

W

August 6, 1998

TO: Distribution

FROM: W/Assistant Inspector General for Auditing

SUBJECT: Final Report on the Audit of Aeronautics Program Grant Financial
Transactions
Assignment Number A-LA-96-003
Report Number IG-98-019

The subject final report is provided for your use and comment. Our evaluation of your response is incorporated into the body of the report. The corrective actions taken or planned on recommendations 1, 2, 3, 5, 8, and the third and fourth elements of recommendation 9 were responsive. Although NASA management concurred with the first element of recommendation 9, the proposed action was not responsive. With respect to the nonconcurrences with recommendation 4 and the second element of recommendation 9, we reaffirm these recommendations. Accordingly, we request that Code H reconsider its position on recommendation 4 and the first and second elements of recommendation 9 and provide additional comments to our office by September 8, 1998. We consider recommendation 1 closed for reporting purposes. We wish to remain in the concurrence cycle for the remaining recommendations.

If you have questions concerning the report, please contact Mr. Lee Ball, Deputy Assistant Inspector General for Auditing, at (757) 864-8500. We appreciate the courtesies extended to the audit staff. The report distribution is in Appendix 6.

[Original signed by Russell A. Rau]

Russell A. Rau

Enclosure

Distribution:

B/Chief Financial Officer

C/Associate Administrator for Headquarters Operations

H/Associate Administrator for Procurement

R/Associate Administrator for Aeronautics and Space Transportation
Technology

GSFC/150/Chief Financial Officer

LaRC/109/Chief Financial Officer

cc:

G/General Counsel

CF/Director, Headquarters Business and Administrative Services Division

HK/Director, Contract Management Division

JM/Director, Management Assessment Division

GSFC/100/Director, Goddard Space Flight Center

LaRC/106/Director, Langley Research Center

BFZ/Chief, Policy, Planning, and Quality Assurance Branch

bcc:

JM/M. Peterson

ARC/200-8/L. Braxton

200-9/J. Coleman

241-11/C. Garcia

GSFC/180/M. Kicza

201/J. Clark

LaRC/104/B. Crawford

LeRC/500-320/P. Scheurer

IG-98-019

**AUDIT
REPORT**

**AERONAUTICS PROGRAM GRANT
FINANCIAL TRANSACTIONS**

August 6, 1998



National Aeronautics and
Space Administration

OFFICE OF INSPECTOR GENERAL

ADDITIONAL COPIES

To obtain additional copies of this report, contact the Assistant Inspector General for Auditing at 202-358-1232.

SUGGESTIONS FOR FUTURE AUDITS

To suggest ideas for or to request future audits, contact the Assistant Inspector General for Auditing. Ideas and requests can also be mailed to:

Assistant Inspector General for Auditing
NASA Headquarters
Code W
300 E Street, SW
Washington, DC 20546

NASA HOTLINE

To report fraud, waste, abuse, or mismanagement, contact the NASA OIG Hotline by calling 1-800-424-9183, 1-800-535-8134 (TDD), or by writing the NASA Inspector General, P.O. Box 23089, L'Enfant Plaza Station, Washington, DC 20026. The identity of each writer and caller can be kept confidential, upon request, to the extent permitted by law.

ACRONYMS

ARC	Ames Research Center
CFO	Chief Financial Officer
FACS	Financial and Contractual System
FMM	Financial Management Manual
FY	Fiscal Year
GSFC	Goddard Space Flight Center
HBASD	Headquarters Business and Administrative Services Division
LaRC	Langley Research Center
LOC	Letter of Credit
LeRC	Lewis Research Center
NASA	National Aeronautics and Space Administration
OASTT	Office of Aeronautics and Space Transportation Technology
OIG	Office of Inspector General
ONR	Office of Naval Research
SF	Standard Form

TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	1
FINDINGS AND RECOMMENDATIONS	4
LaRC COST DATA NOT ALWAYS ACCURATE AND CURRENT	4
HEADQUARTERS FINANCIAL DATA NOT ALWAYS RECORDED PROMPTLY.....	8
REPORTS LATE, AND SOMETIMES INCOMPLETE OR INACCURATE	12
FY 1997 COSTS IN COMPARISON TO DISBURSEMENTS FAR EXCEED STANDARDS.....	17
GRANT CLOSE-OUT PROCESS NEEDS IMPROVEMENTS	20
APPENDIX 1 - OBJECTIVES, SCOPE, AND METHODOLOGY	24
APPENDIX 2 - ILLUSTRATION OF LARC COSTING PROCESS AND AUTOMATED SYSTEM ISSUES	26
APPENDIX 3 - ILLUSTRATION OF HEADQUARTERS COSTING PROCESS.....	28
APPENDIX 4 - RELATED OIG REPORTS AND REVIEWS	29
APPENDIX 5 - MANAGEMENT’S RESPONSE	30
APPENDIX 6 - REPORT DISTRIBUTION.....	35

AERONAUTICS PROGRAM GRANT FINANCIAL TRANSACTIONS

EXECUTIVE SUMMARY

BACKGROUND

The NASA Headquarters Office of Aeronautics and Space Transportation Technology (OASTT) expressed concerns to us that grant reports from educational institutions may be late, inaccurate, and incomplete. Other concerns included untimely grant recording procedures.

A June 1996 NASA report, “The Management and Liquidation of Budget Authority,” stated that NASA’s budget through the end of 1995 showed a trend of increasing unliquidated budget authority. NASA’s unliquidated budget authority¹ balance increased 25 percent from September 1993 to September 1995. The 1996 report partly attributes this increase to untimely grant reports and closeouts, inaccurate and untimely cost accrual data for grants, and delayed disbursements. Our review addressed these issues. Related OIG reports and reviews are shown in Appendix 4.

From fiscal year (FY) 1995 to 1997, NASA grant obligations exceeded \$1.2 billion, while OASTT obligations exceeded \$124 million. We reviewed 60 grants with total obligations exceeding \$14 million. Our review focused on FY’s 1996 and 1997 recording and reporting practices. Grantees report costs and disbursements quarterly on Standard Form (SF) 272, the Federal Cash Transaction Report. NASA uses the SF 272 reports, as well as other sources, to enter accounting information into the Agency’s financial records. Financial procedures require NASA to record an “accrual” for unreimbursed costs.

OBJECTIVES

Our overall objective was to evaluate procedures used to process and manage grant financial transactions. Our specific goals were to answer the following:

- Do Headquarters and the aeronautics Centers’ financial management offices record grant financial transactions both accurately and in a timely manner?

¹ Unliquidated budget authority consists of unobligated budget authority, uncosted obligations, and unpaid costs or accounts payable.

- Are grantee SF 272 reports accurate, and do grantees submit the reports in a timely manner?

During our audit, we became aware of delays in closing out grants. Therefore, we also evaluated aspects of the close-out process. We provide additional information on objectives, scope, and methodology in Appendix 1.

RESULTS OF AUDIT

Grant problems described in the June 1996 NASA report still exist. Our review showed OASTT grant costs are too often inaccurate. Also, grantees often submit quarterly SF 272 reports late, FY 1997 costs appear overstated, and the number of grants awaiting closeout has increased. Some of our issues extend beyond OASTT grants. For example, almost 50 percent of quarterly SF 272 reports on grants were late. Many of NASA's grantees report financial data for all their grants on a single, quarterly SF 272 report. Thus, late reports affect the timely recording of data for numerous grants (not only OASTT grants). We also found Headquarters had not always accrued costs each month as required for more than 2,000 grants. Grant management requires improvement in the following five areas.

