JP-96-004

AUDIT REPORT

EARLY RETIREMENT OPTION PLAN

AT THE

JET PROPULSION LABORATORY

AUGUST 30, 1996

National Aeronautics and Space Administration

OFFICE OF INSPECTOR GENERAL

National Aeronautics and
Space Administration

Headquarters
Washington, DC 20546-0001

Reply to Attn of: W

AUG 30 1996

TO: SPJ/Manager, NASA Management Office, JPL

FROM: W/Assistant Inspector General for Auditing

SUBJECT: Final Report
Early Retirement Option Plan
At The Jet Propulsion Laboratory
Assignment No. A-JP-95-008
Report No. JP-96-004

We have completed an audit of the Early Retirement Option (ERO) charges transferred by the California Institute of Technology (Caltech) to the Jet Propulsion Laboratory (JPL) contract and reimbursed by NASA. Overall, the ERO charges transferred by Caltech to the NASA contract at JPL did not appear reasonable when compared to selected other ERO plans and OMB guidance. Further, the internal control procedures over the ERO charges to NASA were not adequate and resulted in unreasonable benefits paid to some ERO retirees. For more details, please refer to the Executive Summary and audit report content which follow.

We discussed a draft of this report with your office and with JPL management on April 29, 1996. A written response was received from your office on July 23, 1996. The comments were incorporated into the report to outline actions taken or planned in response to the recommendations. The complete NASA Management Office (NMO) response is in Appendix 1.

As a result of discussions between the NMO and Caltech, significant changes were negotiated in response to this report. The discussions resulted in a $244,000 settlement by Caltech for questionable rehire practices. We estimate that future cost savings as a result of changes to the ERO plan and the rehire policy through Fiscal Year 2000 could exceed $1.35 million.

In accordance with NMI 9910.1A, please include our office in the concurrence cycle for closing recommendations 2 and 4. The NASA Office of Inspector General staff members associated with this audit express their appreciation to the NMO and JPL for their courtesy, assistance, and cooperation.

Robert J. Wesolowski
for Debra A. Guentzel

Enclosure

cc:
S/W. Huntress
JMC/P. Chait

TABLE OF CONTENTS

(THIS PAGE INTENTIONALLY LEFT BLANK)

JP-96-004

EARLY RETIREMENT OPTION PLAN

AT THE

JET PROPULSION LABORATORY, CALIFORNIA

EXECUTIVE SUMMARY

INTRODUCTION

In response to a NASA Management Office (NMO), Jet Propulsion Laboratory (JPL) request, we have completed an audit of the California Institute of Technology (Caltech) Early Retirement Option (ERO) charges for fiscal years (FYs) 1991 through 1994 that were transferred to NASA contracts at JPL. This audit was requested by the NMO because of concerns about the amount of charges associated with the ERO plan. In September 1995, we issued a rapid action report that covered ERO charges for FYs 1991 and 1992. This report includes findings from the rapid action report as well as 1993-1994 ERO data.

OBJECTIVES

The overall audit objective was to evaluate the interdivisional transferred costs between Caltech and JPL. Specifically, we evaluated the reasonableness, allowability and allocability of the ERO charges and the adequacy of the internal control procedures over the transferred charges to the NASA contract at JPL.

RESULTS OF AUDIT

Overall, the ERO charges transferred by Caltech to the NASA contract at JPL did not appear reasonable when compared to other FFRDCs operated by educational institutions, major NASA contractors, and OMB Circular A-21 guidance. Furthermore, the internal control procedures over the ERO charges to NASA were not adequate and resulted in unreasonable benefits paid to at least three ERO retirees reviewed. The specific issues discussed in this report are summarized below:

Reasonableness of the ERO Plan. The Caltech ERO benefits paid to the 14 individuals selected for our review did not appear reasonable when compared to the benefits provided by four other surveyed FFRDCs with early retirement plans, one major NASA contractor that offered an early retirement plan, and OMB Circular

A-21 guidance. None of the other 13 FFRDCs operated by educational institutions or four major NASA contractors surveyed had an ERO plan with an unlimited election period or no stated purpose. These weaknesses may have occurred because the Caltech ERO plan had not been submitted to NASA for formal review and approval. NASA's cost for the 14 individuals drawing ERO benefits during FYs 1991 through 1994 was approximately $2.7 million (an average of approximately $193,000 per ERO retiree); also, 13 of the 14 retirees were rehired as consultants or on-call employees for an additional cost to NASA of $728,000. NASA is facing a potential ERO liability of several million dollars over the next five years (see page 10).

ERO Internal Controls. The internal control procedures over the ERO charges to NASA were not adequate. These procedures allow for a wide interpretation on administering the plan. For at least three ERO retirees reviewed, we believe the plan provided the retired employees with unreasonable benefits that were charged to NASA (see page 17).

RECOMMENDATIONS

We recommended that the NASA Management Office:

1. determine the allowability of the NASA costs under the current Caltech ERO plan.

2. formally review and approve any Caltech ERO plan that requires use of NASA funds. The plan should have a stated purpose consistent with OMB Circular A-21 and provide a reasonable ERO benefits package. We suggest that the ERO plan include time-period limits for election and a rehire policy.

3. pending the determination made in response to recommendation 1, recover any NASA funds, and accrued interest, paid by Caltech to its employees, in excess of the Internal Revenue Code limitation on pension contributions, as set forth in the Institute's established pension plan.

4. direct Caltech to establish specific procedures to process any ERO contributions to the retirees' pension plan.

5. establish a periodic review process to ensure that the ERO transferred charges are consistent with the ERO policy and procedures.

The actions taken or planned by the NASA Management Office are responsive to the recommendations.

(THIS PAGE INTENTIONALLY LEFT BLANK)

INTRODUCTION

In response to a NASA Management Office (NMO), Jet Propulsion Laboratory (JPL) request, we have completed an audit of the California Institute of Technology (Caltech) Early Retirement Option (ERO) charges for fiscal years (FYs) 1991 through 1994 that were transferred to NASA contracts at JPL. This audit was requested by the NMO because of concerns about the amount of charges associated with the ERO plan. In September 1995, we issued a rapid action report that covered ERO charges for FYs 1991 and 1992. This report includes findings from the rapid action report as well as the 1993-1994 ERO data.

The Caltech ERO plan offers selected employees (executive and senior managers) an early retirement option and benefits that include cash payments, contributions to their retirement pension plan, and group health and life insurance programs. The ERO program is managed by Caltech for retired Caltech and JPL executives and senior managers.

JPL is a Federally Funded Research and Development Center (FFRDC) that is operated by Caltech under NASA contract NAS7-1260. This contract was effective September 20, 1993, and replaced contract NAS7-918 and contract NAS7-920(F). The Laboratory, staffed largely with Caltech employees, is a government-owned installation located in Pasadena, California. JPL also operates other NASA facilities in Southern California, at Goldstone Tracking Station and Table Mountain. The NMO at JPL provides NASA management oversight of JPL operations.

As part of this audit, the OIG on September 12, 1995, issued a rapid action report addressing the allowability of the NASA costs for FYs 1991 and 1992 under the Caltech ERO plan (see Appendix 2). That rapid action report recommended that the NMO question the allowability of the ERO costs pending formal NASA approval of the plan. The NMO, in its management response to the rapid action report, reserved the right to a full response with the issuance of the final report covering FYs 1991-1994.

EARLY RETIREMENT OPTION (ERO) PLAN

The ERO plan was instituted at Caltech and JPL in July 1976, under Caltech Staff Personnel Memoranda No. 99. The plan provided up to three years of benefits to selected Caltech and JPL early retirees. Annual ERO costs charged to NASA ranged from $29,000 in 1976 to over $522,000 in 1995. Annual costs increased significantly starting in 1986 (see Illustration 1 on following page).

Originally, the 1976 plan offered an early retirement option only for senior managers who had attained 62 years of age and completed 25 years of service at the campus and/or JPL. The incentive benefits included:

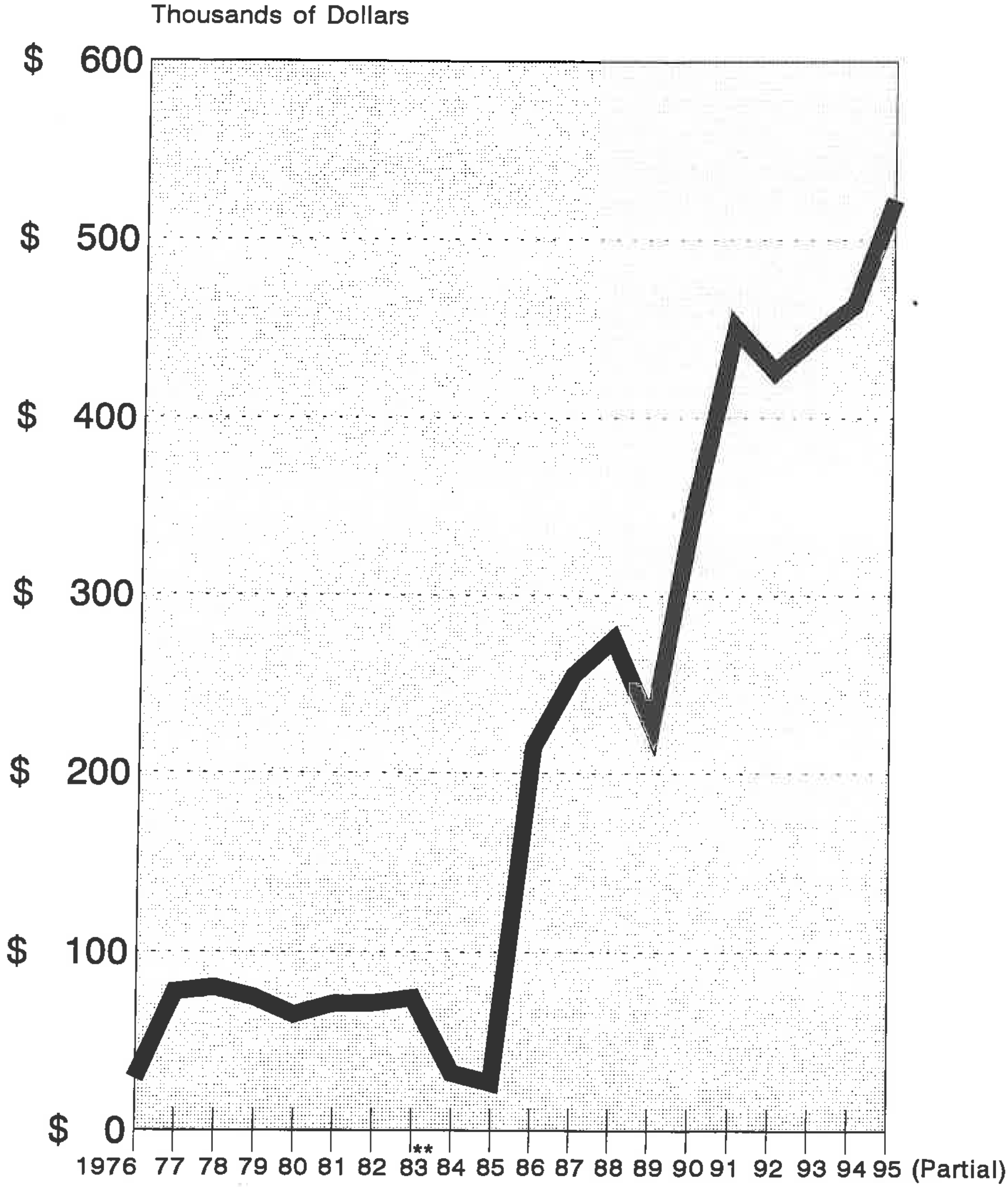
- payments equal to one-half the individual's salary for three years (or approximately one and one-half years' salary);
- contributions to the participant's basic retirement plan at the rate provided in the retirement plan for three years; and
- continued contributions to age 65 for retirees who elect continued participation in the Institute's Health Insurance Program and Group Life Insurance Program.

