



SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

Fixed Wing



Col Michael Schmidt
Program Executive Officer

Fixed Wing Aircraft





Fixed Wing

The SOF Team



United States Special Operations Command (USSOCOM)



United States Army Special Operations Command (USASOC)

Naval Special Warfare Command (NAVSPECWARCOM)

Air Force Special Operations Command (AFSOC)

Marine Corps Special Operations Command (MARSOC)

Joint Special Operations Command (JSOC)

Special Operations Command Joint Capabilities (SOC-JC)

Joint Special Operations University (JSOU)



SES

FT BRAGG, NC
SPECIAL FORCES RANGERS
AVIATION
MISO
CIVIL AFFAIRS
JFK SPECIAL WARFARE CENTER

NAB CORONADO, CA
SEAL TEAMS
SPECIAL BOAT TEAMS
SEAL DELIVERY VEHICLE TEAMS
NAVAL SPECIAL WARFARE CENTER

HURLBURT AFB, FL
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AIR FORCE SPECIAL OPERATIONS SCHOOL

CAMP LEJUENE, NC
MARINE SPECIAL OPERATIONS COMPANIES
MARINE SPECIAL OPERATIONS ADVISORY GROUP
MARINE SPECIAL OPERATIONS SUPPORT GROUP
MARINE SPECIAL OPERATIONS SCHOOL