- Langley Research Center (LaRC) grant costs have not always been accurate and current. LaRC sometimes did not make needed cost adjustments or adjust costs accurately. As a result, costs were not always accurate and reliable. If costs are overstated, the availability of funding for other programs is adversely impacted. This could result in needed work being canceled or delayed. Understated costs increase cost carryover, which can impact program operations and future budgets.
- Headquarters grant financial data was not always recorded in a timely manner. Staffing was inadequate to record costs each month, and other recording delays occurred that were avoidable. Thus, costs and disbursements are often understated; and uncosted obligations, a component of unliquidated budget authority, are inaccurate and overstated.
- Grantee reports at the Centers we reviewed were often late and sometimes incomplete or inaccurate, thereby delaying the recording process. This affected the accuracy and timeliness of grant/program costs and disbursements. Management could be using inaccurate data to make program or funding decisions.

- The FY 1997 average monthly costs for aeronautics grants exceeded average monthly disbursements by 43 percent, while the NASA standard is ± 5 percent. Overstated costs inappropriately increase accounts payable and unliquidated budget authority at a time when the Agency is trying to reduce these amounts.
- The grant close-out process needs improvements. NASA has delegated close-out responsibility for most of its grants to the Office of Naval Research (ONR). However, the close-out process has been ineffective, and the number of grants awaiting closeout continues to increase. This presents administrative and financial burdens to NASA. For example, the difference between obligated grant funds and possible disbursements arising from grants awaiting closeout contributes to increases in unliquidated budget authority.

***LARC AND
HEADQUARTERS HAVE
TAKEN SOME
CORRECTIVE ACTIONS***

During our audit, LaRC and Headquarters took or promised to take remedial actions that should improve system processes, data accuracy, and close-out procedures. For example, LaRC documented automated system procedures and corrected automated system problems that occurred due to a contractual change that brought in a new contractor and modified the scope of work. Management also told us that grant file documentation will be improved. Furthermore, Headquarters and Center staff responsible for grant closeout met with officials of the ONR at Headquarters in 1997 to discuss delays in closing grants. ONR management committed to improving communication and coordination processes. We commend management's efforts.

RECOMMENDATIONS

Our report contains nine recommendations requiring cooperation and corrective actions by several Headquarters and Center organizations.

***MANAGEMENT'S
RESPONSE***

Management concurred with seven of the nine recommendations, and planned actions are responsive to the intent of our recommendations. Although management concurred with the first element of recommendation 9, the planned action was not responsive. With respect to management's nonconcurrences with recommendation 4 and the second element of recommendation 9, we reaffirm these recommendations. We have requested additional management comments where further action is needed or nonconcurrence exists. Management's response is shown in Appendix 5.

FINDINGS AND RECOMMENDATIONS

LaRC COST DATA NOT ALWAYS ACCURATE AND CURRENT

LaRC grant costs were not always accurate and current. LaRC costs grants by using both automated and manual processes. LaRC's automated system experienced various problems during calendar year 1996. Also, accountants did not always make required manual cost adjustments or ensure that adjustments were accurate. These problems occurred because some staff accepted the accuracy of the automated system cost at face value. Further, manual cost procedures were undocumented, and staff training was inadequate. As a result, some grant costs were overstated and some understated. Overstated costs impact management's ability to fund other program work because a false impression exists that funds are not available. This could cancel or delay other needed work. Understated costs can result in excess cost carryover that may imply to sources outside the Agency that budgeted funds are not needed. LaRC had 533 active grants as of October 31, 1997.

Cost Accruals Required Monthly

Section 9061-5, "General Requirements," of NASA's Financial Management Manual (FMM), chapter 9060, "Accrual Accounting," requires a cost to be accrued/recorded monthly. FMM appendix 9061-5A allows Centers to record accruals using either a straight-line basis (a pro rata amount, usually one-twelfth of the obligation amount recorded as monthly cost) or grantee cost forecasts from quarterly SF 272's. NASA Procedures and Guidelines 5800.1D, "Grant and Cooperative Agreement Handbook," requires grantees to provide forecast data for each of the 4 months following the date of the quarterly SF 272 report. This forecast represents the grantee's expected disbursements in each of the subsequent months. Whether costs are straight-lined or entered using forecast data, the FMM requires accountants to adjust costs at June 30 annually to reflect actual disbursements and to ensure end of FY cost accuracy.

LaRC Costs Inaccurate Due to Automated and Manual Problems

Costs for 17 of the 20 LaRC grants we tested were inaccurate due to problems with automated costing processes and manual operations. LaRC computes costs using both automated and manual processes. LaRC's automated system costs all grants each month on a straight-line basis. Accountants adjust these automated costs to reflect disbursements shown on the SF 272 quarterly reports. LaRC's cost process is described in Appendix 2.

Automated System Not Working Properly

The LaRC automated process did not operate as intended in calendar year 1996. We found the system:

- accrued costs for some grants twice in the same month;
- fully costed some grants a year or more before they expired due to incorrect dates;
- overstated costs when grants were extended; and
- did not cost all grants in some months.

LaRC acknowledged that in September and November 1996, virtually all grants were costed (accrued) twice. Management also verified that 48 grants were not costed properly in May 1996 due to incorrect grant expiration dates in the system. This meant some grants were costed too soon (see Appendix 2) while others were undercosted.

System Overstates Costs When Grants Are Extended

The automated system also overstates costs when grants should end but work is incomplete and the grant officer extends the performance period. Upon expiration, LaRC's grants are fully costed because the system considers the award complete and has straight lined costs accordingly. When LaRC extends the grant, the system is not programmed to properly adjust costs to reflect the dollars spent to date. Appendix 2 shows an example of how the system overstates costs.

All Grants Not Costed Each Month

Two grants we tested were not costed by the system in February or March 1996. We found other examples of the automated system not accurately costing grants, but accountants made manual adjustments to correct the errors. If grants are not costed by the system, costs are inaccurate for the month in question and for subsequent months until manually corrected.

Manual Costing and Cost Documentation Need Improvements

Manual costing problems and poor documentation also affected cost accuracy. LaRC accountants did not always adjust costs to reflect SF 272 data and made some untimely or inaccurate adjustments. The accountant told us she did not make all required manual adjustments to costs for December 1996 SF 272 disbursement data, and we found other examples of this problem in prior quarters of 1996. We also considered adjustments untimely (see Appendix 2 for more detail).

The LaRC accountant also stated she did not know how the automated program calculated costs in certain instances. For example, depending on the grant starting and ending dates, the

automated system may cost some grants on a 13-month rather than a 12-month basis. The accountant was unaware this feature existed and made some inaccurate, manual cost adjustments using 12-month calculations.

We also noted file documentation was sometimes lacking. Copies of cost adjustments kept in grant files did not always explain why an adjustment occurred, potentially affecting the accuracy of future adjustments. In other instances, we could not find copies of adjustments. An adequate audit trail did not exist for accountants or auditors to determine costs accurately.

Training Needed at LaRC

To improve cost accuracy, LaRC should periodically verify system accuracy, provide more staff training, and document cost procedures. Staff should periodically review system controls and computations for accuracy. Grant accountants need training to fully understand automated system processes and to make timely and accurate adjustments. Documentation for recording costs was lacking although management stated that it followed the FMM. These factors contributed to confusion and led to inconsistent cost recording.

RECOMMENDATION 1

The LaRC CFO should ensure:

- accountants are properly trained to understand the automated system process,
- LaRC costing policy is fully documented,
- copies of all cost adjustments are maintained in appropriate grant files,
- accountants document the purpose for all cost adjustments,
- dates in the straight-line system and the procurement system are reconciled semiannually in February and July to ensure the accuracy of automated system accruals,
- accountants adjust costs if a no-cost extension of 6 months or more occurs, and
- supervisors periodically review grants on a sample basis to ensure costs are estimated and accrued in an accurate and current manner.

Management Response

Concur. LaRC management concurred with all elements of the recommendation. Staff are prepared and trained for position requirements. Cost policy and all aspects of cost adjustments are now fully documented and copies of cost adjustments are retained permanently. Dates in the automated and procurement systems

are reconciled, management established a process to adjust costs for no-cost extensions, and the cost status of all grants is reviewed monthly.

***Evaluation of
Management's Response***

LaRC's actions are responsive to the recommendation.

