

# ARMY AVIATION

Where We Are  
Where We Are Going



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PROGRAM EXECUTIVE OFFICER  
AVIATION



# PEO Aviation Organization




**Apache**



**ASH**



**Aviation Systems**



**Cargo**



**UAS**



**Utility**

Mods/Recap 

Armed Recon Helicopter 

AGSE 

CH-47F 

CSI 

UH-60 MODERNIZATION 

Block III 

Kiowa Warrior 

AME 

Joint Heavy Lift 

Ground Maneuver 

UH-60A/L/M 

Sensors 

Training Helicopters 

ATC 

Fixed Wing 

Med Altitude Endurance 

Light Utility Helicopter 

Longbow 

Joint Cargo 

SUAV 

T700 Engine 

Fleet Mgmt 

ANMP 

Tactical Concepts 

MEDEVAC 

Future Forces 

Army, Navy, Air Force





# Mission

**Execute Life Cycle Management of Manned and Unmanned Aviation Weapon Systems for the Current Force and Transformation to the Future Force**



### What We Do:

- Centralized Management for All Assigned Army Aviation Programs
- Full Life-Cycle Management of Assigned Systems
- Improve Interoperability
- Enhance Reliability and Safety
- Maintain Combat Overmatch thru Recapitalization & Modernization

### What We Manage:

- Six Project Offices
- Two Major Initiatives: Support to OIF/OEF and Fixing Army Aviation

### The Magnitude:

- \$34.3B over POM years FY 10-15
- FMS Total Case Value — \$7.023B
- 55 FMS Cases — 36 Countries

**Total Workforce:**  
~ 2250 on board  
(Civilian, Military & Contractors)

### Managing

**Total FY09  
Resources: ~\$6.7B**

### To

**Support the Warfighter**

**PROVIDING THE WORLD'S FINEST SUPPORT TO THE WARFIGHTER  
AT REDSTONE ARSENAL**





# Army Aviation OPTEMPO

**Over THREE million hours flown in OIF/OEF since 2003.**

**Mission capable rates exceed standard while OPTEMPO is five times peace time rate.**

- 1144 new aircraft delivered to the field in 2008
- Over 4911 aircraft planned for future delivery\*
- 347 new UAS Systems delivered to the field in 2008
- 3900 UAS planned for future delivery
- 686 deployments of PEO personnel in theater during 2008
- Plus up on war replacement aircraft
- Deployed enhanced maintenance capabilities
- 2027 aircraft PRESET prior to deployment
- First operational MUM teaming capability deployed via VUIT-2





# Army Aviation Modernization Plan

**MISSION**

(FY09) *(Near Term)*      (FY10-15) *The POM Years*      (FY16-22) *The EPP Years*      (FY22 – Beyond) *Beyond the EPP*



**ATTACK**



AH-64A



AH-64D LB

Block III

Joint Multi-Role



**ASH**

OH-58D KW

*(Sustain)*

Kiowa Warrior Replacement



Raven

Raven (PIP)



gMAV

FCS Class I



**UAS**



Shadow



Modernization

Shadow C



Hunter



Maintain



Warrior A/O

QRC 1

QRC 2

ERMP Block 1



**UTILITY**



UH-60A/L



UH-60M

UH-60L



UH-60M/HH-60M

H-60M Upgrade

UH-1  
*(Divest)*

LUH

Joint Heavy Lift (JHL)



**CARGO**



CH-47D



CH-47F



**FIXED WING**



C-23 (CARGO)  
*(Divest)*



C-12 (SHORT RANGE)  
*(Divest)*



MA (RC-12 and EO-5)  
*(Divest)*

Joint Cargo Aircraft

Future Utility Aircraft

Aerial Common Sensor



# Selected Programs, Products, and Services

## Cargo Helicopters

**Colonel Newman Shufflebarger, Project Manager**



CH-47F third and fourth units equipped: 1 CAV (Sep 08) & 82 CAB (Feb 09)

