



USCG Office of Aviation Forces  
Unmanned Aircraft Systems (UAS)

# Coast Guard UAS; Programs and Strategy

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USCG Office of Aviation Forces  
UAS Division (CG-7114)  
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## Long-Range UAS

- Wide area surveillance for the Area Commander
- Beyond Radio Line of Sight C2 link (SATCOM)
- 24 hour endurance



5000'

## Medium-Range UAS

- On demand support for the tactical commander
- Beyond Visual Line of Sight C2 link (Radio)
- 12+ hour endurance



400'

## Short-Range UAS

- Personal, portable system
- Visual Line of Sight C2 link (Radio/Wifi)
- 20-30 minute endurance



# Long-Range UAS (LR-UAS) – Joint



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# LR-UAS Program Status



## Joint Program Office (JPO)

- All aircraft and equipment owned by CBP
- Joint MQ-9 operations with CBP: 4 USCG Pilots / 9 USCG Sensor Operators (SO)
- CG Personnel stationed with CBP at National Air Security Operations Center (NASOC) in San Angelo, TX
- CG aircrew serve as:
  - Pilots, Sensor Operators, Instructors
- **Mission:** CONUS land border; Maritime border
- **Challenges**
  - Cost prohibitive for CG-only program
  - Airspace/ see and avoid



# Medium Range-UAS (MR-UAS)



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# MR-UAS Program Status



## ➤ UAS on National Security Cutters (NSC)

- Only current Coast Guard UAS program of record
- 6 NSCs operational by end of FY20, entire fleet by FY21
- Contractor owned and operated
- 12 hour endurance per day
- Ground Control Station (GCS) and live video monitoring is available in ship's Combat Information Center
- Sensor Data not currently sent off NSC to other assets

## ➤ Future:

- Expand cutter-based UAS to Offshore Patrol Cutters and Polar Security Cutters
- Develop Land-Based UAS program



# MR-UAS Challenges



- **Sensors**
- **Cross platform data sharing**
- **Airspace, Detect and Avoid, Beyond Visual Line of Sight (BVLOS)**
- **Footprint**



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# Short-Range UAS (SR-UAS)



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# SR-UAS Program



## ➤ Current:

- Commercial off-the-shelf (\$1-2K)
- 24 Units Operating
- 122 Remote Pilots trained
- Fleet-wide implementation on hold

## ➤ Future:

- DHS prohibition on foreign made UAS
- DIU/DoD has released “Blue” UAS
- CG is committed to transitioning 100% to “Blue” UAS
- New systems range from \$7k - \$25k
- Identifying fleet replacement and long term sustainment strategy



# SR-UAS: Moving Forward



## Full Coast Guard Fleet Implementation:

- **Authorized for all 11 Statutory Missions:**
  - ✓ **Major Cutters**
  - ✓ **Patrol Boats/Ice Breakers**
  - ✓ **Civil Engineering Units**
  - ✓ **Sectors**
  - ✓ **Boat Stations**
  - ✓ **Public Affairs Detachments**
  - ✓ **MFPU/PSU/MLEA**
- **Schoolhouse to provide initial training and inventory management**
- **Potentially Thousands of Remote Pilots performing every Coast Guard Mission**





# Questions?



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