



CHAPTER 4

NOAA Procurement, Acquisition, & Construction



PROCUREMENT, ACQUISITION AND CONSTRUCTION (PAC)

NOAA's Procurement, Acquisition, and Construction (PAC) account captures the cost of acquiring and improving capital assets, which are mission-critical to all agency programs and contribute significantly to achieving each of NOAA's Strategic Goals. This account is grouped by line office into five activities: (1) "Systems Acquisition," which includes projects that will have a major impact on NOAA's ability to monitor and to forecast weather and climate change on a global basis; (2) "Construction," which includes projects involving new construction or major modification of existing facilities; (3) "Climate Research," which includes NOAA's investments in research supercomputing; (4) "Observations and Monitoring," which includes

investments in observing systems and data center modernization; (5) "Fleet and Aircraft Replacement," which includes funding to support modernization of NOAA's fleet of ships and aircraft either through new construction, major modification to existing assets, or long-term acquisition of capacity from third parties.

ADJUSTMENTS TO BASE:

The NOAA PAC account requests technical adjustments to the FY 2010 Enacted level with a decrease of \$4,314,000 and 6 FTEs to transfer \$3,504,000 from the Weather Forecast Office (WFO) Construction line to the Operations, Research, and Facilities (ORF) account to consolidate funding for WFO leases in one sub-activity, Local Warnings and Forecasts; to transfer \$810,000 and 4 FTEs from NESS to Program Support, Office of the Chief Information Officer to support the Radio Frequency Management Division; and to transfer 2 FTE from the NWS Cooperative Observer Network Modernization to Local Warnings and Forecasts. The request proposes to transfer responsibility for the Cooperative Observer Network Modernization from NWS to the new Climate Service. NOAA also requests the following transfers in the PAC account for the creation of the proposed Climate Service:



(2/2011) NOAA's nearly completed Gulf of Mexico Disaster Center (DRC). The DRC will deliver state of the art science and information to emergency managers and other critical stakeholders for crucial decision-making in protecting and restoring the Gulf Coast's communities, economies, and valuable natural resources.



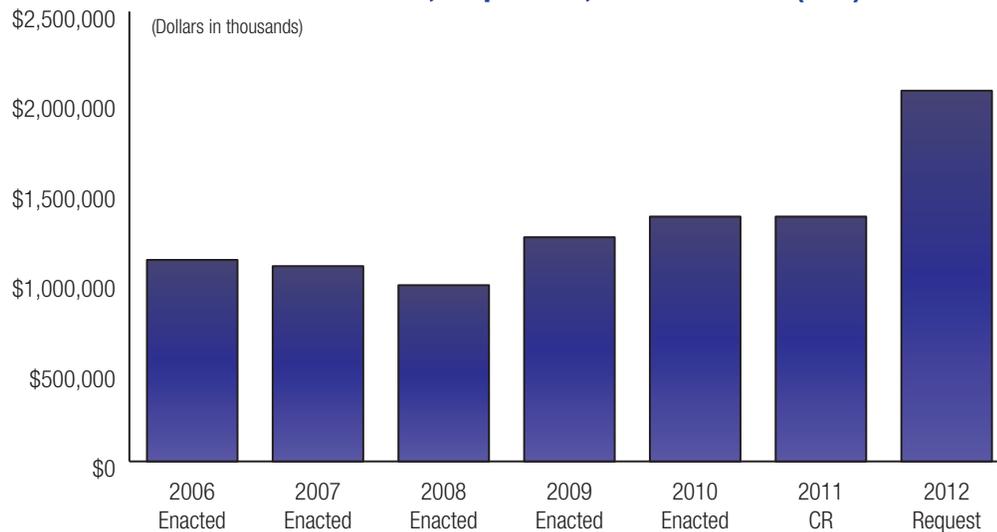
TRANSFER OFFICE	BUDGET LINE	RECIPIENT OFFICE	BUDGET LINE	AMOUNT (\$K/FTE)
OAR	Research Supercomputing	Climate Service	Climate Research Super Computing	\$10,379/0 FTE
NWS	Cooperative Observer Network Mod. (NERON)	Climate Service	Observations & Monitoring-Historical Climatology Network Modernization	\$3,734/0 FTE
NESS	EOS & Advanced Polar Data Processing, Distribution & Archiving Systems	Climate Service	Observations & Monitoring – EOS & Advanced Polar Data Processing, Distribution, & Archiving Systems	\$990/0 FTE
NESS	GOES-N	Climate Service	Observations & Monitoring – Data Center Modernization	\$2,846/0 FTE
NESS	CLASS	Climate Service	Observations & Monitoring-CLASS	\$18,476/0 FTE



