

The National Academies of
SCIENCES • ENGINEERING • MEDICINE



**ASSESSING THE PHYSICAL AND TECHNICAL SUITABILITY OF DOD TEST AND
EVALUATION RANGES AND INFRASTRUCTURE**

Workshop Agenda

January 28-29, 2021

Livestream available at: <https://bit.ly/2MdjSBy>

Workshop Objective:

To hear from a variety of speakers and panelists to identify key operational test and evaluation (OT&E) challenges facing current programs in each of the war-fighting domains. The workshop will also host discussions on potential paradigm shifts that could improve the effectiveness and realism necessary to meet demands anticipated by 6th generation systems across multiple domains.

**Thursday, January 28
1300 – 1800 Eastern Time**

1300 - 1310 ET

Welcome and workshop overview

Committee chair welcomes attendees and provides background on the workshop

- Chair Dr. Keoki Jackson, Vice President for Supply Chain and Program Performance, Lockheed Martin
- Mr. Bruno Millonig, Director of the Board on Army Research and Development

1310 – 1330 ET

Remarks from the study sponsor

The study sponsor will discuss the motivation, complexity, and relevance of the study, as well as the likely audiences for the report recommendations and important stakeholders to engage.

- Dr. Raymond O'Toole, Principal Deputy Director of OT&E, Department of Defense (DoD)

1330 - 1430 ET

Framing Panel

Panelists discuss OT&E priority areas pertaining to the DoD ranges and across the services for the study committee to consider in their efforts.

- Moderator: Mr. Derrick Hinton, Vice President for Research and Engineering Services, Scientific Research Corporation
- Mr. George Rumford, Principal Deputy Director, Test Resource Management Center
- Mr. Devin Cate, Director of Test and Evaluation, US Air Force
- Mr. Carroll P. Quade, Director of Test and Evaluation, US Navy
- Mr. James Cooke, Director of Test and Evaluation, US Army

1430 – 1530 ET

Panel 1: Current programs and testing challenges –F35

Representatives from current programs articulate the current and projected challenges with operational test and evaluation. The moderators will pull out common sets of problems.

- Moderator: Dr. Rob Kewley, Director and Systems Engineer, simlytics.cloud LLC
- Mr. John Pearson, Senior Evaluator, 5th/6th Generation Fighter Aircraft

1530 – 1545 ET Break

1545 – 1645 ET

Panel 2: Current programs and testing challenges –Air Force Research Laboratory-Space Vehicles, Naval Surface Warfare Center

- Moderator: Dr. Graham Candler, Russell J. Penrose and McKnight Presidential Chair in Aerospace Engineering and Mechanics, University of Minnesota
- COL Eric Felt, Director, AFRL Space Vehicles Directorate
- Mr. John Fiore, Technical Director, Naval Surface Warfare Center

1645 - 1745 ET

Panel 3: Current programs and testing challenges – Advanced Battle Management System, AEGIS/CEC/STANDARD MISSILE

- Moderator: Mr. Hans Miller, System Test Engineer, MITRE Corporation
- Dr. Marc Bernstein, SAF/AQ Chief Scientist
- Mr. Conrad Grant, Chief Engineer, Johns Hopkins University Applied Physics Laboratory

1745 - 1800 ET

Workshop Summary

Summary remarks of the key takeaways from day 1 of the workshop.

- Dr. Darryl Ahner, Director of the Scientific Test and Analysis Techniques Center of Excellence, Air Force Institute of Technology

Friday, January 29
1000 – 1500 Eastern Time

1000 - 1015 ET

Welcome and reconvening remarks

Committee chair welcomes attendees, provides summary of Day 1 discussions, and frames the workshop objectives

- Chair Dr. Keoki Jackson, Vice President for Supply Chain and Program Performance, Lockheed Martin

1015 – 1115 ET

Panel 4: Next generation programs

Understand the operational T&E requirements for future technologies (up to 2035)

- Moderator: Dr. Gary Polansky, Senior Scientist, Sandia National Laboratories
- Dr. Andre' B. Abadie, Solutions Architect, Networks-AI-Cyber & Project Convergence, US Army Futures Command
- Mr. James Amato, Executive Tech Director, Army Test and Evaluation Command
- Mr. Michael White, Principal Director, Hypersonics, Under Secretary of Defense for Research and Engineering

1115 - 1215 ET

Panel 5: Next generation programs

Understand the operational T&E requirements for future technologies (up to 2035)

- Moderator: Mr. William Wilson, Acting director of the CERT Division at the Software Engineering Institute, Carnegie Mellon University
- Mr. John Garstka, Senior Analyst, Directorate for Communications and Networks Programs and Policy for Command, Control, Communications, Space and Spectrum, DoD
- Mr. Brian Nowotny, DoD Autonomy Test Lead, TRMC
- Mr. David Tremper, Director, Electronic Warfare at Office of the Secretary of Defense
- Col. Ryan Conner, Division Chief, Electromagnetic Spectrum Superiority at the United States Air Force
- Col Jason Eckberg, Deputy Director, A5L at the United States Air Force

1215 – 1230 ET Break

1230 – 1330 ET

Panel 6: Key considerations for OT&E

Key considerations about the context for the recommendations.

- Moderator: Mr. Chris Collins, Director, Developmental Test and Evaluation, and Assessments, Under Secretary of Defense for Research and Engineering
- Mr. Fred Drummond, Former Deputy Assistant Secretary of Defense, Force Education and Training
- Dr. Jane Pinelis, Chief, Test and Evaluation of AI/ML at DoD Joint Artificial Intelligence Center
- Dr. Arun Seraphin, Professional Staff Member at Senate Armed Services Committee
- Mr. Jeffrey White, formerly Principal Deputy Assistant Secretary of the Army (Acquisition, Logistics, and Technology)

1330 – 1430 ET

Panel 7: Envisioning the future of OT&E

What changes to OT&E could better support future programs?

- Moderator: Ms. Heidi Perry, Assistant Division Head for the Air, Missile and Maritime Defense Technology Division, Massachusetts Institute of Technology Lincoln Laboratory
- Dr. Missy Cummings, Professor in the Department of Electrical and Computer Engineering, Duke University
- Mr. Ed Greer, President, Greer Consulting, LLC
- Mr. Joshua Marcuse, Head of Strategy & Innovation, Global Public Sector, Google

1430 - 1500 ET

Workshop Summary

Summary remarks of the key takeaways from the workshop.

- Mr. Bruno Millonig, Director of the Board on Army Research and Development