Special Operations Forces

Industry Conference

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Fixed Wing Aircraft

FIXED WING

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## 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
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)
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

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

Precision Strike Package Capabilities
- Dual Electro-Optical Infrared Sensors
- Precision Guided Missiles
- 30mm Cannon
- Networked Battle Management System
- Enhanced Situational Awareness
- Enhanced Communications
MC-130J

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

AC-130J

- Gov will own all platform integration data rights
- Gov will retain the ability to compete follow on efforts

MC-130W

- Leverage Dragon Spear
  - Proven Technology
  - Cost Avoidance - NRE
- Primary PSP risk driver
  - Integration on new platform

Program Integrator

PEO-FW
*PSP system can be customized to meet any number of platforms and mission sets.*
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