



U.S. House of Representatives
Committee on Transportation and Infrastructure
Washington, DC 20515

John L. Mica
Chairman

Nick J. Rahall, III
Ranking Member

James W. Coon II, Chief of Staff

James H. Zoia, Democrat Chief of Staff

May 11, 2012

MEMORANDUM

TO: Members, Subcommittee on Coast Guard and Maritime Transportation

FROM: Staff, Subcommittee on Coast Guard and Maritime Transportation

RE: Hearing on “Creating American Jobs and Assuring the Safety and Security of America’s Waterways: A Review of the Coast Guard’s 5-year Capital Improvement Plan”

PURPOSE

On Wednesday, May 16, 2012, at 10:00 a.m., in room 2167 of the Rayburn House Office Building, the Subcommittee on Coast Guard and Maritime Transportation will meet to review the status of the Coast Guard’s current acquisition program and examine the program’s sustainability. This is the third hearing the Subcommittee has held this Congress to review the Service’s acquisition program. The last hearing was held on October 4, 2011.

BACKGROUND

Coast Guard Recapitalization

The Coast Guard began a process of replacing its aging vessels and aircraft in the late 1990’s. The program’s focus was those assets that carry out missions farther than 50 miles from shore and the modernization of the information technology systems that the Service relies upon to coordinate its operations. The program was known as the Integrated Deepwater Program (Deepwater). To manage the acquisition program, the Coast Guard engaged a Lockheed Martin/Northrop Grumman team, called the Integrated Coast Guard System (ICGS).

Deepwater encountered significant quality and cost issues. It was the subject of several hearings and an investigation by the Committee. It is also the subject of continuing review by the Government Accountability Office (GAO). The Coast Guard has terminated the Deepwater contract with ICGS and is now performing the acquisition functions in-house. The assets scheduled for recapitalization remain the same.

Recent GAO Report: Approved Deepwater Program Remains Unachievable

The latest GAO report on the Coast Guard's acquisition program was released in July 2011 and is entitled "Action Needed As Approved Deepwater Program Remains Unachievable". The title refers to the GAO's finding that it will be impossible for the Coast Guard to complete its major acquisitions without breaching its 2007 baseline of 20 to 25 years for construction and delivery of recapitalized assets at a total cost of \$24.2 billion. The GAO estimated it could take an additional 10 years to complete and could cost at least an additional \$5 billion. Below is a summary of the GAO's specific findings:

- The 2007 baselines for Deepwater are no longer valid or achievable because the Coast Guard has developed new baselines for some assets; additional cost growth is likely; the reliability of the estimated costs and schedules for selected assets is questionable; and Coast Guard and Department of Homeland Security (DHS) officials agree that the annual funding needed to support all approved Deepwater baselines substantially exceed levels of funding appropriated by Congress or requested by any administration. The FY 2013 budget request of \$1.19 billion for Coast Guard acquisitions is 18.5 percent less than the FY 2012 appropriated level.
- The Coast Guard is taking delivery of assets and technological upgrades that have yet to meet promised capabilities.
- The Coast Guard has not successfully completed initial operational test and evaluation (OT&E) on any of its new assets delivered to date. This procedure is a critical step in the acquisition process that identifies deficiencies in asset design and operation and ensures delivered assets meet required capabilities.
- The Coast Guard has not provided a comprehensive reanalysis of the current program of record for major acquisitions to examine tradeoffs between budget constraints, timelines, capabilities, and asset quantities.
- The Coast Guard is gaining a better understanding of cost, schedule, and technical risks, but does not always fully convey these risks in reports to Congress.

Recommendations:

The GAO recommends DHS identify trade-offs to the approved program of record and ensure the Offshore patrol Cutter (OPC) design is achievable. GAO further recommends the Coast Guard identify priorities, incorporate cost and schedule best practices, increase confidence that assets will meet mission needs, and report complete information on risks to Congress in a timely manner. DHS concurred with the recommendations. Finally, the report recommended Congress consider including a

permanent reporting requirement which ensures timely and complete information on risks. Section 307 of H.R. 2838, the Coast Guard and Maritime Transportation Act of 2011 consolidates several reports on Coast Guard acquisitions and expands the reporting requirements beyond the former Deepwater Program to encompass all major acquisitions projects. A major acquisition is defined as the procurement of assets and other technology with life cycle costs exceeding \$300 million.

FY13 Budget Request for Coast Guard Acquisitions

The President requested \$1.19 billion for the Acquisitions, Construction, and Improvements (AC&I) account in FY 2013, a reduction of \$271.6 million (or -18.5 percent) below the FY 2012 enacted level. The AC&I account funds the acquisition, construction, and physical improvements of Coast Guard owned and operated vessels, aircraft, facilities, aids to navigation, information management systems and related equipment.

