

DEFENSE SCIENCE BOARD TASK FORCE FOR BIOLOGICAL DEFENSE

Meeting Minutes

23 January 1995

Summary

- The third meeting of the Defense Science Board Task Force (DSBTF) for Biological Defense was held at the Joint Program Office for Biological Defense (JPO-BD) on 23 January 1995. An agenda and list of attendees are provided at Enclosures 1 and 2.
- The meeting opened with welcome remarks by BG Busbee, JPO-BD Program Manager, followed by opening comments by Dr. Lederberg, DSB Task Force chair.
- Ms. Winnie Fanelli, acting Deputy Joint Program Manager, followed with an overview of the JPO-BD organization and a summary level financial and programmatic status. LTC Jim Hansen, Deputy Program Manager for Detection, presented a briefing on a joint service acquisition strategy for uniform detection capability across the battlefield. Major Grotke, Deputy Program Director for Biological Defense, presented a briefing of the initial results of the Biological Integrated Detector System (BIDS); focused on demonstrated detection capabilities and limitations of both the BIDS and the Interim Biological Agent Detector System (IBADS) which could be addressed in new technology insertion initiatives. Following a working lunch, LTC Dave Danley briefed on the approach to the vaccine production capability issue and FDA licensure concerns.

Action Items.

1. Provide a funding chart that includes all Biological Defense funding, including Science & Technology (S&T). (JPO-BD, Ms. Fanelli)
2. Provide a copy of the Committee on Veterans' Affairs United States Senate December 8, 1994 report "Is Military Research Hazardous to Veterans' Health? Lessons spanning half a century" and the Army Medical Research and Materiel Command January 11, 1995 response (Complete - provided at meeting)
3. Provide a copy of the ATSD (AE) report on the S&T review conducted 9-11 Aug 94 at Edgewood Research, Development & Engineering Center (Complete - provided at meeting)

4. Brief details of SAIC vaccine cost and effectiveness study to vaccine subcommittee (JPO-BD - LTC Danley)

5. Contact Mr. John Kreise from DIA re: threat modeling (JPO-BD - Mr. David)

6. Publish letter report on a review of detection technologies by 1 May 1995. (DSBTF - Dr. Whitesides)

Details:

Discussion involving the joint acquisition strategy for uniform detection capabilities across the battlefield.

- Dr. Lederberg suggested that ground contamination in some cases may be a bigger problem than long line source release and should be looked at carefully.
- Dr. Whitesides offered that low observable cruise missiles and such will become more available to hostile countries in the future and may pose more of a threat as a delivery system for local strikes.
- Dr. Lederberg suggested that medical countermeasures should be looked at very closely to see if there is some benefit to troops carrying their own personal medication (e.g., antibiotics for anthrax).
- Dr. Whitesides commented that Unmanned Aerial Vehicles may be an acceptable alternate platform for detection provided technical issues such as weight, size, and power could be resolved.

Discussion regarding BIDS testing.

- With regard to the problem of finding a good antibody for detecting Plague, Dr. Lederberg suggested talking with the Swedish government (BD Pat Umea)
- Dr. Lederberg suggested that open air testing using the simulate *BT* (Bacillus Thuringiensis) instead of *BG* (Bacillus subtilis var. niger) should be considered since this is an EPA approved pesticide and might simulate some pathogens more accurately.
- Dr. Lederberg asked about our concern for ground contamination especially near air bases with jet blasts kicking up large amounts of particulate. He recommended that we find out the extent of the potential problem. BG Busbee commented that he is focusing on modeling and simulation activities in an effort to reduce some of the

redundancy. The JPO will talk with Mr. John Kreise from DIA for modeling threat type input.

- Dr. Lederberg asked if particle size identification would be useful in the Long Range system and if so, look at dual frequency lasers to get this type of information and discrimination.
- Dr. Whitesides offered that the ability to see the delivery platform will be much harder in the future due to stealth designs and smaller platform cross sections.

Discussion regarding vaccine issues.

- MG (Ret) Russell expressed concern with the FY96-FY97 funding cut in the medical S&T program and warned of several unfavorable consequences and suggested the JPO bring the issue to the attention of the Army. Dr. Bosco, representing the Deputy Assistant to the Secretary of Defense (Chemical/Biological Matters), said this issue will be brought up to the DAB. If the DAB recommends funds restoration the FY97 mini-POM is the most likely vehicle available to restore the funds.
- Dr. Lederberg and Dr. Whitesides discussed the need for an indemnification type policy/doctrine to handle future Desert Storm syndrome type cases, especially as new vaccines come are introduced.
- Dr. Henderson discussed the uniqueness of the U.S. vaccine industry and indicated that the Department of Health and Human Services is completing a study of the industry and will have a report available in the next several months that may be of benefit to the vaccine cost and effectiveness study.
- MG (Ret) Russell agreed with the unique aspects of commercial vaccine producers and expressed doubts that a qualified prime contractor would respond to a Request for Proposal to make BD vaccines. He suggested that a consortium approach may be more effective, particularly if modeled after the SEMATEC approach used for advanced computer chip development.
- Dr. Whitesides suggested consulting with CEO's from biotechnology and venture capital companies to discuss the best approaches for transitioning research products to production.

- Dr. Lederberg suggested that surge capability should be considered as an element for source selection of a contractor.

Dr. Lederberg ended the session by summarizing his major concerns as follows; in addition to the tasks assigned to the vaccine and the bio sensor sub panels:

- Doctrine
- FDA approval process
- Congressional limitation to develop only vaccines for validated threat pathogens.

--Signed--

Dr. Joshua Lederberg
Task Force Chairman

--Signed--

Dr. Sal Bosco
Executive Secretary