

IG-97-006

**AUDIT
REPORT**

RAPID ACTION

**CHARGES FOR USE OF NASA'S FACILITIES
BY DOD'S JOINT STRIKE FIGHTER (JSF) PROGRAM
CONTRACTORS**

November 14, 1996



**National Aeronautics and
Space Administration**

OFFICE OF INSPECTOR GENERAL

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National Aeronautics and
Space Administration

Headquarters
Washington, DC 20546-0001



Reply to Attn of: **W**

November 14, 1996

To: R/Associate Administrator for Aeronautics

FROM: W/Assistant Inspector General for Auditing

SUBJECT: Rapid Action Report
Charges for Use of NASA's Facilities by DoD's Joint Strike Fighter (JSF)
Program Contractors
Facility Cost Recovery Policies
Assignment No. A-HA-97-002 (A-LA-96-002)
Report No. IG-97-006

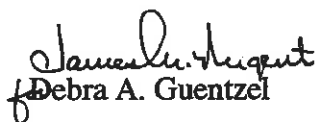
We are performing an audit of the facility cost recovery policies employed by the NASA Office of Aeronautics (OA). During this review, we found OA was attempting to begin charging the Department of Defense (DoD) Joint Strike Fighter (JSF) program (formerly the Joint Advanced Strike Technology (JAST) program) for the program contractors' use of wind tunnels at all OA centers. However, OA had not established policies and procedures for collecting and processing receipts and did not execute a required Memorandum of Agreement (MOA) addendum outlining agreed upon services and charges for some tests done during the early stages of the JSF program. Without a supportable policy, OA may lose some of an estimated \$20 million in payments for future services required for this program. By not executing the addendum to the MOA, OA may have lost the opportunity to recover \$250,000 of agreed reimbursements for wind tunnel tests already provided.

Immediate action is needed to establish a supportable basis for billing the customer, retaining the collections, and using the funds collected before the receipts begin to arrive. Action is also needed to develop proper agreements with the JSF program.

We issued a draft report, dated October 2, 1996, to obtain your comments. We received your written response on October 30, 1996, summarized the response after each recommendation, and included the entire response as Appendix 1. Management concurred with each recommendation. Because the planned corrective actions are not complete, please include our office in the concurrence cycle for closing Recommendations 1 and 2 in accordance with NMI 9910.1B. After receiving the management response, we verbally requested documentation in support of the reported actions on Recommendation 3. Subsequent discussions indicated no conclusive documentation was available to support the actions you have taken, but we

concluded that additional actions would have little benefit. Therefore, Recommendation 3 is considered closed.

We express our appreciation to members of your staff and the personnel we worked with at Langley Research Center, Lewis Research Center, and Ames Research Center for their courtesy, assistance, and cooperation. If you have any questions or need additional information, please call Lee Ball, Director, Aeronautics and Space Transportation, at 757-864-8500, or me at 358-1232.


Debra A. Guentzel

Enclosure

cc:

JM/Ms. M. Peterson

RB/Mr. G. Fuller

ARC/C200-8/Mr. R. Robinson

LaRC/119/Mr. J. Struhar

LeRC/0200/Mr. R. Fails

INTRODUCTION

The NASA Office of Aeronautics (OA) operates and staffs many research facilities – the major ones being wind tunnels – to support research programs. Most facilities are used primarily for NASA research, but certain wind tunnels are required by statute to be available primarily to industry for testing experimental models in the development of aircraft and missiles. For many years, industry and other Government agency customers have used OA facilities primarily in cooperative programs with NASA without reimbursement. Under cooperative programs, customers usually contribute models, prior tests results, or other research materials and NASA pays for the test. NASA benefits because it obtains additional research data without having to pay the full costs.

OA is attempting to institute a strategic management approach to facilities. OA management recognizes that reduced budgets make review of the past practice of not charging some customers for use of OA's aeronautics research facilities necessary and has tasked the Central Facilities Management Team to develop a new policy proposal. While no final decision has been made by the Associate Administrator, the Team has developed a preliminary proposal. This proposal is currently being presented to the OA Centers for review and comment.

One of the most significant impacts of the proposed policy will be processing of charges imposed on non-NASA customers who want to use the research facilities. To equitably and consistently levy these charges, OA managers need a formal facility charging policy and internal financial control procedures but have not had time to develop them.