***HEADQUARTERS
FINANCIAL DATA NOT
ALWAYS RECORDED
PROMPTLY***

Headquarters grant financial data was not always recorded in a timely manner. Despite FMM policy to accrue costs monthly, Headquarters did not do so due to limited resources and recorded costs only by using SF 272 reports. Furthermore, longer than necessary recording delays occurred due to report accuracy problems and untimely follow-up practices. These problems resulted in inaccurate and untimely cost and disbursement data in NASA's Financial and Contractual System (FACS). Inaccurate financial data affect OASTT and NASA's program operations and budgets, overstate uncosted obligations, and distort accounts payable amounts.

***Headquarters Not Costing
Grants Each Month***

Headquarters did not comply with FMM policy to accrue grant costs monthly. Headquarters recorded grant financial data only when grantees submitted quarterly SF 272 reports. Appendix 3 of this report illustrates Headquarters recording practices. Also, delays in report submissions and recording of financial data at Headquarters were not uncommon.

***Recording Delays Caused
by Various Problems***

We tested 20 grants and determined that costs and disbursements had not always been recorded promptly. The Director, Headquarters Business and Administrative Services Division (HBASD) told us the recording of financial data was four to five quarters behind as of March 31, 1996. However, after the backlog was cleared, half the grants tested had cost and disbursement data for at least one quarter that accountants did not record until at least the fourth month after the quarter ending date. Accountants did not record SF 272 data in a timely manner for various reasons.

***Reports Inaccurate, Lost,
and Incomplete***

Some SF 272 reports were inaccurate, lost, or incomplete. It took more than a year for Headquarters to obtain accurate quarterly reports for 2 of the 20 grants we reviewed. For example, a New Mexico Highlands University grant (NAGW 4078), with obligations of more than \$1,000,000, showed zero costs and disbursements for about a year because the school had not submitted accurate reports. This recording delay impacted three other non-OASTT grants. In another instance, NASA had advanced a grantee about \$112,000, but had not received a report showing actual disbursements for more than a year. In two other instances, confusion concerning reports for grants near their expirations delayed recording for about a year.

Also, a September 1996 report submitted by the University of Houston was not recorded until February 1997. A Headquarters

accountant told us the original report, mailed in October, was lost. Headquarters then misplaced a January 1997 replacement copy. Headquarters eventually received the report via facsimile on February 21, 1997. This SF 272 report affected 15 grants and understated costs and disbursements from November through January. In another instance, Dartmouth University forecasts were lacking, which delayed the recording of costs and disbursements for more than 5 months. This impacted about 10 grants, including non-OASTT grants.

Resources Inadequate to Record Costs Monthly

The Director, HBASD told us that because resources were inadequate, all grants were not costed monthly. Thus, Headquarters procedures did not conform to FMM cost policy. Grant costing was four to five quarters (a full year) behind when the current Director, HBASD came on board in March 1996. Although the backlog was cleared by September 30, 1996, delays in recording costs still occurred. The delays were due to reporting problems compounded by what we considered inadequate or untimely follow-up processes. The lead Headquarters grant accountant told us she spent about 15 percent of her time on accuracy issues and provided us explanations for all the reporting and recording problems described above. Despite the various explanations, we consider follow-up untimely.

Grant Costs and Disbursements not Accurate and Current

These problems led to cost and disbursement data for Headquarters grants being generally understated and not current. Accountants did not accrue costs each month for more than 2,000 grants in FY 1996, and recording delays created more discrepancies. These problems impact the effectiveness of OASTT and NASA program operations. Management is relying on inaccurate data to make program decisions. Understated costs and disbursements also increase uncosted obligations and distort accounts payable balances. Understated costs may also give the Congress and others a false perception that budget funds are not being spent and, therefore, may not be needed. This could impact future budgets.

Department of the Treasury Staff Processing Headquarters Grants

To remedy the March 1996, 1-year costing backlog, NASA used Financial Management Services staff from the Department of the Treasury to assist in-house staff. NASA has an interagency task order agreement for these services. The Treasury staff improved timeliness and have stayed on to continue recording SF 272 data. These staff also work with grant and interagency agreement close-outs and reconcile general ledger accounts.

Total cost for Treasury assistance may reach \$1.6 million by September 1998. In our opinion, personnel costs of this magnitude demonstrate that in-house staffing was inadequate to process the volume of grants. The Director, HBASD told us he is taking steps to minimize Treasury costs and hopes to eliminate all Treasury staff by the end of FY 1998. Headquarters plans to shut down grant operations by October 1, 1998. All grants that received FY 1997 funds were transferred to Goddard Space Flight Center (GSFC) in FY 1997. Grants not receiving FY 1997 funds remained at Headquarters. As of October 31, 1997, 723 grants, most expiring in FY 1998, remain at Headquarters.

***Headquarters Grants
Operations Moved to
GSFC***

Headquarters transferred about 1,400 grants and 2 staff accountants to GSFC in the early part of FY 1997. The remaining Headquarters accountants moved to GSFC in July 1997. To handle the increased grant workload, GSFC officials told us they developed a program to straight line costs for the 1,400 grants in FY 1997. However, Headquarters revised FMM policy in May 1997 because some Centers found that the use of the straight-line method significantly impacts the accuracy of their accruals and are, therefore, using SF 272's. Based on our review, we agree that the SF 272 data provide a more accurate basis for recording costs.

We did not review or test the ability of GSFC to accurately and promptly meet the demands of its increased workload. However, we are concerned that the transferred staff were in place at the time Headquarters experienced significant recording backlogs. GSFC had also not implemented what we consider to be the most accurate costing method to accommodate the grants transferred. In our opinion, GSFC's increased number of grants requires close management oversight to ensure that financial data are timely and accurate. Also, we have concerns that the Treasury staff may be needed beyond the October shut-down date to assist in the close-out process or to record grant transactions. It is possible some grants may be extended because work will not be completed as planned, therefore, additional financial data will have to be recorded. We encourage NASA to develop a plan to address this need.

RECOMMENDATION 2

The GSFC CFO should periodically review grants on a sample basis to ensure costs are estimated and accrued in an accurate and current manner.

Management Response

Concur. The GSFC CFO will periodically review grants on a sample basis to verify that costs are estimated and accrued properly.

***Evaluation of
Management Response***

GSFC's actions are responsive to the recommendation.

RECOMMENDATION 3

The Director, HBASD should continue developing and, thereafter, implement a plan of action to eliminate reliance on the Department of the Treasury Financial Management Service personnel.

Management Response

Concur. Management received monthly metrics from Treasury personnel. Management also meets monthly with Treasury personnel to assess the status of grant processing. Although HBASD planned to phase out Treasury support by September 30, 1998, Treasury support will continue until March 31, 1999, due to workload constraints.

***Evaluation of
Management Response***

HBASD's actions are responsive to the recommendation.

***REPORTS LATE,
AND SOMETIMES
INCOMPLETE OR
INACCURATE***

Quarterly SF 272 reports were often late. Reports were also sometimes incomplete due to a lack of forecast data and were occasionally inaccurate. Of the 1,724 reports submitted from January 1996 to June 1997 by grantees funded through letter of credit (LOC) agreements, 847 or 49 percent were late. Only Ames Research Center (ARC) compiled similar data for non-LOC grantees, and late reports affected more than 61 percent of its grants in FY 1997. These problems occurred because NASA has not adequately monitored report timeliness or temporarily denied or eliminated advance funding to grantees not meeting reporting requirements. As a result, NASA is unable to identify “problem” grantees or determine the severity of timeliness issues. Report problems also cause delays in recording costs and disbursements into NASA’s financial records. These delays cause costs and disbursements to be inaccurate and untimely, thus negatively impacting budgetary and accounting reports. OASTT management uses grant financial data quarterly to plan and fund programs and projects. If financial data are not accurate and current, management’s ability to make informed decisions is compromised. Operating effectiveness is also diminished by inaccurate and untimely data.

