Office of Marine and Aviation Operations
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For future questions and information on OMAO and the NOAA Corps, please contact Tim Bagley in NOAA’s Office of Legislative and Intergovernmental Affairs – timothy.bagley@noaa.gov.

Copies of the monthly NOAA Fleet Update may be viewed and downloaded at http://www.legislative.noaa.gov/.
Director, OMAO and the NOAA Corps

Rear Admiral David A. Score (2 star)
Director, NOAA Commissioned Officer Corps and Office of Marine and Aviation Operations (OMAO)

As Director of the NOAA Corps and OMAO, Rear Admiral (RADM) Score is responsible for the safe, efficient and effective operation of the agency's fleet of research and survey ships and aircraft, as well as guiding the 321 commissioned NOAA officers and approximately 1,000 civilian personnel assigned to OMAO.

RADM Score previously served as Deputy Director of the NOAA Corps and OMAO’s Deputy Director for Operations. Earlier assignments include: Director of OMAO’s Marine Operations Centers, which oversees all NOAA ship operations, and Commanding Officer of the NOAA Marine Operations Center-Atlantic in Norfolk, Virginia. Before directing NOAA’s Atlantic fleet, RADM Score commanded NOAA Ship Gordon Gunter, which conducted key research missions during the BP Deepwater Horizon oil spill response.

RADM Score’s full bio is available online at: http://www.omao.noaa.gov/find/people/rear-admiral-david-score
Deputy Director for Operations and Deputy Director of the NOAA Corps

Rear Admiral Anita L. Lopez (1 star)
Deputy Director, NOAA Commissioned Officer Corps and Deputy Director for Operations, Office of Marine and Aviation Operations (OMAO)

As Deputy Director, Rear Admiral (RDML) Lopez is responsible for the direct leadership and management of program and business operations, providing for the safe, efficient and effective operation of the agency's fleet of research and survey ships and aircraft, as well as the management of the NOAA Corp’s 321 commissioned officers and approximately 1,000 civilian personnel assigned to OMAO.

RDML Lopez has over nine years of sea experience sailing on eight NOAA ships. Ashore, RDML Lopez has held positions in leadership, management, staff and operational billets at NOAA headquarters, the Pacific Marine Environmental Laboratory, the National Marine Mammal Laboratory, the Marine Operations Center – Pacific, and as the Executive Director to NOAA’s Deputy Under Secretary of Operations in Washington, DC.

RDML Lopez’s full bio is available online at:
http://www.omao.noaa.gov/find/people/rear-admiral-lower-half-anita-l-lopez
The personnel, ships, and aircraft of NOAA play a critical role in gathering environmental data vital to the nation's economic security, the safety of its citizens, and the understanding, protection, and management of our natural resources.

The NOAA fleet is managed and operated by OMAO, one of six Line Offices within NOAA, and is comprised of civilians, mariners, and officers of the NOAA Corps - one of the seven uniformed services of the United States.

NOAA's roots trace back to when President Thomas Jefferson ordered the first comprehensive coastal surveys. Those early surveys ensured safe passage of ship-borne cargo for a young nation.

As the needs of the nation have grown, so too have OMAO's responsibilities.
OMAO Personnel

A diverse, highly skilled, adaptable workforce with an authorized strength of approximately 1,100 employees, with six personnel systems and five employee unions:

- **GS/CAPS civilians and SES (1)** – Primarily land-side mission support, platform acquisition and maintenance, resource management, and administration.

- **Wage Mariners** – Licensed engineers and mates and unlicensed deck, engineering, steward, and survey technician personnel comprise the majority of sea-going crew aboard NOAA ships.

- **NOAA Commissioned Officer Corps** – NOAA Corps officers serve in OMAO’s operational and administrative leadership positions at sea, in the air, and ashore, as well as leadership positions throughout NOAA Line Offices and other federal agencies and institutions.

- **U.S. Public Health Service Commissioned Officers Corps** – USPHS officers provide medical care at sea and medical administrative services and specialized IT services ashore.

- **Contractors** – Specialized support in IT and platform acquisition.
The officers of the NOAA Corps are operational leaders:

• As one of the seven U.S. uniformed services, serve with the “special trust and confidence” of the President.

• The NOAA Corps traces its roots back to the former U.S. Coast and Geodetic Survey, which dates back to 1807 and President Thomas Jefferson. Entering World War I in 1917, the U.S. Coast and Geodetic Survey Corps was formally commissioned to provide officers to command U.S. coastal survey ships and field survey parties locally and abroad. In 1970, NOAA was created to develop a coordinated approach to oceanographic and atmospheric research and subsequent legislation converted the USC&GS Corps to the NOAA Corps.