The budget request includes approximately \$1.03 billion for the acquisition of aircraft, vessels, and command, control, communications, computer, intelligence, surveillance and reconnaissance (C4ISR) systems. This represents a reduction of \$64.5 million (or -6 percent) below the FY 2012 enacted level. The budget request includes:

- \$683 million to complete construction of the sixth National Security Cutter (NSC). No funding is included in the five year Capital Improvement Plan for the acquisition of NSCs #7 or #8;
- \$30 million to continue the development of the Offshore Patrol Cutter (OPC);
- \$43 million to acquire one HC-144A Marine Patrol Aircraft (MPA);
- \$31.5 million for the modernization/sustainment of the HH-65 Dolphin helicopter fleet;
- \$76.5 million for C4ISR acquisition, program management, systems engineering and integration, and Nationwide Automatic Identification System;
- \$8 million to survey and design a new polar icebreaker.

The Service proposes to eliminate funding for the following acquisition programs in FY 2013:

- Response Boat – Medium (RB-M). The Coast Guard’s program of record for this procurement calls for the acquisition of 180 RB-M’s to replace the aged, slow, and obsolete 41 foot utility boat. To date, funding has been secured to acquire 166 RB-Ms. Despite proposing to terminate the acquisition early, the Service has not amended the program of record to explain how the reduced buy will meet mission requirements. Terminating the acquisition early could impair small boat readiness which could impact search and rescue mission effectiveness.
- HH-60 Helicopter Conversion. The Coast Guard had planned to make critically needed upgrades to the helicopter’s search radar sensor system to improve the

asset's ability to conduct search and rescue. The Service now proposes to put off these upgrades until at least 2017.

- C-130H Conversion/C-130J Acquisition. The Coast Guard's program of record calls for a fleet of 22 C-130's by the mid 2020's. Rather than requesting funding in FY 2013, the Service proposes to use previously appropriated funding to complete the acquisition three C-130J's, bringing the fleet of C-130J's up to nine.
- In Service Vessel Sustainment. This program funds service life extension projects on the 32 year old fleet of 140 foot Icebreaking Tugs and mission effectiveness projects on the 16 year old fleet of 225 foot Seagoing Buoy Tenders. The Service proposes to delay initiation of these projects until FY 2014.
- Unmanned Aircraft System (UAS). The Service proposes to use previously appropriated funds to continue work to test and evaluate existing UAS platforms for potential use aboard cutters.

In addition, the Coast Guard proposes to withhold up to \$139 million provided by Congress in FY 2012 to construct six new Fast Response Cutters (FRC), opting instead to construct four FRCs in FY 2012. The Service then proposes to combine the withheld \$139 million from the FY 2012 appropriations with an additional \$139 million requested in FY 2013 to construct four FRCs in FY 2013. This strategy will delay the acquisition of this asset, which is being acquired to replace the 26 year old fleet of 110 foot Patrol Boats.

The budget requests \$186.5 million in other capital costs, 124.4 million (or -40 percent) less than the FY 2012 enacted level. This includes \$110 million in personnel costs to execute AC&I programs and \$49 million to make improvements to piers and hangers to support newly acquired assets. This also includes \$15 million to construct shore facilities and aids to navigation, which is \$97.9 million (or -86.7 percent) less than the FY 2012 enacted level. The Coast Guard currently has a backlog of over 35 prioritized shore facility improvement projects with an estimated combined cost of over \$540 million.

Finally, no funding is included in the budget request to rehabilitate housing for Coast Guard servicemembers and their dependents. The account received \$14 million in FY 2012 funding. Much of the Service-owned housing is decades old and in poor condition. The Service expects to complete a report in May 2012 which includes survey of the condition of its housing and recommendations on how to address the situation.

Recent Coast Guard Acquisitions Developments

Since the Subcommittee's October 2011 hearing, there have been several major developments in the Service's acquisition program which are highlighted below. Other

developments are summarized in the attached “Status of Coast Guard Major Acquisitions”.

