



SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

Win • Transform • People

COL David Phillips *Program Executive Officer*

ROTARY WING



Schedule of Presentations

**Day 1 – Wednesday
23 May 2018**

**0930 - 1030
PEO RW**

Strategic Overview

**1100-1230
PEO One-on-One Sessions**

**Day 2 – Thursday
24 May 2018**

**0900 - 1000
MH-47G Update**

**1000 – 1100
SOF Training Systems Update**

**1100-1145
Rotary Wing Panel**

STRATEGIC OVERVIEW PROGRAM EXECUTIVE OFFICE ROTARY WING

COL David Phillips
Program Executive Officer



History Matters



Photo # NH 64472 LtCol. Doolittle & Capt. Mitscher with USAAF crews aboard USS Hornet, April 1942



Wimbrown VII.



OH-58 on Hercules.



History Matters

In September 1991 the SOCOM Deputy for Acquisitions office was created. The Mission Enhanced Little Bird became the office's first program of record. Today, SOF AT&L and PEO Rotary Wing continues to push the capability envelope for the A/MH-6, MH-47, MH-60, and other aircraft systems.



In 1993, SOF Operators were equipped with SOF unique armor, weapons, medical equipment, and specially modified aircraft.

The max gross weight of the A/MH-6 has increased from 2400 lbs (-6A), to 3550 lbs (-6C), to 3950 lbs (-6J), to 4700 lbs (-6M), to 4700+ lbs (-6M Blk 3).



2018 National Defense Strategy

First, Rebuilding Military Readiness as we Build a more Lethal Joint Force;

...strike diverse targets inside adversary air and missile defense networks to destroy mobile power-projection platforms.

...a competitive approach to force development and a consistent, multiyear investment to restore warfighting readiness and field a lethal force. skills into service.

Second, Strengthening Alliances as we Attract new Partners;

...train to high-end combat missions in our alliance, bilateral, and multinational exercises.

...expand access to outside expertise, and devise new public-private partnerships to work with small companies, start-ups, and universities.

Third, Reforming the Department's Business Practices for Greater Performance and Affordability.

...shed outdated management practices and structures while integrating insights from business innovation.

...*explore streamlined, non-traditional pathways to bring critical skills into service.*



Program Executive Office Rotary Wing

Mission: Rapid and focused acquisition, research and development, and life-cycle logistics support to the operators of the USASOAC—160th Special Operations Aviation Regiment which provides SOF rotary wing capability to the joint force.



WIN

Sustain current operations, ensuring SOF readiness to win the current fight.



TRANSFORM

Strategic resource sponsorship to *increase lethality*.



PEOPLE

Support *and sustain* the people and program offices located at Joint Base Langley Eustis (PM TAPO, PM MELB); in Orlando (PM STS); and MacDill (PM SKR).

Rotary Wing Network



USASOAC
SIMO
(Capability Sponsor)



160th SOAR (A)
Operators



PM SKR/PM TAPO/PM STS/PM MELB
(Materiel Developer)



PEO RW USSOCOM
(Resource Sponsor)

Tenets of Success

1. Speed
2. Risk tolerance
3. Scale
4. Inclusivity
5. Relationships

Other Services

Army Staff

AMCOM

USAACE

RDECOM

Industry Partners

Program Executive Office Rotary Wing (RW)

