

GAO

Report to the Chairman, Subcommittee
on Transportation and Related Agencies,
Committee on Appropriations, House of
Representatives

May 1992

COAST GUARD

Coastal Buoy Tender Acquisition Project Did Not Follow Federal Guidelines



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**Resources, Community, and
Economic Development Division**

B-247994

May 20, 1992

The Honorable William Lehman
Chairman, Subcommittee on
Transportation and Related Agencies
Committee on Appropriations
House of Representatives

Dear Mr. Chairman:

The Coast Guard is planning to spend \$25 million in fiscal year 1993 and a total of more than \$200 million over the next 5 years to replace its fleet of 11 coastal buoy tenders. These vessels are primarily used to service short-range aids to navigation (SRA), such as buoys and lights, in coastal areas. This report responds to your request of September 4, 1991, that we determine whether the Coast Guard's acquisition program for coastal buoy tender replacements has been justified and conducted according to federal, Department of Transportation, and Coast Guard regulations governing major system acquisitions.

Results in Brief

The Office of Management and Budget (OMB) developed a multistep process for large federal acquisition projects to avoid problems commonly experienced in acquiring major systems, such as unnecessary costs and delays. Under these guidelines, the first thing an agency is to do when acquiring a major system is to define its need by determining (1) what functions it needs to perform and (2) whether its existing systems can perform those functions. The Coast Guard, however, has not justified its need to replace its coastal buoy tenders in the manner prescribed by OMB's guidelines for major acquisitions. Instead, the Coast Guard defined its need for replacement coastal buoy tenders by stating that, since its existing vessels were aging, it would need replacement vessels that are functionally similar to its existing coastal buoy tenders. The Coast Guard did not, however, fully consider whether other existing aids-to-navigation vessels could perform some of the functions now performed by coastal buoy tenders. For example, the Coast Guard's larger, seagoing buoy tenders could also service some of the larger aids now serviced by coastal buoy tenders. As a result, since the Coast Guard has not specifically determined what functions can and cannot be performed by all of its other existing SRA vessels, it does not know what functions replacement vessels will need to perform, and thus, could procure replacement vessels with capabilities that exceed or do not meet its needs.

Department of Transportation (DOT) guidelines require top departmental officials to review acquisition projects at several key decision points to ensure that a project does not advance from one acquisition phase to the next until it has met the requirements of its current phase and until management concerns have been resolved. Even though the Coast Guard had not met the provisions of the first phase of the federal acquisition process, DOT allowed the coastal buoy tender replacement project to advance to the second acquisition phase—during which the Coast Guard would evaluate alternative ways to meet the need defined during the first phase—and the third phase, where a prototype is developed. During its review of the project in the first phase, DOT had unresolved concerns about how technological advances could change what the coastal buoy tender replacements would need to do and whether other existing SRA vessels could perform some of these functions—both elements of the mission need. Nevertheless, the continuation of the project was approved. By allowing the project to continue without a clear understanding of what functions the Coast Guard can and cannot perform with its other existing SRA vessels, DOT risks procuring a replacement system with capabilities that exceed or do not meet its needs.

Background

The Coast Guard Act of 1949 (P.L. 81-207) authorizes the Coast Guard to operate and maintain a system of maritime aids to facilitate navigation and to prevent disasters, collisions, and wrecks. To fulfill this mission, the Coast Guard operates about 49,000 SRAs—such as buoys, lights, and fog signals—to assist mariners in determining their positions and to warn them of obstructions to navigation.

Coastal buoy tenders (WLM) are one class of vessels used by the Coast Guard to maintain its SRAs. The Coast Guard currently operates 11 WLMs of two sizes—six 133-foot WLMs, which were originally built between 1942 and 1944, and five 157-foot WLMs, which were built between 1964 and 1971. In addition to the WLMs, the Coast Guard uses several other classes of vessels to service SRAs, ranging from 180-foot seagoing buoy tenders (WLB) to 21-foot aids-to-navigation team (ANT) boats. (See app. I for more information on the vessels the Coast Guard uses to service SRAs.)

