DEFENSE BUDGET

Observations on the Air Force Flying Hour Program
B-282754

July 8, 1999

The Honorable Ted Stevens
Chairman
The Honorable Daniel K. Inouye
Ranking Minority Member
Subcommittee on Defense
Committee on Appropriations
United States Senate

This report responds to your request that we study the Air Force's budget formulation process for its flying hour program for fiscal years 1997 through 1999. During fiscal years 1997 and 1998, the Air Force reported funding deficits of $171 million and $200 million, respectively, in its flying hour program, and it projects a similar deficit for fiscal year 1999. Concerned that shortfalls in this program would curtail flying operations and in turn pose a serious risk to the readiness of Air Force aviation units, the Air Force requested and received additional money for the program in each fiscal year.

The requests for additional funding raised concerns in Congress about the validity and accuracy of the Air Force's budget formulation process for its flying hour program. As agreed with your offices, this report (1) identifies the extent to which the Air Force has flown the hours requested in its budget, (2) describes the process that the Air Force uses to determine flying hour requirements, (3) discusses how the requirements and specific cost factors are used to develop the budget estimate for the flying hour program, and (4) compares program funding and obligations incurred in fiscal year 1997 and fiscal year 1998 and provides reasons for the differences.

Background

The Air Force's flying hour program comprises the number of hours needed to attain and maintain combat readiness and capability for its aircrews, to test weapon systems and tactics, and to fulfill collateral requirements such as air shows, demonstration rides for VIPs, and ferrying aircraft. The number of hours required is determined annually at the major commands by operations and training personnel.
Air Force documents show that funding for active Air Force flying hours was about $2.8 billion for fiscal year 1998. The funds are part of the congressional appropriation for Air Force Operation and Maintenance, which totals about $20 billion annually. Air Force headquarters distributes the flying hour funds to its eight major commands, which have the responsibility of managing the funds. The major commands use the operation and maintenance dollars to pay for fuel, maintenance, and spare parts in support of flying operations.

The Air Force flying hour program is not reflected as a separate line item in the operation and maintenance appropriation. The budget is organized by budget activity groups, activity groups, and sub-activity groups; flying hour costs are spread throughout this budget structure by the use of program element codes. These program elements are used as the basic building blocks for identifying resource requirements in the Air Force's portion of the President's budget. Costs per flying hour in fiscal year 1998 were expensed within 39 program element codes spread throughout 12 sub-activity groups.

Results in Brief

In the last 4 years, the Air Force has requested funding for more flying hours than it has been able to fly. From fiscal year 1995 through fiscal year 1998, the Air Force flew fewer hours than were programmed, ranging from a low of about 89 percent of programmed hours in fiscal year 1995 to a high of about 94 percent in fiscal year 1996. Programmed hours were not flown for a variety of reasons, including deployments, bad weather, and maintenance or supply problems. The Air Force did not cite a shortage of flying hour funding as a cause for underflying the program.

In July 1997, the Air Force changed its method for determining its flying hour requirements by better linking these hours to missions required for maintaining readiness and proficiency. For fighter and bomber aircraft, for example, the Air Combat Command has two readiness levels—basic mission-capable and combat mission-ready. For each level, the new method specifies the number of sorties required, the training events to be accomplished, and the hours required for accomplishing them. The Air Force Chief of Staff has also emphasized to its major commands the need

---

to fly all programmed hours in fiscal year 1999. The remainder of this fiscal year should serve as a good indication of the Air Force’s general ability to fly the hours it says are needed to maintain combat readiness and proficiency while maintaining support for contingencies in Europe and Southwest Asia.

The methodology used by the Air Force to cost out the flying hour program depends heavily on stable prices for its repairable and consumable spare parts. Management problems in determining prices for these items have led to multiple price changes that have, in turn, led the Air Force to believe it would exhaust its flying hour funding before the end of the fiscal year. As a result, for the last 2 fiscal years, it requested, and received, additional congressional funding for its flying hour program that ultimately proved to be in excess of its requirements since it flew fewer hours than programmed. In total, Congress provided about $5 million more for the flying hour program than the Air Force’s obligations during fiscal year 1997 and about $357 million more than its obligations in fiscal year 1998. Ultimately, these excess funds were used to support unmet needs for funding in other operation and maintenance programs, such as real property maintenance and base operation support.