MOBILITY



A/MH-6 Light Attack/Assault



Medium Assault MH-60



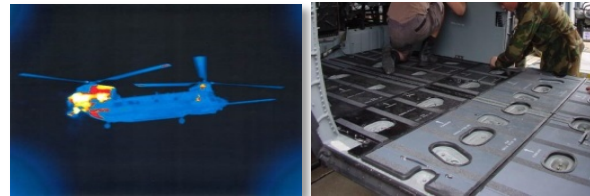
Heavy Assault MH-47

Airframe Recaptalization

MISSION EQUIPMENT



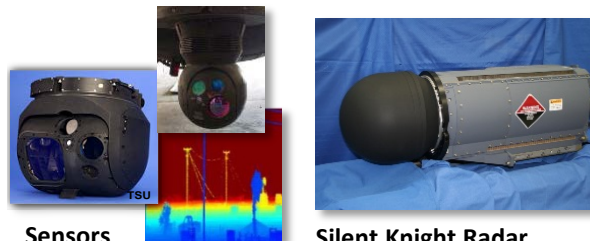
Active Aircraft Survivability Equipment



Passive Aircraft Survivability Equipment



Avionics



Sensors

Silent Knight Radar

Common Hardware and Software

TRAINING SYSTEMS



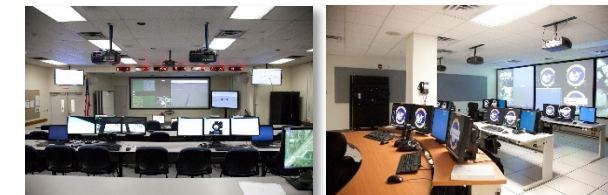
A/MH-6M Little Bird



MH-47G CMS









MH-60M CMS

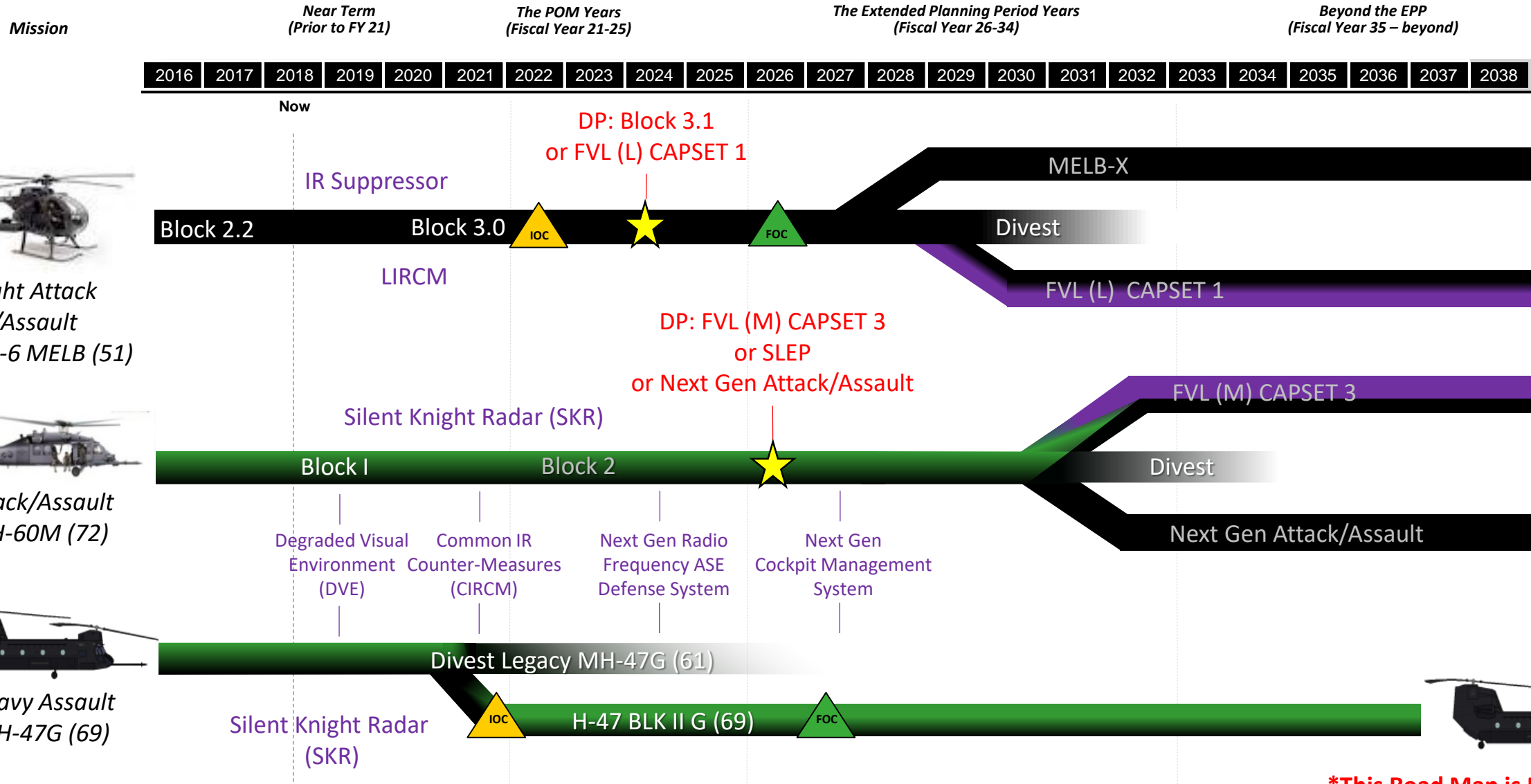


