1992 NAVY BUDGET

Potential Reductions in Research, Development, Test, and Evaluation Programs

GAO

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

National Security and
International Affairs Division

B-245523

September 30, 1991

The Honorable Daniel K. Inouye
Chairman, Subcommittee on Defense
Committee on Appropriations
United States Senate

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

We reviewed the Navy's fiscal year 1992 budget request and prior year appropriations for its research, development, test, and evaluation programs. Our objectives were to identify potential reductions to the fiscal year 1992 budget request for selected programs and potential rescissions to fiscal year 1991 appropriations. We provided the preliminary results of our review to your staffs prior to your subcommittee's markup of the Defense Appropriations Bill so that the potential reductions and rescissions could be used in your evaluations.

Results in Brief

We identified $321.7 million in potential reductions to the research, development, test, and evaluation budget request for fiscal year 1992 and $150.6 million in potential rescissions to appropriated funds from fiscal year 1991. The potential reductions and rescissions are summarized by program in table 1. Additional information on the results of our review is in appendix I.

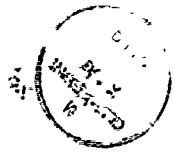


Table 1: Potential Reductions and Rescissions to Navy Research, Development, Test, and Evaluation Programs

Dollars in millions

Program element	Element number	Fiscal year 1992	Fiscal year 1991	Total
Skipper Enhancements	0603222N	$0.0	$10.0	**$10.0**
Electric Drive System	0603573N	40.9	0.0	**40.9**
MK-48 Advanced Capability Torpedo	0603691N	52.6	4.3	**56.9**
Container Offloading and Transfer System	0603719N	1.0	0.0	**1.0**
Airborne Antisubmarine Warfare Development	0604219N	25.8	1.8	**27.6**
Air Launch Saturation System	0604265N	7.5	0.0	**7.5**
Vertical Launch Antisubmarine Rocket	0604355N	36.9	14.8	**51.7**
Tomahawk	0604367N	2.1	0.0	**2.1**
Surface Antisubmarine Warfare Systems Improvement	0604713N	78.0	86.0	**164.0**
Fixed Distributed System	0604784N	22.0	33.7	**55.7**
Target Systems Development	0604258N	54.9	0.0	**54.9**
Total		**$321.7**	**$150.6**	**$472.3**

In addition to the programs that we analyzed, we identified potential rescissions of $1,140.5 million to fiscal year 1991 funds that are being held in reserve by the Office of the Secretary of Defense and the Navy Comptroller, pending allocation, reprogramming, program review, or transfer. These funds are summarized by program in appendix II.

Scope and Methodology

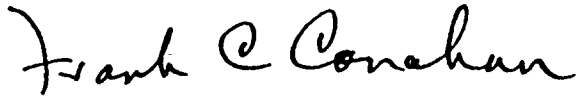
This review is one of a series that examines defense budget issues. To conduct our review, we interviewed budget and program officials and reviewed pertinent program documents and budget support data from the Department of the Navy, Washington, D.C.; the Naval Air Development Center, Warminster, Pennsylvania; and the Naval Underwater Systems Center, Newport, Rhode Island.

We conducted our review from January to July 1991 in accordance with generally accepted government auditing standards. As requested, we did not obtain written agency comments on this report. However, we discussed the information in a draft of this report with officials from the Office of the Secretary of Defense and the Department of the Navy and incorporated their comments where appropriate.

(25) * Naval budgets, * Naval research, Test and evaluation.

We are sending copies of this report to the Secretaries of Defense and the Navy; the Chairmen, House and Senate Committees on Armed Services, House Committee on Government Operations, and Senate Committee on Governmental Affairs; and the Director of the Office of Management and Budget. We will also make copies available to others on request.

This report was prepared under the direction of Martin M Ferber, Director, Navy Issues, who may be reached on (202) 275-6504 if you or your staff have any questions concerning this report. Other major contributors to this report are listed in appendix III.



Frank C. Conahan
Assistant Comptroller General

Contents

Potential Reductions and Rescissions to Navy Research, Development, Test, and Evaluation Programs

We identified $321.7 million in potential reductions to the Navy's fiscal year 1992 research, development, test, and evaluation budget request. We also identified $150.6 million in potential rescissions from fiscal year 1991 appropriations. These reductions and rescissions are discussed below by program.

