BUDGET ACTIVITY: OFFICE OF MARINE AND AVIATION OPERATIONS

For FY 2012, NOAA is requesting an increase of $32,653,000 and 10 FTE from the FY 2010 enacted level for a total of $229,259,000 and 1,040 FTE for the Office of Marine and Aviation Operations. This increase includes $13,291,000 and 5 FTE in inflationary adjustments.

BASE JUSTIFICATION FOR FY 2012:

Office of Marine and Aviation Operations Overview:
NOAA's Office of Marine and Aviation Operations (OMAO) operates a wide variety of specialized aircraft and ships to complete NOAA's environmental and scientific missions. OMAO is also responsible for the administration and implementation of the NOAA Diving Program, Small Boat Program and Aviation Safety Program, to ensure safe and efficient operations in NOAA-sponsored underwater activities, aviation and small boat operations.

OMAO initiates the development of annual fleet allocation plans; develops and updates long-range plans for inspection, repair, and operations of its fleet; provides centralized fleet management and coordination; updates standard fleet procedures; trains and certifies officers, crew members, and scientists in at-sea safety; conducts fleet-safety inspections; and provides medical guidance and support for NOAA ship, aircraft, and scientific personnel.

OMAO provides management of the NOAA Commissioned Corps. OMAO's Commissioned Personnel Center (CPC) (http://www.noaacorps.noaa.gov/cpc) manages recruitment, training personnel assignments, and payroll for the NOAA Commissioned Officer Corps. It also provides health-care contractual support for NOAA Commissioned Officers and Wage Marine personnel and their dependents. The NOAA Corps supports the fleet as well as NOAA Line Offices.

The Office of Marine and Aviation Operations of ($179,959,000 and 1,030 FTE) budget is organized into three subactivities under the Operations, Research and Facilities appropriation:

- Marine Operations and Maintenance ($131,969,000 and 923 FTE) includes Data Acquisition
- Fleet Planning and Maintenance ($17,470,000 and 3 FTE) includes Fleet Planning and Maintenance
- Aviation Operations ($30,520,000 and 104 FTE) contains Aircraft Services

In addition, OMAO also has one subactivity in the Procurement, Acquisition and Construction appropriation ($2,000,000 and 5 FTE):

- Fleet Replacement ($2,000,000 and 5 FTE) includes Fleet Capital Improvements & Tech Infusion and New Vessel Construction

The Office of Marine and Aviation Operations budget includes the following other accounts:

- NOAA Corp Commissioned Officers Retirement ($28,269,000 and 0 FTE)
- Medicare Eligible Retiree Healthcare Fund ($1,936,000 and 0 FTE)

Research and Development Investments:
The NOAA FY 2012 Budget estimates for its activities, including research and development programs, are the result of an integrated requirements-based strategic planning process. This

process provides the structure to link NOAA's strategic vision with programmatic detail and budget development, with the goal of maximizing resources while optimizing capabilities. OMAO requests $77,853,000 for investments in R&D and infrastructure to support R&D in the FY 2012 Budget.

NOAA's strategic planning process makes specific reference to the objectives and milestones outlined in the NOAA 5-Year Research Plan for 2008-2012. The strict management of planning against these investment criteria, objectives, and milestones leads to NOAA budget proposals that reflect the research and development needs of the organization. The NOAA Research Council - an internal body composed of senior scientific personnel from every line office in the agency - is tasked with developing the 5-Year Research Plan, and provides corporate oversight to ensure that NOAA's research activities are of the highest quality, meet long-range societal needs, take advantage of emerging scientific and technological opportunities, and shape a forward-looking research agenda.

Significant Adjustments-to-Base (ATBs):
NOAA requests a net increase of 0 FTE and $13,291,000 to fund adjustments to current programs for OMAO activities. The increase will fund the estimated FY 2012 Military pay raise of 1.6 percent and annualize the FY 2011 Military pay raise of 1.4 percent that applies to uniformed men and women of the NOAA Corps. The increase will also provide inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Service Administration (GSA).

Other Adjustments:
The NOAA FY 2012 Budget for OMAO also requests other adjustments in the amount of $1,761,000 to restore funds that were anticipated in FY 2011 to be transferred from the Department of Agriculture related to the Promote and Develop (P&D) account. The P&D transfer represents funds derived from duties on imported fisheries products and are transferred to NOAA from the Department of Agriculture. The annualized FY 2011 Continuing Resolution provided $36,056,800, including carryover, less than requested in FY 2011 President's Budget due to a downturn in the international fisheries markets. To address the difference between estimated and actual transfer amounts in FY 2011, NOAA allocated the shortfall in the transfer to each of its seven line offices, taking a 1.06 percent reduction to each Program, Project, or Activity (PPA) line. For FY 2012 NOAA requests an adjustment to offset the impact of the FY 2011 shortfall.

From Office	Line	To Office	Line	Amount
OMAO	All	OMAO	All	$1,761,000

Administrative Cost Savings:
The Administration is pursuing an aggressive government-wide effort to curb non-essential administrative spending called the Accountable Efficiency Initiative (AEI). In order to be good stewards of taxpayer money the Federal Government will continue to seek ways to improve the efficiency of programs without reducing their effectiveness. As such, the President directed each agency to analyze its administrative costs and identify savings where possible. After reviewing its administrative costs, the Office of Marine and Aviation Operations (OMAO) has identified $3,526,000 in administrative savings. OMAO has targeted a number of areas to achieve these savings, at both OMAO Headquarters level and throughout the program offices. Using NOAALink, OMAO anticipates saving money through more strategic sourcing of products and services. Consolidation of products will enable buying in bulk to reduce prices. Consolidation of services will result in dollar savings by reducing the number of contracts to be managed. In the area of human capital, OMAO expects to reduce its costs by canceling some planned hires, downgrading some positions, and working to reduce its workers compensation costs. Administrative savings in the area of logistics planning and

in general administrative support have been identified by limiting the use of overnight mail services as well as consolidating services through a single provider. OMAO has also identified savings tied to IT related items, primarily through delaying the refresh of computer equipment and eliminating redundant software licenses. In addition, OMAO expects to reduce costs through business process reengineering. The $3,526,000 in administrative savings identified above represent real reductions to the OMAO's funding level and will help reduce overall spending by the Federal government.

Headquarters Administrative Costs:

In FY 2012, OMAO headquarters will use $7,711,400, after instituting planned savings as a result of the AEI mentioned above, in funds to support general management activities, financial, budgeting, and IT related expenses, as well as supporting facilities and other general operating costs. These funds also include support for service contracts, utilities, and rent charges from the General Services Administration. As part of the AEI, OMAO has reviewed its Headquarters costs and will be able to reduce previously planned costs by $1,967,000. Specifically, OMAO will use headquarters administrative funds to support the following:

Headquarters Program Support Type	Description	FY 2012 Amount	FY 2012 FTE associated with OMAO Line Office HQ
General Management & Direction	Includes Assistant Administrator's office, public affairs, information services	$1,859,900	8.4
CFO Operations	Includes Budget, Finance and Accounting	$5,020,700	15.0
CIO Operations	Includes IT-related expenses and other CIO related activities	$1,716,600	5.0
CAO Operations	Includes Facilities and Security costs, as well as other CAO related activities	$946,000	0
Human Resources	All HR services, including EEO	$135,200	1.0
Procurement services, Acquisitions, and Grants Management Operations		$0	0
Total before AEI savings		**$9,678,400**	**29.4**
AEI Savings		*($1,967,000)*	-
Total post AEI savings		**$ 7,711,400**	**29.4**

NOAA recognizes the need to improve the transparency of the policies and procedures used by its line office headquarters to bill component programs for management and administrative services. NOAA is currently re-evaluating, standardizing, and documenting these policies and procedures for each line office. Prior to the beginning of FY 2012, NOAA will publish its policies and procedures for assessing headquarters and administrative costs within the line offices on the NOAA CFO public website along with other budget and finance documents. NOAA looks forward to working with the Congress and other interested parties to increase the transparency and confidence in NOAA's financial management.

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APPROPRIATION: OPERATIONS, RESEARCH AND FACILITIES
SUBACTIVITY: MARINE OPERATIONS AND MAINTENANCE

The objectives of Marine Operations and Maintenance subactivity are to:

- Operate and maintain NOAA observation platforms to achieve in situ data collection in support of NOAA's highest priority mission requirements;
- Ensure the operational readiness and maximum capability and safety of the NOAA fleet;
- Develop plans for future ship support and replacement;
- Develop, with the guidance of the Fleet Council, annual ship allocation schedules based on the program requirements;
- Provide centralized management and coordination, scheduling, port services, operating procedures, and engineering support for NOAA's ships;
- Provide guidance and support for effective outsourcing and outsource data collection where appropriate;
- Provide end users with high quality real time data products and data visualization;
- Train and qualify NOAA personnel to ensure safe and effective diving operations;
- Provide specially skilled NOAA Corps Officers trained as engineers and scientists in NOAA program disciplines to provide leadership, operational and technical support;
- Train and certify NOAA Commissioned Corps officers, crew, and scientists in at-sea safety requirements for their positions;
- Provide oversight and support to enhance safety of NOAA's small-boat operations.

DATA ACQUISITION
Data Acquisition funding provides centralized management for NOAA's 18 active vessels in the NOAA Fleet during FY 2012, including the newest Fisheries Survey Vessels, *Pisces* and *Bell M. Shimada,* and supports charter vessels to meet additional requirements. NOAA vessels, ranging in length from 124 to 274 feet, conduct operations that support NOAA's programs in nautical charting, bathymetric mapping, fisheries research, ecosystem assessments, marine environmental baseline assessments, coastal-ocean circulation, and oceanographic and atmospheric research. In FY 2012, base funding will provide approximately 2,963 operating days at sea to support NOAA's highest priority programs and pursue NOAA specific objectives over the next five years. Additional days at sea are funded by individual NOAA programs.

