

GAO

U. S. GOVERNMENT PRINTING OFFICE: 1988

Report to the Chairman, Subcommittee on
Coast Guard and Navigation, Committee
on Merchant Marine and Fisheries, House
of Representatives

November 1988

COAST GUARD

Better Information Needed Before Deciding on Facility Closings



137454

About Our New Cover . . .

The new color of our report covers represents the latest step in GAO's efforts to improve the presentation of our reports.



United States
General Accounting Office
Washington, D.C. 20548

Resources, Community, and
Economic Development Division

B-232870

November 29, 1988

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

Dear Mr. Chairman:

In February 1988 you requested that we review the possible implication of the Coast Guard's plans for eliminating or reducing facilities, resulting from the reduction in its requested fiscal year 1988 appropriation. This report addresses the Coast Guard's closure of two Vessel Traffic Service (VTS) facilities (primarily used to keep vessels from colliding while transiting harbor areas) and the decommissioning of two of its icebreakers—Northwind and Westwind (the Winds). An earlier report covered the proposed phaseout of industrial operations at the Coast Guard Yard in Curtis Bay, Maryland (GAO/RCED-89-29, Oct. 7, 1988).

As agreed with your office, we reviewed (1) the factors used by the Coast Guard in selecting the New York and New Orleans VTSS for closure, (2) the safety value of the VTSS, and (3) the estimated Coast Guard personnel cost savings to be achieved from closing the two VTSS and decommissioning the two icebreakers.

Results in Brief

The factors used by the Coast Guard to select VTSS for closure were chosen primarily to resolve its immediate problem of reducing operating expenses and gave little consideration to the effectiveness of each of the VTSS in enhancing safety. Although cost-effectiveness information is required by Coast Guard policies, it was not used, was seriously out of date, or was not maintained. Because the Coast Guard did not consider such information, it does not know if it made the correct decision in closing the New York and New Orleans VTSS, two of the three largest in terms of vessel activity.

Without current and complete information regarding VTS effectiveness, the safety value of VTSS cannot be clearly demonstrated. Although the National Transportation Safety Board (NTSB) believes VTSS are important in enhancing safety, Coast Guard Chief of Staff officials believe that VTSS are not as important as when they were initially developed because

of technology and communication improvements. The Coast Guard position, however, appears inconsistent with its 1987 plans to require vessel participation at New York and New Orleans as a means to enhance vessel traffic safety at these locations.

The Coast Guard understated the annual personnel cost savings from closing the two VTSS by about \$228,000, and overstated such savings from decommissioning the Wind icebreakers by about \$445,000. The Congress has requested the Administration to further study the nation's icebreaker requirements. The Coast Guard believes it needs two icebreakers to replace the 40-year-old Winds. If new icebreakers are procured, future annual savings from decommissioning the Winds will be eliminated.

Background

The VTS is the Coast Guard's most common form of active vessel traffic management and is used in those harbors where it has been determined, on the basis of various factors including traffic volume and number of accidents, that active management is desirable. Each VTS has a manned Vessel Traffic Center that collects—generally through the use of radio, radar, and/or closed-circuit TV—and disseminates to participating vessels information on vessel movements in the VTS area, alerting them to possible hazards.

The VTS program consisted of seven VTSS at the beginning of fiscal year 1988. At three—Prince William Sound, Alaska; Puget Sound, Washington; and Berwick Bay, Louisiana—either statute or federal regulations require specified vessel types to contact the VTS and continuously monitor the VTS radio frequency while moving within the VTS area. The other VTSS—New York, New Orleans, San Francisco, and Houston/Galveston—are voluntary, with specified vessel types only encouraged to participate. The New Orleans and New York VTSS were decommissioned in March and July 1988, respectively.

The Coast Guard also manages the nation's icebreaker fleet. In addition to its domestic icebreaking missions, its polar icebreakers provide assistance in resupplying Department of Defense arctic facilities and National Science Foundation antarctic facilities and serve as polar scientific-research platforms for government and private users. Users reimburse the Coast Guard for related fuel and maintenance costs. At the

start of fiscal year 1988, the Winds were two of four Coast Guard ice-breakers that could perform polar missions. The Westwind was decommissioned in March 1988 and the Northwind is scheduled for decommissioning in January 1989.

