

# Missile Defense for Guam Needed to Improve Deterrence in the Indo–Pacific

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## KEY TAKEAWAYS

Guam provides U.S. forces with a strategic location to fight from in conflict with China, but it is increasingly threatened by China's forces.

To enhance deterrence, the DOD needs to quickly deploy advanced missile defense on Guam after deferring the effort for too long.

The DOD should commit to building Aegis Ashore—which could subsequently be built upon—and congressional funding should support the urgency of the effort.

For three years, air and missile defense for Guam has appeared on U.S. Indo–Pacific Command's (INDOPACOM) list of unfunded priorities, yet efforts to begin work on this project have not progressed.<sup>1</sup> Both former and current INDOPACOM commanders have stressed the importance of Guam's strategic location in great-power competition with China, whose offensive capabilities that threaten Guam continue to improve.

Yet despite this rapidly growing threat, the Department of Defense (DOD) has deferred committing to any specific system to build on Guam, and instead continues to study the problem. To deter the Chinese threat, the DOD should commit to a phased approach toward missile defense for Guam, initially deploying an Aegis Ashore system (the most feasible and realistic system for timely deployment that meets

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This paper, in its entirety, can be found at <http://report.heritage.org/ib5203>

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INDOPACOM's requirements), while initiating an effort to incrementally improve the system with additional sensors and shooters. Congress should provide significant funding for the effort in fiscal year (FY) 2022.

## Why Guam Needs Advanced Missile Defense

INDOPACOM's investment plan for FY 2022–2027 states, “Guam is our most crucial operating location in the western Pacific” and requires a strong defense.<sup>2</sup> Home to Anderson Air Force Base (AFB), Naval Base Guam, and Marine Corps Base Camp Blaine, Guam is strategically located in the Western Pacific and provides U.S. forces with a base to fight from in a regional conflict.

**Guam's Strategic Importance.** Because Guam is located on the second island chain in the Western Pacific, it is far enough from China to be out of range of its arsenal of short-range missiles, but close enough to provide both logistical support to warfighters forward-deployed along the first island chain, near the East and South China Seas, as well as long-range fires.<sup>3</sup> Anderson AFB hosts F-22 fighter squadrons, as well as the Bomber Task Force, enabling significant air-based power projection from the island. The Navy has access to Guam's deepwater strategic port, which enables repair and supply of the Pacific fleet—including aircraft carriers—during a conflict with China. Finally, since Guam is a U.S. territory, the United States can conduct operations from Guam without coordinating with a host nation.<sup>4</sup>

**The Chinese Threat.** Yet Guam is becoming increasingly threatened as China advances its regional conventional and nuclear forces capable of striking Guam. According to current INDOPACOM Commander Admiral John Aquilino, China's military buildup in the Indo-Pacific creates an imbalance that “may embolden China to unilaterally change the status quo before our forces may be able to deliver an effective response.”<sup>5</sup> China's DF-26 ballistic missile, known as the “Guam killer,” can strike Guam with precision,<sup>6</sup> and the DF-17 missile can range Guam with a hypersonic glide vehicle.

China's arsenal also includes cruise missiles that can strike Guam if launched from H-6 long-range bombers or naval vessels like the improved JL-3 submarine-launched ballistic missiles. Most of China's regional missiles are also nuclear-capable.<sup>7</sup>

The Chinese have even recently released a propaganda video displaying their bombers attacking Andersen AFB.<sup>8</sup> The current Terminal High Altitude Area Defense (THAAD) battery on Guam, originally deployed to respond to the lower-end North Korean ballistic missile threat, is

inadequate to pace this sophisticated Chinese arsenal.<sup>9</sup> Guam has become a target that the United States may need to fight for in a conflict over Taiwan, which, according to Admiral Aquilino “is much closer to us than most think.”<sup>10</sup>

**Deterrence.** Active air and missile defense of Guam would enhance deterrence of a Chinese attack. Missile defense can convince an adversary that its attack will fail—or that the costs of overcoming missile defense systems would outweigh the benefits of success. China’s forces may indeed have the ability to overcome current and potential air and missile defense systems on Guam, but doing so would require depleting offensive forces. As a result, missile defense on Guam would complicate China’s planning and perhaps make Beijing think twice before launching an attack. Moreover, defending Guam helps signal to China that an attack on U.S. territory is unacceptable and would provoke major consequences.

Finally, should deterrence fail, a strong missile defense system can help protect the lives of 170,000 U.S. citizens who live on Guam, as well as over 20,000 American servicemembers, civilians, contractors, and their families.<sup>11</sup> Given that it has the required technological capabilities, the United States has a moral imperative to defend Guam as a territory of the U.S. homeland and protect the forces on the island.