The Air Force is currently implementing our prior recommendations aimed at improving the financial operations of the Air Force’s supply management activity group. Continued progress in implementing these recommendations should enable the Air Force to provide the pricing stability needed to more accurately assess the adequacy of its flying hour funding as the budget year progresses. Therefore, we are not making any additional recommendations at this time.

Historically, Air Force Flying Hour Requirements Have Exceeded the Number of Hours Units Could Fly

During fiscal years 1995 through 1998, the Air Force each year requested funding for more flying hours than its flying units were able to execute. Annually, the major commands are asked to determine the number of hours needed to attain and maintain combat proficient aircrews and to complete collateral flying requirements. In making this determination, command personnel consider the frequency of flying (number of sorties or hours) and specific training events each aircrew must accomplish. The flying requirements, expressed in hours, become the basis for the funding requested in the President’s budget. From fiscal year 1995 through fiscal year 1998, the total Air Force requirement remained fairly constant at about 1.3 million hours each year.
In each fiscal year the Air Force flew fewer hours than were programmed. This ranged from a low of about 89 percent of the programmed hours in fiscal year 1995 to a high of about 94 percent in fiscal year 1996. The hours programmed and the percent flown are shown in table 1.

Table 1: Air Force Flying Hours Programmed and Percentage Flown (fiscal years 1995–98)

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>President’s budget (hours)</th>
<th>Percent flown</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>1,453,501</td>
<td>88.7</td>
</tr>
<tr>
<td>1996</td>
<td>1,327,155</td>
<td>93.7</td>
</tr>
<tr>
<td>1997</td>
<td>1,285,695</td>
<td>91.7</td>
</tr>
<tr>
<td>1998</td>
<td>1,290,256</td>
<td>92.5</td>
</tr>
</tbody>
</table>

Note: The numbers and percentages shown in table 1 are aggregates; the actual hours and percentages flown vary among each flying unit. For example, the aggregate for fiscal year 1998 was 92.5 percent, but as we reported in Air Force Supply: Management Actions Create Spare Parts Shortages and Operational Problems (GAO/NSIAD/AIMD-99-77, April 1999), the B-1B and the F-16 aircraft in the Air Combat Command flew only 83 percent of their total flying hours during fiscal year 1998.

Source: Department of the Air Force.

As each unit recognizes that it will be unable to fly its programmed hours, it “turns in” the hours to the major command and provides the reason for doing so. The reasons for not flying the program varied, but a shortage of flying hour funding was not cited as one of them. The reasons that were cited by units from the Air Combat Command and Air Mobility Command included

- supporting contingencies (such as enforcing the no-fly zone in Iraq),
- evacuation of aircraft due to hurricanes,
- aircraft grounded for safety considerations, and
- higher than normal non-mission-capable rates due to maintenance and supply problems.

The flying hour requirement in the budget request does not include flying in support of contingency operations such as those in Bosnia and Iraq. However, hours flown in support of contingency operations are counted against programmed hours already funded in the President’s budget up to the number of hours an aircraft would have flown at its home station. For additional hours flown, the Air Force receives additional funding from a centrally managed Department of Defense (DOD) contingency account.
For example, in fiscal year 1998, Air Combat Command units flew about 79,400 hours in support of contingencies; about 54,500 hours were counted against the programmed hours, and funding was received for the remaining 24,900 hours.

Air Force Has Revised Its Requirements Determination Processes to Better Link Flying Hours to Mission-Oriented Training Programs

In mid-1996, the Air Force Chief of Staff expressed concern that the service was not fully executing its flying hour program and emphasized that it is Air Force policy to fly the complete program. Accordingly, he tasked the major commands with (1) revalidating their flying hour requirements to ensure that they were adequate to meet readiness levels and (2) addressing their ability to execute these hours. The Acting Secretary of the Air Force reported to Congress in March 1998 that these actions had been completed.

In response to these concerns, the major commands revised their requirements determination processes to tie them more closely to mission-oriented training programs. The Air Combat Command, for example, developed and implemented the Ready Aircrew Program, which incorporates a computer model to determine flying hour requirements for its fighters and bombers. Air Force officials said that the new system links flying hour training with warfighting commanders in chief requirements and standardizes the methodology for determining the hours needed to ensure combat proficiency. The Air Mobility Command has adopted a similar, model-based approach to determining its requirements.²

