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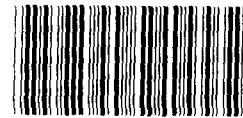
GAO

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

February 1988

AIR FORCE BUDGET

Potential for Reducing Requirements and Funding for Aircraft Spares



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

National Security and
International Affairs Division

B-225116

February 18, 1988

The Honorable Bill Chappell, Jr.
Chairman, Subcommittee on Defense
Committee on Appropriations
House of Representatives

Dear Mr. Chairman:

In response to your request, we examined the potential for reducing the Air Force's fiscal year 1988 requirements and funding request for aircraft replenishment spares in the aircraft procurement appropriation. Also, we compared the Air Force's fiscal year 1988 budgeted and updated procurement requirements for aircraft replenishment spares, and examined the Air Force's performance in obligating prior years' funds for the purchase of aircraft spares. Our examination included an indepth review of the accuracy of budget support documentation and reasonableness of budget estimating methodologies. Our review was made in accordance with generally accepted government auditing standards.

We briefed your representatives on June 22, August 17, and October 8, 1987, and identified potential reductions of \$1,226.9 million in the Air Force's funding for peacetime operating stocks of aircraft replenishment spares. We also pointed out that the Air Force's fiscal year 1988 updated procurement requirements for aircraft replenishment spares were \$1,643.2 million less than the budgeted requirements on which its funding request was based. Additionally, we reported that the Air Force was experiencing substantial shortfalls in obligating prior years' funding appropriated for the procurement of aircraft replenishment spares.

As requested by your office, this report summarizes the results of our review. Details on the potential reductions we identified are in appendix I. A comparison of the Air Force's fiscal year 1988 budgeted and updated procurement requirements is in appendix II. Finally, information on the Air Force's performance in obligating prior years' funds is in appendix III.

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We discussed our findings with Air Force officials and considered their comments in preparing this report. As requested, we did not obtain DOD comments. We are sending copies of this report to the Chairman, Subcommittee on Defense, Senate Committee on Appropriations; the Chairmen, Senate and House Committees on Armed Services; the Secretaries of Defense and the Air Force; the Director, Office of Management and Budget; and other interested parties.

If you have any questions, please call me at 275-4268.

Sincerely yours,

A handwritten signature in cursive script that reads "Harry R. Finley".

Harry R. Finley
Senior Associate Director

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ABBREVIATIONS

AFLC	Air Force Logistics Command
ALC	Air Logistics Center
DOD	Department of Defense
GAO	General Accounting Office
O&M	Operations and Maintenance
OCALC	Oklahoma City Air Logistics Center
WRALC	Warner Robins Air Logistics Center

POTENTIAL FOR REDUCING THE AIR FORCE'S
FUNDING OF AIRCRAFT REPLENISHMENT SPARES

An overview of the Air Force's fiscal year 1988 funding request, and \$1,226.9 million of potential fiscal years 1988 and 1987 reductions we identified are presented below.

OVERVIEW OF FY 1988 FUNDING REQUEST

In arriving at the Air Force's fiscal year 1988 funding request of \$2,402.9 million for aircraft replenishment spares (\$2,109.4 million for peacetime spares and \$293.5 million for wartime spares), the Air Force Comptroller's Office reduced the budgeted requirements for peacetime spares by \$201.6 million to reflect anticipated performance in obligating funds. This reduction was an overall estimate based on past experience and was not weapon system or item specific.

Subsequently, the Department of Defense (DOD) reduced the Air Force's proposed funding request by \$802.3 million (\$348.7 million for peacetime spares and \$453.6 million for wartime spares). Approximately 79 percent of the peacetime reduction was related to the B-1 bomber (\$112.5 million) and the F-100 engine (\$163.2 million). The remainder of the peacetime reduction was due to such things as changes in DOD's inflation and profit policies. DOD initially reduced the proposed B-1 bomber funding by \$366 million on the basis that a 15-percent increase in planned flying hours did not justify a 300-percent increase in funding over the prior fiscal year. However, \$253.5 million of the initial reduction was restored without explanation.

Of the \$453.6 million reduction for wartime spares, \$400 million was because the Air Force had used \$1.2 billion in excess prior years' peacetime funding for wartime spares requirements. The remainder of the wartime reduction was attributable to an exchange of wartime funding for peacetime funding and to a change in DOD's inflation and profit policies.

POTENTIAL REDUCTIONS

We identified \$1,226.9 million of potential reductions to the Air Force's fiscal years 1988 and 1987 funding for aircraft replenishment spares, as detailed below.

