

Headquarters U.S. Air Force

Integrity - Service - Excellence

Live-Virtual-Constructive Simulation Integrated Environment for the USAF



U.S. AIR FORCE

**Col Lou “Spanky” Olinto
11 March 2008
DoD M&S Conference**

Report Documentation Page

*Form Approved
OMB No. 0704-0188*

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE 11 MAR 2008	2. REPORT TYPE N/A	3. DATES COVERED -	
4. TITLE AND SUBTITLE Live-Virtual-Constructive Simulation Integrated Environment for the USAF		5a. CONTRACT NUMBER	
		5b. GRANT NUMBER	
		5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)		5d. PROJECT NUMBER	
		5e. TASK NUMBER	
		5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Air Force		8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)	
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited			
13. SUPPLEMENTARY NOTES 2008 DoD M&S (Modeling and Simulation) Conference, presentations held in Orlando, Florida on March 10 - 14, 2008, The original document contains color images.			
14. ABSTRACT			
15. SUBJECT TERMS			
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	UU
			18. NUMBER OF PAGES 7
			19a. NAME OF RESPONSIBLE PERSON

General Fogleman Vision ~ 1995



**Gen Fogleman's
task is still
relevant
and
accomplishing it
is a
priority!**

“...allow us to demonstrate the flexibility, responsiveness and utility of air power in peace and war.”

“...get senior leadership understanding and involvement in the development of an accelerated Air Force M&S Program.”

*source: A New Vector for Air Force Simulation,
Gen Ronald Fogleman, Air Force Chief of Staff, Jan 95*





Air Force Agency for Modeling & Simulation



Training Systems Product Group



MISSION

- Orchestrate and provide AF support for OSD, Joint, and AF M&S activities
- Facilitate the appropriate representation of air, space, and cyberspace in M&S
- Explore new warfighting concepts, roles, and missions
- Ensure AF personnel have the appropriate M&S skills, experience, and training
- Maintain configuration control for and modernize selected models
- Establish high level architectures, interoperable databases, protocols, and standards
- Act as a central repository and / or access point for AF M&S knowledge

VISION

The Air Force Center of Excellence for modeling and simulation delivering realistic, reusable, and cost-effective tools for operations, training, analysis, and acquisition support – ensuring the contributions of air, space & cyberspace are accurately represented to the Joint Warfighter.

Orlando Personnel	
Military:	16
Civilian:	15
Contractor:	25
Budget – FY08	
AFAMS:	\$3M
AFRL:	\$47M
677 AESG:	\$407M
507 ACSS:	\$523M

- Air Force Research Lab
- 677 Aeronautical Systems Group
- 507 Aircraft Sustainment Squadron

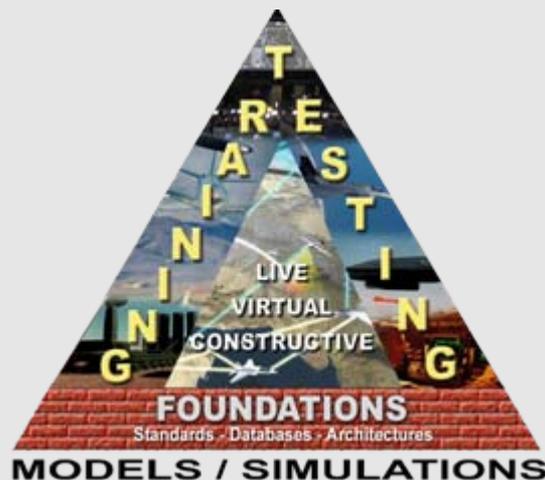
Air Force organizations that support warfighter training through the use of modeling and simulation techniques. Collectively provide the warfighter with a full range of training system lifecycle support.

MISSION

Lead the development, acquisition and sustainment effort necessary to meet every MAJCOM's simulation and training requirement.

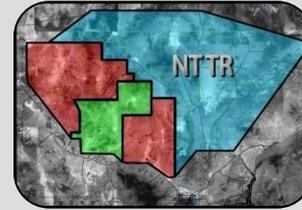
VISION

Provide the world's best training systems to the combat forces of today and tomorrow.