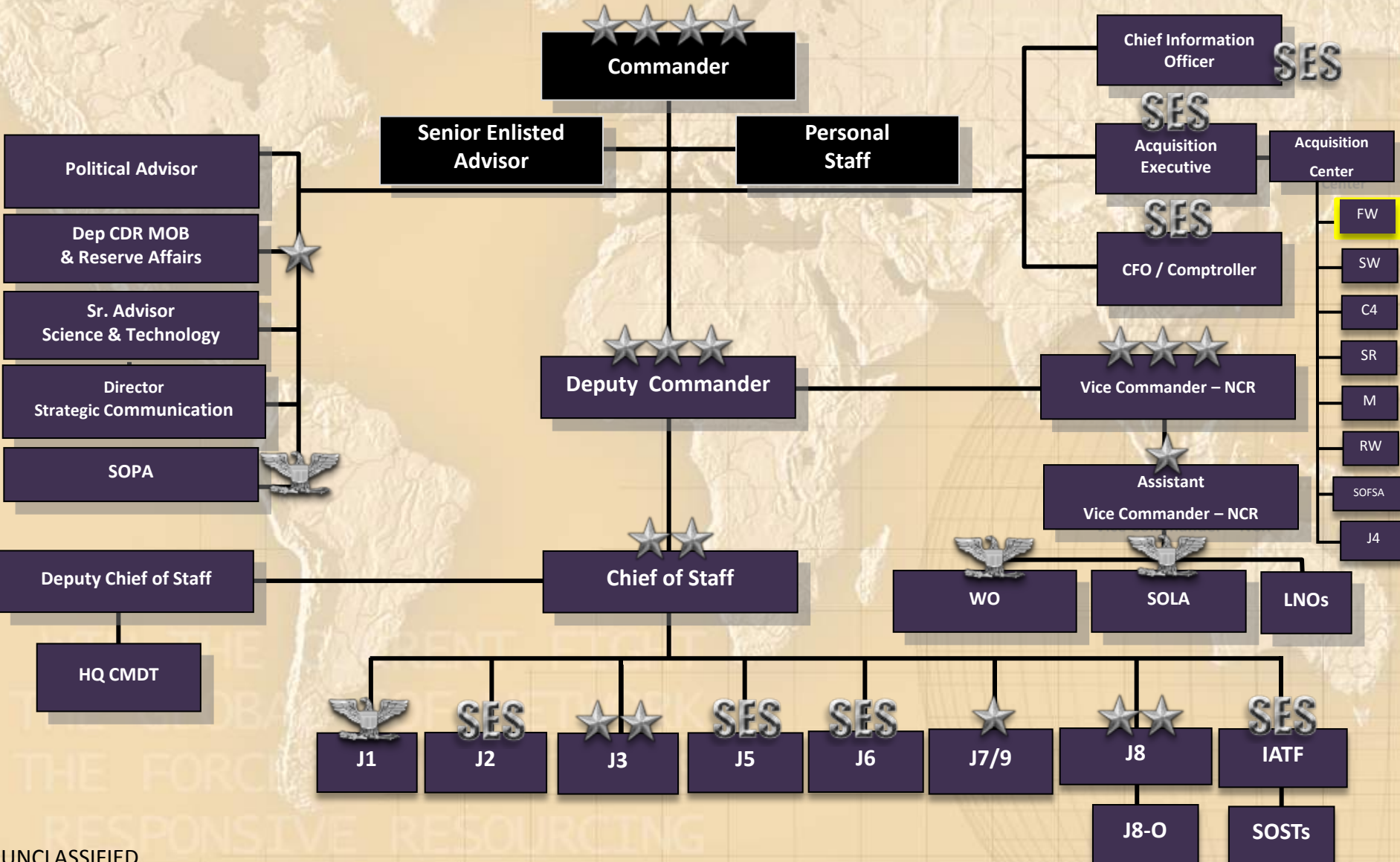
FT BRAGG, NC
JOINT STANDING DEVELOPMENT, TRAINING AND EXERCISES

SUFFOLK, VA
TRAIN CONVENTIONAL AND SOF JOINT FORCES

TAMPA, FL
SOF EDUCATION AND STAFF TRAINING



USSOCOM Headquarters





Fixed Wing

ISR - FIND



MQ-1



MQ-9



Puma



MEUAS II



JAVAMAN



Liberty



RC-26



U-28

MOBILITY- INFILTRATE



CV-22



EC-130J



Dornier 328



M-28



MC-130J
MC-130E/P/H

PC-12



STRIKE-FINISH



AC-130U
AC-130J



AC-130H



AC-130W



SOPGM

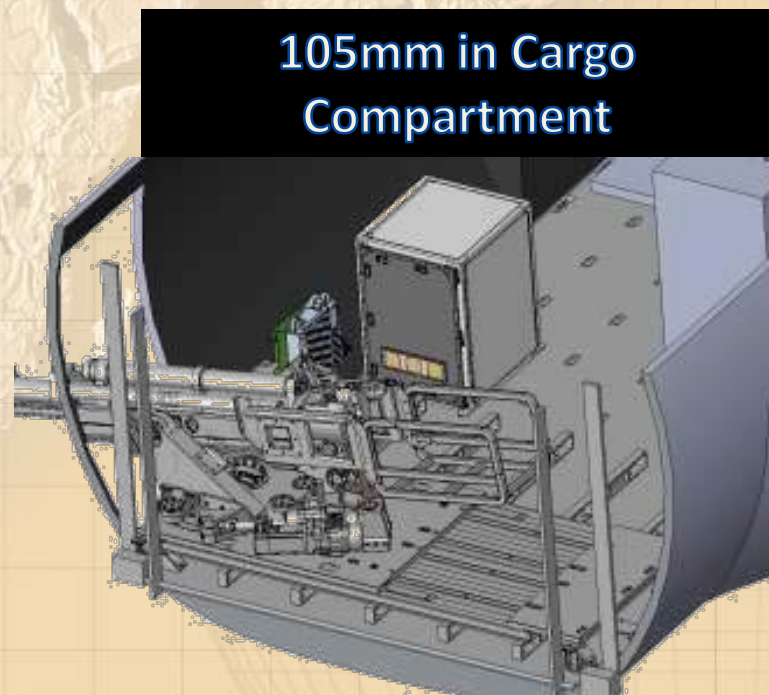
**EMERGING TECHNOLOGY
MISSION TRAINING AND PLANNING
SYSTEMS**

AFSOC Initiatives

- ◆ 105mm Demo on Stinger II
- ◆ AC-130U Sensor Upgrade
- ◆ BLOS KuSS
- ◆ Digital Close Air Support, AIECS & Specialized Automated Mission Suite Enhanced Situational Awareness on AC-130U
- ◆ C-130J Light Detection and Ranging (LIDAR) Demo
- ◆ SOPGM
 - Griffin
 - SOPGM PSP Enhancements for Laser SDB (GBU-39)
 - Hellfire
- ◆ HD FMV
- ◆ C-145A Weaponization Demo
- ◆ Lead Off Hitter Combat Evaluation
- ◆ CLS Efficiencies
- ◆ Next Generation Manned ISR
- ◆ AC/MC-130J RF Countermeasures
- ◆ MC-130J Terrain Following Radar Program
- ◆ Convert PC-12s to U-28s

Dragon Fire - 105mm Gun Demo

- ◆ Demo integrated lightweight gun design for AC-130W & AC-130J
 - Fire 105mm gun controlled by Mission Operator Pallet (MOP)
 - Weight reduction of pallet and Trainable Gun Mount (TGM)
 - Demonstrate ability to shoot any weapon from any mission console seat
- ◆ Top Level Schedule
 - Project Start: Feb 12
 - TGM assembly & SW Integration ongoing
 - Begin Flight Testing: Nov 2013
- ◆ Potential Follow-on Program/Project
 - Precision Strike Package (PSP) configuration modified w/fully integrated 105mm gun





AC-130U Sensor Upgrade

- ◆ Requirement: USSOCOM has an urgent and immediate need for color Electro - Optical (EO) and Infrared (IR) imaging at increased ranges for current missions