PROCUREMENT, ACQUISITION, AND CONSTRUCTION (PAC)

(DOLLARS IN THOUSANDS)	FY 2010 ENACTED	FY 2011 CR	FY 2012 REQUEST	INCREASE (DECREASE)
National Ocean Service	\$40,890	\$40,890	\$31,734	(\$9,156)
National Marine Fisheries Service	0	0	0	0
Ocean and Atmospheric Research	10,379	10,379	0	(10,379)
Climate Service	0	0	24,391	24,391
National Weather Service	107,727	107,727	91,190	(16,537)
National Environmental Satellite, Data and Information Service	1,199,357	1,199,357	1,897,536	698,179
Program Support	2,000	2,000	14,926	12,926
GRAND TOTAL PAC	\$1,360,353	\$1,360,353	\$2,059,777	\$699,424
Total FTE	190	190	184	(6)
Systems Acquisition	1,317,731	1,331,731	2,032,739	715,008
Construction	40,622	26,622	13,012	(27,610)
Fleet Replacement	2,000	2,000	14,026	12,026
TOTAL	\$1,360,353	\$1,360,353	\$2,059,777	\$699,424

Budget Trends FY 2006-2012 Procurement, Acquisition, & Construction (PAC)



PAC: Procurement, Acquisition, & Construction



PAC PROGRAM CHANGE HIGHLIGHTS FOR FY 2012

NOAA requests a net increase of \$703,738,000 for a total of \$2,059,777 and 184 FTEs for the PAC programs. A summary of funding by line item is located in Chapter 8, Special Exhibits. Detailed descriptions of all program changes by line item are located in the NOAA FY 2012 Technical Budget.

NATIONAL OCEAN SERVICE **\$31,734,000**

Systems Acquisition: NOAA requests an increase of \$5,000,000 and 0 FTEs. This increase is comprised of one new initiative:

(BA IN THOUSANDS)	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
CELCP	25,000	TBD	TBD	TBD	TBD

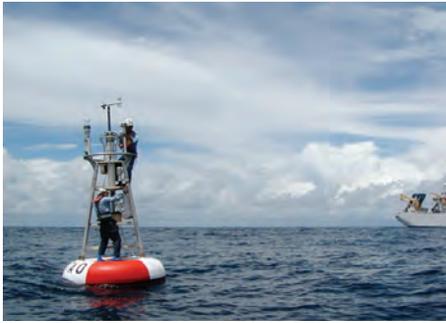
Coastal and Estuarine Land Conservation Program: NOAA requests an increase of \$5,000,000 and 0 FTEs for the Coastal and Estuarine Land Conservation Program (CELCP). Coastal counties are home to almost 153 million people, about 53 percent of the total U.S. population, and by 2015 the coastal population is estimated to reach 165 million. As the coastal population continues to increase, there are many competing demands for limited coastal areas and growing pressure to develop the remaining lands. Coastal lands and estuaries are ecologically productive and economically important. Through the competitive CELCP program, NOAA provides grants to state and local governments to protect important coastal and estuarine areas that have significant conservation, recreational, ecological, historic or aesthetic value that are threatened by development, such as tidal or freshwater wetlands, stream buffers, and floodplains. This increase of \$5,000,000 will support land conservation grants, approximately 2-4 conservation projects per year. This funding will also enable NOAA to ensure that conservation projects satisfy the requirements of NEPA and meet federal appraisal standards. The federal grants require matching funds, which leverage additional state, local or private contributions. The program gives priority to lands that can be effectively managed and protected and have significant ecological value.



