U.S. Coast Guard
Unmanned Systems

USCG Assistant Commandant for Capability
CAPT Thom Remmers (CG-7 UxS)
Long-Range UAS
- Wide area surveillance for the Area Commander
- **Beyond Radio Line of Sight** C2 link (SATCOM)
- Long endurance

Medium-Range UAS
- On demand support for the Tactical Commander
- **Beyond Visual Line of Sight** C2 link (Radio)
- Medium endurance

Short-Range UAS
- Personal, portable system
- **Visual Line of Sight** C2 link (Radio/Wifi)
- Short endurance
Unmanned Surface Vessels (USV)
Unmanned Underwater Vehicles (UUV)
Why Unmanned Systems (UxS)?

1. Issue a high-level UxS strategy
2. Designate a top Coast Guard official to advance strategy
3. Establish a UxS program office
4. Expand and normalize efforts to ensure ample and systematic operations-related experimentation
5. Commission an internal study of the multi-year spending that will be required for UxS
An Unmanned Systems Strategy

Lines of Effort:

- **Employ** UxS as a means to fulfill Coast Guard mission requirements

- **Defend against** threats posed from UxS (i.e. Counter- or C-UxS)

- **Establish the regulatory framework** for safe, lawful employment of UxS in the Marine Transportation System

Focus on the operational concepts, not any one technology
An Unmanned Systems Strategy

- We’ve experienced small-scale success with UxS, but the vision of a new ecosystem of vehicles, sensors, networks, and systems would fundamentally transform operations:
  - Fill capability and capacity gaps.
  - Automate and augment crewed missions to preserve readiness and improve situational awareness of manned systems when needed.
  - Conduct higher risk missions safer and more effectively.

Transition from reacting to tactical sensors to proactively managing mission execution through an ecosystem that yields strategic maritime domain awareness and knowledge-driven operations.
A Future State: More than a Vehicle & Sensor

UxS are more than the “eyes and ears” of our operators.

UxS become sensors that feed a data-driven ecosystem designed to convert data into information, information into knowledge, and enable knowledge-driven decision making to support both operations and mission support.
Possible Use Cases

Homeland Security Missions:
• Drug Interdiction
• Migrant Interdiction
• Ports, Waterways, and Coastal Security
• Defense Readiness
• Other Law Enforcement

Non-Homeland Security Missions:
• Search and Rescue
• Marine Safety
• Aids to Navigation
• Living Marine Resources
• Marine Environmental Protection
• Ice Operations

Mission Support:
• Supply Support Logistics
• Condition-Based Maintenance
• Personnel Readiness
Questions?
Thank You

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