PEO Aviation’s Commitment to MOSA and the FACE Approach

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Program Executive Officer, Aviation

14 September 2021
Our Mission Statement

Serve Soldiers and Our Nation by Designing, Developing, Delivering & Supporting Advanced Aviation Capabilities for Operational Commanders and Our Allies
Breadth of the PEO Aviation Portfolio

Worldwide Responsibility: 15,328+ Platforms

**Cargo Helicopters**
- APO: 538
  - CH-47F: 465
  - MH-47G: 73

**Utility Helicopters**
- UH APO: 2,135
  - UH-60M: 1,375
  - UH-60V: 760
  - UH-72A APO: 477

**MASPO**
- Aircraft/CLS/FSR: 391
  - PC-12: 18 CLS, Mi-17: 95
  - AC CLS, MD-530: 78, Bell Helicopter: 27, OH-58D: 124
  - CFSR, OH-58: 9 CLS, I-407: 30 CLS, Bell 206: 10 CLS

**Apache Helicopters**
- APO: 791
  - AH-64E: 791

**Unmanned Aircraft Systems**
- APO: 10,718*
  - MQ-1C: 15
  - RO-7B: 110
  - LRR: 1,409
  - MRR: 2,450
  - SRR: 6,734

  *UAS APO Shown is Number of Systems. Actual number of Aircraft > 17,791

**Future Vertical Lift**
- APO: TBD
  - FARA
  - FLRAA

**Fixed Wing Aircraft**
- APO/Systems: 278
  - ARL-E, GRCS, QRC, C-12 Variants, C-23, C-26, UC-35, EMARSS

**Supporting Our Forces and Our Allies With Worldwide Strength and Diversity**

**APEO FMS International**
- 70 Countries
  - 503 Active Cases
  - $54.3B (Case Value)
U.S. Code 2446a
MOSA is an Integrated Business and Technical Strategy

2004
OSD PM Guide: MOSA for Acquisition
Defines 5 Principles for MOSA

2017
NDAA FY17
MOSA in Acquisition Strategies With Focus on Major System Interfaces

2013
DoD OSA Guidebook for PMs
Recommends MOSA, OSA, and OSMP in Acquisitions

2019
Tri-Services Memo: MOSAs for Our Weapon Systems is a Warfighting Imperative
Cites Open Standards Including FACE

2020
ASA(ALT) MOSA Implementation Guide
Requires PEOs to provide MOSA Guidance Requires Project Assessment IAW 5 Principles

2021
NDAA FY21
Extends Guidance to Modular System Interfaces

AAE Memo: Policy Guidance on Implementing MOSA
Requirements for PEOs and PMs
PEO Driving MOSA Transformation Effort

Aligning People, Tools, Processes for Successful Execution

Current State

MOSA 9 LOEs

Future State

Creating Standardization, Increasing Communications, Applying Lessons Learned, Eliminating Stovepipes

1. Governance & Policy
2. Architecture & Standards
3. Software Development
4. Collaborative Digital Environment
5. MOSA Conformance Center
6. Qualification & Materiel Release
7. Affordability & Savings
8. Contracting Efficiencies
9. Strategic Communications

FY21 NDAA MOSA ICRD

Integrated, Aligned, Synchronized

“Ready to Catch” Modernization Efforts
FACE Standard is Integral to MOSA Success by Enabling Modularity and Promoting SW Reuse

- New Warfighter Functionality
- Congressional/Higher HQ Mandates
- Obsolescence Issues
- Technology Insertions

-too many requirements, too few dollars

PMs’ Dilemma

SW reuse via the FACE Approach allows you to do more with what we have!

Platforms
- Platform A: Task A, Task B, Task C, Task D, Task E, Task F
- Platform B: Task A, Task B, Task C, Task D, Task E, Task F
- Platform C: Task A, Task B, Task C, Task D, Task E, Task F

Funding Profiles

Different Upgrade Reasons
- New Warfighter Functionality
- Congressional/Higher HQ Mandates
- Obsolescence Issues
- Technology Insertions
MOSA Principles & FACE Approach

**5 Principles of MOSA***
- Establish Enabling Environment
- Employ Modular Design
- Designate Key Interfaces
- Select Open Standards
- Certify Conformance

**FACE Approach & Ecosystem**
- Technical Standard; Data Architecture, Tools (CTS, PR/CR, 3rd Party Tools), RIG, Examples (BALSA), Training, Available Capabilities in Registry, Tailorable Contract Language
- FACE Reference Architecture & Data Architecture
- FACE Interfaces Include OSS, IOSS and TSS
- Leverages Existing Standards Including ARINC 653, ARINC 661, OpenGL, POSIX
- FACE Conformance Program Operational

*FACE Approach Addresses All Five Principles of MOSA*

Achieving MOSA Objectives for PEO Aviation

**Lines-of-Effort**
- Future Vertical Lift Architecture Framework (FAF)
- Architecture Collaboration Working Group (ACWG)
- Aviation Common Mission Server (AMCS)

**Benefits**
- Establishes Requirements Baseline & Shared Data Model
- Define Reusable Mission Capabilities
- Mature FVL Architecture Requirements
- Enables Commonality and Competition
- Common Digital Interface for Platform Mission Backbone
- Decreases Cycle Time for Fleet Upgrades
- Path for Common Capability on FVL and Enduring Fleets

**Enables Greater**
- Adaptability
- Affordability
- Survivability
- Lethality
- Reach

PEO Aviation Driving OSA
# Closing Comments and Questions

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