

GAO

Report to the Chairman, Committee
on Commerce, Science, and
Transportation, U.S. Senate

June 2003

**MARITIME
ADMINISTRATION**

**Weaknesses Identified
in Management of the
Title XI Loan
Guarantee Program**





Highlights of [GAO-03-657](#), a report to the Chairman, Senate Committee on Commerce, Science, and Transportation

Why GAO Did This Study

Title XI of the Merchant Marine Act of 1936, as amended, is intended to help promote growth and modernization of the U.S. merchant marine and U.S. shipyards by enabling owners of eligible vessels and shipyards to obtain financing at attractive terms. The program has committed to guarantee more than \$5.6 billion in ship construction and shipyard modernization costs since 1993, but it has experienced several large-scale defaults over the past few years. Because of concerns about the scale of recent defaults, GAO was asked to (1) determine whether MARAD complied with key program requirements, (2) describe how MARAD's practices for managing financial risk compare to those of selected private-sector maritime lenders, and (3) assess MARAD's implementation of credit reform.

What GAO Recommends

GAO recommends that Congress consider providing no new funds for new loan guarantees under the Title XI program until certain controls have been instituted and MARAD has updated its default and recovery assumptions to more accurately reflect costs. GAO also recommends that MARAD undertake several reforms to help improve program management. In written comments, the Department of Transportation disagreed with some report findings, however, recognized that program improvements were needed.

www.gao.gov/cgi-bin/getrpt?GAO-03-657.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Tom McCool at (202) 512-8678 or mccoolt@gao.gov.

MARITIME ADMINISTRATION

Weaknesses Identified in Management of the Title XI Loan Guarantee Program

What GAO Found

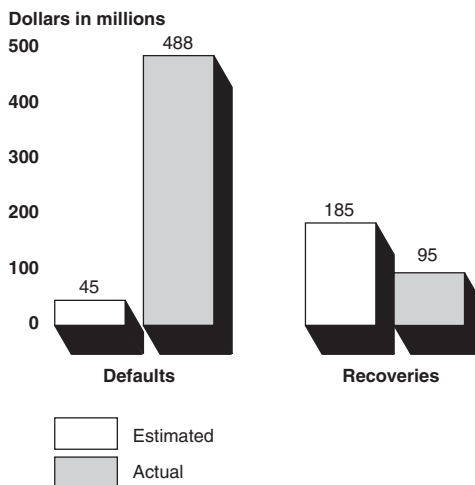
The Maritime Administration (MARAD) has not fully complied with some key Title XI program requirements. While MARAD generally complied with requirements to assess an applicant's economic soundness before issuing loan guarantees, MARAD did not ensure that shipowners and shipyard owners provided required financial statements, and it disbursed funds without sufficient documentation of project progress. Overall, MARAD did not employ procedures that would help it adequately manage the financial risk of the program.

MARAD could benefit from following the practices of selected private sector maritime lenders. These lenders separate key lending functions, offer less flexibility on key lending standards, use a more systematic approach to loan monitoring, and rely on experts to estimate the value of defaulted assets.

With regard to credit reform implementation, MARAD uses a simplistic cash flow model to calculate cost estimates, which have not reflected recent experience. If this pattern of recent experience were to continue, MARAD would have significantly underestimated the cost of the program.

MARAD does not operate the program in a businesslike fashion. Consequently, MARAD cannot maximize the use of its limited resources to achieve its mission, and the program is vulnerable to fraud, waste, abuse, and mismanagement. Also, because MARAD's subsidy estimates are questionable, Congress cannot know the true costs of the program.

Estimated and Actual Defaults and Recoveries to Date for Loans Originated between



Sources: MARAD (data); GAO (presentation).

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Abbreviations

AMCV	American Classic Voyages, Co.
DCAA	Defense Contract Audit Agency
DOT	Department of Transportation
FCRA	Federal Credit Reform Act
IG	Department of Transportation Inspector General
MARAD	Maritime Administration
MHI	Massachusetts Heavy Industries, Inc.
OMB	Office of Management and Budget
SEC	Securities and Exchange Commission

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G A O

Accountability * Integrity * Reliability

United States General Accounting Office
Washington, DC 20548

June 30, 2003

The Honorable John McCain
Chairman
Committee on Commerce, Science, and Transportation
United States Senate

Dear Mr. Chairman:

Under the Title XI Loan Guarantee Program, the Maritime Administration (MARAD) committed to guarantee more than \$5.6 billion in shipyard modernization and ship construction projects over the last 10 years. During this period, MARAD experienced nine defaults associated with these loan guarantee commitments totaling over \$1.3 billion. The defaulted amounts associated with these nine loan guarantee commitments totaled \$489 million.¹ Five of these defaults were by subsidiaries of American Classic Voyages Company (AMCV), a shipowner. AMCV defaults represented 67 percent of all defaulted amounts experienced by MARAD during this period, with this borrower having defaulted on guaranteed loan projects in amounts totaling \$330 million. The largest loan guarantee ever approved by MARAD, for over \$1.1 billion, was for Project America, Inc., a subsidiary of AMCV. Project America, Inc., had entered into a contract in March 1999 with Northrup Grumman Corporation (formerly Litton Ingalls Shipbuilding) in Pascagoula, Mississippi, for the construction of two cruise ships. In October 2001, AMCV filed for bankruptcy, defaulting on \$187 million in loan guarantees associated with Project America.

As of December 31, 2002, MARAD's portfolio included approximately \$3.4 billion in executed loan guarantees, representing 103 projects for 818 vessels and four shipyard modernizations.² At the end of fiscal year 2002, MARAD had approximately \$20 million in unexpended, unobligated budget authority that had been appropriated in prior years. In its 2004 budget, the administration requested no new funds for the Title XI program.

¹Defaulted amounts may include disbursed loan guarantee funds, interest accrued, and other costs.

²Loan guarantees are legal obligations to pay off debt if an applicant defaults on a loan.

Because of concerns about the scale of recent defaults experienced by MARAD, particularly those associated with AMCV, you asked us to conduct a study of the Title XI loan guarantee program. Specifically, you asked us to (1) determine whether MARAD complied with key Title XI program requirements in approving initial and subsequent agreements, monitoring and controlling funds, and handling defaults; (2) describe how MARAD's practices for managing financial risk compare to those of selected private-sector maritime lenders; and (3) assess MARAD's implementation of credit reform as it relates to the Title XI program.

To determine whether MARAD complied with key Title XI program requirements, we identified key program requirements and reviewed how these were applied to the management of five loan guarantee projects. To determine how MARAD's practices for managing financial risk compare to those of selected private-sector maritime lenders, we interviewed three maritime lenders to learn about lending practices, and compared these practices to MARAD's. To assess MARAD's implementation of credit reform, we analyzed MARAD's subsidy cost estimation and reestimation processes and examined how the assumptions MARAD uses to calculate subsidy cost estimates compare to MARAD's actual program experience. We conducted our work in Washington, D.C., and New York, N.Y., between September 2002 and April 2003 in accordance with generally accepted government auditing standards. Appendix I contains a full description of our scope and methodology.

Results in Brief

MARAD has not fully complied with some key Title XI program requirements. In approving loan guarantees, MARAD generally complied with requirements to assess an applicant's economic soundness. MARAD used waivers or modifications, which, although permitted by Title XI regulations, allowed MARAD to approve applications where borrowers did not meet all financial requirements. In monitoring projects it financed, MARAD did not ensure that shipowners and shipyard owners provided required financial statements. Overall, we could not always track financial reporting because of missing or incomplete documentation. Without a systematic analysis of changes in the financial condition of its borrowers, MARAD cannot take the appropriate steps to minimize losses. Further, MARAD disbursed loan funds without sufficient documentation of project progress. MARAD also permitted a shipowner to minimize its investment in a project before receiving guaranteed loan funds. With respect to the disposition of assets, MARAD has guidelines, but no requirements, in place to ensure that it maximizes recoveries.

Selected private-sector maritime lenders told us that they manage financial risk by (1) establishing a clear separation of duties for key lending functions; (2) permitting few, if any, exceptions to key underwriting standards; (3) using a more systematic approach to monitoring the progress of projects; and (4) employing independent parties to survey and appraise defaulted assets. Private-sector representatives we interviewed stated that they were very selective when originating loans for the shipping industry. While MARAD cites its mission as an explanation as to why it does not employ these practices, these controls would actually help it to accomplish its mission while managing financial risk.

MARAD's credit subsidy estimates and reestimates are questionable. MARAD uses a relatively simplistic cash flow model that is based on outdated assumptions, which lack supporting documentation, to prepare its estimates of defaults and recoveries. While the nature and characteristics of the Title XI program make it difficult to estimate subsidy costs and may affect MARAD's ability to produce reliable cost estimates, MARAD has not performed the basic analyses necessary to assess and improve its estimates, which differ significantly from recent actual experience. Specifically, we found that in comparison with recent actual experience, MARAD's default estimates significantly understate defaults, and its recovery estimates significantly overstate recoveries. If this pattern of recent experiences were to continue, MARAD would have significantly underestimated the costs of the program. Agencies should use sufficient reliable historical data to estimate credit subsidies and update—reestimate—these estimates annually based on an analysis of actual program experience. However, MARAD has never evaluated the performance of its loan guarantee projects to determine if its subsidy cost reestimates were comparable to actual costs. Finally, while the Office of Management and Budget (OMB) approved each MARAD estimate and reestimate, its review was not sufficient since it did not identify that MARAD's assumptions were outdated and lacked adequate support.

This report makes several recommendations to help MARAD improve its management of the Title XI loan guarantee program, including its processes for approving loan guarantees, monitoring and controlling funds, and managing and disposing of defaulted assets, and better implementing its responsibilities under the Federal Credit Reform Act (FCRA). We also recommend that Congress consider legislation to clarify borrower equity contribution requirements and incorporate concentration risk in the approval of loan guarantees. Because of the fundamental flaws we have identified, we question whether MARAD should approve new loan guarantees without first addressing these program weaknesses.

We provided a draft of this report to the Department of Transportation for its review and comment. MARAD noted that it has already begun to take steps to improve the operations of the Title XI program, consistent with several of our recommendations. MARAD disagreed with the manner in which we characterized some report findings, and provided additional information and data that we have incorporated into our analyses and report as appropriate. We also provided a copy of the draft report to OMB for its review and comment. OMB agreed that recent recovery expectations should be incorporated into future reestimates, but disagreed that it had provided little or no oversight over the program's subsidy cost estimates. However, we believe that had OMB provided greater review and oversight of MARAD's estimates and reestimates, it would have realized that MARAD did not have adequate support for its default and recovery assumptions.

Background

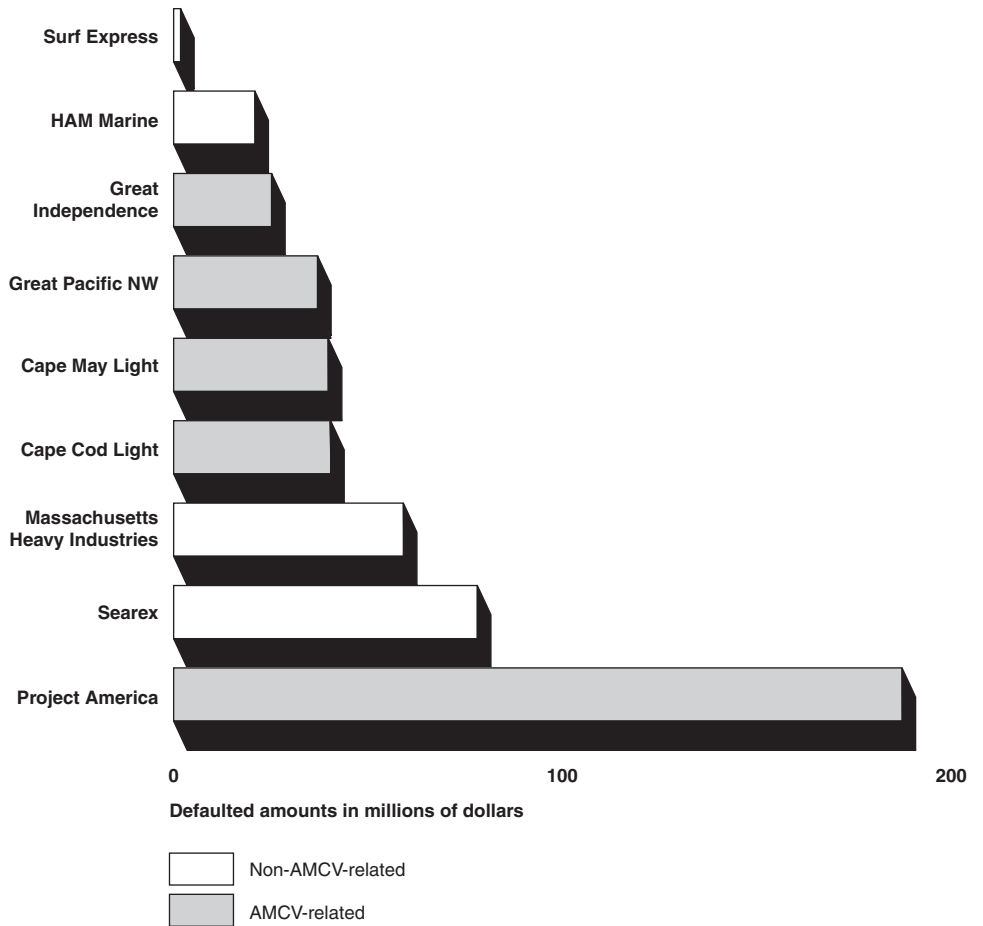
Title XI of the Merchant Marine Act of 1936, as amended, authorizes the Secretary of Transportation to guarantee debt issued for the purpose of financing or refinancing the construction, reconstruction, or reconditioning of U.S.-flag vessels or eligible export vessels built in U.S. shipyards and the construction of advanced and modern shipbuilding technology of general shipyard facilities located in the United States.³ Title XI guarantees are backed by the full faith and credit of the United States. Title XI was created to help promote growth and modernization of the U.S. merchant marine and U.S. shipyards by enabling owners of eligible vessels and shipyards to obtain long-term financing on terms and conditions that might not otherwise be available. Under the program, MARAD guarantees the payment of principal and interest to purchasers of bonds issued by vessel and shipyard owners. These owners may obtain guaranteed financing for up to 87.5 percent of the total cost of constructing a vessel or modernizing a shipyard. Borrowers obtain funding for guaranteed debt obligations in the private sector, primarily from banks, pension funds, life insurance companies, and the general public. MARAD loan guarantees represent about 10 percent of the U.S.-flagged maritime financing market,