Skipper Enhancements

The fiber optic guided Skipper program is a congressionally directed program that has received over $36 million in funding since fiscal year 1987. Although the program's specific objectives have varied from year to year, the overall objectives are to (1) demonstrate a low-cost, air-launched, standoff weapon using the Army's fiber optic guided missile technology on the Navy's AGM-123 (Skipper) airframe and (2) conduct sufficient flight tests to evaluate the weapon's readiness for transition to full-scale development. The Army's fiber optic guided missile employs a video camera and single spool fiber payout system to provide a continuous data link to a ground station for weapon guidance.

According to Navy officials, before the fiber optic guided system program was included in the Navy's annual appropriations, the Navy had developed a Strike/Antisurface Warfare Master Plan, which calls for a low-cost, air-launched weapon with extended standoff range, warhead versatility, survival characteristics, and stealthy design. It stipulates the replacement of six of its air-launched weapons, including the Skipper, with a single weapon—the Advanced Interdiction Weapon System—capable of meeting all of the aforementioned criteria. The Navy is currently developing the system.

Results of Analysis

We identified $10 million in potential rescissions from fiscal year 1991 appropriated funds.

On the basis of the results of a series of flight demonstration tests, the Navy concluded that the Army's technology was not ready for full-scale development. The Skipper Enhancement project achieved its first objective of developing a method of simultaneous payout of the fiber optic cable from both the aircraft and the weapon. However, Navy officials considered the system's fiber payout success rate unacceptable, since it decreased from 71 to 50 percent as testing approached the most realistic operating conditions. Other problems during testing also resulted in unacceptable overall system success rates. For example, the guidance signal was lost in some test flights in which fiber payout was successful.

A Navy official testified in March 1991 before the Defense Subcommittee, House Appropriations Committee, that the Navy plans to abandon Skipper Enhancement and pursue development of the Advanced Interdiction Weapons System. On May 24, 1991, Navy officials requested authority to reprogram the $10 million in fiscal year 1991 funds appropriated for Skipper Enhancements.

The Navy has requested $53.4 million in fiscal year 1992 funding to develop the Advanced Interdiction Weapon System, which it says will better meet its requirements for a standoff weapon. As of April 1991, two of three contractors conducted successful demonstration flights, and the Navy released a request for proposals for full- scale development. According to the program office, the program is expected to meet a planned November 1991 milestone II decision, whether to award a full-scale development contract.[1]

Electric Drive System

The Electric Drive System is a program to develop advanced power and machinery systems for future Navy ships. The system would use new power turbines, propellers, electric motors, electric transmission technology, electric generators, and monitoring and control systems. It is expected to meet future needs in many different areas such as quietness, fuel efficiency, survivability, and power.

The program began in September 1988 when the Chief of Naval Operations declared that an integrated electric drive and associated technologies would be the method of propulsion for the next class of surface battle force combatants. The Navy estimates that the system will cost more than $1 billion to develop.

Results of Analysis

We identified $40.9 million in potential reductions to the Navy's fiscal year 1992 budget request of $80.9 million.

As of July 1991, the Navy had awarded one major competitive contract to develop the electric drive propulsion system. In fiscal year 1992 it plans to continue work on the propulsion system, award a developmental contract for a gas turbine engine, and initiate design studies in the areas of advanced propulsion, monitoring and control, and electrical

[1]The acquisition phase referred to in this report as full-scale development is a phase of system acquisition that leads immediately into the decision of whether to start production. The Department of Defense refers to this phase as engineering and manufacturing development in recent directives, and milestone II is the point at which approval to commence full-scale development is scheduled to occur.

distribution. This electric drive system now being developed includes a propulsion, transmission, and generator plant. Program officials said they would need about $40 million in fiscal year 1992 to continue work under this contract. Program officials said if the funding request is reduced, the other projects' contract awards will be delayed.

