

**P**ORTFOLIO  
**A**CQUISITION  
**E**XECUTIVE  
**M**ARINE  
**C**CORPS



**Program Manager  
Ground Based  
Air Defense**

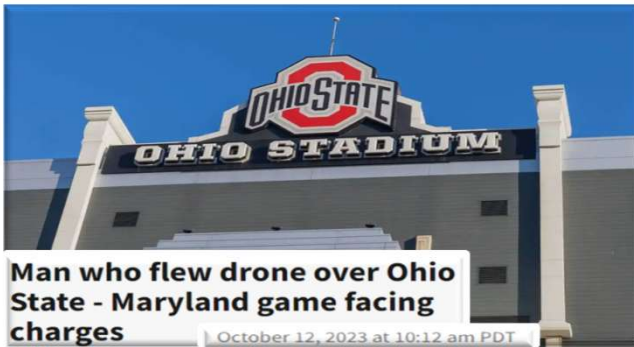
**Colonel Andrew J. Konicki  
Program Manager**



# THE THREAT IS NOW...INDISCRIMINATE, HIGHLY PROLIFIC!

BBC

Combat drones: We are in a new era of warfare - here's why  
4 February 2022



## Ukraine's Operation Spider's Web Shows Future of Drone Warfare

June 3, 2025  
COUNCIL ON FOREIGN RELATIONS



## Houthi Lethal Underwater Drones Adds New Threat to Red Sea

FEBRUARY 19, 2024 12:15 PM

USNI News

## Drone Swarms Pose New Threat to US Bases, Official Says

May 8, 2024

AIRSPACE FORCES MAGAZINE

## Israeli Commandos Attacked Iranian Air Defenses With Drones From Inside The Country: Report

JUN 13, 2025 6:27 AM EDT

## Yemen's Houthi rebels use missiles, drones to attack 2 more ships in Red Sea

Houthis have targeted more than 70 ships, sinking 2 of them and killing 4 since November

Associated Press

Published July 16, 2024 8:48am EDT

## Mysterious Drones Swarmed Langley AFB For Weeks

The unidentified drones were such an issue that assets were called in from around the government, including a NASA WB-57 high-altitude jet.



# PM GBAD – USMC CENTER OF EXCELLENCE FOR COUNTER AIR CAPABILITIES

## Future Weapons Systems (FWS)

### Marine Air Defense Integrated System (MADIS)

- ▲ ACAT II, AAO: 131
- ▲ MDA: PEO LS



### Light-MADIS (L-MADIS)

- ▲ JUONs: 12 Fielded
- ▲ PoR: ACAT IV(T), AAO: 21
- ▲ MDM: PM GBAD



## Fixed Site

### Installation-Counter small Unmanned Aircraft Systems (I-CsUAS) Urgent Statement of Need (USON)

- ▲ Five USON sites in operation, sixth site on-line 2QFY25



### I-CsUAS Program of Record (PoR) System

- ▲ ACAT III, AAO: 34 Sites
- ▲ MDA: PM GBAD

### Ground-Based Operational Surveillance System (G-BOSS)

- ▲ Sustainment
- ▲ Shelter: 4 | Heavy: 4 | Medium: 25 | Light: 29



### Urgent Need Capabilities

Home Alone      Dismounted CsUAS

- ▲ Urgent Capability Acquisition
- ▲ Emerging USON

## MRIC & A-MANPADS

### Medium Range Intercept Capability (MRIC)

- ▲ Middle Tier of Acquisition (MTA)
- ▲ AAO: 48 Launchers
- ▲ MDA: PEO LS



### Advanced Man-Portable Air Defense System (A-MANPADS)

- ▲ Sustainment
- ▲ Fire Unit Veh: 143/Sect Leader Veh: 13
- ▲ Ukraine Stinger Replenishment effort



## ACQUISITION APPROACH

High TRL (6+ and greater)

Ability to integrate and function with multiple technologies (i.e. USMC C2, active/passive sensors, kinetic/non-kinetic effects)

Reduce cognitive load of user – AI/ML enabled, one screen across the system

Ability to operate and sustain in communications degraded/denied environment

Fielding everything across the portfolio – continual improvements and evolution of capabilities.