³Vessels eligible for Title XI assistance generally include commercial vessels such as passenger, bulk, container, cargo and oceanographic research; also eligible tankers, tugs, towboats, barges, dredges, floating power barges, offshore oil rigs and support vessels, and floating dry docks. Eligible technology generally includes proven technology, techniques, and processes to enhance the productivity and quality of shipyards; novel techniques and processes designed to improve shipbuilding; and related industrial production that advances U.S. shipbuilding.

according to MARAD officials. However, MARAD plays a greater role in certain segments of the maritime finance market. For example, according to a private-sector maritime lender, MARAD guarantees financing on about 15 percent of the country's inland barge market.

Over the last 10 years, MARAD experienced defaults in amounts that totaled \$489 million. One borrower, AMCV, defaulted on five loan guarantee projects in amounts totaling \$330 million, 67 percent of the total defaulted amounts. Figure 1 shows the nine defaults experienced by MARAD over the past 10 years, five of which were associated with AMCV and which are shown in gray.

Figure 1: MARAD's Defaulted Projects (1993–2002)



Source: GAO.

Once an applicant submits a Title XI application to MARAD, and prior to execution of a guarantee, MARAD must determine the economic soundness of the project, as well as the applicant's capability to construct or operate the ship or shipyard. For example, the shipowner or shipyard must have sufficient operating experience and the ability to operate the vessels or employ the technology on an economically sound basis. The shipowner or shipyard must also meet certain financial requirements with respect to working capital and net worth.

The amount of the obligations that MARAD may guarantee for a project is based on the ship or shipyard costs. Title XI permits guarantees not exceeding 87.5 percent of the actual cost of the ship or shipyard, with

certain projects limited to 75 percent financing. The interest rate of the guaranteed obligations is determined by the private sector.⁴ MARAD also levies certain fees associated with the Title XI program. For example, applicants must pay a nonrefundable filing fee of \$5,000. In addition, prior to issuance of the commitment letter, the applicant must pay an investigation fee against which the filing fee is then credited. Participants must also pay a guarantee fee, which is calculated by determining the amount of obligations expected to be outstanding and disbursed to the shipowner or shipyard during each year of financing.

The Title XI program is also subject to the Federal Credit Reform Act (FCRA) of 1990, which was enacted to require that agency budgets reflect a more accurate measurement of the government's subsidy costs for direct loans and loan guarantees. FCRA is intended to provide better cost comparisons both among credit programs and between credit and noncredit programs. The credit subsidy cost is the government's estimated net cost, in present value terms, of direct or guaranteed loans over the entire period the loans are outstanding. Credit reform was intended to ensure that the full cost of credit programs would be reflected in the budget so that the executive branch and Congress might consider these costs when making budget decisions. Each year, as part of the President's Budget, agencies prepare estimates of the expected subsidy costs of new lending activity for the upcoming year. Unless OMB approves an alternative proposal, agencies are also required to reestimate this cost annually. OMB has oversight responsibility for federal loan program compliance with FCRA requirements and has responsibility for approving subsidy estimates and reestimates.

All credit programs automatically receive any additional budget authority that may be needed to fund reestimates.⁵ For discretionary programs this means there is a difference in the budget treatment of the original subsidy cost estimates and of subsidy cost reestimates. The original estimated subsidy cost must be appropriated as part of the annual appropriation process and is counted under any existing discretionary funding caps.

⁴MARAD must determine that the interest rate is reasonable.

⁵Congress recognized that data were limited or unreliable in the early years of credit reform and that this could impede the ability of agencies to make reliable estimates. Thus, Congress provided for permanent, indefinite budget authority for upward reestimates of subsidy costs. Agencies with discretionary credit programs then could reestimate subsidy costs as required without being limited by the constraints of budgetary spending limits.

However, any additional appropriation for upward reestimates of subsidy cost is not constrained by any budget caps. This design could result in a tendency to underestimate the initial subsidy costs of a discretionary program. Portraying a loan program as less costly than it really is when competing for funds means more or larger loans or loan guarantees could be made with a given appropriation because the program then could rely on a permanent appropriation for subsequent reestimates to cover any shortfalls. This built-in incentive is one reason to monitor subsidy reestimates. Monitoring reestimates is a key control over tendencies to underestimate costs as well as a barometer of the quality of agencies' estimation processes.

When credit reform was enacted, it generally was recognized that agencies did not have the capacity to implement fully the needed changes in their accounting systems in the short-term and that the transition to budgeting and accounting on a present-value basis would be difficult. However, policy makers expected that once agencies established a systematic approach to subsidy estimation based on auditable assumptions, present value-based budgeting for credit would provide them with significantly better information.

MARAD Has Not Fully Complied with Some Key Title XI Program Requirements

MARAD has not fully complied with some key Title XI program requirements. We found that MARAD generally complied with requirements to assess an applicant's economic soundness before issuing loan guarantees. MARAD used waivers or modifications, which, although permitted by MARAD regulations, allowed MARAD to approve some applications even though borrowers had not met all financial requirements. MARAD did not fully comply with regulations and established practices pertaining to project monitoring and fund disbursement. Finally, while MARAD has guidance governing the disposition of defaulted assets, adherence to this guidance is not mandatory, and MARAD did not always follow it in the defaulted cases we reviewed. We looked at five MARAD-financed projects (see table 1).

Table 1: Projects Included in Our Review

Dollars in millions

Project	Year loan committed	Original amount	Risk category	Status
(AMCV) Project America, Inc.	1999	\$1,079.5	2A	Default
Searex	1996	\$77.3	2B	Default
Massachusetts Heavy Industries (MHI)	1997	\$55.0	3	Default
Hvide Van Ommeran Tankers (HVIDE)	1996	\$43.2	2C	Active
Global Industries	1996	\$20.3	1C	Active

Source: MARAD.

Note: MARAD places projects into one of seven risk categories that, from lowest to highest, are 1A, 1B, 1C, 2A, 2B, 2C, and 3.

MARAD Used Waivers and Modifications to Approve Loans That Would Otherwise Not Be Approved

MARAD regulations do not permit MARAD to guarantee a loan unless the project is determined to be economically sound.⁶ MARAD generally complied with requirements to assess an applicant's economic soundness before approving loan guarantees, and we were able to find documentation addressing economic soundness criteria for the projects included in our review. Specifically, we were able to find documentation addressing supply and demand projections and other economic soundness criteria for the projects included in our review.⁷ In 2002, MARAD's Office of Statistical and Economic Analysis found a lack of a standardized approach for conducting market analyses. Because of this concern, in November 2002, it issued guidance for conducting market research on marine transportation services. However, adherence to these guidelines is not required. According to the Department of Transportation (DOT) Assistant Secretary for Administration, the market research guidelines

⁶All projects must be determined to be economically sound, and borrowers must have sufficient operating experience and the ability to operate the vessels or employ the technology on an economically sound basis. Particularly, MARAD regulations contain language stating that (1) long-term demand must exceed supply; (2) documentation must be provided on the projections of supply and demand; (3) outside cash flow should be shown, if in the short-term the borrower is unable to service indebtedness; and (4) operating cash flow ratio must be greater than one (sufficient cash flow to service the debt).

⁷Economic soundness analyses are prepared by the Office of Insurance and Shipping Analysis which is responsible for recommending approval or disapproval of loans from an economic soundness perspective, and the Office of Statistical and Economic Analysis. It should be noted that we did not assess the substance of these economic analyses.

developed by the Office of Statistical and Economic Analysis were neither requested nor approved by Title XI program management. Finally, while MARAD may not waive economic soundness criteria, officials from the Office of Statistics and Economic Analysis which is responsible for providing independent assessment of the market impact on economic soundness expressed concern that their findings regarding economic soundness might not always be fully considered when MARAD approved loan guarantees.⁸ They cited a recent instance where they questioned the economic soundness of a project that was later approved without their concerns being addressed. According to the Associate Administrator for Shipbuilding, all concerns, including economic soundness concerns, are considered by the MARAD Administrator.

Shipowners and shipyard owners are also required to meet certain financial requirements during the loan approval process. However, MARAD used waivers or modifications, which, although permitted by Title XI regulations, allowed MARAD to approve some applications even though borrowers had not met all financial requirements that pertained to working capital, long-term debt, net worth, and owner-invested equity.⁹ For example, AMCV's Project America, Inc., did not meet the qualifying requirements for working capital, among other things. Although MARAD typically requires companies to have positive working capital, an excess of current assets over current liabilities, the accounting requirements for untermiated passenger payments significantly affect this calculation because this deferred revenue is treated as a liability until earned.¹⁰ Because a cruise operator would maintain large balances of current liabilities, MARAD believed it would be virtually impossible for AMCV to meet a positive working capital requirement if sound cash management practices were followed.¹¹ Subsequently, MARAD used cash flow tests for

⁸In another case, Congress statutorily waived economic soundness criteria. Specifically, the Coast Guard Authorization Act of 1996 contained a provision waiving the economic soundness requirement for reactivation and modernization of certain closed shipyards in the United States. Previously, MARAD had questioned the economic soundness of the MHI proposal and rejected the application.

⁹MARAD may waive or modify financial terms or requirements upon determining that there is adequate security for the guarantees.

¹⁰Untermiated passengers are individuals who pay for a cruise, but do not actually take the cruise, and the payment is not refunded. However, the passenger may take the trip at a later date.

¹¹Cash management is a financial management technique used to accelerate the collection of debt, control payments to creditors, and efficiently manage cash.

Project America, Inc., in lieu of working capital requirements for purposes of liquidity testing. According to the Assistant Secretary for Administration, one of the major cruise lines uses cash flow tests as a measure of its liquidity.

According to MARAD officials, waivers or modifications help them meet the congressional intent of the Title XI program, which is to promote the growth and modernization of the U. S. merchant marine industry. Further, they told us that the uniqueness of the Title XI projects and marine financing lends itself to the use of waivers and modifications. However, by waiving or modifying financial requirements, MARAD officials may be taking on greater risk in the loans they are guaranteeing. Consequently, the use of waivers or modifications could contribute to the number or severity of loan guarantee defaults and subsequent federal payouts. In a recent review, the Department of Transportation Inspector General (IG) noted that the use of modifications increases the risk of the loan guarantee to the government and expressed concern about MARAD undertaking such modifications without taking steps to mitigate those risks.¹² The IG recommended that MARAD require a rigorous analysis of the risks from modifying any loan approval criteria and impose compensating requirements on borrowers to mitigate these risks.

MARAD Did Not Follow Requirements for Monitoring the Financial Condition of Projects and for Controlling the Disbursement of Loan Funds

MARAD did not fully comply with requirements and its own established practices pertaining to project monitoring and fund disbursement. Program requirements specify periodic financial reporting, controls over the disbursement of loan funds, and documentation of amendments to loan agreements. MARAD could not always demonstrate that it had complied with financial reporting requirements. In addition, MARAD could not always demonstrate that it had determined that projects had made progress prior to disbursing loan funds. Also, MARAD broke with its own established practices for determining the amount of equity a shipowner must invest prior to MARAD making disbursements from the escrow fund.¹³ MARAD did so without documenting this change in the loan

¹²U.S. Department of Transportation, Office of Inspector General, *Maritime Administration Title XI Loan Guarantee Program* (Washington, D.C.: March 27, 2003).