FY 2010 Program Accomplishments:

- NOAA commissioned *Bell M. Shimada*, the fourth of a new class of fisheries survey vessels on August 25, 2010. The ship's primary mission is to study, monitor and collect data on a wide range of sea life and ocean conditions, primarily off the West Coast. The 208 ft. vessel will also observe environmental conditions, conduct habitat assessments and survey marine mammal, sea turtle and marine bird populations. The ship's state-of-the-art design allows for quieter operation and movement of the vessel through the water, giving scientists the ability to study fish and marine mammals without significantly altering their behavior.
- NOAA awarded a $7*3.6 million Ame*rican Recovery and Reinvestment Act contract to Marinette Marine Corporation located in Marinette, WI. This is for the construction of a new fisheries survey vessel, FSV 6, which will dramatically improve NOAA's ability to conduct surveys for fish, marine mammals and turtles off the U.S. West Coast and in the eastern tropical Pacific Ocean. The vessel will be the fifth state-of-the-art Oscar Dyson-class ship built for the agency.

- NOAA ships were integral in responding to the Deep Water Horizon oil spill in the Gulf of Mexico:
    - *Thomas Jefferson* completed three legs of operations taking water samples and testing advanced met*hods for detecti*ng submerged oil while gathering oceanographic data in the area's coastal waters.
    - *Gordon Gunter* was on an oil detection mission in the vicinity of the Deepwater Horizon well head. During the cruise the ship collected water samples, conducted plankton tows, and employed echo sounders, autonomous underwater vehicles and other technologies to collect subsurface data.
    - *Pisces* performed a cruise to assess impacts of oil on Gulf of Mexico reef fish populations. The ship used echo-sounders to monitor for oil and gas releases in the immediate vicinity of the wellhead.
    - *Delaware II* performed Pelagic Longline surveys and water sampling around the periphery of the closure area and collected plankton samples at the surface and discrete depths.
    - *Oregon II* assessed the impacts of the oil spill on summer shrimp and groundfish
    - *Nancy Foster* assessed the impact of the oil spill on corals in the vicinity of the well head and characterized the impact of persistence oil spill to provide early warnings of oil entrainment.
    - *Henry B. Bigelow* performed wellhead monitoring and oil detection.

NOAA Fleet detail is provided below:

Vessel	Length-Class	Mission	Home Port	Status
Ronald H. Brown	274 ft. - I	1,4	Charleston, SC	Active
Rainier	231 ft.- II	3	Seattle, WA	Active
Fairweather	231 ft.- II	3	Ketchikan, AK	Active
Ka'imimoana	224 ft.- III	1	Honolulu, HI	Active
Miller Freeman	215 ft.-II	1,2	Seattle, WA	Active
Mcarthur II	224 ft.- III	1,2,4	Seattle, WA	Active
Oregon II	175 ft.- III	2	Pascagoula, MS	Active
Thomas Jefferson	208 ft.- II	3	Norfolk, VA	Active
Gordon Gunter	224 ft.- III	2	Pascagoula, MS	Active
Oscar Elton Sette	224 ft.- III	2	Honolulu, HI	Active
Delaware II	155 ft.- IV	2	Woods Hole, MA	Active
Nancy Foster	187 ft.- III	1,4	Charleston, SC	Active
HI'ialakai	224 ft.- III	1,4	Honolulu, HI	Active
Oscar Dyson	208 ft. - II	2	Kodiak, AK	Active
Henry B. Bigelow	208 ft. - II	2	TBD	Active
Pisces	208 ft. - II	2	Pascagoula, MS	Active
Bell M. Shimada	208 ft. - II	2	West Coast	Active
Okeanos Explorer	224 ft.- III	1	Davisville, RI	Active

Mission:
1= Oceanographic Research
2 = Fisheries Research
3 = Hydrographic Surveys
4 = Environmental Assessment

The Marine Operations Center

The Marine Operations Center (MOC) has Atlantic and Pacific regional offices located in Norfolk, VA, and Seattle, WA, respectively. MOC provides regional fleet management, maintenance, stores supplies, repair facilities, data-processing facilities, operational support, and administrative support for

NOAA's vessels. The vessels are assisted by a small support staff at the homeport of most ships. NOAA vessels are staffed by NOAA Commissioned Corps officers, Wage Marine employees, and Electronics Technicians. NOAA vessels are strategically deployed based on the size, range, laboratory space, equipment, and accommodations of each ship necessary to meet project requirements. The Class I and II vessels have the size, endurance, and equipment to conduct surveys and investigations in the deep ocean outward from the continental shelf or in remote areas such as Alaska and Antarctica. The smaller Class III, and IV are designed for continental shelf and near-shore operations. Programs supported by ships are organizationally housed within NOAA's National Marine Fisheries Services (NMFS), Office of Oceanic and Atmospheric Research (OAR), National Ocean Service (NOS), NOAA Climate Service (NCS) and National Weather Service (NWS).

The NOAA Commissioned Personnel Center
The Commissioned Personnel Center (CPC) is responsible for active duty NOAA Corps officers. As part of OMAO, it is a unique personnel system within NOAA. CPC provides a specialized workforce to NOAA that has the skills to plan, prepare, and execute the acquisition of environmental and scientific data on land, at and under the sea, and in the air. CPC is responsible for the human resources activities for active duty NOAA Corps officers.

OMAO Headquarters
OMAO Headquarters division consists of Executive Affairs Division (EAD), Resource Management Division (RMD), Safety and Environmental Compliance Division (SECD), Information Management Division (IMD) and Health Services. Formulation of policies and procedures, development of plans and budgets, and management of NOAA Commissioned Personnel are conducted by OMAO personnel located at headquarters in Silver Spring, MD. In addition, OMAO Headquarters provide direction for labor relations activities, medical affairs, training, safety, and other personnel matters unique to commissioned officers and vessel employees assigned to the fleet.

The NOAA Dive Program
The NOAA Dive Center (NDC) provides diver training, safety standards, certification, technical advice, a standardized equipment program, and publishes the NOAA Diving Manual. NOAA divers perform over 1,500 dives annually in support of NOAA programs. Dives by NDC divers are primarily associated with diver training. Marine Center divers play a support role for various projects. Fleet diving activities include ship husbandry tasks such as clearing screws and sea strainers, conducting hull surveys for damage, and installing transducers. Ship divers also install tide gauges and other data gathering equipment and investigate multi-beam contacts. These activities provide cost savings to the NOAA fleet, enhance customer service and facilitate self-sufficiency on the seas.

The NOAA Small Boat Program
The NOAA Small Boat Program (SBP) is designed to reduce risk, promote standardization, and enhance the safety of NOAA's small boats. NOAA maintains over 400 small boats, which are operated and funded within the programs. The SBP monitors and conducts small-boat inspections, facilitates small boat activities by hosting workshops and sharing related information, and provides technical and engineering assistance to NOAA Line Offices concerning small boats. The SBP increases safety and ensures collaboration and compliance with standard policies and procedures among all Line Offices.

The NOAA Teacher at Sea Program
The NOAA Teacher at Sea (TAS) Program allows the participation of up to 30 teachers per year. Teachers at the kindergarten through college level spend time on NOAA vessels working with NOAA scientists. The teachers provide a valuable connection between NOAA and their students. The

popularity of the program led two TAS alumni to develop the spin-off, Teacher in the Air. NOAA's Teacher in the Air (TIA) program now flies between two-to-five teachers on NOAA aircraft each year. As of FY 2010, over 600 teachers have participated in the programs.

PROGRAM CHANGES FOR FY 2012:

Data Acquisition: Homeport Facility Lease Costs (Base Funding: 0 FTE and $1,254,000; Program Change: +$1,902,000 and +0 FTE) : NOAA requests an increase of $1,902,000 and 0 FTE for a total of $3,156,000 and 0 FTE to fund lease costs for the Marine Operations Center – Pacific, Newport, OR and Homeport of the *Okeanos Explorer*, Davisville, RI .

Proposed Actions:
OMAO requests funding for homeport lease and improvement costs at Newport, OR and Davisville, RI. Specific lease requirements are as follows:

Homeport	Lease Amount	Offset	Differential Required
Newport, OR	$2,533,000	$1,254,000	$1,279,000
Davisville, RI	$623,000	$0	$623,000

- Newport, OR will be the new home of the Marine Operations Center – Pacific (MOC-P) and the homeport of NOAA Ships *McArthur II, Rainer, Miller Freeman* and *Bell M. Shimada*. In 2006, a fire destroyed the pier at the current MOC-P location in Seattle, Washington requiring the relocation of NOAA ships throughout the Puget Sound area. In late 2008, NOAA began the process of reviewing the current facility lease, which expires June 30, 2011. In August 2009, NOAA selected the Port of Newport, OR, through a competitive lease award, to be the new MOC-P location and homeport facility. The new annual lease cost of $2.53M is $1.28M more than the current annual lease expenditure in Seattle, WA.
- Davisville, RI is the new homeport of NOAA Ship *Okeanos Explorer* and has been a temporary homeport for NOAA Ship *Henry B Bigelow.* The homeport is in close proximity to the University of Rhode Island and the Inner Space Center, partners in NOAA Ship *Okeanos Explorer* cruises. New facilities, including work space for the vessel's Remotely Operated Vehicle (ROV) were acquired through a lease. The annual lease cost for this new facility is $623,000.

Statement of Need and Economic Benefits
NOAA homeport facilities vary in size, condition, and configuration, but all homeports serve the same purpose: to provide a safe and secure environment for a NOAA ship to tie up for periods of maintenance, crew rest, training, and staging and de-staging of cruises. Homeports generally consist of pier space with adequate water depth, a port office for on-site support personnel, and equipment storage areas. A permanent homeport guarantees access to a secure facility of sufficient water depth and safe operating conditions, and gives crew members a place to call home. Homeports have dedicated personnel providing logistical support to the vessel and receive mail, supplies and equipment.

Newport, OR – *Miller Freeman, McArthur II, Rainier, Bell M. Shimada*
In August 2009, following a competitive lease acquisition process, based on best value source selection procedures, NOAA selected the Port of Newport, OR as the new MOC-P location. MOC-P is NOAA's largest homeport and a critical hub for West Coast fleet operations. Design and construction is underway, and the new facility will be occupied in the summer of 2011. Outfitting costs are based on the OMAO contracted relocation specialist and CIO re-validation of the Pacific Marine Operations Center, Pacific Market Assessment Report estimates; and recent negotiations with the Port of Newport on tenant improvement cost allowances in the lease, which was signed August 7, 2009.