Department of Defense instructions stipulate that projects estimated to cost over $300 million for research, development, test, and evaluation should be designated as Acquisition Category I[2] programs and be subject to high-level milestone reviews. Although the electric drive program office estimates the cost of the electric drive development to exceed $1 billion, the Navy has not yet designated it as an acquisition category program and has not yet held a program milestone review. Acquisition category programs require several key program documents such as independent cost estimates and logistic support and spend plans. As of June 18, 1991, these plans had not been completed.

Since the program office's estimate for development exceeds $1 billion, we believe that it should be subjected to acquisition category program reviews. As a result, the Congress may wish to consider reducing the Navy's fiscal year 1992 budget request by $40.9 million while allowing the program to continue at a slower pace until Navy obtains independent cost estimates and subjects the program to Office of the Secretary of Defense milestone reviews.

MK-48 Advanced Capability Torpedo

The MK-48 Advanced Capability Torpedo product improvement program consists of a software upgrade and the development of an improved propulsion system called the Closed Cycle Advanced Capability Propulsion System.

Results of Analysis

We identified $52.6 million in potential reductions to the fiscal year 1992 budget request and $4.3 million in potential rescissions from fiscal year 1991 appropriated funds.

In September 1989 the program encountered propulsion system testing problems and was subsequently restructured. These problems resulted

[2]Department of Defense instructions require all acquisition programs, excluding highly sensitive programs, to be placed in one of four acquisition categories. These categories determine the level of decision authority required to advance through the acquisition process. An Acquisition Category I Navy program requires decision at important milestones by the Assistant Secretary of Defense for Acquisition or by the Secretary of Navy.

in about a 1-year delay, to March 1991, in starting full-scale development and increased estimated research, development, test, and evaluation costs by about $66 million over the $122 million initially planned for full-scale development. Since that time the program has been delayed at least another year and, as of May 1991, the program's projected cost and schedule were unknown. Because of continued problems, the program will not enter full- scale development in fiscal year 1991, and it is not clear whether the program will enter full-scale development in fiscal year 1992.

Since January 1991 the Navy's technical design agent for the MK-48 torpedo has been directing a major research and testing effort. The results of these tests are to be available in September 1991, and the Navy plans to decide subsequently whether to pursue full-scale development, perform additional tests, or retain the program in the demonstration and validation phase.

The Navy planned to enter full-scale development in fiscal year 1991 and obligate $28.6 million from fiscal year 1991 funds toward the full-scale development contract. Because of contractor test failures and the Navy's decision to pursue an independent test program, the Navy directed the majority of these contract funds to research work at Navy laboratories and a university research facility. As of May 1991, the Navy had only $4.3 million set aside for the development contract.

The supporting documentation for the fiscal year 1992 budget request submitted to the Congress does not accurately show the program's current status. Program officials told us that the program will not be in full-scale development until at least fiscal year 1992. They further noted that until the results of the testing program are known, they cannot provide any valid cost estimates or plans for fiscal year 1992 activities. The Navy had planned to spend about $32.7 million of the $52.6 million requested for fiscal year 1992 on the full-scale development contract.

Since the Navy cannot accurately forecast its fiscal year 1992 plans or obligation, the Congress may wish to reduce the fiscal year 1992 request by $52.6 million and rescind the $4.3 million from fiscal year 1991 appropriations.

Container Offloading and Transfer System

The Container Offloading and Transfer System program's only project is to provide funds for test and evaluation of a modular elevated causeway. A modular evaluated causeway is a specially designed pier

that can be quickly assembled and constructed on an unimproved beach to allow small craft used to shuttle cargo from ships at anchor to unload.

Results of Analysis

We identified $1 million in potential reductions to the fiscal year 1992 budget. The Navy has not yet built an elevated causeway; thus, funds to be used for testing the causeway will not be needed during fiscal year 1992. Further, the Navy can not estimate when the causeway will be built.

Airborne Antisubmarine Warfare Development

The Navy is developing the Airborne Low Frequency Sonar system to enhance the capabilities of SH-60F and SH-60B antisubmarine warfare helicopters to detect threat submarines.

Results of Analysis

We identified $25.8 million in potential reductions to the fiscal year 1992 budget request and $1.8 million in potential rescissions from fiscal year 1991 appropriated funds.