***NASA Handbook Requires
Timely, Complete Reports***

Section 1260.26 of NASA’s Grant Handbook requires grantees to submit SF 272 reports within 15 working days following the end of the Federal fiscal quarter. Grant reports must contain estimates (forecasts) of projected disbursements for each of the 4 months following the quarter being reported. NASA’s FMM 9280-10, “Miscellaneous Accounting,” calls for suspension or termination of advance funding agreements when grantees fail to meet reporting requirements. However, the FMM does not specifically define which event(s) must occur to result in advance funding being suspended.

Grantees submit quarterly reports to each NASA Center providing funds. Thus, a school could submit separate reports to multiple Centers. These reports must also include disbursement and forecast data for all grants the school has with a Center. A single late report can affect numerous grants and programs in addition to those of OASTT.

***Many Grantees Receive
Advance Funding***

Most larger universities with numerous grants do not have to submit an SF 272 report to receive payment for expenses. NASA advances funds to most larger schools by allowing them to “draw down” funds through the Department of Health and Human

Services Payment Management System. This process is called the LOC system. Schools use these advances to fund anticipated expenses. To participate in the LOC system, grantees must meet fund control, accountability, and financial reporting requirements. LOC grant recipients report advances on the quarterly SF 272, in addition to quarterly and cumulative disbursements and projected forecasts. Because grantees fund disbursements by receiving advances through the LOC process, payment is not an incentive to submit timely reports.

49 Percent of LOC Reports Late

About 49 percent of reports submitted by ARC, LaRC, Lewis Research Center (LeRC), and Headquarters LOC grantees from January 1996 to June 1997 were late under NASA's Grant Handbook requirement. More recently, 186 (62 percent) of the approximately 300 reports for the quarter ending June 30, 1997, submitted by LOC grantees to these 4 Centers were late. Except for ARC, the other Centers reviewed do not monitor timeliness for non-LOC grantees. ARC began monitoring report timeliness for its grants only in FY 1997. Late reports affected more than 61 percent of the ARC non-LOC grants. Our sample showed that all Centers had received late reports from non-LOC grantees.

Forecasts Not Provided by Non-LOC Grantees

Non-LOC grantees also did not always provide forecasts, making reports incomplete. For example, 7 of 10 September 1996 LeRC reports lacked forecasts. The LeRC accountant processing reports submitted by non-LOC grantees estimated that currently 25 percent of non-LOC reports lack forecasts. The LeRC grants office recently sent letters to grantees not providing forecasts. We commend LeRC's actions. We also found examples of missing forecasts from our testing at both LaRC and Headquarters.

Besides incomplete reports, some reports were inaccurate for various reasons. For example, on one SF 272 report the total disbursements from the summary page did not agree to the sum of the disbursements for the individual grants shown on the back-up page. See pages 9 and 10 for examples of inaccurate and incomplete reports submitted to Headquarters.

Monitoring Not Done or Improvements Needed

Inadequate monitoring practices contributed to report problems. Each Center monitors LOC report timeliness quarterly. However, none of the Centers we reviewed compiled timeliness data on an annual basis. Thus, a school could submit all of its quarterly reports late without anyone at NASA identifying this deficiency. Further, Centers do not report or distribute SF 272 timeliness data to anyone outside the financial area at the Centers. Thus, a school

could constantly submit late reports to multiple Centers without management being aware of the problem.

Except for ARC, OASTT Centers have also not monitored the timeliness of non-LOC reports. LaRC management told us there was no requirement to do so, nor had LeRC management directed its staff to monitor timeliness. Furthermore, NASA has no standard form letter or notification period for advising grantees that reports are late.

***NASA's Policy and
Actions Insufficient to
Deter Reporting Problems***

NASA's policy allows for temporary suspensions or termination of advance funding agreements when grantees do not meet reporting requirements. However, FMM suspension policy is not specific, and terminations of funding have been rare. The FMM states that a grantee's unwillingness or inability to comply with reporting requirements can lead to suspended funding. However, the policy does not provide criteria to allow staff to specifically determine and justify a suspension.

Suspending advance funding requires added staff time and formal notification. A Headquarters accountant told us she preferred to call grantees and imply suspension was possible rather than prepare documentation to suspend funds. NASA lifts suspensions when report compliance occurs. Furthermore, even though FMM policy states that termination of funding after two suspensions is possible, a NASA Headquarters procurement official stated this policy has rarely been enforced.

***Degree of Timeliness
Problems and
Noncompliant Grantees
Unknown***

Current monitoring practices do not allow NASA to identify the extent of timeliness problems or the specific grantees not meeting requirements. Because many grantees receive advance funding, report timeliness is likely not as critical for them as it is to NASA.

The deficiencies we found cause staff to delay the recording of costs and disbursements (pages 9 and 10). This impacts the accuracy, timeliness, and completeness of OASTT and NASA's budget and financial data. Delays impact the reliability of the financial information used by management and can increase cost carryover which is an unsound business practice. Report problems cause NASA's accountants to troubleshoot report accuracy issues and limit time available for other functions. NASA should improve monitoring processes and tighten enforcement practices to avoid a recurring cycle of quarterly reporting and recording difficulties.

RECOMMENDATION 4

The Contract Management Division Director of the Headquarters Office of Procurement should identify a focal point for gathering quarterly report timeliness data from all Centers.

Management Response

Nonconcur. Management nonconcurrent because an upcoming change in NASA's costing procedure eliminates the need for quarterly SF 272 reports. Under the revised procedure, grants will be costed at "drawdown." Drawdown information will be used for costing instead of the quarterly SF 272 report. The new process will use an annual, electronic SF 272 and will automatically reconcile drawdown information with actual costs.

Evaluation of Management Response

Management's response implies that the recommendation has been addressed by changing costing procedures, reporting periods, and the number of reports submitted annually. We disagree with management's position in that the timeliness of reports for active grants must still be addressed. Under the new procedure, grantees will submit annual, rather than quarterly, SF 272 reports. Costing processes will also change. However, report timeliness should be monitored regardless of report frequency or costing procedures. NASA must be able to identify and take corrective action against grantees not submitting timely reports. Presently, each Center identifies grantees submitting late reports. However, this information is not consolidated. Therefore, a university could submit late reports to many Centers without NASA being aware that such a situation exists because no central database of report timeliness exists. Thus, we reaffirm our recommendation and request that management reconsider its position in response to the final report.

RECOMMENDATION 5

The Chief of the Policy, Planning and Quality Assurance Branch of the Headquarters Office of the Chief Financial Officer should develop policies that provide for mandatory suspension of advance funding for 1 year if two or more consecutive quarterly reports are late or if more than two reports are late in any given fiscal year.

Management Response

Concur. The Financial Management Manual will be amended to show more specific suspension criteria.

Evaluation of Management Response

Actions taken by Code B are responsive to the recommendation.

RECOMMENDATION 6

The Contract Management Division Director of the Headquarters Office of Procurement should develop a follow-up process for grantees not submitting timely reports.

Management Response

Concur. The automated submission process automatically generates a report status database to facilitate follow-up.

Evaluation of Management Response

NASA's actions are responsive to the recommendation.

RECOMMENDATION 7

The Contract Management Division Director of the Headquarters Office of Procurement, in coordination with other Headquarters offices affected by improper reporting, should develop specific criteria as to when advance funding would be terminated.

Management Response

Concur. While establishing new grant processes, NASA management will develop consequences for nonsubmission of the required SF 272 cost report.

Evaluation of Management Response

NASA's actions are responsive to the recommendation.