Davisville, RI – *Okeanos Explorer*
Davisville is the homeport for NOAA's first dedicated ocean exploration ship, *Okeanos Explorer*. Berthing and shore-side support facilities have been acquired through a lease. Construction of offices, warehouse space, and pier upgrades are underway. NOAA signed the lease in 2010 and will take occupancy in February 2011.

Base Resource Assessment: The base resources for this activity are described in the Marine Services base narrative.

Schedule & Milestones:

- FY 2012-2016 – Operations continue from NOAA Ship homeports without adverse effect on annual ship operating days.

Deliverables:

- Operations continue from NOAA Ship homeports without adverse effect on annual ship operating days.

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Office of Marine & Aviation Operations
Subactivity: Marine Services

	Object Class	2012 Increase
11	Personnel compensation	
11.1	Full-time permanent	$0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12	Civilian personnel benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental Payments to others	1,902
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25.1	Advisory and assistance services	0
25.2	Other services	0
25.3	Purchases of goods & services from Gov't accounts	0
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	0
25.8	Subsistence and support of persons	0
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	1,902

Data Acquisition: NOAA Dive Center Improvement Plan (Base Funding: 2 FTE and $900,000; Program Change: +5 FTE and $790,000): NOAA requests 5 FTE and $790,000 for a total of 7 FTE and $1,690,000 for a total of 7 FTE and $1,690,000 to address the findings released in the NOAA Florida Keys National Marine Sanctuary Dive Fatality Incident Report. To date, 21 of 33 recommendations have been completed and a dive/small boat program database has been developed to more efficiently and effectively track critical data and measure execution of mission operations. The additional funding is required to provide the staff resources necessary to implement and oversee three of the remaining 12 recommendations.

Proposed Actions

To meet the outstanding recommendations, NOAA will take the following actions:

- Implement on-site inspection program for all NOAA diving units every three years. This will help to increase safety and reduce the number of dive-related safety incidents and near-misses currently reported.
- Develop a diving standards and safety manual for conducting working dives, to establish all applicable regulations, standards and policies, and to comply with Occupational Safety and Health Administration (OSHA) requirements.
- Develop a web-based refresher training module in Oxygen Administration, Dive Procedures and Dive Regulations to increase safety and reduce the number of dive-related safety incidents and near-misses currently reported.
- Issue additional safety equipment (e.g., automated external defibrillators, diver recall systems and low-pressure alarm devices) to NOAA dive units in order to increase safety and reduce the number of dive-related safety incidents and near-misses currently reported.
- Develop a formalized science diver training and certification program to ensure science divers are properly trained in the "NOAA-way" of diving, thus increasing safety and reducing the number of dive-related safety incidents and near-misses currently reported.
- Hire additional personnel to handle the increased NDC annual workload requirements for administration, training, certification, equipment, medical, dive accident management support, NDC operations and maintenance, and unit inspections necessitate additional personnel.

Statement of Need and Economic Benefits

The NOAA Florida Keys National Marine Sanctuaries Diving Fatality Report included 33 corrective recommendations to mitigate similar incidents in the future. To date, six of the remaining open recommendations are in the final stages of being completed. Of the remaining six; three recommendations will be addressed with current funding. However, NDC needs additional funding for the following three outstanding recommendations:

- Individual recall units do not meet specifications of the contract and will need additional investment.
- Ensuring all diving conducted under NOAA's auspices is accomplished safely, efficiently, and cost-effectively; additional FTE will support this recommendation.
- Ensuring compliance with all applicable diving regulations, standards and policies.

Base Resource Assessment: The base resources for this activity are described in the Marine Services base narrative.

Schedule & Milestones:

FY 2011:

- 7 recommendations completed

FY 2012:

- 5 recommendations will be complete
- Publish Annual Report –at the end of each calendar year
- FY 2011 - Publish Operations Manual for conducting Working Dives in accordance with OSHA regulations

Deliverables

- Training: The NOAA Dive Center will conduct a Diver Medical Technician Class, Working Diver Class, Divemaster Class, Standards of Training, Certification and Watchkeeping Medical Person-in-Charge Class, Diving Physician's Course, Tethered Scuba Class.
- Publications: The NOAA Dive Center will issue an Annual Report and a new Operations Manual for conducting Working Dives in accordance with OSHA regulations.

Performance Measure: Number of dive units inspected / year	**FY 2011 Target**	**FY 2012 Target**	**FY 2013 Target**	**FY 2014 Target**	**FY 2015 Target**	**FY 2016 Target**
With Increase	N/A	30	30	30	30	30
Without Increase	N/A	0	0	0	0	0

Description: One of the recommendations of the Dive Fatality Incident Report was to implement an on-site inspection program for all NOAA diving units every three years to increase safety and reduce the number of dive-related safety incidents and near-misses currently reported. One third of the 90 NOAA dive units will be inspected per year for a 3-year inspection cycle. Direct Dive Center oversight of each NOAA diving unit operation will provide a significant increase in dive operations standardization across the agency and provide essential opportunities for Dive Center personnel to recognize, foresee and prevent non-standard and unsafe operations.

Performance Measure: Number of dive units with essential safety equipment	**FY 2011 Target**	**FY 2012 Target**	**FY 2013 Target**	**FY 2014 Target**	**FY 2015 Target**	**FY 2016 Target**
With Increase	-	90	90	90	90	90
Without Increase	10	10	10	10	10	10

Description: The Dive Fatality Report recommended issuance of additional safety equipment (e.g., automated external defibrillators, diver recall systems, and low-pressure alarm devices) to NOAA dive units to increase safety and reduce the number of dive-related safety incidents and near-misses currently reported. This increase would allow all 90 NOAA dive units to be immediately outfitted with such equipment and to sustain this level of outfitting on an annual basis. Diver recall systems and low pressure alarms will serve to warn divers their gas consumption has reached a point where the diver needs to surface in order to maintain a safe ascent without exceeding the minimum air pressure requirement and to avoid drowning. Automated external defibrillators will be included as part of the NOAA Small Boats Program emergency medical equipment on designated small boats as an on-scene method of providing immediate medical assistance to injured divers. The introduction of this additional safety equipment greatly enhances NOAA's ability to reduce the risk of dive-related safety incidents of the type that led to the Florida Keys NMS dive fatality.

Performance Measure: Reduction in dive-related near miss accidents	**FY 2011 Target**	**FY 2012 Target**	**FY 2013 Target**	**FY 2014 Target**	**FY 2015 Target**	**FY 2016 Target**
With Increase	N/A	10%	11%	12%	13%	14%
Without Increase	N/A	0%	0%	0%	0%	0%
Description: This measure tracks the reduction in near miss accidents among NOAA divers.						

PROGRAM CHANGE PERSONNEL DETAIL

Activity: Office of Marine and Aviation Operations
Subactivity: Marine Operations & Maintenance

Title:	Location	Grade	Number of Positions	Annual Salary	Total Salaries
Supervisory Program Manager	Seattle, WA	ZA-04	1	87,306	87,306
Dive Safety Officer	Seattle, WA	ZA-04	1	87,306	87,306
Equipment Specialist	Seattle, WA	ZA-03	1	61,255	61,255
Training Specialist	Seattle, WA	ZA-03	1	61,255	61,255
Equipment Specialist	Seattle, WA	ZA-02	2	41,390	82,780
Secretary	Seattle, WA	ZS-03	1	33,414	33,414
Total			7		413,316
less Lapse		25%	2		103,329
Total full-time permanent (FTE)			5		309,987
2011 Pay Adjustment (0%)					0
2012 Pay Adjustment 0%)					0
TOTAL					309,987

Personnel Data	Number
Full-Time Equivalent Employment	
Full-time permanent	5
Other than full-time permanent	0
Total	5

Authorized Positions:

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Marine Operations & Maintenance
Subactivity: Data Acquisition

	Object Class	2012 Increase
11	Personnel compensation	
11.1	Full-time permanent	$309
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	54
11.8	Special personnel services payments	0
11.9	Total personnel compensation	363
12	Civilian personnel benefits	95
13	Benefits for former personnel	0
21	Travel and transportation of persons	81
22	Transportation of things	2
23.1	Rental payments to GSA	0
23.2	Rental Payments to others	15
23.3	Communications, utilities and miscellaneous charges	17
24	Printing and reproduction	0
25.1	Advisory and assistance services	50
25.2	Other services	49
25.3	Purchases of goods & services from Gov't accounts	2
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	0
25.8	Subsistence and support of persons	0
26	Supplies and materials	116
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	790

Data Acquisition: Integrated Bridge System (Base Funding: 0 FTE and $2,500,000; Program Change: 0 FTE and -$2,500,000): NOAA requests a decrease of $2,500,000 and 0 FTE for a total of $0 and 0 FTE. In the Consolidated Appropriations Act, 2010, Congress provided an additional $2,500,000 to purchase an integrated vessel electronics bridge system for any ship or boat within NOAA. With these additional funds NOAA acquired systems for a small vessel in the National Ocean Service's Sanctuaries Program. This funding is not required in FY 2012 as the integrated vessel electronics bridge system has been purchased and installed.

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Marine Operations and Maintenance
Subactivity: Marine Services

	Object Class	2012 Decrease
11	Personnel compensation	
11.1	Full-time permanent	$0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12	Civilian personnel benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental Payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25.1	Advisory and assistance services	0
25.2	Other services	-2,500
25.3	Purchases of goods & services from Gov't accounts	0
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	0
25.8	Subsistence and support of persons	0
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	-2,500

APPROPRIATION: OPERATIONS, RESEARCH AND FACILITIES
SUBACTIVITY: FLEET PLANNING AND MAINTENANCE

The objective of the Fleet Planning and Maintenance (P&M) subactivity is to support maintenance activities for the NOAA Fleet. Regular and adequate maintenance allows NOAA ships to meet the rigorous demands of scientific, forecasting, and regulatory missions of NOAA. The funding provides for general maintenance and repair of NOAA ships including critical scientific and technical equipment necessary to meet stakeholder requirements.

