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Report to the Chairman, Subcommittee
on Defense, Committee on
Appropriations, House of
Representatives

August 1989

NAVY CONTRACTING

Status of Cost Growth and Claims on Shipbuilding Contracts



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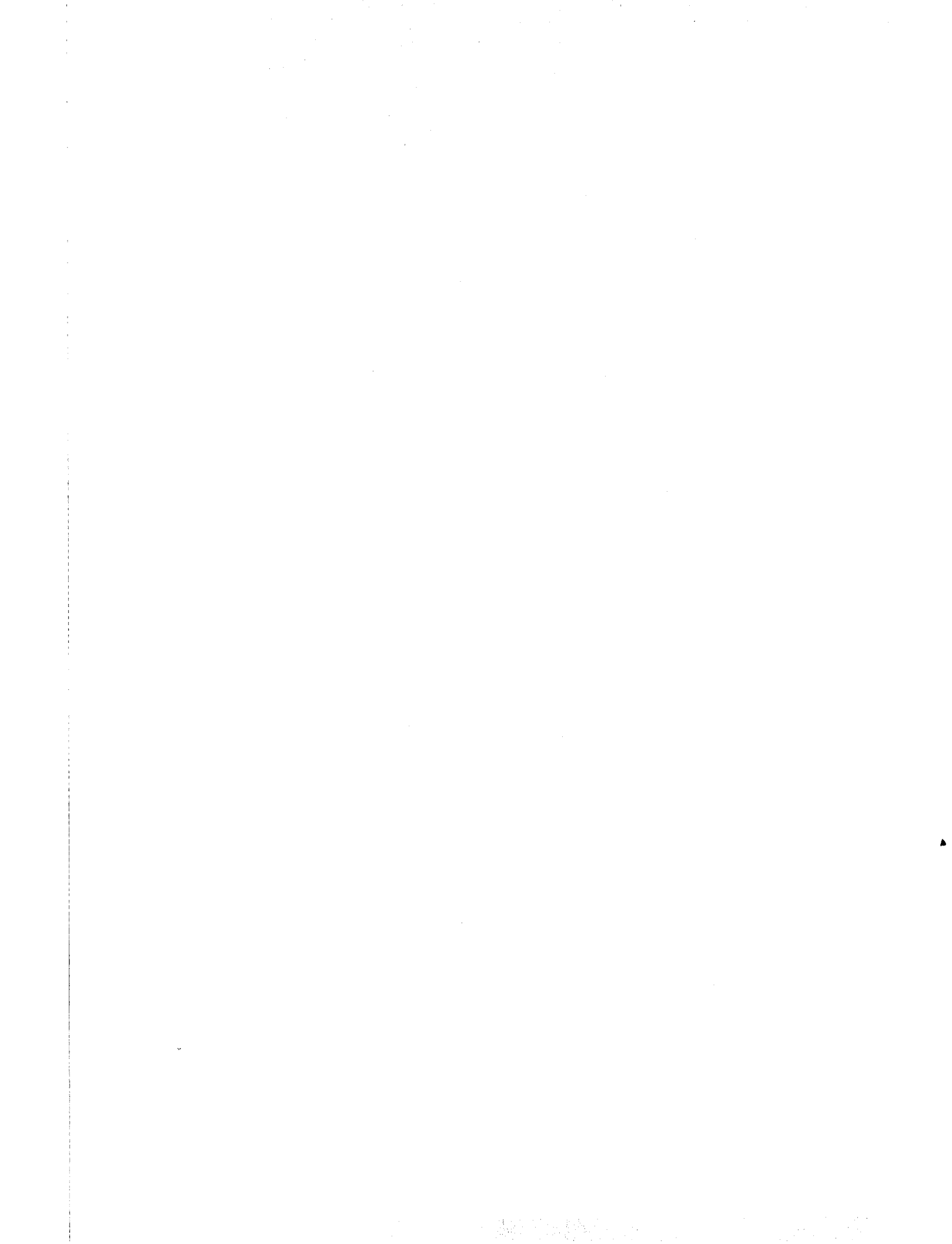
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National Security and
International Affairs Division

