

October 1988

COAST GUARD

Decision to Phase Out Curtis Bay Yard Is Inadequately Supported



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General Accounting Office
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**Resources, Community, and
Economic Development Division**

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October 7, 1988

The Honorable Earl Hutto
Chairman, Subcommittee on
Coast Guard and Navigation
Committee on Merchant Marine
and Fisheries
House of Representatives

The Honorable Frank R. Lautenberg
Chairman, Subcommittee on Transportation
Committee on Appropriations
United States Senate

The Honorable Barbara A. Mikulski
The Honorable Paul S. Sarbanes
United States Senate

The Honorable Benjamin L. Cardin
The Honorable C. Thomas McMillen
House of Representatives

As you requested in February 1988, we reviewed the proposed phaseout of industrial operations at the U.S. Coast Guard Yard in Curtis Bay, Maryland. In January 1988, the Coast Guard Commandant announced that the Coast Guard planned to phase out the Yard's industrial operations as part of an initiative to reduce operating expenses. As agreed with your offices, we focused our review on the adequacy of the Coast Guard's justifications for the Yard's phaseout—achieving annual cost savings of about \$2.6 million, avoiding capital improvement costs of \$20 million to \$30 million, and an anticipated decline in the Yard's future work load. As agreed, we also provide specific information on the Yard's industrial operations and how they are funded, the Department of Transportation's (DOT) previous designation of these activities as essential, and the Coast Guard's plans and related studies for phasing out the Yard.

Results in Brief

The Coast Guard has not adequately supported its decision to close the industrial operations at the Yard. Specifically,

- Its savings estimate is optimistic because it does not consider contract administration costs for future work done in commercial shipyards or all applicable facility closure costs.
- The intangible benefits of retaining the only major shipbuilding and repair facility under Coast Guard control have not been weighed against the estimated savings.
- The Coast Guard's estimate of Yard capital improvement costs that will be avoided is imprecise and may be overstated because it does not consider the less costly alternative of repairing rather than replacing existing facilities.
- The assumed decline in the Yard's future workload is inconsistent with recent Coast Guard planning documents and a March 1987 DOR designation of the Yard's industrial operations as an essential logistics activity.

The Coast Guard is developing a phaseout implementation plan for the Yard that should include new and better cost estimates. In addition, we plan to initiate a comparative cost analysis of doing work at the Yard versus doing it at commercial shipyards—a critical but unsupported assumption in the Coast Guard's cost analysis. Additional Coast Guard efforts will be needed, however, to resolve other weaknesses we identified in its analysis of the proposed phaseout.

Background

The Yard, founded in 1899, is the Coast Guard's only major shipbuilding and repair facility, employing about 1,100 military and civilian personnel. Over 600 civilians are involved in industrial operations, which includes the repair, modification, and construction of vessels. The Yard performs only about 13 percent of the Coast Guard's total industrial operations work; the majority of the Coast Guard's shipyard work is contracted to commercial shipyards. The Coast Guard now plans to phase out most of the Yard's industrial operations, with the exception of the electronics and ordnance repair shops, which employ about 75 civilians. (App. I provides details on the type of work performed at the Yard's industrial facility for fiscal year 1988.)

The Yard's industrial activities, estimated at about \$37 million for 1988, are funded through a revolving fund. The fund is self-sustained through payments from the Coast Guard units that use the Yard's industrial services. (App. II shows revolving fund expenses for fiscal years 1980 through 1988.)

Other primary Yard missions include providing logistics support to the Coast Guard fleet through its Ships Inventory Control Point and facilities support for search and rescue stations and several homeport ships that are assigned to the Fifth Coast Guard District. Under the proposed phaseout, the Yard plans to continue these two missions.

