



SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

MOBILITY

.....
ROTARY WING



ROTARY WING

MH-47 Heavy Assault Helicopter

Mission:

- Precision Air Assault
- Transport Array of Payloads
- Resupply
- Infiltration/Exfiltration
- CASEVAC

Armament:

- M134 7.62mm Mini-guns
- M240 7.62mm Machine gun

Capability:

- Terrain Following/Avoidance
- Rescue Hoist
- Aerial Refuel



MH-60 Medium Assault/DAP Helicopter

Mission:

- Precision Air Assault
- Infiltration/Exfil
- CSAR/Resupply

Capability:

- Terrain Following/Avoidance
- Aerial Refuel
- Fast Rope
- Rescue Hoist

Armament:

- M134 7.62mm Mini-guns



A/MH-6M Light Assault/Attack Helicopter

Mission:

- Precise Air Assaults
- Infiltration/Exfiltration
- Reconnaissance

Capability:

- External Personnel Pods
- Fast Rope

Armament:

- M134 7.62 mm Mini-guns
- M230 30 mm Chain-gun
- Hellfire / 2.75" Rockets



ROADMAP

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Programs



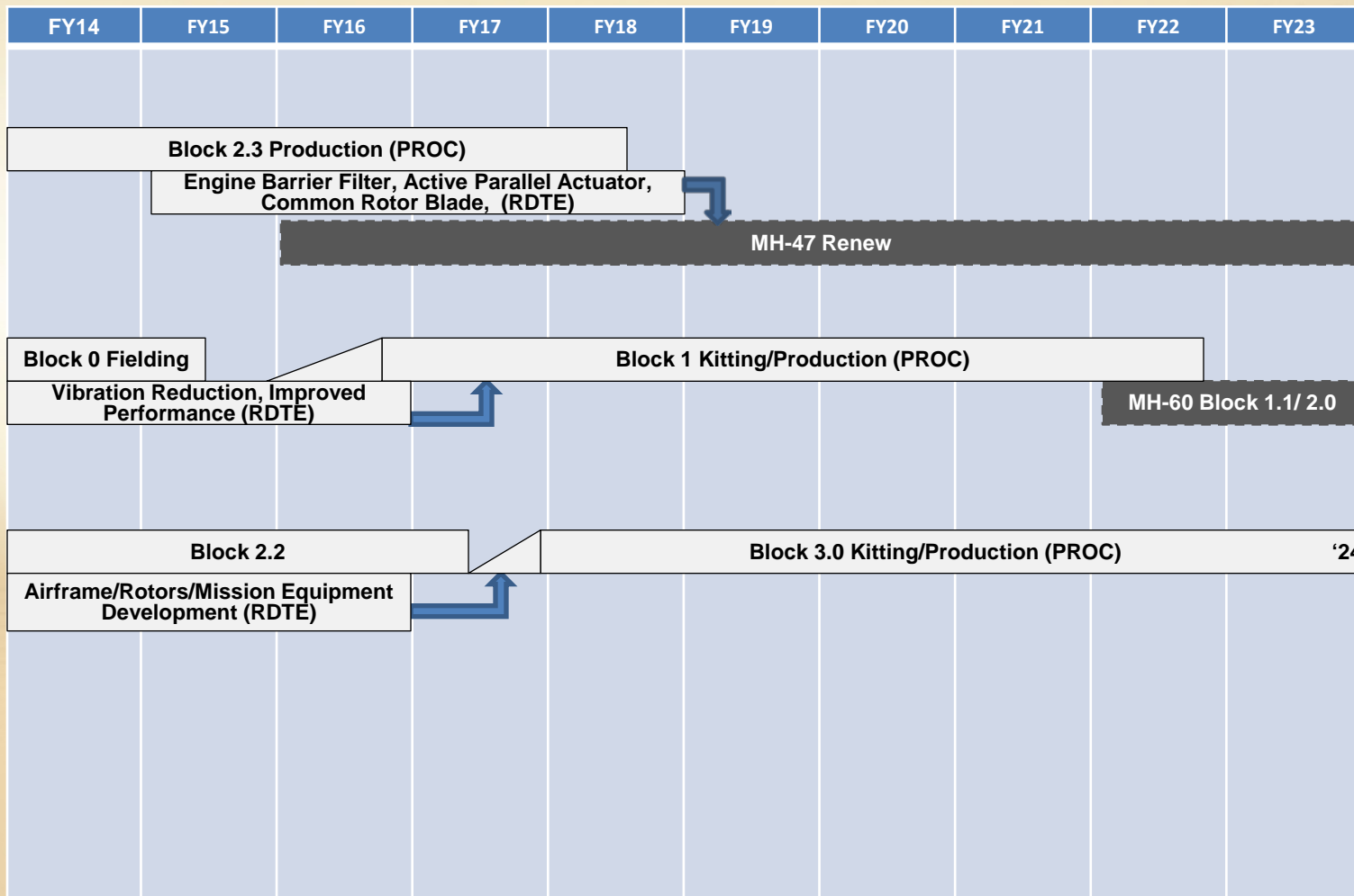
MH-47



MH-60



A/MH-6



Programmed

MH-47 PROGRAM

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MH-47G CONFIGURATION



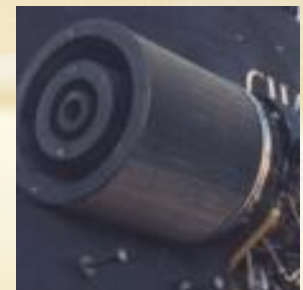
Legend:
 CH-47F Common
 SOF Provided

Note: system improvements depicted are not all inclusive

MH-47G ACTIVITIES

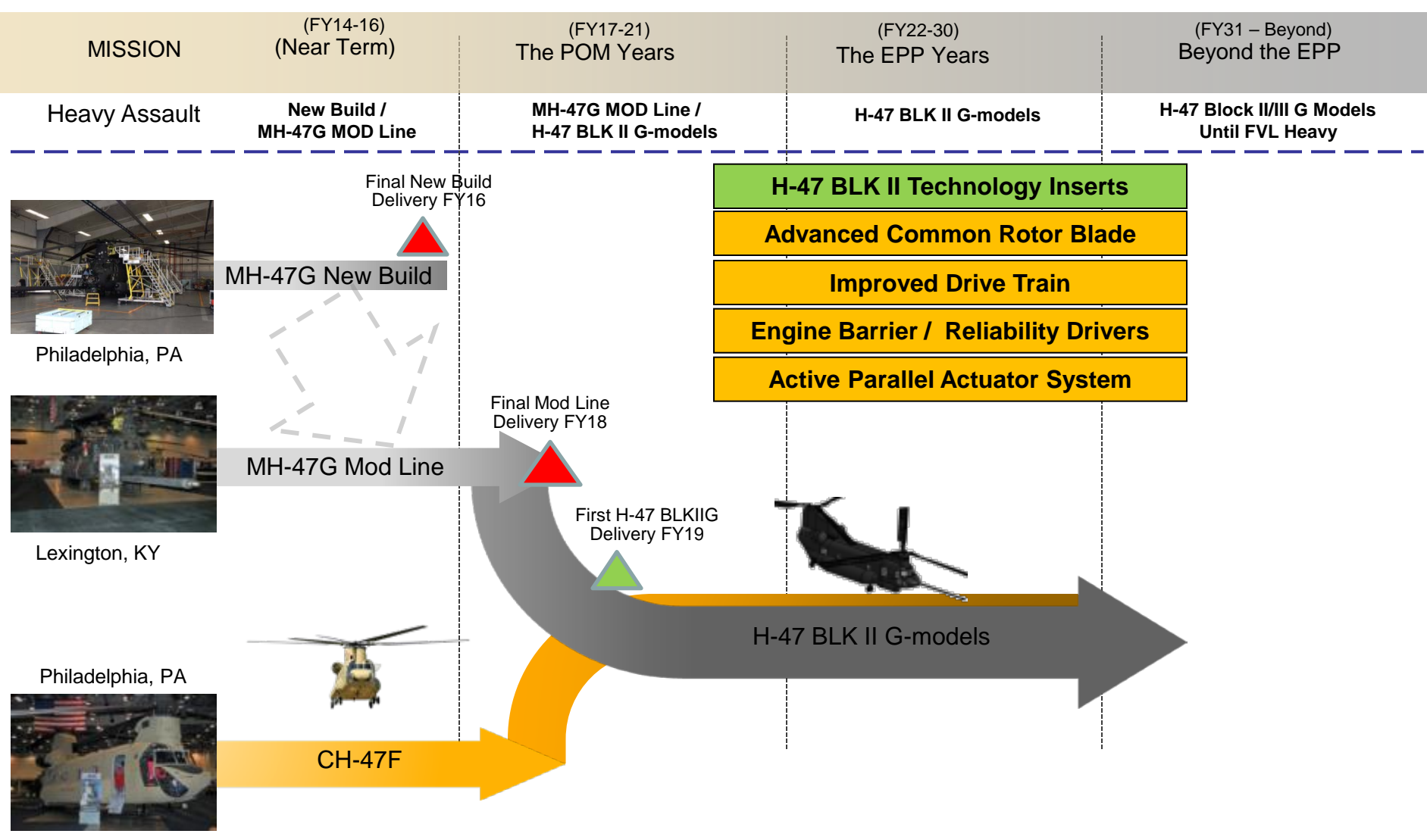
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- Block 2.3 execution
- +8 New Build execution
- Sustainment cost drivers
- Development Efforts
 - Advanced Parallel Actuator System (APAS)
 - Engine Barrier Filter
 - Advance Common Rotor Blade (ACRB)