The Navy had expected to enter a full-scale development contract on the program during fiscal year 1991, but the program was delayed. Program officials cited the uncertainty of whether to use a standard signal processor as the primary reason for delays. As a result, the officials will not obligate $1.8 million for the contract.

Navy program officials now plan to enter the full-scale development contract in November 1991 and use any remaining fiscal year 1991 funds for efforts not funded in fiscal year 1992. Entering into a full-scale development contract in November 1991 is contingent on milestone II approval. Under Department of Defense regulations, one condition for such approval is that a program must be fully funded (i.e., the Department of Defense has committed enough funds in current and future years to accomplish the objectives of the program). According to the program office, this program requires $33.9 million in fiscal year 1992, but the Navy is requesting only $25.8 million. Program officials stated that the program is also not fully funded in future years. Since this is an impediment to a milestone authorization, this program may not be allowed to proceed.

Because the development contract did not begin in 1991, $1.8 million could be rescinded. Since the program is not fully funded, it does not meet milestone affordability requirements for advancement, and the entire fiscal year 1992 request for $25.8 million could be reduced.

Air Launch Saturation System

The Air Launch Saturation System is envisioned by the Navy as an alternative to the canceled Tacit Rainbow program. It would be a new program that would provide commanders with a weapon that could destroy or suppress the enemy's air defense capabilities.

Results of Analysis

We identified $7.5 million in potential reductions to the fiscal year 1992 budget request because the Navy has no current plans, requirements, or estimates for this program. Navy officials advised us that the Office of the Secretary of Defense may provide some direction after a joint services study scheduled for completion in August or September 1991. The study should result in recommendations concerning the services' approaches to the destruction and suppression of enemy air defense capabilities.

Vertical Launch Antisubmarine Rocket

The Vertical Launch Antisubmarine Rocket program provides for the design, development, and testing of an intermediate, all-weather, quick-reaction antisubmarine warfare weapon for surface ships equipped with vertical launch systems. The originally designed Vertical Launch Rocket delivers a MK-46 Mod 5 Torpedo. For fiscal year 1991 and beyond, research, development, test, and evaluation funding is planned to provide for design, development, test and integration of the MK-50 torpedo with the Vertical Launch Rocket.

Results of Analysis

We identified potential reductions of $36.9 million to the fiscal year 1992 budget request and potential rescissions of $14.8 million from fiscal year 1991 appropriated funds.

Because of the delays in instituting the MK-50 variant effort and the fact that the Navy has not finalized its consideration of issues related to antisubmarine standoff weapons, the Congress may wish to consider rescinding fiscal year 1991 funding and not appropriating funds requested for fiscal year 1992.

According to Navy officials, fiscal year 1991 funds are being held pending the completion of the Navy's antisubmarine warfare standoff weapon study, the results of which were presented to the Assistant Secretary of the Navy for Research, Development, and Acquisition during July 1991. It is anticipated that the results of the study will assist the Navy in deciding the future direction of the antisubmarine standoff weapon. Until such decisions are made, no development efforts are planned for the MK-50 variant.

It is unlikely that fiscal year 1991 funding can be used during fiscal year 1991. Most of the funds were to be used for planning contracts. Because of the program delays involved with the MK-46 variant and the Navy's current assessment of standoff weapons, program officials stated that little has been done on the MK-50 variant and the planning contracts will not be ready for issuance in fiscal year 1991.

As an alternative, due to current uncertainties concerning the entire standoff weapon system program, the Congress may wish to appropriate fiscal year 1992 funding for the program but restrict obligational authority until the Navy reports to the Congress its plans for antisubmarine warfare standoff weapon development. Under this alternative, the fiscal year 1991 funds could be rescinded.

Tomahawk

The Tomahawk program, also known as Theater Mission Planning element, consists of three development efforts. Two efforts, the Tomahawk Theater Mission Planning Center upgrade and the Afloat Planning System, are developing software to decrease Tomahawk mission planning time on both land and at sea, respectively. The third effort, the Integrated Strike Planning System, is designed to provide a decision support system that integrates Tomahawk and the weapons planning at sea to achieve optimum use of strike assets.

Results of Analysis

We identified $2.1 million in potential reductions to the fiscal year 1992 budget request.