Current Coast Guard plans call for the development of an implementation plan, including new cost savings estimates, for the phaseout by October 1988, with the actual phaseout taking place over a 4-to-5-year period starting in 1988. According to a Chief of Staff official, the Yard has sufficient work load to keep its current work force employed until 1992. No formal DOT approvals are required for the Yard's phaseout; however, DOT would have to provide the Congress with a justification for lifting the Yard's designation as an essential logistics industrial activity. In developing the phaseout implementation plan, the Coast Guard will consider moving nonindustrial functions, such as warehousing Coast Guard material now stocked at the Naval Supply Center in Norfolk, Virginia, to the Yard after vacating the industrial facilities.

Recurring Annual Cost Savings

One of the Coast Guard's primary justifications for closing the Yard's industrial operations was the potential for sizable annual recurring cost savings. However, the Coast Guard did not include all annual offsetting costs in its initial estimates. Nor did the Coast Guard consider the Yard's intangible benefits. In addition, one-time offsetting costs, mostly severance pay and lump sum annual leave payments, will delay realization of net savings several years beyond that indicated in the Coast Guard's justification.

Annual Savings

Coast Guard headquarters' most recent estimate (Feb. 1988) shows that phasing out the Yard's industrial functions would result in annual savings of \$2.6 million starting at the end of the phaseout (in fiscal year 1992). This is considerably less than its initial rough estimate of \$10 million to \$15 million. These savings consist of about \$1.9 million in military personnel overhead costs and about \$0.7 million in overhead operating and maintenance costs. However, Yard officials estimated at the same time that annual savings would be only about \$1 million—\$1.6 million in military personnel overhead cost savings offset by \$0.6 million in increased overhead operating and maintenance costs. These two estimates differ mainly because of different assumptions regarding overhead operating and maintenance costs. For example, Yard officials assumed that the medical clinic's services would be contracted out at

increased cost, while headquarters assumed the clinic would remain open but would be reduced in size. (See app. III for a chronology and details of Coast Guard's cost savings estimates.) Coast Guard headquarters now plans to reconcile the differing savings estimates as it develops its phaseout implementation plan.

Further, neither Coast Guard headquarters nor Yard estimates considered certain annual offsetting costs, mostly associated with increased contract administration activities, that would be incurred if the Yard's industrial work were contracted out. These costs would be incurred for writing contracts, soliciting bids, awarding contracts, monitoring contracted work and resolving legal issues, including contractor claims, among other things. Coast Guard also now plans to consider these costs as it develops its implementation plan.

In addition, in developing its cost savings estimates, Coast Guard headquarters assumed, without supporting data, that contracted-out work would cost the same as in-house Yard work. In other words, the Coast Guard assumed that having work done at commercial shipyards would cost the same as the labor, material, and overhead¹ currently recouped from Coast Guard units using Yard services. Because of concerns about this assumption, the Senate Committee on Appropriations, in its report on the fiscal year 1989 Department of Transportation and Related Agencies Appropriations Bill, directed GAO to make a comprehensive evaluation of the relative costs of ship repair work at the Yard versus at private shipyards. As mentioned earlier, we plan to address this issue in a subsequent review.

One-Time Offsetting Costs

Closing the Yard's industrial operations will result in the Coast Guard's incurring one-time offsetting costs. These costs, which the Coast Guard estimated in June 1988 at \$5 million to \$8 million, consist of severance pay and annual leave payments to civilian employees. The Coast Guard, however, initially overlooked other one-time offsetting costs, such as unemployment compensation, employee severance counseling, and relocation assistance, in developing this estimate. More recently, Coast Guard officials have recognized that unemployment compensation could be an offsetting cost. Estimates of other one-time costs were still being developed at the completion of our review.

¹In addition to the overhead costs for military personnel, operations, and maintenance, other overhead costs (approximately \$11 million in fiscal year 1988), such as Yard maintenance, are charged to the users of Yard services under the revolving fund arrangement, as discussed above.

Although the Coast Guard's February 1988 estimate shows savings beginning the first year following the phaseout, these one-time costs will initially offset the Coast Guard's annual savings and must be recovered before any net cost savings are achieved. According to the Commandant, one-time offsetting costs could delay net savings for 2 to 3 years (until fiscal year 1994 or later).