This plan, in effect for about two years, was renewed in May 1978 with minor changes. Caltech again renewed the plan in January 1982 and made the ERO program effective indefinitely. Another revision in July 1983 introduced major changes. The ERO plan was expanded to include executive managers who have attained 52 years of age, completed 15 years of service, and held an executive manager position for at least two years prior to electing the ERO. The revised plan still provides for the same three-year incentives.

Under the 1983 revision, which is applicable to the period under review, i.e., FYs 1991 through 1994, the ERO plan is available to Caltech and JPL executive managers and senior managers. Executive managers include Vice Presidents of the Institute, other corporate officers of the Institute who report directly to the President, as well as the JPL Director, Deputy Director and the Associate and Assistant Directors. Senior managers include employees who report to an executive manager or to the President, and are in pay grades E-9 through E-12 or A-9 through A-12; and corporate officers, without regard to pay grade, who do not report directly to the President. The

ANNUAL ERO COSTS CHARGED TO NASA*

From 1976 to August 1995



Source: Caltech/JPL ERO History

* Not adjusted for inflation

** ERO Policy was extended to executive managers

ERO benefits stop when a participant either deceases, has received the full three years of benefits, or becomes eligible to collect his/her basic retirement annuity at age 65, whichever comes first.

OBJECTIVES, SCOPE, AND METHODOLOGY

OBJECTIVES

The overall audit objective was to evaluate the interdivisional transferred costs between Caltech and JPL. Specifically, we evaluated the reasonableness, allowability and allocability of the ERO charges and the adequacy of the internal control procedures over the transferred charges to the NASA contract at JPL.

SCOPE AND METHODOLOGY

Our analysis of the ERO plan included a review of the six executive and eight senior managers receiving ERO payments during FYs 1991, 1992, 1993 and 1994. To present a more accurate assessment of the benefits paid under the Caltech ERO plan, the information presented in this report reflects total payments (i.e., cash payments, contributions to the retirement pension plan, and group health and life insurance programs) made to or on behalf of the executives and managers. Therefore, some payments occurred both before FY 1991 and after FY 1994.

To determine whether the ERO payments charged to NASA were reasonable, allowable and allocable, we reviewed:

- Contract NAS7-918, effective in FYs 1989 through 1993;
- Contract NAS7-1260, effective September 20, 1993, through FY 1998;
- Caltech Staff Personnel Memoranda No. 99, dated July 1976, May 1978, January 1982 and July 1983;
- OMB Circular A-21, Cost Principles for Educational Institutions;
- JPL cost accounting practices set forth in the Caltech certified Cost Accounting Standards Board Disclosure Statement, dated January 23, 1992;
- Caltech Teachers Insurance Annuity Association-College Retirement Equities Fund (TIAA-CREF)

Defined Contribution Retirement Plan document dated January 1, 1993;

- Internal Revenue Code Section 415-6, Limitation for Defined Contribution Plans; and

- For comparative purposes only:

- Federal Employees Workforce Restructuring Act of 1994; and,

- Federal Acquisition Regulations (FAR) 31.205-6, Compensation for Personal Services.

Further, to determine the reasonableness of the Caltech ERO policy at JPL, we surveyed:

- 13 FFRDCs operated by educational institutions (Exhibit 1); and,

- four major NASA contractors whose contracts were regulated by the FAR (Exhibit 2).

INTERNAL CONTROLS REVIEWED

We reviewed significant internal controls to determine whether there were:

- adequate ERO policies,

- adequate procedures for the interdivisional transfer of ERO charges to the NASA contract, and

- proper implementation of the ERO policies in the payments of benefits.

Internal control weaknesses were identified and are described in the Observations and Recommendations section of the report.

AUDIT FIELD WORK

Audit field work was conducted from April through September 1995 at JPL. The audit was performed in accordance with generally accepted government auditing standards.

OBSERVATIONS AND RECOMMENDATIONS

OVERALL EVALUATION

Overall, the ERO charges transferred by Caltech to the NASA contract at JPL did not appear reasonable when compared to other FFRDCs operated by educational institutions, major NASA contractors, and OMB Circular A-21 guidance. None of the other 13 FFRDCs operated by educational institutions or four major NASA contractors surveyed had an ERO plan with an unlimited election period or no stated purpose. These weaknesses may have occurred because the Caltech ERO plan had not been submitted to NASA for formal review and approval. NASA's cost for the 14 individuals drawing ERO benefits during FYs 1991 through 1994 was approximately $2.7 million (an average of approximately $193,000 per ERO retiree); also, 13 of the 14 retirees were rehired as consultants or on-call employees for an additional cost to NASA of $728,000. With the additional people eligible for ERO benefits, NASA is facing a potential ERO liability of several million dollars over the next five years. Furthermore, the internal control procedures over the ERO charges to NASA were not adequate and we believe these procedures resulted in unreasonable benefits paid to at least three ERO retirees reviewed.

REASONABLENESS OF THE ERO PLAN

The Caltech ERO benefits paid to the 14 individuals selected for our review did not appear reasonable when compared to the benefits provided by four other surveyed FFRDCs with early retirement plans, one major NASA contractor that offered an early retirement plan, and OMB Circular A-21 guidance. These benefits, about $2.7 million of NASA funds, were used to support the Caltech ERO program. The average amount of $193,000 per retiree exceeded the average of about $117,000 per retiree paid by another Federal agency supporting such programs at similar institutions. Also, with the additional people eligible for ERO benefits, NASA is facing a potential liability of several million dollars over the next five years.

Correspondence between NASA and Caltech regarding the most recent version of the ERO plan was limited. In April 1983, Caltech sent a letter regarding revisions to its ERO plan to the NASA Resident Office (name at the time). In a June 1983 response to Caltech, the NASA Resident Office expressed concerns "... about the potential cost to NASA and other agencies sponsoring work at JPL if this policy were broadened to include other JPL executives." Caltech interpreted this letter to be approval for its revised ERO plan which expanded the benefits to JPL executives who were 52 years old, had 15 years of Institute service, and had two years in their current position. We could not find any other NASA or Caltech correspondence justifying the revised ERO plan (e.g., clarifying the purpose of the plan, time-period limits for electing the plan, rehire policy, or reasonableness of the ERO benefits package).

The NASA contract with Caltech states that compensation costs are allowable, provided they are reasonable and consistent with the contractor-established practice. OMB Circular A-21 states that a cost is reasonable if it reflects the action of a prudent person. It further states that major considerations involved in the determination of the reasonableness of a cost include "...whether or not the cost is of a type generally recognized as necessary for the operation of the institution or the performance of the sponsored agreement ... and ... the actions taken with respect to the incurrence of the cost are consistent with established institutional policies and practices applicable to the work of the institution generally, including sponsored agreements."

We surveyed 13 other FFRDCs operated by educational institutions (see Exhibit 1). We compared the plans offered by these institutions to the Caltech plan and early retirement benefits paid to the 14 Caltech retirees reviewed. Unlike Caltech, none of these FFRDCs offered an ERO with an unlimited time period for election and no stated purpose. However, four FFRDCs did offer, within specified time frames, an early retirement option to respond to federal appropriation cutbacks and staff reductions. The ERO plans were offered by the Stanford Linear Accelerator Center, operated by Stanford University, and the Lawrence Livermore National Laboratory, Lawrence Berkeley Laboratory, and Los Alamos National Laboratory, all operated by the University of California.

In addition, we surveyed four major NASA contractors whose contracts were regulated by the FAR (see Exhibit 2). None are currently offering any type of early retirement option. However, under a 1992 advance agreement with the government contracting officer, one contractor offered its employees, for a limited election period, an average projected incentive of approximately $50,000 to retire early. In accordance with the Federal Acquisition Regulations, the advance agreement limited the incentive payments to "... 100% of the employee's 1991 compensation."

The following examples compare the Caltech ERO program with the other FFRDCs surveyed:

- *AVERAGE COST PER ERO RETIREE*. Caltech payments for the 14 retirees reviewed averaged $193,000 per individual. In comparison, the University of California's 1993 early retirement benefits averaged $117,000 per laboratory retiree. The U.S. General Accounting Office (GAO) reviewed the University of California's 1993 early retirement benefits involving 1,779 employees at a cost of $209 million. In August 1994 GAO reported that the University had reduced proposed ERO benefits from an average of $128,000 to $117,000 as a result of concerns raised by the Department of Energy. This reduction of benefits was confirmed with the supervisory GAO evaluator who conducted the audit. Based on the GAO report, the Chairman of the Subcommittee on Energy and Commerce, House of Representatives, concluded in a letter to the Secretary of the Department of Energy that: "The University early-out program was excessive and unwarranted."

  In its response to our rapid action report on the Caltech ERO plan (Appendix 2), Caltech claimed that the total ERO costs were very small. According to Caltech, over the past 19 years the average half-salary per employee was $121,240 and the average Teachers Insurance Annuity Association (TIAA) contribution was $37,830, for a total ERO benefit per employee of $159,070.