- ◆ Capability Solution: Install High Definition EO/IR sensors on AC-130U Aircraft. Sensors are non-developmental and can be rapidly integrated onto existing aircraft structures
- ◆ Potential Follow-On Program
 - Opportunity for a Command HD Sensor across AFSOC Fleet-to leverage supply chain and logistic support



Activity	FY13				FY14				FY15			
	1	2	3	4	1	2	3	4	1	2	3	4
<i>PHASE I and II</i>												
ATR & New Start Approved		▲										
UCA Award (NRE COTS Procurement)		▲										
PDR/CDR			▲									
UCA Definitization				▲								
Flight Testing				▲								
Group A & B Installs on A/C 2, 3 & 4												
Group A & B Installs on A/C 5, 6 & 7												
<i>PHASE III</i>												
Contract Award												
Group B Installs on A/C 8-17									▲			



AC-130U BLOS KuSS

- ◆ Center hatch mounted satellite antenna and Beyond Line of Sight (BLOS) Ku Spread Spectrum (KuSS) High Speed Terminal T1 Mod in support of AC-130H/U aircraft
- ◆ Install Ku-band hatch mounted satellite antenna and KuSS to support increased data rate requirements when using current C4ISR and enroute planning systems on AC-130H/U aircraft
- ◆ Potential Follow-On Program
 - Migrate to less costly and/or Gov't Operated High-Speed SATCOM Link



SCHEDULE:

Activity	FY13				FY14				FY15			
	1	2	3	4	1	2	3	4	1	2	3	4
KuSS Kit Contract Award			▲									
Manufacture Kits			■	■								
Procure Associated Parts			■									
Integration				■								
Flight Testing			■									
Installation					■	■						

SOF C-130 Enhanced Situational Awareness

- ◆ Networked suite of service common tactical radios, on/off-board threat receivers, and displays providing battlespace information to AC-130U/W, MC-130H/J, and EC-130J aircrew, back end PAX and ground forces
- ◆ Capabilities include:
 - Secure e-mail
 - Air/Ground datalinks
 - Threat warning
 - Full Motion Video



- ◆ Potential Follow-On Program
 - Pod-mounted solution
 - Migrate software applications to MC-130J Special Mission Processor

SCHEDULE:

Activity	FY13				FY14				FY15			
	1	2	3	4	1	2	3	4	1	2	3	4
Software development												
Manufacture MCH Kits												
MC-130H Integration												
MC-130H Flight Test												
MC-130H Installation												
Manufacture MCJ Kits												
MC-130J Integration												
MC-130J Flight Test												
MC-130J Installation												

Special Airborne Mission Installation and Response (SABIR) System

- ◆ Mounting system consisting of a modified paratroop door and articulating strut for quick roll-on/no-scar aircraft configuration
- ◆ Attributes:
 - 400 lb payload capability
 - 2-person install/de-install
 - Portability among C-130s
 - NATO Standard BRU-12 payload mounting interface
- ◆ Potential Follow-On Program
 - Multi-mission payload pod
 - Carry-on operator console

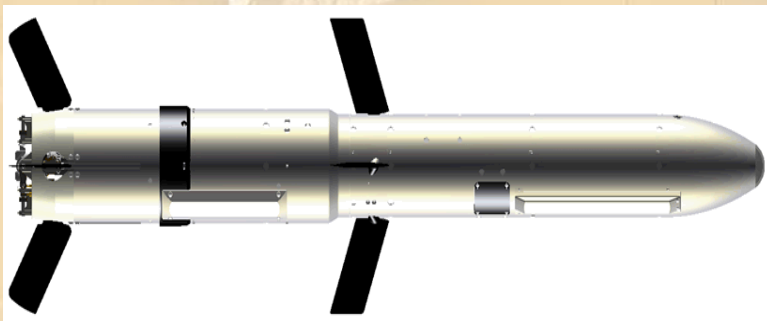


SCHEDULE:

Activity	FY15				FY16				FY17			
	1	2	3	4	1	2	3	4	1	2	3	4
Payload development and test	[Bar]				[Bar]							
Procure/manf SABIR for flight test	[Bar]											
Integration					[Bar]							
Flight Test									[Bar]			
Payload production									[Bar]			
SABIR production									[Bar]			

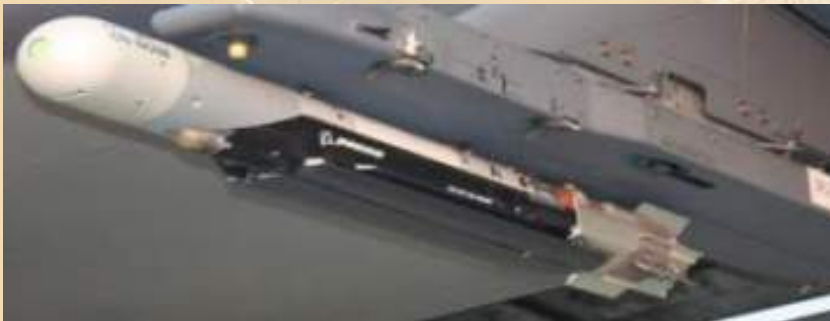
SOPGM: Griffin

- ◆ 38-lb Munition Fully Integrated into SOF Battle Management System and Common Launch Tube
- ◆ Built from Off-the-Shelf Components
- ◆ Small Signature on Launch
- ◆ Contractor-Developed Improvements Rapidly Fielded
- ◆ Block I → Improved CLT → Block II → Block III
- ◆ Reliability/Ops Effectiveness Continue to Increase



SOPGM: AC-130W Small Diameter Bomb (SDB)/Laser SDB

- ◆ Integrated GBU-39 (SDB) on Stinger II AC-130W
 - 250-lb Low Collateral Damage Weapon with Significant Standoff Range
 - Over 12,000 SDBs in Air Force Inventory
 - Fielded within 12 Months of Receiving Direction to Proceed
 - 1st Used in Combat Nov 12



- ◆ Laser SDB Gives Existing Munition Ability to Strike Moving Targets
 - Integrate SDB with Laser Joint Direct Attack Munition Seeker
 - Phased Approach to Rapidly Field
 - Low Technical Risk; IOC Dec 13