Intangibles

During our discussions with Yard officials about the Coast Guard's justification for phasing out the Yard, the Commanding Officer pointed out that attributes unique to the Yard are often overlooked when deciding where ship construction and repairs should be made. The benefits of these intangibles are almost impossible to quantify on an annual basis but, according to Yard officials, can and should be considered in decisions regarding the Yard's future.

Benefits identified by the Yard management include instant response capability for emergency work, training for the Coast Guard's naval engineers, and the ability to accelerate or decelerate work to meet Coast Guard priorities without associated contractor claims and contract administration costs. The current Coast Guard Engineering Support Program Plan identifies a number of other Yard benefits, including maintaining a capability to directly support military mobilization plans. Headquarters officials agree that numerous intangible benefits are associated with the Yard, but say they are difficult to quantify and use in cost comparisons. We agree that such benefits are difficult to quantify, but believe they should be identified and assessed so that relative judgments can be made about their value in relation to any cost savings from phasing out the Yard's industrial functions.

Final Implementation Plan and Cost Estimate

The Coast Guard's final phaseout implementation plan, expected in October 1988, is to include an updated estimate of the Coast Guard's costs and savings. As stated above, according to Chief of Staff officials, these final savings estimates will include annual offsetting costs for additional contract administration associated with contracting out current Yard work and one-time offsetting costs, including unemployment compensation.

However, according to a Chief of Staff official, the plan will not attempt to confirm the Coast Guard's assumption that work performed in private shipyards will cost about the same as work now done in the Yard

and funded by the revolving fund. In addition, the plan will not address the Yard's intangible benefits.

Avoidance of Capital Improvement Costs

Another Coast Guard justification for phasing out industrial operations at the Yard was to avoid \$20 million to \$30 million in capital costs for modernizing the facility over the next 10 years. The Coast Guard justification stated that modernization would not be cost-effective.

In a June 10, 1988, letter to Senator Barbara A. Mikulski, the Coast Guard Commandant stated that very significant costs of capital improvements could be avoided if the Yard's industrial operations were discontinued and that these costs must be incurred if the industrial facility were to be productive and avoid operating cost increases. According to Yard officials, however, it would be some years before large capital expenditures were required. In addition, less costly options, such as repairing existing equipment, were spelled out in the Yard's July 1987 Master Plan. This master plan, for example, identified repair as an alternative to an \$11.5-million replacement of a dry dock. The costs, advantages, and disadvantages of this alternative, however, are not addressed in the master plan. In addition, both headquarters and Yard officials agreed that the Coast Guard could possibly pay for the same types of improvements in its contracts with private shipyards as they make similar improvements and pass along their costs to the Coast Guard. Headquarters officials noted, however, that with current excess capacity in private shipyards, it is unclear in the short run how much private shipyards would attempt to recoup their capital improvement costs.

Anticipated Decline in the Yard's Work Load

The Coast Guard's third justification for closing the Yard was an anticipated decline in its work load. The Commandant has stated that given the current interest in initiatives to transfer government work to the commercial sector, it is unlikely that DOT would authorize the Yard to do the kinds of work it has done in the past. Because the Coast Guard is an agency within DOT, decisions regarding whether major Coast Guard projects will be performed at the Yard or in the private sector must be approved by DOT. The Commandant noted that the last two administrations have emphasized privatization. However, no prior Coast Guard actions or planning documents made available to us indicated that the Yard's work load would decline because of this or other reasons. In fact, these documents suggested that the Yard's industrial operations are an essential Coast Guard activity needed for the effective and timely performance of the Coast Guard's missions.