Federal acquisitions of large, complex systems—called major systems—are guided by OMB Circular A-109. This circular aims to ensure the effectiveness and efficiency of the acquisition of major federal systems by establishing responsibility for making key decisions and providing that major system acquisitions be based on a clearly identified need. The

circular outlines a multistep process in which departmental and agency executives are to review major acquisitions for compliance with the provisions of Circular A-109 at four key decision points: (1) identification and definition of mission needs, (2) selection of competitive systems design concepts, (3) commitment to full development and limited production, and (4) commitment to full production. These decision points, which occur at the end of the first four phases of the process, are designed to ensure that the acquisition does not advance to the next phase until management concerns have been resolved and the provisions of the current phase have been met. To implement provisions of A-109 and provide additional guidance to program managers, DOT and the Coast Guard have both prepared instructions on the actions required for a major acquisition. (App. II provides more details on the A-109 process and DOT's and the Coast Guard's acquisition guidelines.)

The WLM acquisition project was originally part of a larger acquisition project to replace both the coastal buoy tenders and the larger, seagoing buoy tenders. In December 1986, DOT approved the joint WLM/WLB mission need statement, and the Coast Guard began phase-two activities to explore various alternatives for meeting its stated need and to select competitive system design concepts for both types of vessels. Unlike the first phase, in which the agency is to determine whether its existing systems can fulfill its mission requirements, the focus of the second phase is to evaluate whether alternatives to its existing systems can meet the mission need. For example, during the second phase the Coast Guard evaluated the ability of alternative systems, such as aircraft and several types of vessels not currently used in the SRA mission, to meet the need it defined in phase one. According to the WLM project's Deputy Project Manager, the WLM and WLB replacement projects were divided into separate projects during the second acquisition phase to reduce the time necessary to acquire WLM replacements. In February 1992, the Coast Guard requested DOT's approval to advance the WLM project to the third acquisition phase, in which the Coast Guard is to award a contract for the design and testing of a prototype, or lead ship. On April 13, 1992, DOT authorized the project to continue into the third phase.¹

¹Our report did not evaluate the adequacy of the Coast Guard's activities during the second acquisition phase. While our review was ongoing, phase two was not complete and, therefore, was subject to review and revision.

WLM Project Did Not Meet the Provisions of the First Phase of the A-109 Process

The Coast Guard has not adequately justified its need for replacement coastal buoy tenders in the manner described by the A-109 process. The Coast Guard is planning to procure replacements that are functionally similar to its existing WLMs even though it has not fully considered whether its other SRA vessels can perform some of the functions now performed by the WLMs. In addition, DOT allowed the project to advance to the second and third acquisition phases even though the Coast Guard did not satisfy the provisions of A-109, and DOT had unresolved questions about what replacements would need to do and whether other SRA vessels could perform some functions now performed by WLMs—questions that directly relate to the project's mission need.

Coast Guard Did Not Adequately Justify Its Mission Need

The first phase of the process defined by Circular A-109 is meant to ensure that each major acquisition fulfills a mission need. The first phase is the most important phase of the process because it establishes the criteria for all subsequent decisions and ensures that the expenditure of a large amount of public funds is warranted. According to Circular A-109, an agency conducting a major system acquisition is to establish the need for a new or replacement system by comparing the agency's mission requirements—or what it needs to do—with its existing resources to meet those requirements—or what systems the agency already has to carry out its requirements. If the agency determines that it cannot fulfill its mission requirements with its existing systems, a "mission need" is identified. The need may result from an inability to fulfill the agency's mission with current systems or because of the addition of new missions. In addition to following the provisions of A-109, DOT agencies are required to document mission needs in a mission need statement, which is subject to DOT approval at the first key decision point of the acquisition process and at each subsequent key decision point.

