

**AUDIT REPORT**  
**STEVEN F. UDVAR-HAZY CENTER**  
**BUSINESS ACTIVITIES**

**A-04-06**

**August 25, 2004**



**Smithsonian Institution**

**Office of Inspector General**

## SUMMARY

The Office of the Inspector General audited business activities at the National Air and Space Museum Steven F. Udvar-Hazy Center (the Center). Our purpose was to determine whether adequate controls were in place to ensure that revenues and expenses were at levels expected and were promptly reported and recorded in official accounting records. Also, we determined if funds borrowed and advanced to complete the Center were being paid as expected. We focused on concessions, the IMAX theater, museum store, simulators, and visitor parking.

Funds borrowed and advanced to construct the Center were being paid consistently with plans. The Smithsonian Institution made payments to bondholders as scheduled and had started repaying trust funds advanced.

Improvements were needed in three areas of the Center's business activities: (1) parking revenue reporting and reconciliations, (2) parking procedures, and (3) concession reporting. We therefore made recommendations to improve controls in those areas as summarized below:

- Provide instruction to contractors to provide more accurate revenue reports and to strengthen procedures over non-revenue transactions.
- Develop written contracting procedures for monitoring contractor performance.

Management concurred with our recommendations and provided implementation plans. We believe that these implementation plans are responsive to our recommendations.

*Office of the Inspector General*  
Office of the Inspector General

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### ABBREVIATIONS AND ACRONYMS

Center	Steven F. Udvar-Hazy Center
NASM	National Air and Space Museum
OMB	Office of Management and Budget
SBV	Smithsonian Business Ventures
SD	Smithsonian Directive

## INTRODUCTION

### **A. Purpose**

The purpose of the audit was to determine whether the Center's internal controls over its business activities were adequate in four areas. Specifically, we examined whether: (1) revenue was promptly and accurately collected and transferred to the Institution; (2) revenues and expenses from the business activities were being recorded into the Smithsonian PeopleSoft and Smithsonian Business Ventures (SBV) Lawson accounting systems promptly and accurately; (3) revenues and expenses were promptly and accurately reported to the Treasurer's office by the National Air and Space Museum (NASM) and SBV and by contractors to NASM and SBV management; (4) bond and "advance" funds<sup>1</sup>, which were used to fund construction of the Center, were being repaid as expected.

### **B. Scope and Methodology**

The audit was conducted from March 8, 2004, to June 29, 2004, in accordance with generally accepted government auditing standards. We evaluated the adequacy of the controls and procedures over the accounting for activity at the Center and tested transactions for compliance with applicable laws, policies, and procedures.

The audit covered business activity from December 15, 2003, to March 31, 2004. The scope of the audit did not cover funds received from donor pledges or special events fees.

We reviewed the following:

- Policies and procedures relating to the accounting for business activities at the Center;
- Prior audits and investigations of Smithsonian activities and of similar activities from other federal and local government agencies;
- Daily, weekly, and monthly transactions at the Center for the period December 15, 2003, through March 31, 2004;
- Contracts for all business activities operated by a contractor;
- Revenue collection processes for all of the business activities, from the receipt of the cash to the deposit in the bank and recording in the PeopleSoft and Lawson financial accounting systems;
- Bond documents; and
- Revenue-sharing documents.

We interviewed staff from offices involved with the Center such as the Office of the Comptroller, the Office of the Treasurer, NASM, SBV, and the Office of Contracting. We also interviewed the food and beverage and simulator contractors' management and staff. Through interviews and transaction reviews, we reviewed Center practices and controls over accounting, contracting, and operations.

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<sup>1</sup> "Advance" funds are advances of funds against almost certain revenues expected in the near future. Typically, such revenues are expected from confirmed grants or signed gift pledges.

For the three and one-half month period from December 15, 2003, to March 31, 2004, the Center produced net income of approximately \$3.2 million from the operation of the parking lot, concessions, theater, simulators, and museum shops, according to SBV's Lawson system and the Institution's PeopleSoft system (see Chart 1).