The first OA-wide attempt to charge DoD involves tests performed for the contractors involved in the Joint Strike Fighter (JSF) program. Three contractors are participating in the on-going concept phase of the program. In November 1996, DoD will initiate the demonstration phase by awarding two of the three participants contracts to build aircraft.

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OBJECTIVES, SCOPE, AND METHODOLOGY

OBJECTIVES

The purpose of the ongoing audit is to evaluate NASA's policies for recovering costs of operating its aeronautical facilities when they are used to perform tests for non-NASA customers.

Specifically, the detailed audit will answer the following questions:

- ▶ *Do Aeronautics managers ensure customer contributions on nonreimbursable and partially reimbursable agreements are adequate compared to NASA's contribution?*
- ▶ *Are Centers complying with existing agreements that require customers to pay actual costs for services provided by NASA on a reimbursable basis?*
- ▶ *Are Centers preparing accurate estimates of the full costs of providing services to non-NASA customers?*
- ▶ *Is NASA properly disposing of reimbursables obtained from customers for use of aeronautical facilities?*

SCOPE AND METHODOLOGY

For purposes of this rapid action report, the scope was limited to a review of the wind tunnel tests performed or to be performed by NASA for the DoD JSF program's contractors. Our work focused on the policy NASA will use to bill, collect, and dispose of funds received from the program for performing these tests. To determine the policy and processes, we interviewed the Aeronautics Facility Manager, Facility Group Director for Wind Tunnels, the NASA coordinator for the JSF program, financial management personnel, budget personnel, and others. We reviewed records of tests performed, tentative test schedules, and existing and planned policy directives.

MANAGEMENT CONTROLS REVIEWED

For this report, we examined certain management controls in the policies and processes for entering agreements involving the use of NASA's aeronautical facilities, complying with agreement terms, and disposing of receipts obtained from performing activities required by the agreements. Also, we examined laws and regulations related to user fees and reimbursable agreements.

***INDICATIONS OF
FRAUD, WASTE,
ABUSE, OR ILLEGAL
ACTS***

To date, nothing has come to our attention to indicate instances of fraud, waste, abuse, or illegal acts. On-going audit work will include specific tests for illegal acts.

AUDIT FIELD WORK

Audit field work began in February 1996 and is continuing. The field work was conducted primarily at Langley Research Center (LaRC) and NASA Headquarters. The audit is being performed in accordance with generally accepted government auditing standards.

OBSERVATIONS AND RECOMMENDATIONS

NASA SHOULD CLARIFY POLICIES FOR RECEIPT AND DISPOSITION OF FACILITY USE CHARGES

The NASA Office of Aeronautics (OA) is missing an opportunity to recover facility use charges from the Department of Defense (DoD). While OA selected this program to start recovering facility costs, it has not established policies and procedures for collecting and processing receipts. In addition, OA did not execute required Memorandum of Agreement (MOA) addenda outlining agreed upon services and charges. As a result, OA may lose some of an estimated \$20 million in payments for future services required for this program and may have lost the opportunity to recover \$250,000 for services already provided.

NASA managers need to know and understand the facility charging processes to be able to execute proper agreements with customers and properly budget and account for the amounts received from customers. Customers need to have accurate estimates of charges to facilitate their planning and budgeting. But, no OA-wide policy has been developed to define and clarify the processes to provide effective management control.

The NASA Space Act Agreements Manual provides guidance for creating Space Act agreements. The Manual states that an agreement is required whenever there is a commitment of NASA resources involving an entity other than NASA. Use of NASA's facilities is one of the resource commitments that requires an agreement.

Facility Charging Policy and Proper Agreements are Needed

In an October 1994 MOA, OA and JSF agreed to exchange information, fund their individual programs, and establish joint or shared funding commitments for cooperative activities in addenda to the MOA (Refer to Exhibit 1). Although the MOA made no mention of wind tunnel tests, OA and JSF informally agreed that JSF would partially reimburse NASA for use of OA's facilities.

The JSF program provided a unique opportunity to implement the OA-wide facility charging policy for two reasons. First and foremost, OA managers recognized the National need for the use of NASA's facilities in developing the next generation of fighter aircraft. Secondly, they wanted to implement the facility charging policy on this program because it required significant wind tunnel testing over several years. Therefore, OA managers agreed to allow JSF contractors to use NASA facilities on a partially reimbursable basis without having had time to adequately make policy decisions such as

how much to charge and how the revenues can be used. Now, time is running out. JSF plans to pay NASA in advance for the first year's tests in the upcoming demonstration phase of the program shortly after the contract award in November 1996. The collections from the demonstration phase tests are estimated at \$20 million or more over about 4 years.