  As we noted earlier, Caltech revised its ERO plan at least three times over 19 years. The 1976, 1978, and 1982 versions of the ERO plan limited the option to senior managers who are 62 years old with 25 years of Institute service. The 1983 plan version (applicable to the FY 1991-1994 ERO retirees) expanded the eligibility criteria to executive managers who are 52 years old with 15 years of service. Consequently, the 1983 version could not be compared to the other versions because of the different eligibility criteria.

In addition, in its response to our rapid action report, Caltech asserted that a confidential source advised the Institute that the benefits in the University of California plan averaged $158,000 per employee, not the $117,000 reported by GAO. Caltech could not provide any documentation to support its claimed amount because of the confidential nature of its source.

- ***Purpose.*** The Caltech ERO plan has no documented purpose (e.g., downsizing, budget cuts, or staff reduction). For the 14 retirees that we reviewed, only one of the positions had been abolished and four others were vacant at the time of our review (see Exhibit 3). In no case could we determine the reason for offering early retirement. Without a defined purpose, we were not able to determine how the early retirements benefited the NASA contract at JPL.

According to OMB Circular A-21, Paragraph C.4, Allocable Cost, a cost is allocable to a government contract if it is incurred solely to advance the work under the contract or it is necessary to the overall operation of the organization. The University of California's purpose for implementing an early out program was "to respond to the federal appropriation cutbacks." Stanford University implemented the early retirement incentive program to provide career recognition and to achieve staff reductions. The purpose of the "buyouts" under the Federal Employees Workforce Restructuring Act of 1994 was to reduce Government agencies' workforce.

In its response to our rapid action report on the Caltech ERO plan, Caltech agreed that the policy does not contain an explicit written statement of purpose, but stated that the nature and purpose of the

ERO plan do not have to be expressed. OMB Circular A-21, Section A, paragraph 2.d., requires that "Each institution, in the fulfillment of its obligations, should employ sound management practices." Therefore, we believe that Caltech should communicate the ERO goals and objective in writing so its policies can be consistently interpreted by all employees. To this end, we received differing interpretations by various Caltech management officials, as illustrated by the following:

- one official stated that the purpose was to allow executives and senior managers to retire;

- a second stated that the purpose was to repay the managers for their stress over the years; and,

- the third official stated that the plan was not for a reduction in force, but it was instituted as a part of bona fide benefits.

- ***ELECTION PERIOD.*** The Caltech ERO plan election time period is unlimited. The election period for the University of California's 1993 plan was limited to three months (July 1, 1993 to October 1, 1993), and the Stanford University election period was limited to one and one-half months (August 31, 1992 through October 15, 1992). The "buyout" of Federal employees was also offered within specified established timeframes under the recent Federal Employees Workforce Restructuring Act.

- ***REHIRING OF EMPLOYEES.*** The Caltech ERO plan had no rehire restraints at the start of the audit. Thirteen of the 14 retired managers we reviewed performed work as consultants or "on-call" employees (i.e., individuals from whom JPL can request services at any time), under the NASA contract at JPL, while receiving their ERO benefits. Six of the 14 ERO retirees were rehired as JPL consultants and seven others were rehired as on-call employees, for an additional cost to NASA of $728,000. The 14th individual, who was not rehired, received more than $260,000 in ERO benefits (see Exhibit 3).

One technical senior manager was retained as a consultant over a six-year period for a total cost of $350,000. In addition, he received three years of ERO benefits of about $212,000. The remaining 12 rehired retirees received an average of about $31,000 in consulting/on-call fees which, when added to the average ERO benefit of $193,000, equalled over $223,000 per retiree. These individuals engaged in work at JPL within days/weeks of the early out, while NASA paid the ERO-associated costs. At least six retirees were rehired as on-call employees within 5 days of retirement (two were rehired on the same day they retired). Several retirees signed their consultant agreements either on the same day they retired, the next day, or within two weeks of retirement.

The University of California ERO policy requires that rehires must be approved by the Laboratory Director on an "exceptions only" basis. In addition, the rehire's salary must not exceed 100 percent of his/her annual salary at the time of retirement. The Federal "buyout" program restricted all future rehiring anywhere in the Federal service including employment on a personal services contract. The restriction was for five years following separation, unless the retiree repays the full amount of incentive (before taxes) to his/her agency.

In its response to our rapid action report on Caltech's ERO plan, Caltech claimed that "using recent senior retirees as consultants or on-call employees has been both very beneficial and cost effective." Caltech also claimed that the "benefit-to-cost results from their contributions [ERO retirees] have been very high." We requested that Caltech provide us a study that measures the results claimed. Caltech's Deputy Director of Internal Audit responded that the "benefit-to-cost results" was a figure of speech, and there is no known study to support this claim. During the audit, though, Caltech issued guidelines requiring the approval of the JPL Deputy Director before an ERO retiree can be re-employed during or following the ERO compensation period.

Although the Caltech ERO is not subject to the regulations set forth in FAR 31.205-6, we determined that this criterion would provide a reasonable benchmark for comparison of the Caltech ERO costs. FAR 31.205-6 states that early retirement incentive payments are allowable if the total incentive payments to any employee do not exceed the amount of the employee's annual salary for the previous fiscal year before the employee's retirement. Accordingly, we determined that the Caltech ERO incentive payments exceeded the employees' respective annual salaries by an average of at least 50 percent.

RECOMMENDATION 1

We recommend the NMO determine the allowability of the NASA costs under the current Caltech ERO plan.

MANAGEMENT'S RESPONSE

"Concur with the recommendation. The NMO has reviewed the incurred costs associated with the current Caltech plan for allowability under the terms and conditions of the NASA contracts to which they were charged and the requirements of OMB Circular A-21 'Cost Principles for Educational Institutions.' We have also reviewed documentation indicating a cognizant NASA official was provided with the particulars of the existing ERO Plan and took no exception to any element of the Plan. We can find no reasonable basis for disallowance of incurred ERO costs to date."

EVALUATION OF MANAGEMENT'S RESPONSE

The action taken by the NMO is responsive to the recommendation.

RECOMMENDATION 2

We recommend the NMO formally review and approve any Caltech ERO plan that requires use of NASA funds. The plan should have a stated purpose consistent with OMB Circular A-21 and provide a reasonable ERO benefits package. We suggest that the ERO plan include time-period limits for election and a rehire policy.

Management's Response

"Concur with the recommendation. As noted above, the NMO has already conducted detailed discussions with JPL regarding the plan's stated purpose, benefits package and associated rehire policy. Set forth ... are the particulars of the agreement in principle reached with Caltech as they pertain to each of the elements of Recommendation 2. ..." For the complete response, see Appendix 1.

"The NMO anticipates final approval of a detailed Caltech ERO Plan as outlined [in the complete response] within 60 days from the date of this correspondence."

Evaluation of Management's Response

The actions planned and taken by the NMO and JPL are responsive to the recommendation. To determine the approximate savings that could be effected by these revisions to the ERO plan, we recalculated the benefits that each of the 14 managers identified during our review (Exhibit 3) would have received. Accordingly, the average ERO benefits would have been reduced from approximately $193,000 to $154,000 per individual, or a savings of about $39,000. Also, the average expenditure for consulting/rehire costs would have been reduced from approximately $31,000 to $16,000 per individual, or a savings of about $15,000. The total average savings per retiree would have been about $54,000 (24 percent). If these savings were to be projected to the 25 individuals eligible for the ERO through FY 2000, the total savings would be approximately $1.35 million.

ERO Internal Controls

The internal control procedures over the ERO charges to NASA were not adequate. These procedures allow for a wide interpretation on administering the plan. Because the ERO plan was silent on procedures for processing the pension plan contributions, the Caltech Assistant Director of Finance, Corporate Accounting, stated that Caltech had the flexibility to process the contributions in any way that would benefit the retirees as long as the contributions did not exceed the Internal Revenue Service limitations. For at least three ERO retirees reviewed, we believe the plan provided the retired employees with unreasonable benefits that were charged to NASA.

The ERO plan states that Caltech will "...continue contributions to the participant's TIAA-CREF Plan, at the contribution rate specified in the Plan, and based on the salary in effect in the month immediately prior to early retirement, ..." The plan did not address the procedures necessary to process these contributions. Because of the lack of procedures, and because Caltech Staff Personnel Memorandum Number 99 states that there may be considerable tax benefits, Caltech felt it had the flexibility and the obligation to process the contributions for the retirees' benefit. As a result, we found the following deficiencies that provided considerable benefits to the retirees at NASA's expense:

1. For one ERO retiree, Caltech made in advance a lump sum contribution of $10,992 (charged to NASA) to the individual's pension plan ten days after his retirement date of August 1, 1989. Because the individual retired in mid-year, contributions to his pension plan had not yet reached the annual maximum level of $30,000 allowed by Section 415 of the Internal Revenue Code (IRC). The advance contribution, which was permissible under the retiree's ERO agreement, was in addition to all contributions due to the retiree's pension plan for 1989. This brought the total ERO contributions for the year to $30,000. As a result, the $10,992 was invested and began accumulating tax-deferred income in his pension plan much sooner than it would otherwise have, had it been invested over the next three years. However, over this time period Caltech did recover the $10,992 from the retiree by reducing the amount of his ERO benefits. Accordingly, it appears that NASA made an interest-free loan of $10,992 to this individual for his own benefit.

2. For two other ERO retirees, NASA was charged with payments of $34,465 and $34,393, respectively. These payments were made directly to the individuals or to their pension plans during the year they elected early retirement. In the year they elected early retirement, the employees also paid $5,001 and $6,205, respectively, into their own pension plans. Because of these contributions, the NASA charges exceeded the $30,000 maximum allowable under IRC Section 415 by $9,466 and $10,598. As a result, Caltech issued checks to the individuals in the amount of $9,466 and $10,598. In each instance, the individual's check exceeded his own contribution to the pension plan during the year. As a result, the individuals actually contributed nothing to their

own pension plans for the year and NASA was charged with contributions to the pension plans greater than the amount allowable under IRC Section 415 (see Exhibit 4).

It is Caltech's position that the employee is entitled to any contribution designated for the individual's pension plan that exceeds the IRC limit. We disagree with that position because: (1) the excess amount results in an added ERO benefit to the retiree that was not addressed by the ERO plan, and (2) the pension contribution that was charged to NASA exceeded the allowable IRC limit under the established pension plan.

RECOMMENDATION 3

Pending the determination made in response to recommendation 1, we recommend the NMO recover any NASA funds, and accrued interest, paid by Caltech to its employees, in excess of the Internal Revenue Code limitation on pension contributions, as set forth in the Institute's established pension plan.