VTS Closure Selection Based on Limited Information

The Coast Guard, in selecting VTSS for closure, used selection factors aimed primarily at resolving its immediate problem of reducing operating expenses. Limiting the selection process to these factors, however, generally precluded the Coast Guard from considering information about the effectiveness of VTSS in enhancing vessel safety—the VTSS' primary goal and the reason they were first established.

Factors Considered by the Coast Guard

In selecting VTSS to close, the Coast Guard primarily considered three factors:

- VTSS with voluntary participation were chosen because they would not take as long to close as mandatory VTSS, since changes to federal laws and regulations would not be required.
- Voluntary VTSS with the lowest reported participation rates in the fourth quarter of fiscal year 1987 were chosen. New York and New Orleans were the only two VTSS with participation rates under 99 percent, 79 and 61 percent respectively. (See app. I.)
- Encountering as little local resistance as possible to closing a VTS was the third factor. The Coast Guard believed it could close the New York and New Orleans VTSS with a minimum of resistance.

We were told an additional advantage in selecting New Orleans was the avoidance of over \$16 million in planned capital expenditures to upgrade equipment.

Of the factors used by the Coast Guard to determine which VTSS to close, only the second one—user participation rates—considered the success of the VTSS in achieving program goals. The others, based solely on which VTSS could be closed quickly and where capital expenditures could be saved, did not concern VTS effectiveness in enhancing vessel safety—including prevention of accidents and fatalities and protection of the environment through prevention of oil spills and accidents involving hazardous cargoes. The use of participation rates, however, disregarded the Coast Guard's plans for establishing federal regulations to require participation for New York and New Orleans, which would have given

all vtss approximately the same rate of participation. This matter is discussed in detail later.

Cost-Effectiveness and Safety Information Should Have Been Considered

Use of information more directly related to vts program goals and plans—such as overall cost-effectiveness information or, in its absence, individual elements of cost-effectiveness, such as accidents or accidents prevented—would have enhanced the process used by the Coast Guard to determine which vtss to close. Although Coast Guard policies require data concerning cost-effectiveness to be maintained, such data were not maintained; and information on individual components of cost-effectiveness are either incomplete or not analyzed.

Cost-Effectiveness Data Required but Not Maintained

The Coast Guard does not have current information on the cost-effectiveness of individual vtss or the overall vts program even though such information is required. The Coast Guard's *Organization Manual* provides that the vts Branch maintain statistical data to support the need for and cost-effectiveness of marine traffic management activities. However, the vts Branch Chief was unable to demonstrate the need for and cost-effectiveness of individual vtss or the overall program. This occurred because the Coast Guard's available cost-effectiveness information is not current (for example, New York vts data have not been updated since 1981) and analyses are not based on current designs and equipment. The Branch Chief also stated that he has not had the resources to update cost-effectiveness information. In a recent general management review of the Department of Transportation (DOT),¹ which included Coast Guard activities, we pointed out that the importance of safety programs, which would include vtss, requires that measures of effectiveness be developed and applied. Commenting on a draft of the report, DOT agreed on the need for such measures.

Three Components of Cost-Effectiveness Not Analyzed or Incomplete

In the absence of cost-effectiveness information, the Coast Guard could have considered other factors or individual components of cost-effectiveness in selecting vtss for closure. Those could include accidents, total vts activity levels, and the complexity of traffic in a vts area.

¹Department of Transportation: Enhancing Policy and Program Effectiveness Through Improved Management (GAO/RCED-87-3, Apr. 13, 1987).

Accidents: Information on accidents and accidents prevented could serve as criteria for assisting the Coast Guard in making VTS management decisions, including closure determinations. However, although actual accidents are included in the VTSS' quarterly reports, they are not summarized for analysis of VTS trends and effectiveness. In addition, a VTS Branch official was unable to determine from the quarterly reports the accidents prevented for some of the VTSS because accidents-prevented information had been mixed with other types of VTS assistance information. Our review of fiscal year 1987 activity reports showed this to be the case for four of the seven VTSS.