¹³An escrow fund is an account in which the proceeds from sales of MARAD-guaranteed obligations are held until requested by the borrower to pay for activities related to the construction of a vessel or shipyard project or to pay interest on obligations.

agreement. Ultimately, weaknesses in MARAD's monitoring practices could increase the risk of loss to the federal government.

MARAD regulations specify that the financial statements of a company in receipt of a loan guarantee shall be audited at least annually by an independent certified public accountant. In addition, MARAD regulations require companies to provide semiannual financial statements. However, MARAD could not demonstrate that it had received required annual and semiannual statements. For example, MARAD could not locate several annual or semiannual financial statements for the Massachusetts Heavy Industries (MHI) project. Also, MARAD could not find the 1999 and 2000 semiannual financial reports for AMCV. The AMCV financial statements were later restated, as a result of a Securities and Exchange Commission (SEC) finding that AMCV had not complied with generally accepted accounting principles in preparing its financial statements.¹⁴ In addition, several financial statements were missing from MARAD records for Hvide Van Ommeran Tankers (HVIDE) and Global Industries Ltd. When MARAD could provide records of financial statements, it was unclear how the information was used. Further, the Department of Transportation Inspector General (IG) in its review of the Title XI program found that MARAD had no established procedures or policies incorporating periodic reviews of a company's financial well-being once a loan guarantee was approved.

An analysis of financial statements may have alerted MARAD to financial problems with companies and possibly given it a better chance to minimize losses from defaults. For example, between 1993 and 2000, AMCV had net income in only 3 years and lost a total of \$33.3 million. Our analysis showed a significant decline in financial performance since 1997. Specifically, AMCV showed a net income of \$2.4 million in 1997, with losses for the next 3 years, and losses reaching \$10.1 million in 2000. Although AMCV's revenue increased steadily during this period by a total of 25 percent, or nearly \$44 million, expenses far outpaced revenue during this period. For example, the cost of operations increased 29 percent, or \$32.3 million, while sales and general and administrative costs increased over 82 percent or \$33.7 million. During this same period, AMCV's debt also increased over 300 percent. This scenario combined with the decline in tourism after September 11, 2001, caused AMCV to file for bankruptcy.

¹⁴On June 25, 2001, AMCV restated losses from \$6.1 million to \$9.1 million for the first quarter of 1999.

On May 22, 2001 Litton Ingalls Shipbuilding notified AMCV that it was in default of its contract due to nonpayment. Between May 22 and August 23, 2001, MARAD received at least four letters from Ingalls, the shipbuilder, citing its concern about the shipowner's ability to pay construction costs. However, it was not until August 23 that MARAD prepared a financial analysis to help determine the likelihood of AMCV or its subsidiaries facing bankruptcy or another catastrophic event.

MARAD could not always demonstrate that it had linked disbursement of funds to progress in ship construction, as MARAD requires. We were not always able to determine from available documents the extent of progress made on the projects included in our review. For example, a number of Project America, Inc., disbursement requests did not include documentation that identified the extent of progress made on the project. Also, while MARAD requires periodic on-site visits to verify the progress on ship construction or shipyard refurbishment, we did not find evidence of systematic site visits and inspections. For Project America, Inc., MARAD did not have a construction representative committed on-site at Ingalls Shipyard, Inc. until May 2001, 2 months after the MARAD's Office of Ship Design and Engineering Services recommended a MARAD representative be located on-site. For the Searex Title XI loan guarantee, site visits were infrequent until MARAD became aware that Ingalls had cut the vessels into pieces to make room for other projects. For two projects rated low-risk, Hvide Van Ommeran Tankers and Global Industries, Ltd., we found MARAD conducted site visits semiannually and annually, respectively. We reviewed MHI's shipyard modernization project, which was assigned the highest risk rating, and found evidence that construction representatives conducted monthly site visits. However, in most instances, we found that a project's risk was not routinely linked to the extent of project monitoring. Further, without a systematic approach to on-site visits, MARAD relied principally on the shipowner's certification and documentation of money spent in making decisions to approve disbursements from the escrow fund.

We also found that, in a break with its own established practice, MARAD permitted a shipowner to define total costs in a way that permitted earlier disbursement of loan funds from the escrow fund. MARAD regulations require that shipowners expend from their own funds at least 12.5 percent or 25 percent, depending on the type of vessel or technology, of the actual cost of a vessel or shipyard project prior to receiving MARAD-guaranteed loan funds. In practice, MARAD has used the estimated total cost of the project to determine how much equity the shipowner should provide. In the case of Project America, Inc., the single largest loan guarantee in the

history of the program, we found that MARAD permitted the shipowner to exclude certain costs in determining the estimated total costs of the ship at various points in time, thereby deferring owner-provided funding while receiving MARAD-guaranteed loan funds. This was the first time MARAD used this method of determining equity payments, and MARAD did not document this agreement with the shipowner as required by its policy. In September 2001, MARAD amended the loan commitment for this project, permitting the owner to further delay the payment of equity. By then, MARAD had disbursed \$179 million in loan funds. Had MARAD followed its established practice for determining equity payments, the shipowner would have been required to provide an additional \$18 million. Because MARAD had not documented its agreements with AMCV, the amount of equity the owner should have provided was not apparent during this period. Further, MARAD systems do not flag when the shipowner has provided the required equity payment for any of the projects it finances.

MARAD officials cited several reasons for its limited monitoring of Title XI projects, including insufficient staff resources, travel budget restrictions and limited enforcement tools. For example, officials of MARAD's Office of Ship Construction, which is responsible for inspection of vessels and shipyards, told us that they had only two persons available to conduct inspections, and that the office's travel budget was limited. The MARAD official with overall responsibility for the Title XI program told us that, at a minimum, the Title XI program needs three additional staff. The Office of Ship Financing needs two additional persons to enable a more thorough review of company financial statements and more comprehensive preparation of credit reform materials. Also, the official said that the Office of the Chief Counsel needs to fill a long-standing vacancy to enable more timely legal review. With regard to documenting the analysis of financial statements, MARAD officials said that, while they do require shipowners and shipyard owners to provide financial statements, they do not require MARAD staff to prepare a written analysis of the financial condition of the Title XI borrower. MARAD Assistant Secretary for Administration noted that if financial documents were not submitted after a request for missing documents was made, MARAD's only legal recourse was to call the loan in default, pay off the Title XI debt and then seek recovery against the borrower.

He said that MARAD tries to avoid takings these steps. We found no evidence that MARAD routinely requested missing financial statements or did any analysis. Also, the IG report on the Title XI program released in March 2003 noted that MARAD does not closely monitor the financial health of its borrowers over the term of their loans. We recognize that

MARAD has limited enforcement resources, however, for such publicly traded companies as AMCV, financial statements filed with the Securities and Exchange Commission could be used. However, we found no evidence that MARAD attempted to use SEC filings.

Inconsistent monitoring of a borrower's financial condition limits MARAD's ability to protect the federal government's financial interests. For example, MARAD would not know if a borrower's financial condition had changed so that it could take needed action to possibly avoid defaults or minimize losses. Further, MARAD's practices for assessing project progress limit its ability to link disbursement of funds to progress made by shipowners or shipyard owners. This could result in MARAD disbursing funds without a vessel or shipyard owner making sufficient progress in completing projects. Likewise, permitting project owners to minimize their investment in MARAD-financed projects increases the risk of loss to the federal government.

MARAD Does Not Have Requirements in Place to Govern the Handling of Defaulted Assets

MARAD has guidance governing the disposition of defaulted assets. However, MARAD is not required to follow this guidance, and we found that MARAD does not always adhere to it. MARAD guidelines state that an independent, competent marine surveyor or MARAD surveyor shall survey all vessels, except barges, as soon as practicable after the assets are taken into custody. In the case of filed or expected bankruptcy, an independent marine surveyor should be used. In the case of Searex, MARAD conducted on-site inspections after the default. However, these inspections were not conducted in time to properly assess the condition of the assets. With funds no longer coming in from the project, Ingalls cut the vessels into pieces to make it easier to move the vessels from active work-in-process areas to other storage areas within the property. The Searex lift boat and hulls were cut before MARAD inspections were made. According to a MARAD official, the cutting of one Searex vessel and parts of the other two Searex vessels under construction reduced the value of the defaulted assets. The IG report on the Title XI program released in March 2003 noted that site visits were conducted on guaranteed vessels or property only in response to problems or notices of potential problems from third parties or from borrowers.

The guidelines also state that sales and custodial activities shall be conducted in such a fashion as to maximize MARAD's overall recovery with respect to the asset and debtor. Market appraisals (valuations) of the assets shall be performed by an independent appraiser, as deemed appropriate, to assist in the marketing of the asset. MARAD did not have a

market appraisal for the defaulted Project America assets. Also, MARAD relied on an interested party to determine the cost of making Project America I seaworthy. An appraisal of Project America assets immediately after default would have assisted MARAD in preparing a strategy for offering the hull of Project America I and the parts of Project America II for sale. According to MARAD officials, as of March 2003, MARAD had received \$2 million from the sale of the Project America I and II vessels.¹⁵ Without a market appraisal, it is unclear whether this was the maximum recovery MARAD could have received.

MARAD hired the Defense Contract Audit Agency (DCAA) to verify the costs incurred by Northrop Grumman Ship Systems, Inc., since January 1, 2002, for preparing and delivering Project America I in a weather-tight condition suitable for ocean towing in international waters. A MARAD official said that the DCAA audit would allow MARAD to identify any unsupported costs and recover these amounts from the shipyard. The DCAA review was used to verify costs incurred, but not to make a judgment as to the reasonableness of the costs. DCAA verified costs of approximately \$17 million.

MARAD officials cite the uniqueness of the vessels and projects as the reason for using guidelines instead of requirements for handling defaulted assets. However, certain practices for handling defaulted assets can be helpful regardless of the uniqueness of a project. Among these are steps to immediately assess the value of the defaulted asset. Without a definitive strategy and clear requirements, defaulted assets may not always be secured, assessed, and disposed of in a manner that maximizes MARAD's recoveries—resulting in unnecessary costs and financial losses to the federal government.

¹⁵MARAD has no financial interest in the equipment purchased for Project America II, and therefore has no right to sale proceeds for this vessel.

MARAD Techniques to Manage Financial Risk Contrast to Techniques of Selected Private-sector Maritime Lenders

Private-sector maritime lenders we interviewed told us that it is imperative for lenders to manage the financial risk of maritime lending portfolios. In contrast to MARAD, they indicated that to manage financial risk, among other things, they (1) establish a clear separation of duties for carrying out different lending functions; (2) adhere to key lending standards with few, if any, exceptions; (3) use a more systematic approach to monitoring the progress of projects; and (4) primarily employ independent parties to survey and appraise defaulted projects. The lenders try to be very selective when originating loans for the shipping industry. While realizing that MARAD does not operate for profit, it could benefit from the internal control practices employed by the private sector to more effectively utilize its limited resources and to enhance its ability to accomplish its mission. Table 2 describes the key differences in private-sector and MARAD maritime lending practices used during the application, monitoring, and default and disposition phases.

Table 2: Comparison of Private-sector and MARAD Maritime Lending Practices

Private-sector practices	Phases of the lending process	
	MARAD practices	
Application		
<ul style="list-style-type: none"> Permit few exceptions to key financial underwriting requirements for maritime loans Seek approval of exceptions or waivers from Audit Committee Perform an in-depth analysis of a business plan for applications received for start-up businesses or first-in-class shipyard vessels 	<ul style="list-style-type: none"> Permit waivers of key financial requirements Have no committee oversight regarding the approval of exceptions or waivers of program requirements Employ little variation in the depth of review of business plans based on type of vessel, size of loan guarantee, or history of borrower 	
Monitoring		
<ul style="list-style-type: none"> Set an initial risk rating at the time of approval and review rating annually to determine risk rating of the loan Use industry expertise for conducting periodic on-site inspections to monitor progress on projects and potential defaults Perform monitoring that is dependent on financial and technical risk, familiarity with the shipyard, and uniqueness of the project Analyze the borrower's financial statements to identify significant changes in borrower's financial condition and to determine appropriate level and frequency of continued monitoring at least annually 	<ul style="list-style-type: none"> Assign one risk rating during the application phase. No subsequent ratings assigned during the life of the loan Use in-house staff to conduct periodic on-site inspections to monitor progress of projects Perform monitoring based on technical risk, familiarity with shipyard, uniqueness of project, and availability of travel funds Have no documentation of analyses of borrowers' financial statements 	
Default and disposition		
<ul style="list-style-type: none"> Contract with an independent appraiser to prepare a valuation of a defaulted project Enlist a technical manager to review the ship after default to assist in determining structural integrity and percentage of completion 	<ul style="list-style-type: none"> Permit an interested party or MARAD official to value assets Permit an interested party or MARAD official to perform technical review of Title XI assets 	

Sources: GAO analysis of MARAD and private-sector data.

