





Presentation to the 35th Annual International Research Ship Operators





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Where is our Fleet Now and Future



Recapitalization of Fleet



Integrating Emerging Technology with Ships



**Facilities** 



People and Culture













# <u>Develop and Deliver Climate Products and Services</u>

- Emphasis on an earth system approach
- Building on observations and predictive capabilities



- Balance environmental stewardship and economic development
- Information and knowledge-based approach to support fisheries, transportation, shipping, oil & gas, recreation, etc.

### **Workforce and Equity**

 Lead in equity & diversity, as well as social justice initiatives associated with NOAA's products and services



Dr. Rick Spinrad









## **NOAA Fleet Operations Centers**





- Marine Operation Center
- Aircraft Operations Center
- Uncrewed Systems Operations Center (UxS)
- \* Under construction

**Nautical Charting** 

**Fisheries Research** 

Oceanographic Research



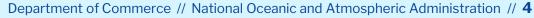














## **Maintenance and Midlife Repairs**

Single phase mid-life repair (MRP) of NOAA Ship Ronald H. Brown nearing completion.

- Work started June, 2023 with a return to service estimated for Nov 2024.
- Extends the anticipated service life by 20 years.

OMAO is using this MRP as a roadmap for our 5 Fisheries Survey Vessels.

- Next Up Fisheries Survey Vessel Oscar Dyson in 2026
- Solicitation is currently on the street.
- ~1 year MRP with (desired) 6 month gaps between vessels.

















#### Oceanographic Ships (Class A):

- The *Oceanographer*, Navy projects delivery in January 2026
- <u>Launched!</u>
- The *Discoverer*, Navy projects delivery in June 2026. Modifications for deep ocean exploration following delivery





- Production Readiness Review: 22 January 2025
- Bubble Sweepdown being reviewed.
- Delivery 2027, 2028

#### Fisheries Medium Endurance (Class C):

- Milestone 1 and RFP documents in progress.
- Indicative Design 65% complete
- IGCE with Navy (05C) planned for fall.
- Additional Market research on Net Zero conducted with designers



















## **NOAA Fleet: Green Initiatives**

#### Oceanographic Ships (Class A):

 Employing Energy Storage Solutions and design optimal power management solutions with the propulsion plant

#### Charting and Mapping (Class B):

- Employing Energy Storage Solutions and design optimal power management solutions with the propulsion plant
- Incorporating launch and retrieval (up to 4 per vessel) of Uncrewed Maritime Systems to expand missions out at sea.

#### Fisheries Medium Endurance (Class C):

- Incentivizing fuel reduction through design in the contract
- Investigating levels of Net Zero technology and alternative fuels for possible inclusion in the RFP
- RFI and Industry Days held in 2022 and 2023
- NOAA participation with ISO TC8/SC25 Maritime GHG Reduction
  - Working groups on alternative fuels, new technologies, and policy. Goal is drafting of new ISO standards.





## **OMAO Facility Projects**

#### Northeast and Mid Atlantic/ NAVSTA Newport:

- Project officially awarded on December 5, 2023
- Construction began late April 2024
- Successful Groundbreaking event on May 6, 2024
- Project Completion anticipated Q4 of 2027



#### Southeast and Gulf Coast:

- North Charleston, SC Contract awarded September 21, 2023
- Ground Breaking Ceremony July 30, 2024
- Construction anticipated to begin October 2024
- Project Completion anticipated Q3 of 2026.
- Gulfport, MS *Lease* anticipated signing September; 2 ship pier to follow in early 2025



#### Northwest, Alaska, and Pacific:

- Ketchikan, AK Completed December 2023
- West Coast lease expires in 2031
- Ford Island, Hawaii upgrades required

























#### Northeast and Mid Atlantic/ NAVSTA Newport:

- LEED Silver for the new Administrative and Warehouse Building
- 4 New Electrical Vehicle Charging Stations

#### Southeast and Gulf Coast:

- LEED Silver Warehouse Building (North Charleston)
- 4 New Electrical Vehicle Charging Stations (North Charleston)
- Floating Pier vs. Fixed Pier, which results in less impact to the marine environment (North Charleston)

#### Northwest, Alaska, and Pacific:

- Floating Pier vs. Fixed Pier, which results in less impact to the marine environment (Ketchikan)
- 2 New Electrical Vehicle Charging Stations (Ketchikan)
- Installed 2 new oil water separators in the parking lot to prevent spills from getting into the waterway (Ketchikan)















## **Continuing Advancements in Uncrewed Systems**

#### **UxS Operations and Development**

- Transitioned DriX Uncrewed Surface Vehicle to Initial Operating Capability
- Operating buoyancy gliders, supporting NOAA Line Offices in California and Alaska, summer 2024
- Funding 11 UxS development projects
- New partnership to develop over FY24 a ship-based, medium lift UAS capability for mammal surveys, other NOAA missions

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

- Year 2 of 2 for 9 projects selected in FY24
- Seeing increase in need for data and funding available for data as a service.











## **People and Culture**











#### Professional Mariner Staffing Challenge

- Skilled professional mariners are the lifeblood of the NOAA Fleet
- Industry wide/global challenge
- Staffed up from 317 PM to 404
   Mariners
- Rotational staffing underway on 6
   NOAA ships. 6 more authorized for FY25
- Lost DAS due to staffing decreased from 147 in Q3FY23 to 43 in Q3FY24

#### Why?

- Pressures from Oil/Gas competition, offshore wind energy
- COVID-19
- Strict cultural standards
- Changing workforce
- Quality of life

#### **Actions**

- Respectful Workplace Training
- Committed to diversity, equity and inclusion.
- Fully staffed recruiting department we can hire!
- Growing mariner staffing annually
- Social media vs. career fairs
- Cadet Shipping Program
- Recruitment Bonus
- Retention Bonus
- Contract licensed/unlicensed labor
- Updating HR policies to support competitive crew rotations (2:1)
- Expanding VSAT, StarLink
- Annual Safety Culture Survey
- Investing in exercise equipment, equipment to cook healthy food
- Total Worker Health/Mental health support.
- Zero tolerance for toxic behavior







## People: Respectful Workplace





Graphic recording by Chrissie Bonner of Illustrating Progress



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## **THANK YOU**