Total VTS Activity Levels: In the opinion of the VTS Branch Chief, the Coast Guard in determining which VTSS to close should have considered total VTS activity levels rather than just participation rates. He believed that analysis of the activity levels would have improved the selection process. As shown in appendix I, in fiscal year 1987, New York ranked third and New Orleans first among all the VTSS in terms of total VTS activity levels.

In addition, the Coast Guard, in using participation rates as a decision factor, disregarded its plans to mandate participation at New York and New Orleans—a relatively low-cost initiative supported by the NTSB on the basis of its accident investigations and observations of VTSS in other countries. When the Coast Guard reestablished the New York VTS in 1985,² its plans included mandating vessel participation. Because of the steadily rising participation rate at New York, mandatory participation was postponed pending any change in this trend. However, as recently as December 1987, the Coast Guard still had plans to mandate participation. Similarly the Coast Guard's current Waterways Management Operating Program Plan, dated August 1987, called for upgrading equipment at the New Orleans VTS and making participation mandatory—an approach recommended by DOT's Office of the Inspector General (OIG). In selecting VTSS for closure, the Coast Guard could have assumed that these plans would be implemented. This would have given all VTSS a full participation rate, essentially eliminating the relevance of participation rates as a factor for determining which VTSS to close.

Complexity of Traffic: The Branch Chief also suggested that the complexity of the traffic in the VTS area could have been used in the closure decision. The VTS ports have different complexity factors that affect the

²Originally established in 1978, the New York VTS was closed in 1982, because of budget cuts and equipment operating problems.

risk of collisions, for example, extensive crossing traffic and various types of traffic, such as ferries and hazardous cargo transits. The Branch Chief said this information could easily have been obtained from the VTS sites.

The Safety Value of the VTSs Is Unclear

Because the Coast Guard did not have complete and current management information regarding VTS program effectiveness, it could not clearly demonstrate the safety value of the VTSs. However, we did discuss the perceived value with Coast Guard headquarters officials and with an NTSB official.

These officials disagreed on the degree of value of the VTSs. According to Coast Guard Chief of Staff officials, increased navigational safety equipment and improved communication between vessels have reduced the safety importance of VTSs. The VTS Branch Chief, however, stated that the VTSs are still very important and cited an incident in 1986 in which the New York VTS was credited with preventing the collision of a Staten Island ferry, carrying approximately 3,200 passengers, and a Greek freighter. In addition, an NTSB Bureau of Safety Programs official told us that VTSs are as important a safety factor today as ever, despite increased navigational safety equipment and improved communication. He cited NTSB support for enhancing vessel safety by making VTS participation mandatory at New York and New Orleans. Further, we believe that the Coast Guard's position, as stated by the Chief of Staff officials, appears inconsistent with the Coast Guard's plans for requiring participation at the New York and New Orleans VTSs.

Anticipated Personnel Cost Savings From VTS Closures Are Understated

The Coast Guard estimated its annual savings from the New York and New Orleans VTS closures at \$1,341,000 and \$1,980,000, respectively, starting in fiscal year 1989. Of the total anticipated savings for VTSs, \$2.4 million represented personnel costs savings—\$870,000 and \$1,530,000 for New York and New Orleans, respectively. The remainder of the estimated savings were attributed to the elimination of operations and maintenance costs.

In calculating the annual savings for personnel reductions, the Coast Guard, for convenience, used a standard cost figure of \$30,000 per billet, or position, which, according to Coast Guard officials, was a "ballpark" figure of the average cost of a Coast Guard billet for fiscal year 1988. Chief of Staff officials used this figure, which we were told includes all personnel-related costs such as training and medical, when

developing cost information for all facility closings announced in 1988. However, information was readily available that would have provided a more precise estimate of personnel savings for specific facilities. In the case of the New York and New Orleans VTSS, the standard cost figure understated the savings. To develop a more precise estimate of personnel cost savings, we used the Coast Guard's "Standard Personnel Cost Report" for fiscal year 1988, which contains average personnel costs for each category of Coast Guard billet—officers, enlisted personnel, and civilian personnel. Using this information, we determined that the annual personnel savings for the New York and New Orleans VTSS would be approximately \$134,000 and \$94,000 more, respectively, than the Coast Guard estimate.