Non-recurring issue and other
additives (\$221.8 million)

Non-recurring issue additives are one-time spares requirements for special projects or foreign military sales that are manually added to the requirement system's computed budgeted requirements for peacetime aircraft spares after the March 31 cutoff date. Other additives are miscellaneous requirements that are also manually added after the March 31 cutoff date. The Air Force's fiscal year 1988 funding request for peacetime aircraft spares included \$494.9 million of non-recurring issue and other selected miscellaneous additives. The Oklahoma City and Warner Robins ALCs accounted for 82 percent of this amount, or \$247.2 million and \$160.2 million, respectively.

We reviewed \$337.4 million of the \$407.4 million budgeted for non-recurring issue and other additive spares by the Oklahoma City and Warner Robins ALCs. We found that \$221.8 million, or about 66 percent of the amount reviewed, could be reduced because the requirements were either no longer valid or not adequately supported due to program reductions or slippage, overstated cost estimates, excess assets which could be used to satisfy requirements, transfer of requirements from appropriation funding to stock funding, use of prior years' funds to satisfy requirements, and use of unsupported methodology to compute requirements.

For example, the Oklahoma City ALC budgeted \$49.1 million for KC-135 aircraft electrical wiring replacement. This project was subsequently delayed until fiscal year 1990 and a decision was made to fund it with operations and maintenance (O&M) funds. Also, the Warner Robins ALC budgeted \$14.1 million for replenishment spares for Combat Talon II mission equipment being installed on C-130H aircraft. Subsequently, the milestone date for initial operation capability tests for this program slipped from March 1988 to March 1989. As a result, a decision was made to include this requirement in Warner Robins' fiscal year 1989 budget, but the requirement was inadvertently left in the fiscal year 1988 budget.

Additional details on the potential reductions we identified are in tables I.1 and I.2 below.

Table I.1: Potential Reductions to Oklahoma City ALC's FY 1988 Funding for Non-recurring Issue and Other Additive Aircraft Spares

<u>Type of requirement</u>	<u>Budget amount (000)</u>	<u>Finding</u>	<u>Basis for finding</u>	<u>Potential reduction (000)</u>	<u>OCALC comments</u>
1. KC-135 usage factor reverification	\$18,322	Requirements deferred/ and overstated	This additive was input to cover usage factor changes for 34 stock numbers for the F108 engine on the KC-135. By comparing the additive amounts for each stock number with the amounts the item managers would actually buy, we found the FY 1988 additive should be \$5.044 million.	\$13,278	Concur.
2. B-1B support equipment	\$24,070	Requirements deferred and inadequately supported	This additive was for support equipment/ intermediate automatic test equipment spares (SE/IATE). No backup data exists on how the value of the additive was determined. B-1B program officials told us the basic requirement was determined based on a \$15 million unsupported estimate input in the FY 1984 budget for support equipment. This amount was input every year until FY 1986, when it was increased to \$43 million. A management decision was made that 50 percent of the FY 1986 amount would be needed in FY 1987 plus final destination and transportation charge of 2.91 percent and a price escalation of 6.5 percent, arriving at a \$24 million additive requirement. This same amount was resubmitted in the FY 1988 budget. This methodology for developing the	\$24,070	Concur that 50 percent of requirement (\$12.035 million) will be deferred to FY 1990. Non-Concur that entire additive amount should be deleted.

<u>Type of requirement</u>	<u>Budget amount (000)</u>	<u>Finding</u>	<u>Basis for finding</u>	<u>Potential reduction (000)</u>	<u>OCALC comments</u>
			<p>budget does not substantiate that the additive was a bonafide requirement.</p> <p>Also this additive requirement was submitted and totally funded in the FY 1987 budget. B-1B officials said they resubmitted the additive in the FY 1988 budget because money for the additive wasn't expended in FY 1987. This is invalid because once the requirement is funded, the money can be spent in the following 3 years. This means the \$24 million funded in FY 1987 can be spent in FY 1988 or FY 1989. Resubmitting the amount in the FY 1988 budget is duplication.</p> <p>Finally, based on the Support Equipment Requirements Data Schedule, B-1B officials now believe that 50 percent of the support equipment requirements will be deferred to FY 1990.</p>		
3. B-1B multi-year additive (EAB/ESB)	\$21,882	Requirements inadequately supported	<p>This additive was to cover increases in spare parts requirements resulting from design changes to troubled portions of B-1B aircraft/components/spares. According to B-1B officials the \$21.882 million additive was an estimate arrived at by making a management decision to request funding for FY 1988 based on 50 percent of the average quarterly expenditure for B-1B spares in FY 1985 (\$43 million per quarter).</p>	\$21,882	<p>Agree that methodology is lacking but disagree that entire amount should be deleted. Believe a valid requirement exists, but unable to ascertain the precise value at this time.</p>