• NOAA Corps officers all have a science or engineering background and provide the technical and operational expertise, dynamic leadership, and breadth of experience to optimize NOAA’s missions through planning, preparation, and execution.

• The NOAA Corps is an integral part of NOAA and with 321 officers, the NOAA Corps serves throughout the agency’s line and staff offices to support nearly all of NOAA’s programs and missions.

• NOAA Corps officers operate NOAA’s ships, fly aircraft, manage research projects, conduct diving operations, and serve in staff and leadership positions throughout NOAA.
The OMAO Fleet includes 16 ships – the largest civilian research fleet in the United States - and nine specialized aircraft. OMAO’s ships support fishery, hydrographic, and marine ecosystems surveys, allowing us to support more robust stock assessments, update our nautical charts faster, and ensure our buoy networks receive the maintenance they need. OMAO’s aircraft collect environmental and geographic data essential to studying climate change, assessing marine mammal populations, surveying coastal erosion, investigating oil spills, improving hurricane and winter storm forecasts.

In 2016:
- OMAO’s ships sailed more than **368,000 nautical miles**
- OMAO’s aircraft flew more than **4,760 accident-free hours**
- 383 NOAA Divers logged **9,863 dives**, resulting in more than 6,075 hours underwater
OMAO’s Ships and Centers

The fleet is listed with ship name, homeport location, primary mission, year built, and projected End of Service Life (EOSL). NOAA’s ships range in age from three to 50 years old. Out of 16 ships in the fleet, only seven are operating within their design life. By FY2028 the NOAA fleet will shrink by 50% without immediate investment.
OMAO’s Fleet Without Investment

- Oscar Elton Sette: 35*
- Oregon II: 55
- Gordon Gunter: 34
- Okeanos Explorer: 35
- Hi‘ialakai: 39
- Fairweather: 56
- Thomas Jefferson: 37
- Rainier: 61
- Nancy Foster: 40
- Ronald H. Brown: 34
- Oscar Dyson: 29
- Henry B. Bigelow: 27
- Pisces: 27
- Bell M. Shimada: 27
- Ferdinand R. Hassler: 27
- Reuben Lasker: 27

*age of ship at retirement

Design life: blue
Extended life: yellow

Updated: 5/8/14
Fisheries Stock Assessments - NOAA ships conduct stock assessments that assist in the management of commercially important fisheries species. East Coast Bottom Trawl Surveys (NOAA Ship *Henry B. Bigelow*) and Alaskan Pollock Surveys (NOAA Ship *Oscar Dyson*) have been conducted for many years and this historical data is important for monitoring trends in fisheries population and managing them at a sustainable level.

Exploration and Mapping in the Western and Central Pacific - NOAA Ship *Okeanos Explorer* mapped over 150,000 square km during 2015 and 2016. Their multiyear CAPSTONE (Campaign to Address Pacific monument Science, Technology, and Ocean Needs) project provides a biological baseline to support scientific and management decisions around U.S. marine protected areas in remote Pacific areas.

Regional Hydrographic Surveys - NOAA Ships *Fairweather* and *Rainier* continue to conduct hydrographic surveys in Alaskan waters, which will result in much needed updates to charts in an area that is seeing more commercial traffic than ever before. Rapid response by NOAA Ship *Ferdinand R. Hassler* expedited the opening of the Ports of Charleston and Savannah following the passage of Hurricane Matthew in 2016.

Ocean Acidification and Tropical Atmosphere Ocean Moorings - In 2016, NOAA ship *Ronald H. Brown* conducted Ocean Acidification research along the West Coast of the US. This important oceanographic data is part of a historical data set that monitors trends in the chemical and physical characteristics of ocean water. Serviced 35 moorings of the TAO Array in the equatorial Pacific.
OMAO’s Aircraft Fleet

- Nine active aircraft based at OMAO’s Aircraft Operations Center, which has been located at MacDill Air Force Base in Tampa, Florida, but as of May 15, 2017, began a phased move to its new home at Lakeland Linder Regional Airport, in Lakeland, Florida.

  **NOAA’s ‘hurricane hunters’:**
  - 2 – WP-3D Orions
  - 1 – Gulfstream IV

  **Light aircraft:**
  - 1 – Jet Prop Commander
  - 4 – Twin Otters
  - 1 – King Air

- Support of NOAA’s missions through atmospheric and extreme weather studies, fisheries and marine mammal observations, coastal mapping, water resource surveys, and hurricane reconnaissance and surveillance operations.

- NOAA’s aircraft operate throughout the United States and around the world; over open oceans, mountains, coastal wetlands, and Arctic pack ice.

