Office of Inspector General June 17, 1999

Mr. John Theis, Partner
Ernst & Young LLP
1225 Connecticut Avenue, NW
Washington, DC 20036

Re: Final Report on Quality Control Review of Ernst & Young LLP
Universities Space Research Association for Fiscal Year Ended June 30, 1998
Assignment No. A9901300
Report No. IG-99-029

Dear Mr. Theis:

The subject final report is provided for your use. Please refer to the Executive Summary for the overall review results. We have incorporated your comments into the final report, as appropriate, and included them in their entirety as an appendix to our report. Regarding corrective action for the recommendations, please notify us when agreed-to actions have been taken. The recommendations remain undispositioned and open for reporting purposes until corrective actions are completed.

If you have questions concerning the report, please call Mr. Kevin Carson, Director, Audit Quality, Office of Inspector General, at (301) 286-0498, or Ms. Vera Garrant, A-133 Audit Manager, at (202) 358-2596. We appreciate the courtesies extended to the audit staff. The report distribution is in Appendix G.

Sincerely,

[Original signed by]
Russell A. Rau
Assistant Inspector General for Auditing

Enclosure

cc:
G/General Counsel
H/Acting Associate Administrator for Procurement
JM/Director, Management Assessment Division

Office of Inspector General June 17, 1999

Dr. David Cummings, Executive Director
Universities Space Research Association
10227 Wincopin Circle, Suite 212
Columbia, MD 21044

Re: Final Report on Quality Control Review of Ernst & Young LLP
Universities Space Research Association for Fiscal Year Ended June 30, 1998
Assignment No. A9901300
Report No. IG-99-029

Dear Dr. Cummings:

The subject final report is provided for your use. Please refer to the Executive Summary for the overall review results. We have incorporated your comments into the final report as appropriate, and included them in their entirety as an appendix to our report. Regarding corrective action for the recommendations, please notify us when agreed-to actions have been taken. The recommendations remain undispositioned and open for reporting purposes until corrective actions are completed.

If you have questions concerning the report, please call Mr. Kevin Carson, Director, Audit Quality, Office of Inspector General, at (301) 286-0498, or Ms. Vera Garrant, A-133 Audit Manager, at (202) 358-2596. We appreciate the courtesies extended to the audit staff. The report distribution is in Appendix G.

Sincerely,

[Original signed by]
Russell A. Rau
Assistant Inspector General for Auditing

Enclosure

cc:
G/General Counsel
H/Acting Associate Administrator for Procurement
JM/Director, Management Assessment Division

IG-99-029

QUALITY CONTROL REVIEW REPORT

ERNST & YOUNG LLP AUDIT OF UNIVERSITIES SPACE RESEARCH ASSOCIATION FOR FISCAL YEAR ENDED JUNE 30, 1998

June 17, 1999

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, or visit www.hq.nasa.gov/office/oig/hq/issuedaudits.html.

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, Room 8V69
300 E Street, SW
Washington, DC 20546-1000

NASA Hotline

To report fraud, waste, abuse, or mismanagement, contact the NASA OIG Hotline at (800) 424-9183, (800) 535-8134 (TDD), or at www.hq.nasa.gov/office/oig/hq/hotline.html#form; or write to 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

AICPA	American Institute of Certified Public Accountants
NASA	National Aeronautics and Space Administration
OMB	Office of Management and Budget
SOP	Statement of Position
USRA	Universities Space Research Association

Contents

Executive Summary, *i*

Introduction, 1

Findings and Recommendations, 2

Finding A. Working Paper Documentation, 2

Finding B. Federal Awards Reporting, 5

Finding C. Continuing Education and Training, 8

Appendix A – Single Audit Requirements, 10

Appendix B – Glossary, 13

Appendix C – Objectives and Scope, 15

Appendix D – Quality Control Review Methodology, 17

Appendix E – Ernst & Young LLP Response, 19

Appendix F – Universities Space Research Association Response, 21

Appendix G – Report Distribution, 22

NASA Office of Inspector General

IG-99-029 **June 17, 1999**
A9901300

Ernst & Young LLP Audit of Universities Space Research Association for Fiscal Year Ended June 30, 1998

Executive Summary

Introduction. The Universities Space Research Association (USRA) of Columbia, Maryland, is a not-for-profit membership corporation that provides universities and other organizations the means to cooperate in the development of knowledge associated with space science and technology. USRA's principal program is to operate laboratories and other facilities under contracts, grants, and cooperative agreements mainly with the Federal Government for research, development, and education associated with space science and technology.

As the cognizant audit agency for USRA, the National Aeronautics and Space Administration (NASA) performed a quality control review of USRA's audit for the fiscal year ended June 30, 1998. The audit is required by Office of Management and Budget (OMB) Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations." The office of Ernst & Young LLP, Washington, D.C., performed the single audit for USRA. The USRA reported total Federal expenditures of $75,816,364 for the fiscal year ended June 30, 1998, from awards provided by NASA.

Appendix A provides details on the single audit requirements, and Appendix B is a glossary of the terms used in this report.