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<u>Type of requirement</u>	<u>Budget amount (000)</u>	<u>Finding</u>	<u>Basis for finding</u>	<u>Potential reduction (000)</u>	<u>OCALC comments</u>
			This estimating procedure is questionable and does not substantiate the requirement.		
4. B-1B strategic additive support spares	\$48,706	Requirements overstated	This additive was for the purchase of the fourth kit of strategic additive support spares (SASS) for the B-1B. We found that two items had been transferred to the D062 system's support stock fund, six items had assets in termination/excess that could be used, and for the remaining items, the estimated unit prices used for the budget submission were updated by the recent actual/definitized prices shown in procurement history records. As a result of these analyses, we recommend the following budget reductions:	\$ 4,546	Concur with stock fund and definitized price analyses. Disagree with terminations analysis because if there is a demonstrated need beyond the termination period, items would be bought and items in termination would not be applied.

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<u>Description</u>	<u>No. of items</u>	<u>Potential Reduction</u>
Items transferred to stock fund	2	\$ 2,312
Items in termination status	6	255,888
Definitized/estimated prices	<u>137</u>	<u>4,287,515</u>
TOTAL	<u>145</u>	<u>\$4,545,715</u>

<u>Type of requirement</u>	<u>Budget amount (000)</u>	<u>Finding</u>	<u>Basis for finding</u>	<u>Potential reduction (000)</u>	<u>OCALC comments</u>
5. Foreign military sales additive spares	\$14,142	Requirement supported	This additive is required as foreign countries only provide requirement data for the apportionment year, and item managers are not able to phase the requirements for the budget year. Therefore, the D041 system doesn't compute a deficit for the budget year and an additive must be input to the budget. The computation was made in accordance with methodology developed by the OCALC. No budget adjustment is recommended.	0	Concur.
6. KC-135 electrical wiring replacement	\$49,100	Requirements deferred with different funding	<p>The OCALC included \$49.1 million in the BP 1500 budget for FY 1988. The entire amount should be deleted because:</p> <ol style="list-style-type: none"> 1. On November 4, 1986, the Air Force Logistics Command (AFLC) informed OCALC that this project should be budgeted with BP 3400 operations and maintenance funds instead of BP 1500 funds. 2. AFLC has delayed the project until FY 1990. 	\$49,100	Concur.
7. Insurance item additive spares (INS/NSO)	\$10,398	Requirements understated	<p>This additive was input as the automated requirements system does not compute a budget requirement for these items. We found two types of problems with the calculation of this additive, resulting in a net increase in requirements.</p> <ol style="list-style-type: none"> 1. The additive amount was overstated due to being escalated twice for inflation. 	(\$ 2,997)	Concur.

<u>Type of requirement</u>	Budget amount (000)	<u>Finding</u>	<u>Basis for finding</u>	Potential reduction (000)	<u>OCALC comments</u>
TOTAL	<u>\$186,620</u>		TOTAL POTENTIAL BUDGET REDUCTION	<u>\$109,879</u>	

2. The additive amount was based on average quarterly usage. The computation used three quarters of usage data and averaged them over four quarters, resulting in an understated quarterly usage figure. To compute a more accurate and meaningful average, the usage data should have been averaged over three quarters instead of four.

Table I.2: Potential Reductions to Warner Robins ALC's FY 1988 Funding for Non-recurring Issue and Other Additive Aircraft Spares

<u>Type of requirement</u>	<u>Budget amount (000)</u>	<u>Finding</u>	<u>Basis for finding</u>	<u>Potential reduction (000)</u>	<u>WRALC comments</u>
1. B-1B strategic additive support spares (SASS)	\$29,418	Overstated	Inventory and procurement records show that the Air Force had excess quantities of these items on-hand or in contract termination status sufficient to meet requirements for 4 of the 50 items managed by the WRALC.	\$ 8,962	Concur.
2. B-52 AN/ALT 16A transmitter	\$ 3,941	Overstated	Procurement falls under the 100 percent spares replacement program. Requirement was overstated in WRALC's budget submission because B-52 officials used an inflated unit cost factor that could not be supported, explained, or reconstructed. During a meeting with us, B-52 officials derived a new estimate based on a lower unit cost figure. The budget reduction was based on the use of the new lower unit cost figure.	\$ 1,424	Concur.
3. B-52 AN/ASG-15 fire control system	\$ 1,565	Deferred	This requirement was no longer valid because of a slippage in the modification contract delivery schedule. The original schedule called for delivery of 19 modified aircraft by September 30, 1988, and another 50 by February 28, 1989. The delivery schedule was revised in February 1987 to provide for	\$ 1,565	Concur.