Multi-Year Procurement awarded August 2008

## Apache Attack Helicopters

**Colonel Shane Openshaw, Project Manager**



Apache Block III Limited User Test Nov 2009

MTADS/PNVS fielded to 11 Battalions; 647 on contract

VUIT-2 fielded and deployed, winner of Aviation Weekly's Laureate Award

## Utility Helicopters

**Colonel Neil Thurgood, Project Manager**



UH-60M fielding third unit equipped

UH-60M Upgrade in flight test

T701D Engine in distribution to Apache and Black Hawk units

Light Utility Helicopter fielding ARNG



# Selected Programs, Products, and Services



## Unmanned Aircraft Systems

### Colonel Gregory Gonzalez, Project Manager



Rapid deployment of Sky Warrior Block 0, SkyWarrior-A, Hunter, Raven and Shadow systems to both theaters, and gMAV to OIF, greatly expanding ISR, SIGINT, and weaponization capabilities plus extending the reach of the warfighter via man-unmanned teaming and Communication Relay.

Rapid expansion One System Remote Video Terminal (OSRVT) in theater.

## Aviation Systems

### Colonel Anthony Potts, Project Manager



Joint Cargo Aircraft and force protection of existing fixed-wing fleet

Air Traffic Control modernization – tactical and fixed-base

## Armed Scout Helicopter

### Colonel Keith Robinson, Project Manager



Kiowa Warrior sustainment

Armed Reconnaissance Helicopter

FMS – Armed Bell 407





# PEO Aviation PM TADSS Responsibilities

- Budget, develop, procure, field, and upgrade required operator and maintainer system TADSS, in support of institutional and sustainment training
- Subsystem PMs budget, develop, procure, and modify system TADSS
- Coordinate with PEO STRI and DAMO-TRS on budgeting/transition to PEO STRI for sustainment/CLS
- Provide New Equipment Training for receiving installation's Instructors/ Operators and CLS
- Budget for aircraft concurrency upgrades into AVCATT
- Budget for modifications to system TADSS due to obsolescent components
- Coordinate with AMCOM on budgeting for disposal of obsolete TADSS





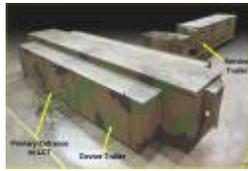
# Aircraft Operator Trainers



AH-64A  
CMS  
(4)



AH-64D  
LCT  
(27+)



AGES II & TESS



No Unit  
Training  
Device

TESS (limited)



UH-60A/L  
SFTS  
(21)



UH-60M  
TBOS  
(17)



AGES II



UH-72A  
PT  
(2)  
More TBD



CH-47D  
SFTS  
(6)



CH-47F  
TFPS  
(17)



