



NOAA

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*





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NOAA Agency Report

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



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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



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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)



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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.



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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**



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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)



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QUESTIONS ???



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