

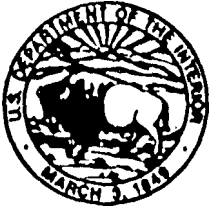


U.S. Department of the Interior  
Office of Inspector General

## **AUDIT REPORT**

OFFICE OF MANAGEMENT AND BUDGET  
CIRCULAR A-76 STUDY OF AIRCRAFT SERVICES  
FOR THE PACIFIC NORTHWEST REGION,  
BUREAU OF RECLAMATION

**REPORT NO. 96-I-822**  
**JUNE 1996**



# United States Department of the Interior

OFFICE OF THE INSPECTOR GENERAL  
Washington, D.C. 20240

**JUL 15 1996**

## MEMORANDUM

TO:

The Secretary

FROM:

Wilma A. Lewis  
Inspector General

SUBJECT SUMMARY: Final Audit Report for Your Information - "Office of Management and Budget Circular A-76 Study of Aircraft Services for the Pacific Northwest Region, Bureau of Reclamation" (No. 96-I-822)

Attached for your information is a copy of the subject final audit report.

The objective of our review was to determine whether the Bureau of Reclamation's cost comparison supporting its decision to provide in-house aircraft services in the Pacific Northwest Region was prepared in accordance with the provisions of Circular A-76, "Performance of Commercial Activities." The Bureau had leased an aircraft since 1990 for about \$2.4 million in lease obligations. In January 1995, the Bureau completed the study, which concluded that providing the services in-house with a Government-owned aircraft was more cost beneficial than providing in-house services with a leased aircraft or using private sector contract services. As a result, the Bureau purchased the aircraft by applying \$2 million of the prior lease obligations and providing a cash payment of \$1.1 million.

We concluded that the Bureau had generally prepared the cost comparison in accordance with the provisions of the Circular. In addition, we determined that the study provided justification for the Bureau's decision to provide aircraft services in-house with a Government-owned aircraft. Our report contained no recommendations.

If you have any questions concerning this matter, please contact me or Ms. Judy Harrison, Assistant Inspector General for Audits, at (202) 208-5745.

Attachment



# United States Department of the Interior

## OFFICE OF INSPECTOR GENERAL

Headquarters Audits  
1550 Wilson Boulevard  
Suite 401  
Arlington, Virginia 22209

JUN 10 1996

## AUDIT REPORT

### Memorandum

To: Commissioner - Bureau of Reclamation

From: Judy Harrison *Judy Harrison*  
Assistant Inspector General for Audits

Subject: Final Audit Report on the Office of Management and Budget  
Circular A-76 Study of Aircraft Services for the Pacific Northwest Region,  
Bureau of Reclamation (No. 96-1-822)

## INTRODUCTION

This report presents the results of our review of the Bureau of Reclamation's January 1995 cost comparison of alternatives in its Office of Management and Budget Circular A-76 study on providing in-house aircraft services for its Pacific Northwest Region. The objective of the review was to determine whether the cost comparison was prepared in accordance with the provisions of Circular A-76, "Performance of Commercial Activities," and whether the cost comparison supported the Bureau's decision to continue to provide the aircraft services in-house.

## BACKGROUND

The Bureau's mission is to manage, protect, and develop water-related resources in an environmentally and economically sound manner in the interests of the American public. To accomplish its mission, the Bureau manages a variety of programs, such as water resource development, operation and maintenance of projects, and construction of water and hydroelectric facilities. Within the Bureau's Pacific Northwest Region, these programs are carried out by personnel in the Regional Office in Boise, Idaho, and at 19 other offices primarily in the States of Idaho, Washington, and Oregon. A key element in the efficient management of these programs is the Bureau's capability to transport the staff within the Region to its facilities and remote areas in a timely manner. Because 13 of the 20 offices in the Region are not served by commercial air transportation, the Bureau must obtain air

travel to these facilities and remote areas through either in-house aircraft services or through the private sector.