B-228619

August 4, 1989

The Honorable John P. Murtha
Chairman, Subcommittee on Defense
Committee on Appropriations
House of Representatives

Dear Mr. Chairman:

Commercial shipyards are responsible for accomplishing the Navy's shipbuilding program. Most of that work is being performed under fixed-price incentive contracts. Over the past few years, we have reported and testified¹ on cost growth trends related to such contracts. These are important matters because the cost growth represents potential increased financial liabilities to the U.S. government and the shipyards. At the request of your Subcommittee, we have continued to monitor the (1) cost overruns and (2) shipbuilders' Requests for Equitable Adjustment (REAS) and claims against the government. This report summarizes the results of that work.

Results in Brief

We reviewed 46 contracts that were underway as of December 31, 1988. These contracts had a total target cost of about \$25.9 billion, with a net projected cost overrun of about \$3 billion. The government is potentially liable for about \$1.2 billion of that cost growth. Most of the overruns were in the attack submarine, amphibious assault ship, and aircraft carrier programs.

The government also is potentially liable for about \$87 million in open REAS and claims, all of which involve contracts that were underway at the time of our April 1988 testimony. The attack submarine, guided missile destroyer, and guided missile cruiser programs accounted for almost all of the additional amounts sought by the shipbuilders. (The details of our analyses are in apps. II and III.)

Background

In 1987 we reported to your Subcommittee on the status of 22 shipbuilding fixed-price incentive contracts. In 1988 we testified on the results of our work, updating the status of those contracts, plus four additional fixed-price incentive contracts that had been awarded since our initial

¹Navy Contracting: Cost Overruns and Claims Potential on Navy Shipbuilding Contracts (GAO/NSIAD-88-15, Oct. 16, 1987) and Navy Ship Construction Contracts (GAO/T-NSIAD-88-27, Apr. 19, 1988), respectively.

review. This year, we again reviewed the status of these 26 contracts except for 2—1 was completed and closed-out and 1 was converted to a firm fixed-price contract—and an additional 22 fixed-price incentive contracts that we reviewed since our April 1988 testimony. (App. I contains a description of our objectives, scope, and methodology.)

Fixed-price incentive contracts contain provisions for the government and contractor to share, usually on an equal basis, costs that overrun the target up to the ceiling price. Thus, part of the projected cost at completion that is above the target price but below the ceiling price represents a potential liability to the government. Amounts above the ceiling are borne entirely by the contractor.

The government also is potentially liable for additional amounts arising from REAS and claims. An REA is a request for additional payment or an extension of the delivery schedule or both, which a shipyard submits and is not in dispute at the time the government receives it. Whenever REAS cannot be settled by agreement, the contractor may file a claim against the government.

