PEO Aviation Digital Transformation Vision

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Topics for Discussion

• Digital Transformation for PEO Aviation
  – What is Digital Transformation?

• Governance & Strategy Mapping
  – Digital Transformation Governance
  – Digital Transformation Objectives
  – PEO Aviation Digital Transformation in Progress

• PEO Aviation Digital Transformation Initiatives
  – Understanding the Digital Lexicon
  – The Digital Thread Tying PEO Aviation Together
  – Realizing Digital Engineering
What is Digital Transformation?

PEO Aviation understands that technology alone does not translate to digital. Digital is the application of a new mindset that enables an organization to leverage new technologies to their fullest potential.

**Technology**
- Robotics Process Automation (RPA)
- Cognitive
- Artificial Intelligence
- Analytics
- Social & Mobile

**Culture**
- Agile
- Collaborative
- Customer-centric
- Risk Taking
- Innovative

Transforming culture without the right technology is impractical. Transforming technology without the right culture is impossible.
Digital Transformation Governance

- **DoD Digital Modernization Strategy**
  - Provides CIOs across DoD with guidance to prioritize common foundational technologies to enable innovation and optimization.
  - **July 2019**

- **U.S. Army Digital Transformation Strategy**
  - Establish framework, vision, and lines of effort to implement strategic digital transformation initiatives for Multi-Domain Operations (MDO).
  - **October 2021**

- **National Defense Strategy (NDS) 2018**
  - Establishes Defense Objective to “Continuously deliver performance with affordability and speed as we change Departmental mindset, culture, and management system.”
  - **January 2018**

- **DoD Digital Modernization Strategy**
  - Provides CIOs across DoD with guidance to prioritize common foundational technologies to enable innovation and optimization.
  - **July 2019**

- **PEO Aviation Strategic Plan**
  - Communicates how PEO Aviation will meet the Army and DoD Priorities.
  - **October 2021**

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- **Digital Engineering Strategy (DES)**
  - References 2018 NDS as motivation for need to use digital technologies to modernize engineering and acquisition practices.
  - **June 2018**

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  - **June 2018**
Digital Transformation Objectives

- Innovate for Competitive Advantage
- Optimize for Efficiencies and Improved Capabilities
- Cultivate Talent From a Ready-digital Workforce

- Modernization and Readiness
- Reform
- People and Partnerships

- Build the Future Vertical Lift Ecosystem
- Ensure the Readiness and Relevance of the Enduring Aviation Fleet
- Build Partner Nation Capacity

DoD Digital Modernization Strategy

U.S. Army Digital Transformation Strategy

PEO Aviation Strategic Plan
PEO Aviation Digital Transformation in Progress

Building off of the DoD, DA and PEO Aviation Strategic Plan alignment, five lines-of-effort are actively being pursued to transform HOW we execute our mission.

Technology
- Capturing the Digital Thread*
- Digital Engineering*
- Integrated Data Environment
- Enterprise HR System
- Fleet Management
- Cloud Architecture

Culture
- Establishment of Digital Transformation Office
- Stakeholder Engagements
- Training the Workforce

1. Human Capital
2. Portfolio Management
3. Business Transformation
4. Digital Ecosystem
5. Product Support
   Modernization

* detailed in following charts
Model-Based Systems Engineering
Focus is on identification of critical domains and interdependencies between domains

Model-Based Engineering
Expands to include domain-specific, specialized models

Digital Engineering
Expands to include all kinds of digital applications and enablers

Digital Transformation
Includes the process of changing legacy process to be more digital, and enabling the workforce

Digital Organization
The culture operates and communicates using integrated digital methods

Understanding the Digital Lexicon
All of the Terms Below Place Information at the Center of the PEO Aviation Digital Transformation Strategy … Capturing the Digital Thread is KEY
The Digital Thread Tying PEO Aviation Together

The Digital Thread is a Representation of the Digital Operation

It is the core of the fabric that weaves together many, varied stakeholders into a consistent, executable vision of PEO Aviation goals.
Realizing Digital Engineering

Digital Ecosystem
- MBSE(SysML)
- Digital Thread
- Infrastructure
- PLE/M
- Modeling and Simulation

Key Enablers

Agile Development
- DevSecOps
- Software Factory
- CI/CD Pipeline
- Infrastructure
- Partitioning
- Qualification Materiel Release

MOSA
- Architecture & Standards
- Governance & Policy
- Business Practices
- Contracting Efficiencies
- Affordability & Savings

Digital Thread
AFSIM/ATCOM/OneSaf
CAMEO EA w/Plug-ins
Matlab/Simulink/Helios/etc.
Windchill

Cloud-Based Environment

Seamlessly Integrated Tool Chain

PEO Aviation Digital Transformation Through Engineering Innovation
Closing Comments and Questions

Website: http://www.army.mil/peoaviation

Facebook: http://facebook.com/peoaviation

DVIDS: https://www.dvidshub.net/unit/PEO-A

LinkedIn: https://www.linkedin.com/company/peo-aviation