<u>Type of requirement</u>	<u>Budget amount (000)</u>	<u>Finding</u>	<u>Basis for finding</u>	<u>Potential reduction (000)</u>	<u>WRALC comments</u>
			delivery of only two modified aircraft in October 1988 and the remaining 67 by August 1989. Therefore, the WRALC did not need replenishment spares funds in FY 1988.		
4. B-52 strategic radar	\$21,549	Overstated	This requirement was overstated because the number of B-52s to be supported with replenishment spares was reduced from 263 to 194. The budget reduction reflects this decrease in the number of aircraft to be supported.	\$ 5,654	Concur.
5. MC-130H Combat Talon II	\$14,130	Deferred	The milestone date for initial operational capability tests for this program slipped from March 1988 to March 1989. As a result, the WRALC did not need replenishment spares funds in FY 1988. Despite the program slippage, this budget amount was inadvertently included in the FY 1988 request, but was supposed to be deleted and included in the FY 1989 budget submission.	\$14,130	Concur.

<u>Type of requirement</u>	<u>Budget amount (000)</u>	<u>Finding</u>	<u>Basis for finding</u>	<u>Potential reduction (000)</u>	<u>WRALC comments</u>
6. F-15C AN/ALQ-135 countermeasures set	\$ 7,173	Deferred	Delivery of AN/ALQ-135 countermeasures sets slipped almost 15 months, from July 1988 until October 1989. Thus, replenishment spares funds will not be needed in FY 1988.	\$ 7,173	Concur.
7. MH-53B main gear box	\$ 5,680	Prior year funding	WRALC officials decided to procure the entire lot of replenishment spares for this item in FY 1987 using prior year funds. As a result, replenishment spares funds were not needed in FY 1988.	\$ 5,680	Concur.
SUBTOTAL	<u>\$83,456</u>			<u>\$44,588</u>	

Other Actions Recommended

1. Error in processing budget submission	\$ 7,770	Overstated	WRALC's original submission to HQ/AFLC contained a request for about \$160.2 million for additive replenishment spares. At a budget review meeting in August 1986,	\$ 7,770	Concur.
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<u>Type of requirement</u>	<u>Budget amount (000)</u>	<u>Finding</u>	<u>Basis for finding</u>	<u>Potential reduction (000)</u>	<u>WRALC comment</u>
2. B-1B AN/ALQ - 161 electronic countermeasure items -- antenna receiver, generator	\$ 3,430	Violates House committee recommendation	<p>HQ/AFLC reduced WRALC's request to \$152.4 million by deleting two line items totaling \$6.582 million and reduced two others by a combined total of \$1.188 million. However, these amounts were not reduced from the Air Force budget provided to the President and the Congress.</p> <p>These items are included in the B1-B SASS kit listed above under item number one and have recently undergone more than one design change. In view of the House Armed Services Committee's recommendation not to procure spares for troubled portions of the B1-B bomber, the Air Force should defer procurement of these items.</p>	\$ 3,430	Deferred comment to Air Staff. Air Staff concurs.
SUBTOTAL	<u>\$11,200</u>			<u>\$11,200</u>	

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<u>Type of requirement</u>	<u>Budget amount (000)</u>	<u>Finding</u>	<u>Basis for finding</u>	<u>Potential reduction (000)</u>	<u>WRALC comments</u>
3. B-52 AN/ASQ-151 FLIC digital signal processor	\$ 2,472	Inadequately supported	WRALC derived budget estimates for items 3 through 8 by applying an average usage factor of 15 percent to total program cost. However, WRALC could not demonstrate that replenishment spares historically average 15 percent of the total cost to produce, install, and modify aircraft with new or updated weapons and avionics subsystems and systems. WRALC officials said that the usage factor of 15 percent for peacetime operating spares was based on an internal study. WRALC did not have a copy of this study nor any work sheets showing the basis for the study results.	\$ 2,472	Concur that support is lacking for items 3 through 8.
4. B-52 strategic radar	\$15,895	Inadequately supported		\$15,895	
5. FB-111 WIDOS (AMP)	\$ 5,421	Inadequately supported		\$ 5,421	
6. FB-111 AN/ASN-141 avionics modernization	\$24,480	Inadequately supported		\$24,480	
7. Common aircraft ARN-147 VOR/ILS	\$ 6,271	Inadequately supported		\$ 6,271	
8. Common Aircraft DLQ-3 seek rain	\$ 1,563	Inadequately supported		\$ 1,563	
SUBTOTAL	<u>\$56,102</u>			<u>\$56,102</u>	
TOTAL	<u>\$150,758</u>		TOTAL POTENTIAL BUDGET REDUCTION	<u>\$111,890</u>	

Base safety level (\$220.1 million)

The Air Force's fiscal year 1988 funding request for peacetime aircraft spares included \$247.2 million for first replenishment buys of base safety levels budgeted by the Warner Robins ALC. We found that \$220.1 million of this amount was for components of the B-1B bomber's ALQ-161 defensive avionics system, which is experiencing continuing design stability problems. For example, we found that five components of this system for which procurement of base safety level spares were budgeted had experienced two or more design changes in the past 6 to 12 months.