The basis for Air Combat Command’s requirements model is their task-based Ready Aircrew Program. The Ready Aircrew Program is the continuation-training program designed to focus training on capabilities needed to accomplish a unit’s core missions. The program establishes two levels of proficiency: basic mission-capable and combat mission-ready. Each level is defined by a total number of Ready Aircrew Program sorties, broken down into mission types, plus specific weapons qualifications and associated events. For example, an experienced F-16 pilot would require 60 sorties annually to achieve basic mission-capable and 96 sorties to achieve combat mission-ready status. The level that individual pilots are required to maintain is determined by their position in the unit; for example, all line pilots, commanders, and operations officers must

²Previously, the commands based requirements largely on training programs that required a specific number of sorties or hours per pilot, but did not use models to standardize the calculations by aircraft type.
maintain combat mission-ready, while staff officers fly at the basic mission-capable level. Guidelines for mission types and weapons qualifications are provided in the training manual for each aircraft, but these are supplemented by unit-specific requirements issued annually by the major command.

These sortie requirements are factors used in the computer model, which calculates the total sortie requirements for each flying unit. Other factors the model considers are as follows:

- The number of primary aircrews (line pilots). These pilots must maintain combat mission-ready status.
- The experience mix of the pilots assigned. An inexperienced pilot (generally, a pilot with less than 500 hours logged in the aircraft) requires 20 more sorties per year than an experienced pilot.
- The number of attached pilots. Staff officers who are required to maintain basic mission-capable status are attached to the unit to satisfy flying requirements.
- Special capability sorties. Units may be required to maintain some pilots with special capabilities or qualifications that require additional sorties.
- Collateral sorties. Each unit must fly some number of sorties not directly related to combat employment or training but necessary for accomplishment of unit training programs. These include ferry flights, deployments, incentive flights, air shows, and so forth.

For budgeting purposes, the flying hour requirements are based on notional models of each unit type that assume that each unit will have all its aircraft and personnel assigned. Once the model has calculated the unit’s sortie requirements, the sorties are converted to flying hours. The conversion is made using unit-specific averages of sortie duration. The average sortie duration varies among units according to geographic location, proximity to training ranges, and the type of aircraft the unit flies. The result of the calculation is the units flying hour requirement. The total requirement for all units in the command is provided to financial management staff for use in developing the budget for flying hours.

The Air Mobility Command also uses models to develop its flying hour program. Air Mobility Command has developed airframe-specific models that compute flying hour requirements based on the number of aircraft commanders, co-pilots, and navigators authorized and the types, number, and duration of training events they must complete annually. The models
consider two types of training requirements: (1) experiencing requirements, which represent the flying training co-pilots must accomplish to upgrade to aircraft commander and (2) currency requirements, which represent the specific training needed for aircrews to develop flying skills. While all flying provides experiencing training, currency training can only be obtained through the accomplishment of specific training events.

In 1998, the Air Force Audit Agency reviewed Air Mobility Command's flying hour program to determine if managers used effectively structured models and accurate data to compute flying hour requirements. The audit reported that opportunities existed to improve the model structure and inputs. According to the report, Air Mobility Command personnel teamed with the auditors to develop an improved, single-model structure for all applicable aircraft, and the Command's personnel validated all the relevant factors used in the models. This structure was provided to U.S. Air Force headquarters to serve as a basis for developing guidance for all Air Force mobility flying hour programs.

The Air Mobility Command flying hour program differs from Air Combat Command's program in that funding is provided from two sources. Traditionally, Air Mobility Command training requirements are Operation and Maintenance funded, while missions flown in support of the U. S. Transportation Command are funded by the Transportation Working Capital Fund. These missions involve movement of passengers and/or cargo, and the customer reimburses the working capital fund. The Air Mobility Command flying hour models were designed to calculate a distribution of flying hours by funding sources based on assumptions about the types of missions expected to be flown. Once the hours needed are determined, the requirements are provided to financial personnel for use in developing the flying hour budget.

\[\text{Source: Airlift and Air Refueling Aircraft Flying Hour Program, Air Force Audit Agency, Audit WS099011, December 9, 1998.}\]
The basis for flying hour funding is the number of programmed hours multiplied by the projected cost per flying hour rate. Each major command develops a cost per flying hour rate for each of the aircraft types in its inventory. The rates comprise three major program expense elements—depot-level repairable parts, consumable supplies, and aviation fuel. Depot-level repairable items are parts that can be repaired at a maintenance facility and are used in direct support of aircraft maintenance (e.g., aircraft engines). Consumables are generally defined as non-repairable supply items used by maintenance personnel in direct support of aircraft maintenance. Aviation fuel is the cost of fuel purchased to operate aircraft.