The NOAA Fleet is subject to various requirements and regulations related to safety and emissions put forth by three organizations. The American Bureau of Shipping (ABS) certifies ships as seaworthy. The Fleet P&M program uses ABS rules to design maintenance program and conduct Material Condition Assessments (MCAs) on the NOAA Fleet. The Environmental Protection Agency (EPA) promulgates regulations related to ship emissions under the Clean Air Act. The regulations are intended to reduce harmful emissions from ships engines. The program maintains all engine and exhaust components in compliance with these regulations. The United States Coast Guard (USCG) promulgates regulations on all discharges from ships. The regulations are designed to protect marine environments from all discharges that can harm marine species. In addition, as the primary provider of fisheries and mammal surveys, the program has a unique operating role in marine sanctuaries that requires additional protections to maintain the pristine nature of these environments.

FLEET PLANNING AND MAINTENANCE

The Fleet P&M program allocates resources to individual ships based on maintenance requirements through planned fiscal year operations. Personnel provide fleet wide oversight, guidance and management of day-to-day operations. The allocation of resources is based on a five year maintenance schedule coinciding with mandated ABS certifications.

The Fleet P&M Program provides shipside and dry dock maintenance activities ensuring the NOAA Fleet is in compliance with all safety, environmental, and legal regulations. In addition, the program ensures state of the art on-board scientific equipment is operational and calibrated to meet mission requirements. Proper maintenance of ships and equipment is essential for NOAA to receive the full Return on Investment (ROI) of the capital investment. Proper maintenance activities allow ships to provide for the maximum Days at Sea (DAS) and reduce the likelihood of breakdowns or unscheduled maintenance, which impacts the ability of NOAA to meet stakeholder requirements.

NOAA ships are required to comply with a range of safety and legal regulations governing safety and operations. The ABS conducts regular ship inspection and issues a certification allowing NOAA ships to operate. Without the certification, NOAA ships would not meet minimum CFR (Code of Federal Regulations) regulations and would not operate. During the inspection process, ABS issues a MCA covering all shipboard systems. Planned maintenance activities are designed to comply with ABS requirements. In the event of MCA findings, NOAA corrects deficiencies through repairs and/or modifications and ships are certified safe to operate.

Schedule & Milestones:
Drydock and Dockside repair has a set maintenance period for each vessel based on ABS scheduling by ship class. Tthe following ships are scheduled for Drydock in FY 2012; *Delaware II, Fairweather, Hi'ialkai, Oregon II, Pisces, Rainier, Ronald.H.Brown, and Shimada.*

Performance Goals and Measurement Data

	FY 2011 Target	FY 2012 Target	FY 2013 Target	FY 2014 Target	FY 2015 Target	FY 2016 Target
Performance Measure: Annual Number of Fleet Casualty Reports (CASREPS)	170	160	140	110	70	20
Description: A decrease in CASREPS is one overall indicator of the success of a maintenance programs and depending on the severity of the CASREP, ultimately translates to a decrease in DAS lost to mechanical/electronic component failure.						

PROGRAM CHANGES FOR FY 2012:

Fleet Planning & Maintenance: Environmental Compliance for Vessels (Base Funding: 0 FTE and $350,000; Program Change: +0 FTE and + $3,365,000): NOAA requests an increase of $3,365,000 and 0 FTE and for a total of $3,715,000 and 0 FTE to bring the NOAA fleet into compliance with Environmental Protection Agency and United States Coast Guard regulations.

Proposed Actions:
A number of maritime environmental regulations are being enforced beginning in FY 2012, including stricter emissions requirements from the Environmental Protection Agency (EPA) and stricter discharge requirements from the United States Coast Guard (USCG). These new regulations will require significant changes to the existing vessel fleet to ensure compliance is maintained and monetary fines are avoided. The current program budget is not sufficient to capture the costs of the capital changes necessary to the fleet, which affects all NOAA vessels delivered before FY 2010. Proactively ensuring compliance with these new environmental regulations will allow NOAA to maintain its position as a leader in environmental stewardship and in executing the Administration's energy priorities.

In FY 2012, this program change will be applied to:

- Engine and Propulsion
    - Purchase and install upgrade kits for engines and generators for vessels to become Tier II-compliant as required by EPA and reduce greenhouse gas emissions.
    - Re-engine vessels with service life greater than seven years for Tier II compliance as required by EPA, increasing fuel efficiency and reduced greenhouse gas emissions.
    - Implement greenhouse gas reduce/efficiency improvement projects on vessels.
- Oils, Hydraulics and Discharges
    - Substitute biodegradable hydraulic oil in cranes and davits to reduce the impact of spills within environmentally sensitive waters, as required by EPA Vessel General permit.
    - Replace top-side hydraulic lines during special survey dry dockings to reduce risk of failure, as required by EPA Vessel General permit.
    - Upgrade or replace of Oily Water Separators (OWS) to ensure legacy systems meet international oil pollution requirements set by International Maritime Organization.
    - Install water treatment systems to reduce discharges and increase duration of operation in protected waters, as required by EPA Vessel General permit and NMSA.
    - Research and planning for ballast water treatment systems.
- Sustainment
    - Implement a design program to ensure future year ship conversions have correct specifications, and establish a training program that maintains and supports new equipment.

These actions were selected according to their status as legal requirements with market-ready solutions.

Statement of Need and Economic Benefits
All U.S. Government-owned public vessels are held accountable for meeting these new EPA and USCG regulations. The Department of Justice and Department of Commerce have waived the right for their respective federal agencies to be exempt from these regulations and the regulatory agencies may impose administrative penalties on other federal agencies.

The NOAA Fleet of small boats are symbols of NOAA's commitment to the environment, and must have the appropriate environmental protection equipment onboard to maintain a leadership role in environmental science collection. The current baseline budget is insufficient to cover the costs of capital improvements needed for environmental compliance. Each of the proposed actions has a direct and tangible economic benefit by preventing fines, reducing fuel costs over the life-cycle of the asset, and by reducing greenhouse gas emissions.

Schedule & Milestones:
In FY 2012:
- One engine upgrade kit installed on a NOAA vessel.
- Planning and initial installation of new propulsion on one T-AGOS class vessel.
- Biodegradable hydraulics installed on four vessels.
- Five green house gas reduce/efficiency improvement projects completed.
- New compliant Oily-Water Separators installed on three NOAA vessels.

In FY 2013 – 2016:
- Four additional ships receive engine upgrade kits.
- Three T-AGOS vessels repowered.
- Biodegradable hydraulics installed on 15 additional vessels.
- Twenty-five additional greenhouse gas improvement projects completed.
- Ten new compliant Oily-Water Separators installed
- Ballast Water Treatment systems installed on seven vessels.
- Biodiesel conversions on four vessels.

Base Resource Assessment: The base resources for this activity are described in the Fleet Planning and Maintenance base narrative.

Performance Goals and Measurement Data

Performance Measure: Ships Compliant with Environmental Regulations (%)	FY 11 Target	FY 12 Target	FY 13 Target	FY 14 Target	FY 15 Target	FY 16 Target
With increase	5%	10%	15%	25%	35%	45%
Without increase	5%	7%	9%	13%	15%	18%

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Office of Marine & Aviation Operations
Subactivity: Fleet Planning and Maintenance

	Object Class	2012 Increase
11	Personnel compensation	
11.1	Full-time permanent	$0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12	Civilian personnel benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental Payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25.1	Advisory and assistance services	0
25.2	Other services	500
25.3	Purchases of goods & services from Gov't accounts	0
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	0
25.8	Subsistence and support of persons	0
26	Supplies and materials	500
31	Equipment	2,365
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	3,365

Fleet Planning and Maintenance: Preventive, Corrective, and Deferred Ship Maintenance: (Base Funding: 3 FTE and $17,470,000; Program Change: +0 FTE and $6,200,000): NOAA requests 0 FTE and $6,200,000 for a total of 3 FTE and $23,670,000 to continue correcting deferred maintenance items and decrease the number of Casualty Reports (CASREPS) that impact accomplished days at sea and scientific data collection for NOAA programs. This increase supports NOAA's Ship Recapitalization Plan to ensure its oldest ships can operate until replacements are delivered and to bridge the operational period until a Major Repair Period is implemented. It also builds on major vessel maintenance and repair investments that were made during FY 2010 using American Recovery and Reinvestment Act of 2009 (ARRA) funding. The proposed increase also accelerates the accomplishment rate of OMAO's shipboard maintenance management program to enhance at-sea safety and ship productivity and to meet emerging regulatory requirements.

NOAA will address the following items:

$ 1,358,000	Deferred Maintenance Backlog – Electronics Engineering
$ 2,742,000	Deferred Maintenance Backlog- Marine Engineering
$ 2,100,000	Increase Preventative Maintenance Accomplishment Rate
$ 6,200,000	

Proposed Actions

A prioritized approach will be taken to correct the Maintenance Backlog by addressing the most critical items first. The most critical items are the items that affect the ship's ability to sail or items that will exacerbate over time and will incur greater expense to repair if left uncorrected for a significant time period. With this funding, after five years the preventative maintenance backlog for mission-related equipment and improvements to exterior and internal compartments to enhance crew safety and productivity will be eliminated. Four Fisheries Survey Vessels (FSVs) will be acoustically maintained annually, and each FSV acoustical signature tested every five years on a rotating schedule. The shipboard At-Sea Preventative Maintenance (PM) will be augmented with shore-based contractor support during winter in port periods, such that the current preventive-maintenance accomplished rate of 40 percent is increased by 10 percent per year.

1. The Deferred Maintenance backlog will be eliminated in five years. Annual amounts of approximately $70,000 per ship/year for deferred electronics maintenance and approximately $140,000 per ship/year for deferred mechanical maintenance are planned.
2. To increase the accomplishment rate of planned maintenance currently assigned to each crew, $2,100,000 per year will be used to address systemic maintenance problems by supplementing crew-performed maintenance with contractor- performed maintenance. This will decrease lost days at sea resulting from casualties to systems, equipment or machinery.

Statement of Need and Economic Benefits

There has been an 89 percent increase in the number of significant mechanical/electronic failures as indicated in NOAA Ship Casualty Reports (i.e., Category 1 and 2 CASREPS) – from 95 in FY 2005 to 180 in FY 2008 – and a 44 percent increase in Lost Days at Sea (DAS) for NOAA programs – from 184 DAS in FY 2005 to 264 DAS in FY 2010. The FY 2012 increase will reduce lost Days at Sea and equipment failures due to lack of maintenance by a full ship-year of mission days by FY 2016, which translates to an annual improvement in the GPRA targets supported by the NOAA fleet. This increase will allow NOAA to properly maintain its aging ships and meet increasingly restrictive maritime standards while ensuring that new ships continue to meet mission requirements and meet performance targets. In recent years NOAA has faced a growing list of deferred maintenance items,

especially on older ships that have increasing need of the investment; the status quo reduces operational tempo and limits the value of scientific operations accomplished per unit ship cost.