# GBAD – FUTURE TECHNOLOGY NEEDS

**BLUF:** Today's increasingly congested and contested airspace requires the acceleration of AI/ML tools to support C2/BM and new technology to optimize detection, identification and defeat of UAS, RW and FW platforms.

## Significant gaps include:

- ▲ Battle management/C2 at the micro-level/edge
- ▲ Inclusion of GCE networks and organic CUAS capabilities into traditional ACE-centric layered air defense & networks
- ▲ Inability to integrate and incorporate a growing number of DoW and industry C2/BM interfaces
- ▲ Utilization of passive sensor contributions to joint data networks
- ▲ Effector and sensor integration into unmanned & autonomous systems
- ▲ Limited magazine depth, cost per shot, and contested logistics result in mismatched threat to kinetic effector ratio

## Today's GBAD Marine must:

- ▲ Conduct localized C2/BM functions historically associated with higher echelons that have more resources
- ▲ ID friendly/enemy threats at a scale and pace required for high end warfare
- ▲ Understand and employ an increasing number of networks and link functions
- ▲ Employ multiple effectors - both kinetic and non-kinetic
- ▲ Employ and operate Radars

BL: Not enough manpower and training resources to accomplish additive tasks – AI/ML tools necessary to perform functions effectively at capacity and scale

## Acquisition Gaps:

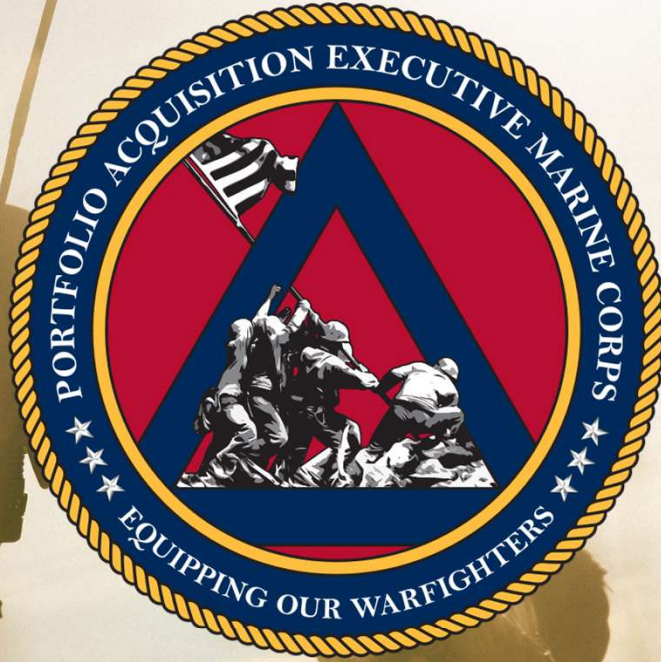
1. **C2/BM:** SW that reduces operator workload and enhances SA in a crowded battle space
  - Automated Track Recognition (ATR), track/sensor fusion, EID, external data ISO threat classification
  - Technology enabling BLOS threat classification ISO maximum range engagements
  - Need to synch service level C2 (CAC2S, Lattice) with tactical C2 (MANGL, TAK)
2. **Networks & Interfaces:** Edge integration and synchronization with information from inter-Service, Inter-Agency, GCE and industry systems
3. **Sensors:** Passive sensors capable of contributing to joint data networks and providing situational awareness in EMI conditions
4. **Effectors:** Development of autonomous ground and airborne systems capable of employing effectors

\* MOSA still requires additional excessive time and money for integration. Sensors/effectors to join a network without years of testing and millions of dollars

**QUESTIONS?**



EQUIPPING OUR



WARFIGHTERS