October 1991

OPERATION DESERT SHIELD/STORM

Costs and Funding Requirements

United States General Accounting Office

GAO

Report to the Chairman, Committee on Armed Services, House of Representatives

September 1991
Dear Mr. Chairman:

In response to your request, we have evaluated the incremental cost of Operations Desert Shield and Desert Storm. Specifically, our objectives were to (1) evaluate the executive branch's cost estimates and funding requirements for the operation, (2) determine the extent to which the United States needs to provide any additional funding, and (3) determine how the Department of Defense (DOD) and the individual services tracked the operation's costs. Specific information on the valuation and reporting of allied contributions, both cash and assistance-in-kind, will be reported separately. We testified in May 1991 that the executive branch's incremental costs estimate appeared high and that funding requirements were much lower than reported costs. This report expands on that testimony.

Results in Brief

The Office of Management and Budget's (OMB) estimated $47.5 billion for Operation Desert Shield/Storm funding requirements appears to be overstated. The estimate reflects (1) higher-than-actual costs incurred by the revolving fund accounts, (2) overestimated maintenance needs, (3) replacement of recoverable munitions, and (4) procurements that were canceled due to the operation's short duration.

Foreign contributions to the Defense Cooperation Account should fully cover the operation's funding requirement; therefore, the $15 billion appropriated to the Persian Gulf Regional Defense Fund will not be needed. Foreign commitments for cash contributions to help defray the U.S. costs for the operation total $48.3 billion, or almost $800 million more than OMB's funding requirement estimate, assuming that each nation fulfills its pledge. Countries making these pledges have already contributed $42.4 billion, or about 88 percent of the total amount pledged.

1 This report refers to Operations Desert Shield and Desert Storm as the operation.

2 Cost of Operation Desert Shield and Desert Storm and Allied Contributions (GAO/T-NSIAD-91-34, May 15, 1991)
Tracking incremental costs for the operation was difficult because the services only captured the total costs at the unit level and did not subtract the costs they would have normally incurred had there been no crisis in the Persian Gulf. These adjustments were made at the higher reporting levels. Also, cost data are aggregated into broad and general categories that make it difficult to verify whether or not specific costs have been properly charged to the operation.

Background

Five days after Iraq’s invasion of Kuwait, the President ordered the deployment of U.S. forces to the Persian Gulf area. This deployment, called Operation Desert Shield, and the subsequent military conflict to liberate Kuwait, called Operation Desert Storm, constituted the largest U.S. military action since the Vietnam War. The United States ultimately deployed about 540,000 troops.

The cost of the U.S. commitment to the operation can be viewed in terms of total costs, incremental costs, and funding requirements. We estimate that the total cost of the operation will be over $100 billion. This total includes about $50 billion for the direct and indirect costs to raise, equip, operate, maintain, and support a force of 540,000 personnel. It also includes an estimated $10 billion in other costs such as the forgiveness of Egypt’s $7 billion debt to the United States.

The total cost also includes incremental costs for the operation. The Omnibus Budget Reconciliation Act of 1990 (P.L. 101-508) defines incremental costs to be only those costs that would not have been incurred except for the operation. For example, the regular pay of active duty personnel deployed for the operation would not be an incremental cost because these personnel would have been paid whether or not the operation took place. However, personnel costs for imminent danger pay and the pay of reservists called to active duty for the operation would be considered incremental. OMB estimates incremental costs at $61.1 billion; we discuss this matter below.

Funding requirements represent outlays that the United States has made or will ultimately be required to make, either from funds contributed by the allies or from the new budget authority provided by Congress. Not all costs translate into funding requirements, thus making funding requirements lower than costs. For example, the loss or destruction of weapons systems and inventory drawdowns are clearly costs of the operation. However, if the weapons and inventories are not replaced, there is no need for additional funding.
Congress, in enacting the Omnibus Budget Reconciliation Act of 1990, provided that the incremental costs of the operation would be considered emergency funding requirements not subject to the defense spending ceilings contained in the budget agreement for fiscal year 1991. Congress also established the Defense Cooperation Account, a mechanism to receive contributions from foreign countries and others for national defense purposes. All contributions for the operation were to be deposited in this account. Congress would then have to authorize the transfer of funds from this account before they could be spent.

For August and September 1990, DoD initially financed the operation by reallocating funds from programs with less immediate funding needs. The Secretary of Defense then authorized the use of Revised Statute 3732, 41 U.S.C. 11, the Feed and Forage Act, legislation that permits the services to overobligate its appropriated amounts for certain specific needs. Congress subsequently appropriated $2.1 billion to fund these fiscal year 1990 expenses (P.L. 101-403).

