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**

“Stabilizing Great-Power Rivalries”. RAND; Nov. 29, 2021.

RAND: "Leveraging theory and historical cases, the authors identify the factors that keep great-power rivalries stable and those that lead to conflictual outcomes and use that framework to assess the current U.S.-Russia and U.S.-China competitions." [Read Report.]

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

**NUCLEAR WEAPONS AND DETERRENCE**

- **How Israel, with US Assistance, Can Deter Iran from Producing Nuclear Weapons** (Wild Blue Yonder, AU Press)
The goal is to deter Iran so it will stop breaching the JCPOA while urging Iran to accept serious constraints. Currently, the talks face difficulties.

- **F-15Es Take Part in Weapons Evaluations, Enhance Readiness** (U.S. Air Force)
The JTAs were released at the Tonopah Test Range to support efforts to further test the F-15E's inherent ability to deliver B61 series tactical nuclear weapons.

- **Forward Defense Symposium on Deterring Chinese Strategic Attack** (Atlantic Council)
This symposium explores the recent Chinese nuclear buildup, puts the development in context of China’s overall military and nuclear strategy, and examines possible US responses.

- **Mason: LANL Gearing Up to Produce Nuclear Triggers** (Santa Fe New Mexican)
The facility upgrades and hiring boost will continue to prepare the lab for its mission to help modernize the nuclear stockpile, Mason said.

- **Updated B61 Nuclear Warhead Enters Production** (Breaking Defense)
The upgraded variant will be carried by America’s F-15, F-16 and B-2 aircraft, as well as on aircraft for NATO member nations.

**COUNTER-WMD**

- **Small-Scale Chemical and Biological Production: Current Threats and Future Trajectories** (RUSI)
Given the relatively modest size and scale of production efforts for small attacks and the trajectory of technical developments, no single policy prescription will successfully address the problem.
Saltzman said deterring a war from starting in space is one of the new service’s “primary responsibilities,” and the Space Force currently views deterrence as a two-sided coin.

It will also be prepared to provide “integrated air and missile defense” and quick reaction forces.

The CBRN specialists also helped to keep troops from the combat brigade in the fight following a simulated chemical attack.

The series highlights the particular challenges facing the Navy, Marine Corps, and Coast Guard, from national level maritime policy to naval concept development and program design.

The Pentagon thinks Beijing may build 1,000 or more weapons by 2030. But it’s the new technologies that worry strategists.

But transfer hinges on more than next year’s FOC test; Korea must also show that it has acquired certain military capabilities “related to ballistic missile defense,” the official said.

Additional Russian deterrence measures that could involve more rotational troops are still being negotiated, the official said.

This article examines nuclear cruise missiles, autonomous systems with nuclear payloads, and hazardous space activity.


"This makes North Korea’s cyber activity a growing concern for the US-ROK alliance to address, calling for concrete steps to craft and implement a credible and effective cyber deterrence strategy."

"Beyond North Korea, however, Russia and China have long expressed concerns that the United States seeks to counter their capacity to use ICBMs against it."
Nuclear Strategists Know How Dangerous the Debt Fight Is (The Atlantic)
“The way the United States has repeatedly flirted with a potentially catastrophic default on the national debt bears an uncomfortable resemblance to the crises of the early Cold War.”