The Bureau is required by Circular A-76 to compare the in-house versus private sector costs of providing aircraft services to determine which alternative is more cost beneficial to the Government. In January 1995, the Bureau completed a Circular A-76 study that concluded that providing the services in-house with a Government-owned aircraft was more cost beneficial than providing in-house services with a leased aircraft or using private sector contract services. Accordingly, in September 1995, the Bureau requested that the Department of the Interior's Office of Aircraft Services<sup>1</sup> purchase the King Air B200 aircraft that Aircraft Services had leased for the Bureau since 1990. Under the lease agreement, the Bureau had paid about \$2.4 million in lease obligations, of which about \$2.0 million was applied toward the \$3.1 million purchase price of the aircraft. As such, Aircraft Services purchased the aircraft for the option price of about \$1.1 million.

## **SCOPE OF AUDIT**

We conducted our audit at the Bureau's Pacific Northwest Regional Office and at Aircraft Services headquarters office in Boise. To accomplish our objective, we analyzed the Bureau's documentation and support for the cost-comparison alternatives presented in its Circular A-76 study to justify in-house aircraft services. We also interviewed officials involved in preparing the study.

The audit was made in accordance with the "Government Auditing Standards," issued by the Comptroller General of the United States. Accordingly, we included such tests of records and other auditing procedures that were considered necessary under the circumstances to accomplish the audit objective. Because the scope of the review was limited to evaluating the cost comparison of the alternatives in the Bureau's Circular A-76 study, we did not assess the Regional Office's system of internal controls over costs and revenues. As part of the audit, we reviewed the Department of the Interior's Annual Statement and Report, required by the Federal Managers' Financial Integrity Act, for fiscal years 1994 and 1995. The Department did not report any control weaknesses that related to the objective and scope of our audit.

## **PRIOR AUDIT COVERAGE**

During the past 5 years, neither the Office of Inspector General nor the General Accounting Office has issued any reports related to the Bureau's acquisition of aircraft services. However, the Office of Inspector General has issued two audit reports on the performance of Circular A-76 studies related to the acquisition of aircraft services within the Department as follows:

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<sup>1</sup>Within the Department of the Interior, the Office of Aircraft Services has responsibility for acquiring all aircraft and related services for the bureaus.

- The March 1994 report "Lease/Purchase of Aircraft for the Oregon State Office, Bureau of Land Management" (No. 94-I-476) addressed the acquisition of aircraft services by the Bureau of Land Management. The report concluded that the Bureau's lease/purchase of the aircraft was based on an inaccurate Circular A-76 cost comparison of acquisition alternatives and recommended that a new study be performed before the aircraft was purchased. The Bureau decided not to provide aviation services in-house.

- The January 1995 report "Use and Acquisition of Aircraft by the Department of the Interior" (No. 95-I-317) discussed Circular A-76 guidelines. The report concluded that the bureaus either did not perform analyses or performed inadequate analyses to determine whether aircraft and aircraft services should be purchased. The reasons cited by the bureaus for these deficiencies were that they believed that the aircraft were mission oriented and that the Circular A-76 guidelines were "ambiguous." The report recommended that studies under Circular A-76 be performed before the aircraft was acquired. The Assistant Secretary for Policy, Management and Budget concurred with the recommendation, noting that "the draft Circular A-76 procedure now in use is not definitive enough" and that the Department would work with the Office of Management and Budget "on acceptable formulas and procedures for use in aviation A-76 studies."

We have addressed the area of ambiguity noted during this review under separate correspondence for consideration by the Assistant Secretary for Policy, Management and Budget.

## **RESULTS OF AUDIT**

The Bureau of Reclamation's cost comparison of alternatives was generally prepared in accordance with provisions of Office of Management and Budget Circular A-76, as modified. In addition, we determined that, subsequent to audit adjustments, the study justified the Bureau's decision to provide aircraft services in-house with a Government-owned aircraft.

In its Circular A-76 study, the Bureau considered three alternatives: continue providing in-house aircraft services with a Government-owned aircraft; provide in-house aircraft services with a leased aircraft; or contract for aircraft services from the private sector. The Bureau conducted the study using the Aircraft and Aviation Cost Comparison Form, as illustrated in the June 1990 draft of Office of Management and Budget Circular A-76. The Bureau's cost comparison, however, contained some misstatements that understated the costs of all the alternatives.