MANAGEMENT'S RESPONSE

"Concur with the intent of the recommendation. As part of the overall lump sum settlement with Caltech, the NMO has addressed what may have been a nominal overpayment of pension benefits to ERO retirees."

EVALUATION OF MANAGEMENT'S RESPONSE

The action taken by the NMO and JPL is responsive to the recommendation.

RECOMMENDATION 4

We recommend the NMO direct Caltech to establish specific procedures to process any ERO contributions to the retirees' pension plan.

MANAGEMENT'S RESPONSE

"Concur with the recommendation. Specific procedures to process ERO contributions to the retirees' pension plan will be included in the ERO Plan submission to the NMO referenced under Recommendation 2."

EVALUATION OF MANAGEMENT'S RESPONSE

The action planned by the NMO and JPL is responsive to the recommendation.

RECOMMENDATION 5

We recommend the NMO establish a periodic review process to ensure that the ERO transferred charges are consistent with the ERO policy and procedures.

MANAGEMENT'S RESPONSE

"Concur with the recommendation. The Defense Contract Audit Agency (DCAA) will be directed to review ERO transfer charges on a periodic basis."

EVALUATION OF MANAGEMENT'S RESPONSE

The action planned by the NMO is responsive to the recommendation.

GENERAL COMMENTS

Our report was intended to provide NASA management with information necessary to ensure the early retirement incentive transfers are reasonable, allocable, and allowable as required by the contractual terms and established regulations. We appreciate the cooperation and assistance extended to use by representatives at the NMO, Caltech, and JPL.

(THIS PAGE INTENTIONALLY LEFT BLANK)

Major Contributors to this Audit

Jet Propulsion Laboratory

Roger Flann, Audit Field Office Manager
Anh Doan, Auditor-in-Charge
Walt Curtis, Auditor

(THIS PAGE INTENTIONALLY LEFT BLANK)

FFRDCs SURVEYED

FFRDCs	SPONSOR	EARLY RETIREMENT PLAN (ERO)	STATED PURPOSE OF ERO
SOFTWARE ENGINEERING INSTITUTE	CARNEGIE-MELLON UNIVERSITY	NO	
LINCOLN LABORATORY	MASS. INST. OF TECHNOLOGY	NO	
INST. FOR ADVANCED TECHNOLOGY	UNIVERSITY OF TEXAS	NO	
NATIONAL ASTRONOMY & IONOSPHERE CENTER	CORNELL UNIVERSITY	NO	
AMES LABORATORY	IOWA STATE UNIVERSITY	NO	
ARGONNE NATIONAL LABORATORY	UNIVERSITY OF CHICAGO	NO	
LAWRENCE BERKELEY LABORATORY	UNIVERSITY OF CALIFORNIA	YES	To respond to the federal appropriations cutbacks
LAWRENCE LIVERMORE NATIONAL LABORATORY	UNIVERSITY OF CALIFORNIA	YES	To respond to the federal appropriations cutbacks
LOS ALAMOS NATIONAL LABORATORY	UNIVERSITY OF CALIFORNIA	YES	To respond to the federal appropriations cutbacks
PRINCETON PLASMA PHYSICS LAB	PRINCETON UNIVERSITY	NO	
STANFORD LINEAR ACCELERATOR CENTER	STANFORD UNIVERSITY	YES	To provide career recognition and achieve staff reductions
PACIFIC NORTHWEST LABORATORY	BATTELLE MEMORIAL INSTITUTE	NO	
SOLAR ENERGY RES. INSTITUTE	MIDWEST RESEARCH INSTITUTE	NO	

(THIS PAGE INTENTIONALLY LEFT BLANK)

MAJOR NASA CONTRACTORS SURVEYED

EXHIBIT 2

CONTRACTORs	EARLY RETIREMENT PLAN	LIMITED PERIOD FOR ELECTION	LIMITED PAYMENTS
TRW Space Electronics Group, Redondo Beach, CA	YES	YES	YES; Not to exceed one year's compensation
Rocketdyne, Canoga Park, CA	NO	N/A	N/A
Rockwell, Downey, CA	NO	N/A	N/A
McDonnell Douglas, Huntington Beach, CA	NO	N/A	N/A

(THIS PAGE INTENTIONALLY LEFT BLANK)

STATUS OF REVIEWED ERO RETIREES

ERO RETIREES	TOTAL ERO BENEFITS	CONSULTING AGREEMENT DATE/COST[1]	CONSULTING/ ON CALL ACTIVITIES	ON CALL REHIRED DATE/COST[2]	REPLACEMENT
1	$211,542	5-01-89 $352,680	Consult for section 350		No
2	$198,877		Special Assistant to Director section 100	3-01-93 $26,051	Yes
3	$141,136		Support Assoc. Director's Office section 100	7-05-94 $19,492	No[3]
4	$66,536	1-07-91 $24,758	Consult for section 100		Yes
5	$84,230	4-01-92 $40,000	Consult for section 830	8-09-93 $3,802	Yes
6	$206,237		Technical staff section 700	2-10-93 $11,254	Yes
7	$227,709	1-07-91 $40,000	Consult for section 400		Yes[4]
8	$318,061		Deputy Director Special Assistant	7-02-92 $36,640	Yes
9	$198,469	11-09-90 $13,600	Consult for section 650		Yes
10	$73,517		Assist section 500	10-01-92 $21,553	No
11	$301,419		Special Assistant section 800	11-03-93 $72,120	Yes
12	$191,165	6-15-88 $60,000	Consult for section 810		No
13	$213,951		Special Assistant section 500	4-01-94 $6,191	Yes[4]
14	$263,483				No
Total	$2,696,333	$531,038		$197,103	
Average cost	$192,595				

1. Costs include personal services and expenses
2. As of December 1994
3. Organization was dissolved and, therefore, position was abolished
4. Position was redefined after departure of ERO retiree

EXCESS NASA CONTRIBUTIONS

EXHIBIT 4

	Example 1	Example 2
Caltech Contributions *	$34,465	$34,393
Employee's Contributions	5,001	6,205
Total Contributions	39,466	40,598
IRC Maximum Contribution	30,000	30,000
Check to Employee	$9,466	$10,598

* Pension costs and ERO benefits paid by Caltech and then charged to NASA.

(THIS PAGE INTENTIONALLY LEFT BLANK)

National Aeronautics and
Space Administration
Jet Propulsion Laboratory
NASA Management Office
4800 Oak Grove Drive
Pasadena, CA 91109-8099

Reply to Attn of: SPJ

JUL 2 3 1996

TO: W/Assistant Inspector General for Auditing

FROM: SPJ/Acting Manager, NASA Management Office - JPL

Subject: Draft Audit Report Early Retirement Option Plan at the Jet Propulsion Laboratory (A-JP-95-008)

The NASA Management Office (NMO) has been in discussions with JPL and Caltech senior management regarding the findings of the subject draft audit report since the report release date of May 28, 1996. Based on these discussions we believe we have reached an agreement in principle with Caltech for the resolution and near term disposition of the findings contained in the report. The NMO and Caltech have also agreed to a lump sum figure of $244,000 in settlement of ERO related issues through July 17, 1996.

Recommendation 1: We recommend the NASA Management Office determine the allowability of the NASA costs under the current Caltech ERO Plan.

Response: Concur with the recommendation. The NMO has reviewed the incurred costs associated with the current Caltech ERO Plan for allowability under the terms and conditions of the NASA contracts to which they were charged and the requirements of OMB Circular A-21 "Cost Principles for Educational Institutions." We have also reviewed documentation indicating a cognizant NASA official was provided with the particulars of the existing ERO Plan and took no exception to any element of the Plan. We can find no reasonable basis for disallowance of incurred ERO costs to date.

Recommendation 2: We recommend the NASA Management Office formally review and approve any Caltech ERO Plan that requires use of NASA funds. The Plan should have a stated purpose consistent with OMB Circular A-21 and provide a reasonable ERO benefits package. We suggest that the ERO Plan include time-period limits for election and a rehire policy.

Response: Concur with the recommendation. As noted above, the NMO has already conducted detailed discussions with JPL regarding the Plan's stated purpose, benefits package and associated rehire policy. Set forth below are the particulars of the agreement in principle reached with Caltech as they pertain to each of the elements of Recommendation 2:

Stated Purpose of the Plan:

"It is the policy of the Institute that an early retirement program be provided for executives and senior managers. This program, which is a component of total compensation for the eligible participants, is designed to:

- attract and retain the best and brightest

-recognize the contribution they have made to the Institute, and

-provide for renewal of the organization at the highest levels."

The NMO believes the above language outlines an ERO program that is consistent with the tenets of OMB Circular A-21 in that a JPL compensation package competitive enough to attract and retain top flight scientific, engineering and management talent is clearly in the interests of NASA.

Reasonable ERO Benefits Package:

The agreement in principle reached with Caltech includes the following changes to the existing ERO plan which we believe collectively represent a reasonable ERO benefits package:

1. An increase in the eligibility age for Executive Managers from age 52 to age 62.

2. A new requirement that Senior Managers serve at least 2 years in an ERO eligible position before being able to opt for participation in the Plan.

3. The elimination of staff positions from eligibility to participate in the Plan. This reduces the existing Senior Manager positions eligible to participate in the Plan from 29 to 25 (14%).

4. A reduction in the benefits package for Executive Managers and Senior Managers not presently eligible to opt for the Plan from 1.5 years salary to 1 years salary.

5. A reduction in the benefits package for Senior Managers not presently eligible to opt for the Plan from 3 years pension contributions to 2 years pension contributions.

6. A new limitation of 25 total positions allowed eligible for the Plan at any given time.

"Reasonableness" in terms of employee benefits and compensation is obviously a subject upon which reasonable people may disagree. The NMO believes the Caltech ERO Plan as amended above represents an equitable balance of NASA's interests in attracting and rewarding talented JPL senior staff and the Agency's fiduciary responsibility for the prudent stewardship of public money.

Rehire Policy:

A revised Caltech rehire policy for ERO retirees has been provided to the IG Office resident at JPL under separate cover. Briefly summarized, the new policy permits reemployment on a strict exception basis only and places severe limitations on re-employment periods and levels of compensation. The NMO would also note that Caltech has included in the ERO settlement figure of $244,000 a sum of money in recognition of several questionable ERO related rehire incidents some years ago.

The NMO anticipates final approval of a detailed Caltech ERO Plan as outlined above within 60 days from the date of this correspondence.