During the first phase of the WLM project, the Coast Guard did not comply with the provisions of A-109. The Coast Guard defined its mission requirements in a general sense by estimating the future needs of its SRA mission and determining that vessels would need to continue to service the SRA system. The Coast Guard did not, however, take into account the capabilities of all of its existing SRA vessels in determining its need. The agency currently uses several classes of vessels, from seagoing WLBs to small ANT boats that can be transported by trailer, to service its numerous SRAs. Although each class of vessel is particularly suited to service a portion of the SRA system, there is some overlap in capabilities. For example, some of the larger buoys currently serviced by WLMs could also

be serviced by WLBS, while ANT boats are capable of performing emergency service on some lighted buoys normally serviced by WLMS.

To justify its mission need as prescribed by A-109, the Coast Guard should have defined its mission need by determining what mission requirements could not be met after it considered the capabilities of its other SRA vessels. For example, if the Coast Guard determined that no other SRA vessel could service aids of a particular size, located in a particular environment, it could justify the need for that capability. The Coast Guard conducted several studies comparing the capabilities of the WLMS to either larger or smaller vessels. However, none of these studies analyzed the capabilities of all of the Coast Guard's existing SRA vessels to determine which specific SRA requirements could not be met by existing SRA vessels. For example, in one study that compared the capabilities of the WLMS and WLBS, the Coast Guard determined that since the WLBS were too large to perform SRA maintenance in some areas, aids in those areas should be serviced by WLMS. However, this study did not consider whether other smaller SRA vessels could service aids in those areas.

Instead of justifying its need in the manner prescribed by A-109, the Coast Guard stated its need in terms of the condition of its existing vessels. Both classes of WLMS were originally designed to last 30 years—referred to as the vessel's service life. After being renovated and fitted with new engines during the 1970s to extend their service lives, all of the 133-foot WLMS reached the end of their extended service lives between 1988 and 1990. The 157-foot WLMS are scheduled to reach the end of their service lives between 1994 and 2001. According to the original mission need statement for the joint WLM/WLB replacement project, the WLMS would have to be replaced when they reached the end of their estimated service lives because of inadequate crew accommodations, increased maintenance costs, and decreased reliability.

The Coast Guard informed DOT that continuing to use the vessels after they reached the end of their service lives would lead to a deterioration of the SRA system. Coast Guard officials told us that the agency assumed—on the basis of experience with other vessels and a detailed inspection of several sample WLMS—that the vessels would experience more problems after they reached the end of their service lives. However, Coast Guard officials also said that service life alone does not determine when a vessel needs to be replaced. A vessel's service life is estimated at the time it is designed and built, but factors such as maintenance history and operating environment can extend or shorten a vessel's useful life from the original estimate. In

addition, detailed inspections, conducted during 1983 and 1985, concluded that both classes of WLM generally had at least 10 years, and possibly more than 15 years, of useful life remaining. In fact, all of the 133-foot WLMs have passed the end of their estimated service lives and are still being used for SRA maintenance. The maintenance and reliability levels of the WLMs have remained fairly constant between 1986 and 1991.

The Coast Guard has developed and continues to develop information on the condition of its existing vessels and the number and mix of vessels to be used to maintain navigational aids. However, until the Coast Guard justifies its mission need in the manner prescribed by A-109, it cannot ensure that whatever it procures will include the capabilities needed to fulfill mission requirements not met by other vessels.

In recent years, we have reviewed two other Coast Guard major system acquisition projects. In both cases, we reported similar concerns about the lack of clearly defined mission needs. In 1989, we testified before your Subcommittee on uncertainties about the projected mission need for the Coast Guard's proposed icebreaker, including unclear plans by other agencies to share in the use of the icebreaker.² Funding for this project was delayed pending the completion of a report to address these uncertainties. Last year, we reported that the Coast Guard did not adequately justify the capabilities needed for its proposed Heritage class patrol boat.³ The Heritage project fell more than 5 years behind schedule, in part because it had not adequately defined its mission need and, therefore, had to repeat the first acquisition phase. As a result, the Coast Guard extended the service lives of its existing patrol boats to avert a fleet shortfall. Thus, both projects experienced problems that the A-109 process was designed to avoid.