Cost per flying hour rates are developed in accordance with guidance from the Air Force Cost Analysis Improvement Group (AFCAIG). AFCAIG is a General Officer/Senior Executive Service group co-chaired by the Deputy Assistant Secretary of the Air Force for Cost and Economics and the Deputy Chief of Staff for Installations and Logistics. The group includes representatives from budget, logistics, and planning sections. The guidance is issued annually by the Comptroller and Air Force Logistics in the form of an AFCAIG letter, which begins the AFCAIG process. Under this guidance, cost factors are developed by the major commands and submitted by mid-November to Air Force headquarters for validation and approval.

The annual AFCAIG process develops costs for the budget 2 years into the future; for example, the 1997 cycle, using the most current cost data available, developed the cost factors used in the fiscal year 1999 budget. The major commands begin the factor development process by calculating a baseline cost per hour for each aircraft type. Essentially, this process is accomplished by dividing the accumulated obligations for each expense element by the number of hours flown. For example, the baseline cost per hour for depot-level repairable parts for the F-15E in fiscal year 1997 was $2,667—accumulated obligations of about $100 million divided by the 37,531 hours flown. The baseline cost per flying hour is then adjusted by a conversion factor (provided in the guidance from headquarters) to state the costs in fiscal year 1998 dollars. For the example cited above, the 1.198 factor used that year increased the baseline cost to $3,195 per flying hour.

Once the baseline cost per flying hour rates are determined, the major commands review them and propose adjustments. An adjustment is an increase or decrease due to a forecasted change in policy, procedure, or
situation that will affect the cost per flying hour. The major command must compile data that is sufficient to allow reviewers within the process to understand the command’s requirements. The reasons for adjustments include, but are not limited to, the following:

- Warranty expiration—when a system has been covered by a warranty, the true sustainment costs have not been captured in the baseline.
- Special program starting—the price paid in the baseline year would no longer be needed because the system is transferring to a special program, such as Contractor Logistic Support.
- Changes in the level of maintenance—changing from two-level to three-level, or vice versa, would affect the depot-level repairable cost and the consumable supply cost associated with repair.

The completed baseline and proposed adjustments are submitted to Air Force headquarters for validation and approval. The validation is done by Air Force logistics and the Air Force Cost Analysis Agency (AFCAA) in conjunction with the major command’s Director of Plans. The result is a coordinated position and a validated package submitted by mid-December. AFCAA provides a copy to the various panels that comprise the AFCAIG in preparation for January briefings. In January, the major commands’ representatives brief the AFCAIG in regard to the cost drivers of the validated factors and the major commands’ total requirement. The AFCAIG approves or disapproves the validated submissions.

Each February, AFCAA provides the Air Force Budget office with the approved factors for each major command. Budget personnel put the cost factors into the Automated Budget Interactive Data Environment System (ABIDES) computer database to price the flying hour program, and they provide the total dollar amount back to AFCAA. The AFCAIG then briefs the Air Force corporate structure, which is the top-level forum for considering and deciding Air Force resource allocation issues. If changes result from this review, the budget office will adjust the cost factors and distribute to the major commands (by May of each year) the adjusted AFCAIG cost per flying hour factors along with an explanation for the adjustments.

Finally, the cost factors are adjusted to accommodate the annual composite price changes forecast by managers of the Air Force Working Capital Fund. The fund provides resources for Air Force Material Command’s (AFMC) Supply Management Activity Group, which provides supply support to the major commands. Each year the managers estimate a rate of increase or
A decrease in prices and submit it to the Under Secretary of Defense for approval. Once approved, the composite rate is provided to the Air Force budget office. The budget office applies the rate to the approved AFCAIG cost factors. These final factors, applied through the ABIDES database, become the basis for the cost of flying hours requested in the President's budget.

Price Instability Has Led to Obligations Exceeding Funds Provided for the Flying Hour Program

The accuracy of the costs projected by the system described above depends heavily on the working capital fund concept that requires stabilized prices for repairable parts and consumable supplies. These prices are established by AFMC. For the past 2 fiscal years, and particularly in fiscal year 1998, AFMC has not provided this stability. Instead, financial management and systems problems at AFMC resulted in price lists that contained numerous errors. Efforts to correct the errors and changes in pricing policies created wide fluctuations of prices paid by the major commands. In total, the price lists provided to the commands were changed six times during fiscal year 1998. These price changes caused a great deal of concern among the commands regarding their ability to support the flying hour program and distorted the baseline data used for future years' budgeting. In a June 1998 report, we recommended that AFMC develop and implement procedures to stabilize prices. AFMC efforts to accomplish this are currently in progress.