Battle Staff Training Exercise Management Control

Stimulated vs Simulated

Rotary Wing Road Map*

-  Milestone (IOC)
-  Milestone (FOC)
-  Decision Point
-  SOF
-  Joint
-  Army



***This Road Map is Pre-decisional and subject to change**

Mobility



***A/MH-6M Mission Enhanced Little Bird
Block 3***



***MH-60M Blackhawk
Block 1***



***MH-47G Chinook
Block II Renew Program***

A/MH-6M Mission Enhanced Little Bird



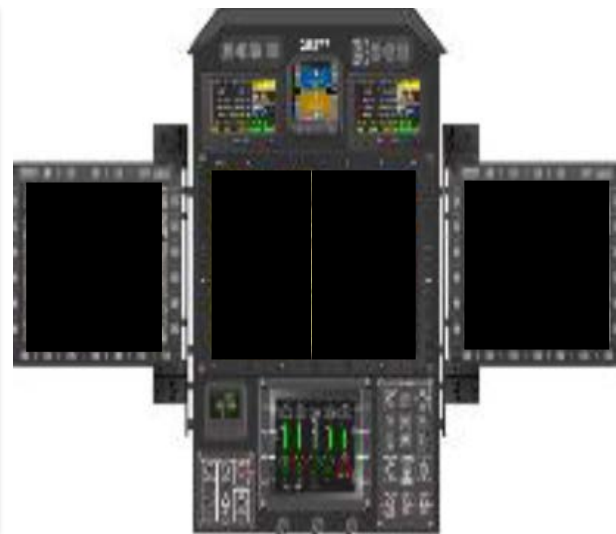
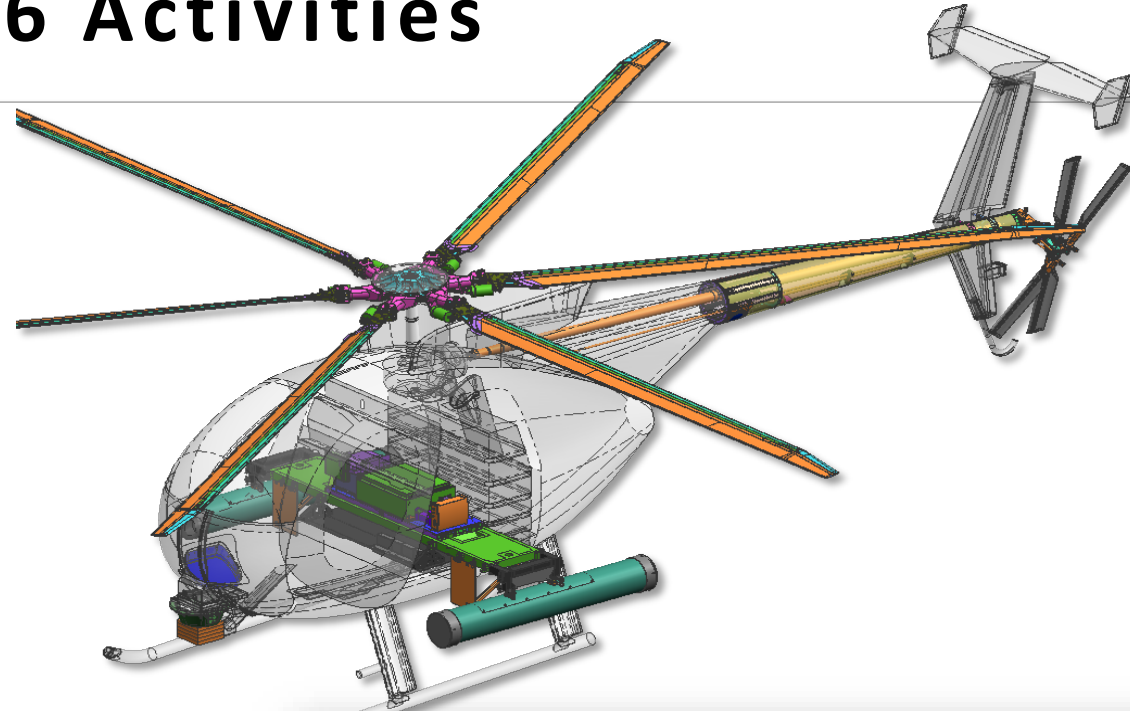
A/MH-6 Activities

