RVTEC 2017

NOAA Agency Report

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U.S. Department of Commerce
National Oceanic and Atmospheric Administration
Office of Marine and Aviation Operations
NOAA Agency Report

- Ship and Aircraft Fleet
- Unmanned Systems
- Cybersecurity
- Data Management
Ships and Aircraft

- Aircraft Operations Center Relocation
- P3 Aircraft Re-winging; 2nd P3 FY2018
- Aging Ship Fleet / New Construction
  - Vessel Condition Assessments (ABS)
  - *Brown* Mid-Life refresh in phases
- Fleet Recapitalization Plan
  - Second allocation received for first NOAA AGOR Variant
  - Ongoing efforts to meet fleet recap goals depending on appropriations
Unmanned Systems

• UxS Executive Oversight Board formed

• OMAO transition to operations approach for UxS with targeted initiatives:
  • Autonomous Surface Vehicles (ASV) for hydro survey operations
    • Z-Boat proof-of-concept from TJ
    • Optionally-manned HSL x2 on FA or RA
  • Successful deployment of Coyotes this hurricane season

• NOAA UAS program office in OAR to focus on Research to Operations (R2O)
Unmanned Systems

NOAA has funded a Small Business Innovative Research Grant (SBIR) to Latitude Engineering to develop a ship based UAS called the HQ-55.

Outcome will be a high performance VTOL UAS capable of carrying a 15lb aerosol science payload with a 10 hour endurance.
Unmanned Systems

Image Credit: Latitude Engineering

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Cybersecurity

• Sensor / Controller Upgrades (Win7 or Linux)
  • Working with manufacturers to ID upgrades
  • Upgrade plan developed / Working on funding

• SCADA
  • Working with DHS / USCG to ID vulnerabilities and develop mitigation strategies

• Shipboard Networks and IT Infrastructure
Data Management

- Partnerships:
  - FSU SAMOS
  - University of Hawaii ADCP (UHDAS)
  - NCEI Contractor

- N-Wave in all ship home ports except AK to facilitate data transfer
- Developing policies and procedures for fleet standardization
- SCS Version 5 – (John Katebini, et al)
QUESTIONS ???