Working Capital Fund Concept Requires Stabilized Prices

The Air Force Working Capital Fund was created in 1996 by the Under Secretary of Defense (Comptroller) as a reorganization of the Defense Business Operations Fund. The Working Capital Fund is a revolving fund established to create a customer-provider relationship between military operating units and support organizations (for the purposes of this report, the Supply Management Activity Group (SMAG)). SMAG generates revenue by selling to Air Force units the items necessary to support troops, weapon systems, aircraft, communications systems, and other military equipment. SMAG is expected to break even over time by setting its prices to recover both the costs of goods and operating costs over the long run. Variations in program execution may result in gains or losses for the year, but such gains or losses are generally reflected in offsetting adjustments to stabilized rates established in subsequent fiscal years.

DOD Financial Management Regulation 7000.14R requires that the prices, once established, be stabilized for the remainder of the fiscal year. This stabilized rate policy serves to protect appropriated fund customers from
unforeseen cost changes, and thereby enables customers to more accurately plan and budget for support requirements. According to the regulations, the policy also reduces disruptive fluctuations in the support facility's workload levels and permits more effective use of resources.

For the past 2 years, SMAG has been unable to establish accurate price lists for the repairable parts and consumable items it supplies to Air Force flying units. In June 1998, we reported that SMAG lacked reliable data on which to base its prices and could not ensure that the composite price change approved by the Under Secretary of Defense (Comptroller) was implemented. The report further stated that on October 1, 1997, the Air Force made two major changes in SMAG's cost allocation procedures, but that SMAG lacked reliable sales revenue and operational cost data needed to effectively implement the change.

As a result, the price lists issued by SMAG to its customers contained inaccurate pricing and/or prices that fluctuated widely from those previously charged. In April 1997, the Air Force determined that SMAG's composite price increase was higher than the one approved for fiscal year 1997 by the Under Secretary of Defense (Comptroller); consequently, prices were reduced by about 18 percent for the remainder of the year. In fiscal year 1998, when SMAG attempted to implement a composite rate increase of about 19.3 percent, the price list that became effective October 1 contained so many erroneous prices that SMAG revised it a month later and revised it again effective December 1. Despite the DOD regulations requiring stabilized prices, SMAG changed the price list a total of six times during fiscal year 1998. Table 2 shows how the changes affected the prices of specific items.

Price Changes Hamper Budgeting at Major Commands

The lack of accurate and stable prices for depot-level repairable and consumable parts caused a great deal of concern among the flying commands. According to Air Force officials, the overpricing by SMAG in fiscal year 1997 was identified only after budget execution reviews revealed that the commands would not have enough money to complete their flying hour programs if spending continued at the current rate. Even though SMAG reduced its prices in mid-year, the Air Force requested and received supplemental funding (about $108 million) to correct the projected shortfall.

Similarly, in deliberations over the fiscal year 1998 budget, the Air Force told Congress that the rapid growth in costs for repairable parts and consumables required substantial funding in addition to its budget request. Congress provided $300 million to offset the perceived shortage. Nevertheless, the numerous price changes made it difficult for the commands to determine if they had been provided adequate funding to complete the flying hour program. Air Combat Command officials acknowledged that the changes made it virtually impossible for them to determine whether funding was sufficient, but their analysis showed that they expected shortages if additional funding was not provided. In late fiscal year 1998, $181 million was reprogrammed into the flying hour program.

In addition to creating uncertainty over the adequacy of funding for the current year, the pricing and policy changes implemented by SMAG may affect budgeting for future years. This is because (1) budgeting is based on actual obligations in prior years, (2) SMAG’s new procedures significantly

Table 2: Examples of Price Changes During Fiscal Year 1998

<table>
<thead>
<tr>
<th>Type of part</th>
<th>Initial price</th>
<th>Second price</th>
<th>Percent of change from initial to second price</th>
<th>Third price</th>
<th>Percent of change from second to third price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell assembly</td>
<td>$9,939</td>
<td>$13,152</td>
<td>32.3</td>
<td>$14,503</td>
<td>10.2</td>
</tr>
<tr>
<td>Duct assembly</td>
<td>17,544</td>
<td>19,340</td>
<td>10.2</td>
<td>23,516</td>
<td>21.6</td>
</tr>
<tr>
<td>Case, turbine</td>
<td>9,235</td>
<td>10,199</td>
<td>10.4</td>
<td>16,795</td>
<td>64.7</td>
</tr>
<tr>
<td>#3 bearing</td>
<td>3,981</td>
<td>5,654</td>
<td>42.0</td>
<td>5,106</td>
<td>(9.7)*</td>
</tr>
<tr>
<td>Liner</td>
<td>10,893</td>
<td>12,141</td>
<td>11.5</td>
<td>2,700</td>
<td>(77.8)*</td>
</tr>
<tr>
<td>Case, gas turbine</td>
<td>1,478</td>
<td>204,413</td>
<td>13730.4</td>
<td>No change</td>
<td>No change</td>
</tr>
</tbody>
</table>