Block 2.2 upgrade execution

- Improves crew safety

Block 3.0 upgrade

- Improves safety margin
- Improves flight controls
- Improves cockpit



MH-47G Chinook



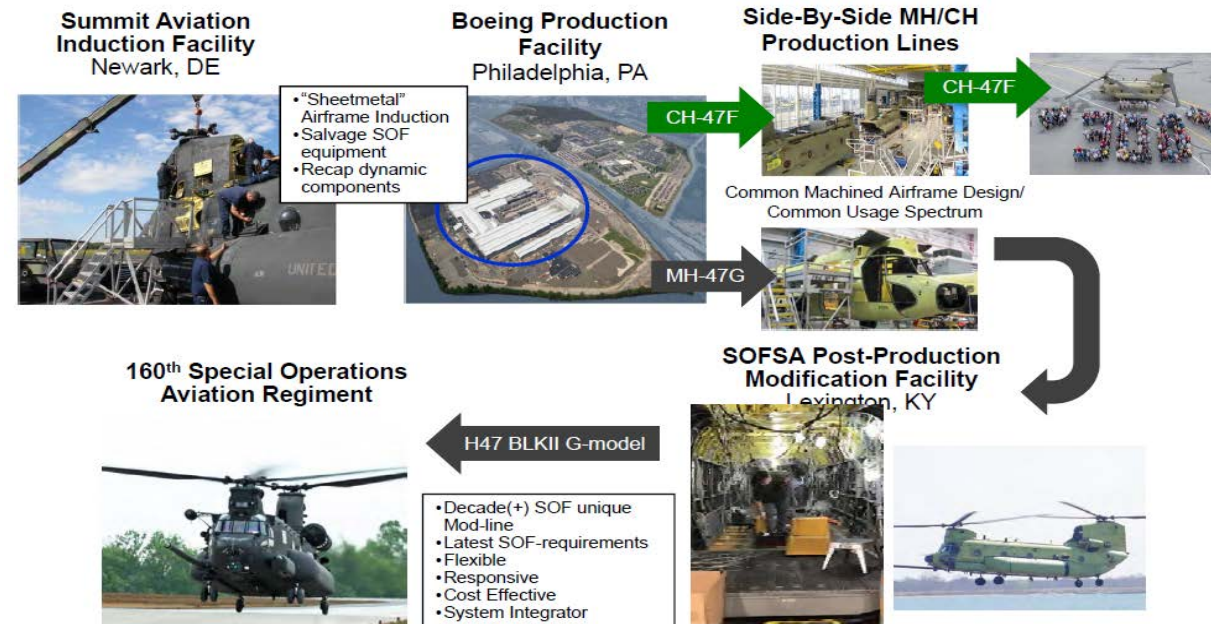
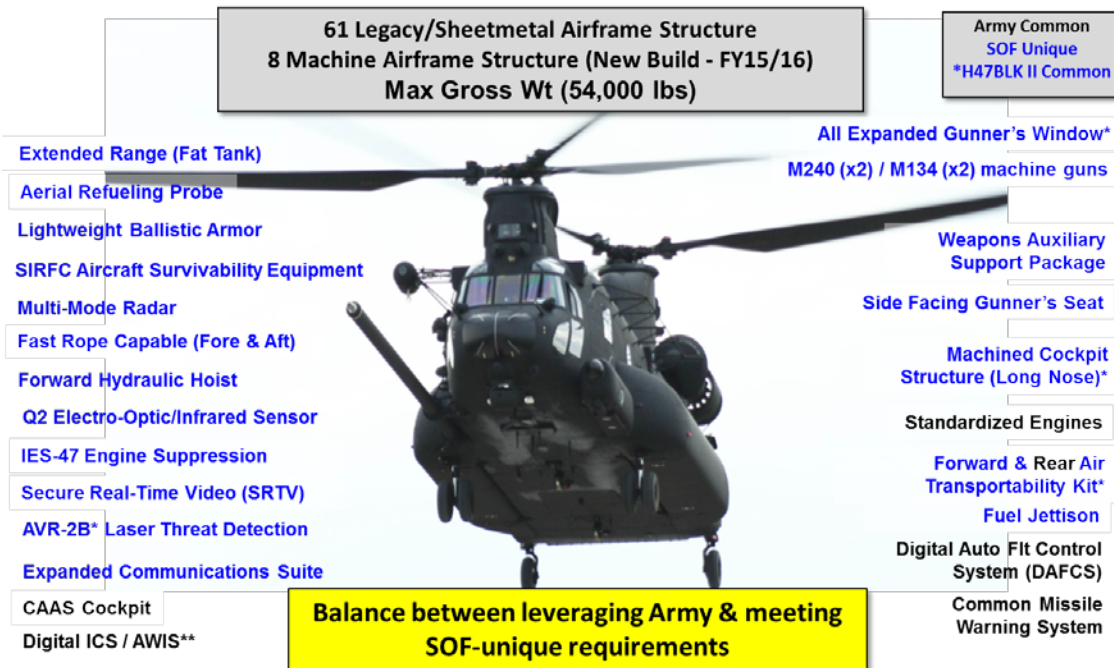
MH-47G Activities

Block II Renew

- Modernization and Recap program for the remaining 61 legacy airframes
- Executed in collaboration with the Army's CH-47F Block II effort

Development efforts

- Advanced Parallel Actuator System (APAS)
- Engine Barrier Filter



MH-60M Blackhawk



MH-60M Activities

Block 1.0 upgrade execution

- Greater directional margin
- Airborne Mission Networking
- Degraded Visual Environment
- DC Powered Mini-gun System
- Sustaining engineering