DOT Approved Continuation of WLM Project Despite Questions About Mission Need

One of the main purposes of Circular A-109 is to ensure that top management officials review each major acquisition at the four key decision points. To ensure that sound decisions are made about the need for major acquisitions, A-109 intended that management play a questioning, critical role in the review of major acquisitions. The purpose of this review is to ensure that a project not be authorized to advance from one acquisition phase to the next unless management concerns have been resolved and the project has met the provisions of its current phase. A-109

²Coast Guard Icebreaker Requirements (GAO/T-RCED-89-24, Apr. 12, 1989).

³Coast Guard: Adequacy of the Justification for Heritage Patrol Boats (GAO/RCED-91-188, July 12, 1991).

describes the first key decision as the "identification and definition of a specific mission need" and emphasizes that a project's mission need be reexamined and approved at each subsequent key decision point. In DOT, the Deputy Secretary of Transportation, assisted by a committee of top departmental officials, must review and approve major acquisitions.

In the case of the buoy tender project, DOT did not ensure that the Coast Guard had clearly met the provisions of the first phase before allowing the project to continue. The Coast Guard first submitted its mission need statement for the joint WLM/WLB replacement project for DOT approval in July 1985. After reviewing the statement, DOT asked the Coast Guard in September 1985 to provide additional information about the existing vessels' service lives and about technological changes that could affect the future need for vessels. The Coast Guard provided some information on these issues and told DOT that a delay in approving the project would result in the deterioration of the SRA system. Subsequently, while approving the project's need statement in 1986, the Deputy Secretary of Transportation again raised questions about the appropriate mix of vessels to service SRAs and the impact of potential technological and operational changes, such as satellite navigation and the possibility of contracting some SRA maintenance to the private sector, on the need for new vessels.

In our opinion, these questions indicate that the Coast Guard did not adequately justify its mission need because DOT's questions address concerns about potential changes in what the Coast Guard would need to do to maintain SRAs and what resources it already had to do so—both key elements of a mission need. After DOT approved the project's need statement, the Coast Guard initiated studies to address DOT's questions and began phase-two activities, evaluating the ability of various systems not currently used to service SRAs, such as aircraft and several types of advanced vessel designs, to meet the need approved by DOT.

Conclusions

The Coast Guard did not adequately justify its need for coastal buoy tender replacements in the manner described by OMB Circular A-109. The Coast Guard generally defined its mission requirements but did not determine how its existing systems were unable to meet those requirements. During the first acquisition phase, it did not consider the capabilities of all of its other SRA vessels when determining its mission need. Because the mission need defined during the first phase established the criteria for all subsequent acquisition decisions, the Coast Guard risks experiencing the unnecessary costs and delays Circular A-109 was

designed to prevent if it continues to go forward without a clear mission need statement.

In addition, DOT did not exercise adequate oversight of the WLM replacement project's mission need statement. Even though it had unresolved concerns about the need for replacements, DOT approved the project's mission need statement without ensuring that the provisions of the first phase of the A-109 process had been met and allowed the project to continue into the second and third phases. Had DOT played the critical role envisioned by A-109 in reviewing the WLM project, it could have ensured that the acquisition project did not advance until the Coast Guard had clearly defined its mission need in the manner prescribed by A-109. If DOT continues to allow the project to advance without a clear understanding of what functions a replacement system needs to perform, it could procure a system that includes unneeded capabilities or does not include all needed capabilities.

