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QUALITY CONTROL REVIEW OF  
PRICEWATERHOUSECOOPERS L.L.P  
AND THE DEFENSE CONTRACT AUDIT AGENCY  
CALIFORNIA INSTITUTE OF TECHNOLOGY  
FISCAL YEAR ENDED SEPTEMBER 30, 1996

Report Number D-2000-6-001

November 19, 1999

Office of the Inspector General  
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### **Acronyms**

DCAA	Defense Contract Audit Agency
JPL	Jet Propulsion Laboratory
NASA	National Aeronautics and Space Administration
OIG	Office of Inspector General
OMB	Office of Management and Budget
PwC	PricewaterhouseCoopers LLP



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November 19, 1999

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SUBJECT: Quality Control Review of PricewaterhouseCoopers LLP  
And the Defense Contract Audit Agency  
California Institute of Technology  
Fiscal Year Ended September 30, 1996  
Report No. D-2000-6-001 (Project No. 90A-1002)

## Introduction

We are providing this report for your information. The California Institute of Technology (Caltech) is a private, not-for-profit institution of higher education based in Pasadena, California. Caltech manages and operates the Jet Propulsion Laboratory (JPL) which is a National Aeronautics and Space Administration (NASA) sponsored Federally Funded Research and Development Center. As the cognizant audit agency for Caltech including JPL, the Office of the Inspector General, Department of Defense (OIG, DoD) performed a joint review with the Office of Inspector General, National Aeronautics and Space Administration (OIG, NASA), of the Circular A-133 Audit of Caltech for the fiscal year (FY) ended September 30, 1996. The audit is required by Office of Management and Budget (OMB) Circular A-133, "Audits of Institutions of Higher Education and Other Nonprofit Organizations. The offices of PricewaterhouseCoopers LLP (PwC), Los Angeles, California, and the Defense Contract Audit Agency (DCAA), West Covina, California, performed the single audit for Caltech. For the fiscal year ended September 30, 1996, Caltech reported total Federal expenditures of \$1,258,649,621, representing \$24,167,524 for DoD, \$1,105,886,931 for NASA, and \$128,595,166 for other Federal agencies.

PwC and DCAA performed the FY 1996 audit using a coordinated audit approach. DCAA's audit work was limited to the Research and Development program. DCAA performed the internal control and compliance testing relating to allowable costs/cost principles, cash management, and types of services allowed or not allowed at Caltech and JPL. DCAA also performed testing for special provisions and tests, financial reporting, claims for advances for reimbursement, and administrative requirements related to the period of availability of funds at JPL.

## **Quality Control Review Results**

The PwC audit report on Caltech was dated February 11, 1997 and March 31, 1999. The auditors identified a reportable condition for internal controls and findings related to the compliance requirements, but questioned no costs. PwC issued an unqualified opinion of the financial statements, Schedule of Federal Awards, and compliance with specific requirements applicable to major programs. The auditors found no instances of noncompliance in the financial statement audit requiring reporting under generally accepted government auditing standards. Finally, the auditors identified no material weaknesses related to internal controls for the financial statement or major programs.

The DCAA audit reports on Caltech and JPL were dated March 25 1999 and March 31, 1999, respectively. The auditors identified reportable conditions for internal controls and questioned costs related to the findings on compliance requirements. DCAA issued a qualified opinion on compliance for the research and development major program. Finally, the auditors identified no material weaknesses related to internal controls for the major program.

The PwC and DCAA audit work generally meets the applicable guidance and regulatory requirements of OMB Circular A-133 and its related Compliance Supplement, which incorporate generally accepted auditing standards and generally accepted government auditing standards. A summary of the Circular A-133 audit findings is provided in Enclosure 1.

## **Quality Control Review Objective**

The objective of our quality control review was to ensure that the audit was conducted according to applicable standards and meets the auditing requirements of OMB Circular A-133. We focused our review on the following qualitative aspects of the audit: auditor qualifications, independence, due professional care, quality control, planning, supervision, major program determinations, and the Schedule of Federal Awards.

In 1998 Coopers & Lybrand LLP and Price Waterhouse LLP merged to form PwC. We reviewed the most recent peer review letters, issued November 6, 1996 and

October 28, 1997, by Deloitte & Touche LLP and Ernst & Young LLP, for Price Waterhouse LLP and Coopers & Lybrand LLP, respectively. The peer review letters stated that the firms met the objectives of the quality control review standards established by the American Institute of Certified Public Accountants and complied with the standards during the fiscal years ended June 30, 1996 (Price Waterhouse LLP) and March 31, 1997 (Coopers & Lybrand LLP).