In its Fiscal Year 1988 Budget Authorization Report, the House Armed Services Committee recommended that the Air Force not procure any spares for troubled portions of the B-1B bomber. The Committee's recommended reduction of \$415.4 million for funding of aircraft replenishment spares included \$258 million for first replenishment buys of depot and base safety level spares for the B-1B's ALQ-161 defensive avionics system.

Buying spares earlier than needed (\$100 million)

In our report to the Secretary of the Air Force entitled Buying Spares Too Early Increases Air Force Costs and Budget Outlays (GAO/NSIAD-86-149, 8/1/86), we pointed out that our review, performed at two of the Air Force's five air logistics centers, showed that they routinely initiated purchases of recoverable aircraft spares up to 14 months earlier than needed to ensure delivery by the required need date. As a result, the two centers prematurely invested \$374.5 million in spare parts inventories. About \$125.4 million of the total amount invested prematurely represented purchases made more than 1 year too early. Requests for appropriations to fund these purchases could have been deferred for 1 year if the centers had planned to buy spares at the appropriate times. Because all five air logistics centers follow the same early procurement practice, elimination of this practice would result in significant Air Force-wide deferrals in procurement outlays and budget requests.

We recommended that the Secretary of the Air Force direct the Air Force Logistics Command (AFLC) to comply with AFLC Regulation 57-4 which stipulates that routine purchases of recoverable spares should be initiated at times that will allow them to be received when needed, considering their procurement lead times. The regulation allows procurement up to 3 months early if the advantage to the government can be documented.

In commenting on our draft report, DOD disagreed that by eliminating early initiations of procurement the Air Force could have avoided premature inventory investment. It was DOD's position that there is no cause and effect relationship between early procurement initiation and early delivery of materials by a contractor. In this respect, DOD stated that Air Force contracts for spare parts specify delivery of materiel in accordance with need as determined by the D041 requirement system or the item manager. Further, DOD stated that there is no premature investment in inventory unless the contractor ignores the requested delivery date and ships materiel early. However, the Air Force can refuse to accept early delivery. DOD did acknowledge that there could be a situation where initiation of procurement more than 12 months early could result in premature obligation of funds. DOD stated that it would apply a limitation of 12 months for early initiation and would ensure that this guidance is included in the annual Air Force buy guidelines issued to its ALCs.

In our final report, we pointed out that the ALCs routinely included a standard provision in their spares contracts, authorizing the contractors to deliver early. We also provided statistics showing that the premature purchases mentioned in the report were delivered and accepted early.

In response to our final report, DOD, by letter dated January 29, 1987, acknowledged that it was wrong in its earlier statement that the Air Force could refuse to accept early delivery of materiel from a contractor. However, DOD stated that our premature purchase finding was still invalid because we had improperly determined the need date for the spare parts purchases reviewed. In this respect, DOD said that the required need dates for the two items used as premature purchase examples in our report were 24 months and 34 months earlier than the need dates we had determined. Therefore, DOD concluded that these purchases were initiated late, rather than early as cited in our report.

In connection with our example of a premature purchase of 165 units for item 2840-00-670-8885RW, DOD said that the earliest required delivery date shown by the D041 requirement system was December 1983, or 34 months earlier than the September 1986 date we had cited. Similarly, for our example of a premature purchase of 397 units for item 2840-00-871-7414PL, DOD stated that the earliest required delivery date was September 1986, or 24 months earlier than the September 1988 date we had cited.

DOD is incorrect in its contention that we improperly determined the required delivery dates for the spare parts purchases reviewed. We correctly used the required delivery dates shown by the D041 requirement system or determined by the item manager.

The earlier required delivery date of December 1983 cited by DOD for item 2840-00-670-8885RW was for a portion of an unfunded war reserve requirement of 139 units for which purchase had been indefinitely postponed. As shown by the D041 requirement computation and confirmed by the item manager, we correctly showed that the earliest required delivery date for the 165 units in question was September 1986. Similarly, the earliest required delivery date of September 1986 cited by DOD for item 2840-00-871-7414PL was for a portion of an unfunded war reserve requirement of 189 units for which purchase had been indefinitely postponed, rather than the purchase of the 397 peacetime spares cited.

