



EXPANDING THE COMPETITIVE SPACE

SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

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



C-27J

STRIKE - FINISH



MQ-9 Reaper



AC-130U Spooky



AC-130J Ghost Rider



Stand Off Precision Guided Munitions



MQ-1C Gray Eagle



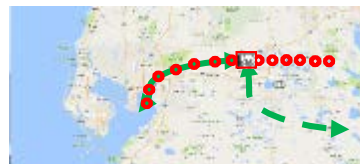
AC-130W Stinger II



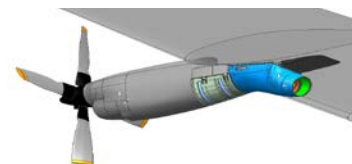
TECHNOLOGY INSERTION



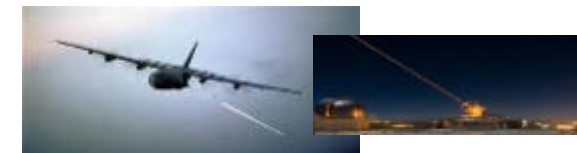
Sensors



Mission Automation

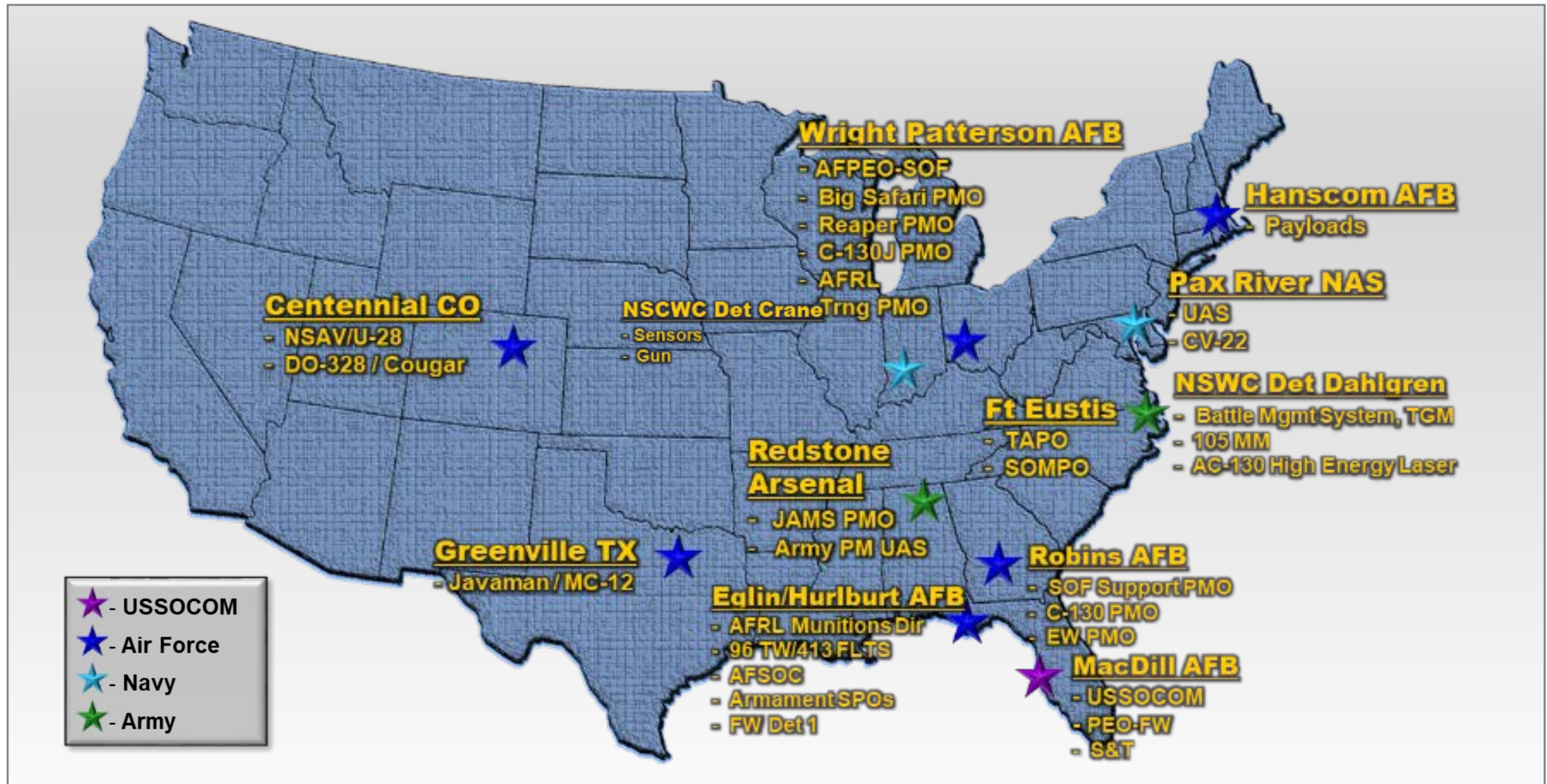


Survivability



Kinetic Effects / DE

Acquisition Support Enterprise



PEO-FW CY20 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)



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

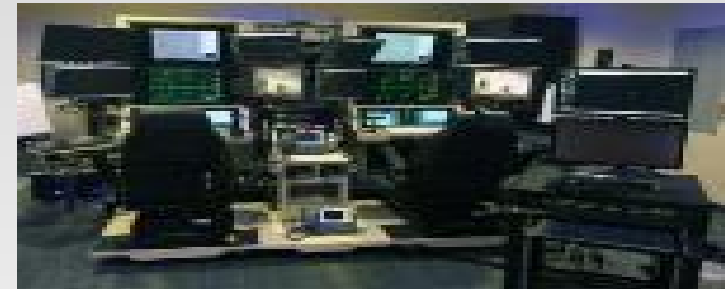


Aerosonde



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 Mobility Programs



Common Mission Systems



MC-130J



EC-130J



CV-22



Training Systems

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 in Contested Environments