Indeed, according to the Secretary of Transportation in a March 1987 letter to the Chairman of the Senate Committee on Commerce, Science, and Transportation and the House Committee on Merchant Marine and Fisheries, many Yard activities are essential logistic activities that should be performed by Coast Guard employees. This letter was written in response to a legislative requirement that the Coast Guard identify the activities necessary to maintain an "essential logistics" capability to ensure, among other things, the effective and timely performance of the Coast Guard's missions in behalf of the security, safety, and economic well-being of the United States.² Further, according to the Commandant in a related January 1987 letter to the Secretary of Transportation, it is necessary for Coast Guard employees to perform certain activities (including the industrial activities of the Yard) so that the Coast Guard maintains the technical personnel skills and base facilities that are needed to meet war readiness and mobilization requirements. Recently enacted legislation would require the Coast Guard to list its essential logistic activities on an annual basis.³

Likewise, the Coast Guard's Engineering Support Program Plan for 1990-1994, dated December 31, 1987, does not mention a decline in the Yard's work load or plans to phase out the Yard's industrial activities. Although addressing the entire engineering program, this plan specifically examined the question of whether the Coast Guard's vessel work should be done in-house, commercially, or by a combination. The Coast Guard indicated a preference for a mix of in-house and commercial work, as has traditionally been done. The plan cites a number of reasons for this mix, including providing the agency with the greatest degree of control and flexibility and the capability for direct support of military mobilization plans. However, Coast Guard headquarters officials told us that maintaining these capabilities would not be cost-effective should the Coast Guard have to direct work to the Yard just to keep it busy.

Finally, the Coast Guard's capital improvements plans do not indicate that the Coast Guard anticipated a declining work load for the Yard. As recently as late 1987, the Coast Guard planned to make, but had not totally funded, over \$5 million in capital improvements to the Yard in anticipation of its continued operations.

²Coast Guard Authorization Act of 1986 (P.L. 99-640).

³Coast Guard Authorization Act of 1988.

With respect to initiatives to transfer government work to the commercial sector, we discussed with DOT Office of Acquisition officials the Coast Guard's concerns that DOT probably would not allow the Yard to do the types of work it had done in the past. According to these officials, DOT uses cost-benefit analyses to decide whether to do individual projects at the Yard. Essentially, projects must meet DOT's primary criteria for in-house work, that is, the Yard must have the necessary expertise and facilities, and it must be cost-effective to do the work there. The officials acknowledged, however, that DOT examines Coast Guard projects proposed for the Yard more critically than those proposed for private shipyards because of the administration's privatization policy. However, it was their opinion that DOT's Transportation Systems Acquisition Review Council⁴ would consider, in addition to the primary criteria stated above, the essential logistics nature of the Yard in making decisions regarding where major Coast Guard work should be performed. The officials also noted that Coast Guard's smaller vessel-related projects done at the Yard do not have to be approved by DOT and that the Coast Guard has flexibility in making these decisions.

The legislation discussed above, addressing essential logistic activities, prohibits contracting for the activities that the Secretary of Transportation considers to be essential for the Coast Guard's logistics capability—unless the Secretary determines that government personnel need not perform these activities and waives the prohibition. Such a waiver, including a full and complete statement of the reasons for it, must be provided to the Congress and may not take effect for 30 days. (The 1988 act retains the prohibition and waiver provisions.) According to a Chief of Staff official, the Coast Guard plans to comply with this requirement; however, in the meantime it is moving forward with plans to phase out the Yard.

Conclusions

The Coast Guard needs assurance that closing the industrial portions of the Curtis Bay Yard is cost-effective and in the national interest. It does not have such assurance because it has not (1) considered the increased contract administration and other costs of work that would be transferred to private shipyards (which would reduce anticipated savings); (2) identified all costs of closing down the Yard (which would delay realization of anticipated net savings); (3) compared the cost of ship repair

⁴The Council reviews each major acquisition project at four key decision points and, at other times, as directed by the Deputy Secretary of Transportation. The reviews concentrate on each project's estimated cost, schedule, and performance requirements.

and construction at the Yard to that of work done in the private sector; (4) considered the intangible benefits derived from maintaining ongoing capabilities at the Yard; (5) considered less costly alternatives to modernize the Yard or developed precise estimates of modernization costs; or (6) resolved inconsistencies with respect to future work load at the Yard and officially justified waiving a legislated prohibition against terminating essential logistic activities (which would be necessary before contracting out the Yard's industrial activities).