Recommendation

We recommend that the Secretary of Transportation and the Commandant of the Coast Guard ensure that, before any new vessels are purchased, the mission need for the coastal buoy tender project is clearly articulated and documented to show what specific capabilities are needed to meet mission requirements that cannot be met by other SRA vessels.

Agency Comments and Our Evaluation

As requested, we did not obtain written agency comments on a draft of this report. However, we discussed the information contained in this report with the Chief of the Coast Guard's Office of Acquisition and other Coast Guard and Department of Transportation officials, who disagreed with the conclusions of our report. These officials expressed their concern that we did not consider any of the project's activities subsequent to the end of the first phase in 1988. We pointed out that while we did not reach any conclusions about the adequacy of the second acquisition phase, we did review the project's documented activities that related to the definition of mission needs and that were completed prior to March 31, 1992.

Officials with the Office of the Secretary of Transportation also told us that the Coast Guard's acquisition strategy allows it to be flexible in the number of replacement vessels it procures pending the completion of an ongoing fleet mix study to determine the number and location of vessels needed to service SRAS. However, an acquisition strategy that allows for flexibility in the number of vessels procured does not address our

concern, which relates to the capabilities of each vessel, regardless of the total number acquired. In addition, Coast Guard officials had previously told us that this fleet mix study is based on the assumption that replacement vessels will be functionally similar to the existing vessels. While the Coast Guard may eventually need some system to replace its coastal buoy tenders, we cannot agree that it needs replacements that are functionally similar to its existing WLMs. Until the Coast Guard considers the capabilities of the systems it already possesses, namely its other SRA vessels, it cannot ensure that its WLM replacements will have to perform the same functions, and thus have the same capabilities, of its existing vessels.

DOT officials also told us, after seeing a draft of our report, that they believed the report implied that we believe the fleet mix study the Coast Guard is now conducting should have been completed during the first acquisition phase. We did not intend to imply that the fleet mix study be completed during the first phase, since it is not intended to determine the capabilities of replacement vessels, but rather the number and location of replacement vessels that are functionally similar to the existing vessels. We have deleted references to "vessel mix" from the report to clarify our position.

In addition, the agency and departmental officials we spoke with made several clarifying suggestions, and we made changes based on their comments where appropriate.

Scope and Methodology

To determine how the Coast Guard conducted its coastal buoy tender acquisition project, we reviewed the guidelines for federal, DOT, and Coast Guard major system acquisitions and compared those provisions with Coast Guard documents on actions taken during the WLM acquisition project through March 31, 1992. Because the second acquisition phase was not completed until April 13, 1992, we evaluated the adequacy of activities conducted for only the first phase. We discussed the progress of the WLM acquisition with Coast Guard officials from several offices involved in the project—including the Office of Acquisition, the Office of Navigation Safety and Waterways Services, and the Office of Engineering and Development—as well as officials from the Office of the Secretary of Transportation. To determine the maintenance history and condition of the WLMs, we interviewed officials from the Coast Guard's Maintenance and Logistics Command-Atlantic in New York; we also observed operations aboard the vessels Red Beech and White Sumac and

interviewed their officers and crews. We conducted our review from October 1991 to April 1992 in accordance with generally accepted government auditing standards.

We are sending copies of this report to the Secretary of Transportation, the Commandant of the Coast Guard, and other interested parties. We will make copies available to others upon request.

This work was performed under the direction of Kenneth M. Mead, Director, Transportation Issues, who can be reached at (202) 275-1000. Other major contributors to this report are listed in appendix III.

Sincerely yours,

A handwritten signature in black ink, appearing to read "J. Dexter Peach". The signature is written in a cursive style with a large initial "J" and a long, sweeping underline.