At the beginning of fiscal year 1991, DoD again reallocated funds and invoked Revised Statute 3732, and borrowed against future quarterly budget allocations. However, in April 1991, Congress enacted the Operations Desert Shield/Desert Storm Supplemental Appropriations Act (P.L. 102-28) to fund fiscal year 1991 obligations. This act appropriated $15 billion of taxpayer money to a newly established Persian Gulf Regional Defense Fund and authorized the transfer of $42.6 billion from the Defense Cooperation Account to various DoD appropriations accounts.

The Regional Defense Fund is to be used only when Cooperation Account funds are exhausted and is to be terminated upon payment of all incremental costs of the operation. Any amount of $15 billion or less remaining in the Fund at that time will be returned to the Treasury. Congress has appropriated $320.5 million from this Fund to be used for Operation Provide Comfort, a humanitarian relief effort in the Persian Gulf (P.L. 102-55).

Major contributors to the effort include: Saudi Arabia, Kuwait, United Arab Emirates, Germany, Japan, and Korea.

This act, dating from the Civil War, allows DoD to overobligate for clothing, subsistence, forage, fuel, quarters, transportation, and medical and hospital supplies.

So far, DoD has made transfers from the Defense Cooperation Account totaling $34.6 billion.
On July 9, 1991, the executive branch submitted a request for additional supplemental appropriations for the operation. This request includes new appropriations of $2.9 billion for fiscal year 1992 to be transferred from either the Defense Cooperation Account or the Persian Gulf Regional Defense Fund and a reallocation among accounts of $6.6 billion of the funds appropriated for fiscal year 1991 to fiscal year 1992.

### Incremental Cost Estimate for the Operation

OMB, as required by the Persian Gulf Conflict Supplemental Authorization and Personnel Benefits Act of 1991 (P.L. 102-25), is providing monthly reports on the incremental costs of the operation based on DOD data. Since May 1991 these monthly reports have stated that DOD's estimated total incremental cost for the operation will be about $61.1 billion. Of this amount, DOD has estimated that $47.1 billion will require funding. Thus, DOD's total incremental cost includes $47.1 billion in funding requirements and $14 billion in other costs that were either previously funded, will never require funding, or will not require funding in the next few years. (See app. 1.) These other costs include:

- $2.1 billion in fiscal year 1990 costs previously funded by a supplemental appropriation.
- $1.0 billion in costs covered through internal DOD budget restructuring.
- $1.2 billion in equipment lost and munitions consumed that DOD does not plan to replace as part of the planned reduction in forces over the next several years.
- $3.9 billion as the present value of long-term personnel benefits that will not affect near-term funding requirements.
- $5.8 billion in fuel and other assistance-in-kind provided by our allies that will not result in expenditures by the United States.

The $47.1 billion funding requirement consists of $26 billion in actual obligations for October 1990 through July 1991, $9.7 billion in what DOD calls accrued costs\(^6\) through July, and $11.4 billion in future estimated funding requirements. Additionally, other agencies have incurred about $400 million\(^7\) in incremental funding requirements bringing the total funding requirement to $47.5 billion.

\(^6\)According to a DOD official, accrued costs are those costs that have been incurred but have not yet had funds obligated for them. Some of these accrued costs are costs that we think are overstated.

\(^7\)This amount was for miscellaneous costs incurred for relief efforts funded by the State Department and personnel benefits funded by the Departments of Education and Veterans Affairs.
Observations Regarding Funding Requirement

We have several observations regarding the $47.1 billion funding requirement for DOD. First, this requirement may reflect higher-than-actual costs incurred by DOD's revolving fund operations, such as air and sea transportation and fuel. For example, the Military Airlift Command (MAC) is responsible for most of the movement by air of services' troops and equipment, which it does on a reimbursable basis. MAC establishes the rates it charges based on fuel costs, maintenance, administration, and equipment replacement for a planned number of flying hours each year. MAC has been charging its regular rates for all transportation even though it has received free fuel and some airlift and sealift from other countries.

MAC also continued charging its regular rates after having fully recovered its fixed costs for the year. MAC develops its rates based on its estimates of costs it will incur, including an amount to recapture fixed costs. The fixed costs are spread over its approved flying hours—450,000 in the fiscal year 1991 budget. To the extent MAC bills more than its approved flying hours, it will be recovering an amount in excess of its fixed costs. MAC officials advised us that MAC may end the year having flown twice their approved flying hours. Actual billed hours will not be known until the end of the fiscal year.

Also, the estimated cost of fuel may be overstated because oil prices have dropped since their high in November 1990. The price the services have been paying for fuel since October 1990 was based on those higher oil prices. According to a Defense Fuel Supply Center (DFSC) official, if the lower oil prices continue through the balance of the fiscal year, they will offset the higher prices DFSC was paying when the operation began. The lower prices have already resulted in a $300 million reduction in the related fuel funding estimate for fiscal year 1991.

