# **UNOLS Fall Council Meeting NOAA Update, November 2024**



### LCDR Terril Efird, NOAA

NOAA Office of Marine and Aviation Operations Marine Operations Chief of Staff

## Fall 2024 Change of Directorship

- September 19, 2024 was the change-of-directorship ceremony for NOAA Office of Marine and Aviation Operations (OMAO) and NOAA Corps
- RADM Chad Cary assumed the role of Director of OMAO and NOAA Corps
- RDML Amanda Goeller assumed the role of Deputy Director for Operations of OMAO and NOAA Corps









## Fall 2024

## October was a busy month on the hurricane front!

- Five named storms, compared to a historical average of three for that time.
- This meant almost sixty
  missions and hundreds of
  flight hours from the
  dedicated pilots, crew, and
  staff down at the Aircraft
  Operations Center.



With Hurricane Beryl becoming the earliest Category 5 and Hurricane Milton becoming the fifth strongest Atlantic hurricane on record, it has been an eventful hurricane season.



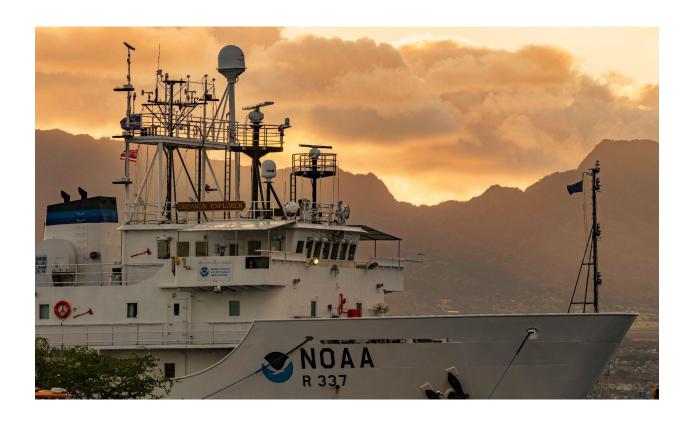
NOAA Deputy Under Secretary for Operations Vice Adm. Nancy Hann and Deputy Secretary of Commerce Don Graves at Lockheed Martin's C-130 production facility in Marietta, Georgia. NOAA has <u>awarded a contract</u> to Lockheed Martin Aeronautics, based in Georgia, for two specialized C-130J Hercules aircraft to become the next generation of NOAA hurricane hunter aircraft.

## Fall 2024

At sea level, much of the NOAA fleet is wrapping survey work and preparing to return to port for the winter repair and maintenance period.



## NOAA Ship *Okeanos Explore*r maps, explores Pacific Islands region

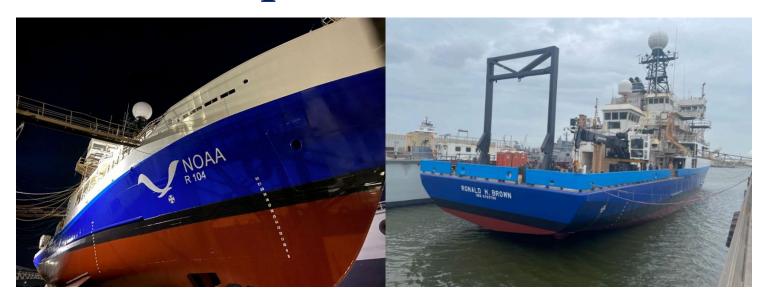


## NOAA expands use of uncrewed systems for seafloor mapping



Throughout the month of October, NOAA partnered with academia and industry to expand the capabilities of uncrewed systems in gathering critical seafloor mapping data.

### Mid Life Repair: Ronald H. Brown



- Arrived at Bollinger Shipyard in Jun 2023
- Refloated in Apr 2024
- Preparing for redelivery early May 2025 due to shipyard delays
- Work is intended to extend service life an additional 15-18 years

### **International Workboat Show**

Last week, NOAA had RADM Cary and Sin Suen present on the future of the NOAA fleet and netzero initiatives



### **Teacher At Sea**

NOAA's Teacher at Sea program is accepting applications until December 2nd!

Since 1990, more than 850 teachers have sailed on NOAA surveys monitoring our nation's fisheries, measuring physical and chemical ocean trends, and charting unknown regions of the seafloor.



