



ACQUISITION,  
TECHNOLOGY  
AND LOGISTICS

## THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3010

DEC 01 2014

MEMORANDUM FOR CHAIRMAN, DEFENSE SCIENCE BOARD

SUBJECT: Terms of Reference – Defense Science Board Task Force on Military Satellite Communication and Tactical Networking

US defense systems have become increasingly reliant on military satellite communication and tactical networks for integrating significantly larger amounts of information. New command and control networks, sensors for intelligence, surveillance, and reconnaissance (ISR) and weapon systems for tactical operations are creating orders of magnitude larger amounts of data to be transferred across military communication networks. Advanced electronic warfare and cyber threats have the potential of significantly reducing the reliability of these networks, and covert operations require improved techniques for communication with low probability of detection and interception.

The study will review the current US military satellite communication and tactical networking capabilities, identify shortfalls within existing and planned capability development, and then propose mid- and long-term system and technology improvements needed to allow effective complex operations against advanced threats. Specifically, the study will investigate military satellite communications systems and address questions such as: what is achievable for assured communications within current modernization and development programs; what is the potential of new technology; what are the new satellite architectural concepts that will offer greater robustness for wideband communication with greater resistance to kinetic, electronic, and cyber attacks. Additionally, the study will investigate military tactical networks and address questions such as what is the current state of military tactical network interoperability across heterogeneous platforms; what are the recommended future tactical network architectures and systems; and how can the rapidly evolving commercial networking systems and technology be best applied, when applicable, to military tactical networks.

I will sponsor the study. Dr. Vincent Chan and Mr. Alfred Grasso will serve as Co-chairmen of the study. Lt Col Michael T. Manor, USAF, (Joint Staff) will serve as Executive Secretary. Lt Col Michael Harvey, USAF, will serve as the DSB Secretariat Representative.

The study will operate in accordance with the provisions of P.L. 92-463, the “Federal Advisory Committee Act” and DoD Directive 5105.04, the DoD Federal Advisory Committee Management Program.” It is not anticipated that this study will need to go into any “particular matters” within the meaning of title 18, United States Code, section 208, nor will it cause any member to be placed in the position of action as a procurement official.

A handwritten signature in black ink, appearing to read "Frank Kendall".

Frank Kendall