# MAGTF COMMAND AND CONTROL, WEAPONS AND SENSORS DEVELOPMENT AND INTEGRATION (MC2I)

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**Director, Product Group 11**

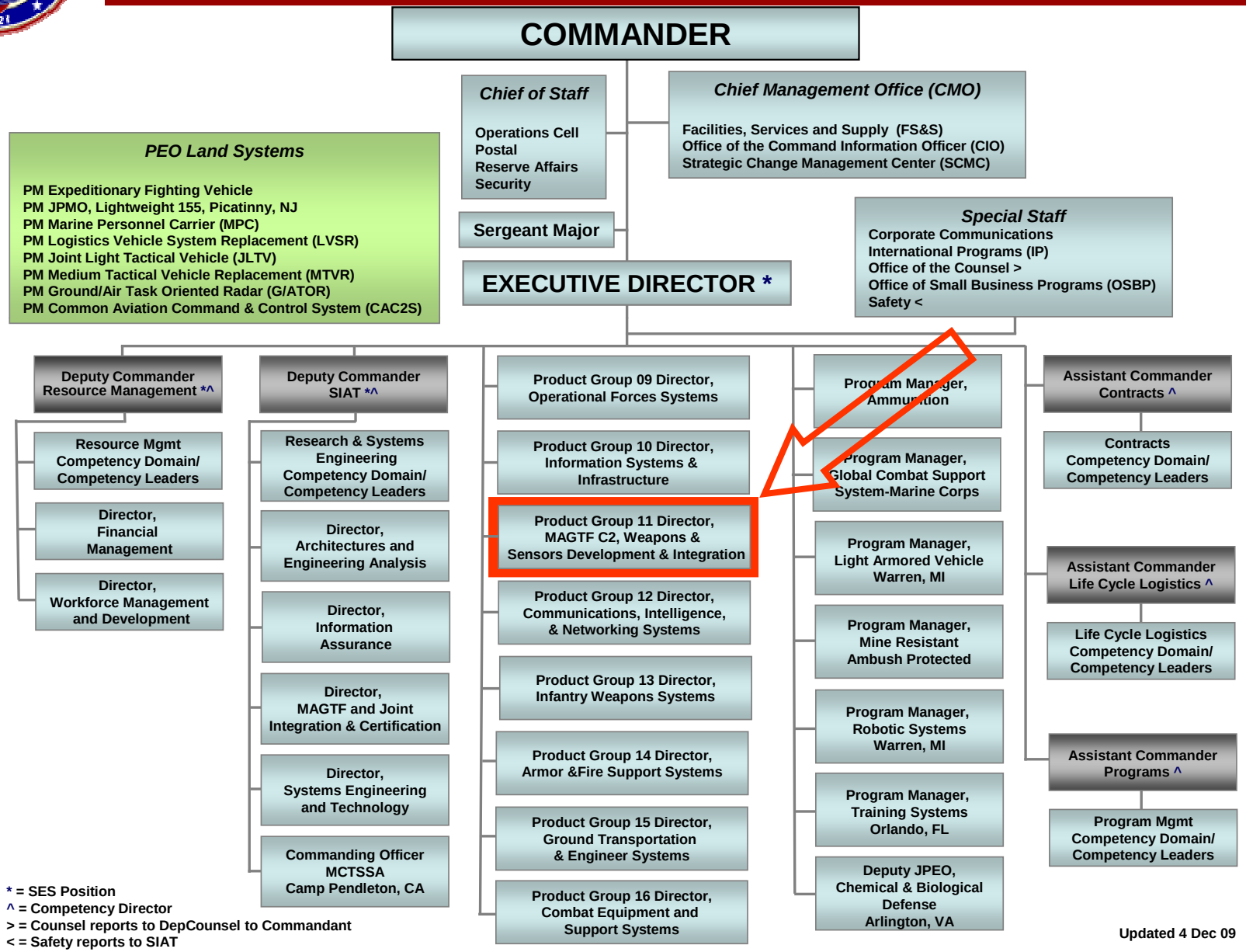
**Briefing to AFCEA**

**26 February 2010**

# MC2I Mission

## We Acquire and Sustain Radar, Command and Control, and Air Defense Weapons Systems for the Marine Corps Air-Ground Task Force Kill Chain

# Marine Corps Systems Command




* = SES Position
^ = Competency Director
> = Counsel reports to DepCounsel to Commandant
< = Safety reports to SIAT

