

USCG Office of Aviation Forces UAS Division (CG-7114) October 2020

# **FL250 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 **Short-Range UAS** Personal, portable system Visual Line of Sight C2 link (Radio/Wifi) 20-30 minute endurance

# Long-Range UAS (LR-UAS) – Joint











### **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)





### **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

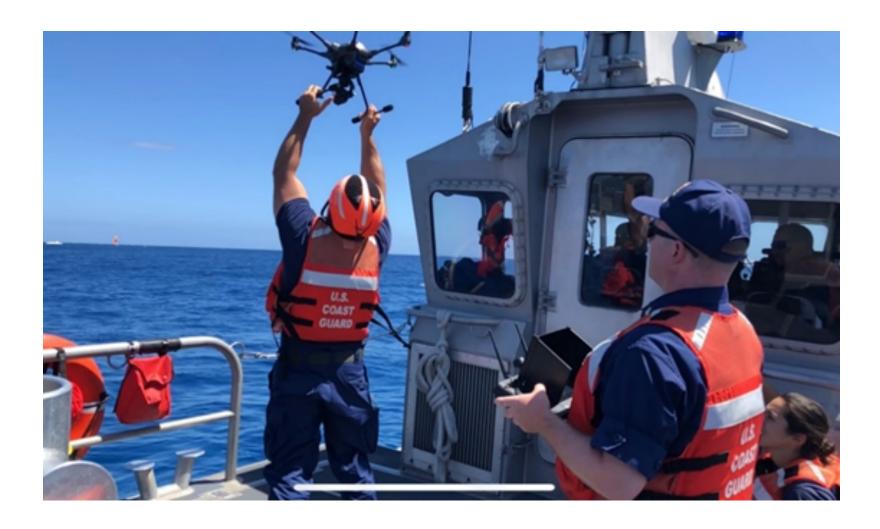
(BVLOS)

**Footprint** 



# **Short-Range UAS (SR-UAS)**





### **SR-UAS Program**

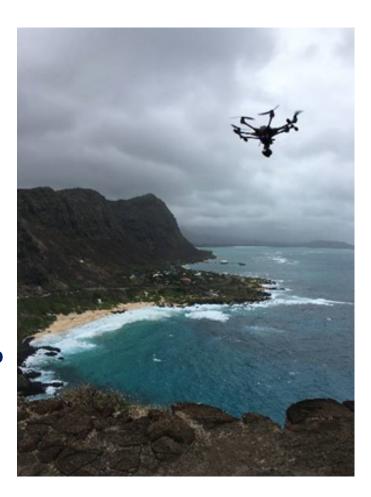


#### **Current:**

- **➤** 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?**