Recommendation 3: Pending the determination made in response to recommendation 1, we recommend the NASA Management Office recover any NASA funds, and accrued interest, paid by Caltech to its employees, in excess of the Internal Revenue Code limitation on pension contributions, as set forth in the Institute's established pension plan.

Response: Concur with the intent of the recommendation. As part of the overall lump sum settlement with Caltech, the NMO has addressed what may have been a nominal overpayment of pension benefits to ERO retirees.

Recommendation 4: We recommend the NASA Management Office direct Caltech to establish specific procedure to process any ERO contributions to the retirees' pension plan.

Response: Concur with the recommendation. Specific procedures to process ERO contributions to the retirees' pension plan will be included in the ERO Plan submission to the NMO referenced under Recommendation 2.

Recommendation 5: We recommend the NASA Management Office establish a periodic review process to ensure that the ERO transferred charges are consistent with the ERO policy and procedures.

Response: Concur with the recommendation. The Defense Contract Audit Agency (DCAA) will be directed to review ERO transfer charges on a periodic basis.

The NMO expects to complete all corrective actions required by the IG recommendations within 60 days of this letter. Questions may be directed to Thomas E. Sauret or Roger Wilson at (818) 354-5359.

for Roger Wilson
Thomas E. Sauret

cc: H/D. Lee
HS/F. Fournier
SPJ/K. Lindstrom
SPI/B. Bennett

JP-95-004

AUDIT REPORT

RAPID ACTION

EARLY RETIREMENT OPTION PLAN

AT THE

JET PROPULSION LABORATORY

SEPTEMBER 12, 1995

National Aeronautics and Space Administration

OFFICE OF INSPECTOR GENERAL

(THIS PAGE INTENTIONALLY LEFT BLANK)

National Aeronautics and
Space Administration

Office of Inspector General
Jet Propulsion Laboratory
4800 Oak Grove Drive
Pasadena, CA 91109-8099

Reply to Attn of: W-JP/9950

September 12, 1995

To: SPJ/Manager, NASA Management Office, JPL

FROM: W/OIG Center Director, JPL

SUBJECT: Rapid Action Report
Early Retirement Option Plan
At the Jet Propulsion Laboratory
Assignment No. A-JP-94-002
Report No. JP-95-004

The NASA Office of Inspector General has completed an audit of the California Institute of Technology (Caltech) fiscal years (FYs) 1991 and 1992 Early Retirement Option (ERO) charges being transferred to NASA's contract at the Jet Propulsion Laboratory (JPL), Pasadena, California. This audit was conducted as part of a NASA Management Office (NMO) request for a review of the interdivisional transfers between Caltech and JPL. The NMO has also requested a review of the FYs 1993 and 1994 ERO charges. The results of the FYs 1993 and 1994 ERO costs will be covered in a final ERO audit report that includes FYs 1991 through 1994 charges to NASA.

Overall, the ERO charges transferred by Caltech to the NASA contract at JPL did not appear reasonable when compared to other FFRDCs operated by educational institutions and OMB Circular A-21 guidance. Based on our review of eight individuals drawing ERO benefits during FYs 1991 and 1992, we estimate that the total NASA share of the ERO costs was about $1,425,000, or an average of $178,000 per retiree. In addition, seven of the eight retirees were rehired as JPL consultants and/or "on call" employees, at an additional total cost of about $550,000, while receiving the ERO benefits. This appears to have been caused by the lack of clear understanding and formal approval of the ERO plan by NASA. For more details, please refer to the audit report which follows.

We discussed a draft of this audit report with your office and JPL management on June 13, 1995. A written response was received from your office on August 7, 1995. The NMO comments were incorporated into the report to outline the action planned in response to the recommendation. The complete NMO response is in Appendix 1. As a courtesy, we have attached Caltech's comments and our evaluation of their comments in Appendices 2 and 3 respectively.

Please include our office in the concurrence cycle for closing the recommendation. The NASA Office of Inspector General staff members associated with this audit express their appreciation to the NMO, Caltech, and JPL for their courtesy, assistance, and cooperation.

Lorne A. Dear

Lorne A. Dear

Enclosure

cc: W/Acting Deputy Assistant Inspector General for Auditing

INTRODUCTION

The NASA Office of Inspector General (OIG) has completed an audit of the California Institute of Technology (Caltech) fiscal years (FYs) 1991 and 1992 Early Retirement Option (ERO) charges being transferred to NASA's contract at the Jet Propulsion Laboratory (JPL), Pasadena, California. This audit was conducted as part of a NASA Management Office (NMO) request for a review of the interdivisional transfers between Caltech and JPL. The NMO has also requested a review of the FYs 1993 and 1994 ERO charges. The results of the FYs 1993 and 1994 ERO costs will be covered in a final ERO audit report that includes FYs 1991 through 1994 charges to NASA (Assignment A-JP-95-008).

Annually, over $50 million of charges for materials, supplies, and services provided by Caltech are transferred to JPL through 22 interdivisional accounts. The Caltech ERO charges are part of the payroll and benefits accounts transferred to JPL. The Caltech ERO plan offers selected employees (executive and senior managers) an early retirement option and benefits that include cash payments, contributions to their retirement pension plan, and group health and life insurance programs.

JPL is a Federally Funded Research and Development Center (FFRDC) operated by Caltech under NASA contract NAS7-1260. This contract was effective September 20, 1993, and replaced contracts NAS7-918 and NAS7-920(F). The Laboratory, staffed largely with Caltech employees, is a government-owned installation located in Pasadena, California. JPL also operates other NASA facilities in Southern California, at Goldstone Tracking Station and Table Mountain. The NMO at JPL provides NASA management oversight of JPL operations.

EARLY RETIREMENT OPTION (ERO) PLAN

The ERO plan, instituted at Caltech in July 1976 and updated in 1983, under Caltech Staff Personnel Memoranda No. 99, provides up to three years of benefits to selected Caltech and JPL early retirees. The plan provides for (1) monthly payments equal to one-half the salary in effect the month immediately preceding early retirement (for three years or approximately one and one-half years' salary), (2) full contributions to the participant's basic retirement plan for three years, and (3) full contributions to the participant's group health and life insurance programs for three years.

The ERO plan is available to Caltech executive and senior managers on campus (Pasadena) as well as JPL executive managers and senior managers at the Laboratory. Executive managers include Vice Presidents of the Institute, other corporate officers of the Institute who report directly to the President, as well as the JPL Deputy Director and the Associate and Assistant Directors. To be eligible for the early out plan, executive managers must be at least 52 years old, have completed 15 years of Institute service, and have held an executive manager position for at least two years prior to electing the ERO. Senior managers include employees who report to an executive manager or to the President, and are in pay grades E-9 through E-12 or A-9 through A-12; and corporate officers, without regard to pay grade, who do not report directly to the President. Senior managers, who are 62 years old, and have 25 years of Institute service, are also eligible to elect the ERO. The ERO benefits stop when a participant either deceases, has received the full three years of benefits, or becomes eligible to collect basic retirement annuity at 65 years of age, whichever comes first. The ERO program remains in effect indefinitely, unless rescinded by the Caltech Board of Trustees. For employees who will meet the age and service requirements while this program is in effect, the ERO program states that "Eligible employees may find that there are considerable tax benefits if the option is elected in advance."

OBJECTIVES, SCOPE, AND METHODOLOGY

OBJECTIVES

The overall audit objective was to evaluate the interdivisional transferred costs between Caltech and JPL. Specifically, we evaluated the reasonableness, allowability, and allocability of the ERO charges and the adequacy of the internal control procedures over the transferred charges to the NASA contract at JPL. The adequacy of the internal control procedures will be addressed in our final audit report on the ERO plan for FYs 1991 through 1994.

SCOPE AND METHODOLOGY

Our analysis of the ERO plan was limited to two executive and six senior managers receiving ERO payments during FYs 1991 and 1992. To determine whether the ERO payments charged to NASA were reasonable, we reviewed:

- Contract NAS7-918, effective in FYs 1988 through 1993;
- OMB Circular A-21, Cost Principles for Educational Institutions;
- JPL cost accounting practices set forth in the Caltech certified Cost Accounting Standards Board Disclosure Statement, dated January 23, 1992; and
- For comparative purposes only:
    - Federal Acquisition Regulations (FAR) 31.205-6, Compensation for Personal Services; and
    - Federal Employees Workforce Restructuring Act of 1994 (buyout program).

Further, to determine the reasonableness of the Caltech ERO policy at JPL, we surveyed 13 FFRDCs operated by educational institutions. Only 4 of the 13 FFRDCs offered an ERO plan. Specifically, we reviewed the ERO plans offered by (1) Stanford University who operates the Stanford Linear Accelerator Center, and (2) the University of California who operates the Lawrence Livermore National Laboratory, Lawrence Berkeley Laboratory, and Los Alamos

National Laboratory. These plans were compared to the Caltech plan and early retirement benefits paid to eight Caltech employees during FYs 1991 and 1992.

INTERNAL CONTROLS REVIEWED

We reviewed significant internal controls to determine whether there were:

- adequate ERO policies and transfer procedures, and
- proper implementation of the ERO policies in the payments of benefits.

Internal control weaknesses were identified and will be addressed in our final report on the ERO plan for FYs 1991 through 1994.

AUDIT FIELD WORK

Audit field work was conducted from June 1994 through May 1995 at JPL. The audit was performed in accordance with Generally Accepted Government Auditing Standards.

Observations and Recommendations

Overall Evaluation

Overall, the ERO charges transferred by Caltech to the NASA contract at JPL did not appear reasonable when compared to other FFRDCs operated by educational institutions and OMB Circular A-21 guidance. Based on our review of the eight individuals drawing ERO benefits during FYs 1991 and 1992, we estimate that the total NASA share of the ERO costs was about $1,425,000, or an average of $178,000 per retiree. In addition, seven of the eight retirees were rehired as JPL consultants and/or "on call" employees, at an additional total cost of about $550,000, while receiving the ERO benefits. Currently, 8 executives and 11 senior managers are eligible for early retirement. Because the ERO program is in effect indefinitely, future senior managers meeting the age, service, and reporting requirements could drive the potential NASA liability of the ERO into the millions of dollars. Accordingly, the ERO charges are not reasonable, and the allowability and allocability of the charges to NASA are questionable. This appears to have been caused by the lack of clear understanding and formal approval of the ERO plan by NASA.

