



SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

Accelerating SOF Innovation

Col Melissa Johnson *Program Executive Officer*

FIXED WING



Program Executive Office Fixed Wing (FW)

ISR - FIND



MQ-1C Gray Eagle



EOTACS



MEUAS 3.0



MC-12W



MQ-9 Reaper



MTUAS



JAVAMAN



U-28A/PC-12

MOBILITY - INFILTRATE



EC-130J Commando Solo



C-145A Skytruck



MC-130H Talon II



CV-22 Osprey



C-146A Wolfhound



MC-130J Commando II

STRIKE - FINISH



MQ-9 Reaper



AC-130U Spooky



AC-130J Ghost rider



Stand Off Precision Guided Munitions



MQ-1C Gray Eagle



AC-130W Stinger II



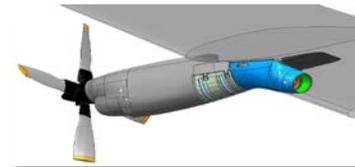
TECHNOLOGY INSERTION



Sensors



Mission Automation



Survivability



Kinetic Effects / DE

Acquisition Support Enterprise



PEO-FW CY19 Execution Priorities

- **Accelerate capabilities to the field to meet current and future fight**
- **Improve overall adaptability and affordability throughout system lifecycle**
- **Aggressively identify, leverage and implement new technology and new ways of using current technology**



Airborne Intel, Surveillance, and Recon (AISR)



SAFC



EOTACS



MEUAS



MTUAS/G3UAS



MALET



Manned

Special Applications for Contingencies (SAFC)

- **Capability Description:** Develops and integrates Group 1-3 UAS technology and payloads
- **On-Going Efforts:** Multiple payload/platform improvements
- **Future:**
 - Reduced size, weight, power
 - Reduced operator in the loop
 - Standardized architecture and interfaces
 - Multiple UAS's working a common mission



Small UAS (SUAS)/ Expeditionary Organic Tactical Airborne ISR Capability (EOTACS)

- **Capability Description:**
Tactical ISR
- **On-Going Efforts:** Payload modification
- **Future:**
 - Common GCS
 - Reduced launch/recovery footprint
 - Autonomy



Group 3/Medium Endurance/Multi-Mission Tactical UAS (G3UAS/MEUAS/MTUAS)

- **Capability Description:**
Provide ISR
- **On-Going Efforts:**
 - GPS Hardening
 - Reduced deployed footprint
 - Modularity/Commonality
- **Future:**
 - Beyond Line of Sight (BLOS) /
Tactical Common Data Link
 - Signature Reduction
 - Alternate Precision
Navigation & Timing

T-20 Jump



MQ-27 Scan Eagle



RQ-21 Black Jack



Aerosonde



Medium Altitude Long Endurance Tactical

- **Capability Description:**
Provide tactical ISR
- **On-Going Efforts:**
 - Common software with USAF
 - Enhanced sensors
 - GPS hardening
- **Future:**
 - Airborne mission networking
 - Signature reduction
 - Precision guided munitions integration
 - Human Machine Interface (HMI) improvements



Manned ISR

- **Capability Description:** Provide Tactical Airborne Intelligence, Surveillance, and Reconnaissance (ISR)
- **On-Going Efforts:**
 - Sensor upgrades
 - Remote SIGINT operation
 - GPS-hardening
- **Future:**
 - Increased comms bandwidth / data transport
 - Alternate Precision, Navigation, & Timing

MC-12W



U-28A



DHC-8



SOF C-130s, CV-22, and Mission Systems

MC-130H



MC-130J



SMS



Multi-Mode Radar



CV-22



EC-130J



Color Helmet Mounted Display



Low Cost Mod (Link 16)

MC-130 Recapitalization

- **Capability Description:** Modified C-130Js to Perform Low-level Infiltration/Exfiltration, Detect and Deny Radio Frequency (RF) Threats, Airdrop, Resupply and In-Flight Refueling
- **On-Going Efforts:** RF Countermeasures (RFCM), Terrain Following (TF) Radar and Airborne Mission Networking (AbMN)
- **Future:**
 - Automated route re-planning
 - Size, weight, and power reduction
 - EW enhancements



C-130 Modifications

- **Capability Description:**
Sustainment Mods to improve reliability and maintainability
- **On-Going Efforts:** Avionics upgrades, structural improvements
- **Future:**
 - Emergency equipment bins
 - Light-weight armor