*More than 95 acres of coastal land in Wareham, Mass., will be conserved under NOAA's Coastal and Estuarine Land Conservation Program.
Photo courtesy: Mass Audubon*

Construction: NOAA requests a decrease of \$9,705,000 and 0 FTEs. This is comprised of one decrease and one termination of FY 2010 congressionally specified funding of \$7,505,000 for activities not proposed to be continued in FY 2012.

(BA IN THOUSANDS)	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
National Estuarine Research Reserve Construction and Land Acquisition	1,690	TBD	TBD	TBD	TBD



Repairing a Tropical Atmosphere Ocean project (TAO) buoy windbird and mooring. The TAO project collects real-time data from moored ocean buoys for improved detection, understanding and prediction of El Niño and La Niña.

National Estuarine Research Reserve System (NERRS): NOAA requests a decrease of \$2,200,000 and 0 FTEs in funding that supports new acquisition and construction activities. In FY 2012 NOAA is requesting an increase for the Coastal & Estuarine Land Conservation Program (CELCP). Under the Omnibus Public Lands Act, no less than 15 percent of CELCP funds shall be available for acquisitions benefitting NERRS. The remaining \$1.69 million will be competitively awarded for high priority NERRS construction activities.

CLIMATE SERVICE \$24,391,000

Climate Observations and Monitoring: NOAA requests a decrease of \$12,034,000 and 0 FTEs. This is comprised of one decrease and one termination in congressionally specified funding of \$12,000,000 and 0 FTEs for activities not proposed to be continued in FY 2012.

NATIONAL WEATHER SERVICE \$91,190,000

Systems Acquisition: NOAA requests a net increase of \$1,781,000 and 0 FTEs. This increase is composed of one new initiative and three decreases:

BA IN THOUSANDS	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
Weather and Climate Supercomputing	40,169	TBD	TBD	TBD	TBD



IBM supercomputers, named "Stratus" and "Cirrus", used for climate and weather forecasts.

Weather and Climate Supercomputing: NOAA requests an increase of \$11,000,000 and 0 FTEs to transition NOAA's operational high performance computing (HPC) to a new HPC contract in order to support on-going Hurricane Forecast Improvement Project (HFIP) modeling activities, and to continue regular improvements to numerical weather prediction (NWP) modeling. The current operational HPC contract expires at the end of FY 2011. In FY 2012 and FY 2013, NOAA must transition operations to a newly competed contract utilizing more technologically advanced supercomputing systems. The first transition year enables preparation of data-center space and associated infrastructure and manufacturing, delivery, installation, and acceptance of systems. In the second transition year, NOAA will transition, integrate and validate its operational models onto the new systems. During this two year period, the production of operational NWP guidance on the current supercomputers will be maintained under a bridge contract while systems under the new contract are configured to support operations. The requested increase will fund the bridge contract. NOAA will acquire a new, ten-year performance based contract for scalable operational HPC. This new contract will include technology refreshment every three years, resulting in HPC capacity increases. This strategy ensures that NOAA's environmental modeling, contributing to Department of Commerce's mission, is processed on reliable, state of the art systems. One million dollars will be used to augment the current HFIP development HPC system enabling the provision of real-time experimental products to the National Hurricane Center (NHC). This continual growth in capacity will allow NOAA to implement enhanced NWP modeling systems that lead to continuous, incremental improvements to many of NWS Government Performance and Reporting Act (GPRA) measures. NOAA's weather



forecasts are derived from a suite of global to local NWP, hydrological, land, coastal, and ocean models. These models provide the basis for all of NWS' prediction and related service areas, except for localized severe weather. Likewise, enhancements in model resolution and sophistication made possible by increased HPC capacity have directly resulted in proportionate improvements in GPRA scores. Historically, NWS forecast skills and GPRA scores have steadily improved by 1-3 percent per year, to which HPC contributes significantly.