**Chart 1**

**Net Income for the Period of December 2003 to March 2004  
According to the Lawson and PeopleSoft Systems<sup>2</sup>**

<b>Activity</b>	<b>Revenue</b>	<b>Expenses</b>	<b>Net Income</b>
<b>Parking</b>	<b>1,298,395</b>	<b>3,387</b>	<b>1,295,008</b>
<b>Theater</b>	<b>795,119</b>	<b>214,224</b>	<b>580,895</b>
<b>Food and Beverage Concession</b>	<b>73,000</b>	<b>33,583</b>	<b>39,417</b>
<b>Simulators</b>	<b>65,534</b>	<b>743</b>	<b>64,791</b>
<b>Store</b>	<b>1,453,830</b>	<b>192,820</b>	<b>1,261,010</b>
<b>Totals</b>	<b>3,685,878</b>	<b>444,757</b>	<b>3,241,121</b>

During the audit we sought to answer questions such as:

1. Was the revenue expected to be received actually received?
2. Were revenues and expenses accurately and promptly recorded in the accounting records?
3. Were expenses supported by documents such as purchase orders and invoices?
4. Was there good communication of accounting and management information between the contractors and the Institution?
5. Were the bond and advance funds being repaid as expected?

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<sup>2</sup> Parking revenues and expenses are recorded in PeopleSoft and other business activities revenues and expenses are recorded in SBV's Lawson system.

## **C. Background**

### **The Steven F. Udvar-Hazy Center**

The Center is an annex to the NASM. The Center is located at Washington Dulles International Airport in Northern Virginia, approximately 30 miles from the National Mall in Washington, D.C. The Center opened on December 15, 2003, and provides exhibit areas for aircraft and spacecraft, educational facilities for school groups and educators, areas for business activities (including a large format IMAX theater, restaurant, museum shop, simulators, and visitor parking), and an observation deck from which visitors can watch aircraft arriving and departing from Washington Dulles International Airport.

### **The Business Activities**

NASM oversees visitor parking, and SBV oversees the IMAX theater, museum store, food and beverage concession, and simulators. NASM uses a contractor to operate the visitor parking. SBV operates the IMAX theater and museum store and uses contractors to operate the concession and simulators.

The parking contractor collects parking revenues in return for a percentage of gross parking receipts collected. The simulator contractor provides three motion-ride systems for a percentage of gross receipts. The concessions contractor provides food and beverage services for a percentage of gross receipts. The museum store sells aviation-themed items at a store and a kiosk in the Center. The IMAX operation provides theater entertainment.

### **Financial Reporting**

OC staff records the revenues and expenses from the parking lot into PeopleSoft, the Institution's financial system. SBV staff records revenues and expenses from the Center's other business activities into SBV's accounting system, Lawson. At year-end, the accounting information from the Lawson system is consolidated into the PeopleSoft system.

### **Center Construction Financing**

NASM had to finance a cash-flow gap between the amount of cash needed to pay for the Center's construction costs and the cash flow provided from contributions and business activities. The Institution bridged NASM's cash-flow need by funding construction of the Center with a trust fund advance. The Institution decided to fund the advance with debt.

## RESULTS OF AUDIT

### **A. Parking Contractor Revenue Reporting and Reconciliation Procedures**

NASM staff was unable to obtain accurate parking revenue data from the parking contractor at the Center. Therefore, they could not accurately determine if the amount of parking revenue received from the parking contractor agreed with the amount of revenue NASM should have received from the opening of the Center on December 15, 2003, through March 31, 2004. NASM staff could not accurately determine the revenue they should have received because contractor reports did not distinguish between the following items: paying and non-paying vehicles; refunds; and sales of \$12 versus \$50 parking passes. During our audit NASM management developed procedures to resolve differences between actual and expected revenue received from the parking contractor.

#### **Background**

To effectively monitor revenue from the Center's parking operation, NASM staff had to distinguish between different payment options available to visitors. First, they allowed certain types of vehicles to park at the Center without paying, such as: employees, tour and school buses, taxis, and vehicles picking up or dropping off visitors. Second, they offered visitors the option of purchasing a \$12 daily pass or a \$50 annual pass. NASM discontinued \$50 annual pass sales in January 2004. Third, due to the limited food options at the Center when it was opened, NASM management instructed the contractor to allow visitors to re-enter the parking lot without paying. Fourth, visitors could receive refunds. The challenge for NASM and the parking contractor was to identify the number of each of these different types of transactions each month, calculate the revenue produced by these transactions, and then compare the revenue received to the revenue expected. Although the contract terms gave the contractor 120 days to provide reporting plans to NASM, we believe that adequate reporting should have been in place from the start.

NASM had the additional challenge of checking the revenues received against the contractor's reports. Beginning in December 2003, when the Udvar-Hazy Center opened, NASM received two different reports of parking activity from the parking contractor. The first report was a daily income report, and the second report was a monthly activity report. Beginning in February 2004, the contractor began sending NASM a third report, called a "count log". The "count log" report identified the revenue provided from the sales of two ticket types: a \$12 daily pass and a \$50 annual pass.

