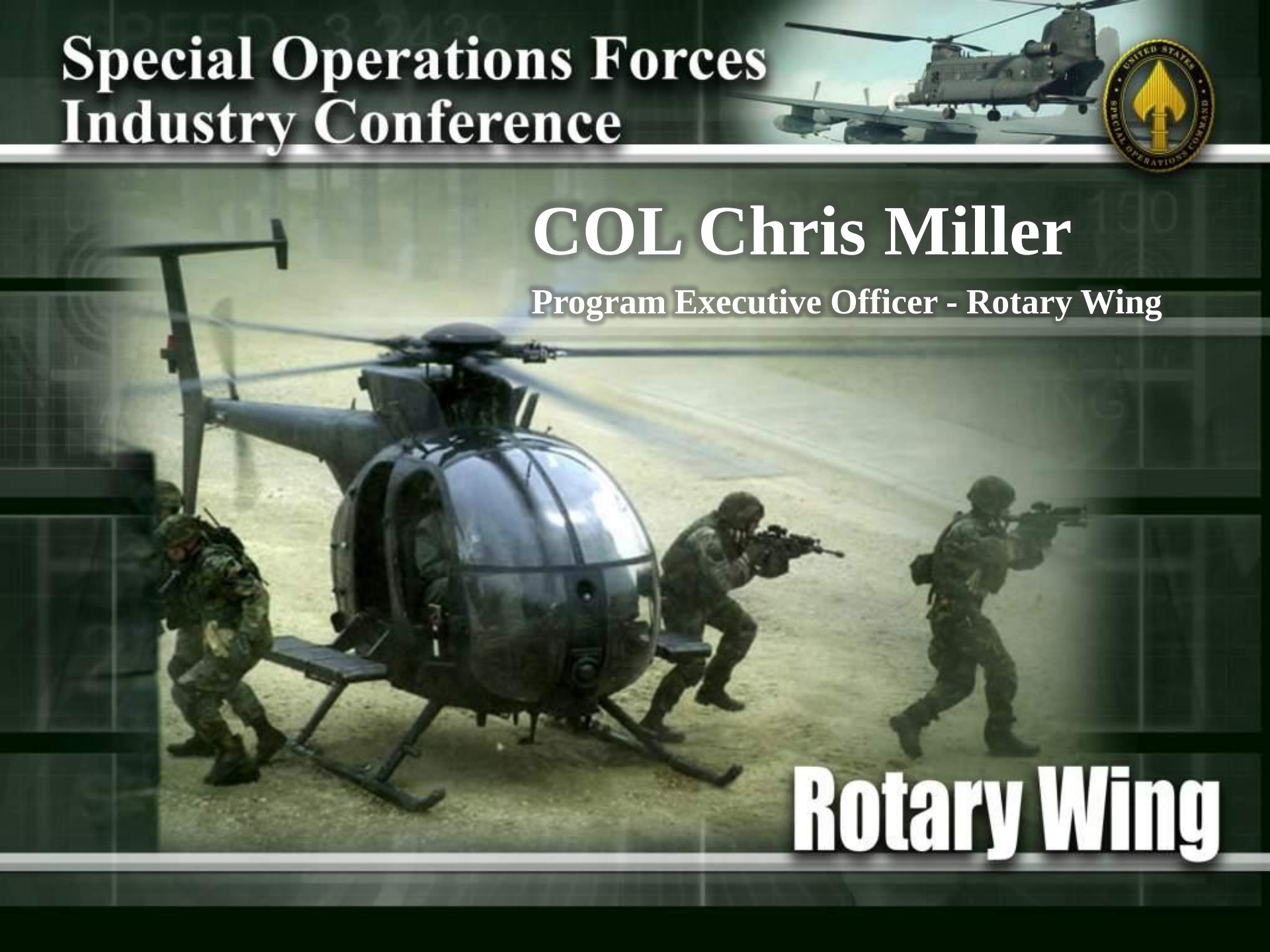
Special Operations Forces Industry Conference



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

SOF RW Capabilities

* Configuration Dependant

MH-6M MELB
Mission Equipped Little Bird (MELB)
Light Attack/Assault
* 6 Combat Equipped Troops (Assault)
* Max Cruise Speed: 120 knots
* Max Gross Weight: 4,700 lbs
Rapidly Deployable
Shipboard Operations
Surgical Point Insertion
Aerial Reconnaissance
Close Air Support
Reconfigurable Armament (Attack)

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

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

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

A/MH 6M MELB

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.

<u>Technology Upgrades/Current Efforts:</u>

- Crashworthy seats
- Lightweight Hellfire
- Block 2.0 Upgrade
- LRF/D into the Q3

MH-60M Blackhawk

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)

MH 47 G Chinook

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

<u>Technology Upgrades/Current Efforts:</u>

- Integrated, Warning, Cautions, Audio (Voice)
- Dual Mode Searchlight
- Left Gunner Windows Modifications
- Suite of Integrated Radio Frequency Countermeasures (SIRFC)

YMQ-18A Hummingbird

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.

<u>Technology Upgrades/Current Efforts:</u>

- SATCOM Beyond Line of Site Comms
- Environmental Hardening
  - –Weatherization
  - –Blade Leading Edge
  - –Air intake redesign
- Redundant Flight Controls
- Unmanned Resupply Modifications

Combat Mission Simulators

A/MH-6M Little Bird


MH-60L/M CMS


MH-47G CMS


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

Acquisition Strategy

- Full and Open Competition

Period of Performance

- FY10-TBD

Milestones

- 3rd QtrFY-11 Established interim HFI software solution
- FY12 Milestone C Decision

Point of Contact

- USSOCOM PEO-Rotary Wing

Funding

- $2.5M RDT&E FY10
- $4M RDTE FY11
- $19M PROC FY12-15

Current Contract/OEM

- TBD

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

Acquisition Strategy

- Full and Open Competition

Period of Performance

- FY10-TBD

Milestones

- FY11-12 Flare development
- FY13 New Flare Solution
- FY 13 Milestone C Decision

Point of Contact

- USSOCOM PEO-Rotary Wing

Funding

- $3.8M RDT&E FY10
- $4M RDT&E FY11
- $2.9M RDT&E FY12
- $3.5M PROC FY13

Current Contract/OEM

- TBD

Light Weight Transparent Armor

- Light Weight Transparent Armor
- This program will be applied to flat and large curved surfaces and will not degrade optical clarity

Acquisition Strategy

- Full and Open Competition

Period of Performance

- FY14-TBD

Milestones

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

Point of Contact

- USSOCOM PEO-Rotary Wing

Funding

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

Current Contract/OEM

- TBD

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)