***OA Has Experienced
Delays in Formulating a
Facility Charging Policy***

OA management has recognized the need for a facility charging policy for some time but has been unable to complete work on the policy. In May 1995, an ad hoc team (Team April) examined various options for recovering costs from customers who used their facilities. At that time, they proposed several steps that needed to be accomplished to develop a facility charging policy.

Several things have contributed to the delay in development of a facility charging policy. First, although the Associate Administrator informed JSF that OA planned to complete work on the facility charging policy by late January 1996, other important activities have pulled staff away from policy development.

Second, OA managers recognize that the facility charging policy they establish will likely have a significant impact on the future quality of both NASA's research facilities and the research that is done in those facilities. NASA expects to implement a new "full cost" accounting system by fiscal year 1999. Under the current system, all programs are "taxed" at the beginning of the year on a pro-rata basis to cover facility costs. Under the new system, programs will pay their share of the full facility costs based on the time they actually use the facilities. However, OA management has become very concerned that a move toward "industrial-funded" facilities will reduce:

- ▶ facility capabilities over the long term because operators cannot be assured of facility utilization sufficient to recover their capital investment costs,
- ▶ the quality of research performed in the facilities due to researchers running shorter and fewer tests in an effort to control program costs, and
- ▶ research performed in NASA facilities as the most talented internal and external researchers seek out lower cost facilities in which to conduct their tests.

Third, facility charging policy likely will be impacted by the new NASA-wide accounting system that the agency is developing.

Immediate Action Could Permit NASA to Retain More of the Collections

Even though valid reasons exist for not completing the policy decisions and executing proper agreements, immediate action is needed. At least an interim facility charging policy must be developed and used as a basis for executing an agreement or agreements with JSF to define the testing requirements, funding liabilities, etc. OA has stated that it plans to execute an agreement with JSF for demonstration phase tests. However, further delays in developing a supportable facility charging policy may make the agreement difficult to negotiate because JSF does not want to pay NASA more than it can retain and use. Without such a policy, NASA could lose some portion of the estimated \$20 million in collections which otherwise could be retained and used.

Wind Tunnel Tests Performed Without Reimbursement

Three OA Centers have already performed several wind tunnel tests for JSF program contractors during the concept phase (predecessor of the demonstration phase) of the program. For some of these tests, JSF had agreed to pay NASA \$250,000. However, a review of a sample of recent wind tunnel tests and related interviews showed Langley Research Center (LaRC) and Lewis Research Center (LeRC) performed tests for the three JSF contractors without reimbursement.

NASA did not recover the facility charges because an agreement was not properly executed in accordance with the Space Act Manual guidance. An Addendum No. 2 (Refer to Exhibit 2) to the NASA/JSF MOA calling for JSF to provide \$250,000 to NASA for wind tunnel tests at the three Centers was prepared but not executed by NASA because decisions regarding the disposition of the collections had not been made. By not executing the addendum, NASA did not collect \$250,000 in revenues. The confusion about how the collections should be handled resulted directly from not having developed a supportable policy on facility charging.

In summary, a facility charging policy is needed to identify and document a supportable basis for determining how much can be charged to Federal and non-Federal customers for facility use, how much of the collections can be retained by NASA, and for what purposes the retained collections can be used. The policy will then provide a basis for executing agreements with customers.

RECOMMENDATION 1

The Associate Administrator for Aeronautics should, with assistance from the Chief Financial Officer and General Counsel, identify and document the basis for determining how much can be charged to Federal and non-Federal customers for facility use, how much of the collections can be retained by NASA, and for what purposes the retained collections can be used. Then, the Associate Administrator should ensure an interim Aeronautics Facility Charging Policy is completed to provide a basis for charging customers which use aeronautics research facilities.

Management's Response

Concur (with qualification). Rather than the "Aeronautics Facility Manager should..." it would be more appropriate to say "The Office of Aeronautics should..." It is our intention to pursue resolution of the larger issues of Agency-wide facility charging policies, and regulatory and legislative changes to allow retention of any resulting collections. In the interim, the Aeronautics Facility Charging Policy will have to comply with existing regulations and laws. Charging Policy development is proceeding.