AGES II



OSGS  
Embedded  
Training



PIMS



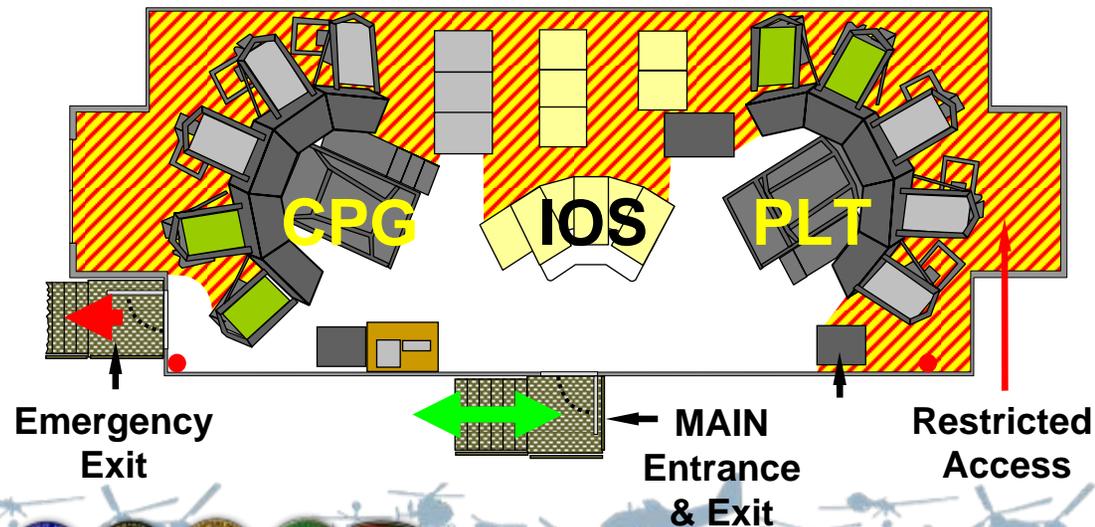
Simulator





# Longbow Crew Trainer Device and Service Trailers

- The LCT is a dual-seat individual and crew transportable, deployable accredited flight simulator training device. It provides for hands-on training of selected critical flight tasks. It trains and sustains individual and crew proficiency in basic, advanced, tactical, instrument, and maintenance test flight tasks in normal, degraded, and emergency modes of operations
- Transportability
  - Tear-down and pack LCT trailers - 7 days. Setup and check LCT - 7 days.
    - Air - C-5 Certified Load (WILL NOT fit in C-17)
    - Sea & Rail Capable.
  - Generator – 11 - 14 Gal/Hr, 300 Gal Tanks. Water for Environmental Control Unit – 5 Gal/Day





# Full Maintenance Trainers and Part Task Trainers

## AH-64A



A2



A6X



A7+

## AH-64D



L8



L9



L10



L11



L12



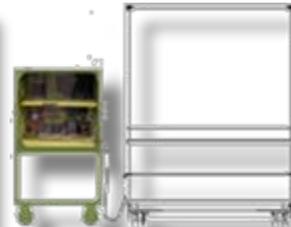
L13



L14



L15



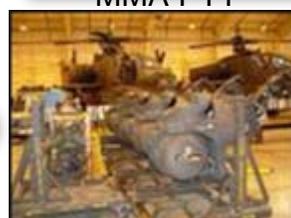
L16



L17



MMA PTT



MTADS Bench

## Full-up Trainers



L6



L7

and

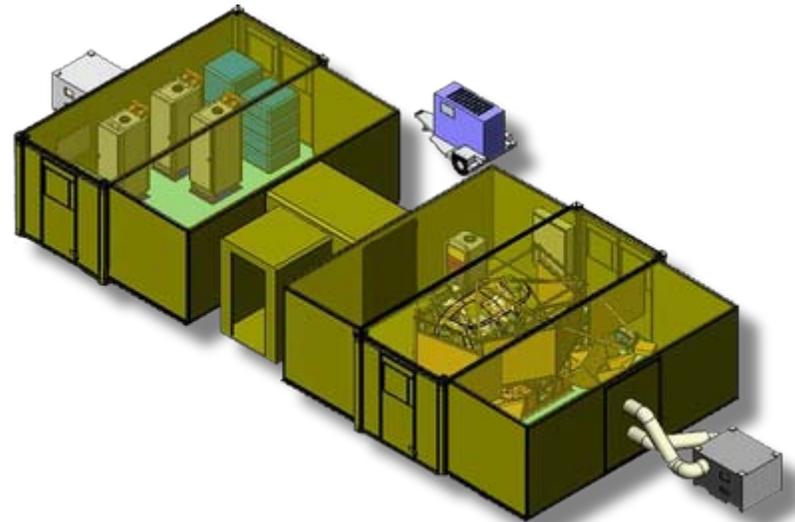
## Part Task Trainers





# UH-60M Transportable Black Hawk Operator Simulator (TBOS)

The UH-60M TBOS is a fully operational, transportable and deployable mission simulator. The TBOS consists of a crew station with pilot and co-pilot positions that duplicate the helicopter cockpit configuration, an IOS, OS and debrief station. The TBOS trains basic, advanced, emergency and instrument flight continuation flight training proficiency. The TBOS is capable of complete mission simulation and can be used to train the pilot and copilot simultaneously on the same mission, enhancing crew coordination.



