

## UNITED STATES AIR FORCE CENTER FOR STRATEGIC DETERRENCE STUDIES

## NEWS AND ANALYSIS

lssue 1469 May 17, 2021

# CSDS News and Analysis 1469 (Feature Report: "Nuclear Triad: DOD and DOE Face Challenges Mitigating Risks to U.S. Deterrence Efforts," GAO)

United States Air Force sent this bulletin at 05/17/2021 10:45 AM CDT

ISSUE

1469

May 17, 2021

Welcome to <u>USAF Center for Strategic Deterrence Studies</u> News and Analysis! As part of the CSDS mission to develop <u>U.S. Air Force</u>, <u>Department of Defense</u>, and other <u>government</u> 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**

"Nuclear Triad: DOD and DOE Face Challenges Mitigating Risks to U.S. Deterrence Efforts". GAO, May 6, 2021.

GAO: "Three kinds of systems that can launch nuclear weapons make up the U.S. nuclear triad:

Nuclear-capable heavy bombers (known as the "air leg") Intercontinental ballistic missiles or ICBMs ("ground leg") Ballistic missile submarines ("sea leg")

Most of these systems, however, are nearing or past their planned end-of-life dates. And all of their replacement systems are at risk of delays. For example, parts of the current ICBM could age out faster than expected, while the replacement ICBM faces delays." <u>Read Report</u>.

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

#### NUCLEAR WEAPONS AND DETERRENCE

• <u>Deterring, Countering, and Defeating Conventional-Nuclear Integration</u> (Strategic Studies Quarterly) This article proposes a framework using the DoD's Deterrence Operations – Joint Operating Concept (deny benefits, impose costs, and encourage restraint) to plan and posture to accomplish this goal.

• <u>Air Force Bomber Completes Hypersonic Missile Test Amid China, Russia Arms Race</u> (Newsweek) The booster propels the glide vehicle and its warheads—including nuclear warheads—to hypersonic speeds, after which the latter detaches and continues to its target.

• <u>Nuclear Notebook: How Many Nuclear Weapons Does the United Kingdom Have in 2021?</u> (Bulletin of the Atomic Scientists)

The United Kingdom is the only nuclear weapon state that operates a posture with a single deterrence system.

• <u>Richard Says Nuclear Deterrence Connected to All Other DOD Capabilities</u> (Air Force Magazine) "Every operational plan in the Department of Defense, and every other capability we have in DOD, rests on the assumption that strategic deterrence ... is holding right," Richard said. • Decision on Minuteman to Shape US Nuclear Policy for Decades (Associated Press)

It could influence how U.S. allies in Europe and Asia view the reliability of America's nuclear "umbrella" - the security net that has allowed most of them to forgo developing nuclear weapons.

### **COUNTER-WMD**

• United States Trains Ukraine To Identify and Respond to the Use of Weapons of Mass Destruction in Targeted Assassinations (State Dept.)

Recent events in Europe have highlighted the real threat of government-sanctioned, targeted weapons of mass destruction attacks.

• <u>Competition Will Speed Up Fielding Timeline for Missile Defense Interceptor, MDA Boss Says</u> (Defense News)

The pressure is on to ensure the Ground-Based Midcourse Defense System has interceptors capable of destroying ever-evolving intercontinental ballistic missile threats from North Korea and Iran.

• After More than a Decade, Agency to Retire Experimental Missile Warning Satellites (C4ISRNET)

The workhorse of the U.S. military's missile warning satellites is the Space Force's Space-Based Infrared System, detecting and tracking ballistic missiles all over the globe, 24/7.

• The Role of Integrated Air and Missile Defense for Strategic Deterrence (CSIS)

A conversation on the U.S. Army's space and air and missile defense plans with Lieutenant General Daniel Karbler, Commander of the U.S. Army Space and Missile Defense Command.

### **US ARMS CONTROL**

• <u>Moscow Says Putin and Biden Should Talk Arms Control at Possible Summit</u> (Reuters) Relations between Moscow and Washington slumped to a post-Cold War low in March after Biden said he thought Putin was a "killer" and Moscow recalled its ambassador to Washington for consultations.

• <u>Iran Enriches Uranium to Highest Purity Yet as Nuclear Talks Continue</u> (CBS News) Iranian officials announced in April that they'd taken another significant step toward obtaining weaponsgrade uranium by enriching up to 60% purity.

• <u>Nuclear Anti-Proliferation Policy and the Korea Conundrum: Some Policy Proposals</u> (CATO) Cato scholar John Mueller argues that the [US] should abandon its bid to separate North Korea from its nuclear weapons and, with South Korea in the lead, push to normalize relations with Pyongyang.

### COMMENTARY

• <u>The US Needs to Impose Costs on China for Its Economic Warfare</u> (Defense One) "The linchpin of a more effective deterrence is developing a more effective way to hurt the Chinese Communist Party if it will not stop hurting the United States."

• <u>Is It Time to Forget about Cyber Deterrence?</u> (Air & Space Power Journal) "The arrival of nuclear weapons dramatically altered the balance between offense and defense and created the ultimate offense-dominant environment."

• The Bold New Direction for Missile Defense is Worthy of Support (The Hill)

"Approximately 30 to 40 nuclear warheads, and the ICBMs capable of ranging most if not all of the United States to carry them, in the hands of a despotic and often erratic leadership represents a threat to the American people that no administration can ignore."

