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ACQUISITION,
TECHNOLOGY
AND LOGISTICS

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MEMORANDUM FOR CHAIRMAN, DEFENSE SCIENCE BOARD

SUBJECT: Terms of Reference – Defense Science Board Task Force on Cyber Defense

As more and more systems have become interconnected for military advantage, the threat of adversaries using cyber techniques to deny or degrade our use of these systems has driven large investment in the Department of Defense DoD) to protect these systems from adversary intrusion. Cyber attackers are generally categorized into levels of capability from entry level actors that rely on tools obtained from the internet or surrogates to very sophisticated nation states. Recent penetrations of DoD enterprise information technology (IT) systems indicate that systems remain vulnerable even to modest threat level actors and the sophistication of tools available to actors in each capability tier continues to increase. In addition, data theft and exposure of proprietary technologies and techniques by insiders has become a significant problem for the Department. While much attention and investment has been given to these issues, the DoD struggles to assess the degree of improvement in system cyber resilience achieved as a result of its investments.

The Cyber Defense Task Force will investigate ways to inform future investment priorities, that is, methods to assess and provide DoD leadership with improved management insight into the level of cyber protection that currently exists and is planned within DoD networks, sensing, weapon and support systems. The Task Force study will include the development of approaches to assess system resilience, or surrogates informing system resilience, to different kinds and levels of cyber attack; the methods to understand relationships between Department cyber investments and the amount of increased resilience to attack; and the development of prioritized recommendations for the "next dollar spent" for maximum effect against cyber threats, and the priorities for investment.

I will sponsor the study. Mr. Robert F. Nesbit and Mr. Lewis Von Thaer will serve as Co-chairmen of the study. Richard Hale, OSD DoD CIO, 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.

Frank Kendall