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PROGRAM EXECUTIVE OFFICE AVIATION

CHINOOK CARGO HELICOPTERS

CH-47F Update

LTC Jacob Brady
CH-47F Product Lead
PM Cargo, PEO Aviation

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PM CARGO Helicopters

Program Update

- Final 5 CH-47F US aircraft in production
- CH-47F Block II EMD activities complete; MS C FY25
- Congressional CH-47F Block II aircraft procurement 2020-2024
- First production representative CH-47F Block II accepted by USG
- Global demand for CH-47F Block II is increasing

Sustainment of Enduring Fleet

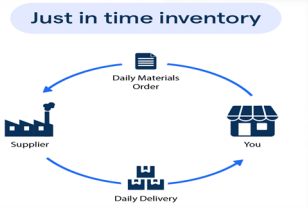
- Historically, aircraft sustainment relied heavily on production
- Fielded CH-47F require OCSM or overhaul to extend the life of a 20+ year old aircraft
- Modernization updates through obsolescence

CH-47F Legacy Radios
ARC-186 ARC-164

Product Improvement Program (PIP)
ARC-231A

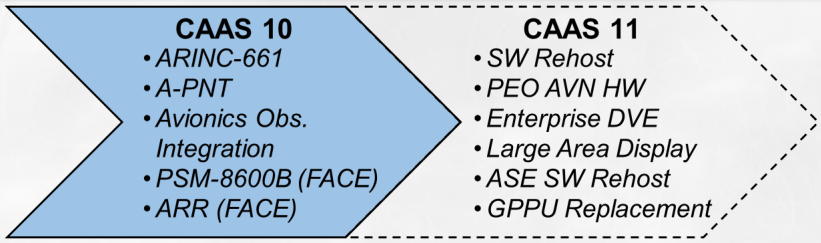
Supply Chain Concerns

- Supply Chain
  - Second source opportunities
  - Increasing raw material costs and lead time for parts drive cost and schedule unpredictability



- Proactive obsolescence management to reduce risk

MOSA & Future Capability



- Use of MBSE processes and tools to integrate cross-platform capabilities
- CAAS architectural alignment with UH-60M, CH-47F, MH-47G

Quality and Affordability are key U.S. Army metrics that OEM and sub-tier suppliers must prioritize

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CH-47F Block II

Product Improvement Program (PIP)

- ARC-231A integration
- New data loader
- Common fill ports
- Improved fuel sys info
- Electromagnetic hardening

Common Avionics Architecture System (CAAS) Update

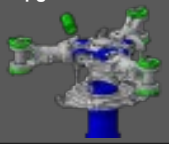
Flight Controls

- Redesigned trim actuators
- Digital Advanced Flight Control System update

Improved Troop Seats

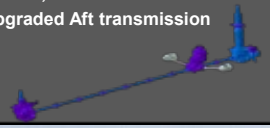
Rotor System

- Upgraded hub



Improved Drive Train

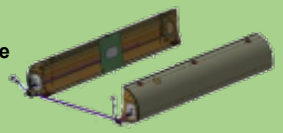
- Upgraded Sync/Rotor Shafts
- Uprated forward, combiner transmissions
- Modified/Upgraded Aft transmission



Upgraded Acoustic Blanket

Fuel System

- New single tank
- Externally replaceable pumps
- New composite pods



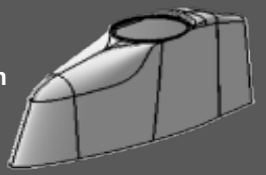
Electrical System

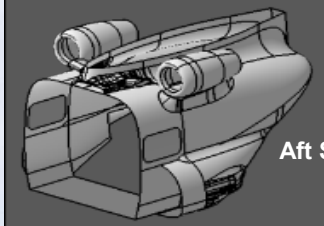
- Regulated Transformer Rectifiers
- Emergency Power
- LED lighting

Airframe Mods

- Strengthened for fatigue & growth (G baseline)