CV-22B Osprey

- **Capability Description:** Provides Long Range, High Speed, All-Weather, Infil/Exfil, and Resupply of Teams in Hostile, Denied, and Politically Sensitive Areas in a Single Period of Darkness
- **On-Going Efforts:**
 - Terrain Following/Terrain Avoidance radar
 - Color Helmet Mounted Display
 - Suite of Integrated RF Countermeasures (SIRFC) upgrades
- **Future:** Forward defense weapons system



NSAv and AvFID

- **Capability Description:** Non-Standard Aviation (NSAv) supports worldwide Special Operations Force Tactical/Strategic missions. Aviation Foreign Internal Defense (AvFID) provides Combat Aviation Advisor (CAA) proficiency in preparation for Partner Nation training in Special Operations Force Techniques, Tactics & Procedures
- **On-Going Efforts:** Cockpit, communication and cabin upgrades
- **Future:** Continued avionic obsolescence avoidance and compliance



Integrated Strike Programs



Small Diameter Bomb



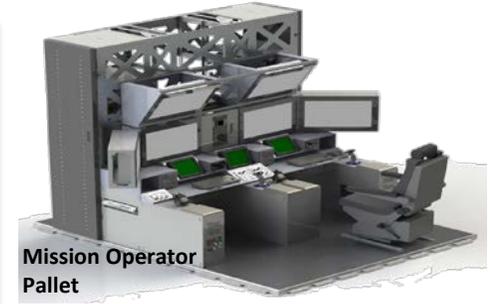
Hellfire Variants



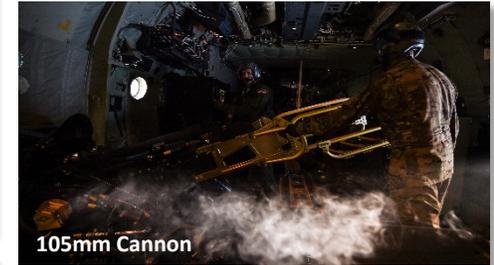
Small Glide Munitions



GRIFFIN



Mission Operator Pallet



105mm Cannon



30mm Cannon



Common Launch Tube

AC-130W/J

- **Capability Description:** Modified MC-130J with a Precision Strike Package (PSP) to deliver Close Air Support (CAS) and Air Interdiction (AI) missions
- **On-Going Efforts:**
 - GPS-Hardened Mission Operator Pallet
 - Upgraded Electro Optical/Infrared (EO/IR) Sensor
- **Future:**
 - Improved Defensive Systems
 - Improved Crew Situational Awareness
 - Infrared (IR) Suppression
 - All-Weather Sensors and Radio Frequency Countermeasures