Updated 4 Dec 09

# MAGTF C2, Weapons and Sensors Development and Integration (PG11)

**63 Total Projects**
**$3.3B FY09-15**

- **PGD**
  - **MC2I Systems Integration**
  - **Air Defense Weapons Systems:**
    - CTN (III)
    - JSS (III-AF)
    - MACCS
      - MACCS-S FoS (tbd)
        - ADCP
        - BLOS
        - CDLS
        - CIS
        - DASC-AS
        - SAAWF
        - TAOM
      - MTAOM (AAP)
    - GBAD-T
      - A-MANPADS (AAP)
      - A-MANPADS Incr I (AAP)
      - A-MANPADS Incr II (NA)
      - LAAD Sustainment
    - Unmanned Systems
      - MUAS (WASP) (UUNS-N)
      - SURSS (Raven B) (IVT-N)
      - ISR Services (UUNS)
      - STUAS (tbd) (III-N)
      - Video Terminals
        - ROVER (UUNS)
        - Video Scout (AAP)
        - RVVT (NA)
  - **MAGTF C2 Systems:**
    - AFATDS (II-A)
      - BUCS
      - MTS
    - BFSA
      - D-DACT (IVT)
        - C2CE
      - BFT FoS (tbd)
        - BFT
        - BFT II
        - JCR
        - KGV-72
        - MRC
      - JBC-P (NA-A)
    - BTID/JCTI-G (SI-A)
    - JCIMS (UUNS)
    - COC
      - COC CS II-IV (III)
        - OEF UUNS (UUNS)
        - MAGTF C2 COC Model G
      - M2C2 (MRAP) (UUNS)
    - JTCW (IVT)
    - TLDHS (III)
    - GCCS (IAM-J)
    - TCO (IVT)
  - **Radar Systems:**
    - Long Range Radar
      - AN/TPS-59 (IVT)
        - (V)3 Incr I
        - (V)3 Incr II
      - 3DELRR (SI-AF)
    - FMS (7 Cases)
    - FTAS
      - AN/TPQ-46 (III)
      - LCMR (AAP)
      - TPS (AAP)

**Legend**
- C2ID
- FMID
- FPID

• NA = Not Assigned

**Technology Initiatives**
- Battlefield Sensor Netting
- BMS-MC / DBMA
- COP Fusion Tools / SIE
- Corporal
- MOSS
- M2C2
- TEDS

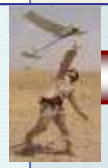


12/18/2009

# PG 11 Portfolio Characteristics

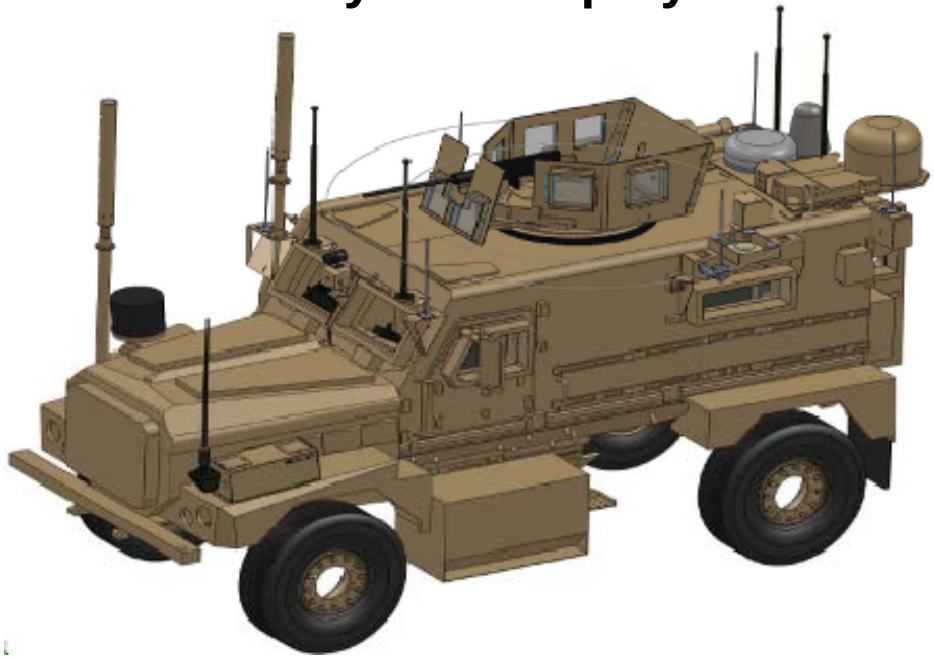
- **Complexity of C2 Programs**
  - **Multiple Program, Technical, and Organizational Interdependencies**
  - **Significant Integration Effort**
  - **Interoperability and IA Required for ~80% of PG 11 Programs**
  - **Software Intensive**
    - **Significant Maintenance Effort**
- **Joint/Other Service Programs**
  - **~50% of PG 11 Programs**
  - **Significant Interaction and Partnering**
  - **SOA Mandates**

