



Office of Marine and Aviation Operations Providing environmental intelligence for a dynamic world.

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 the Office of Marine and Aviation Operations (OMAO), an office comprising civilians, mariners, and officers of the NOAA Commissioned Officer Corps, one of the seven uniformed services of the United States. NOAA's roots trace back to 1807, 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. Today, OMAO civilians and NOAA Corps officers operate, manage, and maintain NOAA's active fleet of 16 research and survey ships and 9 specialized aircraft. Together, OMAO and the NOAA Corps support nearly all of NOAA's missions.

NOAA has the largest fleet of federal survey ships in the nation. The fleet ranges from large oceanographic ships capable of exploring and charting the world's deepest ocean, to smaller vessels responsible for surveying the shallow bays and inlets of the United States. The fleet supports a wide range of marine activities including fisheries surveys, nautical charting, and ocean and climate studies. Based throughout the continental United States, Alaska, and Hawaii, the ships operate in all regions of the nation and around the world.

NOAA's aircraft provide a wide range of airborne capabilities. Our highly specialized Lockheed WP-3D turboprop "hurricane hunter" aircraft are equipped with an unprecedented variety of scientific instrumentation, radars, and recording systems for both in situ and remote sensing measurements of the atmosphere, the Earth, and its environment. Equipped with both C-band weather radar and X-band tail Doppler radar systems, the WP-3Ds have the unique ability to conduct tropical cyclone research in addition to storm reconnaissance. Together with NOAA's Gulfstream IV-SP hurricane surveillance jet, these aircraft greatly improve our physical understanding of hurricanes and enhance the accuracy of tropical cyclone forecasts. NOAA's light aircraft also play a vital role in monitoring our environment. Our King Air, Commander and Twin Otter aircraft support marine mammal population studies, shoreline change assessments, oil spill investigations, and snowpack surveys for spring flood forecasts.

The NOAA fleet provides immediate response capabilities for unpredictable events. For example, after Hurricane Sandy, NOAA ships *Thomas Jefferson* and the newly commissioned *Ferdinand R. Hassler* conducted emergency bathymetric surveys to locate possible submerged navigational hazards in the ports of New York and Virginia. These surveys enabled the ports to reopen quickly. Aerial images of storm-stricken regions, taken by NOAA aircraft, helped residents and emergency workers to quickly assess the condition of houses, bridges, and vital infrastructure.

In 2011, OMAO's Aero Commander and Jetprop Commander aircraft conducted snow surveys, which increased the accuracy of National Weather Service's flood forecasting during a record year of snow and floods. In 2010, the NOAA fleet and the NOAA Corps played a major role in the response to the BP Deepwater Horizon oil spill, conducting extensive studies in the Gulf of Mexico to monitor the health of the ecosystem. NOAA's entire Atlantic fleet and over a quarter of the total strength of the NOAA Corps were deployed to the Gulf following the spill, developing mission plans and assisting response efforts.

While manned aircraft and sea-going vessels have been, and will continue to be, a primary source of environmental data, new technology will have a significant role to play in the future NOAA fleet. OMAO, in coordination with other NOAA offices and federal agencies, is evaluating and deploying remotely piloted underwater and aircraft systems that could significantly contribute to environmental observations. OMAO's ongoing challenge is to meet the growing demand for *in situ* scientific data while providing the highest level of service. As NOAA's fleet continues to age, maintenance costs steadily increase. Operational costs have increased as well, driven largely by rising fuel costs. We are working to address these challenges by increasing operating efficiencies while maintaining our commitment to safety. To better serve the needs of the nation, NOAA is examining the composition of the fleet through an exhaustive and critical review of at-sea science and observation requirements. Our objective is to develop a clear, cost-efficient path forward to ensure that the NOAA fleet can continue to conduct at-sea surveys and research vital to fisheries management, updating nautical charts, responding to natural and manmade disasters, and understanding coastal and marine systems more fully. Meeting these requirements is essential to developing sustainable, science-based management and conservation plans that protect the health and resiliency of these resources over the long-term.

We are also continuing our effort to build a civilian and NOAA Corps officer work force that is uniquely qualified to gather critical environmental intelligence and be adaptive and responsive to a changing world. We transitioned our basic NOAA Corps officer training class to the U.S. Coast Guard Academy, where newly commissioned officers train alongside Coast Guard officer candidates, developing skills and professional relationships that will benefit both services, especially during challenging times.

Finally, we continue to expand our partnerships with other federal agencies. We are proud of our longstanding and fruitful working relationships with the U.S. Air Force, U.S. Coast Guard, U.S. Navy, and U.S. Public Health Service and through the Interagency Working Group on Facilities and Infrastructure, continue facilitating cross-agency cooperation for the federal fleet of research and survey ships. Active collaboration among the Federal family is critical to ensuring the long-term capability and success of the federal ocean infrastructure. Our partners' success is our success.