- **On-Going Efforts:**
 - Terrain Following Radar Integration and Automated Route Re-planner
 - Airborne Mission Networking
 - Radio Frequency Countermeasures
 - Open Mission Systems (OMS) Integration
 - Special Mission Processor Tech Refresh
 - Cloud-based Mission System Integration
- **Future:**
 - Automated Mission Systems Functionality for Joint All-Domain Operations



C-130 Modifications

- **Capability Description:** Perform Sustainment Mods to Improve Aircraft Reliability and Maintainability, Correct Deficiencies, Address Obsolescence, Incorporate Mission Enhancements, and Critical Safety Changes
- **On-Going Efforts:**
 - Paratroop Doors Light Weight Armor
 - Joint Threat Warning System-Air Rack
 - Avionics Upgrades and GPS Hardening
- **Future:**
 - Loadmaster Signal Lights
 - OMS Software Capabilities

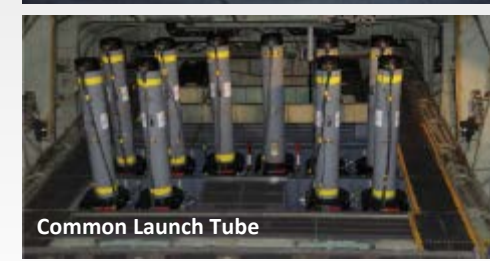
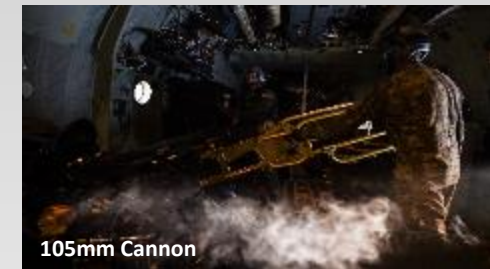
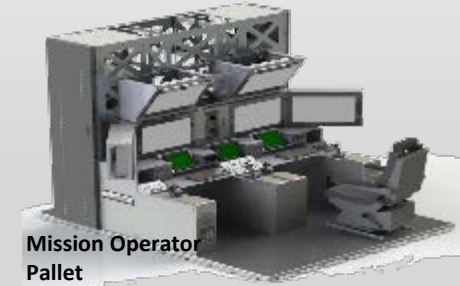