Reasonableness, Allowability, and Allocability of the ERO Plan

The Caltech ERO benefits paid to the eight individuals reviewed are not reasonable when compared to other FFRDCs operated by educational institutions and OMB Circular A-21 guidance. The benefits were also not reasonable when compared to the FAR criteria on early retirement and the separation plan offered to Federal employees. As a result, NASA funds used to support the Caltech ERO program exceeded those paid by similar institutions being supported by the Federal Government. This appears to have been caused by the lack of a clear understanding and formal approval of the ERO plan by NASA. The NASA Resident Office (name at the time) expressed concern in a June 1983 letter to Caltech "...about the potential cost to NASA and other agencies sponsoring work at JPL if this policy were broadened to include other JPL executives." We could not find any other NASA or Caltech correspondence regarding the ERO plan (e.g., clarifying the purpose of the plan, time-period limits for electing the plan, rehire policy, or reasonableness of the ERO benefits package).

The NASA contract with Caltech states that compensation costs are allowable, provided they are reasonable and consistent with the contractor established practice. OMB Circular A-21 states that a cost is reasonable if it reflects the action of a prudent person. Major considerations involved in the determination of the reasonableness of a cost include "...whether or not the cost is of a type generally recognized as necessary for the operation of the institution or the performance of the sponsored agreement ... and ... the actions taken with respect to the incurrence of the cost are consistent with established institutional policies and practices applicable to the work of the institution generally, including sponsored agreements."

The following examples demonstrate that Caltech's ERO plan is not reasonable when compared with other FFRDCs surveyed:

- Caltech payments for the eight retirees sampled averaged $178,000 per employee. In comparison, the University of California benefits averaged $117,000 per employee. The U.S. General Accounting Office (GAO) reviewed the University of California early retirement benefits plan and reported in August 1994 that the University of California had reduced proposed benefits to $117,000 as a result of concerns raised by the Department of Energy. Based on the GAO report, the House of Representatives Chairman for the Subcommittee on Energy and Commerce concluded in a letter to the Secretary of the Department of Energy that: "The University early-out program was excessive and unwarranted."

- The Caltech ERO plan has no documented purpose (e.g., downsizing, budget cuts, or staff reduction). In the case of the eight individuals reviewed, we could not determine the reason for offering early retirement because their positions were not abolished. Without a defined purpose, we were not able to determine how the early retirements benefited the NASA contract at JPL. According to OMB Circular A-21, Paragraph C.4, Allocable Cost, a cost is allocable to a government contract if it is incurred solely to advance the work under the contract or it is necessary to the overall operation of the organization. The University of California purpose for implementing an early out program was "to respond to the federal appropriation cutbacks." Stanford University implemented the early retirement incentive program to provide career recognition and to achieve staff reductions. The purpose of the Federal buyout program was to reduce Government agencies' workforce.

- The Caltech ERO plan election time period is unlimited. The election period for the University of California was limited to three months (July 1993 to October 1993), and the Stanford University election period was limited to one and one-half months (August 31, 1992 through October 15, 1992). The buyout of Federal employees was offered within specified established timeframes.

- The Caltech ERO plan had no rehire restraints at the start of the audit. As a result, seven of the eight retired managers (or 88 percent) that we reviewed performed work as consultants and/or "on call" employees (i.e., individuals JPL can request services from at anytime), under the NASA contract at JPL after electing early retirement. These individuals engaged in work at JPL within weeks of the early out, while NASA paid the ERO associated costs. Several retirees signed their consultant agreements either the day before, on the same day they retired, or within one to two weeks of retirement. One ERO senior manager has a six-year $350,000 consultant agreement in addition to receiving three years of ERO benefits of about $212,000. The University of California ERO policy on rehires must be approved by the Laboratory Director on an "exceptions only" basis. In addition, the rehire's salary must not exceed 100 percent of his/her annual salary at the time of retirement. The Federal buyout program restricted all future rehiring anywhere in the federal service, including employment on a personal services contract. The restriction was for five years following separation, unless the retiree repaid the full buyout amount (before taxes) to the agency that paid the separation pay.

During the audit, Caltech issued guidelines requiring the approval of the JPL Deputy Director before an ERO retiree can be re-employed during or following the ERO compensation period.

Although the Caltech ERO is not subject to the regulations set forth in FAR 31.205-6, we determined that this criteria would provide a reasonable measurement of the Caltech ERO costs. FAR 31.205-6 stated that early retirement incentive payments are allowable if the total incentive payments to any employee does not exceed the amount of the employee annual salary for the previous fiscal year before the employee's retirement. Accordingly, we determined that the Caltech ERO incentive payments exceeded the employees respective annual salaries by at least 56 percent.

RECOMMENDATION

The NMO should question the allowability of the NASA costs under the Caltech ERO plan pending formal NASA approval of a plan that contains a purpose consistent with OMB Circular A-21 and provides a reasonable ERO benefits package. We suggest that the ERO plan include time-period limits for election and a rehire policy.

MANAGEMENT'S RESPONSE

"Concur With Intent. The NMO will initiate actions based on the rapid action report to work with JPL to develop an acceptable ERO plan. We reserve a full response to the report until the final report covering fiscal years 91-94 is issued" (Appendix 1). As a courtesy, we have attached Caltech's comments and our evaluation of their comments in Appendices 2 and 3 respectively.

EVALUATION OF MANAGEMENT'S RESPONSE

The action planned by the NMO is responsive to the recommendation.

GENERAL COMMENTS

Our report was intended to provide NASA management with information necessary to ensure the early retirement incentive transfers are reasonable, allocable, and allowable as required by the contractual terms and established regulations. We appreciate the cooperation and assistance extended to us by representatives at the NMO, Caltech, and JPL.

Space Administration
Jet Propulsion Laboratory
NASA Management Office
4800 Oak Grove Drive
Pasadena, CA 91109-8099

Reply to Attn of SPJ

August 7, 1995

TO: W/OIG Center Director, JPL

FROM: SPJ/Deputy Manager

SUBJECT: NMO Response to Revised Draft Action Report on Early Retirement Option, Dated July 21, 1995

Enclosed for your consideration is Caltech's response to the subject report. The NMO is in the process of evaluating the Caltech response and does not endorse the assertions made therein. For your information, we intend to ask Caltech to respond explicitly to the recommendation in your July 21, 1995 report and to provide additional supporting rationale for their position.

The NMO response to the recommendation contained in the IG report has been previously provided to you. For the record, it is restated below.

Recommendation

The NMO should question the allowability of the NASA cost under the Caltech ERO plan pending formal NASA approval of a plan that contains a purpose consistent with OMB Circular A-21 and provides a reasonable ERO benefits package. We suggest that the ERO plan include time period limits for election and a rehire policy.

NMO Comment

Concur With Intent. The NMO will initiate actions based on the rapid action report to work with JPL to develop an acceptable ERO plan. We reserve a full response to the report until the final report covering fiscal years 91-94 is issued.

This response supersedes our correspondence of July 25, 1995.

Thomas E. Sauret

Enclosure

CALIFORNIA INSTITUTE OF TECHNOLOGY

DIRECTOR OF INTERNAL AUDIT

August 2, 1995

Mr. Daniel W. Bromley
Audit Liaison
NASA Management Office
Jet Propulsion Laboratory
4800 Oak Grove Drive
Pasadena, CA 91109-8099

Subject: OIG Rapid Action Draft Audit Report on Early Retirement Option Plan at the Jet Propulsion Laboratory Assignment No. A-JP-94-002

This letter constitutes an official response to the subject Rapid Action Draft Audit Report. Caltech is concerned that the draft report still contains material errors and, like earlier drafts, has a tone that suggests impropriety on the part of Caltech. To the contrary, there has been consistent application of a prudent and cost-effective management tool which has resulted in greater efficiency and lower cost in Caltech's operation of the Jet Propulsion Laboratory.

Our specific response to the Draft Audit Report follows:

Purpose

Caltech's Early Retirement Option (ERO) was instituted in 1976 and revised in 1983. On both occasions, the ERO was reviewed by the NASA Resident Office and no objections were raised. The draft report states "The Caltech ERO plan has no documented purpose...", and "...we could not determine the reason for offering early retirement..." and "Without a defined purpose, we were not able to determine how the early retirements benefitted the NASA contract at JPL." Caltech is puzzled by the reiteration of this narrow perspective when there have been ample interactions, written and oral discussions for the auditors to understand the nature and purpose of the ERO plan. Further, the lack of an explicit statement of purpose is not unusual -- a fact recognized in Government Audit Standards at 6.9.b: "Purpose is the result or effect that is intended or desired, and can exist without being expressly stated." Caltech believes this statement is directly applicable to the ERO plan where it is self-evident that for some applications a specific statement of purpose would seriously limit the use of the plan.

The ERO is necessary to the overall operation of the Institute. In general terms, since its inception in 1976, the ERO has benefitted the Institute by:

1. Assisting with the retention of middle managers with critical skills and promise as future executives and senior managers, and
2. Allowing some executives and senior managers to retire, allowing for the renewal of the workforce at the top level. In a high technology organization, this renewal is critical for the continuation of leading edge performance.

It is also relevant to observe that the ERO plan was a key element in the recent reorganization of the top level management at JPL, a reorganization which reduced the number of Executive Council positions.

Reasonableness of the ERO Plan

To evaluate reasonableness, the draft report compares the Institute's ERO to three plans, one from Stanford which operates the Stanford Linear Accelerator Center, one from the University of California which operates the Lawrence Livermore National Laboratory, Lawrence Berkeley Laboratory, and Los Alamos National Laboratory, and the separation plan offered to Federal employees. It is critical to the relevance of this comparison to note that these plans are primarily reduction in force plans that were designed to achieve different goals than the Institute's ERO.

This point is reinforced by the fact that ERO has not been a factor in the reduction in force that JPL has been undergoing for several years. At JPL the reduction in force has been accomplished through attrition and layoffs.

Reduction in force plans are characterized by limited time windows for electing the option, large groups of eligible participants in many job categories, the same retirement date for all who elect the option, and enhanced benefits. In contrast, the Institute's ERO is limited to a small population of employees in very few job categories. Election periods are based on age and years of service and retirement dates are intermittent. Because of these significant differences, it is not appropriate to compare the Institute's ERO with the reduction in force plans described in the report.

The inappropriateness of these comparisons highlights the Report's failure to apply the "Policy Guides" of OMB Circular A-

21, "Cost Principles for Educational Institutions" which encourages the use of academic management approaches that preserve the Institute's identity. The "Policy Guides" (paragraph 2b, under Section A, "Purpose and Scope") state:

> "[e]ach institution, possessing its own unique combination of staff, facilities, and experience, should be *encouraged* to conduct research and educational activities *in a manner consonant with its own academic philosophies and institutional objectives."* (Emphasis added.)

