



THE UNDER SECRETARY OF DEFENSE
3030 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

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OFFICE OF PREPUBLICATION AND SECURITY REVIEW

7 SEP 2023

MEMORANDUM FOR CHAIR, DEFENSE SCIENCE BOARD

SUBJECT: Terms of Reference – Defense Science Board Permanent Subcommittee on Threat Reduction Study on Future Considerations for Chemical Weapons Demilitarization

At Congressional direction in 1986, DoD began the safe demilitarization and destruction of its chemical weapons stockpile and bulk agent stores. Through numerous technical and political challenges, the program is nearing its end with the last of bulk agent destroyed on July 7, 2023. Questions are now being asked as to what – if any – demilitarization capabilities and expertise developed through the substantial investment that has been made over these last four decades should be sustained and at what level.

More worrisome is some analog to the “Cape Ray,” when Syria agreed to surrender its sarin precursor stocks to avoid international military intervention in its civil war. The U.S. assumed the operational lead to remove and neutralize the chemicals under a tight timeline. The research and development base of the U.S. demilitarization program allowed for rapid construction and testing of a viable technical option, and its integration onto the Cape Ray, a military cargo ship. From start to finish, the operation was completed in about a year. Should such an event present itself again after the demilitarization program is completed, it is doubtful that the response could be as swift and/or effective if all knowledge, expertise, and equipment are no longer supported.

The Defense Science Board (DSB), working through its Permanent Subcommittee on Threat Reduction, is directed to conduct a study to consider a range of potential “surprises” that might require demilitarization of chemical weapons, agents, or precursors, especially on a compressed timescale, as well as what “hot” or “warm” capabilities are the critical few for being able to respond – and at what level. Options for various levels of capability to mitigate risk and provide confidence should be considered. Scenarios should assess potential needs spanning domestic and international areas of operation during peacetime to wartime, including humanitarian assistance and disaster relief operations. The study should evaluate existing and on-the-horizon technologies and capabilities with considerations for the resources and workforce required to maintain these capabilities. If other matters material to the study topic are discovered in the subcommittee’s fact finding, those matters should be addressed as well.

The Permanent Subcommittee findings, observations, and recommendations will be presented to the full DSB for its thorough, open discussion, and deliberation at a properly noticed and public meeting, unless it must be closed pursuant to one or more of the exemptions found in subsection 552b(c) of title 5, United States Code (U.S.C.). The DSB will provide its findings and recommendations to the Under Secretary of Defense for Research and Engineering as the Sponsor of the DSB. The nominal start date of the study period for this ToR will be within 30 days of when this terms of reference (ToR) is signed. In no event will the duration of the study exceed 12 months from the start date.

In support of this ToR and the work conducted in response to it, the DSB and the Permanent Subcommittee have my full support to meet with Department leaders. The DSB staff, on behalf of

the DSB and the Permanent Subcommittee, may request the Office of the Secretary of Defense and DoD Component Heads to timely furnish any requested information, assistance, or access to personnel to the DSB or the Permanent Subcommittee. All requests shall be consistent with applicable laws; applicable security classifications; DoD Instruction 5105.04, "Department of Defense Federal Advisory Committee Management Program"; and this ToR. As special government employee members of a DoD federal advisory committee, the DSB and the Permanent Subcommittee members will not be given any access to DoD networks, to include DoD email systems.

Once material is provided to the DSB and the Permanent Subcommittee, it becomes a permanent part of the DSB's records. All data and information provided is subject to public inspection unless the originating Component office properly marks the data or information with the appropriate classification and Freedom of Information Act exemption categories before the data or information is released to the DSB and the Permanent Subcommittee. The DSB has physical storage capability and electronic storage and communications capability on both unclassified and classified networks to support receipt of material up to the TS/SCI level.

The DSB and the Permanent Subcommittee will operate in conformity with and pursuant to the DSB charter; chapter 10 of title 5, U.S.C.; subsection 552b(c) of title 5, U.S.C.; and other applicable federal statutes, regulations, and policy. Individual DSB and Permanent Subcommittee members and the Permanent Subcommittee as a whole do not have the authority to make decisions or provide recommendations on behalf of the DSB nor report directly to any Federal representative. The members of the Permanent Subcommittee and the DSB are subject to certain Federal ethics laws, including section 208 of title 18, U.S.C., governing conflicts of interest and the Standards of Ethical Conduct regulations in 5 Code of Federal Regulations, Part 2635.

A handwritten signature in black ink, appearing to read "Heidi Shyu". The signature is fluid and cursive, with a large initial "H" and "S".

Heidi Shyu