***FY 1997 COSTS IN
COMPARISON TO
DISBURSEMENTS FAR
EXCEED STANDARDS***

Average monthly aeronautics grant costs of \$1.881 million exceeded average monthly disbursements of \$1.315 million by \$566 million (43 percent) as of the end of FY 1997. This difference far exceeds the NASA standard for this comparison of ± 5 percent. Properly following FMM policy should minimize differences in these averages. This large disparity could be due to various factors that include Centers not making end of year adjustments, overestimated grantee forecasts, and delays in reporting or recording disbursements. As a result, costs may be overstated or disbursements understated. Overstated costs can erroneously increase program needs in the subsequent year. Also, the difference between costs and disbursements represents accounts payable, which increases unnecessarily if costs are overstated or disbursements lag.

***NASA Standard Is ± 5
Percent***

According to the June 1996 NASA report "Management and Liquidation of Budget Authority," average monthly costs should be within ± 5 percent of average monthly disbursements. The report also states that a monthly review of cost estimates and actual disbursements is needed to determine whether the estimating system used is reasonable. The report adds that management should plan on an accrued cost basis to minimize unliquidated budget balances and align program budgets and planned outcomes. The accuracy of cost data is critical to NASA's success.

To ensure cost accuracy, FMM 9061-5A, "Accrual of Contracts, Purchase Orders and Grants," prefers Centers to cost grants using SF 272 forecast data. Centers can accrue costs monthly using the straight-line method. However, the FMM requires that costs be adjusted to reflect June 30 SF 272 disbursement data. This ensures that September 30 cost data is as accurate as possible. Following FMM policy should result in minimal differences in these averages. If adjusted properly, costs and disbursements should equal each other as of June 30. The FMM also states that if material variances between the June 30 straight-line amount and the SF 272 report data occur, Centers are to revert to using the SF 272 forecast data.

***Average Monthly Costs 43
Percent Higher Than
Disbursements***

Using FY 1997 FACS data, we determined average monthly costs were \$1.881 million, 43 percent more than average monthly disbursements of \$1.315 million.² This disparity is significant and requires review.

***NASA Assigned Study
Group to Investigate
Growth in Unliquidated
Budget Authority***

Due to increased congressional attention, the NASA CFO assigned an internal steering group to investigate a continuing growth (about 25 percent) in NASA's unliquidated budget authority from FY 1993 through the end of FY 1995. The group prepared the previously mentioned 1996 report based on detailed data from each Center and Headquarters. The report contained numerous recommendations and identified the need to review forecast data periodically.

***Costs Unrealistic for
Various Reasons***

Despite NASA's increased emphasis on reviewing costs, OASTT costs appear unrealistic. There could be at least five reasons that average monthly costs were much greater than average monthly disbursements.

- Straight-lined costs were not adjusted at yearend.
- Grantee cost projections were overestimated.
- Fourth quarter FY 1997 obligations were costed, but not disbursed.
- LeRC was not recording the full amount of all disbursements.
- The reporting of disbursements lagged or disbursements were not recorded in a timely manner.

If accountants did not adjust costs to reflect June 30 disbursement data, distorted and inflated costs are possible. Inflated costs are also possible if grantee forecasts for the fourth quarter of the FY are overstated. Also, fourth quarter obligations could be costed but not disbursed. This occurs because accountants record grant costs monthly, while disbursements are recorded quarterly. Fourth quarter FY 1997 disbursements are not recorded on NASA's books until FY 1998. In addition, LeRC accountants do not always record the full amount disbursed quarterly. In situations where individual grant expenditures for LOC grantees exceed amounts advanced, LeRC records the lesser of the two amounts, which understates disbursements. Finally, it is possible that disbursements are underreported due to weaknesses in recipient

² To determine average FY 1997 monthly costs and disbursements, we used different measurements. We determined average costs by dividing FY 1997 total program costs by 12 months. We used 12 months because NASA records grantee-projected expenses from the June 30, 1997, SF 272 before September 30. Conversely, we used a 9-month average for disbursements because disbursement data are based on the SF 272 data as of June 30, 1997. The recording of disbursements for the July to September 1997 quarter occurs after the yearend.

accounting systems or because NASA had not recorded disbursements in a timely manner.

NASA Must Review Cost Accuracy More Closely

NASA is not monitoring cost or costing practices closely enough. Thus, financial and budgetary data may not be reliable and useful for its intended purposes. Although the FMM allows Centers an option when accruing costs, we believe financial personnel should periodically review costs and use grantee forecasts wherever possible. In our opinion, straight-line costing adversely affects accrual accuracy.

An OASTT program analyst told us overstated costs could adversely affect program activity. This occurs because anticipated costs are higher than they should be, which overstates budgets and obligations for affected grants in the subsequent year. Conversely, other grant work could be underfunded. Also, inflated costs or lags in reporting or recording disbursements improperly increase accounts payable and unliquidated budget authority balances when NASA is trying to reduce these amounts.

RECOMMENDATION 8

The NASA CFO should require that:

- Centers using straight-line costing adjust costs annually to reflect June 30 SF 272 reported amounts;
- OASTT CFO's periodically review the accuracy of their grant costing systems;
- SF 272 forecast data be used to cost grants on a monthly basis; and
- LeRC record disbursements in a manner consistent with the other Centers.

Management Response

Concur. The NASA CFO concurred with all four elements of the recommendation. The CFO will issue a memorandum to Center Financial Officers to ensure implementation of the specific FMM sections related to the four elements of the recommendation.

Evaluation of Management Response

The NASA CFO's actions are responsive to the recommendation.

***GRANT CLOSE-OUT
PROCESS NEEDS
IMPROVEMENTS***

The grant close-out process needs improvement to reduce delays. At the four Centers reviewed, the total number of grants in closeout exceeds active grants. NASA has delegated close-out authority for most grants to the ONR. However, staff reductions and computer problems affected ONR’s ability to close grants in a timely manner. Untimely final SF 272 reports also affected close-out timeliness. The large number of grants in closeout creates administrative and financial burdens that tax already limited resources. Grants awaiting closure also contribute to increases in unliquidated budget authority due to unpaid obligations.

***Time Needed to Close Out
Grants Not Specific***

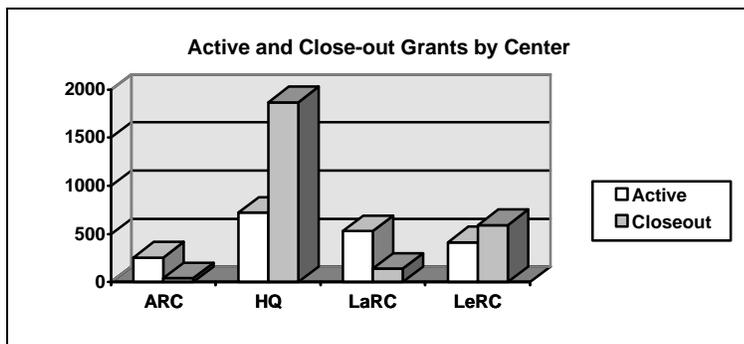
NASA and ONR close-out procedures do not specify the time “normally” needed to close a grant. NASA’s Grant Handbook does identify time limitations for some close-out reports. However, an overall standard is absent. The Handbook lists four requirements to administratively close out a grant:

- all reports have been received;
- all certifications for final reports have been received;
- allowable costs have been reimbursed and refunds made as necessary; and
- NASA's grant officer has received DD Form 1594, “Contract Completion Statement,” from ONR, when applicable.

The Handbook also states that final SF 272 reports are due within 90 days following grant expiration. The final SF 272 report determines funds owed NASA or due to grantees.

***Volume of Grants in
Closeout Significant***

At the four installations we reviewed, grants in closeout as of October 31, 1997, totaled 2,642—more than 37 percent greater than the total active grants, 1,928. Headquarters had the highest number of grants in closeout as shown in the figure below.



Most of the 723 remaining Headquarters grants should be completed this fiscal year which will significantly increase close-out totals.

