



Targets, Ranges and UAVs: An Operational Test Perspective



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10/9/2008



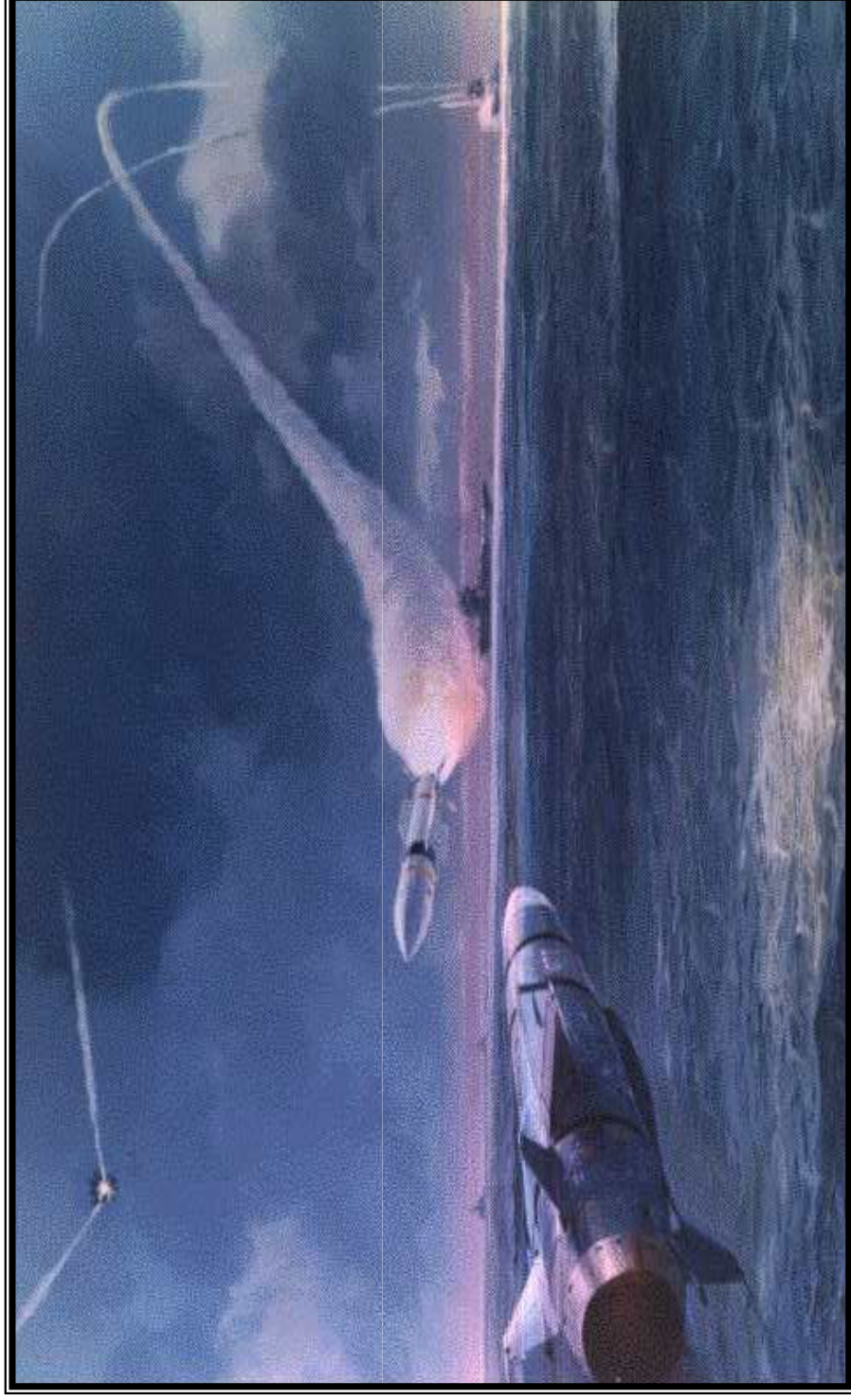
DOT&E Charter

- Title X, Sec.2399. Para (b) Operational Test and Evaluation.
 - (1) Operational testing of a major defense acquisition program may not be conducted until the Director of Operational Test and Evaluation of the Department of Defense **approves (in writing) the adequacy of the plans (including the projected level of funding) for operational test and evaluation to be conducted in connection with that program.**
 - (2) The Director shall analyze the results of the operational test and evaluation conducted for each major defense acquisition program. At the conclusion of such testing, the Director shall prepare a report stating—
 - “(A) the opinion of the Director as to—“(i) whether the test and evaluation performed were adequate; and “(ii) whether the results of such test and evaluation confirm that the items or components actually tested are effective and suitable for combat; and
 - “(B) additional information on the operational capabilities of the items or components that the Director considers appropriate based on the testing conducted.”

DOT&E approves the OT&E plans which identifies the test resources (i.e., targets and ranges) for all programs on OSD oversight.



Missile Targets



End to End Testing is Necessary – “Test Like You Fight”



Full Scale Aerial Targets

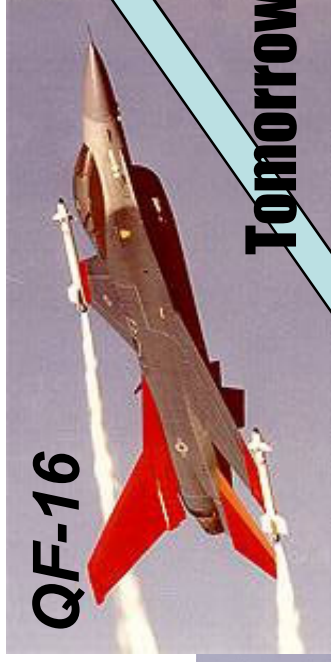
5th Gen

Future ?

