Hypersonic Weapons, Cruise Missiles Gain Greater Focus in New Missile Defense Review

WASHINGTON — The primary value of the recently released Missile Defense Review is to expand the focus of missile defense to include the new threats from cruise missiles and hypersonic weapons, and to provide clear guidance, focus and integration of views to the programs, two of the top leaders on the issue said Jan. 23.

The review "really does usher in the next generation of missile defense" against "not just ballistic missiles but also cruise and hypersonics," said John Rood, the undersecretary of Defense for Policy, who led the effort to draft the new review that was released Jan. 17.

Noting the early resistance to a comprehensive program to defend the nation against ballistic missiles, Rood said, "we have come a long way," and have a goal "not to just pursue the initial stages of missile defense, but to outpace the threat, against missiles of all variety."

The biggest benefit to his agency was clear guidance and focus coming from the review and the strong endorsement from President Donald Trump, said Air Force Lt. Gen. Samuel Greaves, director of the Missile Defense Agency (MDA).

"We have direction and knowledge of where we need to go. It's time to get things done," Greaves said, joining Rood at a briefing on Capitol Hill sponsored by the Missile Defense Advocacy Alliance.

The expanded focus of the review was highlighted by the change in its title, dropping the word "ballistic," which was in the previous reviews and in the early days of this one. The added emphasis on hypersonic weapons is to account for their different flight paths, which significantly increases the need for space-based sensors and possibly space-based interceptors, the two officials said.

Unlike ballistic missiles that fly a high trajectory into space and generally plunge directly to their targets, hypersonic weapons can fly at a low altitude and at speeds exceeding five times the speed of sound. And, like the low-flying cruise missiles, they may maneuver to complicate interception.

Citing the reports of tests of hypersonic weapons by Russia and China, Greaves said the space component of the multilayered defense MDA developed to counter ballistic missiles "is absolutely critical" to be able to "find, fix and track hypersonics." To intercept a maneuvering hypersonic threat, they will need "birth-to-death track. We will need to do that from space."

Countering hypersonic weapons also accentuates the quest for directed energy, or lasers, as an interceptor, he said, while noting the challenge of developing that capability.

But while highlighting the new focus on the emerging threats, both officials stressed the need to continue progress on the existing primarily land- and sea-based sensors and interceptors

against the growing arsenals of ballistic missiles being fielded by "roque states" such as North Korea and Iran.

Greaves said his top priority was to "maintain the focus on sustaining" the fielded missile defense system, with the second priority to "increase the engagement capabilities of those systems — to do more with what we have." His third priority was to "rapidly address the advanced threats."

Improving the existing missile defense included fielding a

"multi-object kill vehicle" for the ground-based interceptors in Alaska and California, new radars in the Pacific and Alaska, testing and fielding the SM-3 block IIA missiles for the Navy's Aegis-equipped warships and enhancing the command and control network.

Rood said under the strategy set by the new review, "homeland defense will be prioritized against all others." They will continue with "today's generation of technology and field new technologies that are significantly more capable" to deal with the rogue states, he said.

But, he added, because Russia and China have very large arsenals of ballistic missiles, "we rely on deterrence," meaning the threat of a counter strike by nuclear missiles.

That appeared to counter the impression left by Trump's comments at the review's unveiling that the proposed new defense would be able to defeat Russia's missiles.