Air Education and Training Command

Education & Training Technology Application (ETTAP) Program

AETC/A5TT
15 May 07

Larry Clemons
**Education & Training Technology Application (ETTAP) Program**

**PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)**

Air Education and Training Command, AETC/A5TT, Randolph AFB, TX, 78150-4331

**SUPPLEMENTARY NOTES**

2007 Air Force Advance Planning Briefing to Industry (APBI), May 15, 2007, Wright-Patterson AFB, OH

**ABSTRACT**

**SUBJECT TERMS**

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Overview

- Education Training Technology Application Program (ETTAP) Summary
- Examples of current projects
- Three new opportunities
ETTAP Summary

- A proof-of-concept
- Linked to an AETC education or training requirement
- Of acceptable risk (financial, developmental, implementation, time, availability, benefit vs cost)
- Measurable
- Completed within approximately 18 months
- Of potential use across AETC
- Cost ≈ $200K - $700K
- Current Projects
  - 21 projects totaling over $4.5M across 10 AETC bases
- FY07
  - Funding certification received 24 Apr 07
Current Projects

VANDENBERG
Standardized Space Trainer

AIR FORCE ACADEMY
Enhanced Freefall Harness Trainer

WRIGHT-PATT
Adaptive Gaming Integrated Learning Mngr Sys Environment

VANCE
Anytime, Anywhere, Ground Based Training System

MAXWELL
Leadership Development Sim

MAXWELL
Expeditionary Airbase Sim

MAXWELL
Airpower Analyst

MAXWELL
Adaptive Gaming Integrated Learning Mngr Sys Environment

LACKLAND
Weapons Cycle of Operations

LACKLAND
Tablet PCs w/Dog Training

LITTLE ROCK
Augmented Reality Loadmaster

PORT HUENEME
Point-2-Point Wiring & Signal Tracing

LUKE
Barry Goldwater Range
Live Virtual Data Link

SHEPPARD
Electronic Hand-Held Devices

SHEPPARD
Generalized Operations Sim Environment

SHEPPARD
3D Knowledge Models

LAUGHLIN
Virtual Interactive Pattern Environment & Radio Comm Sim

KEESLER
Squadron Host Aviation Resource Mngt Console Lab

KEESLER
Ultimate Virtual Classroom

KEESLER
Stand-alone Training

TYNDALL
Airborne Warning & Control System

LITTLE ROCK
Generalized Operations Sim Environment

VANCE
Anytime, Anywhere, Ground Based Training System
BMGR Data Link Integration

- **Description:** AFRL developed software to facilitate live, virtual, constructive Link-16 integrated training on Barry Goldwater Range
- **Customer:** 56 FW (Luke AFB AZ)
- **Vendor:** AFRL/HEA (Mesa)
- **Benefits:** Significantly enhance AETC training across the Distributed Mission Operations battlespace
Expeditionary Airbase Simulator

- **Description:** A multi-player, 3D, real time strategy, city building game. The simulation of the build-up and sustainment of an expeditionary airbase that will allow students to apply leadership and followership skills.
- **Customer:** Air University Maxwell AFB
- **Vendor:** KMS Technologies
- **Benefits:** Increase comprehension of complex combat theater operations
Augmented Reality Training for C-130 Loadmaster

- **Description:** Head-mounted see through goggles that allows loadmasters to see the real cargo environment with virtual pallets and emergency situations overlaid
- **Customer:** C-130 Aircrew Training System (ATS) Little Rock AFB AR
- **Vendor:** Pathfinder Sys Inc
- **Benefits:** Fills training gap left by loss of loadmaster training flights
VIPERS

• **Description:** Virtual Interactive Pattern Environment and Radiocomms Simulator (VIPERS). PC-based interactive training with voice recognition for situational awareness and radio communications in primary pilot training traffic patterns. VIPERS includes simulation, intelligent entities, assessment of voice communications, and debrief technologies

