

IG-97-028

**AUDIT
REPORT**

**TECHNOLOGY AND APPLICATIONS
PROGRAMS' BID AND PROPOSAL
COST AT THE
JET PROPULSION LABORATORY,
CALIFORNIA**

JUNE 25, 1997



National Aeronautics and
Space Administration

OFFICE OF INSPECTOR GENERAL

National Aeronautics and
Space Administration

Headquarters
Washington, DC 20546-0001



Reply to Attn of: W

June 25, 1997

TO: SJ/Manager, NASA Management Office, JPL

FROM: W/Acting Assistant Inspector General for Auditing

SUBJECT: Final Audit Report
Technology and Applications Programs (TAP)
Bid and Proposal Costs
Jet Propulsion Laboratory
Report No. IG-97-028
Assignment No. A-JP-96-001

We have completed an audit of TAP bid and proposal (B&P) costs. Although the overall TAP B&P costs appear reasonable, NASA's share of the costs is not reasonable. JPL's accounting treatment of these costs does not equitably allocate costs to government and non-government programs. As a result, in fiscal years (FY) 1994 and 1995, NASA paid an inappropriate share of B&P costs totaling \$486,000 and \$1.3 million, respectively. If this accounting practice continues, NASA could pay an additional \$5.4 million of B&P cost for non-NASA work during FY 1996 through FY 2000. We recommended that NASA: (1) consider using a special allocation, in accordance with FAR 9904.420-50(F)(2), for B&P costs; and (2) evaluate the allowability of JPL's FY 1994 and 1995 B&P costs attributable to commercial and other non-U.S. government work.

We issued a draft report on April 22, 1997, and received management's written response on May 16. We believe the comments for the two report recommendations are nonresponsive. We consider these recommendations significant and will require OIG concurrence before their closure. We reaffirm these recommendations and request the agency to reconsider its response. A written response regarding such reconsideration should be provided to our office within 30 days of the date of this memorandum. If you have any questions, please call me at 202-358-1232.

A handwritten signature in cursive script that reads "Robert J. Wesolowski".

Robert J. Wesolowski

Enclosure

cc:
H/D. Lee
S/W. Huntress, Jr.

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INTRODUCTION

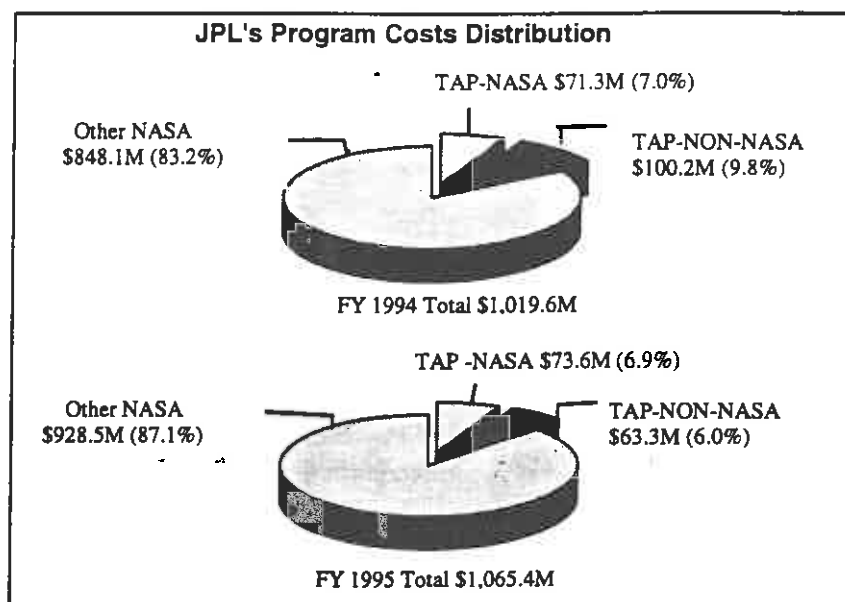
The NASA Office of Inspector General (OIG) conducted an audit of selected aspects of the Technology and Applications Programs (TAP) at the Jet Propulsion Laboratory (JPL). The NASA Management Office (NMO) requested the audit.