Significant Projected Cost Overruns

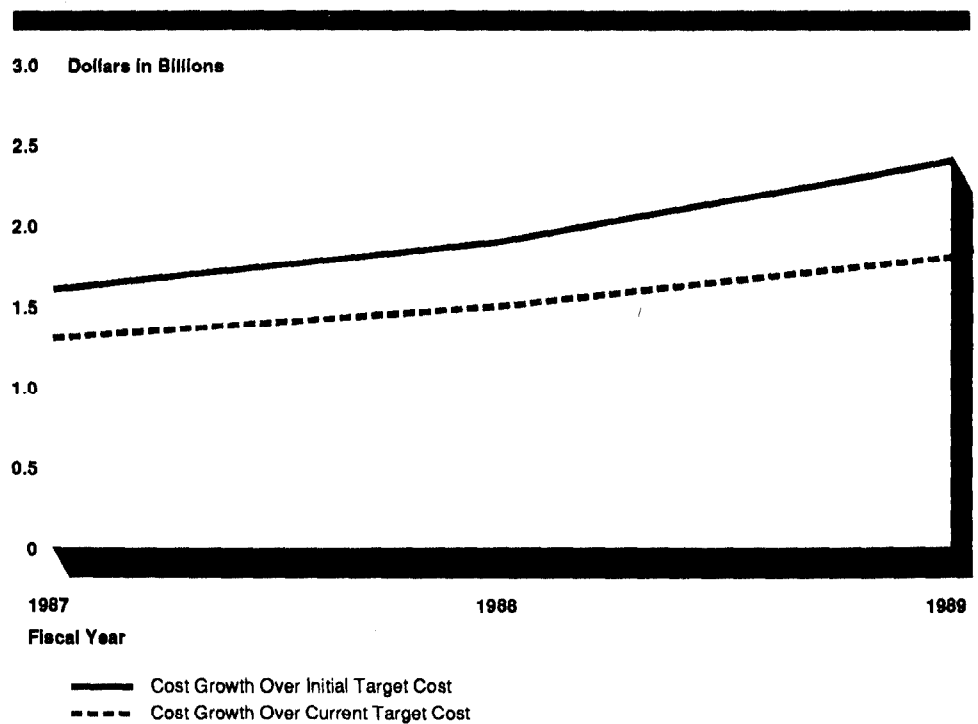
Of the 46 shipbuilding fixed-price incentive contracts we reviewed this year, 25 were experiencing cost overruns of about \$3.297 billion, 6 were underrunning target costs by \$315 million, and 15 were estimated to be completed at their current target costs, yielding a net projected cost overrun (overruns less underruns) of about \$3 billion, of which about \$573 million is projected to be above the ceiling prices. The commercial shipyards are potentially liable for about \$1.8 billion (which includes all of the \$573 million above the ceiling price) and the Navy is potentially liable for about \$1.2 billion. A schedule showing the projected costs of individual contracts at completion and other financial data is provided in a restricted supplement to this report (GAO/NSIAD-89-189S).

The attack submarine, amphibious assault ship, and aircraft carrier programs accounted for about 85 percent of the net projected cost overrun. In our earlier review we stated that most cost overruns could be attributed to shipbuilders' decisions to cut prices and to make low competitive offers to obtain Navy contracts.

Our analyses show that certain trends are developing. Of the 22 contracts we originally reviewed in 1987, 20 remain open as fixed-price incentive contracts and are continuing to experience cost growth. As shown in figure 1, projected net cost growth over current target cost on

these contracts increased (1) \$200 million, or 15.4 percent, from our October 1987 report to our April 1988 testimony and (2) an additional \$300 million, or 20 percent, from April 1988 to March 1989. (App. II presents our analyses of projected cost growth on the 46 shipbuilding contracts reviewed.)

Figure 1: Cost Growth Over Target Costs for Originally Reviewed Contracts



Large REAs and Potential Claims

To date no REAs or claims have been submitted on the 22 additional contracts that we reviewed. However, for the previously reviewed 24 contracts that remain ongoing fixed-price incentive contracts, the shipyards have sought about \$214 million on 14 contracts through 22 REAs and 6 claims. Of these, six REAs and five claims that originally sought about \$127 million have been settled for about \$84 million. Thus, the Navy is still potentially liable for about \$87 million on the open REAs and claims.

The attack submarine, guided missile destroyer, and guided missile cruiser programs accounted for 93 percent of the amount sought through REAs and claims. The reasons for REAs and claims can include

government-initiated changes, late delivery or defective drawings or specifications from the government or the shipyard building the lead ship, delays in equipment deliveries, or shipyard delays or disruptions. (App. III provides more detailed information on REAs and claims against the government for the contracts we reviewed.)