## **Scope and Methodology**

We used the 1991 edition of the Uniform Quality Control Guide for Single Audits (the Guide) to perform our review. The President's Council on Integrity and Efficiency prepared the Guide as guidance for performing the quality control review procedures. The Guide is organized by the general and fieldwork audit standards and the required elements of a single audit. The Guide is further divided into the substantive work performed during the audit of the financial statements and the specific program compliance testing for major programs. Our review was conducted from July 19 through 30, 1999, and covered areas related to the financial statements and the research and development program. We did not review compliance with requirements related to the other major programs, as defined by OMB Circular A-133. The other major program at Caltech for FY 1996 was the Student Financial Aid program for the Department of Education.

## **Results of Prior Quality Control Reviews**

Since July 1996, we have performed nine quality control reviews of Coopers & Lybrand LLP, one quality review of Pricewaterhouse LLP, and one quality review of PricewaterhouseCoopers LLP. We identified conditions resulting in quality control review findings and made recommendations at several locations. We notified the affected offices, and no further action is necessary.

## **Background**

The Inspector General Act of 1978 prescribes the duties and responsibilities of that office. In implementing those responsibilities, the Inspectors General are required 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 (the Act) was intended to improve the financial management of state and local governments, while OMB Circular A-133 (the Circular) was intended to improve financial management for nonprofit organizations. The Act and the Circular established uniform requirements for audits of Federal awards,

promoted efficient and effective use of audit resources, and helped ensure that Federal departments and agencies rely on and use the audit work done under the Act, to the maximum extent practicable.

The Single Audit Act Amendments of 1996 incorporate the previously excluded nonprofit organizations. Including the nonprofit organizations strengthened 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. The Act Amendments increased the threshold to trigger an audit requirement from \$25,000 to \$300,000; prescribed a risk-based approach to determine major programs; and shortened and streamlined the report submission process.

OMB Circular A-133 established the Federal audit and reporting requirements for nonprofit and educational institutions whose Federal awards are, or exceed, \$25,000. It provides that an audit made in accordance with the Circular shall be in lieu of any financial audit required under individual Federal awards. Federal agencies must rely on the audit to the extent that it provides information and assurances needed to perform overall agency responsibilities. The Circular also requires that the cognizant agency obtain or conduct quality control reviews of selected audits made by non-Federal auditors and provide the results, when appropriate, to other interested organizations. The OMB Circular A-133 was revised on June 24, 1997, to incorporate the changes in the Single Audit Act Amendments of 1996. Its provisions apply to audits of fiscal years beginning after June 30, 1996.

## **Discussion of Results**

During our quality control review, we reviewed and took no exception to the working papers supporting the following reports prepared by PwC and DCAA.

**Report of Independent Accountants.** The auditor is required to obtain reasonable assurance about whether the financial statements are free of material misstatement. We reviewed the audit program and the testing of evidential matter 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.

**Report of Independent Accountants on the 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. Our review was included in the steps to evaluate the audit working papers related to the Independent Accountant's Report.

**Report of Independent Accountants on the Internal Control Structure Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards.** The auditor is required to obtain an understanding of internal controls that is sufficient to plan the audit and to assess control risk for the assertions embodied in the financial statements. We reviewed the audit program for the appropriate procedures, the working paper documentation, and the results of the testing of controls.

**Report of Independent Accountants on Compliance with Laws, Regulations, Contracts, and Grants based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards.** The auditor is required to determine whether the recipient has complied with laws and regulations and with provisions of contracts and grant agreements that may have a direct and material effect on determining financial statement amounts. We reviewed the audit program for the appropriate procedures, the working paper documentation and support, and the compliance tests performed.

**Report of Independent Accountants on the Internal Control Structure Used in Administering Federal Awards.** The auditor is required to obtain an understanding of the internal controls, assess control risk and perform tests of controls to provide reasonable assurance that Federal awards are managed in compliance with applicable laws, regulations, and contract terms. The auditor must also test a recipient's system for monitoring subrecipients and the controls in effect to ensure that direct and indirect costs are properly computed and billed. We reviewed the audit programs for the appropriate procedures, the working paper documentation, the tests of controls, and reviewed the substantive testing performed.

