

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

"Cruise Missile Proliferation: Trends, Strategic Implications, and Counterproliferation". By European Leadership Network; March 17, 2021

"This report seeks to inform public debate about the proliferation of cruise missiles and their strategic implications. It provides a detailed discussion of the technology behind cruise missiles, analyses how the proliferation of cruise missiles has proceeded and considers the strategic implications of cruise-missile proliferation on the European continent. The paper also outlines several policy recommendations intended to curtail the proliferation of cruise missiles and mitigate its adverse strategic consequences." Read Report.

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

NUCLEAR WEAPONS AND DETERRENCE

- Aging Electronics May Limit Nuke Reliability (Federation of American Scientists)
 The JASON panel offered 15 recommendations for identifying and detecting electronic failure modes and validating electronic reliability under the long-term conditions of the US nuclear stockpile.
- Nonstrategic Nuclear Weapons (Congressional Research Service)
 The report reviews the issues that have been raised with regard to U.S. and Russian nonstrategic nuclear weapons, and summarizes a number of policy options
- Columbia Submarine Program Challenges Supply Chains (National Defense)
 The Navy's fleet of hard-to-detect SSBNs, also known as "boomers," are the most survivable leg of the U.S. nuclear triad.
- A Mom's Guide to Coercion and Deterrence (Atlantic Council)
 "We proudly present a mom's primer on deterrence, coercion, credibility, and reassurance."

COUNTER-WMD

• USAF CBRN R&S Demo (DTRA via DVIDS)

This state-of-the art platform employs advanced CBRN sensors and integrated communications, with which they executed integrated CBRN early warning, reconnaissance and surveillance missions in support of the USAF Agile Combat Employment (ACE) concepts.

- Chemical Weapons Arms Control at a Crossroads: Russia, Syria, and the Future of the Chemical Weapons Convention (3/23) (Schar School at George Mason)
- Dr. John Walker, Dr. Una Jakob, and Dr. Hanna Notte will discuss the challenges posed by the current Russian and Syrian chemical weapons programs
- A Decade of U.S.-Romanian Missile Defense Cooperation: Alliance Success (National Institute for Public Policy)

This Information Series provides an overview of U.S. missile defense efforts in Romania and presents them in the context of North Atlantic Treaty Organization (NATO) missile defense cooperation.

• UK Plans New Counter-terrorism Centre, Says Chemical or Nuclear Attack Likely (Reuters)

"It is likely that a terrorist group will launch a successful CBRN (chemical, biological, radiological or nuclear)attack by 2030," it [the review] said.

US ARMS CONTROL

• Return to the Deal? The New US Administration and the Prospects for the JCPOA (Center for Nonproliferation Studies)

The panel considered the prospects for a return to implementation of the JCPOA, including what steps should be expected from Iran, the United States and other actors.

- Reviving the Iran Nuclear Deal Requires Tackling These Three Issues (Washington Post)
 Contrary to what Iranian officials have suggested, it's not possible to turn the JCPOA back on with the flip of a switch.
- Artificial Intelligence, Autonomy, and the Risk of Catalytic Nuclear War (Modern War Institute) In the digital era, the catalyzing chain of reaction and counter-retaliation dynamics set in motion by a third-party actor's deliberate action is fast becoming a more plausible scenario.

COMMENTARY

- When It Comes to China's Nuclear Weapons, Numbers Aren't Everything (Defense News)
- "These differences tell a slightly less alarmist story when it comes to the bilateral nuclear competition, but by no means present easy answers to the project of deterring China or avoiding nuclear war."
- The Art of Non-War: Sun Tzu and Great Power Competition (U.S. Army War College) "Today, the use of coercive military force is limited by increasing international economic interdependence and global nuclear deterrence strategies."
- Pathogens Have the World's Attention (Foreign Affairs)
- "The toll from a virus genetically engineered to increase transmissibility and lethality as a bioweapon could be almost inconceivable."