Private-sector Lenders Separate Key Lending Functions

Private-sector lenders manage financial risk by establishing a separation of duties to provide a system of checks and balances for important maritime lending functions. Two private-sector lenders indicated that there is a separation of duties for approving loans, monitoring projects financed, and disposing of assets in the event of default. For example, marketing executives from two private-sector maritime lending institutions stated that they do not have lending authority. Also, separate individuals are responsible for accepting applications and processing transactions for loan underwriting.

In contrast, we found that the same office that promotes and markets the MARAD Title XI program also has influence and authority over the office that approves and monitors Title XI loans. In February 1998, MARAD created the Office of Statistical and Economic Analysis in an attempt to obtain independent market analyses and initial recommendations on the impact of market factors on the economic soundness of projects. Today, this office reports to the Associate Administrator for Policy and International Trade rather than the Associate Administrator for Shipbuilding. However, the Associate Administrator for Shipbuilding is primarily responsible for overseeing the underwriting and approving of loan guarantees. Title XI program management is primarily handled by offices that report to the Associate Administrator for Shipbuilding. In addition, the same Associate Administrator controls, in collaboration with the Chief of the Division of Ship Financing Contracts within the Office of the Chief Counsel, the disposition of assets after a loan has defaulted. Most recently, MARAD has taken steps to consolidate responsibilities related to loan disbursements. In August 2002, the Maritime Administrator gave the Associate Administrator for Shipbuilding sole responsibility for reviewing and approving the disbursement of escrow funds. According to a senior official, prior to August 2002 this responsibility was shared with the Office of Financial and Rate Approvals under the supervision of the Associate Administrator for Financial Approvals and Cargo Preference. As a result of the consolidation, the same Associate Administrator who is responsible for underwriting and approving loan guarantees and disposing of defaulted assets is also responsible for approval of loan disbursements and monitoring financial condition. MARAD undertook this consolidation in an effort to improve performance of analyses related to the calculation of shipowner's equity contributions and monitoring of changes in financial condition. However, as mentioned earlier, MARAD does not have controls for clearly identifying the shipowner's required equity contribution. The consolidation of responsibilities for approval of loan disbursements does not address these weaknesses and precludes any potential benefit from separation of duties.

Private-sector Practices Employ Less Flexible Lending Standards

The private-sector lenders we interviewed said they apply rigorous financial tests for underwriting maritime loans. They analyze financial statements such as balance sheets, income statements, and cash flow statements, and use certain financial ratios such as liquidity and leverage ratios that indicate the borrower's ability to repay. Private-sector maritime lenders told us they rarely grant waivers, or exceptions, to underwriting requirements or approve applications when borrowers do not meet key minimum requirements. Each lender we interviewed said any approved applicants were expected to demonstrate stability in terms of cash on hand, financial strength, and collateral. One lender told us that on the rare occasions when exceptions to the underwriting standards were granted, an audit committee had to approve any exception or waiver to the standards after reviewing the applicant's circumstances. However, according to one MARAD official the waivers are often made without a deliberative process. Nonetheless, MARAD points to its concurrence system as a deliberative process for key agency officials to concur on loan guarantees and major waivers and modifications. However, as mentioned earlier, the official responsible for performing a macro analysis of the market is not always included in the concurrence process. We found in the cases we reviewed that MARAD often permits waivers or modifications of key financial requirements. Also, a recent IG report found that MARAD routinely modified financial requirements in order to qualify applicants for loan guarantees. Further, the IG noted that MARAD reviewed applications for loan guarantees primarily with in-house staff and recommended that MARAD formally establish an external review process as a check on MARAD's internal loan application review.¹⁶ A MARAD official told us that MARAD is currently developing the procedures for an external review process of waivers and modifications.

These private-sector lenders also indicated that preparing an economic analysis or an independent feasibility study assists in determining whether or not to approve funding based on review and discussion of the marketplace, competition, and project costs. Each private-sector lender we interviewed agreed that performance in the shipping industry was cyclical and timing of projects was important. In addition, reviewing historical data provided information on future prospects for a project. For example, one lender uses these economic analyses to evaluate how important the project will be to the overall growth of the shipping

¹⁶The IG also recommended that MARAD impose compensating factors for loan guarantees to mitigate risks.

industry. Another lender uses the economic analyses and historical data to facilitate the sale of a financed vessel. In the area of economic soundness analysis, MARAD requirements appear closer to those of the private-sector lenders, in that external market studies are also used to help determine the overall economic soundness of a project. However, assessments of economic soundness prepared by the Office of Statistical and Economic Analysis may not be fully considered when MARAD approves loan guarantees.

Private-sector Lenders Use a More Systematic Approach to Loan Monitoring

Private-sector lenders minimized financial risk by establishing loan monitoring and control mechanisms such as analyzing financial statements and assigning risk ratings. Each private-sector lender we interviewed said that conducting periodic reviews of a borrower's financial statements helped to identify adverse changes in the financial condition of the borrower. For example, two lenders stated that they annually analyzed financial statements such as income statements and balance sheets. The third lender evaluated financial statements quarterly. Based on the results of these financial statement reviews, private-sector lenders then reviewed and evaluated the risk ratings that had been assigned at the time of approval. Two lenders commented that higher risk ratings indicated a need for closer supervision, and they then might require the borrower to submit monthly or quarterly financial statements. In addition, a borrower might be required to increase cash reserves or collateral to mitigate the risk of a loan. Further, the lender might accelerate the maturity date of the loan. MARAD notes that in certain cases, such as a loan guarantee to a subsidiary of Enron, it already uses such requirements. The DOT IG noted that MARAD should place covenants in its loan guarantees concerning the required financial performance and condition of its borrowers, as well as measures to which MARAD is entitled should these provisions be violated. However, the IG expressed concern that MARAD's minimum monitoring approach would not provide financial information in a timely and sufficient manner. Private-sector lenders use risk ratings in monitoring overall risk, which in turn helped to maintain a balanced maritime portfolio.

At MARAD, we found no evidence that staff routinely analyzed or evaluated financial statements or changed risk categories after a loan was approved. For example, we found in our review that for at least two financial statement reporting periods, MARAD was unable to provide financial statements for the borrower, and, in one case, one financial statement was submitted after the commitment to guarantee funds. Our review of the selected Title XI projects indicated that risk categories were

primarily assigned for purposes of estimating credit subsidy costs at the time of application, not for use in monitoring the project. Further, we found no evidence that MARAD changed a borrower's risk category when its financial condition changed. In addition, neither the support office that was initially responsible for reviewing and analyzing financial statements nor the office currently responsible maintained a centralized record of the financial statements they had received. Further, while one MARAD official stated that financial analyses were performed by staff and communicated verbally to top-level agency officials, MARAD did not prepare and maintain a record of these analyses.

Private-sector lenders also manage financial risk by linking the disbursement of loan funds to the progress of the project. All the lenders we interviewed varied project monitoring based on financial and technical risk, familiarity with the shipyard, and uniqueness of the project. Two lenders thought that on-site monitoring was very important in determining the status of projects. Specifically, one lender hires an independent marine surveyor to visit the shipyard to monitor construction progress. This lender also requires signatures on loan disbursement requests from the shipowner, shipbuilder, and loan officer before disbursing any loan funds. This lender also relies on technical managers and classification society representatives who frequently visit the shipyard to monitor progress.¹⁷ Shipping executives of this lender make weekly, and many times daily, calls to shipowners to further monitor the project based on project size and complexity. This lender also requires shipowners to provide monthly progress reports so the progress of the project could be monitored.

MARAD also relied on site visits to verify construction progress. However, the linkage between the progress of the project and the disbursement of loan funds was not always clear. MARAD tried to adjust the number of site visits based on the amount of the loan guarantee, the uniqueness of project (for example, whether the ship is the first of its kind for the shipowner), the degree of technical and engineering risk, and familiarity with the shipyard. However, the frequency of site visits was often dependent upon the availability of travel funds, according to a MARAD official.

¹⁷Classification society representatives are individuals who inspect the structural and mechanical fitness of ships and other marine vessels for their intended purpose.

Private-sector Lenders Use Industry Expertise to Value Defaulted Assets

Private-sector maritime lenders said they regularly use independent marine surveyors and technical managers to appraise and conduct technical inspections of defaulted assets. For example, two lenders hire independent marine surveyors who are knowledgeable about the shipbuilding industry and have commercial lending expertise to inspect the visible details of all accessible areas of the vessel, as well as its marine and electrical systems. In contrast, we found that MARAD did not always use independent surveyors. For example, we found that for Project America, the shipbuilder was allowed to survey and oversee the disposition of the defaulted asset. As mentioned earlier, MARAD hired DCAA to verify the costs incurred by the shipbuilder to make the defaulted asset ready for sale; however, MARAD did not verify whether the costs incurred were reasonable or necessary. For Searex, construction representatives and officials from the Offices of the Associate Administrator of Shipbuilding and the Chief of the Division of Ship Financing Contracts were actively involved in the disposition of the assets.

MARAD Cites Mission as the Difference in Management of Financial Risk Compared to Private-sector Lenders

According to top-level MARAD officials, the chief reason for the difference between private-sector and MARAD techniques for approving loans, monitoring project progress, and disposing of assets is the public purpose of the Title XI program, which is to promote growth and modernization of the U.S. merchant marine and U.S. shipyards. That is, MARAD's program purposefully provides for greater flexibility in underwriting in order to meet the financing needs of shipowners and shipyards that otherwise might not be able to obtain financing. MARAD is also more likely to work with borrowers that are experiencing financial difficulties once a project is under way. MARAD officials also cited limited resources in explaining the limited nature of project monitoring.

While program flexibility in financial and economic soundness standards may be necessary to help MARAD meet its mission objectives, the strict use of internal controls and management processes is also important. Otherwise, resources that could have been used to further the program might be wasted. To aid agencies in improving internal controls, we have recommended that agencies identify the risks that could impede their ability to efficiently and effectively meet agency goals and objectives.¹⁸

¹⁸U.S. General Accounting Office, *Standards for Internal Control in the Federal Government*, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999) and *Internal Control Management and Evaluation Tool*, GAO 01-1008G (Washington, D.C.: August 2001).

Private-sector lenders employ internal controls such as a systematic review of waivers during the application phase and risk ratings of projects during the monitoring phase. However, MARAD does neither. Without a more systematic review of underwriting waivers, MARAD might not be giving sufficient consideration to the additional risk such decisions represent. Likewise, without a systematic process for assessing changes in payment risk, MARAD cannot use its limited monitoring resources most efficiently. Further, by relying on interested parties to estimate the value of defaulted loan assets, MARAD might not maximize the recovery on those assets. Overall, by not employing the limited internal controls it does possess, and not taking advantage of basic internal controls such as those private-sector lenders employ, MARAD cannot ensure it is effectively utilizing its limited administrative resources or the government's limited financial resources.

MARAD's Credit Subsidy Estimates and Reestimates Are Questionable

MARAD uses a relatively simplistic cash flow model that is based on outdated assumptions, which lack supporting documentation, to prepare its estimates of defaults and recoveries. These estimates differ significantly from recent actual experience. Specifically, we found that in comparison with recent actual experience, MARAD's default estimates have significantly understated defaults, and its recovery estimates have significantly overstated recoveries. If the pattern of recent experience were to continue, MARAD would have significantly underestimated the costs of the program. Agencies should use sufficient reliable historical data to estimate credit subsidies and update—reestimate—these estimates annually based on an analysis of actual program experience. While the nature and characteristics of the Title XI program make it difficult to estimate subsidy costs, MARAD has never performed the basic analyses necessary to determine if its default and recovery assumptions are reasonable. Finally, OMB has provided little oversight of MARAD's subsidy cost estimate and reestimate calculations.

MARAD's Credit Subsidy Estimates Are Questionable

FCRA was enacted, in part, to require that the federal budget reflect a more accurate measurement of the government's subsidy costs for loan guarantees.¹⁹ To determine the expected cost of a credit program, agencies are required to predict or estimate the future performance of the program. For loan guarantees, this cost, known as the subsidy cost, is the present value of estimated cash flows from the government, primarily to pay for loan defaults, minus estimated loan guarantee fees paid and recoveries to the government. Agency management is responsible for accumulating relevant, sufficient, and reliable data on which to base the estimate and for establishing and using reliable records of historical credit performance. In addition, agencies are supposed to use a systematic methodology to project expected cash flows into the future. To accomplish this task, agencies are instructed to develop a cash flow model, using historical information and various assumptions including defaults, prepayments, recoveries, and the timing of these events, to estimate future loan performance.

MARAD uses a relatively simplistic cash flow model, which contains five assumptions—default amount, timing of defaults, recovery amount, timing of recoveries, and fees—to estimate the cost of the Title XI loan guarantee program. We found that relatively minor changes in these assumptions can significantly affect the estimated cost of the program and that, thus far, three of the five assumptions, default and recovery amounts and the timing of defaults, differed significantly from recent actual historical experience.²⁰ According to MARAD officials, these assumptions were developed in 1995 based on actual loan guarantee experience of the previous 10 years and have not been evaluated or updated. MARAD could not provide us with supporting documentation to validate its estimates, and we found no evidence of any basis to support the assumptions used to calculate these estimates. MARAD also uses separate default and recovery assumptions for each of seven risk categories to differentiate between levels of risk and costs for different loan guarantee projects.