Mission Equipment Activities

Aircraft Survivability Equipment:

- IR Countermeasure Development
- RF Countermeasure Enhancements
- Ballistic Protection

Sensors and Weapons:

- Degraded Visual Environment Development
- Improved RW Electro Optical Sensor (IRES)

Avionics:

- Tactical Airborne Network Integration
- Mission Processor Upgrades

Sustainment:

- Sustain operational availability
- Control sustainment costs of mission equipment

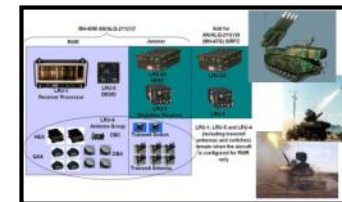
Direct Fire Threat
(Detect and Locate)



Radar Threat
(Receive and Jam)



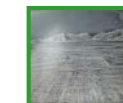
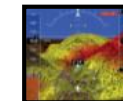
EO/IR Missile Threat (Detect
and Decoy/Jam)



SIRFC



Degraded Visual Environment



Ground Force
Software Compatible



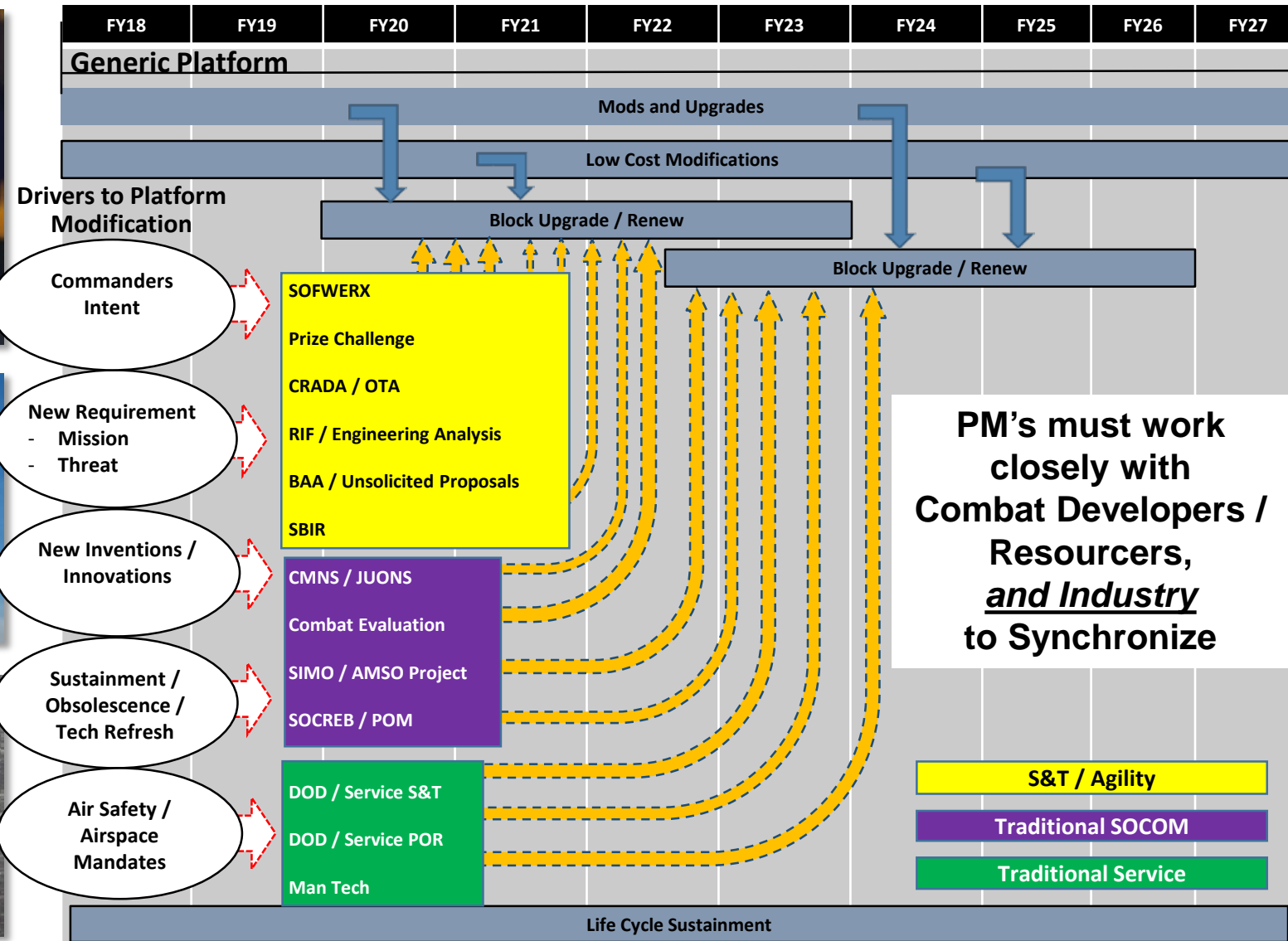
GOTS/COTS
Material Solution

Moving map with other
Friendly icons shown



Live video with location of
Video shown on imagery

Acquisition Tools Across the Life Cycle



Science and Technology Areas of Interest



- RF Convergence
- Total Situational Awareness
- Rotor Speed Efficiency
- Assured Communications
- Robust Survivability
- Optimal Manning
- High Efficiency Power Sources
- Next Generation Cockpit
- Mission Simulation and Training

Review opportunities—Submit your idea:

<https://www.socom.mil/SOF-ATL/>

<https://www.sofwerx.org/>

<https://www.fbo.gov/>

- Value Engineering on fielded systems
- Augmented and Virtual Reality
- Distributed Simulations and Training
- Platform Signature Management
- Aircraft Weight Reduction
- Unmatched Ballistic Protection
- Capabilities to Sufficiently Execute Countering Weapons of Mass Destruction (CWMD)
