COL John Vannoy
Program Executive Officer

ROTOR WING
SCHEDULE OF PRESENTATIONS

Day 1 – Wednesday  20 May 2015

11:15 - 12:15
PEO RW Strategic Overview

13:30 - 14:30
MH-47G, MH-60M, MELB Program Update
Mission Equipment Program Update
SOF Training Systems Update
Silent Knight Radar Product Update

Day 2 – Thursday  21 May 2015

09:00 - 10:00
PEO RW Strategic Overview

10:45 - 11:45
MH-47G, MH-60M, MELB Program Update
Mission Equipment Program Update
SOF Training Systems Update
Silent Knight Radar Product Update
AGENDA

- Enterprise and Portfolio Overview
- Operational Commander’s Perspective
- New in FY15
- Roadmaps
- Resourcing Strategic View
- Highlights of Program Status
- Way Forward
- Questions
Equip the soldiers of the 160th SOAR(A) and the TSOCs SOF with unique and unequaled Rotary Wing capabilities.

Sustain the unique aircraft operated by the 160th SOAR(A) and the TSOCs.

Resource SOF Rotary Wing Fleet

Support the Global SOF Network through responsive resourcing.

160th SOAR (A) – TSOCs Operators

ARSOAC SIMO Requirements

PEO RW USSOCOM Resource Sponsor

PM SKR/PM TAPO/PM STS/PM MELB Materiel Developer
MOBILITY

A/MH-6
Light Attack/Assault

Medium Assault MH-60

Heavy Assault MH-47

MISSION EQUIPMENT

Active Aircraft Survivability Equipment

Passive Aircraft Survivability Equipment

Avionics

Sensors

Silent Knight Radar

TRAINING SYSTEMS

A/MH-6M Little Bird

MH-47G CMS

MH-60L/M CMS

Battle Staff Training Exercise Management Control
Emerging operating environment suggests a complex, multi-polar world with an ever-broadening array of irregular/hybrid threats.

**must be prepared to conduct operations throughout the spectrum of conflict**

Our adversaries will continue to employ asymmetric operations and tactics against U.S. interests.

**comparative advantage capability investments needed to counter the proliferation of information, weapon, and cyber technologies**

U.S. Strategic Guidance cautions against forces sized for large-scale, prolonged operations.

**drives an expeditionary, scalable force with reduced footprints**

Must recognize the implications of fiscal uncertainty and austerity.

**strategic choices among capability, capacity, and readiness**

<table>
<thead>
<tr>
<th>Army Special Operations Aviation Priorities</th>
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</thead>
<tbody>
<tr>
<td><strong>Sustain Our Core Competencies Beyond The Current Fight</strong></td>
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<tr>
<td><strong>Posture To Provide SOA Support Forward</strong></td>
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<tr>
<td><strong>Maintain The Comparative Advantage Over Our Adversaries</strong></td>
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<tr>
<td><strong>Improve Affordability Without Sacrificing Effectiveness</strong></td>
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</table>
POSTURE TO PROVIDE SUPPORT FORWARD

- Regional alignment of SOA Battalions to Theater SOCs
- Tailored "Presence for Purpose" employment to support full spectrum SOF campaigns (SOA RW Operations, AvFID, ISR....)
- Small footprint, low signature capability solutions
- Country-specific engagements to build partner nation aviation SOF capacity
MAINTAIN COMPARATIVE ADVANTAGE

Objective 1
Air Defense Penetration
- 100 NM
Afloat Staging Base
JSOTF

Objective 2
Recon Team Insertion
- 150 NM
HVT Objective 1
Power Plant
- Exploitation

Raid Force Assault Position
- Manuever / Fires

- Platform improvements in range, speed, payload, and vertical maneuverability
- Operations in degraded visual environment
- Lightweight munitions
- HD imagery and datalinks
- Weight reduction

Survivability
- Signature reduction
- Integrated aircraft survivability equipment
- Multi-function sensors/jammers that are distributed and networked
- Cyber force protection
IMPROVE AFFORDABILITY MAINTAIN EFFECTIVENESS