The Armed Services Board of Contract Appeals in Massachusetts Institute of Technology, ASBCA No. 23079, 81-2 BCA 15,451 (disallowance of a payment to a government funded laboratory which decided to close for a "special holiday' was improper) indicated (Finding No. 6 and 7) that the cost principles for educational institutions must be interpreted and applied with consideration of such "Policy Guides." The evaluation of the reasonableness of the Caltech ERO therefore must be conducted with this principle in mind. If the Report had done so it would have recognized that Caltech, as a "leading edge" technical institute, possessing its own unique combination of staff, facilities, and experience, is entitled and encouraged by OMB Circular A-21 to make management decisions in a manner consonant with Caltech's institutional objectives. The Report would have focused on whether it was reasonable and prudent for Caltech to institute the ERO as a method of preserving Caltech's identity and meeting Caltech's institutional objectives.

If comparisons are to be made, the ERO should be compared to similar plans at private universities. Early retirement plans are common at universities, particularly those specializing in technical fields, where faculty and staff must be of "leading edge" caliber. The Institute's ERO benefits are reasonable when compared to the appropriate group of schools with similar goals for the program. Our informal survey of our peer schools, although conducted with assurances of confidentiality, strongly suggests that the Institute's ERO benefits are both typical and reasonable. It should be noted that an increasing number of colleges and universities allow for lump-sum payments of the entire early retirement benefit at the beginning of the agreement.

Contract NAS7-1260 and NAS7-918 are governed by the Office of Management and Budget (OMB) Circular A-21, "Cost Principles for Educational Institutions" rather than the FAR Part 31.2 provisions which govern contracts with commercial organizations. Paragraph J.8, "Compensation for personal services" of OMB Circular A-21 does not specifically address early retirement options. Therefore, paragraph C.3, "Reasonable costs," and paragraph C.4, "Allocable costs" of the Circular must be utilized to determine the reasonableness and allocability of the Caltech

ERO consistent with the "Policy Guides" (paragraph A.2.b.) quoted above. Caltech's ERO fully meets the tests set forth in these OMB Circular A-21 provisions. The Caltech ERO, "consonant with [Caltech's] own academic philosophies and institutional objectives," is necessary to the overall operation of the Institute, including sponsored agreements. It is prudent. It is effective. It is a written practice consistently applied.

The NASA OIG decision to utilize FAR 31.205-6(j)(7)(iv) as a "measurement of the reasonableness" of the Caltech's ERO conflicts with the fundamental fact that the cost principals established in OMB Circular A-21, "Cost Reimbursement for Educational Institutions," are different from the commercial cost principles set forth FAR subpart 31.2. As the ASBCA observed in Southeast Consortium for International Development, ASBCA No. 35064, 88-2 BCA 20,735, "the cost principles applying to contracts with educational institutions are not identical with those for 'commercial organizations' and 'non-profit organizations', and the allowability of the costs in issue could depend on which subpart is apposite." The Report's failure to respect this distinction (1) contravenes the Federal policy of establishing OMB Circular A-21, "Cost Principles for Educational Institutions" as separate and independent of the commercial cost principles, and (2) violates the requirements of FAR 31.103 and FAR 31.104 which mandate that the distinction be maintained. The Report's application of FAR 31.205-6(j)(7)(iv) to the Caltech ERO also places "additional restrictions" on an educational institution in violation of the first paragraph ("Purpose") of OMB Circular A-21 which states:

> "The [A-21] principles are designed to provide that the Federal Government bear its fair share of total costs, determined in accordance with generally accepted accounting principles, except where restricted or prohibited by law. *Agencies are not expected to place additional restrictions on individual items of cost.*" (Emphasis added.)

The Report fails to demonstrate that Caltech's decision to institute the ERO violates the cost principles of OMB Circular A-21 or the terms of Contract NAS7-1260 or NAS7-918. The Report's contention that the Caltech ERO Plan is unreasonable rests on nothing more than (1) a misapplication of FAR 31.205-6(j)(7)(iv) and (2) inappropriate comparisons between the ERO and dissimilar reduction in force plans.

Putting aside the erroneous arguments, the Report constitutes nothing more than a recommendation that the Contracting Officer replace Caltech's management judgment with his own on what early retirement options should be utilized to meet Caltech's institutional objectives. There is a longstanding government contract principle that holds that a contractor is entitled to exercise its sound judgment in incurring costs without the substitution of judgment by the contracting officer. For example, the ASBCA decision in J. A. Ross & Co., ASBCA No. 2326, 6 CCF p 61,801 (1955) stated:

> "[W]hen the Government enters into a cost-plus-a-fixed-fee contract with a contractor, the Government engages the knowledge, the skill, the judgment and the capabilities of the contractor to perform the contract. It is the contractor's right, as well as his duty, to use all of those qualifications to employ men and women who will comprise his 'team' to perform the contract, to buy materials, and to use his discretion, not that of the Contracting Officer, in carrying out all of the factors involved in the performance of the contract. The Contracting Officer's function is not that of a boss over the contractor, telling him what he can and cannot buy, whom he shall employ and how much he is allowed to pay employees. True, the contract bestows upon the Contracting Officer the authority to disapprove for reimbursement the costs involved in the contractor's performance, but unless he is able to demonstrate that the contractor's acts or the costs he incurs violate the terms of the contract or the guides found in [the cost principles] it is the Contracting Officer's duty to approve the contractor's acts and to approve the costs thereof for reimbursement." See Grumman Aerospace Corporation, NASA BCA No. 673-8, 1273-17, 1273-18, 76-1 BCA 11,671 (NASA contractor who used his best judgment in determining what was required to hold his employees was entitled to reimbursement of field adjustment pay.)

Caltech has exercised reasonable judgment in determining that the ERO was necessary to shape the composition of Caltech's "leading edge team." Caltech's decision was consonant with the Institute's academic philosophies and institutional objectives. Caltech's decision was also consonant with the applicable OMB Circular A-21, "Cost Principals for Educational Institutions."

Post-retirement utilization of ERO participants

The draft audit report also discusses the utilization of some ERO participants as consultants and on-call employees. The concept of using recent senior retirees as consultants or on-call employees has been both very beneficial and cost effective.

Senior individuals who have worked at the Laboratory for many years often have a unique understanding of JPL's problems, processes and procedures which, in the absence of full-time duties, can be tapped for the benefit of the Institution. For many studies they are able to be effective quickly and to provide thoughtful insights that could not come from less knowledgeable outside consultants.

Relieved from full-time employment in a specific position, they are also able to express independent opinions free of local organizational bias or vested interests. Without full-time institutional responsibilities, they are also better able to devote the time needed to complete key study assignments quickly. Although their assignments generally involve only part-time support over a period of a few weeks, the lack of competing responsibilities generally leads to rapid progress and efficient work completion.

In rare cases, a senior manager has been used part-time over a number of years to help implement a specific program. This was the case with a Division level manager who was brought back to help improve JPL's Project Planning and Management capabilities. This was in response to management problems experienced in the 1980s. This former manager participated in the development of JPL document D-269, "Planning and Performance Management", and also taught a four-day class, "Project Planning and Performance Management", based on the document. This class has been used for a number of years to train project managers and staff and is believed to be a significant factor in improving project management performance as experienced in recent years.

This ERO participant's consulting agreements were extended several times over the period 1989-1995 (both during and after his ERO participation) to support his teaching. Although one could question in hindsight the judgment in this particular case, on a financial basis, the benefits accruing to JPL and NASA in improved project management justify the costs for his time.

The support from other retirees acting as consultant or on-call employees has been of shorter duration. The benefit-to-cost results from their contributions have been very high.

Caltech believes the practice of utilizing the unique talents and skills of recently retired executives and senior managers to be a common, valued practice in industry, academia, and government. Unique abilities were applied to needed tasks and as a result the tasks were accomplished better, faster, and cheaper.

As the report acknowledges, JPL has instituted further strengthened its controls to provide more guidance to future utilization of its retirees.

Cost Perspective

Caltech believes it is important to place the ERO plan in perspective. Although ERO is a major factor in the Institute's ability to effectively manage itself, ERO is a very small factor in accounting terms.

During the 19 year life (7-1-76 through 6-30-95) a total of 28 JPL employees have retired under ERO, an average of about one and one-half per year. The total of the half-salary payments for these 28 people (payable through 1998) is $3,394,722, an average of $121,240 per person. The TIAA pension contribution continuation for them (also payable through 1998) totals $1,059,231, an average of $37,830 per participant.

We anticipate two additional JPL employees will retire under ERO before 12-31-95. JPL employees who will attain eligibility for the next four years are:

1996 -- one; 1997 -- five; 1998 -- three; 1999 -- four.

History has shown that only a fraction will actually elect ERO. The level of participation in ERO is not expected to show any significant increase and may in fact decrease from levels of recent years. In view of this, Caltech expects that future costs will continue to be quite modest.

It is significant to note also that ERO is an Institute-wide management tool. During its 19 year life (7-1-76 through 6-30-95) a total of 82 Institute employees have retired under ERO. Of these 82, 54 or 66% have been campus employees and only 28, or 34%, have been JPL employees even though JPL has always had more than double the number of employees that the campus had. ERO procedures are consistently applied at both campus and JPL.

1983 Correspondence with NASA

The Report asserts that the NASA Resident Office expressed concerns about ERO potential cost in a 1983 letter which stated in toto:

> "After studying the proposed policy on early retirement, we are aware that it has very limited application. Although we understand the Institute has no plan to expand the application of this policy, we are concerned about the potential cost to NASA and other agencies sponsoring work at JPL <u>if this policy were broadened to include other JPL executives.</u> In our judgment, personnel compensation and fringe benefit costs should reflect the lower levels of inflation experienced recently."

This letter was a response to an earlier letter to the NASA Resident Office from Caltech's Director of Personnel describing the then-planned revisions to the ERO plan. Both letters are attached as Exhibits 1 and 2.

Caltech believes NASA's concern applies only if the plan were to change. We read the 1983 NRO letter as acknowledging that Caltech had no intention of expanding the ERO and then noting that if that policy should change, which it has not, the NRO would have some concerns.