- Precision Guided Munitions/Scalable Effects Weapons
- Robust Communications
- Other than RF Communications
- Anti-Access/Area Denial (A2/AD)
- Intelligence, Surveillance, & Reconnaissance (ISR)
- Cyber Security
- Leap Ahead Power & Energy Systems
- Distributed Simulations & Training
- Improved Data Management & Crew Workload Management
- Assured Precision Navigation and Timing

Near-Term Opportunities

Aviation Maintenance Modernization Capability Collaboration Event

20-21 June 2018

<https://www.sofwerx.org/aviation/>



Special Operations Forces Aviation Systems Trainers - Enhancements (SOFAST-E II) Industry Day

Nov/Dec 2019

<https://www.fbo.gov/>

Improved Rotary Wing Electro- Optical Sensor (IRES) Request for Proposals

2019

<https://www.fbo.gov/>



Questions





SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE (rev 1)

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LTC AL Niles
PM-SOF TRAINING SYSTEMS

Mr. Dan Lynch
APM SOF TRAINING SYSTEMS



PM SOF Training Systems Portfolio



PM SOF Training Systems (PM STS) Air

PM STS (Air) procures and maintains high fidelity and fully mission capable MH-47G, MH-60M, A/MH-6 Combat Mission Simulators (CMS), two Universal Mission Simulators (UMS), and ancillary training devices for the 160th Special Operations Aviation Regiment Airborne (160th SOAR)(A). These CMSs must meet concurrency with the aircraft and provide realistic, full-spectrum, training and mission rehearsal capabilities.



TRAINING SYSTEMS



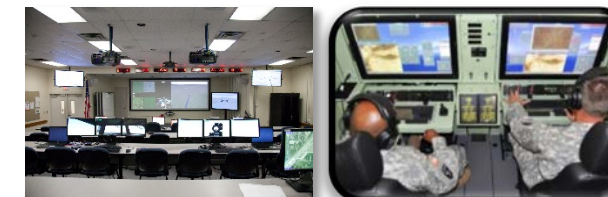
A/MH-6M Little Bird



MH-47G CMS



MH-60M CMS



Mission Rehearsal Exercise Training System

Universal Mission Simulator (x2)