¹⁹The Federal Accounting Standards Advisory Board developed the accounting standard for credit programs in Statement of Federal Financial Accounting Standards No. 2, "Accounting for Direct Loans and Loan Guarantees," which generally mirrors FCRA and which established guidance for estimating the cost of guaranteed loan programs.

²⁰MARAD's recovery assumption assumes a 50 percent recovery rate within 2 years of default. However, 2 years have not yet elapsed for several of the defaults and so we could not yet determine how the estimated timing of recoveries compares to the actual timing of recoveries.

We attempted to analyze the reliability of the data supporting MARAD's key assumptions, but we were unable to do so because MARAD could not provide us with any supporting documentation for how the default and recovery assumptions were developed. Therefore, we believe MARAD's subsidy cost estimates to be questionable. Because MARAD has not evaluated its default and recovery rate assumptions since they were developed in 1995, the agency does not know whether its cash flow model is reasonably predicting borrower behavior and whether its estimates of loan program costs are reasonable.

The nature and characteristics of the Title XI program make it difficult to estimate subsidy costs. Specifically, MARAD approves a small number of guarantees each year, leaving it with relatively little experience on which to base estimates for the future. In addition, each guarantee is for a large dollar amount, and projects have unique characteristics and cover several sectors of the market. Further, when defaults occur, they are usually for large dollar amounts and may not take place during easily predicted time frames. Recoveries may be equally difficult to predict and may be affected by the condition of the underlying collateral. This leaves MARAD with relatively limited information upon which to base its credit subsidy estimates. Also, MARAD may not have the resources to properly implement credit reform. MARAD officials expressed frustration that they do not have and, therefore, cannot devote, the necessary time and resources to adequately carry out their credit reform responsibilities.

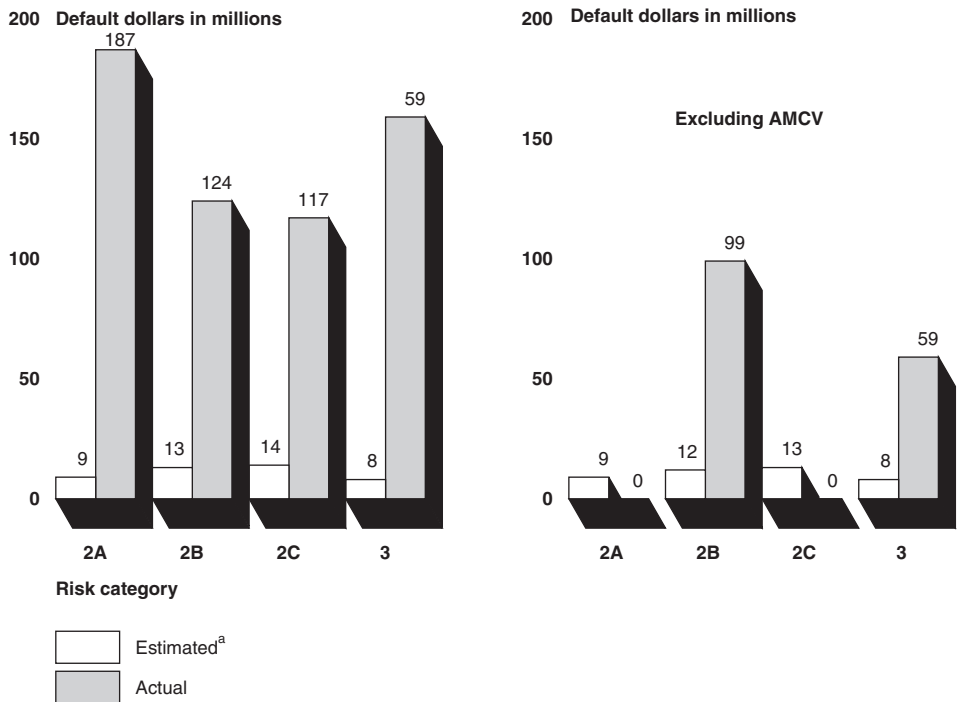
Notwithstanding these challenges, MARAD has not performed the basic analyses necessary to assess and improve its estimates. According to MARAD officials, they have not analyzed the default and recovery rates because most of their loan guarantees are in about year 7 out of the 25-year term of the guarantee, and it is too early to assess the reasonableness of the estimates. We disagree with this assessment and believe that an analysis of the past 5 years of actual default and recovery experience is meaningful and could provide management with valuable insight into how well its cash flow models are predicting borrower behavior and how well its estimates are predicting the loan guarantee program's costs. We further believe that, while difficult, an analysis of its risk category system is meaningful for MARAD to ensure that it appropriately classified loan guarantee projects into risk category subdivisions that are relatively homogenous in cost.

Of loans originated in the past 10 years, nine have defaulted, totaling \$489.5 million in defaulted amounts. Eight of these nine defaults, totaling \$487.7 million, occurred since MARAD implemented its risk category

system in 1996. Because these eight defaults represent the vast majority (99.6 percent) of MARAD's default experience, we compared the performance of all loans guaranteed between 1996–2002 with MARAD's estimates of loan performance for this period.²¹ We found that actual loan performance has differed significantly from agency estimates. For example, when defaults occurred, they took place much sooner than estimated. On average, defaults occurred 4 years after loan origination, while MARAD had estimated that, depending on the risk category, peak defaults would occur between years 10–18. Also, actual default costs thus far have been much greater than estimated. We estimated, based on MARAD data, that MARAD would experience \$45.5 million in defaults to date on loans originated since 1996. However, as illustrated by figure 2, MARAD has consistently underestimated the amount of defaults the Title XI program would experience. In total, \$487.7 million has actually defaulted during this period—more than 10 times greater than estimated. Even when we excluded AMCV, which represents about 68 percent of the defaulted amounts, from our analysis, we found that the amount of defaults MARAD experienced greatly exceeded what MARAD estimated it would experience by \$114.6 million (or over 260 percent).

²¹Our analysis focused on loans beginning in 1996 because (1) this was the first year in which MARAD implemented its risk category system, and (2) MARAD could not provide us with any supporting data for its default and recovery assumptions for loans originating before 1996. Further, only one default occurred between 1993–1996, representing less than 1 percent of MARAD's total defaults between 1993–2002.

Figure 2: Estimated and Actual Defaults of Title XI Loan Guarantees (1996–2002)

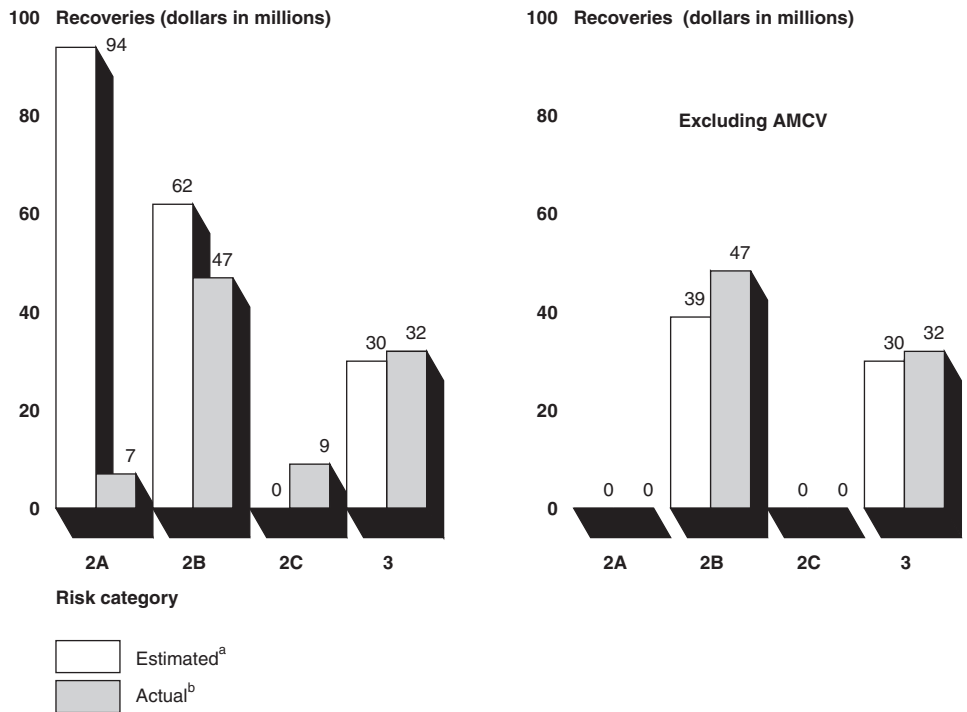


Sources: MARAD (data); GAO (presentation).

^aWe excluded estimates for risk categories 1A, 1B, and 1C, because estimated defaults for these categories totaled only \$1.5 million or 3.4 percent of total estimated defaults.

In addition, MARAD’s estimated recovery rate of 50 percent of defaulted amounts within 2 years of default is greater than the actual recovery rate experienced since 1996, as can be seen in figure 3. Although actual recoveries on defaulted amounts since 1996 have taken place within 1–3 years of default, most of these recoveries were substantially less than estimated, and two defaulted loans have had no recoveries to date. For the actual defaults that have taken place since 1996, MARAD would have estimated, using the 50 percent recovery rate assumption, that it would recover approximately \$185.3 million dollars. However, MARAD has only recovered \$94.9 million or about 51 percent of its estimated recovery amount. When we excluded AMCV, which represents about 68 percent of the defaulted amounts, from our analysis, we found that MARAD has more accurately estimated the amount it would recover on defaulted loans, and in fact, has underestimated the actual amount by about \$10 million (or about 15 percent). If the overall pattern of recent default and recovery experiences were to continue, MARAD would have significantly underestimated the costs of the program.

Figure 3: Estimated and Actual Recoveries on Title XI Loan Defaults (1996–2002)



Sources: MARAD (data); GAO (presentation).

^aEstimated recoveries are based on applying MARAD’s 50 percent recovery rate within 2 years to the actual default amounts. Our analysis of recovery estimates includes estimated recovery amounts for two of the five defaulted AMCV loans, even though 2 years have not elapsed, because, according to MARAD officials, no additional recoveries are expected on these two loans. Thus, our recovery calculation was based on \$370.6 of the \$487.7 million in defaulted loans, which includes defaults for which 2 years have elapsed, as well as the two AMCV defaults for which no additional recoveries are expected. With its 50 percent recovery assumption, MARAD would have estimated that, at this point, it should have recovered \$185.3 million of these defaulted loans.

^bWe calculated the actual recovery rate by comparing the total actual recoveries to the \$370.6 million in relevant actual defaulted amounts. At the time of our review, MARAD had recovered \$94.9 out of this \$370.6 million.

We also attempted to analyze the process MARAD uses to designate risk categories for projects, but were unable to do so because the agency could not provide us with any documentation about how the risk categories and MARAD’s related numerical weighting system originally were developed.²²

²²MARAD’s risk category system incorporates ten factors that are set out in Title XI, which specifies that MARAD is to establish a system of risk categories based on these factors. How MARAD weighs and interprets these factors is described in program guidance.

According to OMB guidance, risk categories are subdivisions of a group of loans that are relatively homogeneous in cost, given the facts known at the time of designation. Risk categories combine all loan guarantees within these groups that share characteristics that are statistically predictive of defaults and other costs. OMB guidance states that agencies should develop statistical evidence based on historical analysis concerning the likely costs of expected defaults for loans in a given risk category. MARAD has not done any analysis of the risk category system since it was implemented in 1996 to determine whether loans in a given risk category share characteristics that are predictive of defaults and other costs and thereby comply with guidance. In addition, according to a MARAD official, MARAD's risk category system is partially based on outdated MARAD regulations and has not been updated to reflect changes to these regulations.

Further, MARAD's risk category system is flawed because it does not consider concentrations of credit risk. To assess the impact of concentration risk on MARAD's loss experience, we analyzed the defaults for loans originated since 1996 and found that five of the eight defaults, totaling \$330 million, or 68 percent of total defaults, involved loan guarantees that had been made to one particular borrower, AMCV. Assessing concentration of credit risk is a standard practice in private-sector lending. According to the Federal Reserve Board's Commercial Bank Examination Manual, limitations imposed by various state and federal legal lending limits are intended to prevent an individual or a relatively small group from borrowing an undue amount of a bank's resources and to safeguard the bank's depositors by spreading loans among a relatively large number of people engaged in different businesses. Had MARAD factored concentration of credit into its risk category system, it would likely have produced higher estimated losses for these loans.