A Chief of Staff official agreed that our figures for individual facilities were closer to the actual personnel savings. We were told that use of a standard cost approach, although not as precise for individual facilities, results in their total savings estimate for all facilities closed or reduced in fiscal year 1988 being fairly close to an estimate using the more precise data. The difference between our cost savings estimate and the Coast Guard's for the New York VTS resulted primarily from the VTS' having a lower ratio of enlisted personnel to officers than the overall Coast Guard ratio. For New Orleans, the difference resulted primarily from its having a higher ratio of civilian billets, which raised the average cost of its billets.

Fiscal year 1988 (the first year) savings will be less than that for later years for two reasons: (1) the two VTSS were open for a portion of the first year and (2) costs to close the VTSS, such as the cost of dismantling the facilities, offset the savings. As of October 1, 1988, precise estimates of offsetting costs were not available.

Anticipated Personnel Savings From Decommissioning Polar Icebreakers Are Overstated

According to the Coast Guard, the Westwind and Northwind are being decommissioned because they are at the end of their useful lives (both are over 40 years old), require disproportionately high levels of maintenance, and are increasingly unreliable.³ The Coast Guard projects annual cost savings of about \$14.2 million including \$9.3 million in personnel cost savings from decommissioning the Winds. The remainder of the estimated savings was attributed to fuel and maintenance costs. The savings represent costs incurred by the Coast Guard that are not reimbursable by users. Again using more precise Coast Guard personnel cost

³Information on past cost, utilization, and crew size of both icebreakers, as well as previous plans to decommission the Westwind is provided in appendixes II and III.

data, we calculated the annual personnel cost savings to be about \$8.9 million.

In determining annual personnel cost savings from the elimination of the Winds' 306 billets, the Coast Guard, similar to its VTS personnel savings calculations, used \$30,000 per billet. The Coast Guard also included \$146,000 in its personnel cost estimate for extra training for its icebreaker crews but could not provide documentation for how this figure was determined. However, using the Coast Guard's "Standard Personnel Cost Report" for fiscal year 1988, which includes a factor for training costs, we calculated the annual personnel savings to be about \$8.9 million, about \$445,000 less than the Coast Guard's estimate. Chief of Staff officials again concurred that our calculations were more precise. Our lower cost savings estimate resulted primarily from the Winds' having a higher ratio of enlisted personnel to officers than the overall Coast Guard ratio.

As with the VTSS, first year savings from decommissioning the icebreakers will be less than the annual savings estimates because of operation costs incurred during part of the year and costs associated with preparing the vessels for decommissioning and disposal.

Projected Icebreaker Fleet Requirements

According to the Coast Guard's Chief, Ice Operations Division, the Coast Guard needs four icebreakers to meet future needs. The four polar icebreaker requirement is based on two interagency studies of U.S. icebreaker needs, one completed in 1984, the second in 1987. The Coast Guard Authorization Act of 1988, requires the President to conduct another study of the nation's polar icebreaker requirements. The Congress plans to use the results of this study, estimated by the Coast Guard to be completed in January 1989, to assess Coast Guard requests for additional icebreakers.

In 1987 the Coast Guard estimated the cost of new icebreakers at approximately \$250 million each if two are procured. According to the Project Manager, Polar Icebreaker Acquisition, the estimated annual operating cost of a new icebreaker would be \$7.4 million, roughly the same as each of the Winds.

Conclusions

The Coast Guard based its selection of the New York and New Orleans VTSS for closure primarily on its concern for reducing operating expenses as fast as possible rather than on the effectiveness of these VTSS in

achieving the VTS program's primary objective of enhancing vessel safety. In addition, in selecting the New York and New Orleans VTSS, the Coast Guard disregarded its plans for increasing vessel participation at these two VTSS. We believe that the Coast Guard should have considered additional information related to the VTS goal of promoting vessel traffic safety in determining which VTSS to close. In the absence of comprehensive cost-effectiveness analysis, the Coast Guard could have considered individual components of cost-effectiveness, including accident data, total VTS activity levels, and VTS traffic complexity. Cost-effectiveness information is a prerequisite for good management control. It would have improved the Coast Guard's decision-making process and made its closure decisions more credible.