Based on our analysis of these alternatives, we determined that the total cost of the first alternative was understated by \$94,035; the second alternative was understated by \$107,740, which was the least cost effective to the Government and the third alternative was understated by \$19,400. The largest adjustments to the Bureau's estimates of the in-house alternatives were attributable to understatements in

depreciation and administrative overhead costs. The largest adjustment to the private sector alternative was the conversion differential costs. The audit adjustments are detailed in the Appendix.

While the correction of these misstatements would not affect the Bureau's conclusion that aircraft services could be provided in-house with a Government-owned aircraft at a lower cost, the 5-year estimated savings over aircraft services contracted from the private sector were reduced from \$729,014 to \$654,379 as follows:

<u>Description</u>	<u>Bureau Estimated costs</u>	<u>Audit Adjustments</u>	<u>Adjusted Estimated costs</u>
Total In-House Costs	\$3,555,838	\$94,035	\$3,649,873
Total Private Sector Costs	<u>4,284,852</u>	19,400	<u>4,304,252</u>
In-House Costs Less Than Private Sector Costs	<u>\$729,014</u>		<u>\$654,379</u>

The legislation, as amended, creating the Office of Inspector General requires semiannual reporting to the Congress on all audit reports issued, actions taken to implement audit recommendations, and identification of each significant recommendation on which corrective action has not been taken.

Since this report does not contain any recommendations, a response to this report is not required. However, if you have any questions or comments concerning the report, please call Mr. Charles Lyons, Acting Regional Audit Manager, Western Region, at (916) 979-2700.

cc: Assistant Secretary for Water and Science  
Assistant Secretary for Policy, Management and Budget  
Director, Office of Aircraft Services

## BUREAU OF RECLAMATION'S STUDY OF AVIATION SERVICES COSTS FOR A 5-YEAR PERIOD

Description	Bureau Estimated costs	Audit Adjustments	Adjusted Estimated costs	Explanatory Notes
Alternative 1- In-House Aircraft Services With Government-Owned Aircraft:				
Total Direct Operating Costs	\$1,603,800		\$1,603,800	
Annual Fixed Operating Costs				
Crew Costs	608,280		608,280	
Maintenance Costs	157,500	(\$157,500)	0	(1)
Depreciation	193,800	193,760	387,560	(2)
Self-insurance	293,700	22,800	316,500	(3)
Operations Overhead	130,000		130,000	
Administrative Overhead	18,630	138,940	157,570	(4)
Cost of Capital	536,090	(89,927)	446,163	(5)
Conversion Differential	<u>14,038</u>	<u>(14,038)</u>	<u>0</u>	(6)
Total Costs	<u>\$3,555,838</u>	<u>\$94,035</u>	<u>\$3,649,873</u>	
Alternative 2- In-House Aircraft Services With Leased Aircraft				
Total Direct Operating Costs	\$1,821,300		\$1,821,300	
Fixed Operating Annual Costs				
Crew Costs	608,280		608,280	
Maintenance Costs	157,500	(\$157,500)	0	(1)
Aircraft Lease	1,094,400		1,094,400	
Self-insurance	190,200	126,300	316,500	(3)
Operations Overhead	130,000		130,000	
Administrative Overhead	<u>18,630</u>	<u>138,940</u>	<u>157,570</u>	(4)
Total Costs	<u>\$4,020,310</u>	<u>\$107,740</u>	<u>\$4,128,050</u>	
Alternative 3- Private Sector:				
Contract Costs	\$3,397,350		\$3,397,350	
Cost Construction to Meet Performance Work Statement Requirements				
Additional Pilot and Crew Charges	240,625		240,625	
Travel and Per Diem	10,370		10,370	
Airport Fees	16,315		16,315	
Other Costs (Overtime)	24,165		24,165	
Contract Administration Costs	93,625		93,625	
One-Time Conversion Costs	502,402		502,402	
Federal Income Tax	0	(\$67,945)	(67,945)	(7)
Conversion Differential	<u>87,345</u>	<u>87,345</u>	<u>87,345</u>	(6)
Total Costs	<u>\$4,284,852</u>	<u>\$19,400</u>	<u>\$4,304,252</u>	

**EXPLANATORY NOTES:**

(1) **Maintenance Costs.** The Government's maintenance costs should be decreased by \$157,500 for both in-house alternatives. Based on our review, this amount was duplicative because it was included in the Office of Aircraft Services administrative overhead (see Note 4).