BA IN THOUSANDS	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
NEXRAD	5,819	TBD	TBD	TBD	TBD

Next Generation Weather Radar (NEXRAD) Product Improvement (PI): NOAA requests a decrease of \$2,157,000 and 0 FTEs to reflect the planned completion of the NEXRAD Product Improvement project. The final year of the program will fund projected costs associated with the fifth year of a 5 year contract for the acquisition and deployment of Dual Polarization technology to 122 NWS operational NEXRADs.

BA IN THOUSANDS	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
Complete & Sustain NWR	5,594	TBD	TBD	TBD	TBD

Complete and Sustain NOAA Weather Radio (NWR): NOAA requests a decrease of \$5,406,000 and 0 FTEs to complete the modernization of the NOAA Weather Radio system via the Weather Radio Improvement Project (WRIP). This planned decrease reflects the continued deployment of the NWR Broadcast Management System (BMS) and associated hardware at all 122 Weather Forecast Offices (WFO).



NEXRAD Radar at the National Severe Storms Laboratory/National Storm Prediction Center in Norman, Oklahoma

BA IN THOUSANDS	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
NOAA Profiler Network	5,480	TBD	TBD	TBD	TBD

NOAA Profiler Conversion: NOAA requests a decrease of \$2,020,000 and 0 FTEs to extend the ongoing modernization of the 20-year old NOAA Profiler Network (NPN). The revised outyear profile will enable NWS to convert 11 profilers currently operating at 404 MHz to 449 MHz and provide technology refresh to the 20-year old system. By coupling the frequency replacement with the tech refresh, the government avoids risking significant problems with technology integration and achieves a more cost-efficient solution to supporting the life-cycle of these operationally critical systems.

Construction: NOAA requests an increase of \$3,150,000 and 0 FTEs for NWS Construction. This increase is composed of one new initiative:

BA IN THOUSANDS	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
WFO Construction	3,150	TBD	TBD	TBD	TBD



Weather Forecast Office (WFO) Construction: NOAA requests an increase of \$3,150,000 and 0 FTEs for a construction project in the Pacific Region and replacement of the heating, ventilating, and air conditioning (HVAC) systems at WFOs with modern, high efficiency units. Specifically, increased funding will complete ongoing construction modernization projects in the Alaska and Pacific Regions and replacement of two HVAC projects.

National Environmental Satellite Service \$1,897,536,000

Systems Acquisition: NOAA requests an increase of \$731,393,000 and 0 FTEs. This increase is comprised of five new initiatives and three decreases:

BA IN THOUSANDS	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
Joint Polar Satellite System	1,070,000	TBD	TBD	TBD	TBD



NOAA's Joint Polar Satellite System (JPSS). Courtesy: Ball Aerospace (artist's rendering)

Joint Polar Satellite System (JPSS): NOAA requests an increase of \$687,800,000 and 0 FTEs to continue development of the instruments, ground systems, and to acquire the spacecraft for the afternoon orbit for the JPSS program. The program will continue to address NOAA's requirements to provide global environmental data used in numerical weather prediction models for near-term (1-3 day) and mid-term (3-5 day) forecasts, as well as provide space weather observation to civil and military customers. The JPSS program continues a number of management and acquisition reforms initiated in FY 2010 and continued in FY 2011 to deliver polar observations necessary to meet both the civil and military needs for weather and climate information. To implement the restructured JPSS program as directed by White House decision in February 2010, NOAA is overseeing program management while NASA, as NOAA's acquisition agent, is providing technical management. NOAA and NASA share the mission success responsibility. Mission success includes building all instruments, launching the spacecraft, developing algorithms, fielding ground systems, and all other program related activities that are essential to the success of the JPSS program.

FY 2012 funding will be used by NOAA and NASA to continue instrument, ground systems, satellite procurements, and engineering and management oversight to meet the program acquisition milestones and a first satellite launch readiness date of FY 2016. Funds will also support ground systems activities for a 2011 launch readiness of the NASA NPP mission. Successful NPP and JPSS systems will improve the Nation's ability to collect and distribute higher resolution data and products for use by the NWS and other Federal, state, and local government agencies. This will be achieved through the modernization of sensors and systems to ensure improved performance, compatibility, supportability, and maintainability. Data and imagery obtained from the JPSS satellites will help increase timeliness, accuracy, and cost effectiveness of public warnings and forecasts of climate and weather events, thus reducing the potential loss of human life and property.