- Sustainability/Affordability
  - Total cost of ownership
  - Interoperability/Commonality of components
  - Integrated machine health monitoring that delivers a tangible cost benefit
  - Increased component time on wing
  - Reduced fuel consumption

Logistics Modernization

Mission Equipment Programs
NEW IN FY15

• New Start Programs:
  – Lightweight Infrared Countermeasures – FY16 PROC
  – MH-60 Block Upgrades – FY16 PROC

• Airborne Mission Network Risk Reduction – FY15

• RW S&T Roadmap

• MH-47G and CH-47F Block II Collaboration
WAY FORWARD

• Emphasize RDT&E planning
• Complete fielding of MH-60M and MH-47G
• Refresh the MELB fleet
• Security Cooperation and Foreign Military Sales
• Expanding off platform sensor employment
• Integrating UAS into simulations
• Aligning the enterprise for “Rolling Advantage” in ASE
• Lightweight Weapons emphasis
**Mission**

<table>
<thead>
<tr>
<th>Light Attack</th>
<th>Assault/Assault</th>
<th>Assault</th>
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<tbody>
<tr>
<td>MH-60K</td>
<td>MH-60L</td>
<td>MH-47D</td>
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<tr>
<td>MH-60L DAP (CAAS)</td>
<td>DVE CIRCM SKR</td>
<td>SKR</td>
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<tr>
<td>MH-60L DAP (CAAS)</td>
<td>DVE CIRCM</td>
<td>CH-47F to MH</td>
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**The POM Years** (Fiscal Year 17-21)
- A/MH-6 MELB (51) Block 3.0
- Improved Seats
- LIRCM
- IOC
- FOC
- Block 3.1
- Block 3.2/SLEP

**The EPP Years** (Fiscal Year 22-30)
- Army CH-47F Production Ends (FY 19)
- MH-47G (61+8) Block 2.2
- 8 New Build
- MH-47G (69)
- CH-47F to MH
- RE-NEW
- FOC

**Beyond the EPP** (Fiscal Year 30 – beyond)
- MH-47D
- MH-47E
- MH-47G (61+8)
- Block 2.2
- 8 New Build
- MH-47G (69)

**Near Term** (Prior to FY 16)
- MH-60K
- MH-60L
- MH-60L DAP (CAAS)
- MH-47D
- MH-47E
- MH-47G (61+8)
- MH-47G (69)

**The POM Years**
- The POM Years (Fiscal Year 17-21)
- The EPP Years (Fiscal Year 22-30)
- Beyond the EPP (Fiscal Year 30 – beyond)

**Fiscal Year**
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020
- 2021
- 2022
- 2023
- 2024
- 2025
- 2026
- 2027
- 2028
- 2029
- 2030
- 2031
- 2032
- 2033
### RW S&T ROADMAP

<table>
<thead>
<tr>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
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<tbody>
<tr>
<td>CHMD</td>
<td>CF Camera</td>
<td>DVE Integration &amp; Test</td>
<td>SKR / DVE / NGFLIR Fielding</td>
<td>SKR DTED / AGR DEV</td>
<td>INTEG</td>
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<tr>
<td>NGFLIR Dev</td>
<td></td>
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<td>Adv IR Countermeasures</td>
<td>Gen IV an V Countermeasure Dev</td>
<td>Army CIRCM Development</td>
<td>IRCM Fielding (A/MH-6)</td>
<td>SOF Common IRCM Development</td>
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<td>Thru Rotor WB SATCOM Antenna</td>
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<td>MPU P3I / Airborne Networking Fielding</td>
<td>Video Processing / Ethernet / Future Aircraft Architecture Studies</td>
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<td>A/MH-6 MELB Block 3.0 / MH-60M Block 1 / MH-47G</td>
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<td>A/MH-6 Block 3.0</td>
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<td>Block 1</td>
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<td>MH-60 ECPs</td>
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<td>MH-47G Active Parallel Actuator and Eng Barrier Filter Integ &amp; Test</td>
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<td>MH-47G Emerging Block II G SOF Mods</td>
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<td>AATD JMR / Army Future Vertical Lift (FVL)</td>
<td>SOF FVL MEP Definition</td>
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#### Long Range Obj:
- Fully Fused Sensors
- Adv/Integ Nav System
- Sat. Based Terrain Map
- Unconstrained Env. Cap.
- Light Weight, Increased Lethality Direct Engagement System
- Full-Spectrum Signature Management
- Multi Ship S.A. Sharing
- Cloud Based Info.
- OTH Information Sharing
- Airframe as Hot Spot