Smithsonian Directive 115, *Management Controls*, states that, "Transactions should be promptly recorded and accounted for in order to prepare timely accounts and reliable financial reports." The Directive and the Office of Management and Budget Circular A-123 define management controls to include policies and procedures to ensure reliable data are obtained, maintained, reported, and used for sound decision-making.

The parking contract between NASM and the parking contractor requires the contractor to furnish the Smithsonian with monthly statements consisting of (1) revenue and number of tickets generated by booth, shift, and day; (2) a list of dates and preset dollar amounts transferred from the contractor's bank account to the Smithsonian's bank account; (3) a bill if funds were over-transferred or a check if funds were under-

transferred; and (4) an itemized bill of any after-hour parking services approved and expended. The contract did not require the contractor to submit reports that identified transactions by type of ticket sold (\$12 daily passes versus \$50 annual passes), or that tabulated the number of non-revenue transactions or refunds. The contract also provided the contractor 120 days to provide all reporting plans, including the cash management plan.

## Results

NASM staff could not accurately determine the revenue they should have received because contractor reports did not distinguish between the following items: paying and non-paying vehicles; refunds; and sales of \$12 versus \$50 parking passes. NASM staff had not received an accurate contractor report which could be compared to the revenue data on any of the three reports provided by the contractor. Therefore, they could not accurately determine whether the revenues received from the parking contractor agreed with the types of transactions processed each month.

From December 2003 to January 2004, NASM received revenue data only on the posted daily income report. NASM staff could not determine from this report if revenue was received for all vehicles which should have paid, because the report lacked a vehicle count.

Beginning in February 2004, NASM and contractor officials developed more detailed report formats, and the contractor began submitting a spreadsheet called the Smithsonian "count log." NASM staff determined sales by type of ticket, the number of non-revenue transactions, and the number of refunds from the "count log." The contractor then went back and produced the "count log" reports for December 2003 and January 2004 activity and submitted them to NASM. NASM and contractor officials later determined that the "count log" underreported sales of \$50 annual passes for December 2003 and January 2004. NASM and the contractor determined that for those two months, the contractor's "count log" understated revenue from \$50 annual pass sales by \$31,344. This amount represents approximately two percent of the total revenue of \$1,527,743 for sales of both \$12 daily passes and \$50 annual passes during that period. NASM also determined that the "count log" contained inaccurate vehicle counts, which prevented NASM from comparing vehicle counts to revenues received.

NASM was unable to reconcile vehicle activity to revenues received from the contractor, because the contractor's reports from December 2003 to January 2004 were not formatted to meet NASM's needs. The contractor reports did not distinguish between paying and non-paying vehicles, refunds, and sales of \$12 versus \$50 parking passes, because NASM officials had not included these requirements in the contract. The contract only required the contractor to report (1) the revenue and number of tickets generated by booth, shift, and day; (2) a list of dates and preset dollar amounts transferred from the contractor's bank account to the Smithsonian's bank account; (3) a bill if funds were over-transferred or a check if funds were under-transferred; and (4) an itemized bill of any after-hour parking services approved and provided. According to NASM management, they formulated their contractor report requirements based on input from their parking experts. They said their parking experts told them that the reports proposed by the parking contractor represented the industry standard. NASM did not realize until they started working with the reports that they needed a different report format to distinguish between paying and non-paying vehicles, refunds, and sales of \$12 versus \$50 parking

passes. Once NASM management realized the need for a vehicle count report to match against revenues received, it requested one, but the contractor was unable to provide a report with accurate vehicle counts. NASM management told us that there appeared to be communication problems within the contractor's organization which were delaying the production of reports which would meet NASM's needs. During the audit, NASM management discontinued the sale of \$50 passes and developed written procedures for reconciling revenues received to vehicle counts from the parking contractor.

We determined that NASM should have received approximately \$1,527,743 from the sale of \$12 daily passes and \$50 annual passes from December 15, 2003 to March 31, 2004. NASM actually received \$1,528,435, or an overpayment of \$692. This amount represents less than 1 percent of the revenue NASM should have received. NASM should have received \$59,708 from the sale of \$50 annual passes from December 2003 to January 2004; however, NASM actually received \$28,364, an underpayment of approximately \$31,345 (52 percent).

### Conclusion

NASM could strengthen controls over its parking contractor by requiring more meaningful data from its contractors. NASM has started to improve its controls by working with the contractor to provide reports that meet its needs.

### Recommendations

We recommended that the Director, National Air and Space Museum ensure that his staff amend the contract with the parking contractor to provide accurate revenue reports containing relevant information and reconcile the revenue it should have received to the revenue it actually received.