The Coast Guard is developing a phaseout implementation plan for the Yard that will include new cost savings estimates, an assessment of offsetting costs for contract administration and related activities, and a better assessment of one-time closing costs. In addition, as directed by the Senate Committee on Appropriations, we plan to initiate a comparative evaluation of the cost of doing work at the Yard versus at commercial shipyards. In conducting this evaluation, we will attempt to compare all relevant overhead and direct costs, including the extent to which commercial shipyards include future modernization costs as a pricing factor. While these actions should help, they will not address other weaknesses we found in the Coast Guard's analysis. Until these weaknesses are also corrected, the Coast Guard will lack assurance that its decision to close the Yard's industrial activities is indeed a proper one.

Recommendations

In order to develop more complete information upon which to base a decision on maintaining or phasing out the industrial activities of the Curtis Bay Yard, we recommend that the Secretary of Transportation direct the Commandant, Coast Guard, to

- identify and weigh the importance of the intangible benefits of maintaining the only ship repair and construction facility under Coast Guard control and
- evaluate the feasibility of the less costly alternatives to modernize the Yard laid out in the Yard's 1987 Master Plan and develop a more precise estimate of future modernization costs.

In addition, the Secretary should adequately justify the required waiver, if the decision is made to terminate the Yard's essential logistics industrial activities. At a minimum, the justification should resolve inconsistencies in existing planning documents with respect to future work that could be done at the Yard and include the reasons why the Yard's technical personnel and base facilities are no longer necessary to ensure the

effective and timely performance of the Coast Guard's missions under varying contingency operations.

In preparing this report, we reviewed documents and interviewed Coast Guard and DOT officials at their headquarters in Washington, D.C., and at the Coast Guard's Yard in Curtis Bay, Maryland. Our review was conducted between March and July 1988.

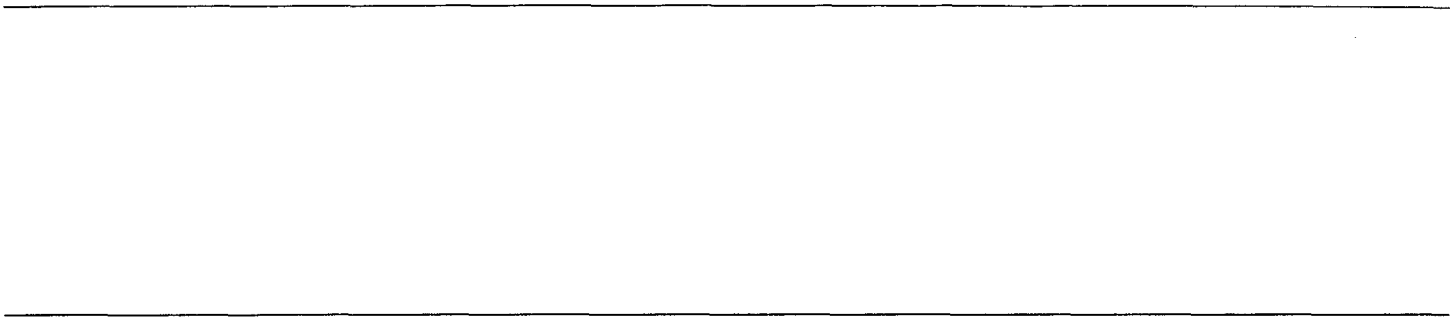
We discussed the report's contents with responsible Coast Guard officials, including the Chief of Staff; Resource Director; Chief, Office of Engineering; Chief, Office of Acquisition; and the Commanding Officer of the Yard and have included their comments where appropriate. However, in accordance with your request, we did not obtain official agency comments on a draft of this report.

As arranged with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 7 days from the date of this letter. At that time, we will send copies to the Secretary of Transportation; the Commandant, U.S. Coast Guard; and to other interested parties and will make copies available to others upon request.

This work was performed under the direction of Kenneth M. Mead, Senior Associate Director. Major contributors to this report are listed in appendix IV.