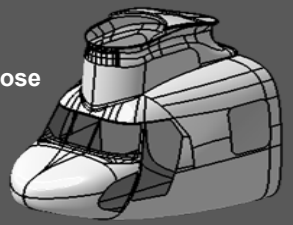
Pylon





Aft Section

Nose



Helicopter Emergency Egress Lighting System

	CH-47 Unique components		MH-47 Common components

INCREASED PAYLOAD, EXTENDED REACH, IMPROVED SUSTAINABILITY

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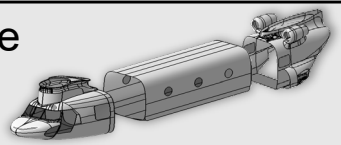
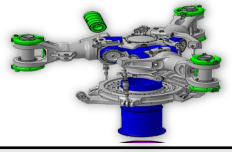
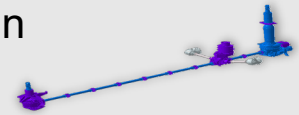
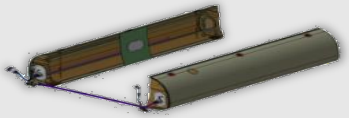
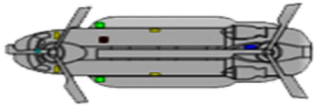
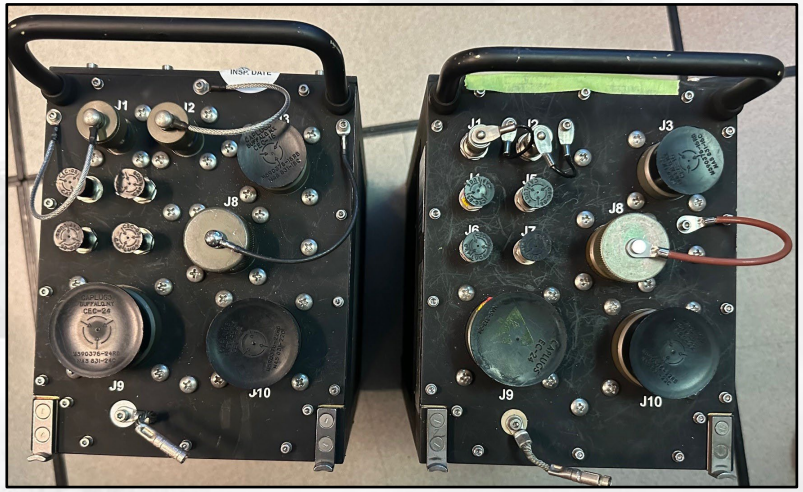
Block II Significant Improvements

ECP	Benefit
Airframe 	• Increased maximum gross weight • Increased commonality for H-47 fleet
Rotor 	• Reduced O&S costs: greater parts life at higher aircraft gross weights
Drive Train 	• Reduced O&S costs: greater parts life at higher aircraft gross weight
Fuel 	• Single tank design • Increased fuel capacity
Electrical 	• Increased emergency power • Helicopter Emergency Egress Lighting (HEELS) • Troop Power Access
Flight Controls 	• Improved aircraft handling qualities

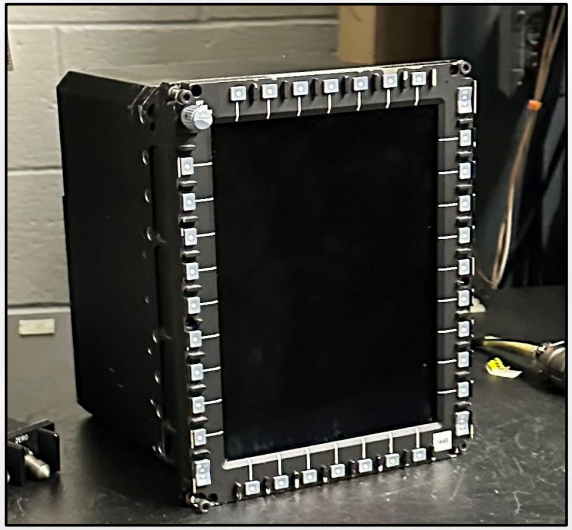
CH-47F Obsolescence Goals

- Deliberate process to identify and mitigate issues
- Proactive program focused on entire aircraft
- Sustain the Block I fleet
- Sustain Block II fleet as it enters service
- Recognition of “orphaned parts” with transition to Block II

CH-47F CDU



CH-47F PSM 8600A, 8600B



CH-47F MFD

International Engineering Services Program

- Opportunity for partners to “Get a Vote” in obsolescence
- IESP partners are priority for parts funding
- Examples of potential projects:
  - New avionics architecture/cockpit to implement MOSA
  - Cruise Guide Indicator
  - Emergency Standby Instrument System

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Closing Comments & Questions

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QUESTIONS