As you requested, we did not obtain agency comments on this report. However, we did discuss the matters presented in the report with officials of the Departments of Defense and the Navy and included their views where appropriate. These officials agree that the potential for cost growth and large claims is significant; but they believe that due to lower than anticipated contract awards, sufficient funds are included in the shipbuilding appropriations to cover most of the additional contract costs.

We are sending copies of this report to the Chairmen, Senate Committees on Appropriations and on Governmental Affairs, Senate and House Committees on Armed Services, and House Committee on Government Operations. Copies are also being sent to the Secretaries of Defense and the Navy and other interested parties.

GAO staff members who made major contributions to this report are listed in appendix IV.

Sincerely yours,



Martin M Ferber
Director, Navy Issues

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Abbreviations

REA Request for Equitable Adjustment

Objectives, Scope, and Methodology

The Chairman, Subcommittee on Defense, House Committee on Appropriations, requested us to monitor cost growth on the Navy's shipbuilding fixed-price incentive contracts. In response to this request, we

- established the magnitude of shipbuilding cost overruns for fixed-price incentive contracts and
- determined the number and amount of Requests for Equitable Adjustment (REAs) and claims relating to these contracts.

Our review was performed at Navy headquarters—the Office of the Assistant Secretary of the Navy (Shipbuilding and Logistics), the Navy's Office of the Comptroller, and the Naval Sea Systems Command. At Navy headquarters, we reviewed 46 shipbuilding fixed-price incentive contracts that accounted for all such ongoing contracts as of December 31, 1988, and covered 14 Navy shipbuilding programs involving 139 vessels at 12 commercial shipyards.

For these contracts, we obtained and analyzed current financial data to establish the magnitude of the projected cost growth and to determine the amount and number of REAs and claims against the government as of March 31, 1989.

In conducting our review, we used the same accounting systems, reports, records, and statistics that Navy headquarters uses to monitor shipbuilding contracts, make decisions, and establish shipbuilding program budgets. We did not independently determine their reliability.

Our review was performed from February through May 1989 and was conducted in accordance with generally accepted government auditing standards.

Projected Cost Overruns on Shipbuilding Contracts

Commercial shipyards are responsible for accomplishing the Navy's shipbuilding program. Most of the shipbuilding is being performed under fixed-price incentive contracts that have target and ceiling prices. The initial contract amount can be increased by the Navy for approved modifications, resulting in a "current" target cost. Costs incurred over the current target cost up to the ceiling price represent a potential additional liability that, generally, is shared equally by the shipyard and the Navy. The cost beyond the ceiling price is a potential additional liability of the shipyards.

In October 1987 we reported on the status of 22 shipbuilding fixed-price incentive contracts. In April 1988 we testified on the status of those contracts, plus four incentive contracts that had been awarded since our initial review. In March 1989 we reviewed the status of 24 of those 26 contracts—1 was completed and closed-out and 1 was converted to a firm fixed-price contract—and an additional 22 contracts that we reviewed since our April 1988 testimony.

Significant Cost Overruns Projected

On the 46 shipbuilding fixed-price incentive contracts, total cost overruns were projected to be about \$3.297 billion on 25 contracts. Of the other contracts, 6 were projected to underrun their current target costs by \$315 million and 15, most of which are for projects in their early stages of construction, were estimated to be completed at their target costs. The projected cost overruns reduced by projected underruns for the 46 contracts yielded a net projected overrun of \$2.982 billion. Of this amount, \$573 million was for costs above the ceiling prices and the shipyards are potentially liable for it. The shipyards and the Navy are each potentially liable for about one-half of the costs between the target and ceiling prices (\$2.409 billion), or about \$1.205 billion each.

The cost growth involved 10 of 14 Navy shipbuilding programs. Of these, the attack submarine, the amphibious assault ship, and the aircraft carrier programs accounted for about 85 percent of the projected cost overruns. The causes of cost growth are many and varied. However, in our October 1987 report we stated that most growth could be attributed to shipbuilders' decisions to cut prices and to make low competitive offers to obtain Navy contracts.