Although the Coast Guard requires cost-effectiveness information to be maintained, it is generally not maintained by VTS program officials in a form readily available for analysis. Consequently, the Coast Guard does not know the effectiveness of its VTSS in achieving program objectives, the relative value of each of its VTSS, or whether from a safety and cost-effectiveness perspective it made the correct decision in closing the New York and New Orleans VTSS.

Coast Guard estimates of annual personnel savings from closing the New York and New Orleans VTSS are understated by a total of \$228,000; and personnel savings from decommissioning the two Wind icebreakers are overstated by about \$445,000, because the Coast Guard used less precise personnel cost data than were readily available. Use of the more precise information could make the difference in closing one facility or another.

The Coast Guard believes it will need four icebreakers to meet future needs. If the Coast Guard acquires two new icebreakers to replace the Winds, the future annual savings of decommissioning the Winds will be eliminated.

Recommendations to the Secretary of Transportation

To improve management control within the VTS program, we recommend that the Secretary of Transportation direct the Commandant, U.S. Coast Guard, to develop and maintain VTS cost-effectiveness information that demonstrates the current and potential value of each VTS, including New York and New Orleans, and to use such information in deciding where such facilities would be most beneficial.

To improve the Coast Guard's personnel cost estimates for making decisions regarding facility reductions and closings and decommissionings of vessels, we also recommend that the Secretary direct the Commandant to use billet cost information contained in the Coast Guard's "Standard Personnel Cost Report."

In addressing the issues discussed in this report, we reviewed documents and interviewed Coast Guard officials at Coast Guard headquarters in Washington, D.C. We also discussed the closings of the New York and New Orleans VTSS and the safety value of VTSS with an NTSB official. Our review was conducted between March and August 1988.

We discussed the report's content with Coast Guard Chief of Staff and cognizant program officials, and their comments have been included where appropriate. However, as requested by your office, we did not obtain official agency comments on a draft of this report.

As arranged with your office, 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; Commandant, U. S. Coast Guard; and other interested parties and will make copies available to others upon request.

Our work was performed under the direction of Kenneth M. Mead, Associate Director. Major contributors are listed in appendix IV.

Sincerely yours,



J. Dexter Peach
Assistant Comptroller General

Contents

Letter		1
Appendix I Selected Operations Information Concerning the Coast Guard's Seven VTSS		14
Appendix II Information on the Cost, Utilization, and Crew Size of Wind Class Icebreakers		15
Appendix III Administration's Fiscal Year 1985 Plan to Decommission the Westwind		16
Appendix IV Major Contributors to This Report	Resources, Community, and Economic Development Division, Washington, D.C.	17 17
Tables		
	Table II.1: Operating Costs for the <u>Northwind</u> and <u>Westwind</u> , Fiscal Years 1984-87	15
	Table II.2: Days Underway for the <u>Northwind</u> and the <u>Westwind</u> , Fiscal Years 1984-87	15

Abbreviations

AC&I	Acquisition, Construction, and Improvements funds
CCTV	closed-circuit TV
DOD	Department of Defense
DOT	Department of Transportation
GAO	General Accounting Office
NTSB	National Transportation Safety Board
OIG	Office of the Inspector General
PIRS	Polar Icebreaker Requirements Study
VTS	Vessel Traffic Service