According to DOD officials, any profit in the revolving funds at the end of the fiscal year could, with the approval of Congress, be (1) used to offset other fiscal year 1992 operation expenses, (2) rebated to the services, which would reduce fiscal year 1992 budget needs, or (3) used to reduce the transportation and fuel rates for fiscal year 1992.

Second, the $4.4 billion funding requirement estimate for depot level and other maintenance may be high. We visited several service units, including an Army infantry division, Navy and Air Force tactical air wings, and a Marine expeditionary force. According to officials at these locations who are responsible for equipment used in the operation, the
equipment may not require the increased levels of maintenance previously expected and included in the funding requirement. These officials' statements were based on their knowledge of inspections of the equipment and repairs done since the equipment returned to the units in the United States.

This suggests that the final funding requirement for equipment repair and maintenance could be less than the total of $4.4 billion. This would mean that DOD may not need the entire $2.5 billion for maintenance that the executive branch has requested be reallocated from fiscal year 1991 to fiscal year 1992 in the supplemental request for emergency funding submitted July 9, 1991.

Third, the funding requirement for munitions may be less than the $4.3 billion estimate. Marine Corps data show that the largest munitions expenditure category is not the munitions used in combat or training but a category that represents opened crates of munitions that were not consumed and are being recovered and examined in the Persian Gulf. Marine Corps officials advised us that they expect some of these munitions to be recovered and to be suitable for future use. According to DOD officials, the Army's and possibly the Air Force's munitions experience may be similar to the Marine Corps', but it will be several months before a full assessment is complete.

This recovery should reduce the total funding requirement for munitions, now placed at $4.3 billion. The executive branch's July 9, 1991, supplemental request includes $482 million in new funding for munitions, in addition to the $3.8 billion appropriated in April. DOD officials advised us that they plan to examine how recovered and newly procured munitions levels affect fiscal year 1993 budget needs. However, the recovery efforts may negate any need for this additional $482 million.

Fourth, supplies and equipment were ordered and shipped to the Persian Gulf area on the premise that the operation would include a 90-day war. Since the war did not last that long, service personnel are now canceling orders and deobligating funds for items that will not be needed. For example, the Army is reporting a total of $111 million in cancellations through June 1991. Also, the Navy reported a reduction of $212 million in reported fuel costs to reflect the free fuel received as assistance-in-kind. OMB is reflecting these cancellations in the monthly cost reports, but has not yet reduced the $47.1 billion total funding requirement. Because the services are still canceling orders, we will not
know the impact of these cancellations on the total funding requirement until a full accounting of the operation has been completed.

Based on the incremental funding requirement of $47.5 billion for fiscal years 1991 through 1992, the operation's funding requirement will not exceed funds available from the Defense Cooperation Account, assuming all pledges are met. As of September 12, 1991, our allies had contributed about $42.4 billion in cash to the Defense Cooperation Account and were expected to contribute an additional $5.9 billion in cash for a total of about $48.3 billion. This would leave a balance in the Defense Cooperation Account of at least $800 million, which could be used to reimburse the Treasury for funding provided in fiscal year 1990 or for other operation-related expenses already incurred by the United States. As shown in this report, we believe the balance may be even greater because funding requirements do not appear to be as high as OMB's estimate. The $15 billion of U.S. funds that Congress appropriated to the Persian Gulf Regional Defense Fund will not be needed.

When considering the cost of the operation, it should be recognized that DOD's financial systems lack the capability to determine the costs with reliability. The services did not have systems in place to capture the actual incremental costs of the operation. Only the total obligations were captured by the accounting systems. The services used management information systems to identify incremental obligations and to estimate costs. Obligational data are generated by individual military units that report them up the chain of command. The data are aggregated into broad categories as they move up the chain. These broad categories make it difficult to verify whether or not specific expenses have been properly charged to the operation. For example, one command reported operation expenses totaling $1.5 billion for October through December 1990. Although the mission had 19 cost categories, about $1 billion of the $1.5 billion was assigned to one category entitled "Special Activities." Budget officials at the command were not able to specify the subcategories of expenditures grouped in this category.

After the initial deployment of troops to the Persian Gulf, service officials set up internal control systems to ensure that supplies and material requisitioned by personnel were essential to the operation and that only the operation's expenses were labeled as such. The services generally
used the normal chain of review for obligations, with supply and comptroller officials responsible for approving or disapproving purchases or determining whether they should be charged to the operation. In addition, an official at one Army command stated that levels of approval were based on the dollar amount of the requisition; that is, high-dollar requisitions required the approval of higher level officials.