# Where are we with our ship scheduling process?

- Fleet Working Group working on a five year Fleet Allocation Plan
- Mitigation for Fisheries Survey Vessel (FSV) Midlife
   Repair Period and End of Service Life within the fleet
- Changes to our ship scheduling system to reflect new barter agreement with NSF (VPASS)

## **Mariner Staffing Initiatives**

#### Rotations/Staffing Model:

- Delta pay (Sep '24)
- 5 more ships rotational in FY25
- Last 6 ships rotational in FY26

#### Roster/Tools:

- FY24 Staffing Coordination tool in use
- New Schedule/Crew Management Software

#### Legislation:

- FY23 NDAA: Directed NOAA to prescribe shore leave regulations specific to NOAA professional mariners and authorized NOAA to pay difference in leave accrued for mariners who are temporarily promoted.
- Final rule published July 28, implemented October 1 (RIN 0648-BM21)

#### Recruiting/Onboarding:

- Finalizing standard hiring process/timeline
- Improved Mariner Recruitment page on OMAO website
- "Day in the Life" videos
- Implementing process improvements (security processing, new employee orientation, etc).
- Targeted hiring campaign for new fully rotational billets

#### Retention:

- FY25 released new Professional Mariner credentialing and training matrix
- Shoreside safety climate survey working group
- Researching how to change mariner duty stations to permanent home of record.
- Mariner Pay Study
- GAO audit 106958 Recruitment and Retention of NOAA Professional Mariners

### Oceanographer and Discoverer

- Construction continues on both vessels at full pace, delays to schedule being assessed.
- Oceanographer floated in Aug 2024!
   Slightly delayed. Delivery Spring 2026.
- Similarly, *Discoverer* is scheduled to be launched winter of 2024, construction will then reach final stages and then transition into trials. Delivery Summer 2026.





## Charting and Mapping Vessels (Class B)



- Naming of Class B's announced Surveyor and Navigator
- Contract Awarded to Thoma-Sea Marine Constructors LLC, in Houma, Louisiana on June 23rd, 2023.
  - Period of Performance started July 11th, 2023
- All Desirable Features in contract will be provided; highlights:
  - Enclosed mission hangar for four Crewed Survey Launches/Uncrewed Maritime Systems
  - Flexible launch and retrieval system
  - 30 single staterooms
  - Surveyor delivery Early 2027
  - Navigator delivery Early 2028



## **FSV Midlife Planning**

- NOAA Ship Oscar Dyson will be first in Oct 2026 with contract award Dec 2024
- Project goals
  - To extend service life 20 years
  - Reduce carbon footprint
    - Tier 4 Feasibility proceeding with detail design for Diesel Exhaust Fluid tank location
- SURROUNDING TANK
  DB #4C BALLAST
  4-39-01
  12.058 gal

  OILY WATER 4-47-2
  1,413 gal

  NEW INTERNAL DEF TANK
  CONVERTED BLST DB #4C
  5,632 gal

- Increase reliability by replacing obsolete/unsupportable systems
- Improve habitability to allow for additional privacy











## **OMAO Facility Projects**

#### Northeast and Mid Atlantic:

NAVSTA Newport: Contract awarded to SKANSKA in DEC 2023.
 Construction began Apr 2024. Groundbreaking Ceremony 06 May 2024.
 Construction on schedule to open Summer 2027.

#### Southeast and Gulf Coast:

- North Charleston, SC: NOAA awarded \$59.8M to Manson Construction Company to renovate the agency's pier. Groundbreaking Ceremony 30 Jul 2024. Construction began 11 Nov 2024. Expected completion is 2026.
- **Gulfport, MS:** Moved in Oct 2024. Piers available in Jan 2025 (temporary power), and fully complete by May 2025.

#### Northwest, Alaska, and Pacific:

- **Ketchikan, AK:** Ribbon cutting was Aug 2023. *Fairweather* alongside for winter repair period.
- West Coast: BCA Study to evaluate locations for NOAA's Marine
   Operations Center Pacific completed Jul 2023. Analysis did not produce
   conclusive result; NOAA is working to broaden scope in order to provide a
   conclusive result.
- Ford Island, Hawaii: Navy Pier F9 & F10 used by NOAA require
  upgrades to support new vessels' power, water, and sewer requirements
  and NOAA is looking at the ability of these two piers supporting up to (4)
  NOAA Vessels in the future. An AoA study commenced FY23 to determine
  best path forward.



## New OMAO Marine Advisor Incoming! LCDR RACHEL PRYOR



## **Thank You!**

## Continuing Advancements in Uncrewed Systems

#### UMS Services (aka 'data as a service'):

- Dedicated funding lines for contracts
- 9 projects selected for hurricane research, habitat mapping and fishery surveys in offshore wind areas, weather observations, and hydrographic surveys.
- 7 of 9 projects awarded; remaining 2 projects scheduled for Q1 FY24 award.

#### **UxS Transition and Development Projects**

- 9 high-priority UxS transition projects advancing -two completed transition work in FY23; ready for routine operations. Others tracking to become operational FY24-26 (contingent on funding).
  - The \$2.5M DriX operationalized for hydrographic surveys. FY24 plans include operational deployment on NOAA Ship *Thomas Jefferson* and delivery of second DriX.
- OMAO and OAR funding \$6.4M (\$1.4M OAR, \$4.8M OMAO) for 12 FY23-24 projects covering UAS and UMS Research, Development, Testing and Evaluation...
- Five new University relationships (MOUs) developed (totaling \$1.5M).