Selected Operations Information Concerning the Coast Guard's Seven VTSs

Dollars in Thousands

VTS facility	FY 1988 staffing level	Total operating expenditure ^a		Vessel participation rate (percent) ^b	FY 1987 transits (activity levels)	Equipment levels
New York	33	FY'87	\$1,636	79	157,340	3 radar 6 CCTV
		FY'88	1,611 ^c			
New Orleans	53	FY'87	1,977	61	212,652	0 radar 1 CCTV
		FY'88	2,040 ^d			
Berwick Bay	10	FY'87	321	100 ^e	66,803	1 radar 1 CCTV
		FY'88	321			
Houston/ Galveston	45	FY'87	2,019	99	97,592	1 radar 8 CCTV
		FY'88	1,995			
San Francisco	25	FY'87	1,106	99	86,327	2 radar 0 CCTV
		FY'88	1,106			
Puget Sound	52	FY'87	2,902	100 ^e	211,354	10 radar 0 CCTV
		FY'88	2,902			
Prince William	12	FY'87	517	100 ^e	3,162	3 radar 0 CCTV
		FY'88	517			
Total	230	FY'87	\$10,478		835,230	20 radar
		FY'88	10,492			16 CCTV

Note: CCTV is a closed-circuit television.

^aFY 1988 expenditures are estimates.

^bParticipation rates (percent of specific vessel types that use the VTS service) are for the fourth quarter of fiscal year 1987.

^cThe \$270,000 difference between the fiscal year 1988 total operating expenditures and the Coast Guard estimated annual savings occurs because a radar facility on Governor's Island will continue operations for anchorage management with four billets.

^dThe \$60,000 difference between the fiscal year 1988 total operating expenditures and the estimated annual savings occurs because of the transfer of two billets to the Coast Guard's Mississippi Traffic Light Operation.

^eMandatory participation. Prince William Sound participation is mandated by the Trans Alaskan Pipeline Authorization Act (P.L. 93-153). Puget Sound and Berwick Bay participation is mandated by DOT regulations.

Source: U.S. Coast Guard

Information on the Cost, Utilization, and Crew Size of Wind Class Icebreakers

Table II.1: Operating Costs for the Northwind and Westwind, Fiscal Years 1984-87

Dollars in Thousands					
	Northwind				Total
	1984	1985	1986	1987	
Pay	\$2,322	\$3,094	\$3,192	\$3,126	\$11,734
Fuel	931	756	280	176	2,143
Operating maintenance	926	700	913	1,143	3,682
Electronics maintenance	38	271	162	178	649
Vessel maintenance	390	3,541	1,019	720	5,670
Total	\$4,607	\$8,362	\$5,566	\$5,343	\$23,878^a
	Westwind				Total
	1984	1985	1986	1987	
Pay	\$1,890	\$1,973	\$1,027	\$2,166	\$7,056
Fuel	787	5	2	28	822
Operating maintenance	833	618	177	886	2,514
Electronics maintenance	9	11	0	2	22
Vessel maintenance	109	435	1	1,898	2,443
Total	\$3,628	\$3,042	\$1,207	\$4,980	\$12,857^a

Note: The Coast Guard provided the cost information above as the best information it had regarding the cost of operating the Winds during fiscal years 1984-87. However, this information cannot be compared directly to the Coast Guard's savings estimates discussed in the text of this letter because (1) it includes costs reimbursed by icebreaker users, (2) personnel costs shown consist solely of actual pay and do not include associated personnel costs, such as training, included in the annual savings estimate, (3) fuel and maintenance costs can vary considerably by year depending on specific missions performed, and (4) according to a Chief of Staff official, the Coast Guard's accounting system may have allocated some costs to incorrect years.

^aThe Coast Guard also spent almost \$4.1 million in Acquisition, Construction, and Improvements (AC&I) funds for the Northwind and almost \$7.2 million for the Westwind during fiscal years 1984 through 1988.

Table II.2: Days Underway for the Northwind and the Westwind, Fiscal Years 1984-87

	1984	1985	1986	1987
Northwind ^a	152	114	82	69
Westwind ^{b,c}	111	10	0	9

^aIn fiscal year 1986, the Northwind was out of service for 8 months because of engine problems, which resulted in the cancellation of two missions. In fiscal year 1987, the Northwind was out of service again, because of an engine problem, which resulted in the cancellation of one mission and required the Coast Guard to seek the Canadian Coast Guard's assistance for resupplying the Department of Defense's arctic facilities.