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MH-47 CONFIGURATION ROADMAP



Philadelphia, PA



Lexington, KY



Philadelphia, PA

- H-47 BLK II Technology Inserts
- Advanced Common Rotor Blade
- Improved Drive Train
- Engine Barrier / Reliability Drivers
- Active Parallel Actuator System



H-47 BLK II G-models

MH-60 PROGRAM

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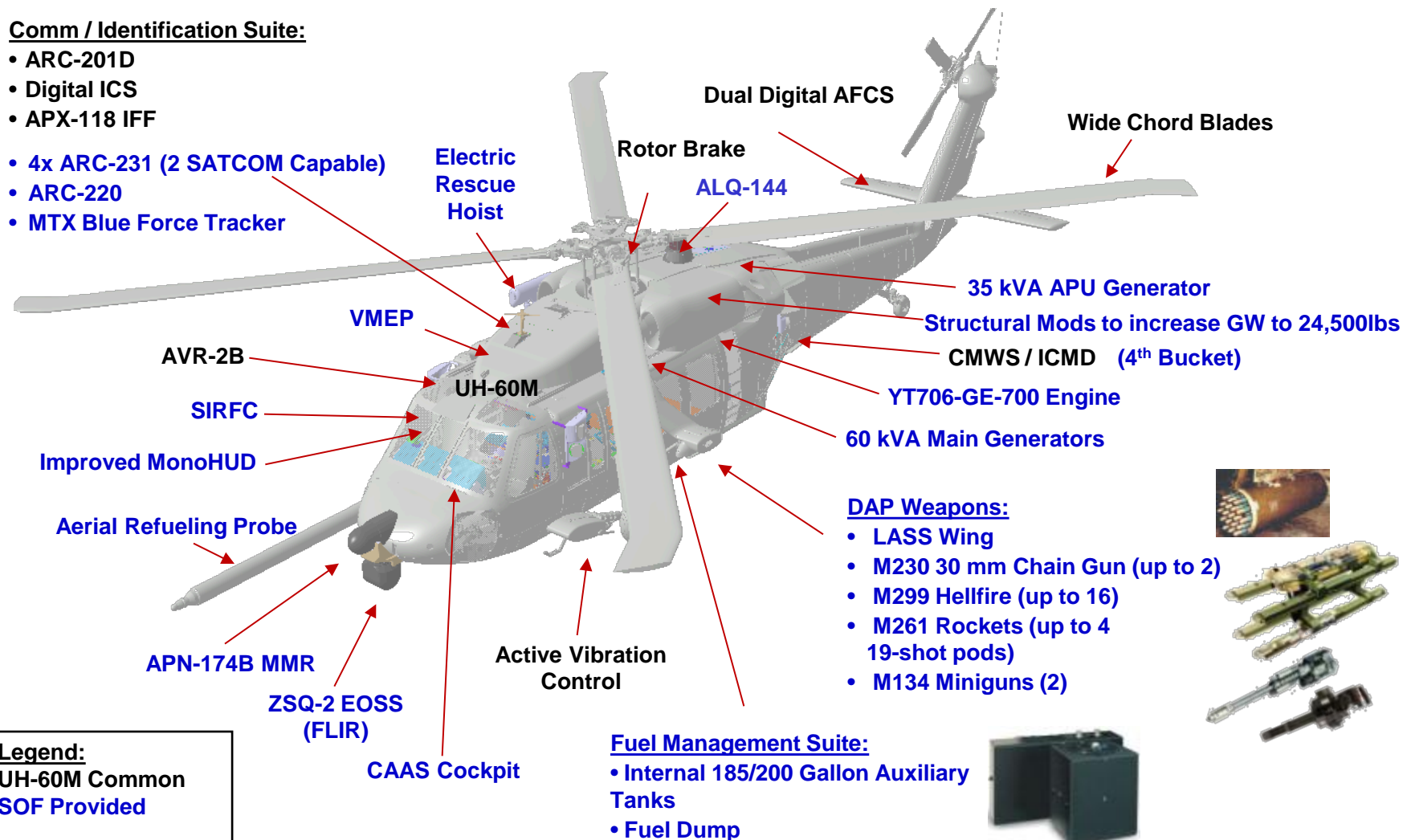


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MH-60M CONFIGURATION

Comm / Identification Suite:

- ARC-201D
- Digital ICS
- APX-118 IFF
- 4x ARC-231 (2 SATCOM Capable)
- ARC-220
- MTX Blue Force Tracker



Legend:

UH-60M Common
SOF Provided

Fuel Management Suite:

- Internal 185/200 Gallon Auxiliary Tanks
- Fuel Dump

DAP Weapons:

- LASS Wing
- M230 30 mm Chain Gun (up to 2)
- M299 Hellfire (up to 16)
- M261 Rockets (up to 4 19-shot pods)
- M134 Miniguns (2)



MH-60 ACTIVITIES

- MH-60M production execution
- MH-60K divestiture execution
- Sustainment cost drivers
- Block 1 upgrades



