# **Special Operations Forces**



# Industry Conference David Breede James Griffin

Program Executive Officer Fixed Wing Aircraft

# FIXED WING







# MC-130J Program



### Description

- Provides low-level infil/exfil and resupply of SOF teams into hostile or denied territory. Provides aerial refueling of SOF fixed-wing and rotary-wing aircraft.
- MC-130J Program recaps 23 MC-130P Combat Shadow, 14 MC-130E Talon I, and 20 MC-130H Talon II aircraft.
- Requirement: HC/MC-130J CPD, Aug 09
- ACAT: HC/MC-130J Core IC (AF); Inc 3 III; MCTF III
- IOC: 2012 (MC-130J Inc 1)

### Program Status

- HC/MC-130J OT&E underway (Blk 6.5/Inc 1 config)
- First 7 MC-130Js delivered (5 Cannon, 2 Kirtland)
  - 3 more deliveries in FY12; 26 of 57 aircraft on contract
- VSD helo qual test, CV-22 surrogate test Apr-May 12
- Inc 3 Special Mission Processor contract award Mar 11
- MCTF contract awarded Apr 12
- NexGen LAIRCM contract award Aug 12

### **Technology Upgrades/Current Efforts**

- Defensive Systems (RFCM)
- Airborne Mission Networking
  - Enhanced Situational Awareness
- CNS/ATM for Legacy Aircraft
- Digital Solo for EC-130J

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# **MC-130J Current Program of Record**

# AC/MC-130J Increments 1-3

- Increments 1-2 add HSLLADS, added power, and other low cost upgrades
- Inc 3 adds Special Mission Processor to allow addition of SOF unique capabilities without having to go back through aircraft OFP
- MC-130J Common TF/TA Radar Program
  - Adds LPI/LPD TF/TA capability to MC-130J by FY17
  - Modifies current AN/APQ-241 radar

# **NexGen LAIRCM**

- Upgrades IR countermeasures to NexGen Missile Warning System (MWS) to provide higher performance warning and better false alarm rejection, and improved reliability
  - Flush mount turret; 2 color IR MWS; Guardian Laser Tracker Assembly (GLTA)



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# MC-130J Future Initiatives (Commando II)

### Integrated Defensive Countermeasures System (Deny, Degrade, and Disrupt)

- Includes capabilities to detect and counter Laser/RF/EO/IR threats
- Provides new robust RFCM suite AoA underway; Jul 12 completion
- Integrates with NexGen LAIRCM, IR MWS (AAR-47), RWR (ALR-56M), chaff/flare system (ALE-47)
- Airborne Mission Networking (Detect, Identify, Locate, and Avoid)
  - Aircraft Enhanced Situational Awareness provides hostile location, intent, and current air/surface defense postures to support threat options and targeting
  - Provides Data correlation, fusion, and display of all pre-mission & on/off-board source data
  - Provides threat response options including auto route re-planning, immediate maneuver cues, countermeasure management

### **Precision Airdrop**

- Allows the precision delivery (less than 300m CEP) of personnel & equipment to remote locations when in a GPS denied mode of operation
- Shall be able to airdrop all SOF standard airdrop loads currently supported by the MC-130H
- Capable of delivering High Speed Container Delivery System (HSCDS) bundles
- The combination of low-altitude delivery (250' AGL) and high-velocity (250 KIAS) chutes significantly reduces drift effect on the bundles, further improving accuracy

# **AC-130J PSP Program**

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### **Precision Strike Package Capabilities**

- Dual Electro-Optical Infrared Sensors
- Precision Guided Missiles
- 30mm Cannon
- Networked Battle Management System
- Enhanced Situational Awareness
- Enhanced Communications

### **Program Description**

- Recapitalize the AC-130H fleet with 16 AC-130J aircraft integrated with the PSP
- MDA: USSOCOM Acquisition Executive
- PEO: PEO-FW
- ACAT Level: III
- CDD: 3 Jul 08 (AC-XX Gunship-Lite)
- IOC: CY16 (4 a/c 3 ship UTC & 1 PTAI)
- Technical/Cost Risk: Low
- Schedule Risk: Low/Moderate

### **Program Strategy**

- Integrate Dragon Spear Precision Strike Package (PSP) on MC-130J
  - Modify production aircraft with proven strike package
  - Leverage NRE & testing already accomplished
  - Avoid duplication of costs and effort
- Implement long-term sustainment design considerations and other lessons-learned
- Manage spiral development to enhance PSP capabilities



## MC-130J

- LMA owns A/C data rights
   Primary integration risk drivers
   New platform
  - Government does not own
  - C-130J technical data

Program Integrator PEO-FW



AC-130J

# MC-130W Dragon Spear

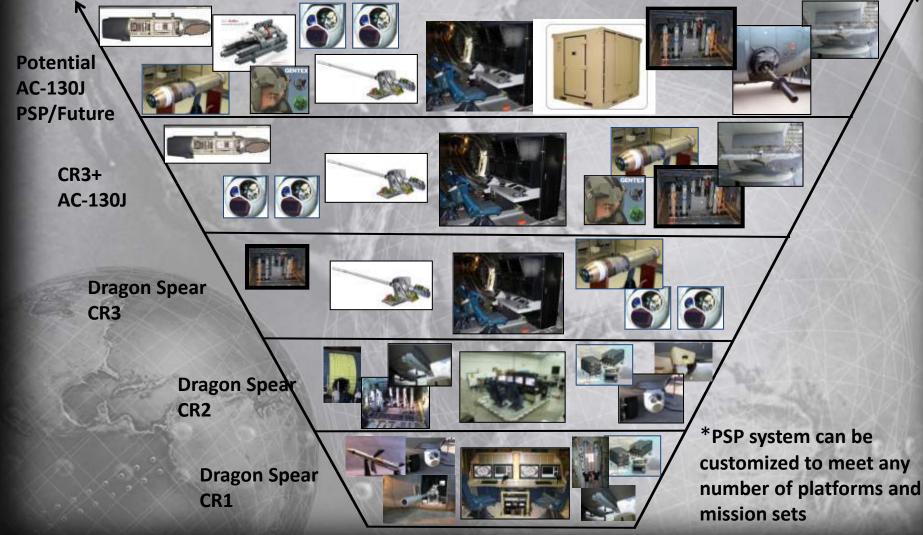


- Leverage Dragon Spear
   Proven Technology
   Cost Avoidance NRE
- Primary PSP risk driver
   > Integration on new platform
- Gov will own all platform integration data rights
- Gov will retain the ability to compete follow on efforts





# **Precision Strike Package Evolution**







# **PSP Near-Term Path Forward**

- FY12: Risk reduction, systems integration, and PSP acquisition
  - Procure and integrate PSP subsystems for initial AC-130J integration
  - > Capability demonstrations and risk reduction with AC-130W for potential future integration
- 1st donor MC-130J for AC-130J conversion scheduled for delivery in Q1 FY13
  - Install the Dragon Spear PSP with near-term spiral upgrades
  - DT&E and OA will span FY13 FY14
- Optimize PSP through a parallel development effort
  - Long-term installation & sustainment considerations:
    - Reliability, maintainability
  - User priorities:
    - Redundancies, task loading, user interface, sensors
  - > Opportunities for technology insertion into AC-130J design during EMD phase
    - Early requirements definition enables near-term integration