Mix of Simulated and Stimulated Architecture

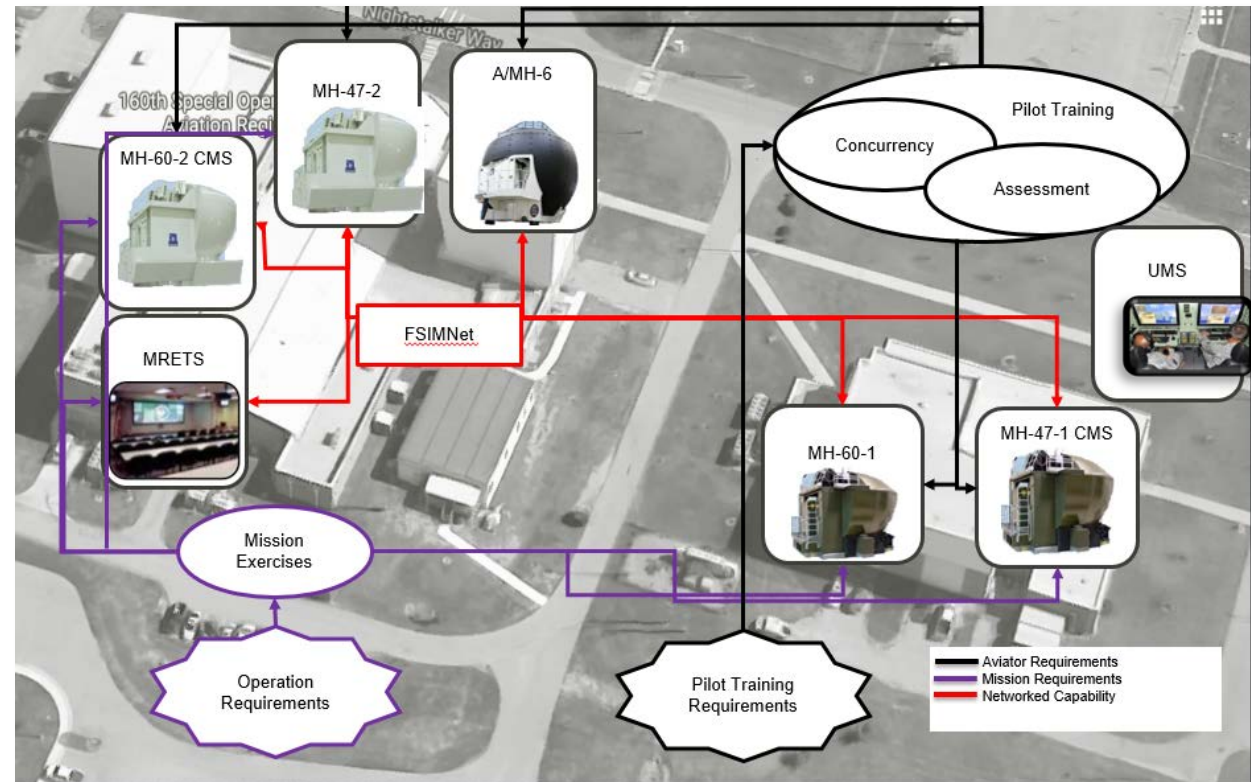
Current Focus and Key Efforts

Focus

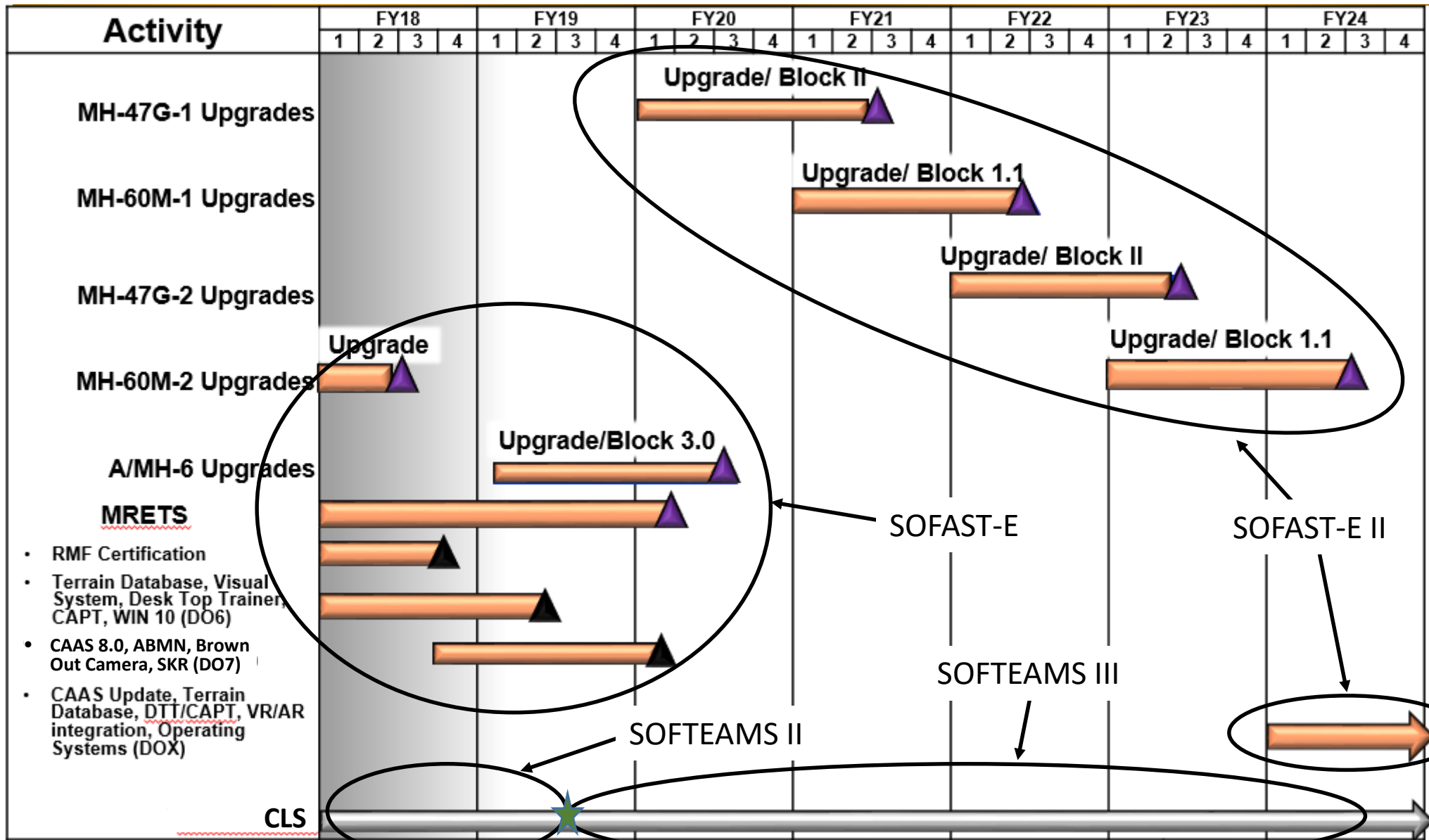
- Robust Common Technical Baseline
- Concurrency
- Interoperability