Evaluation of Management's Responses

In response to the management comments, we directed our recommendation to the Associate Administrator for Aeronautics. OA's plan to develop an Aeronautics Facility Charging Policy is responsive to the recommendation. We endorse OA's plans to pursue Agency-wide facility charging policies and regulatory and legislative changes to allow retention of any resulting collections. A consistent Agency-wide policy should greatly benefit NASA.

RECOMMENDATION 2

The Associate Administrator for Aeronautics should ensure proper agreements are prepared to support the use of aeronautics facilities by the JSF Program Office and other non-NASA customers. The agreements should conform to the approved Aeronautics Facility Charging Policy when it is completed.

Management's Response

Concur. As we consistently have stated, it is our intention to execute an appropriate agreement with the JSF Program Office after contract award, which is currently scheduled for November 1996, and prior to initiation of testing. Development of this agreement has been initiated.

Evaluation of Management's Responses

Management's comments are responsive to the recommendation.

RECOMMENDATION 3

The Associate Administrator for Aeronautics should determine the extent to which funds described in Addendum 2 of the NASA/JSF Memorandum of Agreement can be retained and attempt to recover from the DoD JSF Program Office the portion of the \$250,000 that NASA can retain and use.

Management's Response

Concur (with qualification). The determination as to the extent to which funds could be retained has already been made, consistent with existing regulations, and we did collect the portion of the \$250,000 that we were able to use. Even if we collected the rest of the \$250,000 originally envisioned, we would not be able, under current laws and regulations, to keep any of it. Therefore, there is no need to pursue it further.

Evaluation of Management's Responses

OA management could not provide convincing documentation on how much of the \$250,000 was collected. Subsequent discussions with management determined they were inaccurate about their position on the \$250,000 cost recovery. They now believe the Defense Advanced Research Projects Agency (DARPA) has paid the entire \$250,000. Management stated that DARPA had provided funding to NASA as its contribution to a related Advanced Short Take-Off Vertical Landing (ASTOVL) cooperative program which was merged with the JSF program.

After Addendum 2 was prepared, OA chose to pay for the JSF contractor tests that were performed at LaRC and LeRC (as set out in Addendum 2) with internal funds as part of NASA's contribution to the cooperative program. OA asked DARPA to provide its contribution only to Ames Research Center (ARC). OA believes the funding provided to ARC includes the \$250,000 reimbursement. However, the documentation provided does not firmly establish that the funds were collected, and management indicates that conclusive documentation is not available.

We consider Recommendation 3 closed because we do not believe further actions would result in the collection of additional funds. However, the above circumstances indicate potential weaknesses in OA's agreement and reimbursable processes which we are examining in more detail in our continuing audit.

Evaluation of Management's General and Detailed Comments

As "general comments" in their response, management discussed funding provided to NASA by DARPA under the ASTOVL program. They comment that DARPA provided funding covering Fiscal Year

(FY) 1995 and 1996 on three orders totalling \$4.9 million and that these funds were made part of the JAST program. As stated earlier, OA believes the \$4.9 million provided by DARPA included the \$250,000; however, the documentation we examined did not conclusively support this position.

Management disagrees with our statement "(OAST) is missing an opportunity to recover facility use charges." Our statement is accurate because, as stated in the report, NASA will be unable to effectively collect and retain user fees unless a facility charging policy and proper agreements are in place.

Management also disagrees with our statement "Without having determined the policy, they were unable to prepare an addendum or other proper agreement to define the funding liabilities." Management states, "We have provided reimbursement requirements to the JSF program and fully intend to prepare an addendum or new agreement" At the time of our field work, the only requirements given to the JSF program were general estimates of wind tunnel costs. OA staff told us that specific requirements were not prepared because the requirements depended on OA's facility charging policy. As a result, we believe our original statement is accurate.

