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# CSDS News and Analysis 1478 (Feature Report: “Countering Weapons of Mass Destruction,” GAO)

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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

[“Countering Weapons of Mass Destruction: Opportunities for DHS to Better Address Longstanding Program Challenges.”](#) U.S. Government Accountability Office, July 16, 2021.

GAO: This statement describes our 2016 work related to the CWMD office formation and findings from our past reports on CWMD programs from 2009 through May 2021, including challenges and opportunities for the effective operations and implementation of key programs related to biodefense, nuclear security, and chemical security. ... GAO made 16 recommendations designed to address the challenges discussed in this statement. As of July 2021, DHS has taken steps to address some, but not all of them. Of the 16 recommendations GAO made, 10 remain open, and GAO continues to monitor DHS's progress to implement them. [Read Report](#).

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

### NUCLEAR WEAPONS AND DETERRENCE

- [Progress on B-21 Means Current Bombers Need a Fast Retirement](#) (Air Force Magazine)  
In the near term, B-52s are undergoing significant modernization, including re-engining, upgraded avionics, and a new “digital backbone,” Nahom said.
- [Air Force Nuclear Cruise Missiles Seen Costing about \\$29 Billion](#) (Bloomberg)  
The new weapon, if deployed, would be carried on B-52 and B-21 bombers.
- [NNSA Completes First Production Unit of W88 Alteration 370](#) (Department of Energy)  
The W88/Mk5 strategic warhead entered the stockpile in 1988 and is deployed on the U.S. Navy’s Ohio-class ballistic missile submarines.
- [Johns Hopkins University Receives New Nuclear Weapons Research Contract](#) (Defence Blog)  
The award ... also covers the first task order for research and development services for \$23,717,889 to support the Ground Based Strategic Deterrent (GBSD) weapon system.
- [Implementing Deterrence by Detection: Innovative Capabilities, Processes, and Organizations for Situational Awareness in the Indo-Pacific Region](#) (CSBA)  
[The report] assesses how both current platforms and emerging capabilities could be utilized to improve dramatically situational awareness in the Indo-Pacific region.

- [Deterrence by Detection: A Key Role for Unmanned Aircraft Systems in Great Power Competition](#) (CSBA)  
The authors argue real-time situational awareness is critical to countering the twin challenges of sub-conventional gray zone aggression and a conventional fait accompli gambit promptly and effectively.

## COUNTER-WMD

- [House Appropriators Fund Hawaii Missile Defense Radar, But Cut Dollars for Guam](#) (Defense News)  
In hearings over the past several months, lawmakers across the defense committees advocated for providing Hawaii the added protection.
- [Nanosatellites Could Play Pivotal Role in Defense Against Enemy Missiles](#) (DoD)  
Two [MDA] nanosatellites—known as CubeSats—that launched June 30 into low-earth orbit from the Mojave Air and Space Port in California could play a large role in the future of U.S. missile defense.
- [Teledyne FLIR to Develop Wearable Chemical Detector](#) (National Defense)  
The program is being funded and jointly managed by [DTRA]’s Joint Science and Technology Office and the Joint Program Executive Office for Chemical Biological and Radiological/Nuclear Defense.
- [Researchers Create Drone Swarms That Can Detect Gas Leaks, Other Threats](#) (Defense One)  
A new algorithm called “Sniffy Bug” shows how tiny drones will do dangerous work even in areas where they can’t use GPS.
- [Soldiers, Marines Test New Chemical, Biological Systems at Dugway](#) (U.S. Army)  
Soldiers [and] Marines went hands-on with the Joint Biological Tactical Detection System (JBTD) and the Contamination Indication Disclosure Assurance System (CIDAS), which indicates chemical agent contaminants so proper decontamination can take place.

## US ARMS CONTROL

- [CSWMD Spotlight: Negotiating Next Steps on Arms Control with Putin’s Russia](#) (WMD Center)  
... a CSWMD Spotlight Webinar discussion on Negotiating Next Steps on Arms Control with Putin’s Russia with Deputy Director, Center for Global Security Research (CGSR) Michael Albertson,
- [The Strategic Stability Dialogue: Think Before You Speak](#) (National Institute for Public Policy via Real Clear Defense)  
The United States and Russia will soon begin a much-heralded strategic stability dialogue “to lay the groundwork for future arms control.”
- [Iran and U.S. Strategy: Looking beyond the JCPOA](#) (CSIS)  
[The report] highlights the critical limits to the present structure of the debate over the JCPOA and Iran’s nuclear program.
- [The Future of Strategic Arms Control](#) (Council on Foreign Relations)  
To manage the increasingly stark geopolitical power shifts of the past decade-plus, the [U.S.] should pursue arms control strategies that regulate rivalry and introduce a broader array of reciprocal restraints.

## COMMENTARY

- [New Tools to Create Time and Information: 'Building the Bike While We Ride It](#) (War on the Rocks)  
“With extra time, commanders could select deterrence options proactively rather than responding to provocation in a way that increases the risk of strategic deterrence failure.”
- [Why America Could Lose Its Next War](#) (Defense News)  
“Preventing a Chinese seizure of Taiwan or a Russian invasion of the Baltic states will require U.S. forces that can launch large-scale precision strikes and otherwise go on the offensive within hours.”

- [Iran's Uranium Gambit is a Dangerous Negotiating Tactic](#) (Bulletin of the Atomic Scientists)  
"Larger stockpiles and higher enrichment are cutting the time needed to accumulate enough fissile material for a single nuclear weapon."