# MC2I FYDP Investments

| | FY10 | FY11 | FY12 | FY13 | FY14 | FY15 |
|---|---|---|---|---|---|---|
| **Radar Systems** | TPS-59 DPG Refresh | |  | | Exc-Rcvr, Mode 5, Pwr Cab Refresh | |
| |   | FTAS – LCMR, TPS, TPQ-46 Fielding & Sustainment | | | | |
| **MAGTF C2 Systems** | COC Model F/G | |  | COC CAPSET I | | C2 Airborne |
| |  | JTCW/GCCS/TCO | |  | JC2 | |
| | MRC |  | BFT – JCR |  | JBC-P  | JCTI  |
| **Air Defense Weapons Systems** |  | Raven B SURSS | |  | Group 3 UAS | |
| |  | A-MANPADS INC 1 | | |  Weapon Replacement | |
| |  | CTN Fielding & Sustainment | | | |  |

# Mobile Modular Command and Control

## First System Deployed Six Months After Receipt of Funding



- High bandwidth on-the-move SATCOM (Ku-band) for extremely robust digital data and Voice-Over-IP communications
- Staff kits: Twelve CF19 Toughbook laptops with full COC tactical software load; connected to M2C2 vehicle and each other by secure wireless LAN (SECNET 11), minimum 500 meter range; TOCNET intercom provides full access to all radios and freqs.
- Full suite of tactical radios: PRC-117F, EPLRS, PRC-150, PRC-152
- Three network enclaves: SIPR, NIPR and Coalition/Mission Secret
- The M2C2 Cat 1 Cougar vehicle retains Blue Force Tracker and counter-IED in its suite of equipment.
- Twelve months of sustainment in-theater including field engineers, spare and repair parts, training, help desk, documentation.
- Systems two and three will be delivered to theater in August 2010.

# Mobile Tactical Air Operations Module
# AN/TSQ-269

- Description: The MTAOM provides an expeditionary transportable Air Command and Control system. The MTAOM is based on the TAOM equipment. It is housed in a S-788/G shelter mounted on a M1152 A1 High Mobility Multipurpose Wheeled Vehicle (HMMWV). Power and ECU are provided by the Integrated Trailer ECU and Generator (ITEG) system. When connected with radar and the AN/MRQ-12(V)4 Communication Interface System the MTAOM provides the capabilities to operate as an Early Warning/Control center.
- Tactical Data Link Capabilities:
  - TDL A
  - TDL B
  - TDL J
  - ATDL-1
  - NATO Link 1
  - JREAP A
  - JREAP B
  - JREAP C
- Communication Assets:
  - 2 AN/VRC-103 radios
  - 1 AN/GRC-171(V)B4 radio
  - 1 AN/USQ-140(V)11 MIDS radio
  - 1 1000Kw HF radio

- Fielding: Starts 4th quarter FY10

# Family of Target Acquisition Systems

- **AN/TPQ-46 Firefinder Radar**
  - Upgraded Armored Vehicles (M1152A1 w B2 and M1151A1 w B1)
  - Procure and field additional systems to meet CMC 202k AAO
  - Procure and field additional systems to meet Reset the Force Initiative
  - EPLRS Radio capability (Dual digital network)
  - Procured Maintenance Tactical Mobile Forward 7187 to enhance RAM
- **AN/TPQ-48 Lightweight Counter Mortar Radar**
  - Plan, Provision, and Source Equipment Density Lists (EDL) for OIF and OEF (32 systems)
  - Pursuing V2 upgrades that enhance performance
  - Provided in-country and on site training to deploying units
- **AN/TSQ-267 Target Processing Set**
  - Standardize Target Processing Center (TPC) equipment layout
  - Provides a platform for the standardization of TPC Tactics, Techniques, and Procedures (TTPs)

# Questions?