A/MH-6M



AH-6M

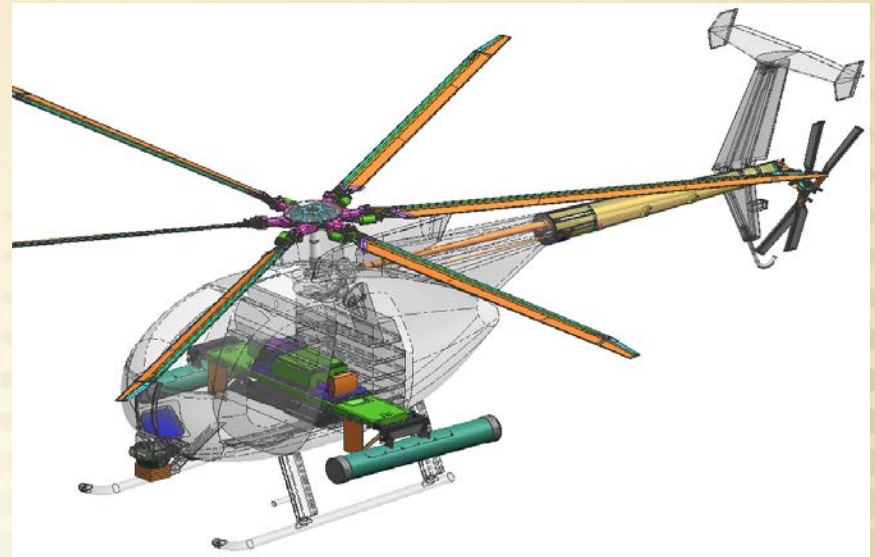


MH-6M

A/MH-6 ACTIVITIES

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- Block 2.2 upgrade execution
 - Improves crew safety
- Block 3.0 upgrade planning
 - Improves payload
 - Improves speed
 - Improves cockpit
 - Improves flight controls



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A/MH-6M

SOF Developed Equipment

Army Common Equipment
AN/ARC-231 Radio
AN/APX-123 IFF

Improved Tail Boom