NASA/JAST Master Memorandum of Agreement

MEMORANDUM OF AGREEMENT

OCT 31 1994

between

The NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)
OFFICE OF AERONAUTICS

and

The DEPARTMENT OF DEFENSE (DOD)
JOINT ADVANCED STRIKE TECHNOLOGY (JAST) PROGRAM

Background:

National Aeronautics Space Administration's Aeronautics Office and the Joint Advanced Strike Technology Program share common goals of maturing, demonstrating and transitioning advanced aeronautical technologies of critical importance to the defense of the nation. While NASA's interests span across all aircraft classes, the mission of the JAST Program is to focus on those technologies specifically associated with the successful accomplishment of a mission of very high priority to the U. S. Navy, U. S. Marine Corp and U. S. Air Force -- i.e. the strike warfare mission.

Purpose:

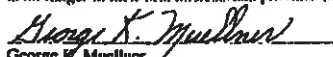
The purpose of this Memorandum of Agreement (MOA) is to provide the authority and define the process for the performance of cooperative activities to advance the development of aeronautical technologies of mutual interest and benefit to NASA and the JAST Program.

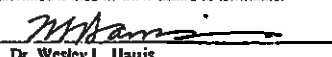
Responsibilities:

NASA and JAST agree to exchange information on project plans and status during regular (quarterly) coordination meetings. The frequency, subject matter and format for these meetings can be changed at any time by mutual agreement. NASA and JAST agree to fund their individual programs. When a cooperative program is defined, the joint or shared funding commitments shall be established and documented as addenda to this MOA by providing the information listed in the attachment. Other potential cooperative activities such as, joint planning for technology advancement, performance of cooperative research and demonstration activities; use of NASA personnel on the JAST Integrated Product Teams, and NASA participation in the JAST technology data base, etc. will occur as mutually agreed. The objectives and responsibilities for these cooperative activities will be documented as addenda to this MOA by providing the information listed in the attachment. These addenda shall be executed by signature of the Director of the High Performance Aircraft and Flight Projects Division for NASA and the Technology Maturation Director for the JAST Program.

Duration and Termination:

This MOA shall remain in effect until 31 December 2000 or until either party determines that it is no longer in their best interests and provides 30 days advance notice of their desire to terminate.


George W. Mueller
Major General, U. S. Air Force
JAST Program Director


Dr. Wesley L. Harris
Associate Administrator for Aeronautics
National Aeronautics and Space Administration

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Addendum No. 2 to NASA/JAST MOA

ADDENDUM No. 2
to
MEMORANDUM OF AGREEMENT
between
The NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)
OFFICE OF AERONAUTICS
and
The DEPARTMENT of DEFENSE
JOINT ADVANCED STRIKE TECHNOLOGY (JAST) PROGRAM

1. PURPOSE OF COOPERATIVE EFFORT

Provide experimental analysis of contractor proposed configurations for JAST concepts by conducting tests in NASA facilities.

2. RESPONSIBILITIES OF BOTH PARTIES

NASA will provide:

- a) wind tunnel and facility test time and associated support to perform the tests at the three aeronautics research centers as listed in the attachment
- b) consultation assistance as required for the model design, fabrication and installation tasks
- c) on-line preliminary data at the completion of each test phase and final reduced data within six (6) weeks of the completion of each test phase. Data to be provided to the JAST system contractor whose model is being tested and to the JAST Program Office. Data produced in the performance of this MOA that is deemed to be proprietary by the contractor will be so marked and treated by NASA.

The JAST Program Office will provide direction to their system contractors to provide models meeting the requirements of the NASA facilities on the schedules as identified by NASA. If schedule conflicts arise, the JAST Program Office will provide guidance as to the priority of technical and schedule requirements to meet their Program goals.

Addendum No. 2 to NASA/JAST MOA

In some cases, the NASA centers may enter into more detailed agreements with the system contractors to further define their responsibilities for the conduct of the tests.

3. FINANCIAL OBLIGATIONS OF BOTH PARTIES

The JAST Program Office will provide funding to NASA for this testing as follows:

Boeing Testing	-	\$100,000
Lockheed Testing	-	\$50,000
McAir Testing	-	\$100,000

All other costs associated with the NASA test facilities and personnel will be a NASA responsibility.

4. SCHEDULE AND MILESTONES OF COOPERATIVE EFFORT

The schedule and milestones for this test effort are provided in the attachment.

5. LIABILITY AND RISK OF LOSS

Neither party shall be liable to the other, except as expressly provided by this MOA Addendum, by reason of accident or other unforeseen contingencies, including injury or damages incurred by third parties.