Objectives. The objectives of our quality control review were to determine whether the audit was conducted in accordance with applicable standards and whether the audit meets the auditing and reporting requirements of OMB Circular A-133. See Appendixes C and D for details on the objectives, scope, and methodology.

Results of Review. Ernst & Young LLP issued its audit report on USRA on September 11, 1998. The auditors identified no findings and questioned no costs. Ernst & Young LLP issued an unqualified opinion on the financial statements, Schedule of Federal Awards* and major program compliance. The auditors also found no instances of noncompliance in the financial statement audit that are required to be reported under

---

*Rather than Schedule of Expenditures of Federal Awards, the audit report references "Schedule of Federal Awards," which is the title prescribed in the original OMB Circular A-133. Hereafter, except in citations from the revised OMB Circular A-133, we will refer to this schedule as "Schedule of Federal Awards."

generally accepted government auditing standards. Finally, the auditors noted no matters involving internal controls relating to the financial statement or major programs that are considered to be material weaknesses.

The Ernst & Young LLP audit work and report generally meets the applicable auditing and reporting guidance and regulatory requirements contained in: (1) OMB Circular A-133 and its related Compliance Supplement, (2) generally accepted government auditing standards; and (3) generally accepted auditing standards. The auditors need to improve working paper documentation (Finding A), correct major program reporting (Finding B), and obtain training specifically related to the single audit requirements (Finding C). Additionally, the audit report must be revised to identify the Federal agencies whose expenditures are presented in the Schedule of Federal Awards and include notes to the Schedule that describe the significant accounting policies used.

Recommendations. We recommend that USRA management prepare a Schedule of Expenditures of Federal Awards and its related notes in accordance with OMB Circular A-133.

We also recommend that Ernst & Young LLP:

- Document its working papers in accordance with generally accepted government auditing standards for the internal controls related to the OMB Circular A-133 compliance requirements.
- Revise the Schedule of Findings and Questioned Costs and the Data Collection Form to correctly identify major programs.
- Provide training in OMB Circular A-133 requirements for the assigned staff.

USRA Response. The Schedule of Federal Awards is being revised to reflect the USRA programs as major programs within the research and development cluster, identify the Federal agencies, and include appropriate footnotes to the Schedule.

Ernst & Young LLP's Response. Documentation of the auditors' thought processes and other matters discussed during the audit can be improved. Ernst & Young will participate in the revision to the Schedule of Findings and Questioned Costs for fiscal year 1998. Ernst & Young LLP will prepare a letter to the Department of Commerce, Bureau of the Census (the collecting agent for OMB on the Data Collection Form), advising the Bureau to identify all contracts listed on the June 30, 1998, Data Collection Form as "major program." Ernst & Young and USRA will jointly sign the letter. Finally, personnel for the USRA audit will obtain training in the revised Circular A-133 requirements.

Evaluation of the USRA and Ernst & Young LLP Response. Both responses meet the intent of the recommendations.

Introduction

The Single Audit Act Amendments of 1996 (Public Law 104-156) and the June 30, 1997, revision to OMB Circular A-133, require that USRA obtain an audit of its fiscal year 1998 Federal expenditures. The audit must be performed by independent auditors and must be in accordance with the Single Audit Act Amendments of 1996, OMB Circular A-133 and its related Compliance Supplement, and the generally accepted government auditing standards that are applicable to financial audits.

A complete reporting submission in accordance with OMB Circular A-133 includes the following: (1) financial statements and related opinion; (2) Schedule of Expenditures of Federal Awards and related opinion; (3) report on internal controls and compliance review on the financial statements; (4) report on internal controls review and compliance opinion on major programs; and a (5) Schedule of Findings and Questioned Costs and a completed Data Collection Form.

Refer to Appendix A for additional details on the Single Audit requirements.

Findings and Recommendations

Finding A. Working Paper Documentation

The Ernst & Young L.L.P sampling criteria and sections of the internal control working paper documentation is incomplete and do not fully comply with generally accepted government auditing standards. This occurred because Ernst & Young LLP auditors relied on certain historically acquired knowledge of and auditing techniques for USRA and its accounting environment, which are not documented in the working papers. Without oral explanations about the sampling criteria and some of the internal control working papers, there is no assurance that the work performed meets the requirements of OMB Circular A-133.

Documentation Requirements

OMB Circular A-133 §___.500(c)(1) and (2) state that the auditors must first perform audit procedures to obtain a sufficient understanding of internal controls over Federal programs to plan the audit to support at least a low level of control risk for major programs. If internal controls are deemed ineffective, auditors must plan the internal controls testing over major programs to support a low level of control risk for the assertions relevant to the compliance requirements for each major program. The auditors must then perform the planned testing. The American Institute of Certified Public Accountants (AICPA) Statement of Position (SOP) 98-3, "Audits of States, Local Governments, and Not-for-Profit Organizations Receiving Federal Awards," sections 8.7, and 8.9 through 8.10, state that the auditors must obtain a sufficient understanding of internal control over Federal programs by performing procedures to understand the design of controls related to the applicable A-133 compliance requirements for each major program and whether those controls are in operation. To obtain that understanding, the auditors must perform procedures to obtain sufficient knowledge of the design of the controls pertaining to the five internal control components: (1) control environment; (2) risk assessment; (3) control activities; (4) information and communication; and (5) monitoring. The auditors must also assess control risk for the assertions related to the applicable A-133 compliance requirements for each major program.

