

U.S. Army FACE™ and SOSA™ Technical Interchange Meeting

# PEO Aviation's Commitment to MOSA and the FACE Approach



# **BG Rob Barrie**

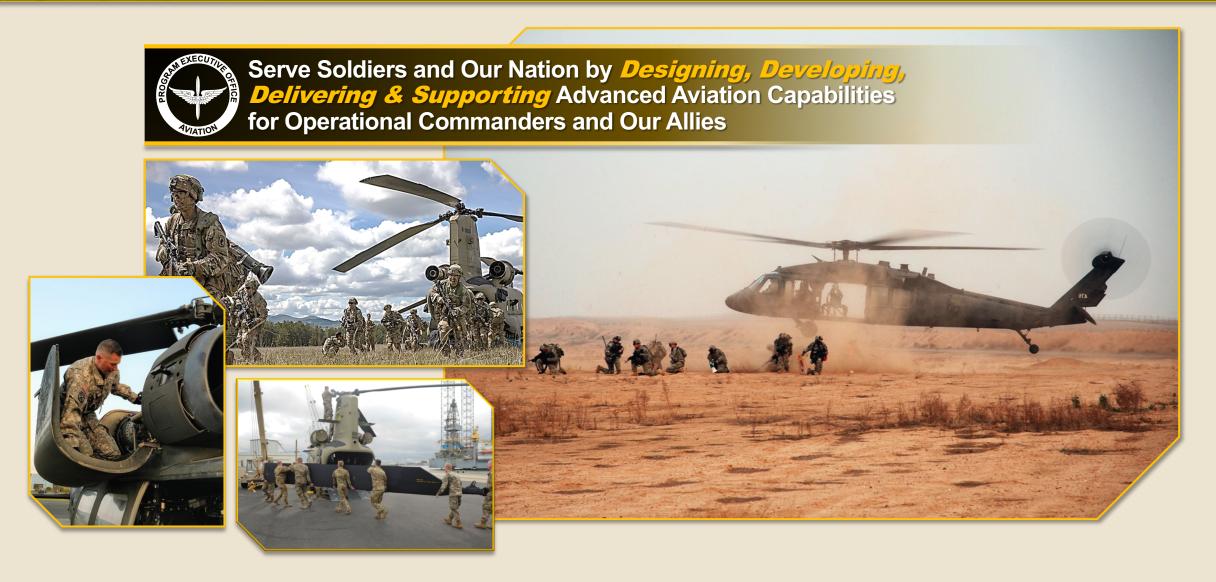
**Program Executive Officer, Aviation** 

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# **Our Mission Statement**





# 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** 



### Aircraft/CLS/FSR: 391

PC-12: 18 AC CLS, Mi-17: 95 AC CLS, MD-530: 78, Bell Huey II: 27, OH-58D: 124 CFSR, OH-58: 9 CLS, I-407: 30 CLS. Bell 206: 10 CLS



