## Air Education and Training Command



Education & Training
Technology Application
(ETTAP) Program

AETC/A5TT 15 May 07

**Larry Clemons** 

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#### **Overview**



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



#### **ETTAP Summary**

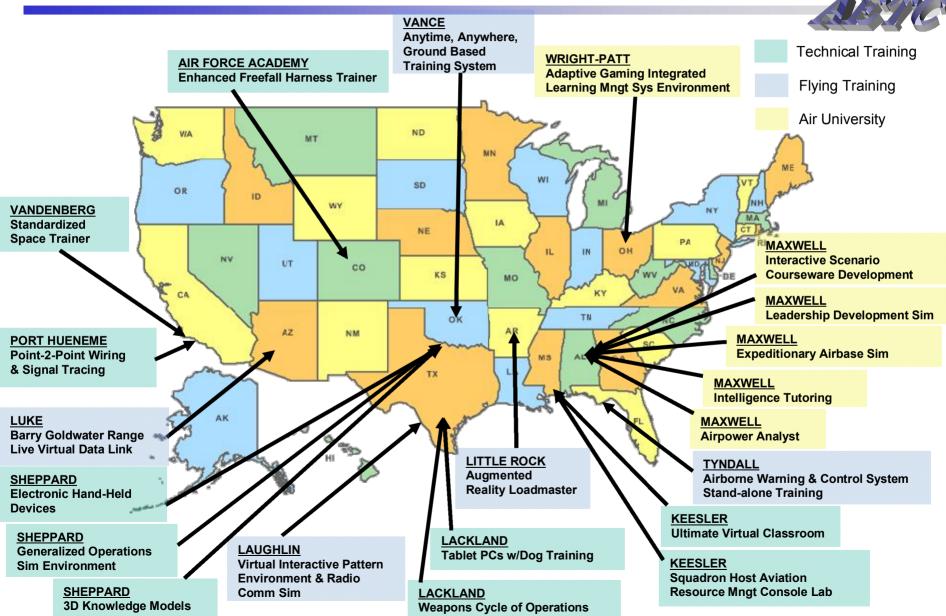


- A proof-of-concept
- Linked to an AETC education or training requirement
- Of acceptable risk (financial, developmental, implementation, time, availability, benefit vs cost)
- Measurable
- Completed within approximately 18 months
- Of potential use across AETC
- Cost ≈ \$200K \$700K
- Current Projects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



### **Current Projects**







### **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



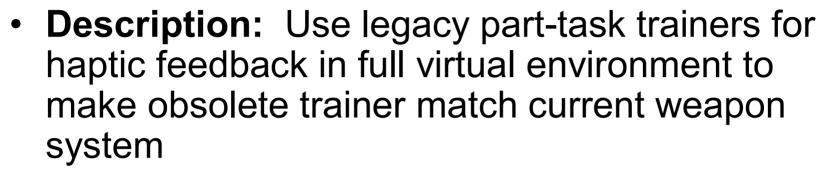
## **AWACS Voice Recognition**



- 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)



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 lowcost, 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



#### **ETTAP 2007**



- 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 (computergenerated 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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