RESEARCH BRIEF Improved Conventional Munitions Policy

March 7, 2017 | David E. Johnson and Ryan Boone

The United States is unilaterally divesting itself of its cluster munitions by 2018.

It is doing so based on a 2008 policy decision to comply with the Oslo Treaty, which restricts the use of cluster munitions, even though the United States is not a signatory to this treaty.

Much has changed since 2008. Russia is using cluster munitions, also called improved conventional munitions (ICM), in Ukraine and Syria. Furthermore, both Russia and China are proliferating these weapons to other countries.

Further removal of ICMs from the U.S. arsenal should be halted, pending a suitable replacement.

Background

ICM weapons employ submunitions (small bomblets) to effectively blanket an area with multiple targets such as dispersed enemy formations and elusive mobile systems including artillery, rocket, missile, and air defense units. These area targets are the types of challenges the U.S. military will face in the future; the kinds of military problems the United States confronted over the past decade in Afghanistan, Iraq, and elsewhere were better addressed with precision unitary warheads to avoid collateral damage.

Criticisms of ICMs and other cluster munitions concern unexploded ordnance (UXO), which can create hazards after their employment. The 2008 Convention on Cluster Munitions (CCM), also referred to as the Oslo Treaty, calls for the elimination of cluster munitions stockpiles. Many U.S. allies are signatories, including all NATO members apart from Poland, Romania, Estonia, and Latvia.¹

Although the United States did not join the CCM, the Department of Defense (DoD) has restricted the use of cluster munitions and is demilitarizing stockpiles for any ICM weapon whose submunitions exceed a 1-percent UXO threshold. This requirement was first introduced in 2001 for all weapon systems produced after 2005. Restrictions were expanded in a 2008 DoD memorandum directing demilitarization of any stockpiles exceeding operational requirements and prohibiting employment after 2018 of any systems unable to meet the 1-percent UXO threshold.² Of all the submunitions in the U.S. inventory, only the Air Force's CBU-97/CBU-105 Sensor-Fuzed Weapon currently meets this requirement.³

Importantly, no potential U.S. rivals are reducing their stocks of cluster munitions. Indeed, the Russians and Chinese are modernizing their systems. Russia used ICMequipped artillery and rocket systems in Ukraine and Syria in conjunction with aerial drone reconnaissance to deadly effect. Chinese rockets with ICMs were fired by Hezbollah into Israel in 2006. Both the Chinese and the Russians export cluster munitions-based systems to other countries.

Cluster munitions are critical to deterring and defeating peer and near-peer adversaries. CSBA wargaming and analysis have shown the challenges of operating against near-peer adversaries, and not having ICMs complicates these challenges.⁴ Thus, Congress should direct that the DoD maintain this capability beyond 2018 and until lower UXO replacements become available.

Current U.S. Army Submunition Capabilities & Plans

Guided Multiple Launch Rocket System (GMLRS) Alternative Warhead Program: The Alternative Warhead program replaces the dual-purpose ICM (DPICM) GMLRS warheads, is useful against personnel and materiel, is fired by the M270 Multiple Launch Rocket System (MLRS) and M142 High Mobility Artillery Rocket System, and includes tungsten fragmentation unitary warheads. The Alternative Warhead seeks to achieve area fires capabilities without UXO risks. Nevertheless, the total area affected per rocket will be smaller than current DPICM rounds. Alternative Warhead production will continue through 2022.

Army Tactical Missile System (ATACMS): All Block

1/1A ATACMS were designed to carry M74 antipersonnel/anti-materiel (APAM) submunitions capable of affecting soft targets across large areas. The Army is turning all Block 1/1A ATACMS, which have not yet reached the end of their service lives, into unitary warheads. This removes long-range area fires capabilities from the Army inventory.

Artillery Shells: Following 2008, modernization programs for cannon-artillery DPICM rounds slowed. Existing rounds are being recycled and adapted into training, smoke, leaflet, or other variants. Although research and development efforts sought to find an alternative for existing DPICM artillery rounds compliant with the 1-percent UXO requirement, the current status of those programs is unclear; there appears to be no alternative to replace existing artillery ICM stocks prior to 2019.

ABOUT THE AUTHORS

Dr. David E. Johnson is a Senior Fellow at the Center for Strategic and Budgetary Assessments. Dave joined CSBA after 18 years with the RAND Corporation, where he was a Principal Researcher. Before joining RAND, he served as a vice president at Science Applications International Corporation (SAIC) following a 24-year career in the U.S. Army. He retired as a Colonel in 1997. **Ryan Boone** is an Analyst at the Center for Strategic and Budgetary Assessments. In addition to research, he assists in the design and analysis of CSBA's operational-level wargames and concept development workshops. Prior to joining CSBA, he interned in the office of the Chairman of the House Armed Services Committee's Subcommittee on Seapower and Projection Forces.

ABOUT THE CENTER FOR STRATEGIC AND BUDGETARY ASSESSMENTS (CSBA)

The Center for Strategic and Budgetary Assessments is an independent, nonpartisan policy research institute established to promote innovative thinking and debate about national security strategy and investment options. CSBA's analysis focuses on key questions related to existing and emerging threats to U.S. national security, and its goal is to enable policymakers to make informed decisions on matters of strategy, security policy, and resource allocation.

NOTES

- 1 The exceptions are all frontline states proximate to Russia.
- 2 DoD, Office of the Secretary of Defense (OSD), DoD Policy on Cluster Munitions and Unintended Harm to Civilians (Washington, DC: DoD, June 19, 2008).
- 3 Textron, the manufacturer of the CBU-105, announced in August 2016 that it "will discontinue production of its sensor-fuzed weapon product because of reduced orders." Marjorie Censer, "Textron to Discontinue Production of Sensor-Fuzed Weapon," *Inside Defense*, August 30, 2016, available at https://insidedefense.com/insider/textron-discontinueproduction-sensor-fuzed-weapon.
- 4 See, for example, Eric Edelman and Whitney Morgan McNamara, U.S. Strategy for Maintaining a Europe Whole and Free (Washington, DC: Center for Strategic and Budgetary Assessments, 2017); and Mark Gunzinger and Bryan Clark, Winning the Salvo Competition: Rebalancing America's Air And Missile Defenses (Washington, DC: Center for Strategic and Budgetary Assessments, 2016).