*aPercentages in parentheses indicate price reductions.

Source: Air Combat Command.
affected the fiscal year 1998 prices charged for individual items, and (3) the impact varied significantly from one customer to the next. In our 1998 report on SMAG, we reported that Air Force budget officials estimated it would take at least 1 to 2 years, perhaps more, before the Air Force has reliable historical data on the amount of money needed by individual customers.

**Pricing Problems Continued into Fiscal Year 1999**

Although SMAG’s problems with pricing have been known for some time, it appears they have continued into this fiscal year. The approved composite rate increase for fiscal year 1999 was 0.4 percent. However, both Air Combat Command and Air Mobility Command budget personnel told us they were experiencing, on the whole, a much greater increase. As a result of the commands’ concerns, SMAG once again issued a new price list effective January 1, 1999. According to an AFMC official, this change reduced prices by about 7 to 7.5 percent across the board. Table 3 provides several examples of the magnitude of changes in the exchange price for specific repairable parts.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Core module</td>
<td>$1,557,348</td>
<td>$1,709,633</td>
<td>10%</td>
<td>$1,592,204</td>
<td>2.24%</td>
</tr>
<tr>
<td>Core module</td>
<td>380,493</td>
<td>671,099</td>
<td>76%</td>
<td>625,003</td>
<td>64.26%</td>
</tr>
<tr>
<td>Fan module</td>
<td>91,731</td>
<td>219,221</td>
<td>139%</td>
<td>204,163</td>
<td>122.57%</td>
</tr>
<tr>
<td>HPT module</td>
<td>87,109</td>
<td>148,031</td>
<td>70%</td>
<td>137,863</td>
<td>58.26%</td>
</tr>
<tr>
<td>Fan drive</td>
<td>58,339</td>
<td>155,164</td>
<td>166%</td>
<td>144,507</td>
<td>147.70%</td>
</tr>
<tr>
<td>Exciter</td>
<td>3,725,818</td>
<td>1,686</td>
<td>(99.95)%</td>
<td>1,433</td>
<td>(99.96)%</td>
</tr>
<tr>
<td>Comp rotor</td>
<td>55,694</td>
<td>152,593</td>
<td>173.98%</td>
<td>14,660</td>
<td>(73.68)%</td>
</tr>
<tr>
<td>Fan rotor</td>
<td>15,096</td>
<td>105,730</td>
<td>600.38%</td>
<td>131,726</td>
<td>772.59%</td>
</tr>
<tr>
<td>Turbine rotor</td>
<td>52,695</td>
<td>96,913</td>
<td>83.91%</td>
<td>10,018</td>
<td>(80.99)%</td>
</tr>
</tbody>
</table>

*Percentages in parentheses indicate price reductions.

Source: Air Combat Command.

In our June 1998 report, we recommended that AFMC develop and implement procedures to ensure that the prices that are established for individual inventory items are consistent with the composite prices developed and approved by the Under Secretary of Defense (Comptroller) during the budget process. In March 1999, the Air Force responded to a
request for the current implementation status of this recommendation. According to that response, the Air Force Director of Supply tasked AFMC to assess the current pricing methodology and develop a long-term solution that would provide stabilized prices consistent with the President’s budget. In turn, AFMC established an Integrated Product Team that is currently working on several options. In addition, AFMC requested assistance from the Air Force Audit Agency to assess their pricing policies. Both efforts are currently in progress.

Comparison of Budgeted Costs With Actual Obligations

The flying hour program included in the President's budget does not include the cost of flying in support of contingencies, while the Air Force accounting system accumulates the costs of all flying without regard to its purpose. Therefore, the most valid and meaningful comparison is between the total funding received for flying hours and the total amount obligated for that purpose. Through supplemental funding and DOD reprogramming actions, the Air Force received more each year for flying hours than was obligated. According to Air Force budget officials, the excess in fiscal year 1997 was about $5 million, but in fiscal year 1998, the excess was about $357 million. Table 4 shows this comparison.