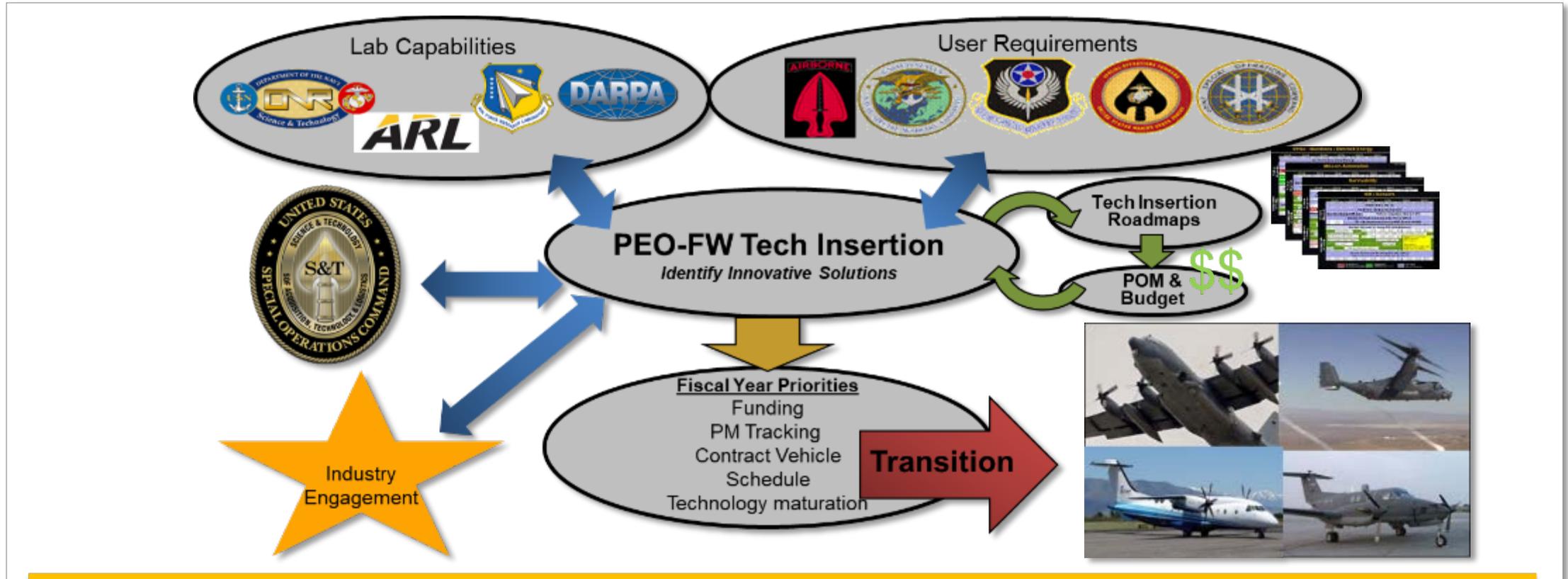
Stand Off Precision Guided Munitions

- **Capability Description:** Procure and Develop Stand-Off Precision Guided Munitions
- **On-Going Efforts:**
 - Data link integration
 - Composite warheads
 - Selectable effects
- **Future:**
 - Guided ammunition
 - Post-launch selectable effects
 - Autonomous/synchronized targeting
 - Next-generation guidance sensors

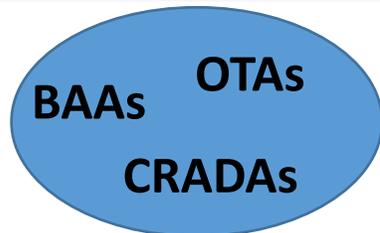


Common Launch Tube (CLT)
– Employs Griffin and SGM

FW Technology Insertion Process and Enablers



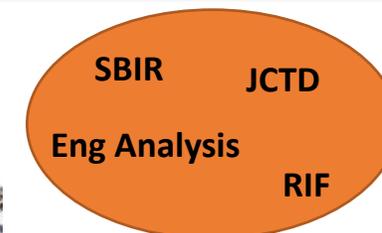
Capability Collaboration Events



Contracts / Agreements



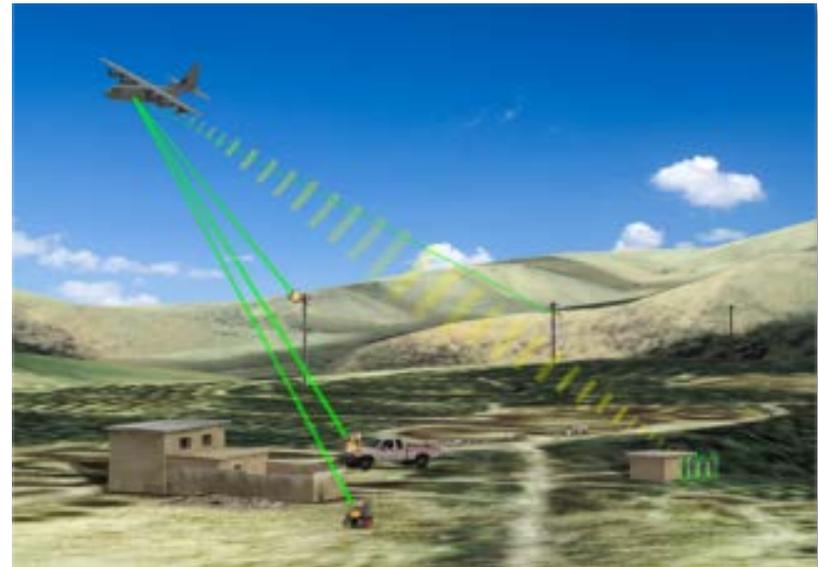
Cougar Demo Platform



Funding Resources

AC-130J High Energy Laser

- **Objective:** Demo a Precise Airborne Low Kinetic Weapon System Capable of Ground Based Scalable Effects
- **HEL Development Approach:**
 - Perform Risk Reduction at low power levels
 - Identify “best of breed” sub-systems
 - Inform DoD on Performance of Airborne Electric High Energy Lasers



QUESTIONS?