J. Dexter Peach
Assistant Comptroller General



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Abbreviations

DOT	Department of Transportation
GAO	General Accounting Office

Major Industrial Work at the Yard for Fiscal Year 1988

Construction

- Four 130-foot crane-equipped barges: The barges are used for servicing navigation aids on the critical waterways in the Second Coast Guard District.

Major Renovation

- Two 210-foot medium endurance cutters: This multiyear project involves performing major midlife maintenance to provide increased fuel and water capacity, as well as improved damage control and seakeeping capabilities, by lowering the cutters' centers of gravity. The cutters will get new engines, electrical systems will be upgraded, auxiliary equipment will be standardized, the radio room will be modernized, and berthing will be improved.
- Two 180-foot seagoing buoy tender class cutters: This multiyear project involves a total renovation of all living spaces; replacement of machinery, including engines; a replacement package of electronics equipment; and structural modifications.

Retrofit Work

- 270-foot medium endurance cutters: The Yard is the Coast Guard's principal source for electronics retrofitting of newly constructed, but unfinished, ships built at commercial shipyards.

Buoy Production

- The Yard manufactures many of the lighted buoys—large, heavy buoys needed for around-the-clock aid to navigation. In April 1988, the Yard ceased construction of buoys because of staffing needs for other Yard projects. Yard managers plan to resume buoy construction again, possibly in 1990, a plan that could, however, be affected by the Yard's phaseout announcement.

Yard Fund Expenses for Fiscal Years 1980 Through 1988

Dollars in millions

Year	Expenses
1980	\$30.9
1981	33.3
1982	32.7
1983	35.3
1984	34.1
1985	34.0
1986	32.6
1987	35.6
1988	37.0 (budgeted amount)

Source: Yard Fund Financial Statistics and Yard Fund Budget Amount for Fiscal Year 1988.

Coast Guard's Cost Savings Estimates

Table III.1: Chronology of Coast Guard's Estimates of Annual Recurring Cost Savings From Closing the Yard's Industrial Activities

Dollars in millions			
Date	Estimated savings	Source	Basis for estimate
Late 1987	\$10 to 15	Informal brainstorming sessions	None available ^a
02/04/88	5.4	Informal discussions within Naval Engineering Division	None available ^b
01/20/88	3.8	Chief, Naval Engineering	Data based on 4-year phaseout
02/05/88	1.0	Commanding Officer, Yard	Data based on 5-year phaseout
02/18/88	2.6	Program Division, Chief of Staff	Revision of data considering 01/20/88 and 02/05/88 estimates

^aAlthough no supporting documents for these estimates were available, a Chief of Staff official told us that the \$15 million savings estimate assumed that the entire Yard would be closed.

^bIn the Coast Guard's fiscal year 1989 budget request submitted to the Congress in February 1988, the Coast Guard showed fiscal year 1989 cost savings of \$5.4 million from the phaseout of the Yard. Chief of Staff officials informed us that there is no documentation supporting these savings and that the \$5.4 million was mistakenly placed in the budget request.

**Appendix III
Coast Guard's Cost Savings Estimates**

Table III.2: Details on Latest Estimates of Net Savings From Yard Phaseout

Personnel	Headquarters estimate	Yard estimate
Reduction in personnel		
Commissioned officers	\$217,000	\$260,400
Warrant officers	190,500	190,500
Enlisted personnel	1,622,400	1,684,800
Increase in personnel		
Civilian employees	(125,000)	(500,000)
Total personnel cost savings	1,904,900	1,635,700
Operating and maintenance costs		
Close barracks/increase cost of unaccompanied personnel housing	(\$129,600)	(\$129,600)
Reduce travel and training costs	62,233	62,016
Mess hall		
Close	300,000	
Remain open under contract		0
Reduce computer costs	69,000	69,000
Medical clinic		
Reduce costs	50,000	
Reopen under contract		(580,000)
Reduce facility repair/renovation	333,500	333,500
Facility maintenance	0	(484,707)
Standard personnel costs	0	92,719
Total operating and maintenance costs	685,133	(637,072)
Total recurring savings	\$2,590,033	\$998,628

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