# **APO: 791**





#### APO: 10,718\*

- MQ-1C: 15
- RQ-7B: 110
- LRR: 1.409
- MRR: 2,450
- SRR: 6,734

Supporting Our Forces and Our Allies With Worldwide Strength and Diversity



#### **Future Vertical Lift**

#### APO: TBD

- FARA
- FLRAA



#### APO/Systems: 278

•ARL-E, GRCS, QRC, C-12 Variants, C-23, C-26, UC-35, EMARSS

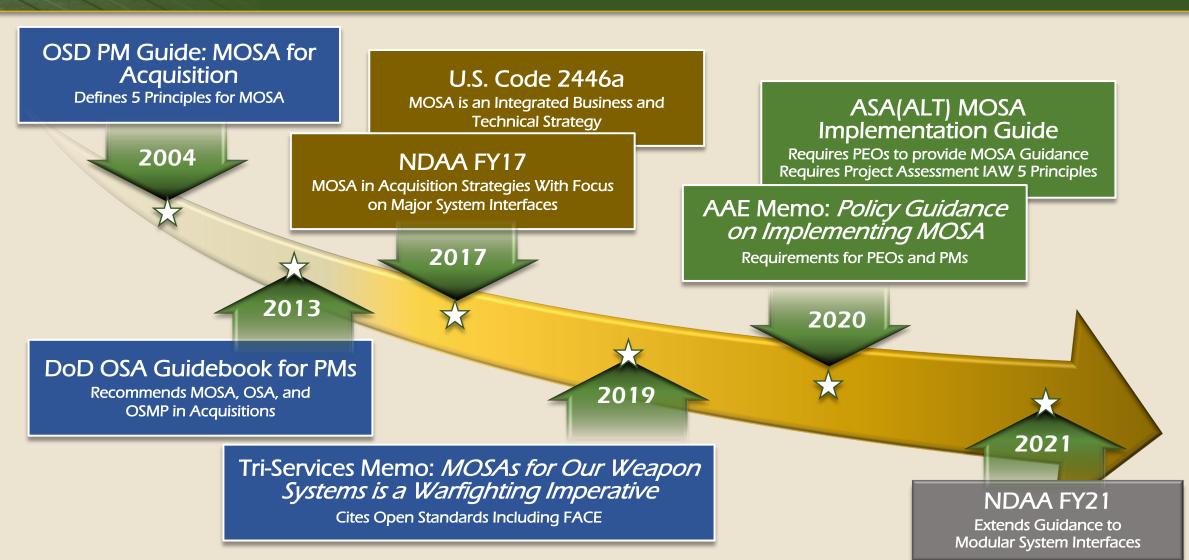
**APEO FMS International** 

#### 70 Countries

503 Active Cases \$54.3B (Case Value)



# **Evolution of MOSA Guidance**





# PEO Driving MOSA Transformation Effort

Aligning People, Tools, Processes for Successful Execution

# **Current State Industry** DEVCOM OpenVPX) Science & Technology ACWG/ICWG MSAD **Industry MOSA Investments**

#### **MOSA 9 LOEs**

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

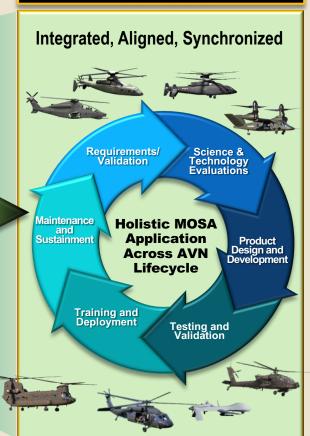
- 1. Governance & Policy
- 2. Architecture & Standards
- 3. Software Development

**FY21 NDAA** 

**MOSA ICRD** 

- 4. Collaborative Digital Environment
- 5. MOSA Conformance Center
- 6. Qualification & Materiel Release
- 7. Affordability & Savings
- 8. Contracting Efficiencies
- 9. Strategic Communications

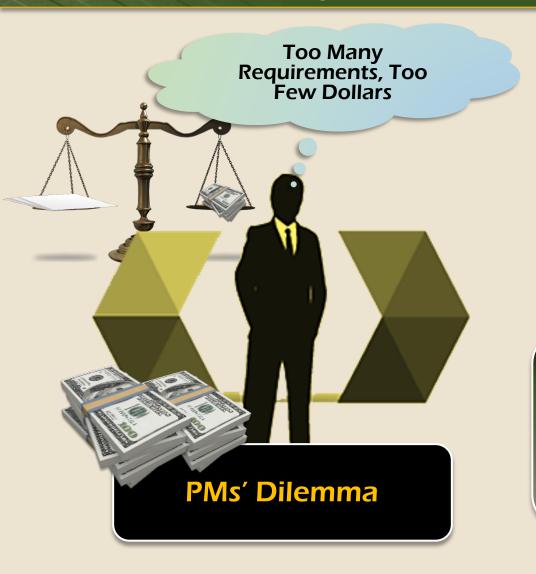
## Future State



"Ready to Catch" Modernization Efforts



# FACE Standard is Integral to MOSA Success by Enabling Modularity and Promoting SW Reuse















# **Different Upgrade Reasons**

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

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

Reuse

# **Funding Profiles**

### Platform A

Reuse

- 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



# MOSA Principles & FACE Approach

5 Principles of MOSA\*

FACE Approach & Ecosystem

**Establish Enabling Environment** 

Technical Standard; Data Architecture, Tools (CTS, PR/CR, 3<sup>rd</sup> Party Tools), RIG, Examples (BALSA), Training, Available Capabilities in Registry, Tailorable Contract Language

**Employ Modular Design** 

FACE Reference Architecture & Data Architecture

**Designate Key Interfaces** 

FACE Interfaces Include OSS, IOSS and TSS

**Select Open Standards** 

Leverages Existing Standards Including ARINC 653, ARINC 661, OpenGL, POSIX

**Certify Conformance** 

**FACE Conformance Program Operational** 

\*MOSA Principles defined in OSD Open Systems Joint Task Force Program Manager's Guide: A MOSA to Acquisition, v2.0 Sept 2004.

FACE Approach Addresses All Five Principles of MOSA



# Achieving MOSA Objectives for PEO Aviation

#### Lines-of-Effort

#### **Benefits**

## **Enables Greater ...**

Future Vertical Lift Architecture Framework (FAF)

Futus Airborne Capability Environment

Architecture Collaboration Working Group (ACWG)



Aviation Common Mission Server (AMCS)

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

✓ Adaptability

Affordability

Survivability

✓ Lethality

**√** Reach

PEO Aviation Driving OSA



# Closing Comments and Questions