JPL is a Federally Funded Research and Development Center (FFRDC) operated by the California Institute of Technology (Caltech) under NASA Contract NAS7-1260. The Laboratory, staffed largely with Caltech employees, is a Government-owned installation located in Pasadena, California. The NMO at JPL provides NASA management oversight of JPL operations.

The TAP Office is a major research and development arm of the Laboratory. Its mission is to make vital contributions to the achievement of JPL's mission by:

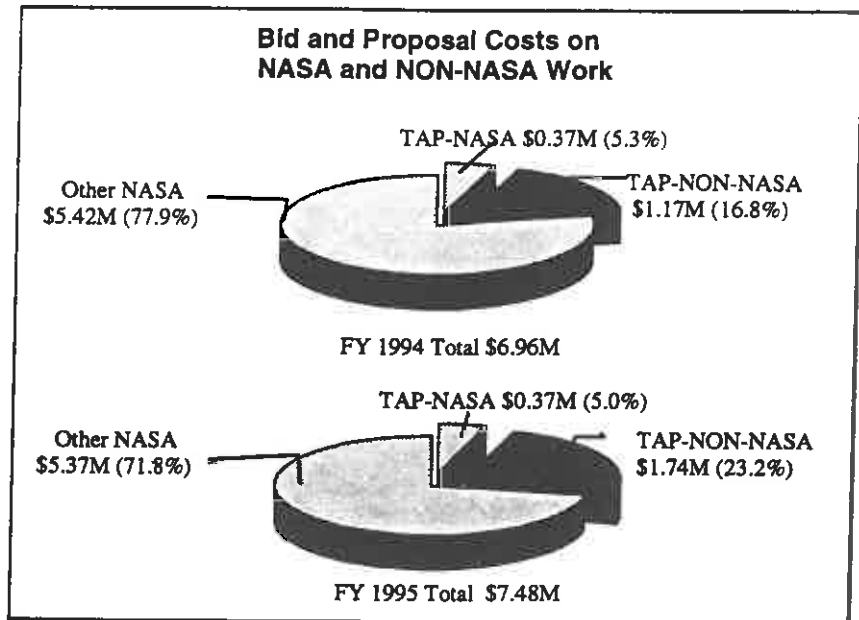
- leading the advocacy and development of innovative and high leverage technologies for NASA and JPL,
- applying its special capabilities to technical and scientific problems of national significance,
- leading and ensuring effective transfer of new technologies to internal users, government agencies, and U.S. industry for dual use applications, and
- enabling affordable and high value small and moderate-sized missions by effecting cultural changes and developing processes and technologies to reduce costs, schedules, and risks.

The TAP Office manages NASA programs and JPL's non-NASA (reimbursable) programs. The NASA programs are funded by the former Office of Space Access and Technology (OSAT), Code X, NASA Headquarters. The non-NASA programs are sponsored by other government agencies, and industry on a reimbursable basis. The Fiscal Year (FY) 1994 and 1995 program costs distribution for the Laboratory and TAP are described in the following chart:



According to the NASA contract with Caltech, work for non-NASA sponsors (reimbursable work) at JPL should be confined to work that JPL has a special competence to perform and which will contribute to the solution of important public sector problems or national security needs. In addition, JPL cannot compete with any non-FFRDC in response to a Federal agency Request for Proposal for other than the operation of an FFRDC. The aggregate of the non-NASA work may not exceed 25 percent of JPL effort in terms of direct workforce application.

JPL classifies costs associated with acquiring work for the Laboratory as bid and proposal (B&P) costs. These costs consist of labor, travel, and other expenditures for preparing, submitting, and presenting a proposal to a prospective sponsor. The TAP Office incurred \$1.5 million and \$2.1 million of B&P costs in FY 1994 and 1995, respectively. Of these costs, \$1.2 million (\$896,000 for other U.S. government work and \$272,000 for commercial and other work) and \$1.7 million (\$1.2 million for other U.S. government work and \$500,000 for commercial and other work) were related to acquiring non-NASA work for the Laboratory. A chart of the B&P costs for NASA and non-NASA programs for FY 1994 and 1995 is presented below:



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OBJECTIVES, SCOPE, AND METHODOLOGY

OBJECTIVES

The overall audit objective was to evaluate selected aspects of the TAP. Specific objectives were to evaluate (1) the reasonableness of TAP's B&P costs, (2) the value to NASA of non-NASA sponsored TAP reimbursable work, and (3) the adequacy of management controls for transferring TAP overrun expenditures to Caltech. At this time, we are only reporting results of the evaluation of the first audit objective. The purpose is to bring to management's attention areas needing improvement so that corrective action can be taken. We have cancelled our review of the other two objectives.