MARAD's Credit Subsidy Reestimates Are Also Questionable

After the end of each fiscal year, OMB generally requires agencies to update or "reestimate" loan program costs for differences among estimated loan performance and related cost, the actual program costs recorded in accounting records, and expected changes in future economic performance. The reestimates are to include all aspects of the original cost estimate such as prepayments, defaults, delinquencies, recoveries, and interest. Reestimates allow agency management to compare original budget estimates with actual costs to identify variances from the original estimates, assess the reasonableness of the original estimates, and adjust future program estimates, as appropriate. When significant differences between estimated and actual costs are identified, the agency should

investigate to determine the reasons behind the differences, and adjust its assumptions, as necessary, for future estimates and reestimates.

We attempted to analyze MARAD's reestimate process, but we were unable to do so because the agency could not provide us with adequate supporting data on how it determined whether a loan should have an upward or downward reestimate. According to agency management, each loan guarantee is reestimated separately based on several factors including the borrower's financial condition, a market analysis, and the remaining balance of the outstanding loans. However, without conducting our own independent analysis of these and other factors, we were unable to determine whether any of MARAD's reestimates were reasonable. Further, MARAD has reestimated the loans that were disbursed in fiscal years 1993, 1994, and 1995 downward so that they now have negative subsidy costs, indicating that MARAD expects these loans to be profitable. However, according to the default assumptions MARAD uses to calculate its subsidy cost estimates, these loans have not been through the period of peak default, which would occur in years 10–18 depending on the risk category. MARAD officials told us that several of these loans were paid off early, and the risk of loss in the remaining loans is less than the estimated fees paid by the borrowers. However, MARAD officials were unable to provide us with adequate supporting information for its assessment of the borrowers' financial condition and how it determined the estimated default and recovery amounts to assess the reasonableness of these reestimates. Our analysis of MARAD's defaults and recoveries demonstrates that, when defaults occur, they occur sooner and are for far greater amounts than estimated, and that recoveries are smaller than estimated. As a result, we question the reasonableness of the negative subsidies for the loans that were disbursed in fiscal years 1993, 1994, and 1995.

MARAD's ability to calculate reasonable reestimates is seriously impacted by the same outdated assumptions it uses to calculate cost estimates as well as by the fact that it has not compared these estimates with the actual default and recovery experience. As discussed earlier, our analysis shows that, since 1996, MARAD has significantly underestimated defaults and overestimated recoveries to date. Without performing this basic analysis, MARAD cannot determine whether its reestimates are reasonable, and it is unable to improve these reestimate calculations over time and provide Congress with reliable cost information to make key funding decisions. In addition, and, again, as discussed earlier, MARAD's inability to devote sufficient resources to properly implement credit reform appears to limit its ability to adequately carry out these credit reform responsibilities.

OMB Has Provided Little Oversight of MARAD's Estimates and Reestimates

Based on our analysis, we believe that OMB provided little review and oversight of MARAD's estimates and reestimates. OMB has final authority for approving estimates in consultation with agencies; OMB approved each MARAD estimate and reestimate, explaining to us that it delegates authority to agencies to calculate estimates and reestimates. However, MARAD has little expertise in the credit reform area and has not devoted sufficient resources to developing this expertise. FCRA assigns responsibility to OMB for coordinating credit subsidy estimates, developing estimation guidelines and regulations, and improving cost estimates, including coordinating the development of more accurate historical data and annually reviewing the performance of loan programs to improve cost estimates. Had OMB provided greater review and oversight of MARAD's estimates and reestimates, it would have realized that MARAD did not have adequate support for the default and recovery assumptions it uses to calculate subsidy cost estimates.

Conclusions

MARAD does not operate the Title XI loan guarantee program in a businesslike fashion to minimize the federal government's fiscal exposure. MARAD does not (1) fully comply with its own requirements and guidelines, (2) have a clear separation of duties for handling loan approval and fund disbursement functions, (3) exercise diligence in considering and approving modifications and waivers, (4) adequately secure and assess the value of defaulted assets, and (5) know what its program costs. Because of these shortcomings, MARAD lacks assurance that it is effectively promoting growth and modernization of the U.S. merchant marine and U.S. shipyards or minimizing the risk of financial loss to the federal government. Consequently, the Title XI program could be vulnerable to waste, fraud, abuse, and mismanagement. Finally, MARAD's questionable subsidy cost estimates do not provide Congress a basis for knowing the true costs of the Title XI program, and Congress cannot make well-informed policy decisions when providing budget authority. If the pattern of recent experiences were to continue, MARAD would have significantly underestimated the costs of the program.

Matters for Congressional Consideration

We recommend that Congress consider discontinuing future appropriations for new loan guarantees under the Title XI program until adequate internal controls have been instituted to manage risks associated with the program and MARAD has updated its default and recovery assumptions to more accurately reflect the actual costs associated with the program and that Congress consider rescinding the unobligated balances in MARAD's program account. We also recommend that

Congress consider clarifying borrower equity contribution requirements. Specifically, we recommend that Congress consider legislation requiring the entire equity down payment, based on the total cost of the project including total guarantee fees currently expected to be paid over the life of the project, be paid by the borrower before the proceeds of the guaranteed obligation are made available. Further, we recommend that Congress consider legislation that requires MARAD to consider, in its risk category system, the risk associated with approving projects from a single borrower that would represent a large percentage of MARAD's portfolio.

Recommendations for Executive Action

We recommend that the Secretary of Transportation direct the Administrator of the Maritime Administration to take immediate action to improve the management of the Title XI loan guarantee program. Specifically, to better comply with Title XI loan guarantee program requirements and manage financial risk, MARAD should

- establish a clear separation of duties among the loan application, project monitoring, and default management functions;
- establish a systematic process that ensures independent judgments of the technical, economic, and financial soundness of projects during loan guarantee approval;
- establish a systematic process that ensures the findings of each contributing office are considered and resolved prior to approval of loan guarantee applications involving waivers and exceptions made to program requirements;
- systematically monitor and document the financial condition of borrowers and link the level of monitoring to the level of project risk;
- base the borrower's equity down payment requirement on a reasonable estimate of the total cost of the project, including total guarantee fees expected to be incurred over the life of the project;
- make apparent the amount of equity funds a shipowner or shipyard owner should provide;
- establish a system of controls, including automated controls, to ensure that disbursements of loan funds are not made prior to a shipowner or shipyard owner meeting the equity fund requirement;

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- create a transparent, independent, and risk-based process for verifying and documenting the progress of projects under construction prior to disbursing guaranteed loan funds;
 - review risk ratings of loan guarantee projects at least annually; and
 - establish minimum requirements for the management and disposition of defaulted assets, including a requirement for an independent evaluation of asset value.

To better implement federal credit reform, MARAD should

- establish and implement a process to annually compare estimated to actual defaults and recoveries by risk category, investigate any material differences that are identified, and incorporate the results of these analyses in its estimates and reestimates;
- establish and implement a process to document the basis for each key cash flow assumption—such as defaults, recoveries, and fees—and retain this documentation in accordance with applicable records retention requirements;
- establish and implement a process to document the basis for each reestimate, including an analysis of a borrower’s financial condition and a market analysis;
- review its risk category system to ensure that it appropriately classifies projects into subdivisions that are relatively homogenous in cost, given the facts known at the time of designation, and that risks and changes to risks are reflected in annual reestimates; and
- consider, in its risk category system, the risk associated with approving projects from a single borrower that would represent a large percentage of MARAD’s portfolio.

To ensure that the reformed Title XI program is carried out effectively and in conformity with program and statutory requirements, MARAD should conduct a comprehensive assessment of its human capital and other resource needs. Such analysis should also consider the human capital needs to improve and strengthen credit reform data collection and analyses.

To assist and ensure that MARAD better implements credit reform, and given the questionableness of MARAD’s estimates and reestimates, we also

recommend that the Director of OMB provide greater review and oversight of MARAD's subsidy cost estimates and reestimates.

Agency Comments

We provided a draft of this report to DOT for its review and comment. We received comments from the department's Assistant Secretary for Administration, who noted that MARAD has already begun to take steps to improve the operations of the Title XI program consistent with several of our recommendations. The department disagreed with the manner in which we characterized some report findings and provided additional information and data that we have incorporated into our analyses and report as appropriate. We also provided a copy of the draft report to OMB for its review and comment. We received comments from OMB's Program Associate Director for General Government Programs, and its Assistant Director for Budget, who agreed that recent recovery expectations should be incorporated into future reestimates, but disagreed that OMB had provided little or no oversight over the program's subsidy cost estimates.

The department noted that its Office of Inspector General recently identified a number of issues raised in our report and that MARAD is already addressing these issues. MARAD recognized that aspects of the program's operation need improvement and said it is working to fine tune program operations and create additional safeguards. Specifically, MARAD has agreed to improve procedures for financial review, seek authorization for outside assistance in cases of unusual complexity, and expand, within resource constraints, its processes for monitoring company financial condition and the condition of assets.

The department pointed out that MARAD is permitted, under Title XI regulations, to modify or waive financial criteria for loan guarantees. Before issuing waivers in the future, DOT reported that MARAD will identify any needed compensatory measures to mitigate associated risks. MARAD also agreed to consider using outside financial advisors to review uniquely complicated cases. In addition, DOT reported that MARAD is working to improve its financial monitoring processes by developing procedures to better document its regular assessments of each company's financial health. The department stated that MARAD plans to highlight the results of these assessments to top agency management for any Title XI companies experiencing financial difficulties.

The department also reported that MARAD is developing a system that leverages limited staff resources for providing more extensive monitoring of Title XI vessel condition. In this regard, DOT said MARAD is

establishing a documentation process for each vessel that would include improved record keeping of annual certificates from the U.S. Coast Guard, vessel classification societies, and insurance underwriters. MARAD hopes to use this system, together with company financial condition assessments, to determine whether additional inspections are necessary.

In addition, DOT indicated that MARAD has begun an analysis of the program's results covering the full 10-year period since FCRA was implemented to improve the accuracy of subsidy cost estimates. We agree that MARAD should conduct this analysis as part of its annual reestimate process to determine if estimated loan performance is reasonably close to actual performance and are encouraged that MARAD has been able to obtain the historical data to conduct such an analysis. We had attempted to perform a similar analysis to assess the basis MARAD used for its default and recovery assumptions, but MARAD was unable to provide us with this data.

The department believes that our analysis may provide results that do not accurately reflect the management of the program as a whole, and that the results we report are affected by our sample selection. It points out that the report is based on an analysis of only 5 projects, representing a minute segment of the Title XI program's universe, 3 of which are defaulted projects, even though the program experienced only 9 defaults out of 104 projects financed over the last 10 years. We do not contend that this sample is representative of all of the projects MARAD finances. However, we do believe that these case studies uncover policies that permeate the program and do not provide for adequate controls or for the most effective methods for protecting the government's interest. In addition, our conclusions also draw on the work of a recent IG review, which looked at 42 Title XI projects, as well as a comparison with practices of selected private sector lenders and our own experience in analyzing loan guarantee programs throughout the federal government.

The department also believes that as a result of our emphasis on projects involving construction financing, a significant portion of the report is directed at issues associated solely with that type of financing, which only accounts for about 30 percent of Title XI projects since 1993. The department believes it is important for us to recognize that most projects (70 percent) have been for mortgage period financing because there are no disbursements made from an escrow fund for these types of projects, and there is virtually no need for agency monitoring of the construction process for these types of projects because the ship owner does not receive any Title XI funds until the vessel has been delivered and certified

by the regulatory authorities as seaworthy. We believe that projects involving construction financing are at greater risk of fraud, waste, abuse, and mismanagement, and therefore require a greater level of oversight compared to projects involving only mortgage period financing. Again, as mentioned above, our overall conclusions are based on more than the cases we reviewed.

DOT asserts that the report's portrayal of events and the rationale behind our description of the assessment of defaulted Searex assets and the verification of the cost for completing Project America I are inaccurate. In the case of Searex, the department believes that we implied that had the program officials rigorously adhered to program guidelines, the vessels would not have been dismantled. We believe that while the use of rigorous program guidelines may not have prevented Ingalls from dismantling the vessels, adherence to existing program guidelines would have provided evidence of the value and condition of the assets at the time of default. This documentary evidence would be advantageous if legal action occurred. In the case of Project America, DOT believes that the report incorrectly asserts that MARAD relied on an interested party, Ingalls Shipbuilding, Inc., to determine the value of the Project America I assets. The department believes that MARAD relied on the shipbuilder only to provide an estimate of the cost of making Project America seaworthy. We revised the report to reflect that MARAD did not obtain a market appraisal of the assets, and that it relied on Ingalls to estimate the cost of making the vessel seaworthy. We believe that in order to market the Project America assets, MARAD needs to know the costs of the available options including the cost of making the hull seaworthy.

The department also believes that the report does not convey a clear understanding of DCCA's role in the handling of Project America assets after default. We disagree with this assertion, and believe that the report appropriately reflects DCCA's role as outlined in its report entitled the Application of Agreed-Upon Procedures Incurred on Project America.