6. TERMS OF AGREEMENT AND RIGHT TO TERMINATION

This Addendum to the Memorandum of Agreement becomes effective upon signature of both parties. Either party, upon a thirty (30) day written notice to the other party, may terminate this Agreement without liability, at any time and for any reason.

7. KEY PERSONNEL

Sam Wilson (703) 276-7733 ext. 105 will coordinate the testing for NASA and the JAST Program Office.

8. SECURITY CONSIDERATIONS

JAST will inform NASA of any security protections required for this work. NASA will conduct the effort under its security system.

9. PUBLIC INFORMATION POLICY

Release of public information shall be approved by the following two signatories.

Addendum No. 2 to NASA/JAST MOA

10. EXECUTION SIGNATURES

Dr. Donald McErlan
Director, Technology Maturation
JAST Program Office
Department of Defense
DATE:

Mr. Richard Christiansen
Director, High Performance
Aircraft and Flight Projects Div.
NASA Headquarters
DATE:

 Addendum No. 2 to NASA/JAST MOA

ATTACHMENT

to

ADDENDUM NO. 2 TO NASA/JAST MOAI. Tests planned at ARC:

<u>Boeing</u>	None		
<u>Lockheed</u>	LSPM Hover	OARF	Jun 95
	LSPM Transition	80x120 WT	Oct 95
<u>McAir</u>	None		

II. Tests planned at LaRC:

<u>Boeing</u>	Transonic Aero	16T WT	May 95
	Inlet Forebody	16T WT	Jun 95
	Vortex Fence	LTPT WT	Dec 95
	Jet Effects	14x22 WT	Feb 96
<u>Lockheed</u>	Nozzle Calibration	Cal Lab	Jul 95
	Jet Effects	14x22 WT	Oct 95
<u>McAir</u>	Transonic Inlet	16T WT	Oct 95
	Aero/Loads Drag	16T WT	Feb 96

III. Tests planned at LeRC:

<u>Boeing</u>	None		
<u>Lockheed</u>	Inlet Forebody	8x6 WT	Sept 95
<u>McAir</u>	None		

Management's Response to Audit Recommendations

National Aeronautics and
Space Administration
Headquarters
Washington, DC 20546-0001



OCT 30 1996

Reply to Attn of: RT/RB

TO: W/Assistant Inspector General for Auditing
FROM: R/Associate Administrator for Aeronautics
SUBJECT: Draft Rapid Action Report
Charges for Use of NASA's Facilities by Department of Defense's (DoD)
Joint Strike Fighter (JSF) Program Contractors Facility Cost Recovery Policies
Assignment No. A-HA-97-001 (A-LA-96-002)

Reference is made to your letter of October 2, 1996, same subject, requesting our comments on the subject report prior to final issuance. We appreciate the opportunity to review and comment on the draft report. Our general and detailed comments follow.

General Comments

The Office of Aeronautics (OA) agrees that it is necessary to have a consistent Aeronautics-wide charging policy for the use of Aeronautics facilities. As you know, we have been working to that end for some time. Our plan is to have the OA Facility Charging Policy finalized by the end of December 1996, as we have previously reported. A guiding principle of that policy will be to enable OA to recover full cost whenever that is appropriate and to retain the flexibility to charge less than full cost for facility use when it is jointly beneficial to NASA programs and maximizes the benefit to the Nation.

It is important to note that before the DoD Joint Advanced Strike Technology (JAST) program (now known as Joint Strike Fighter or JSF) existed, there was a joint NASA/Defense Advanced Research Projects Agency (DARPA) program for Advanced Short Take-Off Vertical Landing (ASTOVL) research. There was a Memorandum of Understanding (MOU) between DARPA and NASA to cover NASA activities in support of DARPA in the ASTOVL program. The DARPA reimbursement was designed to match the NASA contribution of \$2 million for the total program, but was never intended to balance DARPA & NASA contributions on a test-by-test and Center-by-Center basis. The DARPA contribution actually exceeded \$2 million. The information provided to your auditor includes three DARPA orders covering Fiscal Year (FY) 1995 and 1996 totaling \$4.9 million.