***Close-out Delays Due to
ONR Downsizing and
Computer Problems***

The Headquarters Procurement Analyst responsible for grant closeout told us that recent staff reductions and widespread computer problems at ONR delayed grant closeouts. ONR has lost as much as 60 percent of its administrative staff, and more cuts are possible. Also, final SF 272 reports were often untimely, and ONR actions to improve the timeliness of final report submissions have not been adequate. Furthermore, job turnover involving technical monitors, property staff, and recipient principal investigators have hampered close-out coordination and communication efforts between the two agencies.

***NASA Retains Close-out
Responsibility***

Despite delegating close-out authority, NASA's grant officers are ultimately responsible for timely closeout. We believe oversight was lacking until recently. Active grants receive priority. During our audit, NASA met with ONR to discuss processes, and the two agencies held a major meeting at Headquarters in November 1997 to address problems. We commend NASA's actions; however, oversight must be constant. Until NASA establishes a time standard for measuring close-out timeliness, NASA cannot measure effectiveness.

***Financial and
Administrative Burdens
Have Ensued***

NASA has experienced financial and administrative burdens due to the many grants awaiting closure. The number of grants in closeout has increased significantly in the last 21 months. The number of grants awaiting closure (2,642) at the 4 Centers reviewed as of October 31, 1997, exceed the total number of NASA's grants (2,249) in closeout as of February 1996. The February 1996 unliquidated obligation balance was \$68 million for grants awaiting closeout. We could not obtain a balance for unliquidated obligations as of October 31, 1997. Obligations remain unliquidated due to untimely final SF 272 reports that in some cases are years late.

Due to reports being so late, Centers must ensure that prior year grant funds do not lapse which would require the use of current year money to pay any unreported disbursements. Conversely, the recipient may owe NASA. Final reports must be timely, or NASA

should impose financial penalties upon schools not in compliance. Administratively, NASA should establish contact points at each Center to coordinate and expedite closeouts.

Headquarters Using Treasury Staff to Assist in Closeout

Closing grants also requires NASA to perform specific financial functions to ready files for closeout. At Headquarters, the Department of the Treasury assists in closing completed grants and interagency agreements. As stated previously, expenses for Treasury staff could amount to as much as \$1.6 million. The possibility of incurring more staff costs due to close-out delays requires close management attention.

RECOMMENDATION 9

The Contract Management Division Director of the Headquarters Office of Procurement should:

- in coordination with the ONR, establish a time standard for grant closeout;
- establish a Headquarters focal point to monitor the timeliness of final SF 272 reports;
- establish a focal point to withhold funding or payments on new awards to institutions not complying with final report requirements; and
- direct Centers to establish a lead grant officer to expedite grant close-out and coordination efforts.

Management Response

Concur with the first and fourth elements of the recommendation. Nonconcur with the second and third elements related to report monitoring and withholding funding. With respect to the first element, NASA has a number of policy initiatives under way to facilitate grant closeout. Relative to the fourth element, NASA has formed an Inter-Center Grants Working Group to improve coordination and close-out timeliness.

Rather than establish a Headquarters focal point to monitor final SF 272 report timeliness, management proposed that Procurement Officers ensure compliance with reporting requirements. With regard to withholding funding, management wants to withhold from only those Principal Investigators whose reporting information is untimely. Also, management prefers that decisions to withhold funds be made by the Center Procurement Officers, rather than a Headquarters focal point.

***Evaluation of
Management's Response***

NASA's concurrence with the first element of the recommendation, while identifying initiatives to facilitate grant closures, does not specifically respond to establishing a standard time period for closing out a grant. Absent a standard, NASA cannot measure ONR's effectiveness or Agency effectiveness should it choose to close more grants internally. We commend NASA's corrective actions, and we request that management identify a specific time standard for grant closeout.

Regarding the nonconcurrence with having a Headquarters focal point, NASA prefers to allow the Centers to monitor final report timeliness. We agree Centers can and should monitor report timeliness. However, report data compiled at the Center level should be centralized to ensure a university is not submitting late final reports to multiple NASA Centers. Thus, cases of frequent nonsubmissions of timely reports to various Centers can be identified and corrective actions can be taken. The Agency currently has no mechanism for identifying across-the-board quarterly, annual, or final reporting issues. Thus, we reaffirm our recommendation to establish a focal point to monitor the timeliness of SF 272 reports and request that management reconsider its position. As long as the responsibilities are performed, this focal point need not be located within Headquarters.

Although management did not concur with the third element of this recommendation, proposed alternative actions are responsive.

With respect to the fourth element of the recommendation, we consider Headquarters actions responsive.

OBJECTIVES, SCOPE, AND METHODOLOGY

OBJECTIVES

OASTT management requested this audit. Our overall objective was to evaluate procedures used to process and manage grant financial transactions. Our specific goals were to answer the following:

- Do Headquarters and the aeronautics Centers' financial management offices record grant financial transactions both accurately and in a timely manner?
- Are grantee SF 272 reports accurate, and do grantees submit the reports in a timely manner?

During our audit, we became aware of delays in closing out grants. Therefore, we also evaluated aspects of the close-out process as part of our work.

SCOPE AND METHODOLOGY

We reviewed 20 grants each at Headquarters, LaRC, and LeRC to determine the accuracy of grant costs and disbursements and the timeliness of recording practices. We judgmentally selected the grants reviewed and examined FY's 1996 and 1997 data. To obtain an overall perspective of grant activity, we obtained OASTT and NASA obligation, cost, and disbursement data from FACS for FY's 1995 through 1997, inclusive.

We discussed policies and procedures with grant accountants at ARC, GSFC, LaRC, and LeRC. We also discussed practices with the Director, HBASD; the Deputy Chief and Head of the Cost and Commercial Accounting Branch of LaRC's Financial Management Division; and the LeRC Branch Chief for Accounting and Reporting. We also held discussions with the GSFC Funds Control Branch Head and the Chief of GSFC's Financial Management Division.

In addition, we obtained limited information from ARC. We evaluated report accuracy, timeliness, and completeness as well as the status of close-out activity at all four Centers. We

discussed close-out practices with a LeRC Senior Grants Officer and the Headquarters Procurement Division Analyst responsible for closeout.

AUDIT FIELD WORK

We conducted our audit from November 1996 through March 1998 according to generally accepted government auditing standards. We did our field work at Headquarters, LaRC, and LeRC. We also obtained a limited amount of data from ARC but did not conduct field work there.

ILLUSTRATION OF LARC COSTING PROCESS AND AUTOMATED SYSTEM ISSUES

***LARC COSTS GRANTS
USING AUTOMATED AND
MANUAL PROCESSES***

To illustrate the costing process, assume LaRC makes a \$120,000, 1-year grant award on January 1, 1998. LaRC's automated system would accrue costs of \$10,000 each month ($\$120,000/12$) until accountants adjust costs to reflect March 31, 1998, quarterly disbursements.

Assuming the staff records March SF 272 data in April, LaRC's automated system would have accrued costs of \$30,000 ($\$10,000 \times 3$ months) as of the end of March. If the grantee reports quarterly disbursements of \$20,000, LaRC procedures require costs to be adjusted to \$20,000. The system computes a new straight-line amount, \$11,111, by subtracting adjusted costs from the award amount and dividing by the remaining life of the grant [$(\$120,000 - \$20,000)/9$]. The system records costs of \$11,111 until the June SF 272 data are entered. This process continues over the life of the grant. However, we found examples of automated system breakdowns which impacted cost accuracy.

***LaRC Grant Fully Costed
12 Months Too Soon;
Adjustment Untimely***

Grant NAG 1-1694 with Brigham Young University was fully costed 12 months too soon because the automated system contained an incorrect expiration date of February 28, 1996, rather than February 1997. In addition, LaRC did not adjust these incorrect costs in a timely manner. The total grant award was \$86,652. As of February 1996, the accounting system incorrectly showed total costs of \$86,652 because the system considered the grant expired. At the time, disbursements totaled \$34,000. The February 1996 costs should have been \$34,000 plus 2 months of accruals. LaRC manually adjusted these costs in July 1996; however, we consider the adjustments untimely and incorrect. Our review showed that costs from January 1996 to February 1997 for this grant were inaccurate.