Base Resource Assessment: The base resources for this activity are described in the Marine Services base narrative.

Schedule & Milestones:
Deferred maintenance activities will be completed on ships during the winter in-port periods. Specific milestones will be developed in late FY 2011 based on the material condition of the ships.

Deliverables:
- 17 Ships will receive Mechanical and Acoustic Deferred Maintenance
- 13 Ships will receive Electronics Deferred Maintenance
- 17 Ships will receive Preventative Maintenance

Specific deliverables will be developed in late FY 2011 based on the material condition of the ships.

Performance Goals

Performance measure Annual number of Fleet Casualty Reports (CASREPS)	**FY 2011 Target**	**FY 2012 Target**	**FY 2013 Target**	**FY 2014 Target**	**FY 2015 Target**	**FY 2016 Target**
With Increase	170	160	140	110	70	20
Without Increase	200	210	220	230	240	250
Description: A decrease in CASREPS is one overall indicator of the success of a maintenance program and, depending on the severity of the CASREP, ultimately translates to a decrease in DAS lost to mechanical/electronic component failures.						
Performance measure: Operational Days Completed (fleet only)	**FY 2011 Target**	**FY 2012 Target**	**FY 2013 Target**	**FY 2014 Target**	**FY 2015 Target**	**FY 2016 Target**
With Increase	2,963	2,963	2,963	2,963	2,963	2,963
Without Increase	2,963	2,663	2,638	2,613	2,588	2,563
Description: A decrease in DAS due to increased mechanical failures will negatively affect the data collection capacity and proportionately affect the GPRA target for each mission the fleet supports.						
Performance measure: Operational Days Completed (fleet only)	**FY 2011 Target**	**FY 2012 Target**	**FY 2013 Target**	**FY 2014 Target**	**FY 2015 Target**	**FY 2016 Target**
With Increase	2,963	2,963	2,963	2,963	2,963	2,963
Without Increase	2,963	2,663	2,638	2,613	2,588	2,563
Description: A decrease in DAS due to increased mechanical failures will negatively affect the data collection capacity and proportionately affect the GPRA target for each mission the fleet supports.						

Performance Measure: Percentage of Living Marine Resources with Adequate Population Assessments and Forecasts, supports Measure 17b, 17c*		**FY 2011 Target**	**FY 2012 Target**	**FY 2013 Target**	**FY 2014 Target**	**FY 2015 Target**	**FY 2016 Target**
Oscar Elton Sette	Without Increase	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%
	With Increase	N/A	1.30%	1.30%	1.30%	1.30%	1.30%
Gordon Gunter	Without Increase	-0.60%	-0.60%	-0.60%	-0.60%	-0.60%	-0.60%
	With Increase	N/A	1.00%	1.00%	1.00%	1.00%	1.00%
McArthur II	Without Increase	-0.50%	-0.50%	-0.50%	-4.0%**	-0.50%	-0.50%
	With Increase	N/A	0.90%	0.90%	-0.10%	0.90%	0.90%

*From NOAA Ship Recapitalization Plan (October 2007), Chapter 11, Figure 9, Annual % Change Projected from FY07 GPRA Performance Baseline. The increase in GPRA target for each ship listed was calculated to incorporate the change in capacity associated with this increase. A percent change in operating days for each specific ship based on a decrease in lost days and CASREPS was multiplied by the number of Adequately Assessed Living Marine Resources associated with that ship. Target adjusted for change in assumption from an average of 240 DAS to 178 DAS.

**The Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA) mandate the frequency and content of NOAA's stock assessments. MMPA requires all listed species be reassessed every three years and "depleted" species every year. The ESA requires each listed species be reassessed every five years, or when new data becomes available. The change between FY 2014 and FY 2015 reflects the inability of NOAA to certify that listed species in the California Current Large Marine Ecosystem are in/are not in compliance with the three or five-year reassessment, as well as a lack of capacity due to McArthur II's Major Repair Period during FY 2014.

Performance Measure: Reduce Hydrographic Survey Backlog Within Navigationally Significant Areas, Measure 18f*		**FY 2011 Target**	**FY 2012 Target**	**FY 2013 Target**	**FY 2014 Target**	**FY 2015 Target**	**FY 2016 Target**
Rainier	Without Increase	0%	0%	0%	0%	0%	0%
	With Increase	N/A	4.50%	4.50%	4.50%	4.50%	4.50%
Fairweather	Without Increase	-2.00%	-2.00%	-2.00%	-2.00%	-2.00%	-2.00%
	With Increase	N/A	3.90%	3.90%	3.90%	3.90%	3.90%

* From NOAA Ship Recapitalization Plan (October 2007), Chapter 11, Figure 15, Annual % Change Projected from FY 2007 GPRA Performance Baseline. The increase in GPRA target for each ship listed was calculated to incorporate the change in capacity associated with this increase. A percent change in operating days for each specific ship based on a decrease in lost days and CASREPS results in an increase to the hydrographic surveying performance measure. Target adjusted for change in assumption from an average of 240 DAS to 178 DAS.

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Fleet Planning and Maintenance
Subactivity: Fleet Planning and Maintenance

	Object Class	2012 Increase
11	Personnel compensation	
11.1	Full-time permanent	$0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12	Civilian personnel benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental Payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25.1	Advisory and assistance services	0
25.2	Other services	5,800
25.3	Purchases of goods & services from Gov't accounts	0
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	0
25.8	Subsistence and support of persons	0
26	Supplies and materials	400
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	6,200

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APPROPRIATION: OPERATIONS, RESEARCH AND FACILITIES
SUBACTIVITY: AVIATION OPERATIONS

The objective of the Aviation Operations subactivity is to provide the following Aircraft Services:

- Provides NOAA with centralized aircraft systems management and coordination of airborne data collection flight time;
- Modifies, maintains, and operates NOAA's aircraft with a combined work force of specially trained civilians and officers of the NOAA Commissioned Corps to meet NOAA's airborne data-collection requirements;
- Maintains the airworthiness and operating standards of NOAA's aircraft for optimum safety along with standardization of scientific systems and aircraft;
- Operates the aircraft as public aircraft as well as adheres to the Federal Aviation Administration regulations with respect to the use of airspace, control of air traffic, and aircraft registration;
- Develops and operates prototype and operational scientific-research instrumentation aboard NOAA aircraft; conducts applied research to ensure validity of data collected; recommends and implements specialized modifications, equipment or personnel for particular missions or projects;
- Develops, with the guidance of NOAA's Fleet Council, annual flight-time allocation schedules based on airborne data-collection requirements;
- Provides centralized expertise in aviation safety to arrange for safe commercial aviation services for NOAA programs using outsourced aircraft; and
- Provides aviation life support equipment to NOAA Programs that utilize commercial aviation services.

The Aircraft Operations Center (AOC) (http://www.aoc.noaa.gov/), located at MacDill Air Force Base in Tampa, FL, ensures the availability and readiness of NOAA's uniquely configured aircraft. The AOC operates a fleet of 12 aircraft used as observation platforms equipped with comprehensive data-collection systems in support of missions related to the Earth's environment, coastal and marine resources, and severe weather. OMAO also ensures that outsourced aviation operations are conducted safely by providing technical support, services and equipment to NOAA programs.

FY 2010 Program Accomplishments

- NOAA Aircraft, provided survey support following Nor'easter**:**
  NOAA's Cessna Citation (N52) acquired remote sensing imagery along the Hampton Roads, VA shoreline following a major storm that impacted the Mid-Atlantic region November 12-14, 2009. The aircraft documented changes in shoreline due to flooding at Whalehead Beach and examined a grounded barge in Virginia Beach. The surveys provided critical aerial imagery to the port community, local officials and residents impacted by the storm and resulting flooding in Hampton Roads.
- NOAA G-IV Aircraft dispatched to gather winter storm data:
  NOAA's Gulfstream IV-SP aircraft conducted flights over the North Pacific Ocean to help fill gaps in atmospheric observations. During that period NOAA crew flew 310.8 hours, covering 134,000 nautical miles. 634 GPS dropwindsondes were launched, of which 97.2% provided good detailed data on 12 intensifying winter storms. Flying out of Yokota Air Force Base in Japan, the OMAO-operated plane collected wind speed and direction, pressure, temperature and humidity information from data sparse regions. The data was sent via satellite to global operational weather forecasting centers and fed into sophisticated computer forecast models.
- Responded to the devastating earthquake in Haiti:

NOAA Aircraft Operations Center and the NOAA National Geodetic Survey dispatched the NOAA Cessna Citation II aircraft to conduct surveys of quake-ravaged areas, giving responders the data they needed to assess damage and plan recovery efforts.

- NOAA aircraft gathered observations in flooded Red-River Region:
  NOAA Shrike Commander and NOAA Jet Prop Commander aircraft stationed in Minneapolis, MN helped the North Central River Forecast Center improve their flood forecasts with real time observations. The Red River, along the Minnesota-North Dakota border, approached record flood levels. The aircraft took video and photographic footage of the river in flood stage. They were able to observe ice jams, standing water in farm fields, and other conditions in the watershed. The hydrologists can use this data to refine their models.