The AICPA Codification of Statements on Auditing Standards §339.05, "Content of Working Papers," and generally accepted government auditing standards, sections 4.34 through 4.37, "Working Papers," require auditors to retain a record of the audit in the form of working papers to demonstrate that the applicable standards of field work have been met. Generally accepted government auditing standards further state that the form and content of the working papers should allow an experienced auditor to understand the audit's significant conclusions and judgments. In general, the working papers should document the objectives, scope, and methodology, including the sampling criteria the auditors used. Specifically, working papers should include enough information about the work performed and the documents (transactions and records) examined so that an experienced auditor would be able to examine the same documents.

Working Paper Documentation

For some of the compliance requirements tested, Ernst & Young LLP did not document the related internal controls to support the nature and extent of testing. The results of the auditors' internal control review determined the nature and extent of testing for the 14 compliance requirements related to the major program. However, Ernst & Young did not always document internal controls to allow an independent reviewer, without prior knowledge of the organization, to understand the auditors' judgments regarding the amount and type of compliance testing that the auditor determined to be appropriate. Some of the working papers do not document the auditors' conclusions on the internal control review (that is, low-risk area, immaterial effect on major program, etc.) to explain the nature and timing of the compliance tests.

The auditors identified the transactions, compliance attributes, and results, but did not document the sampling criteria for the compliance requirements tested that are applicable to the research and development major program. Without the sampling criteria, an independent reviewer cannot determine the judgments the auditors used to determine the appropriate sampling technique, sizes, approach, and other criteria.

Conclusion

Based on our review of the working papers and discussions with appropriate Ernst & Young LLP personnel, we concluded that the auditors' work met the requirements of OMB Circular A-133. However, the auditors did not adequately document the internal control assessments and the related testing strategy (sampling criteria) for some of the applicable 14 compliance requirements related to the research and development major program. Ernst & Young LLP needs to revise its 1998 working paper documentation in these areas to comply with professional auditing standards. Without sufficient working paper documentation, there is no assurance that the required audit work was performed.

Recommendations for Corrective Action

We recommend that Ernst & Young LLP:

1. Document the results of the auditors' understanding of the 5 internal control elements related to each of the 14 compliance requirements that could have a direct and material effect on each major program as required by OMB Circular A-133 and in accordance with generally accepted government auditing standards and the American Institute of Certified Public Accountants standards and guidance.

2. Document the audit sampling criteria for major programs in accordance with generally accepted government auditing standards.

Ernst & Young LLP's Response. Ernst & Young LLP agreed that documentation of the auditors' judgments and matters discussed during the USRA audit can be improved. Ernst & Young has begun to more completely document these areas in its working papers. In connection with its fiscal year 1999 effort, Ernst & Young LLP will revise the documentation to support the 1998 and 1999 audits. Ernst & Young will share the key memoranda, major program testing, and internal control testing in this area with the NASA Office of Inspector General before finalizing its audit. The complete text of the comments is in Appendix E.

Evaluation of the Ernst & Young LLP Response. The Ernst & Young LLP response meets the intent of the recommendations.

Finding B. Federal Awards Reporting

The Schedule of Federal Awards, Schedule of Findings and Questioned Costs, and the Data Collection Form were not prepared in accordance with OMB Circular A-133. Specifically, some awards are incorrectly identified as major programs in the Schedules and the Data Collection Form and information required by OMB Circular A-133 is missing. This occurred because the auditors had incorrectly designated individual awards as major programs, instead of identifying all the research and development awards as one major program. As a result, the auditor's compliance opinion for major programs refers to individual awards that were not audited.

Major Programs as Reported

OMB Circular A-133 §___.300(a) and (d) require the auditee (USRA) to identify the Federal awards in its accounts and the Federal programs under which they were received and to prepare the Schedule of Federal Awards in accordance with OMB Circular A-133 §___.310. In general, the Schedule of Federal Awards lists:

- Federal programs by Federal agencies
- Individual Federal programs within a cluster
- The name of the pass-through entities and identifying numbers, if applicable
- Total Federal awards expended for individual Federal programs and identifying numbers
- Notes that describe the significant accounting policies used in preparing the Schedule

OMB Circular A-133 §___.505(d)(1)(vii) and §___.500(f) require the auditors to prepare a Schedule of Findings and Questioned Costs that will identify major programs in the audit summary section of the Schedule of Findings and Questioned Costs and the applicable sections of the Data Collection Form.

The auditors incorrectly reported as major programs the Federal awards it determined to be Type A programs using the risk-based approach that is described in §___.520 of the Circular. In general, Type A programs are Federal programs for which expenditures for the period exceed the greater of $300,000 or 3 percent of total Federal awards expended by the auditee. Identifying Type A programs is the first step in a multistep process that auditors use in determining which Federal programs will be audited and reported on as major programs.

