



# SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

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**MISSION EQUIPMENT**

**ROTARY WING**

# *Agenda*

- Mission Equipment Portfolio
- On-Going Programs
- Technologies of Interest

# Mission Equipment Portfolio

## Requirements

### Survivability

**Detect and Defeat  
Multi-Spectral Threats**

### Penetration / Fires

**Navigation  
Terrain Avoidance  
Targeting**

### C4 / Mission Command

**Situational Awareness  
Digital Connectivity  
Data Management**

## Technology Areas

*RF & IR Sensors and Countermeasures  
Laser Detection*

*Acoustic Detection  
Ballistic Protection  
Signature Reduction*

*Electro-Optical Sensors*

*Terrain Following Radar  
Sensor Fusion  
Synthetic Vision*

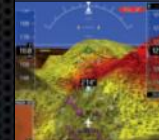
*Avionics Architecture*

*Real Time Video/Data  
Communications*

## End State



- *Integrated Advanced ASE*
- *Full Spectrum Signature Management*
- *Increased Lethality Engagement Sys*



- *Operations Unconstrained By Environment*
- *Fully Fused Sensors*
- *Advanced /Integrated Nav System*



- *Multi ship SA Sharing*
- *OTH Info Sharing*
- *Cloud Based Information*
- *Pilot-Vehicle Interface*

**Light Weight, Lower Cost of Ownership**

# Mission Equipment Activities

## Aircraft Survivability Equipment:

- Lightweight IR Countermeasure Development
- SIRFC Enhancements
- Flare Improvements

## Sensors and Weapons:

- Degraded Visual Environment Development
- FLIR Upgrades

## Avionics:

- Secure Real Time Video Integration
- 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



Common Sensor Payload



## Avionics:

- Secure Real Time Video Integration
- Tactical Airborne Network Integration
- Mission Processor Upgrades



Ground Force  
Software  
Compatible



GOTS/COTS  
Material  
Solution

Moving map with other  
Friendly icons shown



Live video with  
location of  
Video shown  
on imagery

# *Technology Interests*

- Protection against guided and unguided threats
- Methods of reducing crew workload
- High data rate communications
- Light weight cabin protection
- Signature management

# *Questions*