- *NSC STRATTON* – In April 2012, the Coast Guard discovered several pin hole leaks and hair line cracks in the hull of USCGC STRATTON. The STRATTON is the Service’s third and newest NSC, commissioned on March 31, 2012. Temporary repairs were made to ensure the vessel could safely sail back to home port. The Service has convened an internal Engineering Analysis Board and plans to consult with the American Bureau of Shipping to investigate the cause of the hull corrosion. The Service estimates that the STRATTON will be out of service through mid July 2012 and the repairs may cost more than \$600,000. The Service will also determine whether the cost to repair the damage is recoverable under the shipbuilder’s (Huntington Ingalls) warranty. At this point, the preliminary findings do not indicate a similar corrosion problem on the first two NSCs – USCGCs BERTHOLF and WAESCHE.
- *HC-144A Maritime Patrol Aircraft* – In May 2012, the Coast Guard informed the Subcommittee that due to budget constraints, it does not have a sufficient number of spare parts for its fleet of HC-144A MPAs to support full operational readiness when it initiates operations at Air Station Cape Cod this fall. The Service indicates that it will impose flight hour restrictions on the MPA fleet until sufficient spares can be acquired. It is not clear how flight hours will be restricted, how long the restrictions will last, the cost to acquire sufficient number of spares, or when they will be acquired.
- *Cost Constrained Fleet Mix Analysis* - The Coast Guard released Phase II of its Fleet Mix Analysis (FMA II) in November 2011. FMA II is an independent third-party analysis of the Service’s current asset requirements. It served as a cost-benefit analysis to determine the effect on Coast Guard mission effectiveness of varying the capabilities and numbers of vessels and aircraft in the existing acquisition program of record. The authors of the analysis found the current program of record is the best mix to adequately address mission needs in a fiscally constrained environment.
- *DHS Major Cutter Study* – DHS released its Major Cutter Study in December 2011. This study evaluated the anticipated mission effectiveness of the Coast Guard’s program of record for both the NSC and OPC against alternative fleet mixes. These mixes included varying numbers of both assets, as well as the possibility of substituting either a modernized 270 foot Medium Endurance Cutter or a Coast Guard variant of the Navy’s Littoral Combat Ship for the OPC. DHS found that while some of the alternative mixes provided advantages in some mission areas, no alternative could match the program of record in every mission area. Additionally, those advantages would not be realized for several decades. As such, the study validates the program of record.

WITNESS

Vice Admiral John Currier
Deputy Commandant for Mission Support
United States Coast Guard

Status of Coast Guard Major Acquisitions

New Asset	Legacy Asset	FY 2013 Budget Request	Total Appropriated to Date	Estimated Total Acquisition Cost ⁽¹⁾	Planned Quantity	Delivered Quantity	Estimated Completion Date ⁽¹⁾	Status
Response Boat - Medium (RB-M)	41 ft Utility Boat	\$0	\$466.4M	\$610M	180	88	2016	USCG intends to terminate the program at 166 vessels, 14 short of the approved program of record. USCG is revising the laydown plan and updating the program of record to reflect the revised buy.
National Security Cutter (NSC)	High Endurance Cutter (HEC)	\$683M	\$3.2B	\$4.7B	8	3	2018	NSC 1 & 2 are operational, but will require substantial retrofits to meet expected service life. NSC 3 to undergo emergency repairs. NSC 4 keel laying set for 8/2012. NSC 5 fabrication began 3/2012. NSC 6 Long Lead Materials contract awarded 3/2012. USCG Capital Investment Plan
Offshore Patrol Cutter (OPC)	Medium endurance Cutter (MEC)	\$30M	\$110.1M	\$10.5B	25	0	2031	Program baseline awaiting approval by DHS. Request For Proposals expected to be released in 4th Quarter FY12. Contracts for 3 preliminary designs expected to be issued to 3 contractors in FY13.
Fast Response Cutter (FRC)	110 ft Patrol Boat	\$139M	\$1.1B	\$3.9B	58	1	2022	1st FRC commissioned 4/14/12. FRC 2-4 launched and in builder's trials. Cavitation problems detected at high speeds which may require retrofits.
Cutter Boats	N/A	\$4M	\$24.8M	\$110M	124	0	2026	USCG is currently conducting tests of 4 designs of the smaller Over the Horizon boat. Contract for production expected 4th Quarter FY12. USCG is currently evaluating proposals for larger Long Range Interceptor boat with contract expected 3rd Quarter of FY 2012. Currently operational NSCs will not be fully outfitted with cutter boats until late 2014.
Polar Icebreaker	USCGC POLAR SEA	\$8M	\$0	TBD	1	0	TBD	USCG initial estimate of total cost to construct a Class 1 heavy icebreaker is \$860 million. USCG Capital Investment Plan funds the total cost over the next 5 years even though design and construction could take 10 years. USCG Capital Investment Plan assumes no other federal agencies with polar missions will contribute to the acquisition cost.
Medium Endurance Cutter Sustainment	N/A	\$13M	\$279.7M	\$297M	27	24	2014	Once the current sustainment program is complete, USCG intends to convene a Ship Structure and Machinery Evaluation Board to begin to determine whether another mission effectiveness project will be required to ensure the service life of the MEC will reach until mid 2030 when the OPC buy is expected to be completed.