SOPGM: Hellfire

- ◆ 100-lb Class Weapon with Semi-Active Laser Homing
- ◆ Able to Defeat Broad Range of Targets Both Static and Moving
- ◆ Successfully Demonstrated Launch of Hellfire AGM114P-2 from AC-130W Stinger II Platform – Nov 12
- ◆ Prioritizing Potential Funding for Permanent Modification



High Definition Full Motion Video (HD FMV)

- ◆ Operational Employment of Prototype High Definition Electro-Optical (EO) Sensor Demonstrated Game-Changing Capability
- ◆ Resulted in Urgent and Immediate for HD (720p Resolution or Better) EO/Infrared (IR) Capability



Way Ahead:

- ◆ Install HD EO/IR Sensors on SOCOM MQ-1, MQ-9, & U-28 Platforms
- ◆ Increase Processing, Exploitation, & Disseminations (PED) Capability
- ◆ Ensure Communications Architecture in Place to Support the Use and PED of HD FMV to Special Operation Force Users

C-145A Side Firing Weapon System Demo

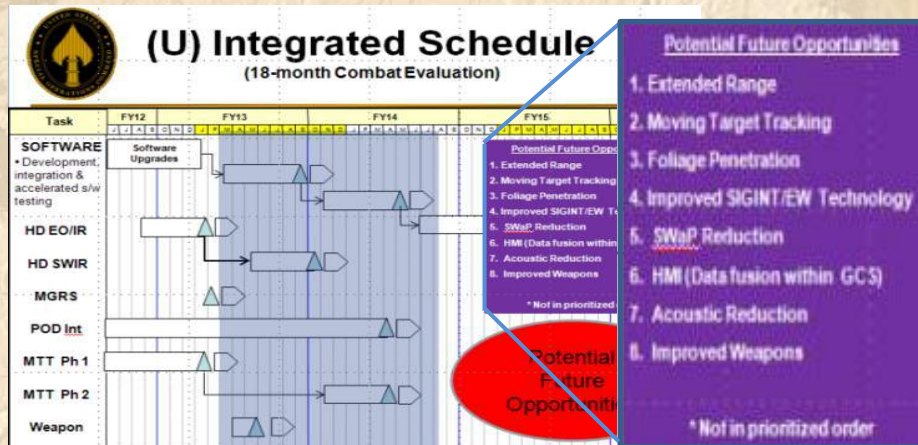
- ◆ Description: Enables Partner Nation aircrew training on TTPs associated with providing capabilities such as Convoy Escort to ground forces
- ◆ Top Level Schedule:
 - Demo ongoing



GAU-18

MQ-9 “Lead-Off Hitter” Concept

- ◆ Need to reduce find, fix, finish timelines and provide *first pass lethality* ISO national objectives
- ◆ Desired Endstate to prove RPA enterprise ability to incorporate emerging technology faster
- ◆ Test bed capability to rapidly develop/test/field SOF upgrades, with dedicated crews for TTP and training improvements



SOF Assets Must be Responsive to SOF Requirements

CLS Efficiencies

- ◆ Find potential Contract Logistics Support (CLS) efficiencies across the NSAv and AvFID programs. NSAv CLS efficiencies is one of the Fixed Wing "Acceptable Risk" areas in USSOCOM CDR's CPG. The CDR also advocates fewer MOBs and a "hub and spoke" CONOP for supporting AORs
- ◆ Top Level Schedule: AvFID Blue Suit maintenance and Contractor Operated Main Base Supply; FY14 - FY15
- ◆ Future: Look at options for transitioning other ISR/NSAS maintenance to combined Active Duty and Reserve Blue suit Mx with COMBS and FSR support



Next Generation Manned ISR

- ◆ As USSOCOM focus areas shift away from Afghanistan, manned ISR requirements will change and evolve potentially to include more sensors, increased ranges and longer loiter times than what the current fleets can provide
- ◆ Future budgeted funds for RDT&E and PROC for this program are TBD
- ◆ The USSOCOM ISR Roadmap once approved, will shape this program in the coming months