The Schedule of Federal Awards, Schedule of Findings and Questioned Costs and the applicable sections of the Data Collection Form identify specific contracts as major programs even though USRA has only one major program – the research and development cluster. Although the research and development cluster was audited in

aggregate, designation of individual contracts as major programs is inappropriate for programs that were not audited as major programs in accordance with the provisions of OMB Circular A-133.

Other Required Information

The Schedule of Federal Awards does not identify the Federal agencies whose program expenditures are presented therein. OMB Circular A-133 §___.300(d) requires the auditee (USRA) to prepare the Schedule of Expenditures of Federal Awards in accordance with §___.310. As discussed above, one requirement is that the Schedule must identify the Federal programs by Federal agencies based on information from the auditee's books and records.

Notes to the Schedule of Federal Awards

The USRA Schedule of Federal Awards does not include explanatory notes as required by OMB Circular A-133 §___.310(b)(4). Because the Schedule did not include the related notes, Federal agencies do not know the significant accounting policies that USRA used to prepare the Schedule. Disclosing this information assists the report user in determining the appropriate procedures for reconciling the report expenditures to the Federal records.

Conclusion

As a result of inaccurately reporting major programs, the Schedule of Federal Awards, Schedule of Findings and Questioned Costs, and the applicable sections of the Data Collection Form are not prepared in accordance with OMB Circular A-133. The auditor's opinion on compliance and assurance over internal controls for major programs refer to Federal awards that were erroneously identified and not audited as major programs.

The Circular requires the auditee to send a copy of its audit report to a Federal agency only when the audit report identifies a finding related to the Federal agency's program. The audit report information is transferred to a Data Collection Form. The information from the Data Collection Form is put on the Internet for review by other Federal agencies that do not receive the report and other interested parties. If the Data Collection Form is incorrect or information therein is incomplete, Federal agencies and others could rely on the assurance over internal controls and an opinion expressed for programs that have not been audited. Federal agencies will also spend time obtaining the information, causing a delay in administering their awards in a timely manner. Finally, Federal agencies may unknowingly rely on the incomplete or incorrect report information to administer their awards.

Recommendations for Corrective Action

3. We recommend that Ernst & Young LLP revise the Schedule of Findings and Questioned Costs and the applicable sections of the Data Collection Form, in accordance with the requirements of the OMB Circular A-133.

4. We recommend that Universities Space Research Association management prepare a Schedule of Expenditures of Federal Awards in accordance with the requirements of OMB Circular A-133 that:

- **identifies major programs (that is, the research and development cluster);**
- **identifies Federal programs by Federal agency; and**
- **includes notes to the Schedule.**

Ernst & Young LLP's Response. Ernst & Young LLP will participate in the revision to the Schedule of Findings and Questioned Costs for fiscal year 1998. Ernst & Young LLP will prepare a letter to the Department of Commerce, Bureau of the Census (the collecting agent for OMB on the Data Collection Form), advising the Bureau to identify all contracts listed on the June 30, 1998, Data Collection Form as "major program." Ernst & Young and USRA will jointly sign the letter. The complete text of the comments is in Appendix E.

USRA Response. USRA is revising the Schedule of Federal Awards to reflect its programs within the research and development cluster. The revised Schedule will identify the Federal agencies and more clearly indicate that the vast majority of expenditures of Federal awards are from a single source--NASA. USRA will include an extract of the footnotes from its financial statements in footnotes to the Schedule as appropriate. USRA will jointly sign the letter related to the 1998 Data Collection Form. The complete text of the comments is in Appendix F.

Evaluation of the Ernst & Young LLP and USRA Response. The USRA and Ernst & Young LLP responses meet the intent of the recommendations.

Finding C. Continuing Education and Training

The Ernst & Young L.L.P. auditors assigned to this audit have not been trained in the revised requirements of OMB Circular A-133. The auditors received training related to general government auditing, government contracting, and the aerospace industry, but not the revised Circular requirements. As a result, the auditors have not maintained a professional level of proficiency in an important aspect of the unique environment under audit to provide confidence in the opinions and assurances expressed in their audit reports.

Training Requirements

OMB Circular A-133 §___.500(a) requires the audit to be conducted in accordance with generally accepted government auditing standards. Sections 3.3 and 3.4 of those standards state that the audit organization is responsible for assigning audit staff whom collectively possess adequate professional proficiency to conduct the audit. The staff should also have a thorough knowledge of Government auditing and of the specific or unique environment in which the audited entity operates, relative to the nature of the audit being conducted. Section 3.6 further states that of the 80 hours of continuing education and training required every 2 years, at least 24 hours must be in subjects directly related to the Government environment and to Government auditing. Generally accepted government auditing standards also require additional training when the auditee operates in a unique or specific environment.

Auditor Education

The audit staff assigned to the fiscal year 1998 audit of USRA was not collectively proficient in the audit requirements of OMB Circular A-133. The auditors assigned had been trained in general Government accounting topics and related industry matters during the current 2-year education cycle. The continuing education and training documentation for the partners, the audit manager, and the audit senior show that they had not been trained in the OMB Circular A-133 requirements since July 1996 (the revised OMB Circular A-133 is dated June 30, 1997). When the audit staff are not specifically trained in the unique aspects of the environment being audited, there is no assurance that the work performed and the supervision provided is based on achieving the objectives of that environment. In addition, as the requirements and needs of the environment change, the auditors must maintain a professional level of proficiency to provide others confidence in the opinions and assurances expressed in their audit reports.