#### **UxS Hurricane Deployments**

- 12 Saildrones contracted for 2023 season. 156 hours of in-storm observations as of 9/27.
- NHC referred to Saildrone data 7 times for Hurricane Lee.
- Successful testing of the ALTIUS and Blackswift Aerial Launched Drones in Hurricane Tammy.









### Fisheries Medium Endurance (Class C)

- Primary Mission: Assessment and Management of Living Marine Resources, Trawling capabilities nearshore/offshore/shallow draft/limited range, Deploy and recover small crafts/free-floating instruments/and or UAS.
- Intended to be a NOAA-led acquisition.
- Analysis of Alternatives complete end of 2023
- Government Indicative Design to start early April 2024.
- Construction for the first Class C estimated for 2033 with pre-award/design work starting beforehand.
- Market research on Net Zero Emissions requirement conducted through Request for Information.

## **Get Backs Since Spring 2024**

- 11 JUL 2024: Chris Zappa (Scientific Committee for Oceanographic Aircraft Research (SCOAR)) and LCDR Laura Dwyer (Chief, Uncrewed Aircraft Systems Division) reconnected to talk all things UXS!
- PIAD connection. Sin Suen to attend Fleet Improvement Committee meeting next month!
- Eric King recommended to DAA TeBeest for new builds/bubble sweep down issue

So thank you for your continued collaboration!

## **OMAO Accomplishments**

#### Aircraft Operations:

- Hurricane Operations -The NOAA Hurricane Hunters flew over 531 Hours for hurricane research and reconnaissance over 7 named storms
- Atmospheric Rivers Collected critical data in and around atmospheric rivers with the Gulfstream IV-SP research jet. The data is directly used by forecasters and water managers on the West Coast and in the central U.S.
- Marine Operations: NOAA Ship Ronald H. Brown completed the GO-SHIP project sailing from Suape, Brazil to the northerly waters of Reykjavik, Iceland. The ship sampled 150 stations along this cruise track collecting ocean heat, freshwater, carbon, oxygen, and nutrients measurements from the ocean's surface to the seafloor, sometimes reaching depths greater than 5,000 meters (3.1 miles).
- **Uncrewed Systems:** NOAA deployed the DriX, an Uncrewed Surface Vessel (USV,) in tandem with NOAA ships *Thomas Jefferson* and *Oscar Dyson* to increase the efficiency in gathering data to meet NOAA missions.
- **Ketchikan ribbon cutting**: Federal, tribal, state and local officials joined NOAA leadership on Aug. 21, 2023 to cut the ribbon on the agency's newly renovated port facility in Ketchikan, Alaska.
- Class B Ship Award: NOAA selected Thoma-Sea Marine Constructors, LLC to design and build two cutting-edge research vessels, with an option to purchase two more. The first two ships will be built in Houma, Louisiana, with expected delivery dates of 2027 and 2028.
- **C-130J Aircraft Award:** On September 21, 2023 NOAA awarded a pre-production contract to Lockheed Martin to reserve slots in the production line for two C-130J Hurricane Hunter aircraft



## **Major Work Items**

- Hull Structure
  - DEF Tank Installation, Wet Lab Structural Mods
  - Options: Replace Mast, Install Side Sampling Station Hatch
- Propulsion
  - Vessel Repower, Shaft Replacement, Prop Replacement
- Electrical
  - Conversion to 480V, Automated Ext Deck Lighting
- Mission
  - Replace Radars, Replace Fire Detection Systems, Replace Rapp Pentagon
- Auxiliaries
  - Replace Bow Crane, Reconfig Aft Steering

#### PIAD Aircraft Acquisition Team update:

• Mr Gerald "Jerry" Foreman - Deputy Director for Aircraft Acquisition

#### G550 #1:

- Design complete, modifications on-going, negotiated settlement for all engineering costs and modifications complete.
- Contract delivery date May 2024- working towards January 2025 delivery; instrument installation and calibration at Aircraft Operations Center to follow; Initial Operating Capability before Hurricane Season 2025

#### G550 #2:

- IRA provides initial \$100M funding with \$25M requested in FY24 and FY25 budgets for completion.
- DOC Milestone review in progress
- Contractor cost proposal in negotiation

#### King Air:

N65RF was delivered and accepted in January of 2024, increasing our fleet of King Air aircraft to 3

#### C-130J:

- NOAA awarded two aircraft on pre-production contract to Lockheed Martin. Reserves two tail numbers.
- Request for proposal for up to four fully modified C-130J posted 8 Dec with responses due by late April 2024
- Contract award expected June 2024.