Dynamic Training Environments of the Future

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1. REPORT DATE  
**13 MAR 2008**  

2. REPORT TYPE  
**N/A**  

3. DATES COVERED  
**-**  

4. TITLE AND SUBTITLE  
**Dynamic Training Environments of the Future**  

5a. CONTRACT NUMBER  
**-**  

5b. GRANT NUMBER  
**-**  

5c. PROGRAM ELEMENT NUMBER  
**-**  

5d. PROJECT NUMBER  
**-**  

5e. TASK NUMBER  
**-**  

5f. WORK UNIT NUMBER  
**-**  

6. AUTHOR(S)  
**-**  

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:  

   a. REPORT  
   **unclassified**  

   b. ABSTRACT  
   **unclassified**  

   c. THIS PAGE  
   **unclassified**  

17. LIMITATION OF ABSTRACT  
**UU**  

18. NUMBER OF PAGES  
**15**  

19a. NAME OF RESPONSIBLE PERSON  
**-**  

**Standard Form 298 (Rev. 8-98)  
Prescribed by ANSI Std Z39-18**
We better be prepared to dominate the skies above the surface of the earth or be prepared to be buried beneath it.

General Carl A. "Tooey" Spaatz
1st AF Chief of Staff

If you want to go anywhere in modern war, in the air, on the sea, on the land, you must have command of the air.

Admiral William "Bull" Halsey

The United States Air Force dominates Air, Space, and Cyberspace.
Developing the Future Airman

Partnering to Define an End-to-End LIFE-CYCLE AIRMAN
Creating the Competitive Edge
Creating Operational Environments
In a Cyber world

Integrity - Service - Excellence
Its All About The Effects

Full Spectrum Dominance: Global effects at the speed of light
Emerging Disruptive Technologies: Games

- Synthetic Network Warfare
- Constructive Cyber Space
- Advanced Simulators
- Global Interaction
- Human Factors/Behaviors
- Directed Energy
- Inter-Active Competitive Sims
- Virtual Testing/Training
- Nano ... Bio ... Quantum

Live-Virtual-Constructive Integration to Support All M&S Domains
Cyber Command Implications

- Games are a huge and unexploited part of cyberspace
  - Greater than $10B revenue in 2005
  - Billions playing online (some of them are terrorists)
- British MI-6 is recruiting game players, within online games for counter-terrorism work
- Adversaries use games
  - 9/11 hijackers used MS Flight Sim
  - Under Siege & Special Force (Hezbollah)
  - Rescue the Nuclear Scientist (Iran)
- Online Games used for cyber attacks, espionage, & command and control
- MMORPG used to generate revenue through the sale of in-game items for real-world currency

The MMORPG is the emergence of a new society

The video game is the new media in cyberspace, it can be used by us and it will be used against us
Types of Strategy Games

- Abstract strategy
- Simulation
- *Real-time strategy*
- War game
- Real-time tactics
- *Turn-based*
- City building
- Multiple Worlds
- Global Cyberspace
- Command & Control

The commander is the giant eye in the sky through an entire war.
A4R M&S Priority: Combat Convoy Mission Rehearsal Tool

- This generation of Airmen grew up on video games
  - They are doing it on their own
  - Time to adapt to new way of training
  - Provide Airmen the tool to ensure they reinforce the right Convoy skills

- Lay framework for other ACS functions
- Adapt existing tech for DoD compliance
- AF Portal brings it to any .mil computer

- Saves $$$ & increases accessibility
Gaming Opportunities

- Gaming Center for the entire Air Force
  - Taking Wargaming through the next evolution

- Exploiting game tech to support the mission across ALL domains
  - Rapid game solutions to meet urgent needs

- Develop official Air Force game based solution
  - Common toolset for modeling sensors
  - Great for rapid CONOPS testing

- Promote and sell the AF and United States mission
  - Demonstration via Interaction
  - Official recruiting games

- Structured after a commercial game studio
  - Leverage the industry talent
  - Capitalize on existing investments

America’s Air Force
The Future…
Firmly Resolving Ourselves to Action

- Looking to a limitless horizon
  ...striving for greater air, space and cyberspace capabilities

- Securing Cyberspace
  ...taking action to increase our advantage in this new domain

- Emphasizing innovation
  ...improving Joint warfighting
  ...improving processes
  ...pursing energy initiatives
Questions?
What is achieved from simulation?
1) Safer 2) WX 3) MX 4) Joint 5) Real 6) Greater Security 7) Interoperative

In simulation, there IS a rerun button!
Guided by Three Priorities

Our Mission…
...deliver sovereign options for the defense of the U.S. and its interests – in air, space, and cyberspace.”

Everything is done in context of Jointness

- Win the Global War on Terror
- Recapitalize/Modernize
- Care for Airmen

Failure is not an option…Can’t afford to re-learn lessons!