While DOD stated that it would apply a 12-month limitation to early procurement initiation and would ensure that this guidance was included in the Air Force's annual buy guidelines, our follow-up review disclosed that the Air Force's fiscal years 1987 and 1988 buy guidelines for recoverable aircraft spares did not contain such a provision and can be interpreted as authorizing premature procurement initiation. For example, the Oklahoma City ALC's implementing buy guidelines stipulate that purchase requests should be initiated more than a year earlier than required. Our follow-up effort also disclosed that the value of annual procurements of recoverable aircraft spares has decreased by about 20 percent since our previous review. Based on this 20 percent reduction in annual procurements, we believe the Air Force could reduce its procurement outlays by \$100 million (\$125.4 million x 80 percent) by deferring its purchases until the appropriate time.

Procurement termination of on-order
excesses (\$164 million)

In our report entitled Air Force Should Terminate More Contracts For On-Order Excess Spare Parts (GAO/NSIAD-87-141, 8/12/87), we pointed out that our review of the Air Force's procedures and practices for terminating procurement of recoverable aircraft spares on-order excesses at two of the Air Force's five ALCs indicated that the Air Force terminated less than 3 percent of the total value of excess on-order aircraft spares. Our review indicated that cost-effective terminations could be made for about 27 percent of these on-order excesses.

At the Sacramento and San Antonio ALCs, we reviewed a sample of items with on-order excesses valued at over \$1 million, totaling \$74.2 million. Our sample represented a universe of items with on-order excesses exceeding \$1 million, and totaling \$103.2 million. The two ALCs terminated only \$1.8 million, or 2.4 percent, of the \$74.2 million on-order excesses in our sample. Our analysis showed that it would have been cost effective to

have terminated an additional \$24.9 million, or 24.1 percent, of the \$103.2 million universe of item on-order excesses represented by our sample. Our analysis showed that the cost to the Air Force for terminating the procurement of the on-order excesses valued at \$24.9 million would have been \$2.03 million for contractor termination charges, or 8.1 percent of the procurement value. By the time we had completed our fieldwork, the ALC officials had reconsidered their earlier decisions and had terminated procurements of \$10.5 million of the \$24.9 million on-order excesses our analyses showed should have been terminated.

The two ALC we reviewed had not taken maximum advantage of cost-effective terminations primarily because the Air Force Logistics Command had not provided them with specific guidance on how to calculate the required factors, such as inventory holding costs, needed to determine whether it is more economical to terminate or accept on-order excesses. AFLC officials confirmed that none of the five air logistics centers had been given such guidance and that the termination process should be improved at all five ALCs.

We also pointed out in our report that the value of on-order item excess reported by the DO41 requirement system was inaccurate. This was confirmed by an AFLC-directed study. AFLC directed its five ALCs to validate reported on-order item excesses that exceeded \$1 million for the March 31, 1986, DO41 requirement computation cycle. The ALCs' review of items with reported on-order excess values totaling \$1,405.9 million revealed that the reported value was overstated by \$730.2 million, or 51.9 percent, leaving a corrected value of on-order excesses totaling \$675.7 million.

In commenting on our report, DOD agreed that improvement was needed in the Air Force procedures and practices for terminating procurement of recoverable aircraft spares on-order excesses. DOD stated that the DOD Inspector General was currently reviewing this area and that upon receipt of additional information from this review new policy guidance would be issued to improve the Air Force's termination process for on-order excesses.

By improving the termination process for on-order excess recoverable aircraft spare parts at all five ALCs, we believe the Air Force could significantly reduce its annual procurement outlays for materiel no longer needed. We estimate that the potential magnitude of annual procurement savings was about \$164 million based on information presented above (i.e., \$675.7 million of on-order excesses as of March 31, 1986 x 26.5 percent cost-effective termination rate identified by our review less 8.1 percent contract termination cost identified by our review).

Our follow-up analysis shows that the Air Force's annual value of recoverable aircraft spares on-order excesses continues to grow and that actions taken or planned by the Air Force should improve the procurement termination of on-order excesses. From March 31, 1986, to March 31, 1987, the total of on-order excesses valued at \$1 million or more, as validated by the ALCs, increased from \$675.7 million to \$972.6 million, or by \$296.9 million.

The five ALCs centers terminated \$126.8 million, or 13 percent, of the \$972.6 million on-order excesses. Previously, as mentioned above, the ALCs had terminated less than 3 percent of their validated on-order excesses. Of the remaining on-order excesses, the air centers determined that it was uneconomical to terminate \$242.5 million, and \$466.4 million were not terminated because of direction from headquarters or other management decisions.