BA IN THOUSANDS	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
Climate Sensors	30,400	TBD	TBD	TBD	TBD

Restoration of Climate Sensors: NOAA requests an increase of \$30,400,000 and 0 FTEs to support the continued development of Clouds and the Earth’s Radiant Energy System Flight Model 6 (CERES FM-6) and the Total Solar and Spectral Irradiance Sensor (TSIS). This request continues the development of the climate sensors to be incorporated into the JPSS program. The continuation of the data sets from these instruments is critical to climate change research and monitoring, and understanding the impacts of climate change on the global environment. The prospect of climate change has profound implications for global society and the environment, underscoring the need for information derived from these instruments to aid decision makers in developing and evaluating options for mitigating the impacts of climate change as well as alternatives for adapting to a changing climate. Continuation of the data from these climate sensors will provide the needed datasets that will lead to improved forecasts and climate monitoring which will benefit agriculture, transportation, and energy production.



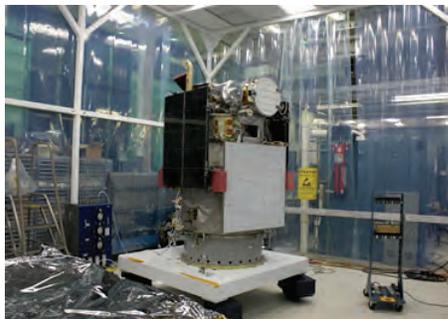
CERES Sensor Delivered to JPSS. Courtesy: Northrup-Grumman

BA IN THOUSANDS	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
Jason-3	53,000	TBD	TBD	TBD	TBD

Jason-3: NOAA requests an increase of \$33,000,000 and 0 FTEs to continue the development of the Jason-3 satellite altimetry mission in partnership with the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), which started in FY 2010. Jason-3 will provide continuity of precise measurement of sea surface height, which is an important measurement to assess climate change, for applications in ocean climatology and for ocean weather. Jason-3 will continue the nearly 20-year climate data record created by the altimetry missions of TOPEX/POSEIDON and Jasons-1 and -2. NOAA will provide the launch vehicle and services and the microwave radiometer. EUMETSAT will provide the spacecraft and the altimeter. Both agencies will provide precision orbit and ground system components as required for respective operations of the satellite. The satellite will be commanded from either of the two NOAA Command and Data Acquisitions (CDA) stations or the third EUMETSAT station in Europe depending on which ground station is visible to the satellite. The data collected from each ground station is shared between the partners so that each will have a complete data set. This request allows NOAA and EUMETSAT to launch Jason-3 in 2014. In FY 2012, funds will continue to be used for launch vehicle development and support spacecraft integration and testing of the Advanced Microwave Radiometer, Global Positioning System and Laser RetroReflector Array.



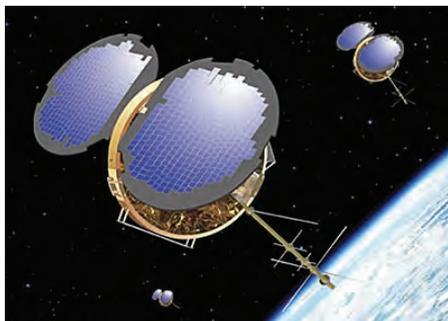
BA IN THOUSANDS	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
DSCOVR	47,300	TBD	TBD	TBD	TBD



