

Situating Weapons of Mass Destruction in our Interagency Thinking

by Amy J. Nelson and John Mark Mattox

2018 was a banner year for national strategies. It witnessed the publication of a National Security Strategy, a National Defense Strategy, a National Strategy for Counterterrorism, a National Strategy for Countering WMD Terrorism, a National Biodefense Strategy, a National Cyber Strategy, and, of course, a Nuclear Posture Review, which operates as a strategy as well. A major driving impetus—if not *the* major driving impetus—behind each of these documents was a deeply held concern over the imperative to protect the nation from the effects of weapons of mass destruction (WMD). To these top-level documents can be added a large array of other, more narrowly circumscribed implementing documents, directives, and regulations, which, in one way or another, echo the concern over WMD.

In addition to this proliferation of official statements, it may be argued that the recent past also has witnessed an increased willingness to understand “WMD” in terms not limited to those specified in official bureaucratic definitions (e.g., nuclear, chemical, biological, and, in some cases, high explosives). Moreover, the evolving understanding of what constitutes, or what meaningfully impinges on, WMD discourse certainly is not limited to narrow legal understandings intended to prosecutorial purposes (e.g., pipe bombs, pressure cooker bombs, grenades, etc.)—as useful as the courts may have found such understandings to be. Rather, one now sees repeated implications for WMD in the new warfighting domains of space and cyberspace; and emerging technologies such as artificial intelligence, 3-D printing, gene editing, and conventional weapons technology, which rivals, or can enable, the effect of WMD. All of these “new” topics enjoy growing stature as legitimate topics for WMD discourse. Moreover, convergences among combinations of these concerns compound security risks to an exponential degree.

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The combination of WMD-related national strategies and new or enhancing security threats suggests that, far from being a passé Cold War relic, the concern over WMD is very much with us in the second decade of the 21st century, and that concern shows no sign of abating. This much is certain: Dealing with WMD at the very practical, operational level of interagency activity will require a concerted, cooperative, and interoperable effort by every person charged with the imperative to make the interagency operate. To that end, six interagency practitioners and Master of Arts degree recipients from the National Defense University Countering WMD Graduate Fellowship present, in this special edition of the *InterAgency Journal*, important perspectives on pressing WMD-related issues.

We begin with an exploration of four topics of great significance in emerging WMD discourse:

- Sean R. Watterson explores the implications of enhanced research in the rapidly maturing field of synthetic biology.
- Richard C. Robbins considers the implications of hypersonic strike weapons for interagency planners.
- Thomas F. Moore takes an innovative look at emerging possibilities for the use of insects as WMD.
- Habi Mojidi offers timely insights into the use of nano-bio sensor systems to conduct biosurveillance.

We continue with articles by Alexi Franklin and Punna Khanna Hayes, which tackle the perennial problem of WMD-related definitions across the interagency.

Finally, we conclude with book reviews by Jenny L. Naylor, Paul A. Sigler, and Kevin J. Latman, each on topics concerning which interagency operators can ill-afford to be unaware.

Each author* is a graduate of the National Defense University Countering Weapons of Mass Destruction Graduate Fellowship Program. This highly competitive program is fully funded for persons selected from the Department of Defense and is open under a separate funding arrangement to federal employees across the interagency. For more information, visit <https://wmdcenter.ndu.edu/Education/CWMD-Graduate-Fellowship>. **IAJ**

*Note: This statement excludes the two articles authored by Kevin L. Stafford and Robert P. Kozloski, which were originally published in the *InterAgency Journal* in 2012. Quan Hai T. Lu, whose article was originally published in the *InterAgency Journal* in 2015, is a graduate of the National Defense University Countering Weapons of Mass Destruction Graduate Fellowship Program.

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