In a Boeing case (ASBCA No. 46274, 94-2 BCA 26.802), NASA challenged the reasonableness because Boeing proceeded to make the payments after being informed by NASA-KSC that *they would be disallowed*. The Board noted that "[w]here advance approval is requested or required, an express disapproval of an intended expenditure by the contracting officer is evidence that the contractor was not acting in a prudent fashion and the costs were unreasonable." Nevertheless, the Board considered the Government's advice as not being determinative of Boeing's reasonableness since there was no requirement for an advance approval to incur costs that would otherwise be allowable. "Moreover, lump sum payments were known to the Government and had not been disallowed on prior Boeing and BAO contracts. There was no precedent for [Boeing] to expect that disallowance would be proper where the lack of prior objection had implied approval."

If an explicit NASA statement of an intention to disallow costs was not determinative of the contractor's reasonableness in the Boeing case, it follows *a fortiori* that the NASA Resident Office's June 21, 1983 expression of concern regarding the possible broadening of the plan to include other JPL executives, a broadening that never occurred, is not evidence that the Caltech ERO Plan was unreasonable.

The report further states "We could not find any other NASA or Caltech correspondence regarding the ERO plan...". Caltech is also puzzled by this statement since we included pertinent Caltech 1983 correspondence in our July 13, 1995 response to a previous draft report on this audit.

GAO Audit of University of California

The draft report discusses an audit by the U.S. General Accounting Office (GAO) of the University of California (UC) and its reduction-in-force (RIF) plan. The report states that "the University of California benefits averaged $117,000 per employee." Caltech believes that the benefits in the 1983 UC plan averaged $158,000 per employee, not $117,000.

The cited GAO audit of pension matters at the University of California operated FFRDCs detailed but did not criticize their early-out (RIF) plans. It did, however, note that California's actions in being less generous with FFRDC employees than campus employees had resulted in a class action suit claiming unfair treatment.

In the discussion of the GAO report of the University of California program, the Draft Audit report noted that the House of Representatives' former Chairman for the Subcommittee on

Energy and Commerce, The Honorable John Dingell, concluded in a letter to the Secretary of the Department of Energy that: "the university early-out program was excessive and unwarranted." Caltech believes that it is inappropriate to include this comment in the audit.

Internal Control Weaknesses

The draft report states "Internal control weaknesses were identified and will be addressed in our final report on the ERO plan for FYs 1991 through 1994." Caltech does not believe that any internal control weaknesses exist. More significantly, we believe it inappropriate to express a conclusion without including any facts or assertions leading to such a conclusion.

Conclusion

We believe that the ERO plan is a reasonable and very valuable part of Caltech's procedures, and that it is consistent with our established practices. Although there is always room for improvement, particularly as times change, the plan has clearly proven its value over the last two decades. We would be happy to discuss any aspect of the draft report, the Institute's ERO, or our practices with you at your convenience.

The OIG Center Director stated at the exit conference that Caltech's response would be included in the published report if the NASA Management Office (NMO) included a copy with the NMO response. Please include a copy of this document with your response as it is very important to Caltech that any reader of the final OIG report also have our response.

Sincerely,

Bernard M. Buss

Bernard M. Buss
Director
Caltech Internal Audit

BMB:jk
Attachments

cc: Thomas E. Sauret/Deputy Manager/Procurement Officer/JPL
Lorne A. Dear/Director/NASA Office of the Inspector General

(THIS PAGE PURPOSELY LEFT BLANK)

CALIFORNIA INSTITUTE OF TECHNOLOGY

PASADENA, CALIFORNIA 91125

OFFICE OF THE
DIRECTOR OF PERSONNEL [illegible]

April 15, 1983

Mr. Allen T. Burke
Director, Procurement Division
NASA Resident Office
Jet Propulsion Laboratory
4800 Oak Grove Drive 180-603
Pasadena, California 91103

Dear Mr. Burke,

Enclosed is a copy of the planned revision of Personnel Memorandum 99 "Early Retirement Option for Executive and Senior Managers" to be effective July 1, 1983. The plan has been modified to provide for early retirement option to executive managers who are 52 years old, have 15 years of Institute service and have two years in their current position. Executive managers are defined as: Vice Presidents of the Institute, other corporate officers of the Institute who report directly to the President; the Deputy Director and the Associate and Assistant Directors of the Jet Propulsion Laboratory.

The number of executive managers is very small and almost all of them would be eligible under our current plan within the next nine or ten years.

Assuming that all those who are eligible took the option, the potential cost to NAS 7-918 of this change would be the same cost as our current plan but incurred a few years sooner. The maximum potential increased cash layout during FY 84, 85 and 86 (between $250,000 and $500,000 per year) would be offset by lower costs in later years.

Since this plan has very limited application within our organization, we ask that you handle this matter very discreetly.

If you have any questions regarding this change, please let me know.

Sincerely,

Wayne P. Strong

Wayne P. Strong
Director of Personnel

Enclosure
cc: D. R. Fowler
D. W. Morrisroe

(THIS PAGE PURPOSELY LEFT BLANK)

NASA Resident Office
[illegible]
4800 Oak Grove Drive
Pasadena, CA 91109

EXHIBIT 2

National Aeronautics and Space Administration

JUN 2 1 1983

Reply to Attn of: EJP(RTH)

California Institute of Technology
Attn: Mr. Wayne P. Strong
Director of Personnel
Pasadena, CA 91125

Subject: Planned Revision of Personnel Memorandum 99, "Early Retirement Option for Executive and Senior Managers"

After studying the proposed policy on early retirement, we are aware that it has very limited application. Although we understand the Institute has no plan to expand the application of this policy, we are concerned about the potential cost to NASA and other agencies sponsoring work at JPL if this policy were broadened to include other JPL executives. In our judgment, personnel compensation and fringe benefit costs should reflect the lower levels of inflation experienced recently.

Allen T. Burke

Allen T. Burke
Director, Procurement Division

cc:
CIT/D. R. Fowler
CIT/D. W. Morrisroe

RECEIVED
JUN 24 1983
DIRECTOR OF PERSONNEL
TIME_

(THIS PAGE PURPOSELY LEFT BLANK)

EVALUATION OF CALTECH's COMMENTS

As a courtesy to Caltech, we have attached their comments. However, we were not able to fully evaluate their comments because of the numerous assertions being made by Caltech without supporting evidence. The NMO in their management response (Appendix 1) stated "The NMO is in the process of evaluating the Caltech response and does not endorse the assertions made therein. For your information, we intend to ask Caltech to respond explicitly to the recommendation in your July 21, 1995 report and to provide additional supporting rationale for their position." The July 21, 1995 report was the draft report version of this report. Contained below are brief comments relating to the major segments of Caltech's comments.

Introduction. Caltech asserts that the report contains material errors and has a tone that suggests impropriety on the part of Caltech. In an attempt to ensure the accuracy and completeness of the report contents, we met numerous times with Caltech management to review and validate the report contents. Where adequate documentation was provided, we made changes, as appropriate, to the report. We are not aware of any errors in the report.

Purpose. Caltech challenges the need to have a stated purpose for their ERO program and cites Government Audit Standards as their basis for that conclusion. One of the key criteria governing the allowability of costs under the NASA contract with Caltech is OMB Circular A-21, not audit standards. Under A-21, a critical factor in determining whether a cost can be recognized is whether it is necessary for the operations of the institution or the performance of the sponsored agreement. Although Caltech provides examples of how they believe the ERO program has benefited the Institute, the benefits to NASA are not evident. For instance, if it was Caltech's desire to renew its work force at the senior and executive level, an organizational restructuring may have achieved the same purpose. In summary, without a stated purpose for the ERO program, evidence for evaluating how the plan complies with OMB Circular A-21 requirements are lacking.

Reasonableness of the ERO Plan. Caltech challenges the equitability of our comparison of their ERO costs to that of 13 other Federally Funded Research and Development Centers (FFRDCs) operated by educational institutions. Caltech claims that their ERO plan is reasonable when compared to private universities with similar plans. Four of the 13 FFRDCs we reviewed had early retirement plans, and we believe our comparison with these FFRDCs, also operated by higher level educational institutions, is equitable. Further, Caltech claimed that they performed a "... informal survey of our peer schools, although conducted with assurances of confidentiality, strongly suggests that the Institute's ERO benefits are both typical and reasonable." In a later Caltech response (August 17, 1995) to the NMO regarding the informal survey, Caltech stated they could not provide any analysis or data to support their survey. Without evidence supporting their survey, there is no way to assess the validity of Caltech's claim.

__Post-retirement utilization of ERO participants__. Caltech's comments are directed at justifying their practice of rehiring ERO annuitants as consultants or on-call employees. Because 7 of the 8 employees reviewed had been rehired as consultants or on-call employees, while receiving ERO benefits, it is difficult to ascertain under OMB Circular A-21 criteria how NASA would be benefiting from this arrangement. With the new rehire guidance issued by Caltech during the audit, improved management control should exist to ensure such rehires are on an exception basis and not the high percentage of employees we found.

__Cost Perspective__. Caltech's comments are directed at the cost and number of past employees who have exercised the ERO and the number of future anticipated participants of the plan. Depending on the assumptions used, the number of future users of the ERO is very subjective. For example, the potential ERO liability to NASA could be in the tens of millions of dollars based on the number of senior and executive managers that could be eligible for the ERO in the future. Also, future reorganizations resulting from such things as NASA downsizing could result in a large increase of then eligible employees electing the ERO. Therefore, past elections of the ERO are not necessarily representative of the future.

__1983 Correspondence with NASA__. Caltech's comments infers that the NASA Resident Office in a June 21,1983 letter had full knowledge of the current ERO plan. The letter is subject to interpretation as to what knowledge the NASA procurement official had of the ERO plan at that time. Because these events occurred over 12 years ago, our report recommendation that Caltech submit their ERO plan to NASA for formal approval will permit NASA the opportunity to now assess the reasonableness and merits of the plan.

__GAO Audit of University of California__. Caltech's comments make several assertions, including that they believe the University of California ERO plan average cost was $158,000 per employee, not the $117,000 we reported. The $117,000 amount we reported was obtained from a GAO report and workpapers that GAO provided us. Caltech, again, provided no support for the increased amounts they claim. Further, Caltech refers to the $158,000 as benefits in a __1983__ University of California plan, over a decade old. The GAO reported results are based on more current early retirement data, as of June 30, 1993.

__Internal Control Weaknesses__. Caltech's comments object to the report making reference to the internal control weaknesses we plan to address in our final report. The adequacy of internal controls was a stated objective in the report and we are commenting on our planned final disposition of this objective.

__Conclusion__. Caltech's comments reiterate their position on the ERO plan. However, their comments acknowledge that there is always room for improvement. We agree, and believe it is important that NASA ensure the plan meets and satisfies the requirements of OMB Circular A-21 and NASA.