^bThe Westwind was undergoing major renovations in fiscal years 1985-87 as a result of damage incurred in fiscal year 1984 while operating in the antarctic. According to a Coast Guard official, the Westwind was still not ready for operations in fiscal year 1987.

^cDuring fiscal years 1984-87, a Wind Class icebreaker's standard crew size was 153 officers and enlisted personnel. During this period, the Northwind carried a standard crew. However, while the Westwind was undergoing major renovation, its crew size was reduced in fiscal year 1985 to a caretaker crew of 36. During fiscal year 1986, its crew was increased so that by the start of fiscal year 1987 the ship was fully crewed in anticipation of her return to duty.

Administration's Fiscal Year 1985 Plan to Decommission the Westwind

In the fiscal year 1985 budget, the Administration proposed reducing the polar icebreaker fleet from five vessels¹ to four by decommissioning the Westwind. However, under the fiscal year 1985 Supplemental Act (P. L. 99-88), the Coast Guard was provided approximately \$6.2 million through transfer of funds from the Navy to the Coast Guard's AC&I Fund to restore the icebreaker Westwind, which had been severely damaged in fiscal year 1984 while operating in the antarctic. Coast Guard engineers indicated that restoration of the Westwind would prolong her useful life for 10 years. After the Congress provided funds to restore the Westwind, an August 19, 1985, report by DOD's Office of Inspector General (OIG), entitled Report on Audit of Polar Ice Operations, United States Coast Guard, recommended that the Westwind be decommissioned without expending funds for the ship's rehabilitation, concluding that four icebreakers were sufficient to meet the country's needs. In a December 3, 1985, response to the OIG report, the Commandant disagreed with the OIG and reiterated the Coast Guard's opinion, first stated in the United States Polar Icebreaker Requirements Study (PIRS) of July 1984,² that the Coast Guard needed four polar icebreakers with a fifth in reserve to cover unforeseen contingencies. The Commandant further stated that the Congress directed, by providing funding in the fiscal year 1985 supplemental budget, that the Westwind be repaired thus restoring "... the icebreaker fleet size to the required number of five vessels." The OIG, responding to the Coast Guard Commandant, stated,

We believe that in approving the transfer of funds from DOD for rehabilitation of the Westwind, Congress may not have had full information on fleet capabilities and user demand. We do not believe Coast Guard has fully explored the fleet's capabilities. We still believe that requirements can be met with four vessels, and that the increased demand reflected in the audit response should be met by increased utilization of the vessels.

¹In May 1987 the Coast Guard decommissioned a fifth icebreaker, Glacier, because of severe hull deterioration.

²PIRS was a study conducted by an interagency policy group composed of the DOT, Maritime Administration, Coast Guard, Department of the Navy, National Science Foundation, National Oceanic and Atmospheric Administration, and Office of Management and Budget. The study's purpose was to analyze the nation's polar icebreaking requirements for the balance of the century and determine the number of icebreakers needed. The general consensus of the policy group was that four icebreakers would be sufficient to meet the nation's needs.

Major Contributors to This Report

Resources,
Community, and
Economic
Development Division,
Washington, D.C.

Kenneth M. Mead, Associate Director, (202) 275-1000
Victor S. Rezendes, Associate Director
Gregg A. Fisher, Group Director
David E. Marwick, Group Director
Joel L. Slotsky, Assignment Manager
James L. Dishmon, Jr., Evaluator-in-Charge
Donald J. Sangirardi, Evaluator
M. Jane Hunt, Reports Analyst



Requests for copies of GAO reports should be sent to:

U.S. General Accounting Office
Post Office Box 6015
Gaithersburg, Maryland 20877

Telephone 202-275-6241

The first five copies of each report are free. Additional copies are \$2.00 each.

There is a 25% discount on orders for 100 or more copies mailed to a single address.

Orders must be prepaid by cash or by check or money order made out to the Superintendent of Documents.

**United States
General Accounting Office
Washington, D.C. 20548**

**Official Business
Penalty for Private Use \$300**

**First-Class Mail
Postage & Fees Paid
GAO
Permit No. G100**