• **Customer:** 84 Flying Training Squadron, Laughlin AFB

• **Vendor:** AFRL contract to CHI Systems

• **Benefits:** Replaces “carpet pattern” – Potential to save one flight sortie for most SUPT students
**Description:** Program to test intelligent voice recognition capability for AWACS training scenarios

**Customer:** 325th ACS, Tyndall AFB FL

**Vendor:** Southwest Research Institute

**Benefits:** Save man hours with elimination of surrogate instructor pilots
Generalized Operations Simulation Environment (GOSE)

- **Description:** Use legacy part-task trainers for haptic feedback in full virtual environment to make obsolete trainer match current weapon system
- **Customer:** HQ AETC
- **Vendor:** Southwest Research Institute
- **Benefits:** Virtually display current weapon system configuration as an interactive overlay on legacy part task trainers to achieve currency through software changes instead of hardware modifications
Intelligent Tutoring System

- **Description:** Use of student adaptive learning & instructional gaming strategies to assess & enhance Officer Trainees’ basic writing skills
- **Customer:** AF Officer Accession and Training School, Maxwell AFB
- **Vendor:** MultiMax
- **Benefits:** Upgrade writing skill sets to be more suitable to military applications
Standardized Space Trainer

- **Description:** An off-the-shelf computer system coupled with state-of-the-art emulation software to provide a low-cost, standardized satellite operations trainer capable of simulating multiple satellite systems (GPS and DSCS) on a single computer.

- **Customer:** 533 Training Squadron Vandenberg AFB

- **Vendor:** Sonalysts Inc. through AFRL SBIR contract

- **Benefits:** Develop and train multiple space platforms from a common courseware development application
Electronic Handheld Devices

- **Description:** Integration of PDAs and software to replace printed textbook references for use in Independent Duty Medical Technician course
- **Customer:** Sheppard AFB
- **Vendors:** Hewlett-Packard, Epocrates Inc., Lippincott, Williams & Wilkins, and Skyscape
- **Benefits:** Increase analytical skills and competency. Reduce attrition rates and unsatisfactory scores on critical items in Clinical Practicum
• Three new opportunities

  • USAF primary pilot training Ground Based Training System (GBTS) modification

  • Interactive Scenario Courseware Development

  • Use of Portable PCs with Dog Training
Anytime, Anywhere Ground Based Training System

- **Description:** Provide proof-of-concept data to AETC leadership in the transformation of Specialized Undergraduate Pilot Training (SUPT) Ground Based Training System (GBTS) from the current segregated and hard scheduled events to a multi-point access training system allowing anytime, anywhere training.

- **Customer:** Specialized Undergraduate Pilot Training (SUPT) T-6 Joint Primary Pilot Training / (P-V4A-J) at a base chosen by AETC/A3F

- **Vendor:** TBD

- **Benefits:** Just-in-time learning and use of learning law of recency

- **Status:**
  - Published RFI in FedBizOps Apr 12
Interactive Scenario Courseware Development

- **Description:** Develop a common simulation-based platform that can be used to enhance or replace current paper-based leadership case studies at Air War College (AWC) and Air Force Officer Accession Training School (AFOATS). Replace the current video counseling training package to PC-based interactive simulation with reusable AVATAR (computer-generated images of humans) development software.

- **Customer:** Air University Air War College and Air Force Officer Accession Training School (AFOATS)

- **Vendor:** TBD

- **Benefits:**
  - Use of AVATAR technology will present and evaluate mastery of objectives in a standardized way in a realistic environment
  - Support of distance learning for the operational Air Force

- **Status:**
  - RFI published in FedBizOps Apr 30
Use of Portable PCs w/Dog Trng

- **Description:** Portable computer electronic performance support system, includes CBTs, used in dog training environments (instructors-/students- handler/trainers; tracks canine students also), and also integrates with the current multi-service Working Dog Management System
- **Customer:** DoD Military Working Dog Center (341 TRS Lackland AFB TX)
- **Vendor:** TBD
- **Benefits:** Assessment of current technology in portable devices for use in field conditions during training. Replace paper based support material in the field.
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