**Report of Independent Accountants on Compliance with General Requirements.** The auditor is required to determine whether the recipient has complied with statutory and regulatory requirements that are generally applicable to Federal assistance programs. General requirements involve national policy. Failure to comply with these requirements could have a material impact on an organization's financial statements including those prepared for Federal programs. The auditor's procedures were those prescribed in the OMB Compliance Supplement for Single Audits of Educational Institutions and Other Nonprofit Organizations. We reviewed the audit programs for appropriate procedures, the working paper documentation and related support and the compliance tests performed.

**Report of Independent Accountants on Compliance with Specific Requirements Applicable to Major Programs.** The auditor is required to determine whether the recipient has complied with laws and regulations that may have a direct and material effect on its major Federal programs and to obtain sufficient evidence to support an opinion on compliance. PwC was responsible for auditing Caltech's compliance with the following specific requirements applicable to the research and development program: types of services allowed or unallowed; eligibility; matching, level of effort,

or earmarking; reporting; special tests and provisions; financial reports and claims for advances and reimbursements; and amounts claimed or used for matching. The auditor's procedures were those prescribed in the OMB Compliance Supplement for Single Audits of Educational Institutions and Other Nonprofit Organizations. We reviewed the audit programs for appropriate procedures, the working paper documentation and related support and the compliance tests performed.

**DCAA Report on OMB Circular A-133 Audit Fiscal Year 1996 Compliance with Requirements Applicable to the Federal Research and Development Program (Caltech).** The auditor is required to determine whether the recipient has complied with laws and regulations that may have a direct and material effect on the research and development program. DCAA was responsible for auditing compliance with the following general and specific requirements: cash management; allowable costs and cost principles; types of services allowed or unallowed; and special tests and provisions related to allowable costs and cost principles. We reviewed the audit program for the appropriate procedures, reviewed the working paper documentation and related support, and reviewed the compliance tests performed.

**DCAA Report on OMB Circular A-133 Review of Fiscal Year 1996 Internal Control Used in Administering the Research and Development Program. (Caltech)** The auditor is required to obtain an understanding of the internal controls, assess control risk and perform tests of controls on the policies and procedures designed to provide reasonable assurance that Federal awards are managed in compliance with applicable laws, regulations, and contract terms. The auditor must also test the controls in effect to ensure that direct and indirect costs are properly computed and billed. DCAA was responsible for evaluating the internal controls related to the following general and specific requirements: cash management; allowable costs and cost principles; types of services allowed or unallowed; and special tests and provisions related to allowable costs and cost principles. We reviewed the audit programs for appropriate procedures, the working paper documentation and related support, and the results of the testing of controls.

**DCAA Supplemental Report on Audit of FY 1996 Allocated Direct Cost Submission Including Comments on OMB Circular A-133 Compliance with Requirements Applicable to the Federal Research and Development Program (JPL).** The auditor is required to determine whether the recipient has complied with laws and regulations that may have a direct and material effect on the research and development program. DCAA was responsible for auditing compliance with the following general and specific requirements: allowable costs and cost principles; period of availability of funds; types of services allowed or unallowed; special tests and provisions; and financial reports and claims for advances and reimbursements. We reviewed the audit program for the appropriate procedures, reviewed the working paper documentation and related support, and reviewed the compliance tests performed.

**DCAA Report on OMB Circular A-133 Review of Fiscal Year 1996 Internal Control Used in Administering the Research and Development Program. (JPL)**

The auditor is required to obtain an understanding of the internal controls, assess control risk and perform tests of controls on the policies and procedures designed to provide reasonable assurance that Federal awards are managed in compliance with applicable laws, regulations, and contract terms. The auditor must also test the controls in effect to ensure that direct and indirect costs are properly computed and billed. DCAA was responsible for evaluating the internal controls related to the following general and specific requirements: allowable costs and cost principles; activities allowed or unallowed; period of availability of funds; special tests and provisions; and financial reports and claims for advances and reimbursements. We reviewed the audit programs for appropriate procedures, the working paper documentation and related support, and the results of the testing of controls.

**Comments**

If you have questions on this report, please contact Ms. Barbara Smolenyak at (703) 604-8761 or by e-mail at [bsmolenyak@dodig.osd.mil](mailto:bsmolenyak@dodig.osd.mil). The report distribution is included as Enclosure 2.