- The average age of NOAA’s aircraft is 30 years.
Hurricane Surveillance and Research – In October 2016, NOAA’s WP-3D (N43RF) and G-IV (N49RF) conducted 21 operational missions in seven days into Hurricane Matthew gathering vital data used to improve hurricane track and intensity forecasts. NOAA’s King Air (N68RF) flew 14 missions to collect post-storm damage and flooding imagery from Florida to Virginia in coordination with FEMA.

Atmospheric Research – In 2016, NOAA responded to El Niño in the tropical Pacific. In conjunction with the NASA Global Hawk UAS and NOAA Ship Ronald H. Brown, NOAA’s G-IV aircraft (N49RF) provided an observational foundation to better understand and predict how tropical conditions related to El Niño contribute to the development and evolution of winter storms affecting the eastern north Pacific and western US.

Water Resources – In 2016, a record number of hours was flown supporting the snow survey mission, including collecting the first operational data from the state of California. Mission safety was increased by automating the acquisition of Gamma data. This mission provided data critical to river, flood, and water supply forecasting.

Emergency Response – In addition to Hurricane Matthew post-storm damage assessment surveys, NOAA’s King Air (N68RF) conducted emergency response missions to large scale flooding events in the Midwest (January) and Louisiana (August), providing critical information to emergency response managers.
NOAA Dive Program

The NOAA Diving Program (NDP) is the largest non-DoD federal diving program with approximately 370 active divers. In addition to 53 sites around the U.S. OMAO operates 14 ships with full diving complements.

In 2016, NOAA Divers completed over 9,800 incident-free dives with a total of over 6,000 hours underwater. NOAA has divers trained on mixed-gas rebreathers who are working at depths of up to 330 feet.

The NOAA Diving Center conducted three NOAA Diver training courses during 2016 resulting in 56 new NOAA Divers and 13 Divemasters. The NDP jointly sponsored the NOAA-UHMS Physicians Training in Diving and Hyperbaric Medicine resulting in training of 34 physicians from seven countries.

Small Boat Program and Aircraft Safety

OMAO sets policy and provides safety inspections for almost 400 small boats throughout NOAA. OMAO also sets and implements aircraft safety policy for NOAA and our contractors.

Teachers at Sea

NOAA’s Teacher at Sea program provides a unique environment for learning and teaching by sending kindergarten through college-level teachers to sea aboard OMAO’s research and survey ships to work under the tutelage of scientists and crew, including officers of the NOAA Commissioned Officer Corps.

Since its inception in 1990, the program has enabled more than 800 teachers to gain first-hand experience of science and life at sea.

Unmanned Systems Support

OMAO and the NOAA Corps provide a number of services to NOAA and NOAA’s Partners to support unmanned systems from launch platforms, to technical support, to pilots.
OMAO’s NOAA Partnerships

OMAO personnel and assets work with and serve all across NOAA Line Offices.

- National Weather Service (NWS)
- Office of Oceanic and Atmospheric Research (OAR)
- National Environmental, Satellite, Data, & Information Service (NESDIS)
- National Ocean Service (NOS)
- National Marine Fisheries Service (NMFS)
Did you know?

Using our aircraft (P-3, G-IV, Jet Prop) and ships, OMAO supports NWS missions such as:

- Hurricane track and landfall predictions
- Winter storm intensity and tracks
- Snow Surveys and soil moisture measurements
- TAO Buoy Maintenance
Did you know?

Using our aircraft (P-3) and ships, OMAO supports OAR missions such as:
- Blue water oceanographic research
- Hydrothermal vent studies
- Air quality studies
- Research to anticipate and respond to weather extremes such as El Niño
Did you know?

Using our aircraft (P-3) and ships, OMAO supports NESDIS missions such as:

- **Ocean Winds** – Advanced measurements to improve the use of ocean surface wind data
- **VIIRS** – Validation and calibration of ocean color sensor missions
Did you know?

Using our aircraft (King Air, Twin Otter, Jet Prop), ships, unmanned aircraft systems, and small boats, OMAO supports NOS missions such as:

- Nautical chart data, habitat, and coral reef mapping
- Sanctuary support and coral reef research and monitoring
- Dive platforms and operations
- Gravity measurements
- Update U.S. coastline data needed to manage coastal resources and support marine navigation
Did you know?

Using our aircraft (Twin Otter) and ships, OMAO supports NMFS missions such as:

- Fish stock assessments
- Marine mammal surveys
- Biological sampling
- Ecosystems research
OMAO’s Federal and External Partnerships

OMAO and the NOAA Corps provide key services and leadership to a number of federal agencies and external partners to help them meet their mission – and ours - and to better leverage federal resources.

[Logos of various federal agencies and partnerships]
Helpful Web Links

http://www.omao.noaa.gov/

http://www.omao.noaa.gov/learn/marine-operations

http://www.omao.noaa.gov/learn/aircraft-operations

http://www.omao.noaa.gov/learn/diving-program

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