Recommendation for Corrective Action

5. We recommend that Ernst & Young L.L.P. staff assigned to this audit obtain training specifically related to the revised OMB Circular A-133 requirements.

Ernst & Young LLP Response. The personnel responsible for planning, directing, and conducting substantial portions of the fieldwork and reporting of the OMB Circular A-133 procedures for the USRA audit will obtain training in the revised requirements. The engagement partner obtained such training in December 1998 and the audit senior responsible for conducting the OMB Circular A-133 fieldwork (and who is anticipated to function as the audit manager for the 1999 audit) obtained such training in April 1999. The complete text of the comments is in Appendix E.

Evaluation of the Ernst & Young LLP's Response. The corrective actions are responsive to the recommendation.

Appendix A. Single Audit Requirements

The Inspector General Act of 1978, as amended (Public Law 95-452), requires an agency's Inspector General to "take appropriate steps to assure that any work performed by non-Federal auditors complies with the standards established by the Comptroller General."

The Single Audit Act of 1984 (Public Law 98-502) was intended to improve the financial management of state and local governments, while OMB Circular A-133 was intended to improve financial management for nonprofit organizations. The Act and the Circular established uniform requirements for audits of Federal financial assistance; promoted efficient and effective use of audit resources; and helped to ensure that Federal departments and agencies rely on and use the audit work to the maximum extent practicable.

The Single Audit Act Amendments of 1996 (Public Law 104-156) incorporate the previously excluded nonprofit organizations. Including the nonprofit organizations strengthens the usefulness of the audits by establishing one uniform set of auditing and reporting requirements for all Federal award recipients that are required to obtain a single audit. Major changes to the Act include: (1) increasing the audit threshold from $25,000 to $300,000 with respect to Federal financial assistance programs before an audit is required; (2) selecting Federal programs for audit based on a risk assessment rather than the amount of funds involved; and (3) improving the contents and timeliness of single audits.

The revised OMB Circular A-133 was issued pursuant to the Single Audit Act Amendments of 1996 on June 30, 1997. In general, the Circular requires that an auditee who expends $300,000 or more annually in Federal awards, obtain an audit and issue a report of its Federal award expenditures in accordance with the generally accepted government auditing standards applicable to financial audits. The audit must be performed by auditors who meet the independent standards in generally accepted government auditing standards and in accordance with the auditing and reporting requirements of the Circular and its related Compliance Supplement. The audit report submission contains:

- financial statements and related opinion,
- Schedule of Expenditures of Federal Awards and related opinion,
- report on internal controls and compliance review on the financial statements,
- report on internal controls review and compliance opinion on major programs, and
- Schedule of Findings and Questioned Costs.

The auditee must also submit a Data Collection Form to the Department of Commerce Clearinghouse. The Form summarizes the significant information in the audit report for dissemination to the public through the Internet. Responsible officials from the audited entity and the audit organization sign the form certifying to the information presented.

Appendix A

The Compliance Supplement is based on the requirements of the Single Audit Act Amendments of 1996 and the final June 30, 1997, revision of OMB Circular A-133, which provide for the issuance of a compliance supplement to assist auditors in performing the required audits. The National State Auditors Association study stated:

> "The Compliance Supplement provides an invaluable tool to both Federal agencies and auditors in setting forth the important provisions of Federal assistance programs. This tool allows Federal agencies to effectively communicate items which they believe are important to the successful management of the program and legislative intent . . . ."

Compliance with the Supplement satisfies the requirements of OMB Circular A-133. The Supplement identifies Federal programs by Federal agency. It identifies existing, important, compliance requirements, which the Federal Government expects to be considered as part of an audit required by the 1996 Amendments. Without the Supplement, auditors would need to research many laws and regulations for each program under audit to determine which compliance requirements are important to the Federal Government and could have a direct and material effect on a program. The Supplement is a more efficient and cost-effective approach to performing this research. It provides a source of information for auditors to understand the Federal program's objectives, procedures, and compliance requirements relevant to the audit as well as audit objectives and suggested audit procedures for determining compliance with the requirements.

For single audits, the Supplement replaces agency audit guides and other audit requirement documents for individual Federal programs and specifically states which of the following 14 compliance requirements are applicable to a major program that may be audited:

1. Activities Allowed or Unallowed
2. Allowable Costs/Cost Principles
3. Cash Management
4. Davis-Bacon Act
5. Eligibility
6. Equipment and Real Property Management
7. Matching, Level of Effort, Earmarking
8. Period of Availability of Federal Funds
9. Procurement and Suspension and Debarment
10. Program Income
11. Real Property Acquisition/Relocation Assistance
12. Reporting
13. Subrecipient Monitoring
14. Special Tests and Provisions

Appendix A

The Compliance Supplement assists the auditors in determining the audit scope for the Circular's internal control requirements. For each compliance requirement, the Supplement describes the objectives of internal control and certain characteristics that when present and operating effectively, may ensure compliance with program requirements. The Supplement gives examples of the common characteristics for the 5 components of internal controls (control environment, risk assessment, control activities, information and communication, and monitoring) for the 14 compliance requirements.