Key Efforts

- MH-47-2 Full Operational Capability (FOC) July 17
- MH-60-2 projected FOC June 18
- SOFAST-E Delivery Order 06 projected completion June 19
 - Common Architecture Avionics System
 - Updated terrain database
 - Desk Top Trainer/Cockpit Aircrew Part Task Trainer
 - Risk Management Framework Compliance (Windows 10 Operating System)



Planning Schedule



In Progress Competitive Action – SOFTEAMS III

This effort requires non-personal technical service support for the 160th SOAR(A) Training Aids, Devices, Simulators and Simulations and associated support systems/equipment to include Integration Labs, test beds, networks, cyber security, and hardware/software documentation configuration management to maintain devices for operational readiness.



ACQUISITION STRATEGY

- SDVOSB Limited Competition
- Operations and Maintenance Funded (O&M)
- Proposals received
- Source Selection in-progress

PERIOD OF PERFORMANCE

- FY20-24
- Base + 4 Option Years

MILESTONES

- Award January 2019
- Option Years awarded annually

POINT OF CONTACT

- Mrs. Marnita Harris, Contracting Officer,
U.S. Army Contracting Command – Orlando
Bravo Division, (407) 208-3294,
Marnita.r.harris.civ@mail.mil

FUNDING

- Estimated total contract value: \$41.5M

CURRENT CONTRACT/OEM

- SOFTEAMS II
- Incumbent – Nova Technologies, LLC

Future Competitive Action - SOFAST-E II

Contractor tasks for the modifications to be made to the Special Operations Aviation suite of Combat Mission Simulators (CMSs), to include the Light Assault/Attack Reconfigurable (LASAR) A/MH-6M CMS, the MH-60M CMSs, and the MH-47G CMSs located at the 160th Special Operations Aviation Regiment [SOAR(A)] Fort Campbell, KY. This includes all peripheral equipment and capabilities that support live, virtual, and constructive training including the Mission Rehearsal Environment Training Simulation (MRETS), Storage Area Network (SAN), Desk Top Trainers (DTT)/Cockpit Avionics Procedure Trainer (CAPT), and associated systems.



ACQUISITION STRATEGY

- Competitive
- Procurement (PROC) funded

PERIOD OF PERFORMANCE

- Multiple Delivery Orders thru FY24

MILESTONES

- Request for Proposal 2nd QTR FY19
- Award September 2019

POINT OF CONTACT

- Mr. Brian Serra, Contracting Officer, U.S. Army Contracting Command – Orlando Bravo Division, (407) 208-3357, brian.d.serra.civ@mail.mil

FUNDING

- Estimated total contract value: \$60-\$70M

CURRENT CONTRACT/OEM

- SOFAST-E
- Incumbent – Veraxx Engineering Corp

Future Areas of Interest

- **Distributed Interactive Simulation to enable:**
 - Connection over the Special Operations Forces Training Enterprise Network (STEN)
 - Joint training capability
 - Standardized protocols and databases/Risk Management Framework compliance
- **Leverage FY17 Proof Concept to mature Augmented Reality/Virtual Reality (AR/VR) training capabilities focused on:**
 - Mission rehearsal
 - Maintenance procedures
 - Integration into existing Combat Mission Simulators
- **Include Next Generation Motion Systems in SOFAST-E II to yield:**
 - Electric and/or electromagnetic actuators
 - Space, weight, and power efficiencies
 - Cost savings



Questions