New Asset	Legacy Asset	FY 2013 Budget Request	Total Appropriated to Date	Estimated Total Acquisition Cost ⁽¹⁾	Planned Quantity	Delivered Quantity	Estimated Completion Date ⁽¹⁾	Status
In Service Vessel Sustainment	N/A	\$0	\$14M	N/A	N/A	N/A	N/A	USCG intends to use previously appropriated funds to complete a service life extension on 1 of the 9 140 ft Ice Breaking Tugs. Although no funding is requested in FY13, USCG intends to spend \$264M in FY14-FY17 to finish the service life extension on the remaining Ice Breaking Tugs, conduct a mission effectiveness project on 4 of 16 225 ft Seagoing Bouy Tenders and 1 of 14 Coastal Bouy Tenders. No funding is programmed for additional sustainment of the MECs or the Inland Tender fleet.
Maritime Patrol Aircraft (MPA)	HU-27 Falcon	\$43M	\$969.6M	\$2.2B	36	13 aircraft & 12 mission system pallets	2020	Operational Test and Evaluation report expected in June 2012. Currently suffering from a shortage of spares which will result in flight hour restrictions for the fleet.
Long Range Surveillance Aircraft (C-130H/J)	Current C-130H model	\$0	\$214.1M	TBD	22	23 C-130H 6 C-130J	TBD	Revised baseline awaiting approval by DHS. USAF released a request for proposals for a 9th fully missionized C-130J in 3/2012.
HH-60 Conversion Projects	Current HH-60 model	\$0	\$331.4M	\$451M	42	26 through segment 2	2020	USCG intends to use previously appropriated funds to complete upgrades to avionics and sensors (segment 2) & defer for more than 5 years planned upgrades to the radar and C4ISR system (segments 3 & 4).
HH-65 Conversion/ Sustainment Projects	Current HH-65 model	\$31.5M	\$548.1M	\$1.2B	102	97 through segment 3 28 through segment 4	2020	USCG continues to install upgrades to the navigation system (segment 4) and is developing an upgrade package for the avionics system for future installs (Segment 6).
Unmanned Aircraft System (UAS)	N/A	\$0	\$121.5M	TBD	TBD	0	TBD	USCG is using previously appropriated RDT&E funding to conduct studies of UAS systems and is pursuing a small UAS system for potential deployment aboard the NSC. The small UAS would not have a large range or advanced sensor capabilities.
C4ISR	Current C4ISR system	\$40.5M	\$681.4M	\$2.3B	8 Segments	1 Segment	2025	USCG continues to build a non-proprietary baseline system that can be improved upon in the future. USCG is working to install system on the MPA, C130J, and NSC. USCG Capital Investment Plan only includes funding to continue to deploy and maintain this baseline system. There is no money programmed to develop improvements.

New Asset	Legacy Asset	FY 2013 Budget Request	Total Appropriated to Date	Estimated Total Acquisition Cost ⁽¹⁾	Planned Quantity	Delivered Quantity	Estimated Completion Date ⁽¹⁾	Status
Nationwide Automatic Identification System (NAIS)	N/A	\$6M	\$101M	\$277M	58 Ports	8 Ports	2014	USCG intends to deploy the system to two more ports in FY12 and conduct site surveys at 6 others.
Rescue 21	National Distress System	\$0	\$808.9M	\$1.1B	37 Sectors	35 Sectors	2017	USCG intends to complete the remaining 2 sectors in FY12 and upgrade legacy equipment at sites along the western rivers and Alaska. However, the western rivers and Alaska will not have the Rescue21 system installed.
Major Shoreside Infrastructure, Military Housing, and Aids to Navigation	N/A	\$15M	\$39.6M	N/A	N/A		N/A	USCG currently has a backlog of over \$540 million in shore infrastructure projects. None of the FY13 requested funds would be used to renovate military housing.
Major Acquisition Systems Infrastructure	N/A	\$49.4M	\$81.5M	N/A	N/A		N/A	USCG uses this account for upgrades to piers, training facilities, and logistic facilities to support new aircraft and vessels.

Source: USCG Fiscal Year 2013 Congressional Budget Justification

Note (1): Total project costs and estimated completion date are based on individual project DHS Acquisition Program Baselines (APBs) when available, or the 2007 Integrated Deepwater System APB.