## Aegis Ashore: The Best Existing System to Defend Guam

INDOPACOM has identified the requirement for a persistent, permanent, 360-degree missile defense system on Guam that can defend against any Chinese ballistic and cruise missile.<sup>12</sup> In particular, Admiral Davidson testified that “the Aegis Ashore system...delivers the kind of capabilities that would meet the threat that is extant here, by mid-decade, and will help us pace the threat into the future.”<sup>13</sup> He has emphasized fielding this capability by 2026, as China may seek to change the status quo in the Indo-Pacific within the next six years.<sup>14</sup>

**Why Aegis?** Admiral Davidson has named Aegis Ashore as his preferred solution because it provides a “turn-key” system for defense of Guam that can be deployed quickly, while also meeting INDOPACOM’s requirements.<sup>15</sup> Aegis Ashore Guam would not exactly replicate the systems deployed in Romania and Poland, but rather can be configured to address Chinese missiles. Aegis’ Mark 41 Vertical Launch System (VLS) can hold Standard Missile-3 (SM-3) interceptors, which can intercept ballistic missiles like the DF-26 in its midcourse phase of flight,<sup>16</sup> as well as the SM-6 that can defend against cruise missiles.<sup>17</sup>

INDOPACOM could then expand upon the Aegis Ashore system over time using disaggregated launchers and other sensors. For example, INDOPACOM could eventually deploy components of the Aegis Combat System underground, mobile, or distributed across the island, characteristics that would increase the survivability of the system.<sup>18</sup> INDOPACOM could also build upon Aegis Ashore to include Glide Phase Interceptors launched from Aegis VLS to defend against hypersonic glide vehicles, or even Patriot Advanced Capability-3 missiles.

**Unclear Path Forward.** Despite having had INDOPACOM's Guam defense requirements and funding requests for the past three years, the DOD has not committed to fielding Aegis Ashore—nor any other system—and instead has continued to *study* the problem. Some offices in the Pentagon also reportedly oppose attempting to defend Guam and deploy forces within reach of China's military forces at all.<sup>19</sup>

Last year, the Senate version of the National Defense Authorization Act authorized \$76.8 million for land-based SM-3 systems engineering on Guam.<sup>20</sup> However, the final conference bill excluded that funding and instead required a study on defense of Guam, despite INDOPACOM's assessment of the need for Aegis Ashore.<sup>21</sup> Moreover, this year's budget request for the Missile Defense Agency (MDA) included \$78 million for further *assessment* of systems to support Guam, and \$40 million for procurement of components common to different defense architectures (for a total of \$118 million).<sup>22</sup>

Meanwhile, INDOPACOM's unfunded requirements list for FY 2022 included \$231.7 million total for Guam defense.<sup>23</sup> When combined with the \$118 million requested in the budget, that equates to the \$350 million originally submitted to Congress this spring in INDOPACOM's investment plan, known as the Section 1251 report.<sup>24</sup> The House Appropriations Committee's Defense Subcommittee has, so far, understandably denied the \$40 million procurement request due to the DOD's inability to name a system it wants to deploy.<sup>25</sup>

According to MDA Director Admiral Jon Hill, MDA has not yet named a defense system for Guam because it is still exploring how to distribute elements across Guam's challenging topography. However, these studies should not preclude the commitment to Aegis Ashore as the foundation or central node for Guam defense—nor should they stall its development any longer.

To realize the priority of speed in deploying defense against the imminent threat, the DOD should begin with the known Aegis Ashore system that it could later build upon. Starting with a new and more complicated architecture would be too time-consuming for the gravity of the problem.

Other options for Guam defense, such as deploying only Patriot or THAAD batteries on the island, are possible, but compared to the more advanced Aegis Ashore system, those systems by themselves are far less credible.

## Recommendations

Considering the speed of China's military buildup and increasing regional aggression, time is of the essence for defending Guam. The DOD needs to move forward with deploying a capability on Guam and avoid getting bogged down in the minutia of the architectural details. The most realistic and feasible way to defend Guam as soon as possible is to begin with deploying Aegis Ashore. To make this goal a reality, the DOD should:

- **Commit to building Aegis Ashore on Guam and shift its policy focus to implementation of that system.** The DOD should stop questioning what is needed to defend Guam—or whether to defend Guam at all—and shift focus to how to execute deployment of the Aegis system. Aegis Ashore is the best existing system that can be configured to meet INDOPACOM's requirements and to address the Chinese threat. The DOD can commit to moving forward with Aegis Ashore as a matter of policy as it finalizes details on how to incrementally add to a final defense architecture.
- **Establish firm deadlines for determining the architecture of Guam missile defense against China in order to avoid indefinite analysis paralysis.** After three years of deferring this project and continuing to study it, despite a consistent push from INDOPACOM, the DOD should ensure Guam defense moves forward in a timely manner.

Likewise, Congress should:

- **Fund the Guam defense system within the Pacific Deterrence Initiative at \$350 million, the level requested by INDOPACOM's 2021 Section 1251 report.** The MDA does not need to have figured out every detail of Guam defense architecture in order to fully invest in a defense of Guam in FY 2022. At minimum, the system will require Standard Missile interceptors and VLS modules, which the DOD can begin procuring. The DOD should proceed to add more components as it goes. Funding should reflect the urgency of the Chinese threat to

Guam and the priority of building defenses as quickly as possible.

## Conclusion

While continued study of Guam defense could surely be used to put together the gold standard architecture for Guam defense, the DOD must prioritize time. Given the pace of the Chinese threat and deferment of beginning to build a defense system for the past three years, the DOD does not have time to waste. Aegis Ashore is the easiest way to meet INDOPACOM's requirements in the nearest term, and it can be extended upon to perfect the Guam defense architecture moving forward.

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