### Management Comments

Concur. During our FY05 contract negotiations, which will be completed December 31, 2004, we will incorporate additional reports that will meet the Inspector General's stated recommendations.

### Office of the Inspector General Response

The Director's plan of action, if implemented, is responsive to our recommendation.

## **B. NASM Parking Procedures**

NASM's parking procedures allow some visitors to park their vehicles without paying, which decreases parking revenue and increases the risk of cashier theft and visitor non-payment. NASM's procedures provide an opportunity for cashiers to explain improper behavior, such as unrecorded sales, as legitimate non-payment transactions. The procedures also provide visitors with a motivation to broadly interpret non-payment rules to their advantage. As a result of these procedures, NASM is not receiving approximately 13 percent of the monthly revenue it could have received from parking fees. The procedures also increase the risk of lost revenue from undetected cashier theft and visitor non-payment schemes. NASM management told us that they have eliminated several types of non-payment transactions.

### **Background**

From December 15, 2003, to March 31, 2004, 18,636 visitors out of a total of 147,411 visitors, or 13 percent, were allowed to park in the parking lot without paying. The parking contractor collected a total of \$1,545,300 for \$12 parking passes but would have collected \$1,768,932 if all these visitors were charged.

In our discussions with the parking contractor, they advised that non-revenue transactions were not standard practice and could decrease control over parking operations. In addition, the International Parking Institute publication, *Parking 101- A Parking Primer*, states the following: Non-revenue tickets should be controlled by requiring cashiers to itemize non-revenue tickets for each shift and supervisors should itemize them for each daily report. When a type of non-revenue ticket is increasing in frequency, the cause may be fraudulent. The documentation of all non-revenue tickets facilitates the early detection of possible problems.

### **Results**

NASM policy permits approximately 13 percent of vehicles to enter the Udvar-Hazy Center each month without paying, which decreases the revenues received from the Center's parking facility. NASM's policy allowed people to pick up and drop off visitors, and allowed visitors to re-enter the Center's parking lot without paying. These transactions totaled on average approximately \$56,000 per month in potential revenue.

The contractor's procedures called for reconciliation of sales, returns, and exceptions (non-revenue transactions) to cash received. The procedures did not require the cashiers to retain physical documentation -- such as ticket stubs -- for non-revenue transactions. Instead, the procedures required the cashiers to identify the type of non-revenue transactions on a "Free Item Log." NASM management decided to allow re-entry of visitors due to the limited food options at the Center. NASM management wanted visitors to be able to leave, eat lunch, and then return because there was only one food vendor at the Center.

NASM's policy to allow non-revenue transactions and the parking contractor's procedures together increased the risk that cashiers could charge a visitor \$12 for a daily parking pass and pocket the money without detection. The cashier could record the transaction on their Free Item Log as a non-revenue transaction -- such as a re-entry --

and a supervisory review of their "Free Item Log" would not detect the theft. NASM management told us that they had eliminated the practice of allowing visitors to leave and return on a daily parking pass and they had eliminated other groups of non-revenue transactions. NASM management told us that there were legitimate non-revenue visitors such as employees or their identified contractors, special guests, representatives of Metropolitan Washington Airports Authority on official business, tour buses, and hotel vans. NASM is determining whether to continue to allow free drop off of visitors not parking at the Center.

#### Conclusion

NASM could decrease the number of non-revenue transactions and the risk of lost revenue by requiring the contractor to document non-revenue transactions. For example, cashiers could be required to maintain existing numbered ticket stubs as evidence of non-revenue transactions. Improved signage, by directing visitors to non-payment lanes where applicable, may also reduce lost revenue from non-paying visitors. NASM management told us that a contract has been executed to improve signage beginning in August 2004. Periodic reviews of the supporting documentation for non-revenue transactions could also deter improper cashier behavior.

#### Recommendation

We recommended that the Director, National Air and Space Museum instruct the contractor to strengthen their procedures to ensure non-revenue transactions are legitimate.

#### Management Comments

Concur. We will review our current non-revenue options and increase controls as necessary by December 31, 2004.

#### Office of the Inspector General Response

The Director's plan of action, if implemented, is responsive to our recommendation.

### **C. Smithsonian Business Ventures Contracting Procedures**

SBV did not have its practices documented in the form of written procedures. SBV management told us the contracts with its vendors represented its contracting procedures. One of the two SBV concession contractors at the Center did not submit monthly management reports and did not promptly remit the revenue it could have remitted as a result.