### Deliverable ▲ Milestone
- Non-USSOCOM Effort
- Non-Funded Effort
- USSOCOM S&T Effort
- Non-Funded USSOCOM S&T Effort
- USSOCOM Effort
- USSOCOM PROC
- Supports a Key Event
## Resourcing Strategy

**Legend:**
- **OM**: Operating Milestone
- **PROC**: Procurement
- **RDTE**: Research, Development, Test, and Evaluation

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<tr>
<th>Fiscal Year</th>
<th>OM</th>
<th>PROC</th>
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<td>FY08</td>
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<td>113</td>
<td>219</td>
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<tr>
<td>FY20</td>
<td>112</td>
<td>256</td>
<td>25</td>
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**Unit:** Millions $
• A/MH-6M
  – Block 2.2
  – Block 3

• MH-60M
  – Fielding complete FY15
  – Block 1

• MH-47G
  – New Build fielding complete FY15
  – Digital Automated Flight Controls
  – Block 2.3
  – Next Block and Renew
MH-47G RENEW PROGRAM

CH-47F
- Machined airframe
- Production (2007)
- Average time: 1,062 Hours
- Max Gross Wt: 50K
- Payload: 19.3K

MH-47G
- Riveted airframe
- 2001 SLEP (61)
- Average time: 8,381 Hrs
- Max Gross Wt: 54K
- Payload: 22.2K

Current H-47 Configuration

H-47 Block II Configuration (533) (Includes SOF)

H-47 Block II F Model

Section 41
SOF MH-47G (Common)

Section 43
CH-47F Multi-Year Recapitalized

Section 46
SOF MH-47G (Common)

1,110 GAL Fuel Capacity

H-47 Block II G Model

Section 41
SOF MH-47G (Common)

Section 43
SOF MH-47G (Common)

Section 46
SOF MH-47G (Common)

2,000 GAL Fuel Capacity
CARGO HELICOPTER STRATEGY

MISSION

(FY14-16) (Near Term)
Heavy Assault
New Build / MH-47G MOD Line

(FY17-21)
The POM Years
MH-47G MOD Line / H-47 BLK II G-models

(FY22-30)
The EPP Years
H-47 BLK II G-models

(FY31 – Beyond)
Beyond the EPP
H-47 Block II/III G Models Until FVL Heavy

CURRENT PLANNED

<table>
<thead>
<tr>
<th></th>
<th>CH-47D</th>
<th>CH-47F</th>
<th>MH-47G</th>
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<tbody>
<tr>
<td>Current</td>
<td>163</td>
<td>301</td>
<td>61</td>
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<tr>
<td>Planned</td>
<td>0</td>
<td>473</td>
<td>69</td>
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</table>

H-47 BLK II Technology Inserts

- Advanced Common Rotor Blade
- Improved Drive Train
- Engine Barrier / Reliability Drivers
- Active Parallel Actuator System

MH-47G New Build
Final New Build Delivery FY16

MH-47G Mod Line
Final Mod Line Delivery FY18

First H-47 BLKIIIG Delivery FY19

H-47 BLK II G-models

CH-47F

Philadelphia, PA
Lexington, KY
MISSION EQUIPMENT

- Degraded Visual Environment
- Airborne Mission Network
- Aircraft Survivability Equipment
- Common Avionics Architecture
- Secure Real Time Video
- Terrain Following Radar
• Legacy Upgrade Effort
  – MH-47E to MH-47G
  – MH-60K to MH-60M
• Concurrency and Re-host
QUESTIONS