Unmanned Maritime Systems Update

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Unmanned Maritime Systems (PMS 406)
UUV Systems Vision
Enhanced, Efficient Capabilities

Efficient, Executable Progression of Capabilities through Various UUV Systems
Core Technology Enablers

- **Endurance**
  - Improved reliability & safety
  - Increased endurance & range
  - Support additional & more capable sensors

- **Autonomy & Precision Navigation**
  - Increased levels of autonomy & decision making
  - Increased accuracy & reliability

- **Command, Control, and Communications**
  - Safely, autonomously & reliably launch and recover
  - Standard Command, Control, and Communications

- **Payloads & Sensors**
  - Increased capacity for sensors and payloads
  - Increased capability

- **Platform Integration**
  - Increased capability to launch and recover
  - Increased coordination with host platforms

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**Increasing the Maturity of Critical Technologies is Integral to Success**

- **Learn**
  - Fleet Exercises
  - Industry Competitions
  - Capability Demonstrations

- **Transition**
  - Autonomy
  - Command and Control
  - Communications
  - Precision Navigation
  - Future Payloads
  - Endurance

- **Standardize**
  - Common Autonomy Architectures
  - Common C2
  - Payload Integration Group
  - Li Ion Battery Certifications
USV Platforms

- **Large USV (LUSV)**
  - Part of Surface Capability Evolution Plan and Future Surface Combatant Force
  - Provides distributed fires

- **Medium USV (MUSV)**
  - Part of Surface Capability Evolution Plan and Future Surface Combatant Force
  - Provides distributed sensing and communications relays

- **Mine Countermeasures USV (MCM USV)**
  - Modular USV to support Modular MCM Force from LCS or Vessel of Opportunity
    - Sweep (UISS configuration)
    - Hunt (incorporates towed sonar)
    - Neutralize (incorporates neutralizer round)