and T/R Drive
System

RRA 250C-30R/3M w/ FADEC

6 Bladed M/R

Cambered
Vertical Fin

IBF Filter Minder

Improved
Engine Inlet
and IBF

Digital CMS

4 Bladed,
15° Cant,
35°

Enlarged Aft Cargo
Doors & Opening

AN/ZSQ-3
FLIR

Azimuth
T/R Sys
Improved
Tail Stinger

MARK IV Rails
Lightweight AH
and MH Plank
Systems

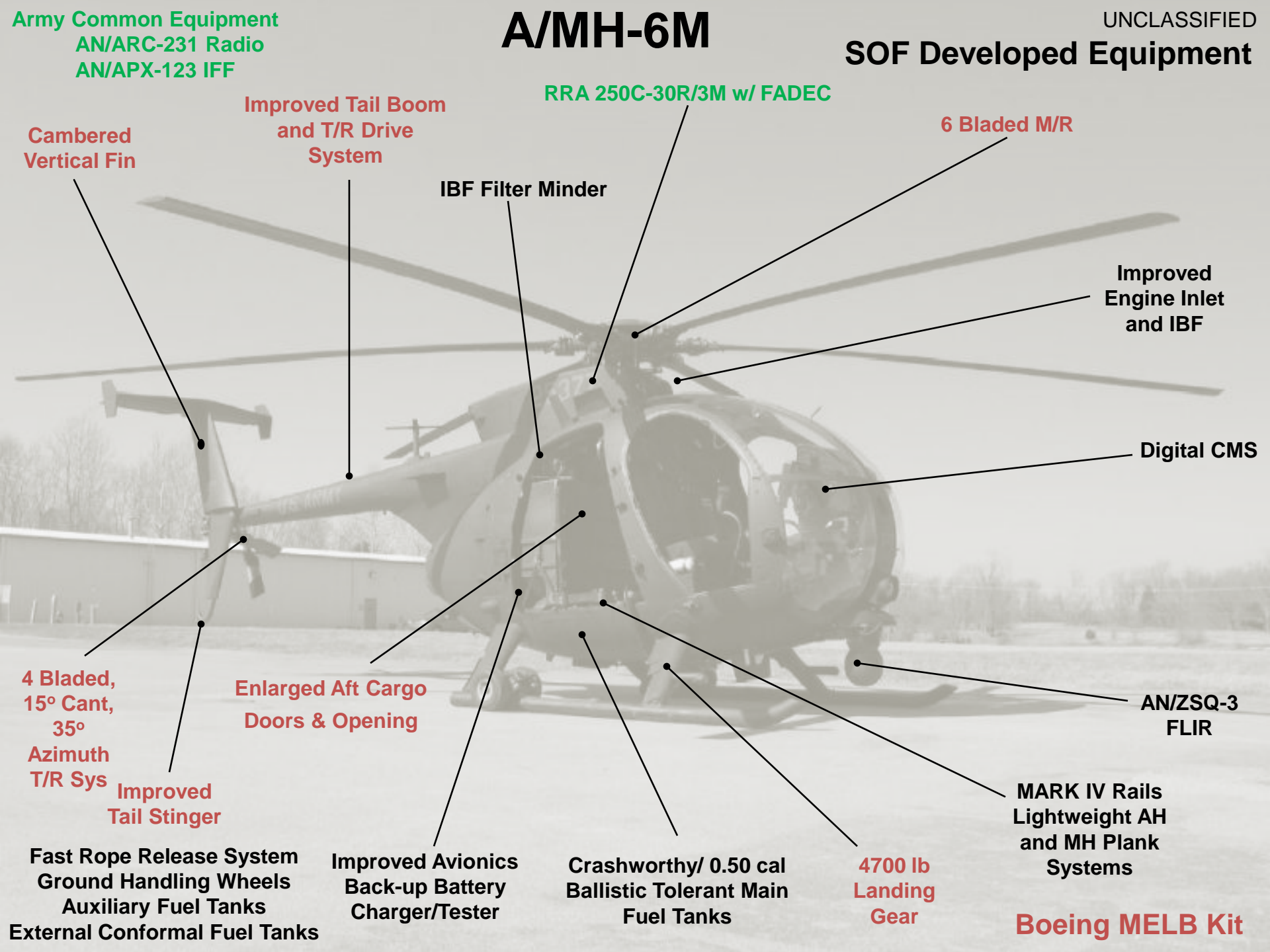
Fast Rope Release System
Ground Handling Wheels
Auxiliary Fuel Tanks
External Conformal Fuel Tanks