MC-130J Terrain Following Radar Program

- ◆ Provides low-level navigation capabilities for MC-130J Commando II mobility aircraft
- ◆ Development contract awarded 2012
 - Based on AN/APN-241 Terrain Following Radar
- ◆ MC-130J data collection activities accomplished 2012/2013
- ◆ Flight test planned to begin early next year

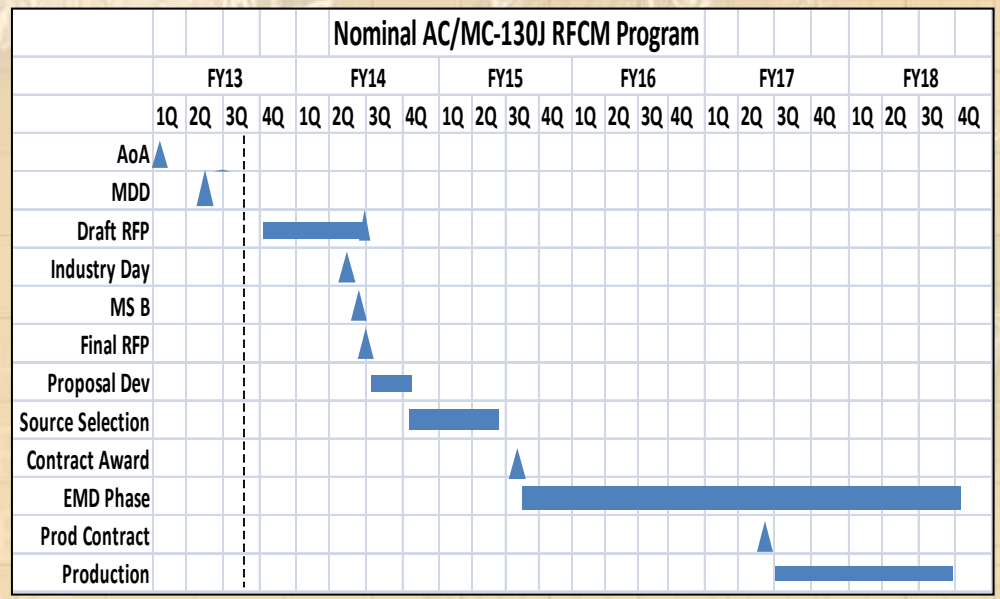




AC/MC-130J Radio Frequency Countermeasure Program



- ◆ RF Countermeasures system required for Commando II to meet survivability requirements
- ◆ System will leverage use of Special Mission Processor, Increment 3 AC/MC-130J
- ◆ Acquisition Strategy to focus on total system performance using mature (TRL 7+) components
 - 2012 AoA shows multiple vendors technically capable
- ◆ Requirements as defined in Commando II CDD delivered to Joint Staff for JROC approval



Convert PC-12s to U-28s

- ◆ Modify NSAV PC-12 aircraft to the fully missionized U-28 configuration and one (1) trainer
- ◆ Top Level Schedule: 2QFY13 – 1QFY15 Convert PC-12 to U-28



AFSOC Initiatives

- ◆ 105mm Demo on Stinger II
- ◆ AC-130U Sensor Upgrade
- ◆ **Enable rapid evaluation and risk reduction for potential future program initiatives**
- ◆ Digital Close Air Support, AIFCS & Specialized Automated Mission Suite
- ◆ Enhanced Situational Awareness on AC-130U
- ◆ **Provides a venue for continued dialogue to ensure AFSOC priorities are addressed**
- ◆ SOPGM
 - Griffin
 - SOPGM PSP Enhancements for Laser SDB (GBU-39)
 - Hellfire
- ◆ HD FMV
- ◆ C-145A Weaponization Demo
- ◆ Next Generation Manned ISR
- ◆ AC/MC-130J RF Countermeasures
- ◆ MC-130J Terrain Following Radar Program
- ◆ C-130J-28s