The Navy planned to spend $3.6 million of the $28.8 million it requested for fiscal year 1992 for the program on the Integrated Strike Planning System development. This amount was based on continued funding support by both the air and surface warfare branches within the Office of the Chief of Naval Operations. However, according to Navy officials, the air warfare branch recently decided to terminate funding support for

the Integrated Strike Planning System, and the surface warfare branch reduced its fiscal year 1992 funding commitment to no more than $1.5 million. Consequently, if the entire $28.8 million requested for this program is appropriated, up to $2.1 million will be available for other purposes.

Navy officials told us they plan to use the $2.1 million, if appropriated, to pay for the Navy's share of a contractor cost overrun on the upgrade effort.

Surface Antisubmarine Warfare Systems Improvement

The Surface Antisubmarine Warfare System improvement program involves the funding of the Navy's AN/SQY-1 antisubmarine warfare combat system and upgrades to the AN/SQQ-89 (V) surface antisubmarine warfare combat system. The SQY-1 surface ship antisubmarine combat system (formerly the AN/SQQ-89 improvement program) is intended to support the surface ship antisubmarine warfare mission by improving the integrated detection, location, tracking, and fire control currently provided under the AN/SQQ-89 basic combat system.

Since beginning design definition in 1986, the SQY-1 project has been restructured many times. In February 1987 the Navy restructured the project into three blocks in response to funding constraints and congressional concerns. (A block is the grouping of related changes or modifications as a unit). By June 1989 the Navy concluded that the project was still not executable and restructured it again. Block 1 was eliminated as a separate software upgrade and incorporated into blocks 2 and 3. Block 2 was modified to include more battle force-capable ships but with less sonar capability than originally planned. The Navy also reduced the number of ships designated to receive block 3 sonar systems.

Our classified February 1991 report stated that block 2, for existing battle force-capable ships, would not meet a key operational requirement. The report recommended that the Navy terminate block 2 because of high program costs compared to the benefits to be gained. In addition, the report highlighted several unresolved operational issues that needed to be addressed before block 3 proceeded into full-scale development.

The Navy had planned to present the project to the Defense Acquisition Board in 1990 for approval to move to full-scale engineering development. Due to development risks and high project costs, the Navy restructured the SQY-1 project and reduced the quantity of systems to be obtained. Two events resulted in the reduction in the number of ships to

be equipped with SQY-1. A September 1990 memo from the Secretary of Defense recommended deferring installation of the system on frigates. Also, a December 1990 memo from the Secretary of the Navy recommended canceling construction of the DDG-51 Flight 3 ships, causing the block 3 development effort to be deferred.

In April 1991 a Navy program review approved the restructured project for full-scale engineering development. The restructured project (basically block 2 for battle force-capable ships) will not meet all of the SQY-1's requirements; however, the Navy believes the planned system will provide a significant improvement to surface antisubmarine warfare operations and have expansion capabilities. Furthermore, Navy officials said that, under certain conditions, the system is capable of achieving all requirements. In addition to reducing the number of ships to be equipped with SQY-1, the current project restructuring highlights include initiating a risk reduction program to address high-risk technical issues that could affect project development and extending the planned development schedule.

Results of Analysis

We identified up to $78 million in potential reductions to the fiscal year 1992 budget request and $86 million in potential rescissions from fiscal year 1991 appropriated funds.

Although the Navy was tentatively planning to present the SQY-1 project to the Defense Acquisition Board in late August for full-scale development approval, it has now postponed this date until issues raised by the Office of the Secretary of Defense are resolved. The issues concern the number of ships that will receive the system, the project's testing program, and documentation questions. The Navy also has recognized that risks exist that could negatively impact the project. Specifically, the Navy has directed that a risk reduction program be established for the SQY-1. This program, estimated to cost about $40 million and planned to last about 2-1/2 years, will address six major technical risks that could critically affect the project's development schedule or operational performance.

Currently, $86 million of fiscal year 1991 funds are being deferred by the Office of the Secretary of Defense pending approval by the Defense Acquisition Board. Once approved, the Navy plans to award the full-scale development contract. The Navy plans to apply $50 million of the

fiscal year 1991 funds toward this contract, another $33 million for government-furnished equipment, and the rest primarily for laboratory services within the Navy.