***System Overstates Costs
When Grants Are Extended***

The automated system overstates costs when grants end but work is incomplete and the performance period for the grant is extended. To demonstrate, the University of California at Davis received a \$45,821 grant (NAG 1-1744) expiring July 31, 1996. Work was largely incomplete when the grant expired, and disbursements totaled about \$4,000. As of July 31, the system

showed total costs of \$45,000 because the system had fully costed the award amount. LaRC extended the grant a year to July 1997. Instead of adjusting costs to \$4,000 to reflect July 31, 1996, disbursements, costs remained at \$45,000. Costs were unchanged on December 31, 1996, when total disbursements were only about \$14,000. Thus, because the system is unable to recognize extensions and make needed adjustments, costs remain overstated. Grant extensions are common, so this problem can occur frequently.

ILLUSTRATION OF HEADQUARTERS COSTING PROCESS

***Headquarters Not Costing
Grants Each Month***

Headquarters did not cost its grants monthly as required by the NASA FMM. An illustration of the Headquarters costing process using the example of a \$120,000, 1-year grant award starting January 1, 1998, follows.

After issuing a new grant award, Headquarters would show zero costs on its books until the initial SF 272 data is recorded. If first quarter disbursements are \$20,000, and the projected monthly expenses are \$10,000 per month from April to July, the amount costed depends upon when recording occurs. If recorded in May, costs would be \$40,000 (\$20,000 disbursed plus the \$10,000 forecast amount per month for April and May). If recorded in June, costs would be \$50,000 by adding the \$10,000 forecast for June to the May amount. In this example, if costs are recorded in May, January to April costs would be inaccurate.

Subsequent monthly costs are accurate only if quarterly reports are submitted in a timely manner and recorded promptly. Carrying our prior example further, if Headquarters had recorded costs in May 1998 and the June SF 272 report was submitted late and not recorded until September, costs from June through August would be understated and not current. This method of recording grant data tends to generally understate costs and disbursements.

RELATED OIG REPORTS AND REVIEWS

Management of the NASA Grant Program, LA-96-003, June 10, 1996

Grant Administration - Case Western University, LE-94-005, September 19, 1994

Grants Management at Virginia Polytechnic Institute, LA-94-003, February 28, 1994

Grants Management at University of Virginia, LA-94-002, October 26, 1993

Grants Management at George Washington University, LA-93-006, September 22, 1993

Grants Management at North Carolina State University, LA-93-004, March 31, 1993

MANAGEMENT'S RESPONSE

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



Reply to Actn of

RB

JUL - 1 1998

TO: W/Assistant Inspector General for Auditing
FROM: R/Deputy Associate Administrator for Aeronautics
and Space Transportation Technology
SUBJECT: Draft Report on the Audit of Aeronautics Program Grant Financial
Transactions (Assignment Number A-LA-96-003)

We have reviewed the draft report and appreciate the opportunity to respond.

Recommendation 1. The LaRC CFO should ensure: ... (Each element of this recommendation is noted below management's response, followed by response detail explanations).

Management Response: Langley concurs with all elements of this recommendation as related to this Center's activities. Explanations and circumstances surrounding the conditions found in 1996 are provided, and current policies and practices reflect that all requested corrective actions have been completed. Details are noted below in response to each recommendation element.

- LaRC's CFO should ensure accountants are properly trained to understand the automated system process.

Management Response: The inaccurate cost on grant conditions noted by the auditor as the basis for this element of the recommendation relate to transactions reviewed in the 1996 timeframe. At that time, duties and responsibilities were in transition, and an evaluation of the costing process was ongoing. All system errors found by Langley management and staff prior to, and as a result of, the OIG audit were corrected immediately. Also, the Langley CFO and Chief, Financial Management Division (FMD), have taken planned action, in addition to corrective action due to audit findings, to ensure that all personnel were adequately prepared to complete position requirements. FMD has also implemented a monthly grant cost review process. This process ensures that all discrepancies found to exist in the automated costing system are analyzed and corrected on a monthly basis, prior to integration with the Center's financial system.

- The LaRC CFO should ensure LaRC costing policy is fully documented.

Management Response: The LaRC costing policy is fully documented and is currently updated for applicable process and policy changes.

- The LaRC CFO should ensure that copies of all cost adjustments are maintained in appropriate grant files.

Management Response: As previously stated, the transition in personnel and costing process evaluation activities contributed to the conditions noted by the auditor in the 1996 timeframe. Corrective action was implemented when conditions were surfaced. Currently, the accountant's standard training includes specific instructions to document all adjustments, and this documentation becomes a permanent part of the grant file. FMD management has reviewed the cost adjustment process with the appropriate personnel, and subsequently sampled grant files to confirm compliance.

- The LaRC CFO should ensure accountants document the purpose for all cost adjustments.

Management Response: Corrective action was taken in 1996 to ensure that the purpose for all cost adjustments was adequately documented. All adjustments are supported with appropriate documentation. All cost adjustment documents note the date and reason for the adjustment (if not obvious), and the initials of the accountant making the adjustment. All items are retained as permanent records of the costing history.

- The LaRC CFO should ensure dates in the straight-line system and the procurement system are reconciled semi-annually in February and July to ensure the accuracy of automated system accruals.

Management Response: Conditions noted by the auditor as the basis for this recommendation element reflect the results of an analysis conducted by FMD management upon discovering a system costing discrepancy. All dates in the straight-line costing system and the Procurement system have been reconciled. The current practice of conducting a monthly review of all grants not reflecting accrued cost in the straight-line system will ensure that the dates, or other reason for discrepancies, are discovered and properly handled on a monthly basis.

- The LaRC CFO should ensure accountants adjust costs if a no-cost extension of 6 months or more occur.

Management Response: FMD has implemented a process by which all grant supplements that request a no-cost time extension are reviewed, and cost is adjusted accordingly. The conditions noted as the basis for this element of the recommendation were attributable to the time period in which Procurement signs off on the supplement and the date that the supplement is actually effective. This time period is often a matter of months after the effective date. Current monthly analyses take into account those grants affected by no-cost time extensions, and the appropriate action is taken.

- The LaRC CFO should ensure supervisors periodically review grants on a sample basis to ensure costs are estimated and accrued in an accurate and current manner.

Management Response: FMD management reviews the cost status on all grants on a monthly basis through the use of exception reports which note all discrepancies.

Recommendation 2: The GSFC CFO should periodically review grants on a sample basis to ensure costs are estimated and accrued in an accurate and current manner.

Management Response: Concur. We agree for the GSFC CFO to periodically review grants on a sample basis to ensure costs are estimated and accrued in an accurate and current manner.

Recommendation 3: The Director, Headquarters Business and Administrative Services Division (HBSAD) should continue developing and thereafter implement a plan of action to eliminate reliance on the Department of the Treasury Financial Management Service personnel.

Management Response: Concur. The HBSAD's original plan was to phase out the Treasury support by September 30, 1998. At our May monthly status meeting with Treasury, it no longer appears feasible to phase them out that early. There have been several hundred grants given no-cost extensions until September 30, 1998. In addition, as of May 31, 1998, there are 620 grants for which a final SF 272 have been requested and an additional 260 grants for which we were processing requests.

The Headquarters CFO and the Chief of the Headquarters Accounting Division receive metric data from Treasury personnel on a monthly basis. In addition, we have begun monthly meetings with Treasury personnel to assess the status of the grant processing. A monthly report of grants which are financially complete is sent to the Headquarters Procurement Operations to accelerate the close-out process. Due to workload constraints, it is our current intent for the Treasury personnel to continue to process the grants remaining at Headquarters until March 31, 1999. Once the vast majority of grants are closed, then the remaining grants will be transferred to the Headquarters Accounting Division at GSFC for processing.

Recommendation 4: The Contract Management Division Director of the Headquarters Office of Procurement should identify a focal point for gathering quarterly report timeliness data from all Centers.

