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 Paper**

"Biological Threats in the DOD CB Defense Program". By Al Mauroni, Director, U.S. Air Force Center for Strategic Deterrence Studies.

"This paper will demonstrate that the DOD CB Defense Program has, over the past 15 years, funded medical biodefense projects as a priority over other efforts. However, it should not divert funding to address emerging infectious diseases, given that the DOD and HHS already have distinct agencies, policy direction, and funding sources to meet the future threat of pandemic outbreaks." [Read Paper.]

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

**NUCLEAR WEAPONS AND DETERRENCE**

- **What Deters and Why: The State of Deterrence in Korea and the Taiwan Strait** (RAND)
  The researchers conclude that the state of deterrence in Korea is healthy, and all examined variables ... are robust or effective. ... The state of deterrence with regard to China and Taiwan is mixed.

- **Risk Reduction and Deterrence: Two Sides of the Same Coin?** (Homeland Security Affairs)
  With limited resources, how should CIKR stakeholders invest? If the objective is to deter, that may have certain implications for investment. If the objective is to reduce risk, that may have different implications.

- **Russian Nuclear Doctrine, Force Expansion and Nuclear Deterrence** (Real Clear Defense)
  The year 2020 was a good year for enhanced understanding of both Russian nuclear weapons use doctrine and the development of Russian nuclear capability. Unfortunately, the news was sobering.

- **LANL Director Fields Questions about Nuclear Weapons, Growth** (Santa Fe New Mexican)
  The funding increases were to pay for new supercomputers and infrastructure upgrades, including at the facility that will make plutonium pits that trigger nuclear warheads, he said.

- **Deep Thoughts: How Moving ICBMs Far Underground Will Make the Whole World Safer** (Bulletin of the Atomic Scientists)
  Whatever the Russian motivation for its nuclear arsenal, it is far and away the major, perhaps the only, existential military threat facing the United States. This fact has to be dealt with ...

**COUNTER-WMD**

- **Next-gen Intercontinental Ballistic Missile Interceptor Estimated Cost? Nearly $18B** (Defense News)
The Defense Department has embarked on a new effort to entirely replace the GBIs in place at Fort Greeley, Alaska, and Vandenberg Air Base, California, with the new NGIs.

- **Watchdog Expresses Concern over Using US Navy Interceptor for Homeland Missile Defense** (Defense News)
The GAO said the SM-3 Block IIA could “introduce considerable cost, schedule, and performance uncertainty to a program that has just entered initial production.”

- **Missile Defense: Fiscal Year 2020 Delivery and Testing Progressed, but Annual Goals Unmet** (GAO)
A network of sensors and interceptor missiles forms the backbone of the U.S. Missile Defense System. DOD's Missile Defense Agency designed this system to protect the U.S., its military forces, and allies from missile attacks.

**US ARMS CONTROL**

- **2021 Adherence to and Compliance With Arms Control, Nonproliferation, and Disarmament Agreements and Commitments** (Department of State)
This Report assesses U.S. compliance with arms control, nonproliferation, and disarmament agreements in 2020, as well as the 2020 compliance and adherence of other nations to arms control, nonproliferation, and disarmament agreements and commitments ...

- **New START Treaty Annual Implementation Report to Congress** (Department of State)
This report is transmitted in response to Condition (a)(10) of the December 22, 2010, Resolution of Advice and Consent to Ratification of the Treaty between the [USA] and the Russian Federation.

- **Biden Administration Forges New Path on North Korea Crisis in Wake of Trump and Obama Failures** (Washington Post)
The specifics of the proposal Washington will put forward remain unclear, and U.S. officials are not using familiar terms that previous U.S. administrations have used, such as “step-by-step” agreement.

- **Russia Secretly Feared the Iran Nuclear Deal. Here’s Why.** (Atlantic Council)
This leak is consistent with reporting in 2015 that Moscow was very nervous that the Joint Comprehensive Plan of Action (JCPOA) would negatively affect Russia.

**COMMENTARY**

- **Falling in Love Again: U.S.-North Korean Relations and the Biden Administration** (National Interest via Belfer Center)
“International relations theory and the history of the Cold War show the importance to being able to communicate and even cooperate in avoiding a nuclear war.”

- **Missile Defense Is Compatible with Arms Control** (War on the Rocks)
“The problem with offering to limit U.S. missile defense plans up front is that it allows Russia to use missile defense as a point of leverage in the talks.”

- **'Transactional' Nuclear Diplomacy May Provide a Path Toward 'Grand Bargains' with Iran and North Korea** (Bulletin of the Atomic Scientists)
“The best nonproliferation progress has been achieved when all sides perceived diplomatic transactions as incremental steps toward broader reconciliation.”