The following table provides information on the aircraft fleet for the current program (missions and support fluctuate based on program priorities):

Aircraft	Type	Mission	Location
HEAVY:			
(2) Lockheed WP-3D	4-engine turbo prop	Air quality (OAR) Hurricane research (OAR) Hurricane reconnaissance (NWS) Ocean winds (NESDIS, NWS) Hurricane intensity forecasting (NWS)	MacDill AFB, FL
(1) Lockheed WP-3C	4-engine turbo prop	Air quality (OAR) Climate research (CS) Hurricane reconnaissance (NWS) Ocean winds (NESDIS, NWS)	MacDill AFB, FL
MID:			
(1) Gulfstream G-IVSP	2-engine turbo jet	Hurricane surveillance (NWS) Winter storm reconnaissance (NWS) Hurricane intensity forecasting (NWS) Atmospheric research (OAR)	MacDill AFB, FL
LIGHT:			
(4) Dehavilland Twin Otter DHC-6	2-engine turbo prop	Aerial surveys (NMFS) Atmospheric research (OAR)	MacDill AFB, FL
(1) King Air	2-engine turbo prop	Photogrammetry (NOS) Multi-spectral scanner (NOS) Post-storm damage assessment (NOS) Airborne topographic LIDAR (NOS, NWS)	MacDill AFB, FL
(2) Rockwell Shrike Commander/AC500S	2-engine reciprocating	Snow survey (NWS) Fisheries observations (NMFS) Marine mammal observations (NMFS)	Minneapolis, MN MacDill AFB, FL
(1) Jet Prop Commander AC/695	2-engine turbo prop	Snow surveys (NWS) Fisheries observations (NMFS) Marine mammal observations (NMFS)	Minneapolis, MN

Schedule & Milestones:
Aircraft Services annual schedule and milestones are governed by the Aircraft Allocation Plan as agreed to and signed by the NOAA Fleet Council. The Aircraft Allocation Plan details the individual NOAA mission projects to be conducted on each aircraft, and the timeframe for each project. The annual Aircraft Allocation Plan can be referenced on the OMAO website at http://www.omao.noaa.gov/airallocation.html.

Deliverables/Outputs:
The program performs 2,845 mission flight hours per year. In addition to flight hours, flight instructions are documented and agreed upon by both OMAO and the respective line office for each individual project conducted on a NOAA aircraft. The project instructions detail the deliverables for each project, e.g. hurricane reconnaissance or surveillance; snow surveys, or marine mammal assessment. The flight instructions will also detail mission success criteria and operational tempo requirements.

Performance Goals and Measurement Data

	FY 11 Target	FY 12 Target	FY 13 Target	FY 14 Target	FY 15 Target	FY 16 Target
Performance Measure: Savings to the nation from Hydrologic forecast from airborne collected data ($x1,000)	$633,864	$633,864	$633,864	$633,864	$633,864	$633,864
Description: Dollars saved by nation from Hydrologic forecast from airborne collected data.						
Performance Measure: Number of Flight Hours	2,845	2,845	2,845	2,845	2,845	2,845
Description: Mission flight hours per year						

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PROGRAM CHANGES FOR FY 2012:

Aircraft Services: Decrease in Operating Funds for NOAA Aircraft Services (Base Funding: 104 FTE and $30,520,000; Program Change: 0 FTE and -$1,162,000): NOAA requests a decrease of $1,162,000 and 0 FTE for a total of $29,358,000 and 104 FTE in Aircraft Services. Reflecting a reprioritization of research missions, and the completion of data acquisition needs for the CALNEX mission, NOAA proposes cancelling the Ocean Winds and CALNEX missions in FY 2012, reducing flight hour requirements by 275 hours.

Statement of Need and Economic Benefits
At the funding level, OMAO will continue to support NOAA research missions throughout the agency. Flight hours will be used for hurricane research and snow surveys. Also supported will be marine mammal population and other living marine resource assessments and coastal erosion surveys.

Base Resource Assessment: The base resources for this activity are described in the Aviation Services base narrative.

Performance Goals and Measurement Data

Performance Measure: Number of Flight Hours	**FY 11 Target**	**FY 12 Target**	**FY 13 Target**	**FY 14 Target**	**FY 15 Target**	**FY 16 Target**
Without decrease	2,845	2,845	2,845	2,845	2,845	2,845
With decrease	2,845	2,570	2,570	2,570	2,570	2,570
Description: Mission flight hours per year						

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Office of Marine & Aviation Operations
Subactivity: Aviation Services

	Object Class	2012 Decrease
11	Personnel compensation	
11.1	Full-time permanent	$0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	-46
11.8	Special personnel services payments	0
11.9	Total personnel compensation	-46
12	Civilian personnel benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	-302
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental Payments to others	0
23.3	Communications, utilities and miscellaneous charges	-35
24	Printing and reproduction	0
25.1	Advisory and assistance services	-35
25.2	Other services	0
25.3	Purchases of goods & services from Gov't accounts	0
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	0
25.8	Subsistence and support of persons	0
26	Supplies and materials	-744
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	-1,162

APPROPRIATION: PROCUREMENT, ACQUISITION AND CONSTRUCTION
SUBACTIVITY: FLEET REPLACEMENT PROGRAM

The objectives of the Fleet Replacement Program (FRP) are to develop the requirements, business case acquisition strategies, funding profiles, contractual instruments and preliminary arrangements necessary to design, equip, construct or modernize the ships and ship systems required to safely meet NOAA's Days at Sea (DAS) collection requirements. The current NOAA Fleet faces challenges similar to other observational infrastructure including expanded mission requirements, age and obsolescence, and finite resources for recapitalization. NOAA has successfully developed, adapted, and/or fielded a number of technologies that have enhanced the capabilities of NOAA ships and is currently evaluating a number of technologies that have potential to contribute to more effectively and efficiently meet collection requirements. While technology is expected to allow NOAA to make incremental advances over its current capabilities in the near-term, long-term technological advances could have a dramatic impact on how the NOAA Fleet is configured.

The Fleet Replacement Program receives sustainment funding that provides for planning and oversight of Fleet Capital Improvement and Technology Innovation (FCITI) activities and ensures a cadre of government experts is available to evaluate requirements, review proposals, and monitor progress towards achieving goals. In addition to sustainment funding, FCITI funding varies depending on the specific tasks delineated in the NOAA Ship Recapitalization Plan (Ship Recap Plan) that are to be performed in a given fiscal year. For example, specific funding was provided in the FY 2010 appropriation for the *Oregon II* and the *Rainier* Major Repair Periods (MRP). In FY 2009, New Vessel Construction (NVC) received funding for FSV6 construction through the American Reinvestment and Recovery Act (ARRA). The Program Gap Analysis section will provide further information on NVC Ship Recap Plan tasks for the performance period.

NOAA Ship Recapitalization Plan
In October 2006, NOAA conducted an Analysis of Alternatives (AoA) study to determine the most cost effective service delivery method to address NOAA mandates. The AoA was conducted in two parts: (1) a cost-effectiveness economic analysis based on guidance provided in the Office of Management and Budget (OMB) Circulars A-11 and A-94 and (2) a program performance analysis that assessed how changes in ship capacity and capability would impact NOAA Government Performance and Results Act (GPRA) measure results.

The AoA evaluated “New Build,” “Service Life Extension,” ”Charter,” and “Conversion” vessels. “New Build” is defined as the construction of a new ship is the most cost effective alternative. “Service Life Extension” extends the service life of a current ship with extensive dry dock overhaul or a more limited dry-dock overhaul using a Major Repair Period (MRP). “Charter” is using non-governmental ships to perform mission requirements. “Conversion” is defined as converting an existing ship to meet mission requirements.

The Hydrographic Services Improvement Acts also reiterate NOAA’s responsibilities “to fulfill the data gathering and dissemination duties… [of] acquiring and disseminating hydrographic data, promulgate standards for hydrographic data…” and the authority to “operate vessels, equipment, and technologies necessary to ensure safe navigation and maintain operational expertise in hydrographic data acquisition and hydrographic services.” The 2002 HSIA also authorizes NOAA to “carry out activities authorized under this title that enhance homeland security, including…hydrographic surveys….”

In order to link AoA results to the fleet configuration and DAS requirements, NOAA developed the Fleet Replacement Program to inform the “New Build,” “Service Life Extension,” and “Conversion” activities.

NOAA utilized a systematic approach to linking NOAA mandates and resulting DAS requirements with fleet configuration. NOAA worked with stakeholder line offices within NOAA to translate NOAA mandates into DAS and ship capability requirements. Collectively the requirements provided input to an analysis of the current configuration of the NOAA Fleet and the proposed configuration. Rapidly aging ships and scientific equipment require a reconfiguration of the NOAA Fleet over the next fifteen years.

The resulting NOAA Ship Recapitalization Plan (2008) (http://www.omao.noaa.gov/publications/08_ship_recap_plan.pdf) will reduce the average age of the NOAA fleets from 26.9 years and reduce the number of ships from 15 ships having more than 30 years of service, including one with more than fifty years of service.. In order to meet the "Build" requirements indentified in the AoA, the Ship Recap Plan addresses the acquisition of new classes of Fisheries Survey Vessels (FSVs), and NOAA Survey Vessels (NSVs). In order to meet the SLE requirements, the Ship Recap Plan addresses SLEs and MRPs to realize the full ROI by providing for replacement of structural, propulsion, and scientific equipment. The investment in scientific equipment ensures NOAA remains at the forefront of applied research and development. The Ship Recap Plan does not currently provide for any ship conversions.

PROGRAM CHANGES FOR FY 2012:

Fleet Capital Improvements: Repair Periods for NOAA Ship *Ka'Imimoana* and *Miller Freeman* (Base Funding: 0 FTE and $1,000,000; Program Change: +$11,626,000 and +0 FTE): NOAA requests an increase of $11,626,000 and 0 FTE for a total of $12,626,000 and 0 FTE to provide for the highest priority repairs for the NOAA Ships *Ka'Imimoana* and *Miller Freeman*.

The funds requested will be used as follows:

- Structural: $6.0M
- Mechanical: $3.2M
- Electrical: $1.7M
- Electronics upgrade: $0.7M

Proposed Actions

The additional funding will accelerate the NOAA Ship Recapitalization Plan timeline for NOAA Ships *Ka'Imimoana (KA)* and *Miller Freeman.* Repair periods will be performed on the *KA* and *Miller Freeman* in FY 2012 replacing a FY 2020 Service Life Extension (SLE) on the *KA* and moving forward the planned FY 2013 Major Repair Period (MRP) on *Miller Freeman*.

A 2010 Material Condition Assessment (MCA) of *KA*, based on a FY 2009 dry dock period and a subsequent fleet inspection, revealed significant deterioration in multiple shipboard systems. NOAA can provide temporary repairs, but an overhaul will be necessary. The funding will provide for repairs to structural and mechanical systems. The *KA* is the only ship in the NOAA fleet capable of servicing the Tropical Atmosphere Ocean (TAO) Array, supporting critical El Niño/La Niña forecasting and climate science missions. In FY 2009, the *KA* experienced 34 lost days out of 145 due to repairs. Furthermore, mission capability was impacted because of restrictions placed on the aft cranes and winches and current, temperature and depth (CTD) winch and deck cranes.