Appendix B. Glossary

Award. Federal financial assistance and Federal cost-reimbursement contracts that non-Federal entities receive directly from Federal awarding agencies or indirectly from pass-through entities. Awards do not include procurement contracts, under grants or contracts, used to buy goods or services from vendors. (OMB Circular A-133 §___.105)

Compliance Supplement. The Compliance Supplement identifies existing important compliance requirements that the Federal Government expects to be considered as part of an audit required by the Single Audit Act Amendments of 1996. See Appendix A for additional details.

Cross-Footed. The verification that the total of all rows and the total of all the columns add to the same number. See also footed.

Data Collection Form. A form that states whether the audit was completed in accordance with the Circular and provides information about the auditee, its Federal programs, and the results of the audit. A senior-level representative of the auditee shall sign a statement to be included as part of the form certifying that: the auditee complied with the requirements of the Circular; the form was prepared in accordance with the Circular; and the information included in the form, in its entirety, is accurate and complete. (OMB Circular A-133 §___.320(b)(1))

Footed. The verification of the row or column total. See also cross-footed.

Pass-Through Entity. A non-Federal entity that provides a Federal award to a subrecipient to carry out a Federal program. (OMB Circular A-133 §___.105)

Risk-Based Approach. In general, the risk-based approach requires the auditors to determine major programs based on dollar thresholds and risk analysis. (OMB Circular A-133 §___.520)

Schedule of Findings and Questioned Costs. The auditors are required to prepare a Schedule of Findings and Questioned Costs that summarizes the audit results. This schedule includes information about and related to the audit that is not required to be identified in other parts of the audit report including: (1) major programs audited; (2) details on findings and questioned costs (including reportable conditions and material weaknesses); (3) recipient's corrective action plan; (4) dollar threshold for Type A and Type B programs; and (5) the determination as to whether the recipient is considered to be low risk.

Type A Program. Federal programs are defined as Type A programs when an auditee's total Federal awards expended during the audit period exceed the greater of (OMB Circular A-133 §___.520(b)(1)):

- $300,000 or .03 of total Federal awards, for which total expended Federal awards equal or exceed $300,000 but are less than or equal to $100 million.

- $3 million or .003 of total Federal awards, for which total expended Federal awards exceed $100 million but are less than or equal to $10 billion.

- $30 million or .0015 of total Federal awards, for which total expended Federal awards exceed $10 billion.

Type B Program. Federal programs that are not defined as Type A (OMB Circular A-133 §___.520(b)(2)).

Appendix C. Objectives and Scope

Audit Report Review

The objective of an audit report review is to determine whether the report submitted by the auditee meets the reporting requirements of OMB Circular A-133. As the cognizant Federal audit agency for USRA, we performed a review of the audit report for the fiscal year ended June 30, 1998. We reviewed the report for compliance with the requirements of the Single Audit Act, Single Audit Act Amendments of 1996, and OMB Circular A-133. We focused our review on the report's qualitative aspects of: (1) due professional care; (2) auditor's qualifications and independence; (3) financial statement, compliance, and internal control reporting; (4) Schedule of Federal Awards; and (5) Schedule of Findings and Questioned Costs.

Quality Control Review

The objectives of a quality control review are to ensure that an audit was conducted in accordance with applicable standards and whether the audit meets the auditing and reporting requirements of OMB Circular A-133. As the cognizant Federal audit agency for USRA, we conducted a quality control review of the audit working papers. We focused the review on the audit's qualitative aspects of:

- Auditor's qualifications
- Independence
- Due professional care
- Quality control
- Planning and supervision
- Federal receivables and payables
- Major program determination
- Internal controls and compliance testing for major programs
- Schedule of Federal Awards
- Schedule of Findings and Questioned Costs
- Data Collection Form

We organized our review by the general and field work audit standards and the required elements of a single audit. We emphasized the areas of major concern to the Federal Government such as determining and auditing major program compliance and internal controls. We conducted the review December 14 through 17, 1998, and April 14, 1999, at the Washington, D.C., offices of Ernst & Young LLP. The NASA Office of Inspector General has not previously performed a quality control review at other Ernst & Young LLP locations.

Appendix C

Peer Review Report

We reviewed the November 3, 1998, report on the most recent peer review of Ernst & Young LLP, performed by KPMG Peat Marwick LLP. KPMG Peat Marwick LLP determined that Ernst & Young LLP met the objectives of the quality control review standards established by the American Institute of Certified Public Accountants and that Ernst & Young LLP complied with the standards during the fiscal year ended June 30, 1998.

Appendix D. Quality Control Review Methodology

Report of Independent Auditors on Audited Financial Statements and Other Financial Information

The auditors are required to obtain reasonable assurance about whether the financial statements are free of material misstatement. The auditors are also required to subject the Schedule of Federal Awards to the procedures applicable to the audit of the financial statements and to ensure that the amounts are fairly stated in relation to the basic financial statements. We reviewed the audit programs and the testing of evidence to determine whether testing was sufficient based on an assessment of control risk to warrant the conclusion reached. We also reviewed the working papers to determine whether they supported the conclusion.