According to AFLC officials, the increase in terminating recoverable aircraft spares on-order excesses is attributable to renewed emphasis caused by continuing GAO and congressional interest. Also, according to these officials, on-order excess termination performance will improve even more significantly when policy and procedural revisions being made by AFLC in response to our recommendations are implemented. In this respect, AFLC has developed a software package for computing inventory holding costs using the formula we recommended. In connection with on-order excesses computed by the September 30, 1987 requirement cycle, the ALCs will use this inventory holding cost software package in making determinations as to whether it is economical to terminate on-order excesses. Also, in its revised policy guidance, AFLC has eliminated the 75 percent expired production lead time criteria, which the ALCs used in the past to make arbitrary decisions that on-order excess terminations were not economical.

Unused prior year funds for B-1B
aircraft defensive avionics system
(ALQ-161) spares (\$521 million)

In fiscal year 1987 the Oklahoma City ALC budgeted and was funded \$521 million for the procurement of spare parts for the B-1B's troubled ALQ-161 defensive avionics system to satisfy forecasted issue requirements of the Warner Robins ALC. At the time the Oklahoma City ALC budgeted the \$521 million, available documentation shows that the Warner Robins ALC no longer had a fiscal year 1987 requirement for ALQ-161 spares. The Oklahoma City ALC has not used the \$521 million to satisfy Warner Robins fiscal year 1987 requirements for ALQ-161 spares, because it is aware that the requirement no longer exists.

The Oklahoma City ALC is the weapon system manager for the B-1B bomber and the Warner Robins ALC is the item manager for components of the ALQ-161 defensive avionics system. AFLC directed that the fiscal year 1987 B-1B spares requirements of all ALCs be budgeted and purchased by the Oklahoma City ALC. In March 1985, the Warner Robins ALC's fiscal year 1987 budget cycle requirement for ALQ-161 spares was \$507 million. In August 1985, the Oklahoma City ALC included in its fiscal year 1987 budget \$521 million (\$507 million plus a \$14 million transportation charge) for the purchase of ALQ-161 spares to satisfy the Warner Robins ALC's fiscal year 1987 requirement. In September 1985, the Warner Robins ALC's updated fiscal year 1987 requirement computation showed a zero requirement for ALQ-161 spares. Despite this, the Air Force's October 1985 fiscal year 1987 aircraft spares budget submission to DOD still included the \$521 million.

Our analysis showed that reductions made to the Air Force's fiscal year 1987 funding request for aircraft replenishment spares did not involve B-1B defensive avionics system (ALQ-161) spares.

Therefore, the fiscal year 1987 funding for aircraft replenishment spares appropriated by the Congress included the \$521 million budgeted by the Oklahoma City ALC for the purchase of B-1B aircraft ALQ-161 spares to satisfy the requirements of the Warner Robins ALC.

In March 1986, the Warner Robins ALC's fiscal year 1988 budget cycle requirements for aircraft replenishment spares continued to show a zero fiscal year 1987 requirement for ALQ-161 spares. On July 20, 1987, we were advised by an Oklahoma City ALC official that no fiscal year 1987 procurement of ALQ-161 spares had been made.

COMPARISON OF THE AIR FORCE'S FISCAL YEAR 1988
BUDGETED AND UPDATED PROCUREMENT REQUIREMENTS
FOR AIRCRAFT REPLENISHMENT SPARES

The Air Force's fiscal year 1988 updated procurement requirements for peacetime aircraft replenishment spares of \$1,990.4 million are \$467.7 million less than the budgeted requirements on which the Air Force's funding request was based (see table II.1). The reduction in peacetime requirements is due primarily to a decrease in previously predicted future usage.

The reduction in fiscal year 1988 requirements for peacetime spares would have been significantly greater had the San Antonio ALC not manually added to its computed updated fiscal year 1988 requirements an "other additive" requirement of \$309.3 million for spare kits to upgrade F-100 engines. DOD had previously reduced the San Antonio's fiscal year 1988 budgeted requirements for F-100 engine spare kits by \$163 million, and proposed a further cut of \$180 million in fiscal year 1989 budgeted requirements, on the basis that the F-100 engine upgrade had been an ongoing program since 1985 and there had been no increase in the number of engines available for modification.

The Air Force's fiscal year 1988 updated procurement requirements for wartime readiness aircraft spares of \$601.2 million are \$1,175.5 million less than the budgeted requirements of \$1,776.7 million on which its funding request was based (see table II.1). The reduction in wartime readiness requirements is due to (1) use of excess fiscal years 1985 and 1986 peacetime funds, resulting from contract price savings to satisfy unfunded prior years' requirements included in the fiscal year 1988 budget (a \$500 million reduction), (2) a policy change in March 1987 reducing wartime support objectives for tactical aircraft (a \$400 million reduction), and (3) decreases in wartime usage factors (a \$275.5 million reduction).