The *Miller Freeman* is one of the oldest ships in NOAA's fleet. To extend ship service life and ensure safe operations, new capital investments must be made beyond routine annual maintenance cycles. Recent dry dock work and associated material assessments confirm the ship's continuing and rapidly deteriorating condition from advanced age. In FY 2009 *Miller Freeman* lost 60 program science days due in part to 54 casualty breakdowns. The NOAA Ship Recapitalization Plan currently schedules a MRP in FY 2013. However, due to the trend in lost-days-at-sea, an accelerated repair period is necessary in order to safely operate the *Miller Freeman* through FY 2017, its planned decommissioning and 50th anniversary year, a repair period is required in FY 2012.

Without repair periods for these vessels, OMAO risks continued unplanned mechanical or infrastructure failures due to poor structural integrity that will result in lost days at sea and additional casualty reports. The condition of these ships may also jeopardize OMAO's ability to meet the ship certification requirements of the American Bureau of Shipping (ABS), the governing regulatory body for international voyages.

Statement of Need and Economic Benefits

The *KA* MCA updated in March 2010, details the serious issues related to crane hydraulic systems, mission winch systems, Heating, Ventilation and Air Conditioning (HVAC) ducting and trunk wastage, ballast tank and void deterioration, sea water piping system failures, and various machinery systems that are no longer manufactured and are becoming obsolete. Achieving the 80 percent TAO data availability requirement is dependent on *KA*'s full operational capacity.

The *KA* is the only vessel in the NOAA fleet capable of providing maintenance to the TAO array. NOAA must invest in new capital investments beyond routine annual maintenance cycles to support the operational readiness and to ensure safe operations of the 24 year old vessel. Under the NOAA Ship Recapitalization Plan, the *KA* is currently scheduled for a SLE in FY 2020. The *KA*, however, has begun to experience increased mechanical breakdowns, shipyard delays due to discovered repairs beyond normal maintenance, and critical system failures.

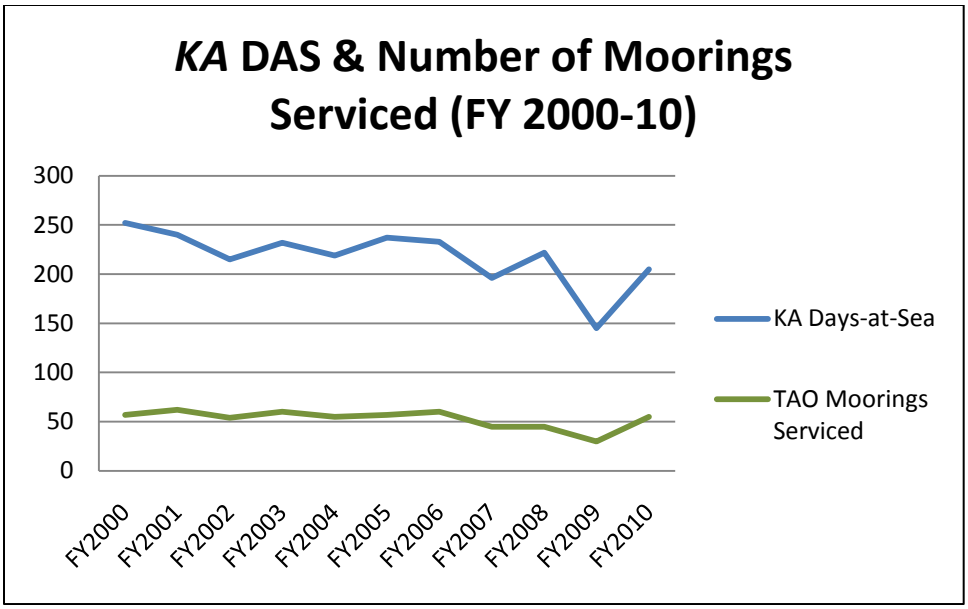
At 44, the *Miller* Freeman is one of NOAA's oldest ships, and suffers from continued and rapid deterioration due to its advanced age. Recent maintenance history shows an increasing incidence of mechanical and electrical casualty reports resulting in unplanned emergency repairs that include extended shipyard periods. It is anticipated that lost program sea days will only increase without a significant investment.

Miller Freeman has lost 60 program science days in FY 2009 due to 54 casualty breakdowns and the cancellation of one winter and two spring program projects. Charter vessels have been used to cover the cancelled cruises. The demand for *Miller Freeman* operating days has increased drastically with the decommissioning of NOAA ship *John N. Cobb* in FY 2008 and the *David Starr Jordan*, reducing the total number of NOAA days-at-sea available for fisheries assessments and research by approximately 400 per year.

The *Miller Freeman* currently supports major field programs, representing decades-long biological and oceanographic time-series in Alaska and off the West Coast. The loss of *Miller Freeman* would severely impact annual investments in important data collections and impede the advancement of NOAA science in the North Pacific. Walleye pollock are the basis of the largest U.S. fishery by landed weight and dollar value. The Alaska Fisheries Science Center (AFSC) conducts annual winter and summer hydroacoustic surveys rotating between the Bering Sea, Gulf of Alaska. The Northwest Fisheries Science Center (NWFSC) conducts a 60-day Pacific hake hydroacoustic survey, and annual Pacific groundfish surveys with the Southwest Fisheries Science Center (SWFSC). All of these surveys are conducted by the *Miller Freeman.*

Historical Performance Data/Days-at-Sea (DAS)

The following graph shows a significant decline in annual DAS for the *KA* during the past two years due to critical mission equipment failures and increased maintenance requirements. During the 10-year period from FY 2000 – FY 2010, the *KA* averaged 218 DAS. During the three-year period from FY2007 – FY 2009, the average DAS declined by 31 to an average of only 188 DAS. The 31 DAS reduction equates to the loss of one full TAO Mooring Cruise. A TAO Mooring Cruise services an average of 14 TAO moorings.



Base Resource Assessment:

The base resources for this activity are described in the Fleet Replacement Program base narrative.

Schedule & Milestones:
FY 2012 - Develop Statement of Work and Detailed Drawing for Acquisition of Repairs (Q1)
FY 2012 - Publish Solicitations (Q2)
FY 2012 - Award Contracts (Q4)
FY 2013 - Begin Industrial Work and TAO buoy maintenance with Charter (Q2)
FY 2013 - Complete Industrial Work and return to Service (Q2)

Performance Goals and Measurement Data

Performance Measure: Annual Number of Fleet Casualty Report (CASREPS)	**FY 11 Target**	**FY 12 Target**	**FY 13 Target**	**FY 14 Target**	**FY 15 Target**	**FY 16 Target**
With increase	210	150	115	75	25	5
Without increase	210	220	230	240	250	260
Performance Measure: *KA* Operational Days at Sea (Fleet Only)	**FY 11 Target**	**FY 12 Target**	**FY 13 Target**	**FY 14 Target**	**FY 15 Target**	**FY 16 Target**
With increase	3,198	3,146	3,078	3,068	3,048	3,028
Without increase	2,963	2,938	2,905	2,880	2,855	2,847
Performance Measure: *MF* Operational Days at Sea (Fleet Only)	**FY 11 Target**	**FY 12 Target**	**FY 13 Target**	**FY 14 Target**	**FY 15 Target**	**FY 16 Target**
With increase	3,198	3,179	3,160	3,141	3,122	3,103
Without increase	2,963	2,924	2,905	2,886	2,867	2,848

Outyear Funding Estimate (BA in thousands)

Repair Periods; *KA and MF*	FY11 & Prior	FY 12	FY13	FY14	FY15	FY16	CTC	Total
Change from FY 2012 Base	0	11,626						
Total	1,000	12,626	TBD	TBD	TBD	TBD	TBD	TBD

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Fleet Replacement
Subactivity: New Vessel Construction

	Object Class	2012 Increase
11	Personnel compensation	
11.1	Full-time permanent	$0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12	Civilian personnel benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental Payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25.1	Advisory and assistance services	4,226
25.2	Other services	7,400
25.3	Purchases of goods & services from Gov't accounts	0
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	0
25.8	Subsistence and support of persons	0
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	11,626

New Vessel Construction (FSV6) : (Base Funding: 5 FTE and $0 million; Program Change: 0 FTE and $1,400,000): NOAA requests 0 FTE and $1,400,000 for a total of 5 FTE and $1,400,000 to provide project management and change margin funds for Fisheries Survey Vessel (FSV 6). A total of $79,843,000 was provided in the FY 2009 American Recovery and Reinvestment Act. The requested FY 2012 funding will be used as follows:

$1,100,000 Project Management
300,000 Change Orders
$1,400,000 Total

Proposed Actions
OMAO will continue construction of a fisheries research ship to replace the NOAA ship *David Starr Jordan.* In FY 2012, the increase in funding will allow OMAO to procure the civilian expertise required to monitor and evaluate the contractor's progress. The government Construction Representative will review contractor deliverables and conduct on-site technical meetings to advise the FSV6 program manager of any problems/issues/corrective actions. The representative will develop shipbuilding metrics and activities to meet specification and contract requirements. OMAO also will procure engineering changes as necessary during the construction and testing of the vessel. These technical changes must be reviewed and fully assessed for cost and impact prior to government approval according to the project office's configuration control plan.

Statement of Need and Economic Benefits
The Fleet Recapitalization Plan provides for the replacement of *David Star Jordan.* The FSV6 is needed to perform acoustic surveys with complementary capabilities for direct sampling of fish and zooplankton and to launch and recover a work boat in open seas. The ship surveys need to comply with international standards on acoustic survey criteria to improve data collection, so the new ship must carry advanced acoustic detection systems and other mission unique equipment.

NOAA requires data collected at sea to achieve outcomes mandated by Congress and the economic impact is significant. The Magnuson-Stevens Fisheries Conservation and Management Reauthorization Act require sufficient data to establish annual catch limits for fisheries. If sufficient data is not available, catch limits must be reduced from current levels with an estimated negative impact on the commercial fishing industry of up to $7 billion annually. The requested funding is necessary to effectively manage the construction and bring FSV6 into operations.