Schedule of Federal Awards

The recipient is responsible for creating the Schedule of Federal Awards. The auditors are required to audit the information in the Schedule to ensure it is fairly presented in all material respects in relation to the financial statements taken as a whole. We reviewed the audit programs for the appropriate procedures, reviewed a selected number of footings and cross-footings, and traced some of the amounts to the Subsidiary Ledger and/or Trial Balance.

Report on Compliance and on Internal Control Over Financial Reporting Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards

The auditors are required to determine whether the recipient has complied with laws and regulations that may have a direct and material effect in determining financial statement amounts. The auditors are also required to obtain an understanding of internal controls that is sufficient to plan the audit and to assess control risk. We reviewed the audit programs for the appropriate procedures, the working paper documentation, and the compliance and substantive testing performed.

Appendix D

Report on Compliance and on Internal Control Over Compliance in Accordance with OMB Circular A-133

The auditors are required to determine whether the recipient has complied with laws, regulations, and the provisions of contracts and grant agreements that may have a direct and material effect on each of its major Federal programs. The auditors are required to use the procedures in the OMB Circular A-133 Compliance Supplement (May 1998 edition) to determine the compliance requirements for each major program. We reviewed the audit program for the appropriate procedures and compared the audit program steps to those in the Compliance Supplement to determine whether the applicable steps had been performed. We also reviewed the working paper documentation and its support and the compliance tests performed.

The auditors are also required to perform procedures to obtain an understanding of the internal controls over Federal programs sufficient to plan the audit to support a low assessed level of control risk for major programs. The auditors must plan and perform internal controls testing over major programs to support a low level of control risk for the assertions relevant to the compliance requirements for each major program. We reviewed the audit programs for the appropriate procedures, the working paper documentation, and the test of controls performed.

Schedule of Findings and Questioned Costs

The auditors are required to prepare a Schedule of Findings and Questioned Costs that summarizes the audit results. This schedule includes information about and related to the audit that is not required to be identified in other parts of the audit report including: (1) major programs audited; (2) details on findings and questioned costs (including reportable conditions and material weaknesses); (3) dissenting views of responsible officials; (4) dollar threshold for Type A and Type B programs; and (5) the determination as to whether the recipient is considered to be low risk. We reviewed the audit programs for the appropriate procedures and the working paper documentation supporting the information in the schedule.

Appendix E. Ernst & Young Response

ERNST & YOUNG LLP

1225 Connecticut Avenue, N.W.
Washington, D.C. 20036

Phone: 202 327 6000

June 9, 1999

Mr. Russell A. Rau
Assistant Inspector General for Auditing
National Aeronautics and Space Administration—
Office of Inspector General
Headquarters
Washington, DC 20546-0001

Re: Final Report on Quality Review of Ernst & Young LLP
Universities Space Research Association for Fiscal Year Ended June 30, 1998
Assignment No. A9901300
Report No. IG-99-029

Dear Mr. Rau:

I have reviewed the final report referred to above. Following are our responses to the recommendations resulting from your review:

Recommendations 1. and 2. While we note that the extent of documentation required is an area in which auditor judgment can play a key role, we believe that documentation of our thought processes and the other matters discussed in these recommendations can be improved. We have begun the process of more completely documenting these areas. In connection with our fiscal year 1999 effort, we will upgrade the documentation to support our 1998 and 1999 audits. We intend to share the key memoranda, major program testing and internal control testing in this area with the NASA Office of Inspector General before finalizing our 1999 audit to ensure that we have appropriately addressed this concern in our audit and incorporate insights of the Office of Inspector General on areas to emphasize in our compliance procedures.

Recommendation 3. We will participate in the revision to the Schedule of Findings and Questioned Costs for fiscal year 1998. We will prepare a letter to the Department of Commerce-Bureau of Census (the collection agent for OMB on the Data Collection Form) advising them to identify all contracts listed on the June 30, 1998 Data Collection Form as "major program." The letter will be jointly signed by Ernst & Young LLP and USRA.

Recommendation 5. The engagement personnel responsible for planning, directing and conducting substantial portions of the fieldwork and reporting of the OMB Circular A-133 procedures for the USRA engagement will obtain training in the revised requirements. The engagement partner obtained such training in December 1998 and the audit senior responsible for conducting the OMB Circular A-133 fieldwork (and who we anticipate will function as the audit manager for the 1999 audit) obtained such training in April 1999.

Ernst & Young LLP is a member of Ernst & Young International, Ltd.

ERNST & YOUNG LLP

We appreciate the cooperation of you and your staff in working through the issues raised in your review. Should you need additional information in connection with finalizing your report, please call me.