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>President’s budget</td>
<td>$2,301.4</td>
<td>$2,717.7</td>
</tr>
<tr>
<td>Congressional increase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>depot-level repairable parts</td>
<td>246.1</td>
<td></td>
</tr>
<tr>
<td>Other (adjustments for force</td>
<td>(10.0)</td>
<td></td>
</tr>
<tr>
<td>structure changes, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingency flying hours</td>
<td>81.5</td>
<td>160.9</td>
</tr>
<tr>
<td>(reimbursement from DOD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplemental/Omnibus</td>
<td>108.4</td>
<td>181.5</td>
</tr>
<tr>
<td>reprogramming</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total funding</strong></td>
<td><strong>$2,481.3</strong></td>
<td><strong>$3,306.2</strong></td>
</tr>
<tr>
<td><strong>Total obligations</strong></td>
<td><strong>$2,476.4</strong></td>
<td><strong>$2,949.6</strong></td>
</tr>
<tr>
<td><strong>Funding excess</strong></td>
<td>$4.9</td>
<td>$356.6</td>
</tr>
</tbody>
</table>

Source: Department of the Air Force.

Air Force officials said that the excess flying hour money was used by headquarters or the major commands to satisfy unmet funding requirements in other operation and maintenance programs. Table 5 shows the distribution of the excess fiscal year 1998 flying hour funds.
Table 5: Distribution of Excess Flying Hour Funds to Other Operation and Maintenance Accounts—(fiscal year 1998)

<table>
<thead>
<tr>
<th>Operation and maintenance account</th>
<th>Dollars received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenses for training and ranges</td>
<td>$69.0</td>
</tr>
<tr>
<td>Air operations training, combat communications</td>
<td>61.0</td>
</tr>
<tr>
<td>Environmental compliance</td>
<td>36.0</td>
</tr>
<tr>
<td>Base operating support</td>
<td>35.0</td>
</tr>
<tr>
<td>Undergraduate pilot training</td>
<td>35.0</td>
</tr>
<tr>
<td>Expenses for SR-71 retirement</td>
<td>30.0</td>
</tr>
<tr>
<td>Real property maintenance</td>
<td>26.5</td>
</tr>
<tr>
<td>Depot purchased equipment for maintenance requirements</td>
<td>22.0</td>
</tr>
<tr>
<td>Temporary duty, supplies, equipment, contracts</td>
<td>14.0</td>
</tr>
<tr>
<td>Battlelabs</td>
<td>13.0</td>
</tr>
<tr>
<td>Headquarters and administrative expenses</td>
<td>10.0</td>
</tr>
<tr>
<td>Updated flying hour factors</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$356.5</strong></td>
</tr>
</tbody>
</table>

Source: Department of the Air Force.

Conclusions

The Air Force continues to request funding for more hours than it has been able to fly in the current world environment. A number of factors have affected the service’s ability to fly all the programmed hours, but a shortage of funding is not one of them. The Air Force has revised its requirements determination process, received adequate funding, and provided the major commands with top-level command emphasis on flying all the programmed hours in fiscal year 1999. The amount of flying hours the Air Force completes in the remainder of this fiscal year should serve as a good indication of its general ability to fly the hours it says are needed to maintain combat readiness and proficiency while maintaining support for contingencies in Europe and Southwest Asia.

The methodology used by the Air Force to determine the cost of the flying hour program appears sound, but it depends heavily on stable prices for its repairable and consumable spare parts. Until the SMAG is able to overcome its management problems and provide stable prices to its customers, the flying hour program will experience fluctuating costs and uncertainty regarding the adequacy of funding.
We are not making specific recommendations at this time because the Air Force is in the process of correcting the pricing problems identified in our previous report on the financial operations of the supply management activity group.

Scope and Methodology

To identify the extent to which the Air Force has flown the hours requested in the President's budget, we obtained and reviewed major command quarterly execution reports from Air Force Headquarters, Directorate of Operations and Training, Washington, D.C. These reports compare the number of hours programmed in the President's budget with the number of hours executed, by type of aircraft, at each of the eight major commands.

To meet our objective of how the Air Force determines flying hour requirements, we reviewed regulations and obtained briefings at Air Combat Command, Langley Air Force Base, Virginia, and Air Mobility Command, Scott Air Force Base, Illinois. We obtained documents on the assumptions and specific requirements used in these models. We selected these two commands because they comprise over two-thirds of the flying hour program funding.