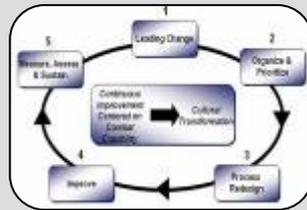
Weapon System Capabilities



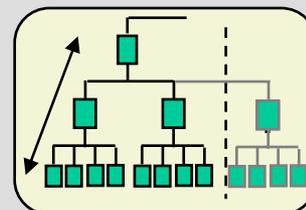
Range Capabilities / Limitations



Asset Availability



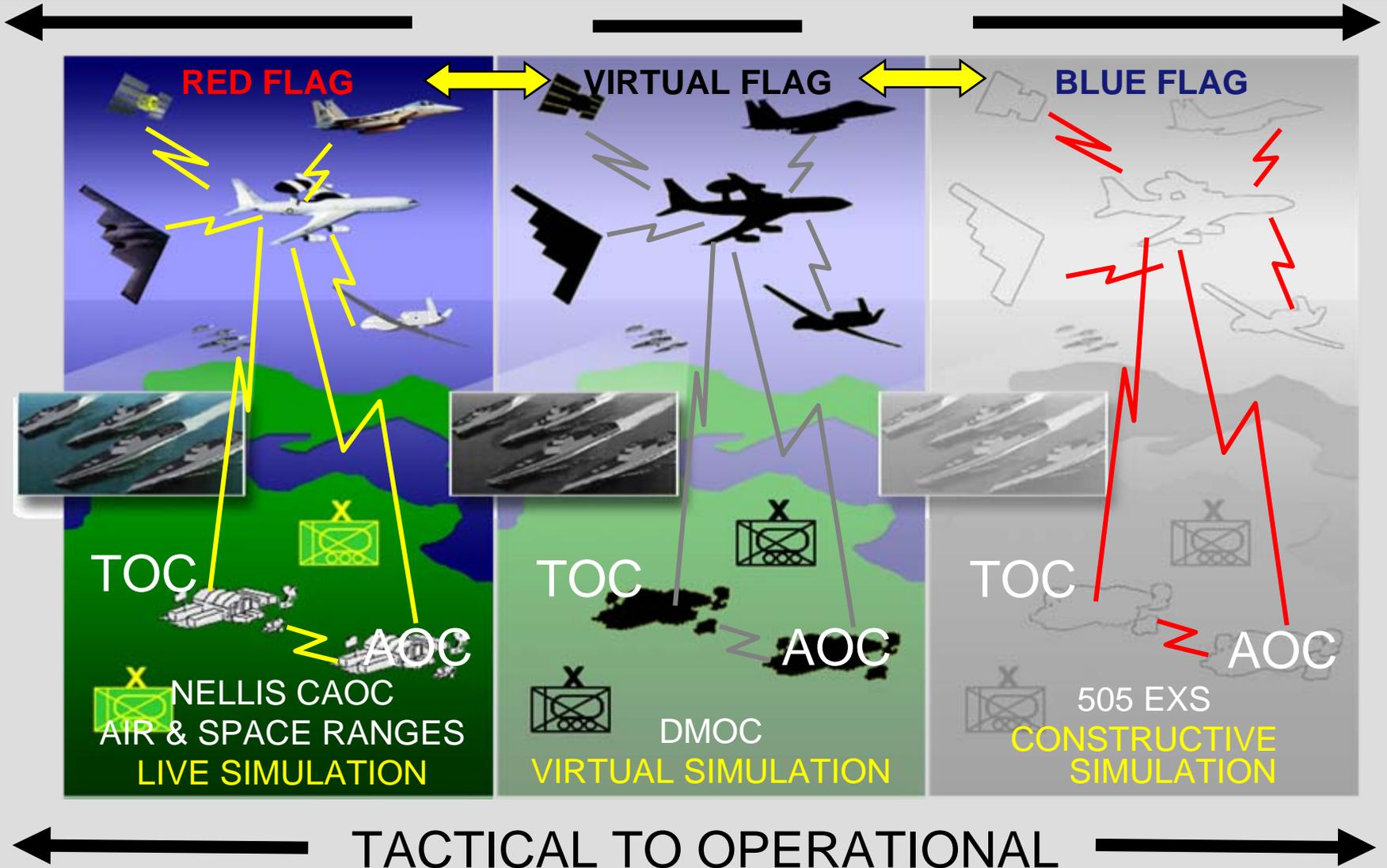
AFSSO 21



PBD 720

Everything Has a Joint Context

LVC Integration Challenge



LVC Capabilities

What Are We Trying To Do?