Table II.1: Comparison of Fiscal Year 1988 Budgeted and Updated Procurement Requirements for Peacetime and War Readiness Aircraft Spares

<u>Category</u>	<u>10/86 Budgeted requirements</u>	<u>1/87 Funding request</u>	<u>10/87 updated procurement requirements</u>	<u>Increase/ (Decrease) from 10/86 budget</u>	<u>Increase/ (Decrease) from 1/87 funding request</u>
----- (millions) -----					
Peacetime	\$2,458.1 ^a	\$2,109.4 ^a	\$1,990.4	(\$467.7)	(\$119.0)
War Readiness	<u>1,776.7^b</u>	<u>293.5^b</u>	<u>601.2</u>	<u>(1,175.5)</u>	<u>307.7</u>
Total	<u>\$4,234.8</u>	<u>\$2,402.9</u>	<u>\$2,591.6</u>	<u>(\$1,643.2)</u>	<u>\$188.7</u>

^aDOD reduced the Air Force's budgeted peacetime requirements by \$348.7 million, resulting in a final funding request of \$2,109.4 million. The Air Force concurred in this reduction and showed no unfunded peacetime requirements in its fiscal year 1988 budget submitted to the Congress.

^bThe Air Force's proposed funding request to DOD was \$747.1 million, leaving an intended unfunded war readiness requirement of \$1,029.6 million. DOD reduced the proposed funding request by \$453.6 million; the resulting \$293.5 million was the funding request included in the Air Force's fiscal year 1988 budget submission to the Congress, leaving an unfunded war readiness requirement of \$1,483.2 million, which was also reflected in the budget submitted to Congress.

AIR FORCE'S PERFORMANCE IN OBLIGATING
PRIOR YEARS' FUNDS FOR THE PURCHASE
OF AIRCRAFT REPLENISHMENT SPARES

Funds appropriated by the Congress for procurement of aircraft replenishment spares are available for obligation over a 3-year period. For example, fiscal year 1985 funds are available for obligation through the end of fiscal year 1987. In order to provide reasonable assurance that a given year's funds are obligated over a 3-year period, the Air Force has established a goal that 92 percent of its current year's funding must be obligated the first year.

Prior to fiscal year 1986, Air Force policy provided that current year's funds could only be used to buy current year's requirements (i.e., fiscal year 1985 funds could only be used to satisfy fiscal year 1985 requirements). In response to DOD pressure to improve its performance in obligating prior years' funding, the Air Force in October 1985 changed its policy to provide that any available replenishment spares funds could be obligated to satisfy prior, current, or future year's requirements. For example, fiscal year 1985 funds, which are available for obligation through fiscal year 1987, could be used to buy fiscal year 1986 and 1987 requirements. Likewise, available fiscal year 1986 funds can be used to buy fiscal years 1987 and 1988 requirements.

AFLC reported that as of August 31, 1987, it was \$898.4 million behind its planned obligations of fiscal years 1985-1987 funds for procurement of aircraft replenishment spares. The Air Force's \$541.3 million obligation shortfall for fiscal year 1987 was attributed in part to use of fiscal year 1985 funds to satisfy fiscal year 1987 requirements.

In an apparent effort to improve its first year's performance in obligating fiscal year 1987 funds, the Air Force during the last month of the fiscal year obligated \$658.6 million of fiscal year 1987 funds. In comparison, the Air Force had obligated \$100.9 million and \$23.8 million of fiscal years 1985 and 1986 funds respectively during that same month. The status of fiscal years 1985, 1986, and 1987 procurement funds for aircraft replenishment spares as of September 30, 1987, is shown in table III.1.

Table III.1: Status of Fiscal Years 1985-1987 Procurement Funds for Aircraft Replenishment Spares as of September 30, 1987

<u>Fiscal year</u>	<u>Procurement authority</u>	<u>Commitments^a</u>		<u>Obligations^b</u>		<u>Unobligated amount</u>
		<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>	
----- (Dollars in thousands) -----						
1985	\$3,823,922	\$3,801,384	99.4	\$3,801,384	99.4	\$ 22,538
1986	2,606,495	2,502,396	96.0	2,450,579	94.0	155,916
1987	2,224,266	2,194,236	98.6	1,964,305	88.3	259,961

^aPurchase requests are prepared and bids solicited. AFLC's goal is to commit 100 percent of a fiscal year's funds during the first year of the 3-year authorization period.

^bContracts are awarded. AFLC's goal is to obligate 92 percent of a fiscal year's funds during the first year of the 3-year authorization period.

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