

33rd Annual National Test & Evaluation Conference

NDIA 2018

T&E to Meet the Pace of Need

Moderator: Gary A. Honea P.E., Raytheon Missile Systems

Industry:

- **Paul Kratzer, Department Manager, AWS Integration and Verification Raytheon Missile Systems**
- **Ed Burnett, Senior Fellow, Lockheed Martin Company**
- **Dr Ed Kraft, Associate Executive Director of Research, University Tennessee Space Institute (UTSI)**

Gov:

- **Mr. Rick Quade, Deputy Assistant Secretary, DON RDT&E**
- **Colonel Ted "Vader" Dempsey, USAF, 53 Test Management Group Commander**

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4. Rick Quade, DON T&E

**5. Colonel Ted "Vader" Dempsey, USAF
53rd Test Management Group Commander**

The Impetus and Deployment Frameworks

Maj Gen Matthew “Zap” Molloy, former Commander, AFOTEC

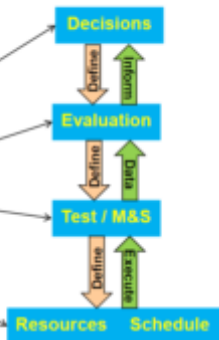
“...it is imperative that we continue to enhance our testing acumen to meet the “speed of need”...and outpace our adversaries.”

DoD’s Developmental Evaluation Frame Work

DT&E Strategy Overview

Articulate a logical *evaluation* strategy that informs decisions

- 1 How acquisition, programmatic, technical and operational decisions will be *informed* by evaluation
- 2 How system will be *evaluated*
- 3 How test and M&S events will provide *data* for evaluation
- 4 What *resources* are required to execute test, conduct evaluation, and inform decisions



DT&E story thread: decision – evaluation– test & resources

Source: Defense Acquisition University, Test & Evaluation

DASD(DT&E) endorsed method for articulating the evaluation-focused DT&E strategy. The Developmental Evaluation Framework (DEF) provides a “one-page picture” of the DT&E strategy -- how the system will be evaluated against its technical requirements and how the information from that evaluation will be used to inform the program’s acquisition decisions

RMS’s Why Test? Connection

“Why Test” questioning should begin as the Requirements, KPP’s and KPC’s emerge for the Prime Item System, Products, and Configuration Items; and must be applied in the context of the entire Test View Framework.

Why Test ?

- ➔ **What Decision**
... Determine what Program Decisions Need to be Made Based on Testing
- ➔ **What Data**
... Determine what Test Data is required to support Decision Making
- ➔ **What Strategy**
... Determine what is an Affordable & Efficient Test Strategy to get the Data

Data Driven Decision Making

	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27
Milestones	RR ATP	CDR ATP, IBR, SRR	PDR	CDR	Phase 2 ATP		ILFD	PRR	IOC		FOC

Major Program Decisions & the Evaluation Criteria for each decision

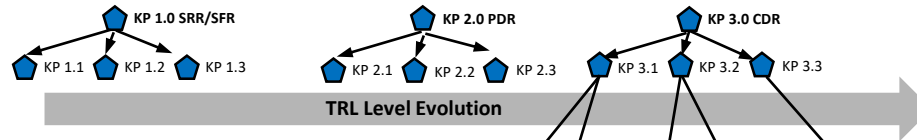
- SRR Evaluation Criteria**
1. Functional Baseline
 2. TPMS
 3. TEMP

- PDR Evaluation Criteria**
1. Allocated Baseline
 2. Char Testing to support Trades / AoA
 3. Fit Checks Pass
 4. Aero Model

- CDR Evaluation Criteria**
1. Product Baseline
 2. Closed Loop Demo of Tact SW on CIL
 3. Inert Operating Missile (IOM) Demo
 4. Mech, Elect, Logical Platform Compatibility
 5. Safety (Flight, Range)
 6. Roadmap to Production

- PRR / IOT Evaluation Criteria**
1. FCA Complete
 2. Pilot Production Line established
 3. Low Risk entering Operational Test

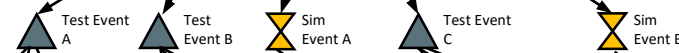
Derived Knowledge Points and evaluation that inform the decisions



Data to Support the Knowledge Points



Test Events / Simulation Events which generate the data



Resources to support the Events



UUT Integration & Acceptance Test Flows

