



UNITED STATES AIR FORCE
CENTER FOR STRATEGIC
DETERRENCE STUDIES

NEWS AND ANALYSIS

Issue 1501

Dec 27, 2021

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

[“Reimagining Nuclear Arms Control: A Comprehensive Approach.”](#) Carnegie Endowment for International Peace; December 16, 2021.

Carnegie: "To try to find common ground, this report presents nine detailed practical measures that—implemented individually or as part of a package—would help address each state’s specific security concerns and the shared dangers of arms racing and inadvertent escalation." [Read Report](#).

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

NUCLEAR WEAPONS AND DETERRENCE

- [Broken Nest: Deterring China from Invading Taiwan](#) (Army War College Press)

This article joins cutting-edge understandings of deterrence with empirical evidence of Chinese strategic thinking and culture to build such a strategy.

- [Posture Reviews, Program Reveals, and Budget Maneuvers Ahead for the Air Force in 2022](#) (Air Force Magazine)

Likely at the same time, the Pentagon will roll out its Nuclear Posture Review and Missile Defense Review.

- [Nuclear Deterrence and the US–China Strategic Relationship](#) (Australian National University Press via American Enterprise Institute)

There are several reasons to suspect that the nuclear dynamics between the US and China are different from those that existed between the Soviet Union and the US during the Cold War.

- [Europe and the Future of Nuclear Strategic Stability](#) (CEPA)

An analysis of Germany and Poland’s perspectives contextualizes larger trends in the CEE region that can be extrapolated for recommended US engagement strategies and negotiating positions.

COUNTER-WMD

- [Designs for Next-gen Missile Defense Interceptors Pass Key Review Ahead of Schedule](#) (Defense News)

While MDA anticipates testing of the NGI in the mid-2020s and placing them in the ground roughly in 2027 or 2028, the agency’s director thinks this could happen sooner.

- [L3Harris' Missile-tracking Satellites Pass Critical Design Reviews](#) (Space News)
HBTSS satellites, equipped with infrared sensors and on-orbit data processing systems, will be deployed in low Earth orbit to detect and track ballistic and hypersonic missiles.

- [Stopping Lethal Anthrax Using an Enzyme](#) (Global Biodefense)
It could also allow servicemembers exposed to anthrax through natural or other means to be treated at the time of exposure or shortly thereafter in forward areas.

US ARMS CONTROL

- [Hundreds of Scientists Ask Biden to Cut the U.S. Nuclear Arsenal](#) (New York Times)
In a letter, the scientists also urged President Biden to declare that the United States would never be the first to use nuclear weapons in a conflict.

- [U.S., Russia to Continue Strategic Stability Dialogue in 2022](#) (Arms Control Now)
Meanwhile, the United States and Russia continue to adhere to the limits on their strategic nuclear arsenals imposed by the 2010 New Strategic Arms Reduction Treaty (New START).

- [Nuclear Missiles in Europe Become Latest Thorn in Tensions between NATO, Russia](#) (Stars and Stripes)
Moscow wants the U.S. to restart talks over the now defunct INF Treaty, which Washington pulled out of in 2019, saying that Moscow had already broken the Cold War-era agreement.

COMMENTARY

- [With China, a "Cold War" Analogy Is Lazy and Dangerous](#) (NY Times via Belfer Center)
"Competition with China, though, is a three-dimensional game. And if we continue to play two-dimensional chess, we will lose."

- [Deterrence during Great Power Competition: Allies Must Build Fighter Capability](#) (Breaking Defense)
"During the Cold War, the US successfully isolated China and the Soviet Union in the 1970s; today, mutual interest appears to be bringing them together."

- [The U.S. Exit From the Anti-Ballistic Missile Treaty Has Fueled a New Arms Race](#) (Carnegie Endowment for International Peace)
"This experience should prompt Washington to try to negotiate new limits on missile defenses, and it provides a cautionary tale about the very real costs of withdrawing from international agreements."

