Special Operations Forces Industry Conference

COL Chris Miller
Program Executive Officer - Rotary Wing

Rotary Wing
The Year In Review

SOF Acquisition Team deliveries and major events:

• 7 MH-47G aircraft delivered to the 160th SOAR
• 11 A/MH-6 Block 2.0 Upgrade completed and returned to the 160th SOAR
• 8 MH-60 aircraft inducted in the SOFSA production line
• 5 MH-60M completed and awaiting fielding
• 7 SIRFC shipsets delivered to the 160th SOAR
• Incorporated Rotary Wing Training Systems (Simulators) into PEO RW
• Incorporated Non-Standard Rotary Wing aircraft (Mi-17) into PEO RW
MH-6M MELB
Mission Equipped Little Bird (MELB)
Light Attack/Assault
* 6 Combat Equipped Troops (Assault)
* Max Cruise Speed: 120 knots
* Max Gross Weight: 1,700 lbs
Rapidly Deployable
Shipboard Operations
Surgical Point Insertion
Aerial Reconnaissance
Close Air Support
Reconfigurable Armament (Attack)

MH-47G Chinook
Heavy Assault
* 44 Combat Equipped Troops
* Max Cruise Speed: 130 knots
* Max Gross Weight: 54,000 lbs
* Ext Loads: 25K lbs tandem, 26K lbs center hook
Aerial Refuel Capable
Suppressive Fire Capability
Resupply
Advanced Aircraft Survivability Equipment

MH-60M Blackhawk
Medium Assault
* 9 Combat Equipped Troops
* Max Cruise Speed: 140 knots
* Max Gross Weight: 24,500 lbs
* External Loads 9,000 lbs
Aerial Refuel Capable
Suppressive Fire Capability
Resupply
Advanced Aircraft Survivability Equipment
Defensive Armed Penetrator (DAP)
Reconfigurable Armament
Armed Escort & Close Air Support

YMQ-18A Hummingbird
Unmanned Aerial System
Multi-role Missions (ISR/Re-Supply)
* Gross Weight : 5500 lbs
* Payload: 2500 lbs
* Range: 2250 NM
* Endurance: 18.7 hrs w/300 lbs
  12.1 hrs w/532 lbs
  8.1 hrs w/1000 lbs
* Speed: 142 kts
* Ceiling : 20000 ft
With a maximum gross weight of 4,700 pounds and the ability to travel at over 100 knots, the A/MH-6M Mission Enhanced Little Bird (MELB) provides the SOF community in attack or assault roles.

Technology Upgrades/Current Efforts:
- Crashworthy seats
- Lightweight Hellfire
- Block 2.0 Upgrade
- LRF/D into the Q3
The Medium lifter for SOF is the MH-60M. With a maximum gross weight of 24,500 pounds and the ability to travel at over 150 knots, the MH-60M The SOF Blackhawk comes in two configurations:

- Troop transport configuration
- Defensive Armed Penetrator (DAP) armed configuration.

Technology Upgrades/Current Efforts:
- 2500 shp YT706-GE-700 Engines
- Integrated, Warning, Cautions, Audio (Voice)
- Silent Knight Radar (SKR)
- Quick Lift to DAP Reconfiguration Capability
- Suite of Integrated Radio Frequency Countermeasures (SIRFC)
The heavy lifter of the SOF rotary wing is the MH-47G Chinook. With a maximum gross weight of 54,000 pounds and the ability to travel at over 150 knots, the MG-47G provides the SOF community with a proven, durable workhorse that is able to fulfill a variety of missions around the world.

Technology Upgrades/Current Efforts:
- Integrated, Warning, Cautions, Audio (Voice)
- Dual Mode Searchlight
- Left Gunner Windows Modifications
- Suite of Integrated Radio Frequency Countermeasures (SIRFC)
Currently undergoing extended User evaluation, the YMQ-18A was designed as a long-endurance vertical takeoff and landing (VTOL) UAS, has flown a world record 18.7 hours with a 300 pound payload. The aircraft’s current maximum gross weight is 5,500 pounds with a design objective of 6,500 pounds and speeds in excess of 140 knots.

Technology Upgrades/Current Efforts:

- SATCOM Beyond Line of Site Comms
- Environmental Hardening
  - Weatherization
  - Blade Leading Edge
  - Air intake redesign
- Redundant Flight Controls
- Unmanned Resupply Modifications
To provide the 160th Special Operations Aviation Regiment (Airborne) (SOAR(A)) with high-fidelity training systems for the MH-47E, MH-60K, MH-47G, MH-60L, and A/MH-6M aircraft that support USSOCOM requirements; Combat Mission Simulators also provide air crews a real-world capability to practice, validate and verify tactics, techniques and procedures to support training and mission rehearsal.

Technology Upgrades/Current Efforts:
- Upgrade CAAS
- Common Missile Warning System (CMWS)
- Back UP Rotor RPM (BURRPM)
- Suite of Integration RF Countermeasures (SIRFC)
Competitive Acquisitions

- Hostile Fire Indicating System (HFIS)
- Reduce Optical Signature Emission Solution (ROSES)
- Light Weight Transparent Armor
Hostile Fire Indicating System (HFIS)

- Detects, classifies, and alerts the aircrew to the presence of small caliber, crew-served, AAA, and RPG fires
- By providing detection and angle of arrival, HFIS will enhance aircraft survivability

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<th>Acquisition Strategy</th>
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<th>Milestones</th>
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<td>Full and Open Competition</td>
<td>FY10-TBD</td>
<td>3rd QtrFY-11 Established interim HFI software solution</td>
<td>$2.5M RDT&amp;E FY10</td>
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<td>$4M RDTE FY11</td>
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<td>$19M PROC FY12-15</td>
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<td>USSOCOM PEO-Rotary Wing</td>
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Point of Contact
- USSOCOM PEO-Rotary Wing
Reduce Optical Signature Emission Solution (ROSES)

- This program will develop a replacement flare that will operate outside of the visible spectrum
- Improve effectiveness and survivability of current and emerging IR threats

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<tr>
<td>FY11-12 Flare development</td>
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<td>FY 13 Milestone C Decision</td>
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Point of Contact
- USSOCOM PEO-Rotary Wing
**Light Weight Transparent Armor**

- **Acquisition Strategy**
  - Full and Open Competition

- **Period of Performance**
  - FY14-TBD

- **Funding**
  - $11M RDT&E FY14
  - $1.9M RDT&E FY15
  - $10.9M PROC FY15

- **Point of Contact**
  - USSOCOM PEO-Rotary Wing

- **Milestones**
  - FY14 & 15 Research and Development
  - FY15 Milestone C Decision

- **Current Contract/OEM**
  - TBD

- This program will be applied to flat and large curved surfaces and will not degrade optical clarity
PEO RW Breakout Sessions

Wednesday, June 16, 1530-1615
Thursday, June 17, 1345-1430

Technology/Capability Areas of Interest:

• Aircraft Occupant Ballistic Protection System (AOBPS)
• Hostile Fire Indicating System (HFIS)
• Reduced Optical Signature Emissions Solution (ROSES)