Sincerely,

John A. Theis
Partner

Copy to David Cummings
Robert Senter
Dan Murrin

Appendix F. Universities Space Research Association Response

Board of Trustees

Mary Bisson
State University of New York, Buffalo
Robert Carravillano
Boston College
Paul J. Coleman, Jr.
University of California, Los Angeles
Burton Edelson
The George Washington University
Joe Eisley
University of Michigan
Robert Hager
Boeing (Ret.)
Kenneth E. Harwell
University of Alabama in Huntsville
Jeffrey Hughes
Boston University
Ralph Jacobson
Charles Stark Draper Laboratory, Inc.
Darrell Judge
University of Southern California
John Kelly
North Carolina A&T State University
Dietrich Muller
University of Chicago
Norman E. Neaz
University of Delaware
Robert Schnabel
University of Colorado

Member Institutions

Alabama A & M University
Alabama, University of (Huntsville)
Alaska, University of
Arizona State University
Arizona, University of
Boston College
Boston University
Brandeis University
British Columbia, University of
Brown University
California, University of (Berkeley)
California, University of (Los Angeles)
California, University of (San Diego)
California, University of (Santa Barbara)
Case Western Reserve University
Chicago, University of
Colorado, University of
Connecticut, University of
Cornell University
Delaware, University of
Denver, University of
Florida State University
Florida, University of (Gainesville)
Georgetown University
George Washington University
Georgia Institute of Technology
Hampton University
Harvard University
Hawaii, University of
Houston, University of
Illinois, University of (Urbana-Champaign)
Indiana University
Iowa State University
Iowa, University of
Johns Hopkins University
Kansas, University of
Lehigh University
Louisiana State University (Baton Rouge)
Maryland, University of (College Park)
Massachusetts Institute of Technology
Michigan, University of (Ann Arbor)
Michigan Technological University
Minnesota, University of (Minneapolis)
Mississippi State University
New Hampshire, University of
New Mexico State University
New York, State University of (Buffalo)
New York, State University of (Stony Brook)
New York University
North Carolina A & T State University
North Carolina State University
Northwestern University
Ohio State University
Old Dominion University
Pennsylvania State University
Pittsburgh, University of
Princeton University
Purdue University
Rensselaer Polytechnic Institute
Rice University
Rochester, University of
Rockefeller University
Sheffield, University of
Southern California, University of
Stanford University
Technion — Israel Institute of Technology
Tel-Aviv University
Tennessee, University of (Knoxville)
Texas A & M University
Texas, University of (Austin)
Texas, University of (Dallas)
Texas, University of, Medical Branch at Galveston
Toronto, University of
Utah State University
Vanderbilt University
Virginia Polytechnic Institute and State University
Virginia, University of
Washington, University of
Washington, University (St. Louis)
William and Mary, College of
Wisconsin, University of (Madison)
Yale, University of

USRA

UNIVERSITIES SPACE RESEARCH ASSOCIATION
10227 WINCOPIN CIRCLE, SUITE 212
COLUMBIA, MARYLAND 21044-3459 • 410-730-2656
info@usra.edu www.usra.edu Fax 410-730-3496

WASHINGTON OFFICE
202-479-2609

4 June 1999

Mr. Russell A. Rau
Assistant Inspector General for Auditing
NASA Headquarters
Code W, Room 8V69
300 E. Street SW
Washington, DC 20546-1000

Re: Report No. IG-99-029

Dear Mr. Rau:

I have reviewed the final subject draft report. USRA concurs with your recommendation to revise the Schedule of Expenditures of Federal Awards and its related notes in accordance with OMB Circular A-133. Please note that our staff is in the process of revising this report to reflect USRA programs as within the Research and Development cluster, denoting the federal agencies, and will include footnotes to the Schedule as appropriate.

We will notify you when these actions have taken place and will provide you with copies of the revised report.

Thank you for this opportunity to respond to your recommendations. Please do not hesitate to call Robert Senter or me at 410-730-2656 if you have any questions concerning this matter.

Sincerely,

W. David Cummings
Executive Director

cc: R. Senter
J. Theis

USRA 30 YEARS 1969-1999

Officers: Paul J. Coleman, Jr., President; Robert Hager, Chair, Board of Trustees; John Kelly, Vice Chair, Board of Trustees; W. David Cummings, Secretary/Treasurer

Appendix G. Report Distribution

Dr. David Cummings, Executive Director
Universities Space Research Association
10227 Wincopin Circle, Suite 212
Columbia, MD 21044

Mr. John Theis, Partner
Ernst & Young LLP
1225 Connecticut Avenue, NW
Washington, DC 20036

Mr. Harold Guillard, Supervisory Auditor
Defense Contract Audit Agency
Columbia Branch Office
One Mall North, Suite 200
10025 Governor Warfield Parkway
Columbia, MD 21044-3329

National Aeronautics and Space Administration (NASA) Officials-in-Charge

Code B/Chief Financial Officer
Code B/Comptroller
Code G/General Counsel
Code H/Associate Administrator for Procurement
Code JM/Director, Management Assessment Division

NASA Field Installation

Director, Goddard Space Flight Center
Chief Counsel, John F. Kennedy Space Center

NASA Offices of Inspector General

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

Major Contributors to the Report

Kevin J. Carson, Program Director, Audit Quality

Vera J. Garrant, A-133 Audit Manager

Tewana Hoskins, Program Assistant

Nancy C. Cipolla, Report Process Manager