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CSDS News and Analysis 1483 (Feature Report: “Tackling Remaining HEU Challenges,” Center for Nonproliferation Studies)

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Welcome to [USAF Center for Strategic Deterrence Studies](#) News and Analysis! As part of the CSDS mission to develop [U.S. Air Force](#), [Department of Defense](#), and other [government](#) leaders to advance the state of knowledge, policy, and practices within strategic defense issues involving nuclear, biological, and chemical weapons, we offer the government and civilian community a source of contemporary discussions.

Feature Report

“[The Final Stretch: Tackling Remaining HEU Challenges](#)”. James Martin Center for Nonproliferation Studies, April 2021.

CNS: "Minimizing civil commerce in highly enriched uranium (HEU) has been a longstanding goal of Global Partnership countries, as HEU represents a highly attractive target for terrorists and proliferators. HEU can be used to create the simplest nuclear explosive device, a so-called gun-type weapon. To make matters worse, because HEU is only weakly radioactive, it is relatively safe to handle and hard to detect." [Read Report](#).

Nukes and Deterrence, Counter-WMD, and Arms Control in News and Research

NUCLEAR WEAPONS AND DETERRENCE

- [National Ignition Facility Experiment Puts Researchers at Threshold of Fusion Ignition](#) (Lawrence Livermore National Lab)
“These extraordinary results from NIF advance the science that NNSA depends on to modernize our nuclear weapons and production as well as open new avenues of research,” said Jill Hruby.
- [Russia is Top Military Threat to U.S. Homeland, Air Force General Says](#) (USNI News)
The Kremlin’s intent is to “create deterrence for themselves, destroy our will and delay or degrade our ability to project forward,” he said.
- [Defense Nuclear Enterprise: DOD Can Improve Processes for Monitoring Long-Standing Issues](#) (GAO)
Since GAO’s March 2020 report, DOD has closed an additional nine of these sub-recommendations, and recommended 11 sub-recommendations for final closure.
- [Understanding the People’s Liberation Army Rocket Force](#) (Army University Press)
China’s nuclear strategy is gradually evolving from a policy of minimal deterrence to a more active posture of limited deterrence.
- [Can the U.S. Military Strengthen Deterrence by Becoming More Operationally Unpredictable?](#) (RAND)
Some in U.S. policymaking circles believe that U.S. military activities have become overly predictable, allowing potential adversaries to anticipate where, when, and how U.S. forces will operate.

COUNTER-WMD

- [Missile Defense Agency Director Wants Less Complex, More Mobile Aegis Ashore](#) (Defense News)
The U.S. has had a fully operational Aegis Ashore site in Deveselu, Romania, since 2016, but has struggled to build a second fixed site in Redzikowo, Poland.
- [Missile Defense Agency Dials Up the Speed in Quest for Hypersonic Interceptor](#) (Defense News)
The agency decided it would make the most sense to focus on taking out hypersonic weapons in the glide phase of flight where they are most vulnerable, Hill said.
- [Key U.S. Initiatives for Addressing Biological Threats Part 4: The Department of State](#) (Council on Strategic Risks)
Nations such as Russia, China, and North Korea are suspected of possessing biological weapons capabilities and have shown a willingness and ability to engage in gray-zone warfare.
- [US and Canada Want to Collaborate on NORAD Modernization](#) (C4ISRNET)
At an Aug. 17 Center for Strategic and International Studies event, Gen. VanHerck outlined some modernization initiatives that would enable teams to see threats sooner and react faster.
- [What's Missing from US Missile Defense? Pentagon Aims to Find Out](#) (Defense One)
"From an adversary's perspective, deterrence comes from the integration of all capabilities," he [Gen. Hyten] said.

US ARMS CONTROL

- [Biden Sends Nuclear Envoy to Seoul Amid North Korea Threats](#) (Bloomberg)
Russia's nuclear envoy, Igor Morgulov, was expected to visit Seoul during Sung Kim's stay in the capital, according to South Korean media including Yonhap News Agency.
- [North Korea Threatens to Boost Nuclear Program Ahead of Drills between U.S. and 'Perfidious' South](#) (Washington Post)
Ankit Panda, an Asia expert, said the phrase "deterrent of absolute capacity" probably referred to North Korea's nuclear arsenal, among other military capabilities.
- [New Satellite Images Show Russia May Be Preparing to Test Nuclear Powered 'Skyfall' Missile](#) (CNN)
While Moscow and Russia renewed the New START Treaty in February, shortly after President Joe Biden took office, the US has withdrawn from two landmark arms control treaties with Russia.
- [China-US Arms Race Set to Quicken as American Air Force Chief Ups Ante](#) (South China Morning Post)
US Air Force's new secretary Frank Kendall seek[s] to raise spending on technologies that could threaten adversaries.
- [Iran Accelerates Enrichment of Uranium to Near Weapons-grade, IAEA Says](#) (Reuters)
Iran increased the purity ... to 60% from 20% in April in response to an explosion and power cut at its Natanz site that damaged output at the main underground enrichment plant there.

COMMENTARY

- [How To Build A Better Policy For Countering WMD Threats](#) (Breaking Defense)
"The national security community remains split as to the actual purpose of counter-WMD strategy — is it as an adjunct to arms control activities, an aspect of deterrence operations, or to guide crisis response drills?"
- [China's Silos: New Intelligence, Old Problems](#) (War on the Rocks)
"Cold War history shows the difficulty of assessing an adversary's nuclear intentions. This problem endures in the new age of open source intelligence."

- [To Make Up For Years Of Slow Policy Decisions, MDA Needs More Cash](#) (Breaking Defense)
"Despite promises to improve homeland missile defense, at the end of the Trump administration, there are empty holes in Fort Greely, Alaska, where ICBM-killing interceptors ought to be."