Management Response: Code H nonconcur with this recommendation since an upcoming change in NASA's procedure for costing grants will eliminate the need for quarterly 272 reports.

A recommendation to cost grants at "drawdown" was made by the Grant Management Process Team (GMPT) and is endorsed by the Chief Financial Officer. Drawdown information will be used for costing in lieu of the quarterly 272 cost report. The new process will require an annual electronic 272 submission which will be used to automatically reconcile drawdown information with actual costs.

Recommendation 5: The Chief of the Policy, Planning and Quality Assurance Branch of the Headquarters Office of the Chief Financial Officer should develop policies that provide for mandatory suspension of advance funding for 1 year if two or more consecutive quarterly reports are late or if more than two reports are late in any given year.

Management Response: Concur. The Chief of the Policy, Planning and Quality Assurance Branch will amend Financial Management Manual, Section 9280-10, Suspension or Termination of Advance Financing, to reflect more specific suspension criteria along the lines of the proposed recommendation.

Recommendation 6: The Chief, NASA Sponsored Research Business Office (NSRBO) should develop a follow-up process for grantees not submitting timely reports.

Management Response: Concur. The automated 272 submission process include an automatically generated report status database which will facilitate follow-up.

Recommendation 7: The Chief, NASA Sponsored Research Business Office, in coordination with other Headquarters offices affected by improper reporting, should develop specific criteria as to when advance funding would be terminated.

Management Response: Concur. In the course of implementing the proposed new process, consequences for nonsubmittal of the required 272 cost report will be considered.

Recommendation 8: The NASA CFO should require that:

- Centers using straight-line costing adjust costs annually to reflect June 30 SF 272 reported amounts;
- OASTT CFO's periodically review the accuracy of their grant costing systems;
- SF 272 forecast data be used to cost grants on a monthly basis; and
- LeRC record disbursements in a manner consistent with the other Centers.

Management Response: Concur. The NASA Chief Financial Officer (CFO) already requires that Centers doing straight-line accruals adjust them based upon the June 30 SF 272 reports (FMM 9061-5A). SF 272 forecast data is the preferred method for accruing grant costs on a monthly basis; we intend to leave the option open for straight-line accruals, due to workload considerations, until the implementation of the Integrated Financial Management system is complete. However, the NASA CFO will issue a specific memorandum to all Center Chief Financial Officers and Center Deputy Chief Financial Officers (Finance) requesting those officials to ensure adherence to and correct implementation of the specific FMM sections covering the four (4) elements of the recommendation. Pertinent FMM references will also be provided.

Recommendation 9: The Chief, NASA Sponsored Research Business Office should: in coordination with the Office of Naval Research (ONR), establish a time standard for grant close-out; establish a Headquarters focal point to monitor the timeliness of the final SF 272 reports establish a focal point to withhold funding or payments on new awards to institutions not complying with final report requirements; and direct Centers to establish a lead grant officer to expedite grant close-out and coordination efforts.

The four bullets included under Recommendation 9 are addressed separately:

- In coordination with the ONR, establish a time standard for grant close-out

Management Response: Concur. The NSRBO has a number of policy initiatives under way which should facilitate grant close-out including: Mandatory close-out of grants at the end of each peer reviewed performance period; a change in NASA policy for vesting

title to research equipment acquired under grants; and the implementation of a "low risk" grant close-out procedure similar to a program in place at the National Science Foundation.

These changes should result in a significant reduction in the amount of time it takes to close out a grant. These initiatives will bring NASA policy in line with other federal agencies and with the Federal Demonstration Partnership (FDP). They will streamline NASA procedures while reducing administrative burden. Also, NASA's policy of virtual blanket delegation to ONR will be revisited.

- Establish a Headquarters focal point to monitor the timeliness of the final SF 272 reports

Management Response: Nonconcur. Compliance with anticipated policy changes should be under the purview of the field Centers. It is suggested that the Procurement Officers be tasked with ensuring compliance with Agency-wide policy and practice. Planned annual automated submission of the 272 report should facilitate monitoring.

- Establish a focal point to withhold funding or payments on new awards to institutions not complying with final report requirements

Management Response: Nonconcur. Withholding funding to entire institutions based on delinquencies under an individual grant is not appropriate. Individual Principal Investigators are responsible for providing reporting information to their Sponsored Research business offices. To penalize other PI's selected for receipt of new, separate grants is unwarranted. It is suggested that this recommendation be modified as follows: "Establish a focal point to withhold funding or payments on annual increments or new awards to Principal Investigators whose grants are delinquent with final reporting requirements." Again, compliance with anticipated policy changes should be the responsibility of the Center Procurement Officers.

- Direct Centers to establish a lead grant officer to expedite grant close-out and coordination efforts

Management Response: Concur. A recommendation of the GMPT, which will be implemented as soon as the approval of the NSRBO organization is complete, is to establish an Inter-Center Grants Working Group. This Working Group will have a member from each Center. The members will be responsible for, among other duties, ensuring that grant policy changes are implemented at their respective Centers.

Should you have any questions concerning our response, please contact Carl Wagenfuehrer at Goddard Space Flight Center, (301) 286-3404 or Tina Kearney, Code R, 358-4730.


Michael Mann

REPORT DISTRIBUTION

National Aeronautics and Space Administration (NASA) Headquarters

Code AS/Chief Scientist
Code B/Chief Financial Officer
Code B/Comptroller
Code BFZ/Chief, Policy, Planning, and Quality Assurance Branch
Code C/Associate Administrator for Headquarters Operations
Code CF/Director, Headquarters Business and Administrative Services Division
Code G/General Counsel
Code H/Associate Administrator for Procurement
Code HK/Director, Contract Management Division
Code J/Associate Administrator for Management Systems and Facilities
Code JM/Director, Management Assessment Division
Code L/Associate Administrator for Legislative Affairs
Code R/Associate Administrator for Aeronautics and Space Transportation Technology
Code S/Associate Administrator for Space Science
Code U/Associate Administrator for Life and Microgravity Sciences and Applications
Code W/Assistant Inspector General for Inspections, Administrative Investigations and Assessments
Code Y/Associate Administrator for Earth Science
Code Z/Associate Administrator for Policy and Plans

NASA Field Installations

Director, Ames Research Center
Director, Goddard Space Flight Center
 Chief Financial Officer, Goddard Space Flight Center
Director, Langley Research Center
 Chief Financial Officer, Langley Research Center
Director, Lewis Research Center

NASA Offices of Inspector General

Ames Research Center
Goddard Space Flight Center
Jet Propulsion Laboratory
Lyndon B. Johnson Space Center
John F. Kennedy Space Center
Langley Research Center
Lewis Research Center
George C. Marshall Space Flight Center
John C. Stennis Space Center

Non-NASA Federal Organizations and Individuals

Assistant to the President for Science and Technology Policy
Deputy Associate Director, Energy and Science Division, Office of Management and Budget
Budget Examiner, Energy Science Division, Office of Management and Budget
Associate Director, National Security and International Affairs Division, General Accounting
Office
Special Counsel, House Subcommittee on National Security, International Affairs, and Criminal
Justice
Professional Assistant, Senate Subcommittee on Science, Technology, and Space

Chairman and Ranking Minority Member - Congressional Committees and Subcommittees

Senate Committee on Appropriations
Senate Subcommittee on VA, HUD and Independent Agencies
Senate Committee on Commerce, Science, and Transportation
Senate Subcommittee on Science, Technology, and Space
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on VA, HUD and Independent Agencies
House Committee on Government Reform and Oversight
House Committee on Science
House Subcommittee on Space and Aeronautics

Congressional Members

Honorable Pete Sessions, U.S. House of Representatives

Major Contributors to this Report

Lee T. Ball, Program Director, Financial Management and Infrastructure

Michael P. Bruns, Auditor-in-Charge

Patricia C. Reid, Program Assistant