DOT believes that the report uses a number of examples to show that granting waivers or "other occurrences" related to program guidelines somehow contributed to the three defaults among the cases studied and expresses concern that the report concludes that weak program oversight contributed to the defaults examined in the draft. First, the report correctly notes that MARAD is permitted to approve waivers under certain circumstances. Nonetheless, waiving financial requirements increases the risk borne by the federal government. MARAD is now recognizing this by agreeing to implement the IG recommendations calling for compensating

provisions to mitigate risk when approving waivers. Second, the program's vulnerability to fraud, waste, abuse and mismanagement is not only due to MARAD not complying with program requirements, but also because MARAD lacks requirements for the management of defaulted assets, does not utilize basic internal control practices, such as separation of duties, and cannot reasonably estimate the program's cost.

With regard to the private sector comparison, DOT does not agree that MARAD lacks a deliberative process for loan approvals. The department believes that, in each written loan guarantee analysis, MARAD discusses the basis for granting major modifications or waivers. Also, DOT believes MARAD has a deliberative process through its written concurrence system whereby key agency offices have to concur on actions authorizing waivers or modifications. We revised the report to reflect the differing opinions of MARAD officials regarding the process for approving loan guarantees and waivers or modifications. We believe that it is not clear that MARAD uses a deliberative process and our review of the project files showed that key agency offices were not always included in the concurrence process.

DOT believes that the report should acknowledge that MARAD maintains separation of duties for disbursement. The report correctly notes that the ultimate decision to disburse funds is made by the same office that approves and monitors the Title XI loans. We added the name of the office that it then instructs to disburse funds.

DOT noted that certain lenders consolidate rather than separate approval and monitoring functions in order to improve efficiencies. The lenders we spoke to, who are major marine lenders, do not combine these functions. They also separate approval and monitoring functions from marketing and disposition functions. Further, we do not believe that efficiencies achieved through consolidating these functions outweigh the greater vulnerability to fraud, waste, abuse, and mismanagement associated with consolidation.

The department believes that MARAD's determination of subsidy costs is in accordance with OMB guidance. While we did not assess MARAD's compliance with OMB guidance, MARAD did not comply with other applicable, more specific guidance, which states that estimated cash flows should be compared to actuals, and estimates should be based on the best available data. The guidance is in the Accounting and Auditing Policy Committee's *Technical Release 3, Preparing and Auditing Direct Loan and Loan Guarantee Subsidies Under the Federal Credit Reform Act*. This guidance was developed by an interagency group including members from OMB, Treasury, GAO, and various credit agencies to provide detailed

implementation guidance on how to prepare reasonable credit subsidies. Regardless of whether MARAD complied with all applicable guidance, because MARAD did not conduct this fundamental analysis to assess whether its cash flow model was reasonably predicting borrower behavior, it did not know that for the past 5 years, defaults were occurring at a much higher rate and costing significantly more than estimated, and recoveries were significantly less than expected. In addition, MARAD did not appropriately incorporate these higher default rates and lower recovery rates into its cash flow models.

The department also stated that the report should recognize that, as a result of its full compliance with FCRA, MARAD set aside adequate funds for all defaults to date. While MARAD may have complied with some of the broad requirements of FCRA in preparing estimates and reestimates, these estimates were based on outdated assumptions and MARAD could not demonstrate that the estimates were based on historical data or other meaningful analyses. Further, DOT's response does not recognize that the appropriated funds are to cover expected losses over the life of the loan guarantee program. Because actual losses for the last 5 years have been significantly more and recoveries significantly less than expected, in the future actual losses will need to be significantly less and recoveries significantly more than estimated for MARAD not to require additional funding.

In addition, DOT believes that our analysis of MARAD's subsidy estimates was inaccurate and based on incomplete or incorrect data, and that we underreported actual recoveries from one of the defaulted projects (MHI). We disagree and believe our analysis was accurate, based on the information MARAD had provided. In its comments, the department provided new information on recoveries for the MHI project. We have now incorporated this new data, as appropriate, into our analysis. We did not include data provided on guarantee fees because these are paid upfront and should not be included in estimates of recoveries.

The department also provided technical comments, which we have incorporated as appropriate. The department's comments appear in appendix II.

OMB agreed that recent recovery expectations on certain defaulted guarantees cited in our report should be incorporated into future reestimates, and plans to ensure that these expectations are reflected in next year's budget. Further, OMB plans to work with MARAD to review recovery expectations for other similar loan guarantees. In addition, OMB

has been working with DOT and MARAD staff to implement recommendations contained in the IG report, and expects that resulting changes will also address many of the concerns raised in our report.

OMB disagreed with our finding that it provided little review and oversight of MARAD's subsidy cost estimates and reestimates and points to the substantial amount of staff time it devotes to working with agencies on subsidy cost estimates. OMB claims that the data used in our report does not seem to support our assertion of a lack of OMB oversight and disagrees with our implication that the overall subsidy rates would be higher if it had provided oversight. We clarified our report to convey the message that if OMB had provided greater oversight, it would have realized that MARAD did not have adequate support for the default and recovery assumptions it uses to calculate subsidy cost estimates. While OMB asserts that the number of default claims made between 1992 and 1999 is substantially in line with the assumptions underlying the estimated subsidy costs, we could not verify the magnitude and timing of defaults prior to the period included in our review (1996–2002) because MARAD could not provide data on historical default experience. Because MARAD could not provide adequate support for its default and recovery assumptions, we question the basis for the estimates and whether OMB had provided sufficient oversight. We continue to believe that MARAD's recent actual experience was significantly different than what MARAD had estimated and OMB had approved. Even when we exclude all of the AMCV projects, as well as the MHI project, from our analysis, we found that the amount of defaults MARAD experienced exceeded what MARAD estimated it would experience by \$63.3 million (or about 177 percent). Should the program receive new funding in the future, the subsidy rate estimates should be calculated using updated default and recovery assumptions to incorporate recent actual experience.

OMB also took issue with our use of data on the eight defaults, particularly those involving AMCV and MHI, in questioning MARAD's most recent reestimates of the costs of loans guaranteed between 1992 and 1995. However, we continue to question the reasonableness of the negative subsidies for the loans that were disbursed in fiscal years 1993, 1994, and 1995. First, the loans in these cohorts have not been through what MARAD considers the period of peak default—years 10–18 depending on the risk category. Second, MARAD was unable to provide us with adequate supporting information for how it determined the estimated default and recovery amounts. OMB agrees that recent experience should be used to calculate reestimates and states in its comments that it generally requires agencies to use all historical data as a benchmark for future cost estimates

and agreed that recent recovery experience should be incorporated into future reestimates.

OMB's comments appear in appendix III.

We are sending copies of this report to the Secretary of Transportation. We also will make copies available to others upon request. In addition, the report will be available at no charge on the GAO web site at <http://www.gao.gov>.

If you or your staff have any questions about this report or need additional information, please contact me, or Mathew Scirè at 202-512-6794. Major contributors to this report are listed in appendix IV.

Sincerely yours,



Thomas J. McCool
Managing Director, Financial Markets and Community Investment

Appendix I: Scope and Methodology

To determine whether MARAD complied with key Title XI program requirements, we identified key program requirements and reviewed how these were applied to the management of five loan guarantee projects. We judgmentally selected 5 projects from a universe of 83 projects approved between 1996 and 2002. The selected projects represent active and defaulted loans and five of the six risk categories assigned during the 1996–2002 period. The projects selected include barges, lift boats, cruise ships, and tankers. (See table 3.) Two of the selected shipowners had multiple Title XI loan guarantees during 1996–2002 (HVIDE, five guarantees; and AMCV, the parent company of Project America, Inc., five).

Table 3: Projects Selected for Our Review

Project	Year loan committed	Type of project
(AMCV) Project America, Inc.	1999	Cruise ships
Searex	1996	Lift boats
Massachusetts Heavy Industries (MHI)	1997	Shipyard modernization
Hvide Van Ommeran Tankers (HVIDE)	1996	Tanker
Global Industries	1996	Barge

Source: GAO.

We interviewed agency officials and reviewed provisions of existing federal regulations set forth in Title 46, Part 298 of the Code of Federal Regulations to identify the key program requirements that influence the approval or denial of a Title XI loan guarantee. We reviewed internal correspondence and other documentation related to the compliance with program requirements for the approval of the loan guarantee, ongoing monitoring of the project, and disposition of assets for loans resulting in default. We interviewed agency officials and staff members from the Title XI support offices that contribute to the approval and monitoring of loans and disposal of a loan resulting in default. Also, we interviewed a retired MARAD employee involved in one of the projects.

In addition, we interviewed officials that represented AMCV/Project America, Inc., including the former Vice President and General Counsel and former outside counsel.

To determine how MARAD’s practices of managing financial risk compare to those of selected private-sector maritime lenders, we interviewed two leading worldwide maritime lenders, and one leading maritime lender in the Gulf Coast region. We interviewed these lenders to become familiar

with private-sector lending policies, procedures, and practices in the shipping industry. Among the individuals we interviewed were those responsible for portfolio management and asset disposition. We did not verify that the lenders followed the practices described to us.

To assess MARAD's implementation of credit reform, we analyzed MARAD's subsidy cost estimation and reestimation processes and examined how the assumptions MARAD uses to calculate subsidy cost estimates compare to MARAD's actual program experience. We first identified the key cash flow assumptions MARAD uses to calculate its subsidy cost estimates. Once we identified these assumptions, we determined whether MARAD had a reliable basis—whether MARAD had gathered sufficient, relevant, and reliable supporting data—for the estimates of program cost and for their estimates of loan performance. We compared estimated program performance to actual program performance to determine whether variances between the estimates and actual performance existed. Further, we interviewed those MARAD officials who are responsible for implementing credit reform and compared the practices MARAD uses to implement credit reform to the practices identified in OMB and other applicable credit reform implementation guidance.

We performed our work in Washington, D.C., and New York, N.Y., between September 2002 and April 2003 in accordance with generally accepted government auditing standards.

Appendix II: Comments from the Department of Transportation



**U.S. Department of
Transportation**

Assistant Secretary
for Administration

400 Seventh St., S.W.
Washington, D.C. 20590

JUN 12 2003

Mr. Thomas J. McCool
Managing Director, Financial Markets and
Community Investment Issues
U.S. General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. McCool:

Thank you for the opportunity to review and comment on the GAO draft report, "Maritime Administration: Weaknesses Identified in Management of the Title XI Loan Guarantee Program." We offer the following comments for your consideration as the report is finalized. The comments are organized to provide an overall perspective on the draft report, followed by a section with specific and detailed comments. If you have any questions concerning our reply, please contact Martin Gertel on 366-5145.

Sincerely,

A handwritten signature in cursive script, appearing to read "Vincent T. Taylor".

Vincent T. Taylor

Enclosure

**U.S. Department of Transportation
Comments on U.S. General Accounting Office
Draft Report, "Maritime Administration: Weaknesses Identified in
the Management of the Title XI Loan Guarantee Program"
GAO-03-657**

Title XI Program Management Improvements Underway

A number of issues raised in the draft report were previously identified by the Department's Office of Inspector General (OIG) in its recently issued report on the Title XI program, and MARAD is already addressing those issues. MARAD recognized that aspects of the Title XI program's operation need improvement, and it is working closely with OIG to fine tune program operation and create additional safeguards. Specifically, MARAD has agreed to improve procedures for financial review, seek authorization for outside assistance in cases of unusual complexity, and expand, within resource constraints, its processes for monitoring company financial condition and the condition of assets.

MARAD is permitted under the Title XI regulations to modify or waive financial criteria for a loan guarantee. Before issuing a waiver in the future, MARAD will identify any needed compensatory measures to mitigate associated risks. These compensatory measures could include requirements for liens on unencumbered collateral or greater amounts of project equity. MARAD also agreed to consider using outside financial advisors to review uniquely complicated cases. Its fiscal year 2004 authorization seeks authority to engage such financial advisors, at the expense of the prospective borrower.

MARAD is working to improve its financial monitoring processes by developing procedures to better document its regular assessments of each Title XI company's financial health. The results of these assessments will be highlighted to top agency management for any Title XI companies experiencing financial difficulties.

Finally, MARAD is developing a system that leverages its limited staff resources for providing more extensive monitoring of Title XI vessel condition. In this regard, MARAD is establishing a documentation process for each Title XI vessel which will include improved recordkeeping of annual certificates from the U.S. Coast Guard, vessel classification societies, and insurance underwriters. MARAD will use this system together with company financial condition assessments to determine whether additional inspections by MARAD are necessary.

Draft Report Results Affected By Sample Selection

The GAO draft report is based on analysis of only five projects, representing a minute segment of the Title XI program's universe. These five projects included three defaults even though MARAD has financed 104 Title XI projects over the last 10 years and experienced only nine defaults in total. Thus, while 60 percent of the projects in GAO's sample were defaults, the program has experienced less than a 9 percent default rate

over the last 10 years. It should also be noted that one of the projects analyzed by GAO, the shipyard reactivation project for MHI Shipbuilding, was approved only as the result of special legislation that has no applicability to any other Title XI project. This project has already been the subject of three separate OIG audits. The draft report's analytical focus on defaults, including a unique case with no parallels in the program, may provide results that do not accurately reflect the management of the program as a whole.