J. Dexter Peach
Assistant Comptroller General

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Abbreviations

ANT	aids-to-navigation team
DOT	Department of Transportation
GAO	General Accounting Office
OMB	Office of Management and Budget
SRA	short-range aids to navigation
WLB	seagoing buoy tenders
WLM	coastal buoy tenders

Coast Guard Vessels Used to Service Short-Range Aids to Navigation

The Coast Guard uses several types of vessels to establish and service its short-range aids to navigation (SRAs). The Coast Guard's SRA system consists of both fixed aids, such as lights, and floating aids, such as buoys. Vessels are used to perform both periodic routine maintenance of aids and unscheduled discrepancy response, when, for example, a light is extinguished or a buoy is moved from its intended location. The primary mission and operating environment of each vessel, as well as the number of vessels in service as of March 1992, is outlined below:

Seagoing Buoy Tenders (WLB)
Number: 27
Size: 180 feet
Construction Dates: 1942-44

Primarily used to service SRAs in offshore exposed environments and to service large (up to 9' by 40") buoys and moorings. Capable of lifting weights up to 40,000 pounds. Also used in other missions, such as icebreaking, search and rescue, and law enforcement.

Coastal Buoy Tenders (WLM)
Number: 11
Size: 133 & 157 feet
Construction Dates: 1942-71

Primarily used to service SRAs along the coast, but also capable of operating in semiexposed environments. Capable of handling most large buoys (up to 8' by 26') and lifting weights up to 20,000 pounds. Some use in other missions, such as icebreaking and search and rescue, but less than WLBS.

Inland Buoy Tenders (WLI)
Number: 6
Size: 65 & 100 feet
Construction Dates: 1945-63

Operated mainly in harbor and harbor entrance environments to service medium size buoys. Capable of traversing exposed water and listing up to 4,000 pounds (65 feet) or up to 10,000 pounds (100 feet) in calm seas.

**Appendix I
Coast Guard Vessels Used to Service
Short-Range Aids to Navigation**

Inland Construction Tenders (WLIC)

Number: 16
Size: 160, 100, & 75 feet
Construction Dates: 1942-76

Responsible for construction and complete servicing of small marine structures, such as fixed lights. Also capable of servicing medium-sized buoys in harbor and harbor entrance environments and lifting up to 10,000 pounds in calm seas.

River Buoy Tenders (WLR)

Number: 18
Size: 115, 75, & 65 feet
Construction Dates: 1943-91

River tenders are operated in the Second Coast Guard District to construct and service shore structures and service floating aids in the river environment. Vessel consists of tug/barge combination.

Aids-to-Navigation Boats (ANB)

Number: 24
Size: 55, 63, & 65 feet
Construction Dates: 1972-88

Primary boat used by aids-to-navigation teams (ANTS). Used to service beacons, small unlighted buoys, and signal equipment on lighted and unlighted buoys in protected or semi-exposed environments. ANTs can also reposition buoys and lift up to 3,300 pounds.

Buoy Boats (BU)

Number: 12
Size: 45 feet
Construction Dates: 1954-62

Operated in sheltered and semiexposed, usually shallow, water. Capable of servicing fixed aids as well as servicing and repositioning small buoys. Unsuitable for rough sea conditions.

**Appendix I
Coast Guard Vessels Used to Service
Short-Range Aids to Navigation**

**Stern-Loading Buoy Boats (BUSL)
Number: 14
Size: 46 feet
Construction Dates: 1966-69**

Capabilities same as buoy boats except for stern (rear) loading area.

**Trailerable Aids-to-Navigation Boats (TANBs)
Number: 83
Size: 21 feet
Construction Dates: 1973-91**

Used to check and service buoys and minor structures. Capable of being transported by trailer to launching facility near aid requiring service.

Guidelines Governing the Coast Guard's Acquisition Process

This appendix describes the policies and procedures that have governed the Coast Guard's buoy tender replacement project since its inception. The Coast Guard's major acquisitions are governed by policies and procedures at three levels: federal, departmental, and agency. At each level, the responsible authorities have developed guidelines to ensure the effective and efficient acquisition of major systems.