To determine how the budget estimate for the flying hour program is developed, we reviewed the Air Force's flying hour process guide and interviewed officials from the Air Force Cost Analysis Agency, Crystal City, Virginia, and Air Force Logistics Directorate, Washington, D.C. In addition, we discussed price changes in the Air Force Working Capital Fund with representatives of the Air Force Deputy Assistant Secretary (Budget).

The financial information used in this report on the actual obligations incurred for the flying hour program compared to budget requests in fiscal years 1997 and 1998 was produced by financial and accounting records from the Secretary of the Air Force Financial Management and Budget Office (SAF/FMBO), Washington, D.C. The SAF/FMBO also provided documentation that showed the Air Force spent funds initially set aside for flying hours for other purposes. We did not independently verify this information.

We conducted our review from August 1998 to May 1999 in accordance with generally accepted government auditing standards.
A draft of this report was provided to the Air Force for their comments. The Air Force stated they are working to improve requirement identification and pricing issues identified in the report. The Air Force also suggested several technical changes to the draft, which we have incorporated where appropriate. Air Force comments are presented in appendix I.

We are sending copies of this report to Representative Jerry Lewis, Chairman, and Representative John P. Murtha, Ranking Minority Member, House Committee on Appropriations, Subcommittee on Defense; Senator James M. Inhofe, Chairman, and Senator Charles S. Robb, Ranking Minority Member, Senate Committee on Armed Services, Subcommittee on Readiness and Management Support; and Representative Herbert H. Bateman, Chairman, and Representative Solomon P. Ortiz, Ranking Minority Member, House Committee on Armed Services, Subcommittee on Military Readiness. We are also sending copies of this report to the Honorable William S. Cohen, Secretary of Defense, and the Honorable F. Whitten Peters, Acting Secretary of the Air Force. Copies will also be made available to others upon request.

If you have any questions about this report, please contact me at (202) 512-5140 or Brenda S. Farrell at (202) 512-3604. Other major contributors to this report include Carol R. Schuster, James K. Mahaffey, Robert L. Coleman, and Raymond G. Bickert.

Mark E. Gebicke
Director, National Security Preparedness Issues
Appendix I

Comments From the Department of the Air Force

Note: GAO's comments supplementing those in the report text appear at the end of this appendix.

MEMORANDUM FOR: Mr. Mark E. Gebicke
National Security Preparedness Issues
National Security and International Affairs Division
U.S. General Accounting Office, Washington D.C. 20548

FROM: SAF/FM
1130 Air Force Pentagon
Washington DC 20330-1130


This is in reply to your request to provide Air Force comments on the subject report.

Subject audit reported no findings, recommendations, or cost savings. However, we are working to improve requirements identification and pricing issues identified in the report. Technical corrections to the subject report are attached.

My point of contact for this effort is Col. Darrell Wagner, SAF/FMBOO, (703)-614-3801.

JAMES R. SPEER
Principal Deputy Assistant Secretary
of the Air Force (Financial Management)

Attachment:

1. Technical Corrections on Draft GAO Report,
   “Observations On The Air Force Flying Hour Program”
The following is our comment on the Department of the Air Force's letter dated June 16, 1999.

GAO Comments

1. We disagree with the Air Force's characterization of our report. The primary findings in this report are that (1) the Air Force has consistently requested funding for more flying hours than it has been able to fly for each of the last 4 fiscal years—ranging from 89 to 94 percent of estimated flying hours; (2) continuing financial management problems associated with the pricing of individual inventory items have contributed to the Air Force's inability to accurately estimate the funding it needs for this program; and (3) the eventual surplus funds that Congress originally intended for the flying hour program—$5 million in fiscal year 1997 and $357 million in fiscal year 1998—have been shifted to other operation and maintenance purposes. Moreover, we have not made any new recommendations in this report because the Air Force is in the process of implementing our earlier recommendations aimed at improving the financial operations of the Air Force’s supply management activity group.
Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are $2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary, VISA and MasterCard credit cards are accepted, also.

Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:
U.S. General Accounting Office
P.O. Box 37050
Washington, DC  20013

or visit:
Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC

Orders may also be placed by calling (202) 512-6000 or by using fax number (202) 512-6061, or TDD (202) 512-2537.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send an e-mail message with “info” in the body to:

info@www.gao.gov

or visit GAO’s World Wide Web Home Page at:

http://www.gao.gov