Deep Space Climate Observatory (DSCOVR) satellite

Deep Space Climate Observatory (DSCOVR) - Space Weather Observations: NOAA requests an increase of \$47,300,000 and 0 FTEs to acquire solar wind and Coronal Mass Ejection (CME) data. This acquisition will fund the refurbishment of an existing NASA satellite DSCOVR, as well as acquire a CME imager to the mission to provide solar wind data for geomagnetic storm forecasting. Under a reimbursable agreement between NESS and NASA, NASA/Goddard Space Flight Center (GSFC) will perform the refurbishment of the DSCOVR satellite currently housed at GSFC in preparation for an FY 2014 launch. It is anticipated that NOAA will lose two of its most critical observational data sources for geomagnetic storm warnings when the NASA ACE and the NASA/ESA SOHO satellites fail since they have already exceeded their operational life. Low reliability of those satellites and sensors and the high risk of unavailability of the data pose one of the most serious gaps for NOAA's space weather services. This comes at a time when a large increase in geomagnetic storm frequency and severity is expected during the next solar maximum beginning in 2013 and lasting for several years. According to a recent report by the National Academies, geomagnetic storm-disabled electric power grids and collateral impacts could result in projected economic and societal costs of ~\$1 - \$2 trillion, and full recovery could take 4 - 10 years. Space weather has demonstrated the potential to disrupt virtually every major public infrastructure system, including commercial airlines and other transportation systems, telecommunications, electric power grids, and global positioning systems (GPS). With this increase in funding, NOAA will continue to provide timely and accurate alerts and warnings of geomagnetic storms to support these key industries and minimize disruptions to service. The U.S. Air Force will provide launch vehicle and launch services for the DSCOVR mission in a separate FY 2012 budget request. This interagency partnership to refurbish and launch DSCOVR is the most expeditious and cost effective option for making DSCOVR operational and replacing the ACE Spacecraft.

BA IN THOUSANDS	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
COSMIC-2	11,300	TBD	TBD	TBD	TBD



Constellation Observing System for Meteorology, Ionosphere & Climate (COSMIC) satellite constellation

Constellation Observing System for Meteorology, Ionosphere, and Climate (COSMIC-2): NOAA requests an increase of \$11,300,000 and 0 FTEs to collaborate with the Taiwan National Space Organization (NSPO) for the launch of 12 satellites to provide replenishment and operational upgrade for the current COSMIC constellation. COSMIC-1 is a six satellite constellation that was launched in 2006 in collaboration between Taiwan, National Science Foundation, NASA, U.S. Air Force and the University Corporation for Atmospheric Research (UCAR). This COSMIC-1 constellation was a proof-of-concept effort for a new and inexpensive atmospheric sounding technique using the U.S. Air Force GPS system as a sounding source, called GPS Radio Occultation (GPSRO). The new technique proved so accurate and beneficial that NOAA began using the data operationally for weather forecasting within a year of the COSMIC-1 launch. COSMIC-1 provides extremely accurate, bias free, daily worldwide



measurements of atmospheric temperature and moisture profiles over the oceans and land that greatly improve NOAA's operational weather forecasting accuracy, and is useful for some space weather forecasting. COSMIC-1 also helps to eliminate bias for artificial offsets in other observing systems, which advances the overall impact on operational model systems and makes it a backbone for the total observing system. The observing system provides over 2500 atmospheric soundings every 24 hours around the globe, an improvement of about twice the number of daily weather balloon observations which are concentrated mostly over land. The success of the mission has inaugurated an age of operational GPS sounding for weather forecasting, climate analysis and research, ionospheric monitoring, and a suite of related Earth science pursuits. In this COSMIC-2 partnership, NOAA will procure 12 radio occultation (RO) sensors, ground station support and sensor processing support. Taiwan will provide the spacecraft and sensor integration. The funding in FY 2012 will start the development efforts for the COSMIC-2 sensors, as well as systems engineering, which is necessary to meet a planned FY 2015 launch date.