Donald E. Davis  
Deputy Assistant Inspector General  
for Audit Policy and Oversight

Enclosures

**California Institute of Technology**  
**Fiscal Year Ended September 30, 1996**  
**Findings and Questioned Cost**

**PricewaterhouseCoopers LLP**

<u>Finding Reference</u>	<u>Report Page</u>	<u>Finding Description</u>	<u>Costs Questioned</u>	<u>Resolution Agency</u>
96-1	33-36	Reportable Conditions-Financial Reporting	None	DoD
96-2	37	Matching	None	DoD
96-3	38	Close-out Procedures	None	DoD
96-4	39	Property Management	None	DoD
96-5	40	Procurement Policy	None	DoD
96-6	41	Subrecipient Monitoring	None	DoD
96-7	42	Federal Reporting	None	DoD

**Defense Contract Audit Agency - Caltech Compliance Report 4901-97P10150001**

<u>Finding Reference</u>	<u>Report Page</u>	<u>Finding Description</u>	<u>Costs Questioned</u>	<u>Resolution Agency</u>
96-1 thru 96-5 96-16,96-21	1,10,14	Indirect Cost Finding Depreciation & Use Allowance	\$1,810,135	DoD
96-6 thru 96-9 96-16, 96-10 96-17 thru 96-21	1,10,14	Indirect Cost Finding Operations & Maintenance	4,697,652	DoD
96-10, 96-16, 96-17 thru 96-21	1,10,14	Indirect Cost Finding General Administration	(292,902)	DoD
96-10, 96-11 96-16 96-17 thru 96-21	1,10,14	Indirect Cost Finding Departmental Administration	220,822	DoD
96-10, 96-13 96-14, 96-16 96-17 thru 96-21	1,10,14	Indirect Cost Finding Student Administration Services	641,960	DoD
96-10, 96-14 96-15, 96-16 96-17-96-21	1,10,14	Indirect Cost Finding Library	375,000	DoD
96-10, 96-12 96-17 thru 96-21	1,10,14	Indirect Cost Finding Sponsored Projects Administration	1,091,084	DoD
96-22 thru 96-24	1,68	Indirect Cost Finding - Staff Benefits	733,000	DoD

**California Institute of Technology  
Fiscal Year Ended September 30, 1996  
Findings and Questioned Costs**

**Defense Contract Audit Agency - Caltech Internal Control Report 4901-98P11050002**

<u>Finding Reference</u>	<u>Report Page</u>	<u>Finding Description</u>	<u>Costs Questioned</u>	<u>Resolution Agency</u>
95-1	5	Reportable Condition-Accounting & Billing Systems	None	DoD
95-2	6	Reportable Condition-Purchasing System	None	DoD
96-1	8	Reportable Condition-Timekeeping System	None	DoD

**Defense Contract Audit Agency - JPL Compliance Report 4901-97J10150001**

<u>Finding Reference</u>	<u>Report Page</u>	<u>Finding Description</u>	<u>Costs Questioned</u>	<u>Resolution Agency</u>
Subcontracts	3	Unresolved Subcontract Costs	\$294,642,952	NASA
Note a.	5,7	Allocated Direct Cost Finding Labor Pool	20,803,399	NASA
Note b.	5,11	General Burden Pool Cost Allocation, Cost Reclassification, and Unallowable Costs	(22,423,342)	NASA
Note b.	5,11	General Burden Base Cost Reclassification	21,914,704	NASA
Note c.	5,12	Allocated Direct Cost Finding Procurement	2,023,205	NASA
Note d.	5,12	Occupancy Allocations	0	NASA
Direct Costs	16	Splitting of Direct Material Costs Between Projects	356,540	NASA

**Defense Contract Audit Agency - JPL Internal Control Report 4901-99J11050001**

<u>Finding Reference</u>	<u>Report Page</u>	<u>Finding Description</u>	<u>Costs Questioned</u>	<u>Resolution Agency</u>
96-1	5	Reportable Condition - Inadequate Disclosure Statement	None	NASA
96-2	5	Reportable Condition - Noncompliance with CAS 405 (Accounting for Unallowable Costs)	None	NASA
96-3	6	Reportable Condition - Noncompliance with CAS 408 (Accounting for Costs of Compensated Personal Absences)-	None	NASA
96-4	6	Reportable Condition - Noncompliance with CAS 418 (Allocation of Direct and Indirect Costs)	None	NASA

California Institute of Technology  
Fiscal Year Ended September 30, 1996

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California Institute of Technology  
Fiscal Year Ended September 30, 1996

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