(2) **Depreciation.** The amount for depreciation under the first alternative should be increased by \$193,760. The Bureau reduced the aircraft acquisition cost by an estimate of the aircraft's residual value and divided the resulting amount by the aircraft's estimated 20-year useful life. The Bureau's method of calculating the \$193,800 in depreciation was in accordance with Office of Management and Budget Circular A-76 except that it allocated a portion to a replacement reserve. This reserve allocation is consistent with Aircraft Services method of computing depreciation. Specifically, Aircraft Services, for internal purposes, allocates half of the amount to depreciation and half to a replacement reserve. However, the full amount calculated for depreciation following the Bureau's method should have been used in the cost comparison.

(3) **Self-Insurance.** The Government's costs for an in-house operation with an owned aircraft should be increased by \$22,800, and the costs with a leased aircraft should be increased by \$126,300. The Bureau used Aircraft Services method for calculating self-insurance, which estimated this cost at 3 percent of the estimated annual market value of the aircraft. However, the Bureau could not provide support for its estimates of the market values used. Based on the prescribed market value authority of trend estimates (the Fall 1995 "Aircraft Bluebook Price Digest"), we determined that the aircraft's market value was \$2,410,000 in 1994, the first year of the study, and that the value would decline by \$150,000 for each of the remaining 4 years. Using these figures and the 3 percent rate, we calculated total self-insurance costs of \$316,500.

(4) **Administrative Overhead.** The Government's administrative overhead costs under both in-house alternatives should be increased by \$138,940 to include an estimate of Aircraft Services administrative overhead. The Bureau calculated its 5-year amount (\$18,630) based on 5 percent of the annual salary for one employee at the Federal general schedule rate at grade 13, step 5, including 29.66 percent for employee fringe benefits, as prescribed by Circular A-76. We determined from historical costs that Aircraft Services had incurred a larger amount of overhead allocable to the aircraft. Based on Aircraft Services actual charges, we estimated that the average cost of overhead per flight hour was \$31.94, which also included a monthly maintenance fee of \$2,625 (see Note 1). Based on 870 hours per year for 5 years, we estimated Aircraft Services overhead costs at \$138,940.



(5) Cost of Capital. The Government's cost of capital for the first alternative could be decreased by \$89,927. According to Circular A-76, the acquisition cost of the aircraft, less its accumulated depreciation, is the basis for computing the cost of capital at a 10 percent rate. However, Circular A-76 does not clarify the appropriate acquisition cost for aircraft under a lease agreement. The Bureau estimated that the cost of capital would be based on the lease/purchase option price of the aircraft in May 1995, of \$1,183,177, less the trade-in allowance for another Bureau aircraft. The Bureau included 10 percent of this amount in the annual fixed operating costs. We estimated that the cost of capital was \$446,163, or a decrease of \$89,927, by using the actual option price in September 1995, \$1,075,789, and adjusting this amount for annual depreciation.

(6) Conversion Differential. The conversion differential should be decreased by \$14,038 for the in-house, Government-owned aircraft (Alternative 1) and increased by \$87,345 for aircraft services contracted from the private sector (Alternative 3). The Bureau calculated the \$14,038 based on 10 percent of the estimated personnel salaries and expenses of \$140,038 for a 1-year period. According to Circular A-76, the conversion differential should have been computed over the 5-year study period and added to the private sector costs instead of the in-house alternative. In addition, the Bureau had underestimated the conversion differential basis by omitting both the aircraft crew and Aircraft Services administrative personnel salaries, expenses, and per diem costs. We determined that 10 percent of these costs and expenses for a 5-year period were \$87,345, which resulted in a corresponding increase in private sector costs.

(7) Federal Income Tax. The estimated Federal income tax should be increased by \$67,945. The Bureau estimated Federal income tax based on 1 percent of the contract cost, as stipulated in Circular A-76, Transmittal No. 7, dated August 8, 1988; however, the Bureau did not include the tax estimate in the estimate, which should reduce the total cost of contract performance.

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