Of the 22 contracts we originally reviewed in 1987, the 20 that remain open as fixed-price incentive contracts were continuing to experience cost growth. Between the time we issued our October 1987 report and testified in April 1988, total net projected cost growth (overruns less

**Appendix II
Projected Cost Overruns on
Shipbuilding Contracts**

underruns) over total current target cost increased \$200 million, or 15.4 percent; from April 1988 to March 1989, projected cost growth for these same contracts had increased an additional \$300 million, or 20 percent.

The total estimated cost at completion for 24 of the 26 contracts discussed in our April 1988 testimony was about 93 percent of the total current ceiling price, where the government's liability ends. In addition, when compared to last year, more of the cost at completion estimates for the 24 contracts were above their ceiling prices. This year, nine contracts had cost at completion estimates ranging from 102 to 119 percent above the ceiling prices compared to four contracts last year, which had estimates that ranged from 101 to 110 percent above those prices. Most of the nine contracts involve projects that have substantial amounts of work remaining until final delivery.

For the 22 additional contracts reviewed this year, the total estimated cost at completion was \$14.8 billion, or about 77 percent of the total ceiling price. The cost at completion estimate on one contract was above the ceiling price (101 percent of ceiling) and the estimates for two others were near their ceiling prices (97 and 93 percent). The estimates at completion for the other 19 contracts ranged from 65 to 84 percent of ceiling.

Requests for Equitable Adjustment and Claims Against the Government

Shipyards can attempt to recoup losses or potential losses on shipbuilding contracts through REAs or claims against the government. An REA is a request for monetary payment to cover additional expenses or an extension of a ship's delivery date or both. Whenever an REA cannot be settled by an agreement, the matter in contention becomes a dispute and a shipyard may submit a claim relating to that dispute.

Large REAs and Potential Claims

No REAs or claims have been submitted on the 22 additional contracts that we reviewed. However, for 14 of the 24 contracts we originally reviewed, 22 REAs and 6 claims totaling \$213.7 million had been submitted as of March 31, 1989. Of that amount, \$127.2 million was settled by the Navy for \$84.1 million. Rejected REAs and claims may be resubmitted by the shipyards through the contract change process or for litigation. Currently, the Navy is still potentially liable for up to \$86.5 million.

As shown in table III.1, the attack submarine, guided missile destroyer, and guided missile cruiser programs accounted for 93 percent of the amount that was sought on the 22 REAs and the 6 claims.

Table III.1: Ship Programs Ranked by Percentage of Total REAs and Potential Claims for Previously Reviewed Contracts (Dollars in Thousands)

| Navy shipbuilding program | REAs and claims against the government | Percentage of total REAs and claims |
|---------------------------|--|-------------------------------------|
| Attack submarine | \$154,278 | 72 |
| Guided missile destroyer | 27,467 | 13 |
| Guided missile cruiser | 16,186 | 8 |
| Fast combat support ship | 6,311 | 3 |
| Landing craft air cushion | 4,711 | 2 |
| Amphibious assault ship | 3,025 | 1 |
| Fast logistics ship | 1,530 | 1 |
| Ocean surveillance | 160 | ^a |
| Total | \$213,668 | 100 |

^aLess than 1/10 of 1 percent.

One REA accounted for over one-half of the amount sought by the commercial shipyards. It was submitted in February 1988 by the Electric Boat Division of General Dynamics Corporation for cost adjustments of \$109.4 million and for schedule adjustments on five attack submarines. This REA resulted from Navy-initiated changes for the design of a combat system, retractable bow planes, and the placement of ballast. The REA was resolved in April 1988 for \$82.4 million.

**Appendix III
Requests for Equitable Adjustment and
Claims Against the Government**

According to Navy officials, there are several reasons for REAs and claims. The causes can include government-initiated changes, late delivery or defective drawings or specifications from the government or the shipyard building the lead ship, delays in equipment deliveries, or shipyard delays or disruptions.

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