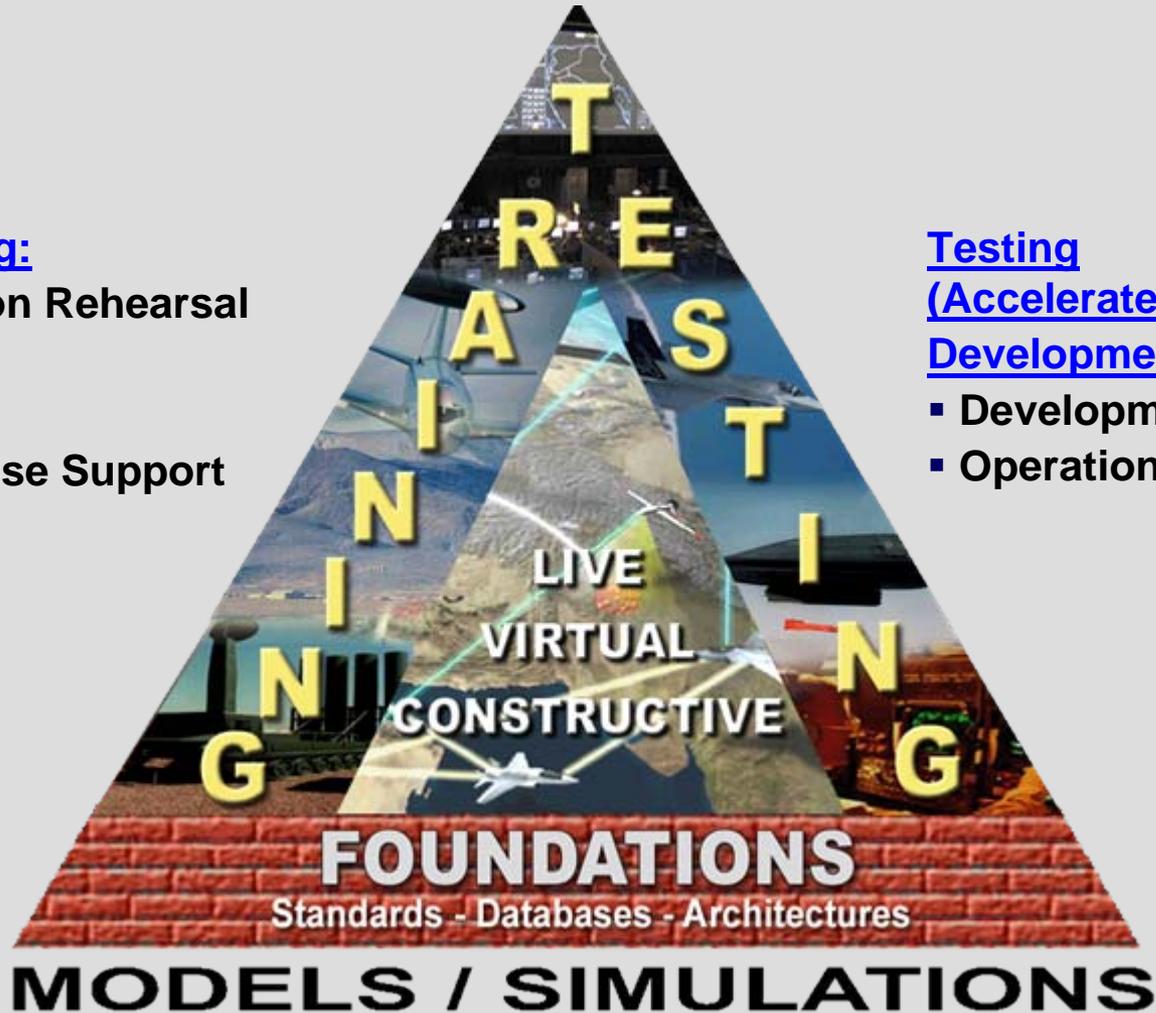
Training:

- Mission Rehearsal
- DMO
- AOC
- Exercise Support

Testing

(Accelerated Development):

- Developmental Test
- Operational Test



The image shows a 3D rendering of the Earth from space, illustrating a network of communication and data links. Two large satellites are positioned in orbit, with blue laser beams connecting them to various aircraft on the ground and in flight. The aircraft include a large commercial jet, a smaller propeller plane, and several fighter jets. A network of yellow and blue lines connects the satellites to the aircraft and to each other, representing data flow. A purple and blue shaded area on the ground indicates a specific region of interest. In the bottom left corner, there is an inset image showing a map of the United States with green curved lines representing data links between different parts of the country.

AFAMS

Advancing Air Force M&S

To Support the Warfighter