CV-22B Osprey

- **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 Radar Integration
 - Full-azimuth Defensive Weapon System
 - Color Helmet Mounted Display
 - Radio Frequency Countermeasures Upgrades
- **Future:**
 - Airborne Mission Networking
 - Automated Mission Systems Functionality for Joint All-Domain Operations



Integrated Strike Programs



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:**
 - Improved Defensive Systems
 - Infrared Suppression
 - GPS-Hardened Mission Operator Pallet
 - Upgraded Electro Optical/Infrared (EO/IR) Sensor
- **Future:**
 - Improved Crew Situational Awareness
 - All-Weather Sensors and Radio Frequency Countermeasures



Stand Off Precision Guided Munitions

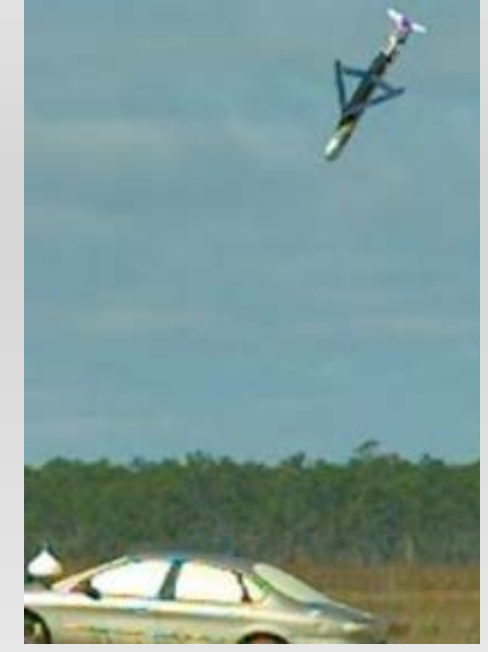
- **Capability Description:**
Procure and Develop Stand-Off Precision Guided Munitions
- **On-Going Efforts:**
 - Autonomous/Synchronized Targeting
 - Data link integration
 - Composite warheads
 - Selectable effects
- **Future:**
 - Post-Launch selectable effects
 - Next-generation guidance sensors



Griffin Missile



Small Glide Munition (SGM)