BA IN THOUSANDS	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
GOES-R	617,390	TBD	TBD	TBD	TBD

Geostationary Operational Environmental Satellites-R Series (GOES-R): NOAA requests a decrease of \$50,110,000 and 0 FTEs for the GOES-R Series to provide continued satellite engineering development and production activities for GOES-R and GOES-S and to introduce development activities for the contract option satellites: GOES-T&U. This request is for a four satellite GOES-R (GOES-R, S, T, & U) program with enhanced capabilities above the current GOES-N, O, and P Series. The budget represents a re-phasing of the GOES-R program and does not increase cost, schedule or technical risk to the GOES-R program development. GOES-R Series will provide uninterrupted continuity of GOES data coverage before the end of the GOES-N series. The four satellite GOES-R program is the next-generation series of NOAA geostationary satellites and provides GOES mission continuity through 2036. The procurement of GOES-R satellites is a cooperative venture between NOAA and NASA. NOAA defines requirements, manages funds, implements system integration, procures ground segments and operates the GOES satellites. NASA serves as the agency with multi-disciplinary engineering expertise, develops detailed system specifications, procures and launches the spacecraft, and assists NOAA in system integration. The GOES-R procurements include priced options for acquiring additional satellites (T and U) and instruments to realize potential savings from economies of scale. The additional satellites will carry the same complement of instruments that are already under development for GOES-R and GOES-S: the Advanced Baseline Imager (ABI), Space Environment In-Situ Suite (SEISS), Extreme Ultraviolet Sensor/X-Ray Sensor Irradiance Sensors (EXIS), Solar Ultraviolet Imager (SUVI), Geostationary Lightning Mapper (GLM), including the communications packages SARSAT and Data Collection Systems. The GOES-R series satellites will not only provide critical weather observations for severe weather events such as hurricanes, but will also provide key enhancements in observational capabilities for climate, oceans and coasts, and the space environment.



In FY 2012, the program will continue development of the instruments, spacecraft, and ground system. Funds will also be used to complete Critical Design Reviews (CDR) for the spacecraft and ground system for a planned launch readiness of the first satellite in the series, GOES-R in 2015. The GOES-S planned launch readiness is 2017. These funds will also procure instruments to support launch readiness of GOES-T in 2019 and GOES-U in 2024.

BA IN THOUSANDS	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
GOES-N	33,967	TBD	TBD	TBD	TBD



Constructing the Geostationary Operational Environmental Satellite (GOES) N series satellite

Geostationary Operational Environmental Satellites-N Series (GOES-N): NOAA requests a decrease of \$19,978,000 and 0 FTEs for the GOES-N Series to re-align the GOES-N series total program to support handover of GOES-P from NASA to NOAA. The GOES-N Series program includes GOES-13, GOES-14, and GOES-15 satellites, launched May 2006, June 2009, and March 2010, respectively. The primary function of the GOES program is to provide data which support the NWS with forecasting, tracking, and monitoring severe storms and weather events. GOES satellites provide continuous imaging and sounding of the Americas, which allows forecasters to better measure changes in atmospheric temperature and moisture distributions and hence increase the accuracy of their forecasts. The improved accuracy of NWS forecasts by using GOES data results in developing and disseminating more accurate and timely weather forecasting and advisories to ensure emergency managers and the public are warned ahead of time to take measures that will protect lives and property from harm. The planned funding decrease for FY 2012 realigns the GOES-N Series program to support the handover of GOES-15 from NASA to NOAA, and provides technical management, maintenance and operations of the on-orbit assets, GOES-13 and GOES-14.

BA IN THOUSANDS	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
POES	34,816	TBD	TBD	TBD	TBD

Polar-orbiting Operational Environmental Satellite (POES): NOAA requests a planned decrease of \$8,319,000 and 0 FTEs for the continuation of the POES program and continued support for the MetOp (European Weather Satellite) program. The revised funding requirement represents recently identified savings as a result of the successful launch of the last POES satellite, NOAA-19, in February 2009. Continued funding will provide on-going satellite and instrument anomaly support to the on-orbit POES satellites, maintain the ground system for their operation, and support the maintenance and testing of U.S. instruments on the MetOp satellites.