For more information, please visit: www.noaa.gov,
www.oma.noaa.gov, and www.noaacorps.noaa.gov





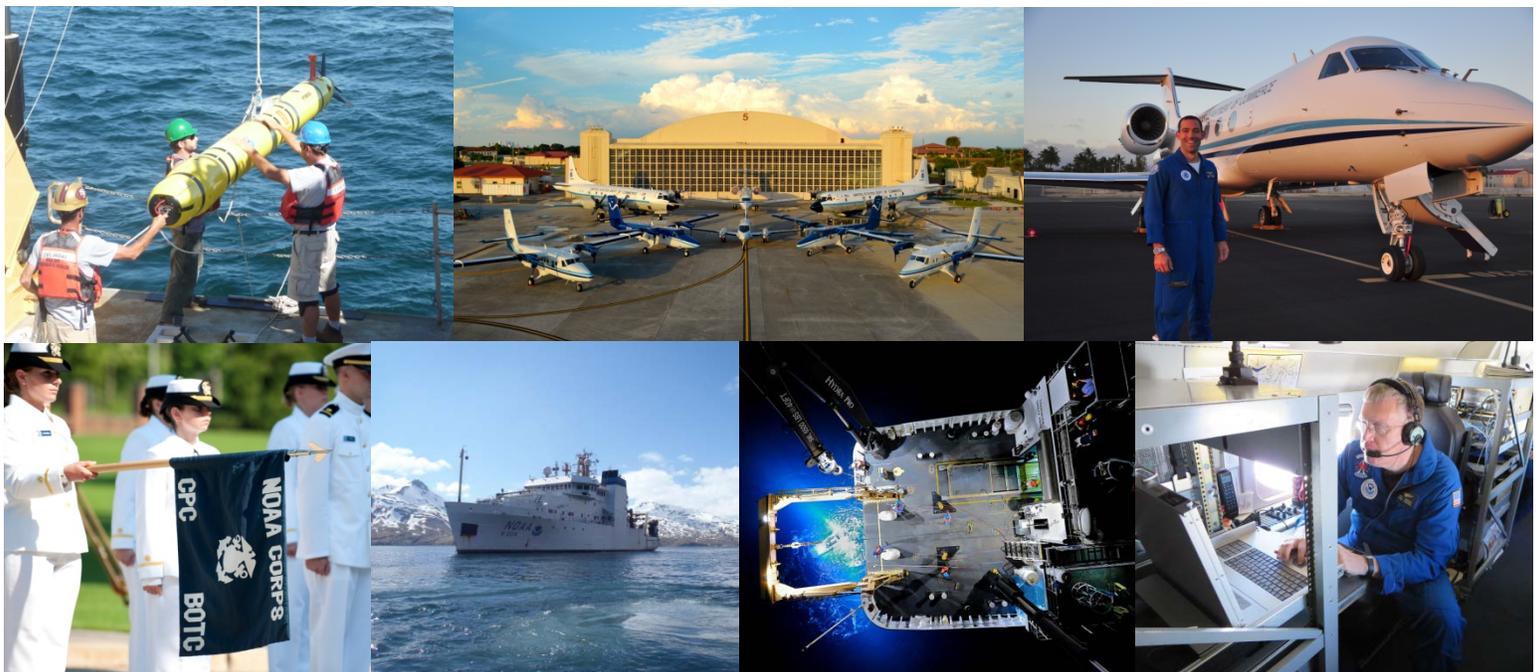
FY 2015 Budget Request Highlights

The FY 2015 President's Budget Request for OMAO is \$244,037,000. The request makes several investments to maintain and increase the utilization of the fleet. It supports 16 active vessels for 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. The request also supports 9 active aircraft for climate and air quality studies, fisheries and marine mammal observations, coastal mapping, water resource surveys, and hurricane reconnaissance and surveillance operations. The program changes noted below are with respect to the FY 2015 Base (= FY 2014 Enacted + Inflationary Adjustments). Highlights include:

Mission Critical Infrastructure

- **Days at Sea (+ \$2.85M)** The request supports a total of 3,170 OMAO funded Days at Sea, with a ship utilization rate of about 84 percent, to support critical *in situ* collection of oceanic, hydrographic, and fisheries data.
- **Progressive Lifecycle Maintenance Program (+ \$2M)** The request of \$7.2M provides a more forward looking investment into the extension of the life of our current fleet of vessels by a continued shift away from a Major Repair Period model. This will stabilize and improve the material condition of our ships and result in a fleet maintained at a higher state of readiness, an extension of service life, and avoidance of mechanical, structural, and mission equipment obsolescence.
- **Aviation Operations (+ \$0M)** The request of \$31.6M includes a \$1M increase to support a total of 2,795 OMAO funded flight hours of critical real time observations. There is also a \$1M decrease for one-time funding provided in FY 2014 to support a study for alternatives to the WP-3D platform for NOAA research.

Whether we are working on land, on the sea, or in the air, we are committed to safely delivering effective Earth observation capabilities, integrating emerging technologies, and providing a specialized, flexible, and reliable team responsive to NOAA and the nation. Today's realities, and the dynamic world in which we live, demand that we do no less.



NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION

For more information, please visit: <http://www.noaa.gov/budget>