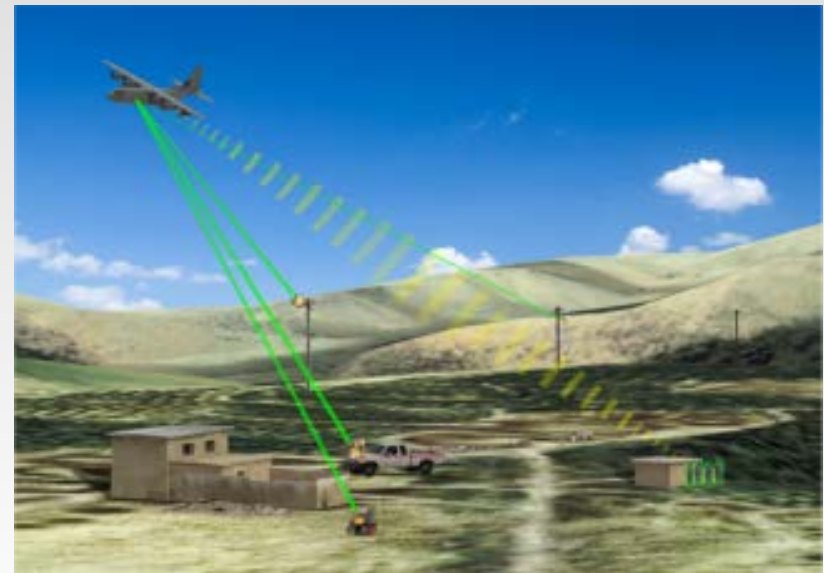
Laser Small Diameter Bomb



Common Launch Tube (CLT)
– Employs Griffin and SGM

AC-130J High Energy Laser

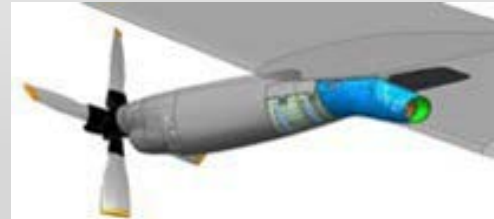
- **Objective:** Demo a Precise Airborne Low Kinetic Weapon System Capable of Ground Based Scalable Effects
- **HEL Development Approach:**
 - Perform Risk Reduction at low power levels
 - Identify “best of breed” sub-systems
 - Inform DoD on Performance of Airborne Electric High Energy Lasers



FW Tech Insertion & NSAS Programs



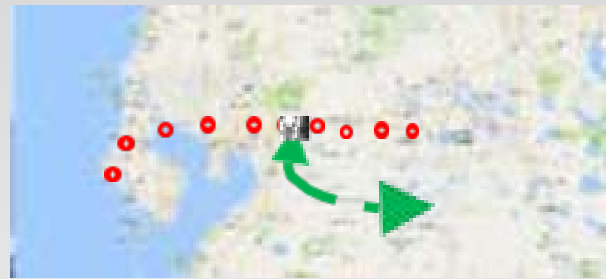
Sensors



Survivability



C-146A Wolf Hound



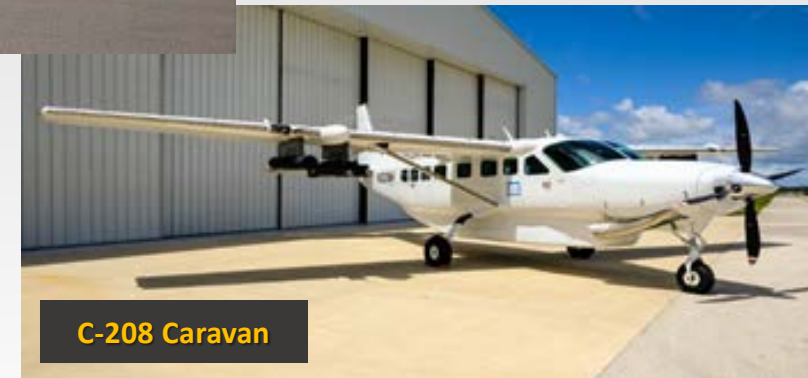
Mission Automation



C-145A Sky Truck



Kinetic Effects



C-208 Caravan

Special Applications for Contingencies

- **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



Scan Eagle UAV



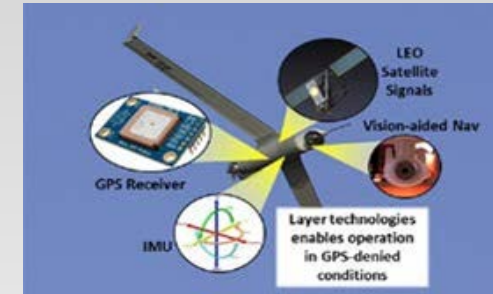
Puma UAV



Stalker UAV



Primary Mount Standardized Payload Interface



ALT PNT Solution Group 2



Anti-Jam GPS Solution Group 2



SUAS Beacons



Medium Range Puma Antenna Kit (MRP) 2x Distance

NSAv

- **Capability Description:** Non-Standard Aviation (NSAv) supports worldwide Special Operations Force Tactical/Strategic missions.
- **On-Going Efforts:** Cockpit, communication and cabin upgrades
- **Future:** Continued avionic obsolescence avoidance and compliance
- **Challenges:** Maintaining civil aviation compliance in an obsolescence environment



AvFID

- **Capability Description:** Aviation Foreign Internal Defense (AvFID) provides Combat Aviation Advisor proficiency in preparation for Partner Nation training in Special Operations Force Techniques, Tactics & Procedures (TTP)
- **On-Going Efforts:** Platform upgrades and munitions testing
- **Future:** Avionic obsolescence avoidance and TTP refinement
- **Challenges:** Maintaining civil aviation compliance in an obsolescence environment



QUESTIONS?