Program Support

\$900,000

Construction: NOAA requests an increase of \$900,000 and 0 FTEs in the Program Support Construction sub-activity. This increase is comprised of one new initiative:

(BA IN THOUSANDS)	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
Pacific Regional Center	900	TBD	TBD	TBD	TBD

NOAA Construction: NOAA requests an increase of \$900,000 and 0 FTEs to support the project management costs of the Main Facility being constructed at the new Pacific Regional Center (PRC) on Ford Island in Honolulu, HI. The Pacific Regional Center is a multi-phase, multi-year construction project to consolidate NOAA programs and operations (excluding the Honolulu weather forecast office) on the island of O’ahu into a single facility on federally-owned property at Ford Island. NOAA received funding in the American Recovery and Reinvestment Act of 2009 (P.L. 111-5) and the Omnibus Appropriations Act, 2009 (P.L. 111-8) to complete the building construction phase of the PRC project and achieve full consolidation of its operations on the island of O’ahu, Hawaii, with construction of the Main Facility. The FY 2012 request will support NOAA’s project management costs to ensure effective oversight and execution of the project. The current projection for completion of the Main Facility is 2013.



Location of the new Pacific Regional Center (PRC), Ford Island, Honolulu, Hawaii

Office of Marine and Aviation Operations

\$14,026,000

OMAO Fleet Replacement: NOAA requests an increase of \$12,026,000 and 0 FTEs in the Program Support OMAO Fleet Replacement sub-activity for a total of \$14,026,000 and 5 FTE. This increase is comprised of two new initiatives and one decrease:

(BA IN THOUSANDS)	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
Repairs for KA and MF	12,626	TBD	TBD	TBD	TBD

Fleet Capital Improvements and Technology Infusion: NOAA requests an increase of \$11,626,000 and 0 FTEs for highest priority repairs for the NOAA Ships *Ka’Imimoana* and *Miller Freeman*. In FY 2009, NOAA conducted a dry dock and fleet inspection that revealed serious deterioration of critical shipboard systems on the *Ka’Imimoana* (KA). At that time, it was discovered that the KA would not last to its schedule service life extension planned for FY 2020 with routine maintenance alone. The KA is the only vessel in the NOAA fleet capable of providing maintenance to the Tropical Atmosphere Ocean (TAO) Array, which provides critical El Niño/La Niña forecasting and climate science data. NOAA must make new capital investments beyond routine annual maintenance cycles to support the operational readiness and to ensure safe operations of the 24 year old vessel. With this request, NOAA will provide for highest priority repairs to structural and mechanical systems. OMAO will award a competitive contract for shipyard repairs with structural, mechanical and electrical focus areas. The *Miller Freeman* (MF) is one of the oldest ships in the NOAA fleet and recent assessments in FY 2009 confirmed



NOAA Ship Ka’Imimoana



NOAA Ship Miller Freeman

the ship's continuing and rapidly deteriorating condition. The requested funds will accelerate a planned Major Repair Period for the *MF*. The *MF* currently supports major field programs, representing decades-long biological and oceanographic time-series in Alaska and off the West Coast. The loss of the ship would severely impact annual investments in important data collections and impede the advancement of NOAA science in the North Pacific. NOAA Fisheries has experienced loss of operating days due to mechanical breakdowns and shipyard delays. 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.

(BA IN THOUSANDS)	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
Fisheries Survey Vessel (FSV 6)	1,400	TBD	TBD	TBD	TBD



NOAA's New San Diego-based Fisheries Survey Vessel (FSV-6)

New Vessel Construction: NOAA requests an increase of \$1,400,000 and 0 FTE to provide project management and change margin funds for Fisheries Survey Vessel (FSV 6). FSV 6 will replace the retired vessel *David Starr Jordan* and perform acoustic surveys for fish and zooplankton and launch and recover a work boat in open seas. 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 requires 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. With this increase, OMAO will procure continuity in the civilian expertise required to monitor and evaluate the contractor's progress during construction. The requested funding is necessary to complete construction and bring FSV 6 into operations.

(BA IN THOUSANDS)	FY 2012 REQUEST	FY 2013	FY 2014	FY 2015	FY 2016
Temporary Berthing	0	TBD	TBD	TBD	TBD

Temporary Berthing: NOAA requests a decrease of \$1,000,000 and 0 FTEs for temporary berthing. Actual costs to berth *Bigelow* are substantially lower and will be accommodated within the Marine Operations and Maintenance-Marine Services activity in the ORF account.