Base Resource Assessment:
The base resources for this activity are described in the Fleet Replacement base narrative.

Schedule & Milestones:
- FY 2012: Execute contract
- FY 2013: FSV6 Delivery
- FY 2014: FSV6 Operations

Deliverables:
Engineering change orders will provide material and manpower to incorporate a required ship component into the vessel. Staff will provide analysis and evaluation reports on ship progress to program managers.

Performance Goals

Performance Measure: Percentage of Living Marine Resources (LMR) with Adequate Population Assessments and Forecasts, supports Measure 17b, 17c*	**FY 2012 Target**	**FY 2013 Target**	**FY 2014 Target**	**FY 2015 Target**	**FY 2016 Target**
Without Increase (DSJ has been retired)	-0.90%	-1.80%	-2.70%	-3.60%	-4.50%
With Increase (New FSV 6)	NA	NA	NA	19.10%	19.10%

*From NOAA Ship Recapitalization Plan (October 2007), Chapter 11, Figure 9, Cumulative Year-over-Year Change Projected from FY07 GPRA Performance Baseline. The change in GPRA target reflects the impact of this increase in bringing FSV6 online relative to providing no capability to replace *David Starr Jordan*.

Outyear Funding Estimate (BA in thousands)

New Vessel Construction (FSV 6)	FY 2011 and prior	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Estimate to Complete	Total Program Estimate
Change from FY2012 Base	0	1,400						
Total Request	79,843	1,400	TBD	TBD	TBD	TBD	TBD	TBD

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Fleet Replacement
Subactivity: New Vessel Construction

	Object Class	2012 Increase
11	Personnel compensation	
11.1	Full-time permanent	$0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12	Civilian personnel benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	50
22	Transportation of things	1
23.1	Rental payments to GSA	0
23.2	Rental Payments to others	0
23.3	Communications, utilities and miscellaneous charges	7
24	Printing and reproduction	0
25.1	Advisory and assistance services	26
25.2	Other services	1,002
25.3	Purchases of goods & services from Gov't accounts	0
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	0
25.8	Subsistence and support of persons	0
26	Supplies and materials	4
31	Equipment	310
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	1,400

Temporary Berthing (Base Funding: 0 FTE and $1,000,000; Program Change: 0 FTE and -$1,000,000): NOAA requests a decrease of $1,000,000 for a total of $0 and 0 FTE for temporary berthing for *Henry B. Bigelow* (FSV2). Actual costs to berth the *Bigelow* are substantially lower and will be accommodated within the Marine Operations and Maintenance – Marine Services activity in the ORF account.

Outyear Funding Estimate (BA in thousands)

	FY2011 & Prior	FY2012	FY2013	FY2014	FY2015	FY2016	Estimate to Complete	Total Program Estimate
Temporary Berthing								
Change from FY 2012 Base		(1,000)						
Total Request	4,976	0	TBD	TBD	TBD	TBD	TBD	TBD

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Fleet Replacement
Subactivity: Temporary Berthing

	Object Class	2012 Decrease
11	Personnel compensation	
11.1	Full-time permanent	$0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12	Civilian personnel benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental Payments to others	-1,000
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25.1	Advisory and assistance services	0
25.2	Other services	0
25.3	Purchases of goods & services from Gov't accounts	0
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	0
25.8	Subsistence and support of persons	0
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	-1,000

Appropriation: NOAA Corps Retirement Pay (Mandatory)
Subactivity: NOAA Corps Retirement Pay (Mandatory)

The retirement system for the uniformed services provides a measure of financial security after release from active duty for service members and their survivors. It is an important factor in the choice of a career in the uniformed services, and the legal mandate for rates to be paid is the same for all uniformed services, see 10 USC. Retired pay is an entitlement to NOAA Commissioned Corps officers under 33 USCA 3044, 33 USCA 3045, and 33 USCA 3046. Retired pay funds are transferred to the U.S. Coast Guard, which handles the payments each year as adjusted pursuant to the Department of Defense Authorization legislation. Healthcare funds for non-Medicare-eligible retirees, dependents, and annuitants are administered by OMAO.

Legal authority for retirement of NOAA Commissioned Corps officers is contained in 33 USCA 3044. Retired officers of the NOAA Commissioned Corps receive retirement benefits that are administered by the Commissioned Personnel Center within the Office of Marine and Aviation Operations.

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Department of Commerce
National Oceanic and Atmospheric Administration
NOAA Corps Retirement Pay (Mandatory)
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	Positions	FTE	Budget Authority	Direct Obligations
FY 2011 Currently Available	0	0	28,269	28,269
plus: 2012 Adjustments to Base	0	0	0	0
FY 2012 Base	0	0	28,269	28,269
plus: 2012 Program Changes	0	0	0	0
FY 2012 Estimate	0	0	28,269	28,269

		FY 2010 Actuals		FY 2011 Currently Available		FY 2012 Base Program		FY 2012 Estimate		Increase/ Decrease	
Comparison by activity/subactivity		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Medicare Eligible Retiree Health Fund Contribution - NOAA Corps	Pos/BA	0	26,116	0	28,269	0	28,269	0	28,269	0	0
	FTE/OBL	0	23,293	0	28,269	0	28,269	0	28,269	0	0
Total: Medicare Eligible Retiree Health Fund	Pos/BA	0	26,116	0	28,269	0	28,269	0	28,269	0	0
	FTE/OBL	0	23,293	0	28,269	0	28,269	0	28,269	0	0

Department of Commerce
National Oceanic and Atmospheric Administration
NOAA Corps Retirement Pay (Mandatory)
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	FY 2010 Actuals		FY 2011 Currently Available		FY 2012 Base Program		FY 2012 Estimate		Increase/ Decrease	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
Direct Discretionary Obligation	0	23,293	0	28,269	0	28,269	0	28,269	0	0
Total Obligations	**0**	**23,293**	**0**	**28,269**	**0**	**28,269**	**0**	**28,269**	**0**	**0**
Adjustments to Obligations:										
Unobligated balance expires	0	2,823	0	0	0	0	0	0	0	0
Total Budget Authority	**0**	**26,116**	**0**	**28,269**	**0**	**28,269**	**0**	**28,269**	**0**	**0**
Financing from Transfers and Other:										
Net Appropriation	**0**	**26,116**	**0**	**28,269**	**0**	**28,269**	**0**	**28,269**	**0**	**0**

Appropriation: Medicare-Eligible Retiree Healthcare Fund Contribution - NOAA Corps
Subactivity: Medicare-Eligible Retiree Healthcare Fund Contribution - NOAA Corps

The FY 2003 Department of Defense Authorization Act requires all uniformed services, including NOAA, to participate in an accrual fund for Medicare-eligible retirees. Payments into this accrual fund will cover the future health care benefits of present, active-duty NOAA officers and their dependents and annuitants.

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Department of Commerce
National Oceanic and Atmospheric Administration
Medicare Eligible Retiree Health Fund Contribution - NOAA Corps
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	Positions	FTE	Budget Authority	Direct Obligations
FY 2011 Currently Available	0	0	1,822	1,822
plus: 2012 Adjustments to Base	0	0	114	114
FY 2012 Base	0	0	1,936	1,936
plus: 2012 Program Changes	0	0	0	0
FY 2012 Estimate	0	0	1,936	1,936

Comparison by activity/subactivity		FY 2010 Actuals Personnel	FY 2010 Actuals Amount	FY 2011 Currently Available Personnel	FY 2011 Currently Available Amount	FY 2012 Base Program Personnel	FY 2012 Base Program Amount	FY 2012 Estimate Personnel	FY 2012 Estimate Amount	Increase/ Decrease Personnel	Increase/ Decrease Amount
Medicare Eligible Retiree Health Fund Contribution - NOAA	Pos/BA	0	1,822	0	1,822	0	1,936	0	1,936	0	0
	FTE/OBL	0	1,822	0	1,822	0	1,936	0	1,936	0	0
Total: Medicare Eligible Retiree Health Fund	Pos/BA	0	1,822	0	1,822	0	1,936	0	1,936	0	0
	FTE/OBL	0	1,822	0	1,822	0	1,936	0	1,936	0	0

Exhibit 5

Department of Commerce
National Oceanic and Atmospheric Administration
Medicare Eligible Retiree Health Fund Contribution - NOAA Corps
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	FY 2010 Actuals		FY 2011 Currently Available		FY 2012 Base Program		FY 2012 Estimate		Increase/ Decrease	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
Direct Discretionary Obligation	0	1,822	0	1,822	0	1,936	0	1,936	0	0
Total Obligations	**0**	**1,822**	**0**	**1,822**	**0**	**1,936**	**0**	**1,936**	**0**	**0**
Adjustments to Obligations:										
Total Budget Authority	**0**	**1,822**	**0**	**1,822**	**0**	**1,936**	**0**	**1,936**	**0**	**0**
Financing from Transfers and Other:										
Net Appropriation	**0**	**1,822**	**0**	**1,822**	**0**	**1,936**	**0**	**1,936**	**0**	**0**

Department of Commerce
National Oceanic and Atmospheric Administration
Medicare Eligible Retiree Health Fund Contribution - NOAA Corps
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	2010 Actuals	2011 Currently Available	2012 Base	2012 Estimate	Increase/ (Decrease) over 2012 Base
Object Class					
Other purchases of goods and services from Govt accounts	1,822	1,822	1,936	1,936	0
Total Obligations	1,822	1,822	1,936	1,936	0
Less prior year recoveries	0	0	0	0	0
Less unobligated balance, SOY	0	0	0	0	0
Plus unobligated balance, EOY	0	0	0	0	0
Offsetting collections, Mandatory	0	0	0	0	0
Less: Previously Unavail. Unoblig. Bal.	0	0	0	0	0
Total Budget Authority Mandatory	1,822	1,822	1,936	1,936	0
Personnel Data					
Full-Time equivalent Employment:					
Full-time permanent	0	0	0	0	0
Other than full-time permanent	0	0	0	0	0
Total	0	0	0	0	0
Authorized Positions:					
Full-time permanent	0	0	0	0	0
Other than full-time permanent	0	0	0	0	0
Total	0	0	0	0	0

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