Improved Avionics
Back-up Battery
Charger/Tester

Crashworthy/ 0.50 cal
Ballistic Tolerant Main
Fuel Tanks

4700 lb
Landing
Gear

Boeing MELB Kit



AIRCRAFT TECHNOLOGY INTERESTS

- **Light weight fuel cell - maintaining ballistics and crashworthy characteristics**
- **Lighter weight cabin sound proofing/thermal protection**
- **Infrared Countermeasures**
- **Conformal multiband antennas**
- **Low volatility lithium battery**
- **Transparent, curved, light, ballistic materiel**

QUESTIONS





SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

TRAINING SYSTEMS

ROTARY WING



ROTARY WING

SOF AVIATION SIMULATION PRODUCT PORTFOLIO



MH-60K MH-47E

Legacy Upgrade Effort



Soldier Monitoring System

Call For Fire Trainer II

Army Supported



MH-47G



A/MH-6



MH-60M



CAPT



Desktop Trainers



Vehicle Interdiction Training

Flight Simulation



SOF TEAMS



SOA STARS



PM SOF Training Systems

Integration and Sustainment



Peripheral Training



Battle Staff Training System



Exercise Management Control



Mission Rehearsal Operations Center



Incident Investigation

Simulation Training Exercise/ Mission Rehearsal

SOF AVIATION PRIORITIES AND INITIATIVES

- **User's Priorities:**

- Available, Concurrent, Interoperable

- **Future Competitive Actions:**

- Special Operations Forces Aviation System Trainers – Enhancements (SOFAST-E => RFP o/a 4th Qtr FY16; major system upgrades)
- Special Operation Forces Training, Engineering, and Maintenance Services (SOF TEAMS III => RFP o/a 3rd Qtr FY17; life-cycle sustainment)

- **Areas of Interest:**

- Collective Training Capability
- Hardware / Software Commonality => Stimulation vs Simulation
- Real-time database generation tools

CLOSING REMARKS

- **Simulation doesn't replace Live Training – It Maximizes it!**
- **Simulation offers a wide variety of benefits to Training and Operations**
- **PM SOF Training Systems manages a diverse portfolio of projects that supports the SOF community**

QUESTIONS

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