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**


GAO: "The COVID-19 pandemic shows how catastrophic biological incidents can cause substantial loss of life and damage the economy. The 2018 National Biodefense Strategy outlines how to prepare for and respond to such incidents. ... We made 16 recommendations aimed at honing the nation’s ability to respond to the next biological threat. Read Report.

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

**NUCLEAR WEAPONS AND DETERRENCE**

- **ICYMI**: [Airframe: The F-35A Lightning II](http://example.com) (Airman)
  A Block 4 F-35A will be dual-capable and carry a full complement of precision-guided and net-enabled weapons.

- **Russia is Building a Plane for Nuclear Doomsday** (Russia Matters from Belfer Center)
  The plane can apparently remain airborne for days thanks to its ability to refuel in midair, which is a feature it shares with its U.S. counterpart, the E-4B.

- **Air Force to Delay Production of Grey Wolf Helicopter** (Defense News)
  The Air Force intends to buy 84 MH-139As to replace the UH-1N Huey. The Grey Wolf will take on missions such as monitoring intercontinental ballistic missile fields ...

- **Cyber Risk Across the U.S. Nuclear Enterprise** (Texas National Security Review)
  Given the extreme dependence of the stockpile on computing, maintaining the security of the computer programs and databases involved is obviously necessary.

- **Forum**: [NNSA Nuclear Weapons Manufacturing & Test Facilities Mission and Modernization](http://example.com) (Mitchell Institute)
  The Joint National Nuclear Security Administration (NNSA) Strategic Nuclear Deterrence Forums.

**Around the DoD**
The nuclear enterprise division, or CFN, supports the Department of Defense’s nuclear triad by integrating modernization efforts for the two Air Force-led nuclear delivery systems — intercontinental ballistic missiles and bombers.

The AGM-86 Air Launched Cruise Missile is the United States’ only nuclear cruise missile and, since 1982, it has been a key component of the nuclear triad ...

The Air University Innovation Accelerator office’s vision is to push the university’s contributions to national security, strategic competition and integrated deterrence “one step beyond.”

Agroterrorism, a subset of bioterrorism, is the deliberate introduction of an animal or plant disease for the purpose of generating fear, causing economic losses, or undermining social stability.

About 170 soldiers from 10 states spent three days learning what it would take for them to help out should such a disaster strike New York City, perhaps the only “megacity” in the homeland.

Next-Gen OPIR is a planned constellation of early warning satellites that detect intercontinental and tactical ballistic missile launches.

The nuclear deal’s future overshadows all else, given its implications for Iran’s economy and foreign relations.

U.S. withdrawal and a looming Russian exit seem to spell doom for a landmark treaty. Can this unique instrument of military cooperation be preserved?

“How an International Order Died: Lessons from the Interwar Era (War on the Rocks)
“Examining how and why deterrence failed to maintain the status quo in Europe in 1939 ... offers useful lessons about the nature of conventional deterrence ... .”

“This new cold war, if it materializes, would be profoundly different than the first one for several reasons.”
• Hybrid Warfare and the End of Minimum Deterrence (Real Clear Defense)
"In the case of China’s Hybrid Warfare campaign against Taiwan, it has made nuclear threats against Japan as a warning against allied intervention."