#### **Background**

Smithsonian Directive 115, *Management Controls*, and OMB Circular A-123, *Management Accountability and Control*, define management controls to include policies and procedures to ensure reliable data are obtained, maintained, reported, and used for sound decision-making. In addition, Smithsonian Directive 115 refers to management controls cited in OMB Circular A-123. These controls include policies and procedures used by managers to ensure that programs achieve their intended results and that resources are protected from the risks of waste, fraud, and mismanagement.

SBV had to bring in a new, temporary, concession contractor to the Center due to ongoing negotiations with the original concession contractor and the need to put a food and beverage vendor in place by the Center's opening date. A two-page memorandum of understanding was the initial agreement between the Institution and the temporary concession contractor. SBV and the temporary concession contractor intended to replace the memorandum of understanding with a more detailed contract, which was awaiting signature at the time of our audit. The temporary concession contractor also submitted weekly sales figures to SBV.

#### **Results**

We found that SBV did not have written procedures to manage concession contracts and contractors. In fact, we found that SBV generally lacked written contracting procedures. SBV management had not established written contracting procedures because they believed that the language in the concession contracts represented their contracting procedures. Although the contract terms might complement contracting procedures, they are not a substitute for them. The Office of Contracting demonstrated the use of written procedures in the case of the parking contractor overseen by NASM personnel. In that instance, the Office of Contracting issued the Contracting Officer's Technical Representatives a list of responsibilities for monitoring the contractor's performance.

Written contracting procedures could have provided SBV guidance on the key elements to include in the memorandum of understanding, such as reporting and remittance instructions. The memorandum of understanding did not require the contractor to report or remit funds within specified time frames. The lack of written contracting procedures, combined with the hurried drafting of the memorandum of understanding to hire a short-term food and beverage vendor, resulted in a memorandum of understanding that failed to address monthly reporting or remitting funds to SBV.

These omissions increased the likelihood that the contractor would not send SBV monthly activity reports or remit revenue to SBV monthly. The contractor did submit weekly sales figures to SBV's Concessions Director and the contractor remitted \$92,179 in

concession revenue for the period from December 15, 2003, to March 31, 2004, to SBV on April 1, 2004.

### Conclusion

Written contracting procedures are a best practice for communicating expectations to employees who manage contractors. We believe that such procedures could provide detailed instructions for SBV personnel and provide the opportunity to clarify responsibilities between SBV units. For example, the duties for following up and monitoring contractors between SBV's operational and accounting personnel could be more fully explained in the procedures. Such procedures can increase the accuracy and timeliness of contractor revenue reports, improve revenue, reduce risk, and provide the basis for sound decisions.

### Recommendation

We recommended that the Chief Executive Officer for SBV ensure that his staff develops written contracting procedures for monitoring contractor performance.

### Management Comments

Concur. SBV will establish written contract administration policies and procedures for all Business Units by January 1, 2005.

### Office of the Inspector General Response

The Chief Executive Officer's plan of action, if implemented, is responsive to our recommendation.

WRITTEN COMMENTS BY THE DIRECTOR, NATIONAL AIR AND SPACE MUSEUM



Smithsonian  
*National Air and Space Museum*

Memo

**Office of the Director**

Date August 19, 2004

To Thomas D. Blair  
Inspector General

From J.R. Dailey  
Director

Subject Revised Draft Report on the Audit of Steven F. Udvar-Hazy Center Business Activities

We have reviewed your August 10, 2004 Draft Report on the Udvar-Hazy Center's business activities. We concur with recommendation #1, and during our FY05 contract negotiations, we will incorporate additional reports that will meet the Inspector General's stated recommendations. For recommendation #2, we concur with the recommendations and will review our current non-revenue options and increase controls as necessary.

We look forward to working with your staff to bring this report to completion.

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WRITTEN COMMENTS BY THE CHIEF EXECUTIVE OFFICER, SMITHSONIAN  
BUSINESS VENTURES



Smithsonian Business Ventures

Gary Beer  
Chief Executive Officer

August 11, 2004

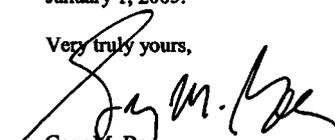
Mr. Thomas D. Blair  
Inspector General  
Smithsonian Institution  
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Dear Mr. Blair:

I have reviewed your revised draft report on the Audit of Accounting for Business Activities at the Steven F. Udvar-Hazy Center dated August 10, 2004.

We concur with your recommendation that the Chief Executive Officer for SBV ensure that written contracting procedures for reporting and reconciling revenue from contractors be developed. SBV will establish contract administration policies and procedures in writing for all Business Units. Our goal is to have this completed by January 1, 2005.

Very truly yours,



Gary M. Beer

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