# UH-60A/L/M TADSS

Training Aids, Devices, Simulators & Simulations Program

Transportable Black Hawk  
Operations Simulator (T-BOS)

- Supports the UH-60M  
Fielding Plan

UH-60 Full Motion  
Simulators

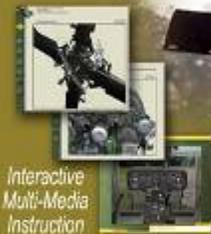
- 21 Devices Worldwide



**BLACK HAWK**



**UH-72A Lakota**



Interactive  
Multi-Media  
Instruction



Full Motion  
Simulator



UH-60M Black Hawk  
Electronic Trainer  
(BHEE)



Classroom  
Training



Light Utility Helicopter  
Cockpit Procedural Trainer



UH-60Q Medical  
Suite Trainer  
(MST)



UH-60L Landing  
Gear Trainer  
(LGT)



UH-60L Wing  
Systems Trainer  
(BAWST)



Transportable  
BLACK HAWK  
Operations Simulator  
(T-BOS)



UH-60M Avionics  
Trainer  
(BHAT)



UH-60L Remove  
& Replace Trainer  
(BHRRT)

**Interactive Multi-Media Instruction**  
• Enhances Classroom Training

**Maintenance Trainers**  
• Support USAALS

**Light Utility Helicopter Cockpit Procedural Trainer**  
• Delivered to EAATS in April 2008



# CH-47F Transportable Flight Proficiency Simulator (TFPS)

The TFPS is a transportable side-by-side crew station simulator for proficiency training of Pilot/Co-Pilot individual/crew tasks. It has a wide field-of-view visual system, motion/vibration seats, aircraft MFDs/CDUs, day/night/NVG and special environments, and Gov't owned databases. The TFPS is capable of training all tasks to standards as stated in ATM.





# CH-47 Maintenance Trainers



CH-47D HMT

The CH-47D Hardware Maintenance Trainer provides realistic maintenance training capable of rapid fault insertion and real time troubleshooting simulations and monitoring.

The CAT supports Avionics troubleshooting skills for the CH-47F

CH-47F  
Chinook  
Avionics  
Trainer



CH-47D CMT

The CH-47D Composite Maintenance Trainer is a full system, stationary, programmable, maintenance training device.

Physical and Functional fidelities support realistic training for critical tasks and procedures (CHMT #3 and beyond will modify actual CAT-Bs to training devices)

CH-47F  
Cargo Helicopter  
Maintenance  
Trainer



CH-47D EST

The CH-47D Electrical Systems Trainer is a computer driven electrical systems training device capable of training 20 separate systems with 220 programmable faults.

Provides Removal/Installation (R/I) critical task training of all Components Pertaining to sub-Systems located within the Cockpit

CH-47F  
Cockpit  
Part Task  
Trainer



CH-47D IMI

CH-47D Interactive Multi-Media (IMI) provides classroom instruction

CH-47F Interactive Multi-Media (IMI) provides classroom instruction



# *OH-58D Training Devices*



**Cockpit  
Procedures  
Trainer-IG  
(CPT-IG)**



**Avionics Electrical Trainer  
(AET)**



**Composite Armament Trainer  
(CAT)**



CAT B Aircraft being replaced  
with Fabricated Aircraft Training  
Devices



**Composite Electrical Trainer  
(CET)**





# Future TADSS Efforts

- UH-60 and CH-47D SFTS Digital Projector Upgrades
- AH-64D Block III upgrades to LCT
- CH-47F PIP #1 to TFPS FY11/12
- Field UH-72A TADSS based on requirements determination
- OH-58D Maintenance Training Devices upgrades to CDS5
- Obsolescence Upgrades to Training Devices
- Air-Ground Virtual Interoperability of Collective and Individual Trainers
  - OneSAF
  - Common Databases for AVCATT/CCTT interoperability



# Supporting the Force

PROGRAM EXECUTIVE OFFICE

AVIATION

AVIATION