According to officials at Army installations we visited, at the beginning of the operation, they disapproved as many as 40 percent of submitted requisitions. Marine officials said that they had disapproved about 25 percent of the requisitions at the early stages of the operation. However, Army and Marine officials stated that the number of questionable requisitions decreased as units became more familiar with the definition and limits of the operation's needs. Examples of items rejected as operation requirements were cellular phones, photographic film, and air conditioners. Many of the rejections were done informally through telephone conversations with comptroller and budget officials and requesters.

Service officials stated that they relied on the judgment of personnel reviewing the obligating documents and personnel in the field who are classifying the expenses as operation related to prevent inappropriate expenditures or errors. The officials stated that they had issued guidance on operation costs, however, they believed some inappropriate or erroneous obligations would get through the process.

Our review of a limited number of the services' requisitions for materials and equipment showed that they were directly related to the operation. However, some service internal review teams conducted early reviews and identified problems. One Army command issued an internal review report that concluded "the necessity of some of the items that were purchased in support of Desert Shield appeared questionable."

When contributions to the Defense Cooperation Account equal or exceed anticipated funding requirements, Congress should rescind the amount remaining in the Persian Gulf Regional Defense Fund before the fund would otherwise terminate.

Congress should use any remaining funds from the Defense Cooperation Account to cover other operation-related costs, such as reimbursing the U.S. Treasury for the $2.1 billion appropriated for fiscal year 1990 costs of the operation and the $320.5 million for Operation Provide Comfort, or paying for the costs accruing after fiscal year 1995 associated with

Congress should not appropriate the $482 million for munitions requested in the July 9, 1991, supplemental until the requirement is clear. Also, Congress should not transfer the $2.5 billion for maintenance costs into fiscal year 1992 until the needs have been determined.

Scope and Methodology

To assess the operation's cost, we (1) reviewed DOD's request for emergency funding and OMB's reports on the operation's estimated incremental costs, (2) compared cost data reported by OMB with data on actual obligations reported by DOD, and (3) examined DOD's estimate of phasedown and redeployment costs and the procurement portion of the emergency funding legislation. We also examined the cost data to determine whether it was appropriate and reasonable based on the criteria set forward in legislation and agency guidance. We also interviewed DOD and OMB officials to determine how the estimates were derived.

We interviewed officials from the Office of the Comptroller for the Office of the Secretary of Defense and the Departments of the Army, Navy, and Air Force, and the Marine Corps to determine how DOD tracked the operation's costs. We also interviewed appropriate officials at field locations throughout the United States.

To determine how DOD accumulated costs, we reviewed accounting records and cost reports. We also tracked a limited number of requisitions from the point of origin to the major command level to determine how accurately costs were reported up the chain of command.

We reported to the appropriate service audit agency allegations that funds were being improperly obligated either for items previously disapproved because of budget constraints or for inappropriate items that have been approved as operation-related expenses.

We conducted our review from September 1990 through September 1991 in accordance with generally accepted government auditing standards. As requested, we did not obtain written agency comments on this report. However, we have discussed our report with DOD program officials and have incorporated their comments where appropriate.
As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies to the Chairman, Senate Committee on Armed Services; the Secretary of Defense; the Director, Office of Management and Budget; and appropriate congressional committees. We will also send copies to other interested parties on request.

This report was prepared under the direction of Paul F. Math, Director, Research, Development, Acquisition, and Procurement Issues, who may be reached on (202) 275-4587 if you or your staff have any questions. Other major contributors are listed in appendix II.

Sincerely yours,

Frank C. Conahan
Assistant Comptroller General
Appendix I

DOD’s Estimated Incremental Costs for Operation Desert Shield/Storm

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount (in billions)</th>
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<tr>
<td>Airlift</td>
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<tr>
<td>Sealift</td>
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<td>Personnel</td>
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<td>Personnel support</td>
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<tr>
<td>Operating support</td>
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<tr>
<td>Maintenance</td>
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<tr>
<td>Fuel</td>
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<tr>
<td>Procurement</td>
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<tr>
<td>Munitions</td>
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<tr>
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<td><strong>Total funding requirement</strong></td>
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<td>Fiscal year 1990 appropriation</td>
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<td>Present value of long-term personnel benefits</td>
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<tr>
<td>Assistance-in-kind</td>
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<tr>
<td><strong>Total incremental cost</strong></td>
<td><strong>$61.1</strong></td>
</tr>
</tbody>
</table>

*Total funding requirements also include $400 million in funding for Departments of State, Education, and Veterans Affairs, bringing this total to $47.5 billion.*
Appendix II

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