The Congress may wish to consider several options in its deliberations concerning the SQY-1 program. The Congress may wish to accept our Block 2 recommendation and terminate funding. However, if the Congress decides to continue the project, it may wish to direct the Navy to retain the project in an advanced technology status. The Congress may also wish to withhold $78 million of fiscal year 1992 funding until the Secretary of Defense certifies to the Congress that the major technical risks have been mitigated to the extent that the project should enter full-scale engineering development. Navy estimates that a risk reduction effort would cost about $40 million.

The project's manager stated that the Department of Defense reduced the project's fiscal year 1992 budget because it anticipated that the Navy would use fiscal year 1991 funds that were still available because of schedule slippage. He stated that any further reduction in funding for fiscal years 1991 or 1992 will result in further delay.

Fixed Distributed System

The Fixed Distributed System is an undersea surveillance system and the first such Department of Defense system to use fiber optic technology and new-generation information processing. The Fixed Distributed System consists of two primary segments, an underwater segment and a shore information processing segment.

The underwater segment will provide an increase in coverage, the number of channels, and detection. The shore information processing segment will help to integrate existing systems, enhance data analysis, and reduce overall staffing requirements. In 1990 the Navy added a requirement for a rapidly deployed or mobile version of the fixed system. Both the fixed and rapidly deployable systems are to be developed concurrently.

Results of Analysis

We identified $22 million in potential reductions to the fiscal year 1992 budget request and $33.7 million in potential rescissions from fiscal year 1991 appropriated funds.

The fiscal year 1992 budget request can be reduced by $22 million because the Navy has overestimated the amount needed for the fiscal

year 1992 cable contracts by $17 million and its fiscal year 1992 budget has a net "reserve" line of $5 million, which program officials hope to use for unknown contingencies.

The fiscal year 1992 budget submission provides for $82 million for the shore signal information processing system. As part of the Fixed Distributed System milestone II approval in 1989, the Office of the Secretary of Defense called for a review of the shore segment before the award of the contract. The results of this review are pending.

Fiscal year 1991 funds totaling $33.7 million can be rescinded because the Navy's program office does not need $10 million for the execution of contracts to produce cables for the Fixed Distributed Systems, $1 million because a laboratory project was canceled, and $22.7 million because the June 1991 schedule for award of the shore segment development contract had been delayed.

Program officials said they would apply these savings to the mobile or rapidly deployed system and its processor, recent underwater segment engineering changes and other modifications in the development contract, and previously unknown or undefined requirements.

Target Systems Development

The Target Systems Development program develops and procures aerial and surface targets for weapon systems testing and fleet training. One of four projects in this program, the Supersonic Low Altitude Target, is a recoverable, remote-controlled target vehicle missile. The project entered full-scale development in September 1984, and in January 1987 flight testing was authorized. The Navy acquired 15 development model targets to conduct flight tests.

The Supersonic Low Altitude Target project has had a history of test failures, milestone slippages, and restructurings. Since 1987 seven of eight flight tests have failed because of various technical problems. After the latest test flight failure in May 1991, Navy officials decided to reevaluate the project.

Results of Analysis

We identified up to $54.9 million in potential reductions to the fiscal year 1992 budget request of $73 million.

Navy officials planned to spend $18.1 million of the $73 million for the Supersonic Low Altitude Target project to continue full-scale development during fiscal year 1992. The remaining $54.9 million was intended to procure 30 targets to be used for testing various other weapon systems. However, because of the problems that have been experienced in tests, the Navy no longer plans to procure the 30 targets. Instead, the Navy is evaluating two alternatives to restructure the program.

The first alternative proposes suspending flight testing until a contractor's ground tests confirm that known design deficiencies have been corrected. In addition, beginning in June 1992, the Navy would order 15 more development models to complete developmental testing. Under this plan, targets for testing other weapon systems would not be procured until fiscal year 1994. According to Navy estimates, this alternative would require $51 million in fiscal year 1992 funding. Of this total, project officials would use $34.7 million to support contractor ground and flight tests and $16.3 million as the first-year increment toward the purchase of the 15 additional test targets.