Management's Response to Audit Recommendations

When the ASTOVL program was merged with JAST the ASTOVL tests became part of the combined JAST program. The DARPA money originally scheduled to fund the ASTOVL program was made part of the JAST program. Since the DARPA/NASA MOU was still appropriate to cover the ASTOVL work and DARPA had an easier and faster method of sending money to NASA than DoD, we continued to use that method through FY 1996. The specific funding level at a given Center was a function, not only of the MOU, but also of laws and regulations that existed in FY 1996 (and still do) which constrain NASA's ability to retain reimbursements for in-house expenses. The DARPA/NASA approach was to avoid transferring to NASA any more of the \$250,000 than it could use, either on contract or in-house. Since NASA could not retain money for in-house expenses, the program "saved" some of its limited resources to pay for other JAST-related activities.

Detailed Comments

In paragraph 2 of the cover letter, a statement is made in referring to the JSF program that "OAST selected this program to start recovering facility costs..." OA has been recovering facility costs for many years, especially for industry fee testing. A more accurate statement is that due to severe budget reductions, OA recognized it would be difficult to support the level of JAST testing being requested without some reimbursement, and therefore developed a proposal for JAST reimbursements that was acceptable to the JAST Program.

In paragraph 2 of the cover letter, and in the Draft Rapid Action Report, page 4, paragraph 1, the statement is made that "OAST did not execute required Memorandum of Agreement (MOA) addenda outlining agreed upon services and charges". In addition, in the Draft Rapid Action Report, page 4, paragraph 4, the statement is made that "OAST has agreed to implement facility charging on the demonstration phase of the JSF program but has not yet executed an addendum to the MOA or a new agreement to define the required activity." While this statement is true, OA has consistently reported during the audit our plan to accomplish an addenda or new MOA covering the demonstration phase of JSF after contract award, which is currently scheduled for November 1996, and prior to initiation of testing. Consequently, the estimated \$20 million over four years will be covered by an agreement.

In the Draft Rapid Action Report, page 4, paragraph 1 says: "... (OAST) is missing an opportunity to recover facility use charges..." We do not concur. We have established reimbursement requirements based on preliminary JSF testing plans that have been agreed to by the JSF program. The reimbursement requirements are based on the estimated full direct cost for the complete range of testing program options. The JSF program is in agreement with the prices we have provided. Recovery of direct cost from a DoD aeronautics program is in accordance with the Central Management of Facilities Team's charging policy proposal currently under development.

In the Draft Rapid Action Report, page 5, paragraph 1 says: "Without having determined the policy, they were unable to prepare an addendum or other proper agreement to define the funding liabilities." We do not concur. We have provided reimbursement requirements to the JSF program and fully intend to prepare an addendum or a new agreement, as mentioned above.

Management's Response to Audit Recommendations

In the Draft Rapid Action Report, page 6, paragraph 4 says: "An Addendum No. 2 ... to the NASA/JSF MOA calling for JSF to provide \$250,000 to NASA for wind tunnel tests at the three Centers was prepared but not executed by NASA because *decisions regarding the disposition of the collections had not been made.*" Disposition of the collections would have been made in accordance with existing laws and regulations, which preclude retention of collections for in-house expenses. Knowing this, DARPA and NASA agreed that DARPA would not give NASA money that NASA would have had to give to the Department of Treasury and which would therefore have been of no benefit to the JSF program or to NASA.

With regard to the three recommendations contained in the Draft Rapid Action Report, we respond as follows:

Recommendation 1: Concur (with qualification). Rather than the "Aeronautics Facility Manager should..." it would be more appropriate to say "The Office of Aeronautics should..." It is our intention to pursue resolution of the larger issues of Agency-wide facility charging policies, and regulatory and legislative changes to allow retention of any resulting collections. In the interim, the Aeronautics Facility Charging Policy will have to comply with existing regulations and laws. Charging Policy development is proceeding.

Recommendation 2: Concur. As we consistently have stated, it is our intention to execute an appropriate agreement with the JSF Program Office after contract award, which is currently scheduled for November 1996, and prior to initiation of testing. Development of this agreement has been initiated.

Recommendation 3: Concur (with qualification). The determination as to the extent to which funds could be retained has already been made, consistent with existing regulations, and we did collect the portion of the \$250,000 that we were able to use. Even if we collected the rest of the \$250,000 originally envisioned, we would not be able, under current laws and regulations, to keep any of it. Therefore, there is no need to pursue it further.


Robert E. Whitehead

cc:
ARC/C200-8/Mr. R. Robinson
LaRC/109/Mr. J. Struhar
LeRC/0200/Mr. R. Fails

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