Headquarters U. S. Air Force

Integrity - Service - Excellence

The Air Force's Perspective



Mr. Jack Manclark

Phone: 703-697-4774 or DSN 227-4774 E-mail: John.Manclark@pentagon.af.mil NDIA, Jacksonville, FL, 8 Mar 06





Modeling and Simulation (M&S)

■ M&S – "The Good"

- F/A-22
- Ranges
- Hardware in the Loop
- M&S "The Bad"
 - Complex Threat Simulators



M&S – A Word of Caution

Joint Modeling and Simulation System (JMASS)
Requirements Creep
We built but they did not come
Blue Model Challenge





- National Defense Authorization Act (NDAA) '03
- Support Contractor Reduction (25%) over FYDP
- Personnel Reductions
- Smart Operations 21 (SO-21)



F-35 JSF Testing Challenges

International Partner Participation

- Desired Level of Involvement
- Data Requirements
- Security Guidelines



Initial Operational test and Evaluation (IOT&E)

- "Effective" adequate to accomplish a purpose
- "Not Effective" –
- Experience
 - JSTARS
 - Predator



Defense Acquisition Performance Assessment (DAPA) Report, Jan 06

- Performance Improvement
 - 1. Make operational testing <u>more realistic</u>, time and <u>resource</u> <u>constrained</u>, and <u>limited in its ability to create additional</u> <u>performance requirements</u>.
 - 2. <u>Create a new category for Initial Operational Test and Evaluation</u> <u>results</u> that allows Combatant Commanders to accept useful capabilities for deployment which the Director of Operational Test and Evaluation would <u>otherwise determine to be Not Operationally</u> <u>Effective</u>.
 - Require that test planning and criteria development for Operational Test and Evaluation reflect <u>testing in environments and against the</u> <u>range of threats</u> that are <u>identified by the Combatant Commander</u> -- not by the test community.
 - 4. Give <u>Program Managers</u> explicit <u>authority to defer non-Key</u> <u>Performance Parameter</u> related requirements to later acquisition . . .
 - <u>Require Joint Requirement Oversight</u> Council approval of all test plans that require operational testing in environments other than those established in the <u>Test and Evaluation Master Plan</u>.



Critical Operational Issues (COI) Rating Definitions

COI Rating	Definition
Fully Mission Capable (FMC)	Mission can be accomplished in the intended operational environment
Mission Capable (MC) G	Mission can be accomplished, but with increased operational cost
Partially Mission Capable	Only some aspects of mission can be accomplished <u>and/or</u>
(PMC) Y	Mission can only be accomplished under some conditions
Not Mission Capable (NMC)	Mission cannot be satisfactorily accomplished