The second alternative proposes combining Navy and contractor flight tests during September 1991 through April 1992 and delaying ordering the 15 additional development models targets until fiscal year 1993. As with the first alternative, targets for weapon system evaluation would not be procured until fiscal year 1994. Navy project officials have not developed a cost estimate for the second alternative.

In July 1991 the Naval Air Systems Command's Acquisition Program Review Board accepted the first alternative to restructure the program. In September 1991 this alternative will be presented for approval to the Assistant Secretary of the Navy for Research, Development, and Acquisition.

According to Navy officials, most of the 15 additional development models were originally planned for the project but were deleted due to budgetary constraints. Officials said that delaying acquisition of the models until fiscal year 1993 would slip the target's initial operational capability dates and increase program costs. Also, the officials stated the technical risk of a fiscal year 1992 contract award is not much greater than a fiscal year 1993 contract award because if subsequent testing were to reveal the need for any design changes, those changes would be incorporated into the 15 development models.

Other potential options for reducing the fiscal year 1992 budget include reducing the request by $38.3 million, which would provide the Navy with $34.7 million to conduct enhanced contractor testing to correct known deficiencies but would not provide for acquisition of any new development models, and reducing the request by $22 million, which would provide $51 million for the enhanced contractor testing effort and funds to begin acquisition of 15 development models late in fiscal year 1992.

Additional Fiscal Year 1991 Research, Development, Test, and Evaluation Funds Available for Rescission

Dollars in millions

Program element	Element number	Amount	Status
Aircraft Equipment Reliability/ Maintenance Program	0205633N	$1.4	Terminated, proposed for rescission
Marine Corps Ground Combat/Supporting Arms System	0206623M	1.5	Proposed for rescission
Tacit Rainbow	0207316N	8.0	Held, pending transfer to another missile
Navy Advanced Tactical Fighter	0603231N	24.1	Held, proposed for reprogramming
NATO Anti-Air Warfare System	0603319N	13.2	Terminated, proposed for reprogramming
Mine Development	0603601N	1.3	Proposed for rescission
Marine Corps Mine Countermeasures Systems	0603612M	4.6	Proposed for rescission
Advanced Minor Caliber Gun	0603656N	3.0	Held, pending fiscal year 1992 start
Ocean Engineering Technical Development	0603713N	1.4	Terminated, proposed for reprogramming
P-3 Modernization	0604221N	23.9	Proposed for reprogramming
Tactical Command Systems	0604231M	4.2	Held, pending project review
Advanced Tactical Aircraft	0604233N	827.0	Terminated, proposed for reprogramming
V-22 Osprey	0604262N	79.3	Held, pending review of requirements
Consolidated Electronic Warfare Development	0604270N	15.0	Proposed for rescission
Sea Lance	0604309N	71.0	Proposed for rescission
5-inch Rolling Air Frame Missile	0604369N	3.0	Terminated, proposed for reprogramming
Submarine Combat System	0604524N	10.0	Held, pending review of Enhanced Modular Signal Processor
Ship Contract Design/ Development	0604567N	2.0	Proposed for rescission
Naval Gunnery Improvements	0604602N	10.1	Terminated, proposed for rescission
Marine Corps Mine Countermeasures System Engineering Development	0604612M	5.5	Proposed for rescission

(continued)

Program element	Element number	Amount	Status
Surface Antisubmarine Warfare System Improvement	0604713N	$30.0	[a]
Intelligence (Engineering)	0604761N	1.0	Excess, proposed for rescission
Total		**$1,140.5**	

Note: As of July 3, 1991.

[a]The Navy has begun concept definition for the AN/SQQ-89(V) sonar system with prior funds and has requested fiscal year 1992 funds. An additional $86 million is being held by the the Department of Defense Comptroller, as discussed in appendix I.

Major Contributors to This Report

National Security and International Affairs Division, Washington, D.C.	Brad Hathaway, Associate Director Patrick Donahue, Assistant Director Paul O'Brien, Evaluator-in-Charge James Dowd, Evaluator
Boston Regional Office	Jeffrey Rose, Regional Assignment Manager Joseph Rizzo, Site Senior
Philadelphia Regional Office	Clifford Martin, Regional Assignment Manager John Heere, Site Senior Carolyn Alessi, Evaluator