The Federal Process for Major System Acquisitions

Throughout its history, the buoy tender replacement project has been subject to the federal acquisition process described in the Office of Management and Budget's Circular A-109 and implemented through the Federal Acquisition Regulations (Chapter 48, Code of Federal Regulations). Circular A-109 took effect in April 1976 and is based on OMB's consideration of the recommendations in the 1972 Report of the Commission on Government Procurement. This congressionally mandated report expressed deep concern over the effectiveness of the management of major system acquisitions.

Circular A-109 has two primary objectives. First, to avoid the problems commonly experienced in acquiring major systems, such as cost overruns and delays, it divides the acquisition process into five phases. Second, to ensure top management's involvement, it establishes, between the five phases, four key decision points at which top management reviews the project's progress, problems, and risks. The purpose of these reviews is to ensure that the acquisition does not advance to the next phase until management's concerns are resolved.

The first phase, in which mission needs are determined, is the most important phase because it establishes the criteria for all subsequent decisions. In order for executive departments and the Congress to be able to understand and debate an agency's mission needs and goals, agencies should present mission needs statements that clearly articulate the purpose and requirements of an agency's project, the way the project would meet the agency's needs, and the risks involved. The project's need and objectives are to be reassessed and approved before each subsequent phase begins.

In the second phase, the agency identifies alternative designs that would satisfy its needs and selects the most promising designs for further exploration. Exploration of alternative systems is intended to increase the probability that the most effective solution will be found and ensure that the acquisition does not prematurely conform to an existing concept or

technical approach. This phase is essential to ensure an appropriate balance between investment costs, ownership costs, project-related schedules, and performance characteristics.

The third phase provides for a competitive demonstration of alternative designs selected during the second phase, which typically involves building, testing, and evaluating prototypes. The competitive demonstration should verify that the chosen design concepts are sound and able to perform as claimed.

In the fourth phase, the agency conducts full-scale development and limited production of the system selected in the third phase. In addition, the system is subject to independent testing and evaluation under anticipated operating conditions.

The fifth and final phase of the A-109 process is full production and deployment of the system. Top management authorizes advancement to this phase after assessing the results of the testing and evaluation conducted during the fourth phase and reconfirming mission needs in light of these results and current conditions.

These phase-based guidelines emphasize A-109's general goals: to (1) ensure that each system fulfills a mission need and operates effectively in its intended environment; (2) promote competition throughout the acquisition process; (3) ensure appropriate balance between investment costs, ownership costs, and project-related schedules and performance; (4) establish clear lines of authority for the management of major system acquisitions; and (5) ensure top-level management involvement in the acquisition process.

Department of Transportation and Coast Guard Acquisition Guidelines

Over the life of the buoy tender replacement project, DOT has issued several departmentwide orders to implement Circular A-109 procedures throughout DOT agencies. DOT Order 4200.14B was in effect from January 1983 until April 1990, when it was superseded by Order 4200.14C. The orders establish review procedures and accountability and provide additional guidance for several key decision points in the A-109 process.

According to these orders, the Deputy Secretary of Transportation, in consultation with top agency officials, is responsible for approving the continuation of designated major acquisitions at the four key decision points of the A-109 process. In general, the orders require that a major

**Appendix II
Guidelines Governing the Coast Guard's
Acquisition Process**

acquisition project not be advanced to the next phase of the acquisition process unless it has fulfilled the purpose of the current acquisition phase and information developed in previous phases has been updated.

The Coast Guard, in turn, developed a Systems Acquisition Manual, COMDTINST M4150.2B, to implement A-109 and the DOT acquisition regulations. This manual was first published in January 1990 and updated in August 1991. The manual is a product of the Office of Acquisition, which was formed in 1986 to improve the Coast Guard's process for major system acquisitions.

Like the DOT order, the Coast Guard manual provides detailed guidance on the procedures that should be followed in conducting a major acquisition. The manual also establishes a committee of top Coast Guard officers to review acquisition projects to ensure that they are ready for review by DOT.

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