet.

THE CASE FOR SLCM-N

The rapid expansion of China's nuclear arsenal over the past five years and its cooperation with Russia and North Korea—two nuclear powers that threaten US national interests and allies—has caused alarm in the defense community. US conventional military power has also eroded, leading some experts to argue that the United States should rely more heavily upon nuclear weapons like SLCM—N.

Advocates of the SLCM-N program highlight the need for visible, forward-deployed tactical nuclear weapons to more effectively deter

https://breakingdefense.com/2022/03/biden-administration-kills-trump-eranuclear-cruise-missile-program/

https://www.congress.gov/bill/118th-congress/house-bill/2670/text

http://breakingdefense.com/2024/11/sub-launched-nuclear-cruise-missile-will-need-an-entirely-new-industrial-base-warns-navy-admiral/



China and reassure US allies in Asia.⁴ They also argue that it would provide a proportional response to limited nuclear use or certain conventional attacks by an adversary. Finally, the program was initially seen as "easy" to acquire, using existing conventional missile systems fitted with low-yield nuclear warheads, which would allow the Navy to avoid the typical drawn-out processes of major Pentagon procurement programs.⁵

REDUNDANCY

The United States already deploys significant conventional military assets in key regions and can quickly augment them by moving in nuclear weapons as needed to signal to adversaries that transgressions will have severe consequences. First, the Long-Range Standoff Missile (LRSO) deployed on either B-52 or B-21 bombers—while not technically classified as a "tactical weapon"-will possess the range, penetrability, and single-kiloton yield to provide the United States with the flexibility to respond to the threatened or actual use of nuclear weapons by an adversary in a proportional way without resorting larger strategic systems. Second, the B61-12 gravity bomb provides a low-yield munition that can be delivered by bomber and strike aircraft. Finally, thanks to your leadership during the first administration, the United States also possesses a low-yield variant of the Trident II D-5 submarine-launched ballistic missile (SLBM). In short, the United States possesses adequate nuclear capabilities to provide limited, flexible options if you or a successor would ever need them.

COSTS

The expected costs of the SLCM-N-initially estimated at \$10 billion but likely to be higher-are significant. The Navy will do its best to implement your preferred policies, but the SLCM-N program will require an "entirely new workforce and industrial base" to deliver this single system. The new missile cannot simply utilize an existing conventional Tomahawk cruise missile fitted with a nuclear warhead, as advocates initially assumed.

⁴ https://www.atlanticcouncil.org/in-depth-research-reports/issue-brief/strengthening-deterrence-with-slcm-n/

https://www.atlanticcouncil.org/insight-impact/in-the-news/soofer-quoted-in-breaking-defense-on-the-production-timeline-for-the-sub-launched-cruise-missile/

https://crsreports.congress.gov/product/pdf/IF/IF12084

⁷ http://breakingdefense.com/2024/11/sub-launched-nuclear-cruise-missile-will-need-an-entirely-new-industrial-base-warns-navy-admiral/



Beyond program costs, the Navy's Strategic Systems Program office already has a "very full plate" of other programs, including upgrading the Trident II D-5 SLBM, as well as the new Conventional Prompt Strike hypersonic missile to be deployed on destroyers and attack submarines. A new program devoted exclusively to SLCM-N would divert workforce and resources away from these important programs at a time when industrial capacity and budgets are already stretched thin.

INDUSTRIAL BASE ISSUES

This brings up the larger issue of a highly constrained and compromised defense industrial base currently struggling to provide the Defense Department with platforms and munitions at requested cost and schedule. These challenges impact both conventional and nuclear weapons programs. Similarly, the complex of nuclear weapons laboratories and related facilities overseen by the Energy Department and the National Nuclear Security Administration (NNSA) are only starting to address the damage done by decades of neglect and underinvestment. These vital US national assets are struggling to successfully execute programs that were devised years ago and are in dire need of further investment, not added demands for superfluous programs unwanted by military leaders.

CONSIDERATIONS

Given your deep knowledge of military affairs, you understand that attempting to use lower-yield tactical nuclear weapons as a replacement for conventional military power is a poor economic trade-off that may also be seen as a bluff by savvy adversaries. More important, given your experience with leaders like Xi Jinping and Vladimir Putin as well as US allies (which often do not sufficiently contribute to their own defense), you would be right to be skeptical of the purported impact of deploying new tactical nuclear weapons simply to placate those who, wrongly, perceive a decline in US conventional military power.

With your leadership and direction, the US defense community should work to develop a clear-eyed and cool-headed long-term plan to reenergize the defense industrial base, fully support the existing

⁸ https://thehill.com/opinion/national-security/4624326-almost-all-navyshipbuilding-is-hopelessly-behind-schedule-as-war-looms/; https://foreignpolicy.com/2024/05/17/us-navy-ships-shipbuilding-fleet-chinanaval-race-pacific/

⁹ https://thebulletin.org/2024/10/the-energy-department-just-made-one-plutonium-pit-making-more-is-uncertain/

 $[\]frac{10}{\text{https://www.defensenews.com/naval/2022/05/13/the-navy-doesnt-want-nukes-on-ships-despite-interest-from-some-combatant-commanders/}$





POLICY ACTIONS

strategic nuclear modernization program of record, and focus on building up the critical conventional military assets necessary to maintain deterrence against peer competitors. This path forward will keep the United States strong and safe while providing necessary leverage to implement your foreign policy agenda.

RECOMMENDED COURSE OF ACTION

We urge that you work with Congress to cancel the SLCM-N program. In doing so, you may prefer to recommend that the allocated funds be devoted to existing conventional Navy programs or toward further investment in flexible nuclear programs, such as the long-range standoff (LRSO) cruise missile.

Cancel the SLCM-N program (Recommend re-allocating funds for the US Navy budget) Cancel the SLCM-N program (Recommend transfer of funding to LRSO) Maintain the SLCM-N program as is

David Kearn is a visiting scholar at Harvard University's Managing the Atom Project and an associate professor in the Department of Government & Politics at St. John's University in Queens, New York. He has served as Strategic Advisor for Countering Weapons of Mass Destruction in the Office of the Secretary of Defense for Policy.