QF-4



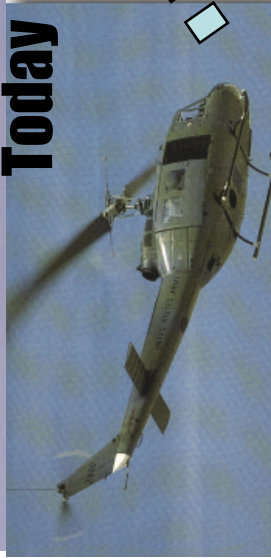
QF-16



Tomorrow

Future ?

Today





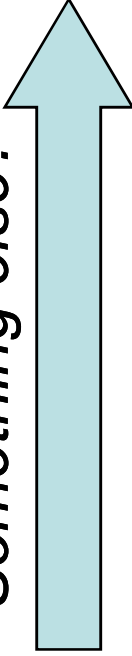
Cruise Missile Targets (Subscale Subsonic)



- Air Force - BQM-167A
- Army - MQM-107
- Navy – Venerable BQM-74E



What will be the future Navy ASCM target?

- BQM-74F
 - BQM-167 Variant
 - Something else?
- 





Mobile Ground Targets

- **It's About Representing The Threat**



- **It's About Test and Training**





- The 2005 DSB Task Force on Aerial Targets envisions the gradual introduction of common control elements that would eventually provide us with the ability to “shoot any target on any range.”

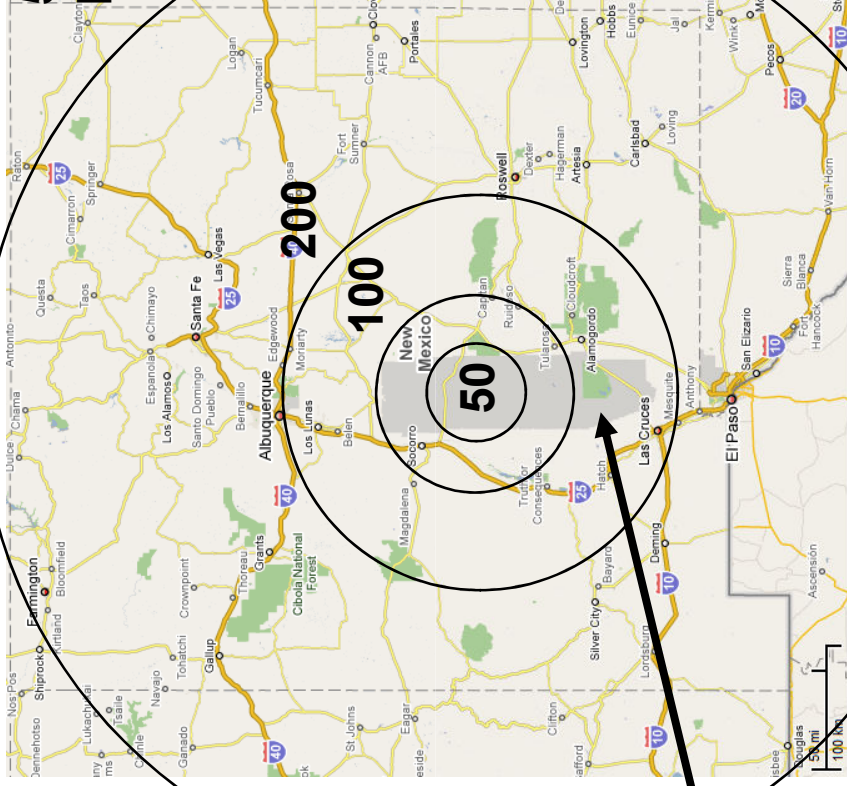
- We need a corporate approach towards open architectures and standards based development





Ranges

500 Mile
Diameter



White Sands
Missile Range

- FOOT PRINT
- SPECTRUM
- AGING INFRASTRUCTURE
- ENCROACHMENT



Unmanned Air Systems

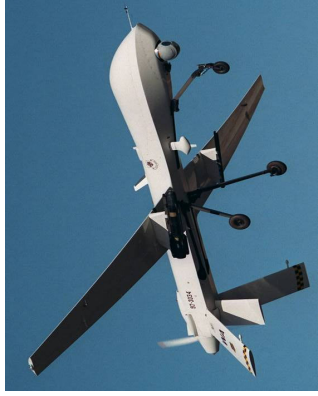


- Perspectives:
 - ACTD legacy
 - Dual-program problem
 - Limited meaningful testing
 - Performance





Unmanned Air Systems



- **What should be done now?**

- Fielded systems: Invest in reliability growth and improvements to suitability
- Systems under development: Accomplish the fundamentals necessary for a successful program
- Realistic DT/OT: Change the paradigm that “UAS’s are just unmanned systems”





Summary



- UAS's are a paradigm shift in how we need to test.
- Expand the capability and flexibility of the range
- Targets must focus on representing the threat for its intended use (Training, DT, OT)



DOT&E Organization

