

# Welcome To OSD/NDIA Summit on Test & Evaluation in Systems Engineering

August 17 & 18, 2004

Sponsored by

National Defense Industrial Association Systems Engineering Division

In conjunction with

**OUSD(AT&L)DS/Systems Engineering** 

## **Purpose of Summit**

- "to strategize the role of Test & Evaluation in the Systems Engineering process"
- The Department of Defense seeks to determine the overall optimum strategy for incorporating the appropriate Test & Evaluation activities in a program's systems engineering activities. The Summit will explore the range of opportunities for such involvement, and will examine the types of contributions that can be made by this action.
- Services T&E communities will present their vision of an appropriate and workable strategy
- We will explore the various arguments relative to the level and timing of their involvement, and the appropriateness of the contributions this community can make to overall program success by such early, participation in program planning, including the topics of Systems of Systems testing, mission capability testing and evolutionary acquisition impact on testing.

#### **Summit Goals**

We will attempt the definition and characterization of what we mean by effective involvement of the test community, and establish what is needed to assure that PM's consistently recognize the importance and value of a robust T&E process on their programs.

## **OSD Policy & Guidance on T&E**

- DoD Instruction 5000.2, Enclosure 5
  - Integrated Test & Evaluation
  - Requires coordination of DT&E, OT&E, LFT&E, family-ofsystems interoperability testing, information assurance testing, and M&S activities into an efficient continuum closely integrated with requirements definition and systems design & development
  - T&E Strategy
  - T&E Planning (TEMP)

## OSD Policy & Guidance on T&E 2

- DoD Acquisition Guidebook, Chapter 10
  - 10.1.6 Integrated T&E Philosophy
  - 10.1.7 Systems Engineering and T&E
  - 10.1.7.2 "T&E is the mechanism for accomplishing the verification loop in the SE process and characterizing technical risk of achieving a proper final design solution"

#### What this means is---

- We have policy & guidance on T&E
- We also know:
  - The earlier you perform good, robust systems engineering, the better chance a program has of success
  - The T&E community should be engaged throughout the life of the acquisition program
  - T&E involvement and considerations are an integral part of the systems engineering process
  - T&E is an essential ingredient to acquiring and producing successful systems it should not exist as an end in its own right

#### Challenge:

 Provide the definition and characterization of effective involvement of the test community, to effectively implement OSD policy & guidance, and if policy and/or guidance changes are needed, provide appropriate recommendations.

# **Expected Output**

#### Output will be Summary Report that will:

- Recommend policy/guidance changes, if any
- Provide practical implementation guidance to industry or gov't
- Identify recommended "metrics" that might be used to determine on-track T&E
- Characterize the nature and level of involvement
- Identify future actions
- Other as the group determines during deliberations

### Agenda - Tues AM

8:00 AM Plenary Session: Opening Remarks:

Workshop Overview, Definitions, Statement of

Objectives (Terms of Reference)

8:20 AM Keynote Speaker

Dr Glenn Lamartin, Director, Defense Systems, Office of

the Under Secretary of Defense, Acquisition Technology

& Logistics

9:00 AM Summary of OSD View of T&E/SE Interactions

Mark Schaeffer, Principal Deputy, and Director, Systems

Engineering, OUSD(AT&L) Defense Systems

9:15 AM Missile Defense Agency Views on T&E/SE Interactions

Brig Gen Mark Shackelford, USAF; Deputy for Test and

Assessment, and Acting Deputy Director, Missile

**Defense Agency** 

#### Agenda 2- Tues AM

10:00 AM USAF Views on T&E/SE Interactions
 Dr George Ka'iliwai, Technical Director, Air Force
 Flight Test Center, Edwards AFB, CA

 10:30 AM US Navy Views on T&E/SE Interactions

Dr Donald P. McErlean, Deputy Assistant Commander for Research & Engineering, NAVAIR

11:00 AM US Army Views on T&E/SE Interactions
Dr. C. David Brown, Director of Test and Technology,U.S.
Army Developmental Test Command

11:30 AM OSD Operational Test Views on T&E/SE Interactions
Dr Ernest Seglie, Science Advisor, Operational Test &
Evaluation

12:00 noon Lunch

8/16/04 v2

## Agenda Tuesday PM

1:00 PM Industry View on T&E/SE Interactions Mr. Glenn Lazier, Sr Technical Director, SVERDRUP Corp, representing NDIA Test & Evaluation Division

1:30 PM Role of Modeling & Simulation in the T&E Process

Jim Hollenbach, President, SIMSTRAT Inc; Chair, NDIA Systems

Engineering Division M&S Committee

2:00 PM Q&A of T&E Views

3:00 PM Break

3:15 FORUM DISCUSSION:

What is needed to assure that PM's consistently recognize the importance and value of a robust T&E process on their programs? What are the benefits & obstacles to up-front T&E involvement? Identify specific contributions to be made, expected outcome, issues, costs vs benefit, which T&E communities, timing of such involvement, etc.

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5:00 PM Adjourn

#### **AGENDA** Wednesday AM

7:00 AM Continental Breakfast

8:00 AM CONTINUE FORUM DISCUSSION:

What is needed to assure that PM's consistently recognize the importance and value of a robust T&E process on their programs? What are the benefits & obstacles to up-front T&E involvement? Identify specific contributions to be made, expected outcome, issues, costs vs benefit, which T&E communities, timing of such involvement, etc.

Collect ideas, prioritize, assign actions for further planning.

11:30 AM Lunch

12:30 PM Summit Wrap-up

Collect & Document Strategies & Concepts

2:00 PM Adjourn