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Bruce Klingner
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What should the United States government, including the Department of the Interior, prioritize from a strategic standpoint to counter North Korea's threats to the Pacific territories?

The defense of Guam is critical for U.S. national security and its ability to project power in the western Pacific.

As the Heritage Foundation assessed,[1] to counter growing missile threats from North Korea and China, Guam needs a full-spectrum, permanent, 360-degree missile defense capability. While Indo-Pacific Command and the Missile Defense Agency have requested funding for improving U.S. missile defenses in the Pacific, new capabilities will take time to develop and deploy.

- The MDA requested more than $800 million to design and build missile defense on Guam, including Lower Tier Air and Missile Defense Sensors, Patriot defenses, and an assortment of mid-range and indirect fire launchers.[2]
- Aegis Ashore, a missile defense capability that can track, engage, and destroy mid-course and terminal missile threats, is still years away from deployment on the island of Guam.
- An expanded Terminal High Altitude Area Defense (THAAD) systems should also be included since it provides effective defenses against ballistic missiles over a broad area and augment the existing short-range, highly effective Patriot (PAC-3) air defenses on Guam.

Since this missile defense architecture will not be complete for years, the United States should implement a near-term, ready-to-employ defense. The United States should:

- **Assign an Aegis Afloat capability to Guam** until permanent, robust missile defenses are put in place, as per INDOPACOM's request in the Pacific Deterrence Initiative (PDI).
- **Deploy an adequate counter-rocket, artillery, and mortar (C-RAM) capability to Guam** to provide added defenses against cruise missile threats. C-RAMs are short-range terminal engagement systems that resemble advanced, high-velocity, high-capacity Gatling guns. Such systems have been used effectively in overseas forward operating bases and are well suited to defend against cruise missile threats. They would be an

[1] Robert Peters, "The Plan to Defend Guam from Missile Threats Is Years from Completion: More Investment Is Needed Now," Heritage Foundation Issue Brief No. 5336, January 9, 2024, https://www.heritage.org/sites/default/files/2024-01/IB5336.pdf.
[2] Missile Defense Agency, "Fiscal Year (FY) 2024 Budget Estimates Overview," January 2023, https://www.mda.mil/global/documents/pdf/MDA%20FY24%20Budget%20Booklet.pdf.

effective augmentation for PAC-3s when it comes to smaller enemy aircraft or sea-skimming cruise missiles and drones.

- **Continue apace with the MDA's sequenced approach** that integrates Patriot point defenses and THAAD, with the ultimate goal of the MDA providing a 360-degree missile defense capability on Guam.

Given North Korea's increased aggression in surrounding regions, how has the assessed threat to the U.S. Pacific territories changed?

In January 2021 - Kim Jong-un established a 5 year strategic plan for expanding and improving North Korea's nuclear and missile forces, including the development of:

1. Tactical nuclear weapons
2. Hypersonic glide warheads
3. Missiles with multiple warheads
4. Cruise missiles
5. Reconnaissance satellites
6. A nuclear-powered submarine and underwater-launched nuclear strategic weapon
7. Solid-fuel missiles, including ICBMs

Each of these categories could pose a greater threat to the U.S. Pacific territories, particularly Guam which North Korea has repeatedly threatened by name.[3] Since then, North Korea has completed or made substantial progress on each of these categories.

Tactical nuclear weapons

- In March 2023, Kim Jong-un displayed the "Hwasan-31" tactical nuclear weapon which would augment the higher yield strategic nuclear weapons revealed previously. A wall poster behind Kim indicated that the tactical nuclear weapons could be fitted on eight different ground- and sea-based missile systems.[4]

Hypersonic missiles with maneuverable warheads

- The Hwasong-12 liquid-fueled intermediate-range ballistic missile was first tested in 2017 and demonstrated it has sufficient range to target the Pacific territories. The Hwasong-16 solid-fueled IRBM was tested during 2022-2024 and, like the Hwasong-12, has sufficient range to target the Pacific territories and is assessed as capable of carrying nuclear warheads.
- Solid-fueled missiles, such as the Hwasong-16, are more difficult for the U.S. and its allies to identify and target since they are pre-packaged with fuel whereas liquid-fueled

[3] I provided a compendium of North Korea threats to Guam in my prepared testimony.
[4] The KN-23, KN-24, KN-25, Hwasong-11D, Haeil underwater drone, the Hwasal-1 and Hwasal-2 strategic cruise missiles and an unidentified missile.

missiles require a lengthy fueling process out in the field, exposing them for longer periods of time to reconnaissance satellites and aircraft.
- Both the Hwasong-12 and Hwasong-16 have variants with a hypersonic wedge-shaped maneuverable glide vehicle and a hypersonic conical maneuverable warhead (Marv). The hypersonic flight path and maneuverable warheads would be more difficult for U.S. missile defense systems to intercept.

Missiles with multiple warheads

- The Hwasong-17 liquid-fueled and Hwasong-19 solid-fueled ICBMs are assessed as capable of carrying multiple nuclear warheads, though they would likely be targeted on the continental United States.
- However, in 2024, North Korea conducted the first test of a multiple independently targetable re-entry vehicle (MIRV) using the first stage of a Hwasong-16 intermediate-range ballistic missiles. Pyongyang announced that the warheads successfully targeted three separate targets and the missile also had a decoy system to make interception more difficult.
- Potentially, Hwasong-16 missiles could target the Pacific territories with multiple nuclear warheads in addition to maneuverable hypersonic warheads.

Cruise missiles (ground- and sea-launched)

- Beginning in 2021, North Korea has tested the Hwasal-1 and Hwasal-2 strategic long-range ground-launched cruise missiles with sufficient range to reach the Pacific territories. These missiles have been launched from an experimental missile submarine, a new warship and ground-based vehicles.
- In 2023, Pyongyang first tested the Bulwhasal-3-31 sea-launched cruise missile.
- The Hwasal and Bulwhasal missiles would be capable of carrying nuclear warheads.

Military reconnaissance satellite

- After several unsuccessful attempts, North Korea succeeded in 2023 in launching the Malligyong-1 reconnaissance satellite on Chollima-1 rocket. Pyongyang announced the satellite surveilled Anderson Air Force Base, Apra Harbor and other major U.S. military bases in Guam.

Nuclear-powered submarine

- In September 2023, North Korea displayed what it claimed was “a Korean-style tactical nuclear attack submarine,” however most analysts assess it is actually a diesel/electric-powered sub since it was an old Romeo submarine which had its hull lengthened. The submarine has 10
    - launch tubes – four tubes for launching submarine-launched ballistic missiles and 6 tubes for launching land-attack cruise missiles.
- In March 2025, Kim Jong-un inspected a “nuclear-powered strategic guided missile submarine” under construction. Pyongyang may have gained nuclear-propulsion

technology from Moscow. The submarine is much larger than the submarine revealed in 2023 and may have 10 launch tubes for submarine-launched ballistic missiles.

Underwater attack systems

- In 2023 and 2024, North Korea tested the Haeil-1, Haeil-2, and Haeil 5-23 underwater nuclear strategic attack weapon system which can be fitted with nuclear weapons. In some tests, the system cruised for 59 hours in an oval pattern. Pyongyang claims the system can stealthily attack allied ships and create a “radioactive tsunami.”