Another aspect of sample selection also affected the draft report's analysis. Two distinct types of financing are offered through the Title XI program, "Mortgage Period" and "Construction Period." Since 1993, mortgage period financing accounts for about 70 percent of the projects. This type of financing provides funds only after vessel construction has been satisfactorily completed as compared to construction period financing, which provides funding during the construction period as well. Despite the program's preponderance of mortgage period loans, only one of five cases considered by GAO was of this type. Recognizing most Title XI financings are mortgage period loans is significant for two key reasons. First, there are no disbursements from an escrow fund for mortgage period financing. Second, there is virtually no need for agency monitoring of the construction process because the ship owner does not receive any Title XI funds until the vessel has been delivered and certified by the regulatory authorities as seaworthy. As a result of the draft report's emphasis on projects involving construction financing, a significant portion of the report is directed at issues associated solely with that type of financing that accounts for only about 30 percent of Title XI projects. For example, all of the discussion in the draft report's section "Controlling the Disbursements of Loan Funds" addresses issues that are pertinent only to construction period financing.

Finally, it would have been useful to include a drill rig project in the sample, since these projects represent the largest market segment in the Title XI portfolio. MARAD has approved drill rig projects totaling \$1.6 billion in outstanding loan guarantees and commitments out of a total portfolio of \$4.6 billion. All of these projects to date have been successful.

Clear Understanding of Events Necessary to Avoid Erroneous Conclusions

In some cases, the draft report's portrayal of events and the rationale behind them is inaccurate. For example, the draft report cites certain issues that arose during Title XI funded projects to assert that reliance on flexible guidelines for handling defaulted assets is insufficient and that specific and rigorous requirements could save funds. As stated earlier, while we agree that the program will benefit from certain procedural modifications, some of the examples cited are misconstrued.

Assessing Assets in Custody

The draft report implies that had program officials rigorously adhered to program guidelines, the SEAREX vessels would not have been dismantled. MARAD's guidelines

for the disposition of defaulted assets state that a marine surveyor "shall survey all vessels as soon as practicable after the assets are taken into custody." The draft report states that MARAD did not timely conduct such a survey before Ingalls dismantled the SEAREX vessels, implying that had this action occurred, the vessels would not have been dismantled. There are several flaws in this logic. First, MARAD did not have custody of the vessels, Ingalls did. As a result, the guideline provisions, even if they had been inflexible requirements, would not have applied. Secondly, MARAD conducted oversight visits to Ingalls prior to the vessels being dismantled. However, it is unclear how a marine surveyor's assessment, or oversight visits by MARAD, could have prevented Ingalls from dismantling the vessels.

MARAD and SEAREX were both entitled to rely on the duty of Ingalls, as a secured party in possession of the vessels, to take reasonable care of the vessels and preserve them. Instead, Ingalls cut up the vessels because they were in its way and, in so doing, failed to carry out its legal obligations imposed by the State of Mississippi, and also Federal Bankruptcy law, which forbids such actions without a Bankruptcy Court order. SEAREX has commenced a civil action against Ingalls for the damage and MARAD will claim against any proceeds. MARAD does not have an independent right to bring a civil action against Ingalls for damage to its collateral.

Verifying Cost for Completion versus Estimates of Assessed Value

The draft report incorrectly asserts that, in the case of Project America, MARAD relied on an interested party, Ingalls Shipbuilding, to determine the value of the Project America I assets. In fact, MARAD relied on the shipbuilder only to provide an estimate of the cost of making the Project America I vessel seaworthy. In places, the draft report incorrectly interprets this as a request for Ingalls to perform an appraisal for the purpose of marketing the asset. MARAD did not ask Ingalls to appraise the hull's market value; rather, MARAD wanted to know how much it would cost to make the vessel towable. The draft report should note the fact that the incomplete vessel, more than 800 feet long and 200 feet high, could only be removed from the shipyard by partially completing it or allowing Ingalls to cut the vessel up. It was MARAD's independent conclusion, based on its shipbuilding expertise, that it would cost more and return less money to dismantle the vessel than it would to partially complete it. MARAD opted to partially complete the vessel for no more than \$12 million - not the \$16 million cited in the draft report. Subsequently, of the \$14 million attributable to the sale of Hull 1, after deducting the \$12 million used to partially complete the vessel, MARAD recovered \$2 million. Had MARAD adopted the alternative course of action described in the draft report, it would have fared worse.

The draft report also does not convey a clear understanding of DCAA's role in this project. On page 18, the draft report states that "rather than obtaining a market appraisal to assist in marketing the asset, MARAD hired the Defense Contract Audit Agency (DCAA) to verify the costs incurred by [Ingalls]." MARAD hired the DCAA to protect its rights under its contract with Ingalls. Had Ingalls spent less than \$12 million in preserving and completing the vessel, MARAD would have been entitled to each dollar

under the \$12 million cap. MARAD's hiring of DCAA was unrelated to assessing the asset's market value, and represents standard and appropriate practice for ensuring charges related to a contract were in fact incurred. Further, the draft report states that DCAA did not review the reasonableness of the costs charged by Ingalls. DCAA does not provide that service. Instead, MARAD is performing a reasonableness review. Prior to entering into its agreement to pay \$12 million of the sales proceeds to Ingalls for partially completing the hull, MARAD performed a preliminary review of the reasonableness of such costs and concluded that they were likely to be reasonable. Now that DCAA has submitted its report, MARAD is completing its review of the reasonableness of Ingalls' charges.

MARAD Compliance with Program Management Requirements

The draft report uses a number of examples to show that granting waivers or other occurrences related to program guidelines somehow contributed to the three defaults among the cases studied. While MARAD agrees, as stated earlier, that some increased program controls may be useful in managing future projects, the draft report does not make a convincing case that cited instances materially contributed to these defaults. For example, MARAD recognizes that certain ship owner financial statements could not be located; however, in each case MARAD was aware of the ongoing financial difficulties, and was working with those tools available to address the situation.

The draft report comments extensively on waivers and modifications of financial requirements, but acknowledges that these are permitted under the Title XI regulations. While MARAD acknowledges that in the future, compensatory measures will be used to provide additional risk mitigation, it should be noted that MARAD has frequently required such compensatory measures in the past. It should also be noted that MARAD could not have approved many of its successful and desirable projects without having waived or modified financial requirements. Examples include the double hull tankers that MARAD financed for American Heavy Lift and Hvide Van Ommeren. These tankers were necessary to meet the requirements of the Oil Pollution Act and could not have been built without MARAD financing, which included the judicious use of waivers.

MARAD also disagrees with the draft report's conclusion, based on the small number of examples studied, that its Title XI oversight is weak, or somehow contributed to the defaults examined by the draft. While MARAD recognizes there are opportunities to improve oversight, some of the assertions in the report lack firm basis. For example, the draft report asserts that MARAD could not always demonstrate linkage between fund disbursement and construction progress. MARAD has supporting documentation of construction progress for Project America which is the example cited in the draft report, and has made it available to GAO.

MARAD Practice Compared to Private Lenders

While comparisons between Title XI practices and those of the private sector offer some useful insights, MARAD does not agree with all of the characterizations of its processes

in the draft report. For example, while MARAD agrees that some of the financial analysis documentation practices of the private sector offer useful insights for improving the program's practices, MARAD does not agree that it lacks a deliberative process for loan approvals. In each written loan guarantee analysis, MARAD discusses the basis for granting major modifications or waivers. MARAD has a deliberative process through its written concurrence system whereby key agency offices have to concur on actions authorizing waivers or modifications. Also, certain lenders consolidate rather than separate approval and monitoring functions to achieve greater efficiencies, as MARAD has recently done. The draft report recognizes that MARAD consolidated certain functions in order to correct the very issues GAO and the OIG have identified, yet the draft asserts MARAD's organizational structure offers too little separation of duties for the Title XI program. The GAO report should note that MARAD does maintain separation of duties for disbursement.

Credit Subsidy

MARAD's determination of subsidy costs is in accordance with guidance from the Office of Management and Budget. The draft report should recognize that as a result of its full compliance with the Federal Credit Reform Act (FCRA), MARAD set aside adequate funds for all defaults to date. The draft report is critical of MARAD's subsidy estimates on the basis that, even if the AMCV recoveries were excluded, MARAD's estimates of its other recoveries were inaccurate. Unfortunately, the draft report's analysis was based on incomplete or incorrect data (see the Specific and Technical comments section), since it underestimated MARAD's recovery from MHI. If the draft report's analysis had been accurate in this case, it would have recognized that MARAD recovered more funds than anticipated, and it would have reached a different overall conclusion.

Finally, we agree with the draft report's suggestion to conduct long-term, retrospective analyses of program results to improve the accuracy of FCRA estimates. However, the draft report's recommendation of conducting analyses covering the last 5 year period could provide an insufficient time-span to achieve worthwhile results. For example, if such an analysis had been done after the first five years after implementation of FCRA, it would have demonstrated that MARAD overestimated program costs, since no defaults occurred during this period. A longer term perspective offers greater assurance that we capture a complete and accurate record of the program's results. Therefore, MARAD has begun an analysis of the program's results covering the full 10-year period since FCRA was implemented.

Appendix III: Comments from the Office of Management and Budget



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

June 23, 2003

Thomas J. McCool
Managing Director
Financial Markets and Community Investment
General Accounting Office
Washington, DC 20548

Dear Mr. McCool:

We have been asked to respond on the Acting Director's behalf to your request for comment from the Office of Management and Budget on your draft report "Maritime Administration: Weaknesses Identified in Management of the Title XI Loan Guarantee Program."

We agree with GAO that recent recovery expectations on certain defaulted guarantees cited in the report should be incorporated into future reestimates; since these data were received after publication of the 2004 President's Budget, we will ensure that they are reflected in next year's Budget, and will work with the Maritime Administration (MARAD) to review recovery expectations for other similar loan guarantees.

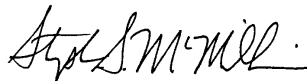
In addition, we commend GAO on recognizing many of the same program management issues raised in the Department of Transportation's Office of the Inspector General (OIG) report on the Title XI program, issued in March 2003. We have been working with the Department and MARAD staff to implement recommendations contained in the OIG report, and expect that resulting changes will also address many of the concerns raised in the GAO report.

However, we disagree with GAO's assertion that OMB provided little or no oversight over the MARAD Title XI subsidy cost estimates. To support this assertion, GAO cites several defaults on loans originated between 1996-2002, and implies that the overall subsidy rates would be higher if OMB had provided oversight.

First, OMB devotes a substantial amount of staff time to working with all agencies, including DoT staff, on subsidy cost estimates: we work with agencies on revisions and refinements to their models throughout the year, review cash flows for all agency subsidy cost estimates and reestimates in preparation for the President's Budget, provide a variety of tools to aid agencies in making calculations in support of these estimates, and provide comprehensive annual training in credit budgeting guidance and procedures for all interested Federal government staff, as well as respond to ad hoc requests for guidance and training.

Second, the data used in the report does not seem to support GAO's assertion of a lack of OMB oversight. In general, OMB requires that agencies use their program's historical experience as a benchmark for future cost estimates. As GAO outlined, the large majority of MARAD's default experience is attributable to six loan guarantees: Massachusetts Heavy Industries (MHI), and the five made for American Classic Voyages (AMCV). At the time of making the AMCV loan guarantees in 1999, MARAD had experienced, at most, only four default claims since 1992. GAO acknowledges that MHI was an atypical project because P.L. 104-324 waived MARAD's economic soundness criterion. Therefore, on the more than 70 standard loan guarantees issued between 1992-1999, MARAD had experienced only three default claims. This figure is substantially in line with the assumptions underlying the estimated subsidy costs for guarantees made under conditions permitted by law and regulations, such as those to AMCV. As a result, OMB would not have questioned the estimates since they were in line with historical experience.

Finally, GAO also uses the data on the eight defaults to call into question MARAD's most recent estimates of the cost of loans guaranteed between 1992-1995, primarily because the MHI and AMCV defaults occurred earlier, and in larger amounts, than originally estimated. As GAO wrote, MARAD estimates that most defaults will occur during years 10-18 of the loans. Since the loans from those earlier years now have between eight and eleven years of experience behind them, with only one default, it is not clear how the MHI and AMCV experience would change the default estimates on the earlier loan guarantees.



Stephen McMillin
Program Associate Director,
General Government Programs

Sincerely,



Richard P. Emery
Assistant Director for Budget

Appendix IV: GAO Contacts and Staff Acknowledgments

GAO Contacts

Thomas J. McCool (202) 512-8678
Mathew J. Scirè (202) 512-6794

Staff Acknowledgments

In addition to those individuals named above, Kord Basnight, Daniel Blair, Rachel DeMarcus, Eric Diamant, Donald Fulwider, Grace Haskins, Rachelle Hunt, Carolyn Litsinger, Marc Molino, and Barbara Roesmann made key contributions to this report.

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