SCOPE AND METHODOLOGY

Our scope included:

- evaluating JPL's cost accounting practices for TAP B&P costs to determine whether they were equitable, reasonable, and in accordance with the Cost Accounting Standard specified in the Federal Acquisition Regulation (FAR), and
- assessing the cost impact to NASA of JPL's cost accounting practices.

We reviewed JPL's accounting practices specified in its disclosure statement. We also reviewed JPL's financial accounting records to determine if the disclosed accounting practices were followed, and whether B&P costs were distributed equitably to NASA and non-NASA projects. We identified the B&P costs actually incurred for NASA and non-NASA projects, and compared these costs to the B&P costs allocated to NASA and non-NASA projects to determine how JPL's cost accounting practices affect NASA contract costs.

MANAGEMENT CONTROLS REVIEWED

Significant management controls were reviewed to determine whether:

- accounting treatment of TAP B&P costs complied with the FAR requirements applicable to work performed at JPL, and
- all B&P costs charged to NASA were allocable to

NASA work.

We identified management control weaknesses which are described in the Observations and Recommendations section of this report.

AUDIT FIELD WORK

We conducted the audit in accordance with generally accepted government auditing standards and performed field work from February 1996 to September 1996.

OBSERVATIONS AND RECOMMENDATIONS

OVERALL EVALUATION

TAP B&P costs appear reasonable, but NASA is paying an inappropriate share of these costs. This occurs because JPL's current accounting practice inequitably allocates these costs to NASA. As a result, in FY 1994 and 1995, NASA paid an inappropriate share of B&P costs totalling \$1.8 million (Exhibit 1). Of this amount, \$712,000 was attributable to commercial work. If this practice continues, we estimate NASA could pay an additional \$5.4 million of B&P costs for non-NASA work at JPL during the next five years (Exhibit 2).

REGULATORY REQUIREMENTS

Except for some deviations expressly stated in the NASA contract, JPL is required to follow the requirements in the Federal Acquisition Regulation (FAR). The FAR requirements applicable to B&P work performed at JPL are presented in Appendix A.

SPECIAL ALLOCATION NEEDED

JPL's current accounting practices for bid and proposal costs conform to its disclosure statement. Additionally, JPL uses the preferred allocation method of allocating B&P costs based on total cost input. However, JPL's practices do not allocate the pooled B&P costs to NASA and non-NASA programs in a reasonable proportion to their beneficial or causal relationship. As a result, in FY 1994 and 1995 NASA paid an inappropriate share of bid and proposal costs totalling \$486,000 and \$1.3 million, respectively (Exhibit 1). Of these amounts, \$228,000 for FY 1994 and \$484,000 for FY 1995 were B&P costs attributable to commercial work. If this practice continues, we estimate NASA could pay an additional \$5.4 million of B&P costs for non-NASA work at JPL during the next five years (Exhibit 2). Use of a special allocation method, as outlined in FAR 9904.420-50(f)(2) (see Appendix A) is needed to ensure future B&P costs are properly allocated.

CURRENT PRACTICE

JPL accumulates B&P costs for NASA and non-NASA work (other government and commercial) in an indirect cost pool identified as Project No. 944. The costs are allocated to the final cost objectives (JPL job accounts) on a total cost input base. The total cost input base is all costs, except general and administrative expenses, which are allocable to the production of goods and services. In FY 1994, while B&P costs related to NASA work totalled \$5.8 million, JPL's

process allocated \$6.3 million to NASA work. Similarly, in FY 1995 NASA work related B&P costs totalled \$5.7 million, while \$7 million was allocated to NASA work. The current allocation process results in NASA paying a disproportionate share of B&P costs. The process also charges NASA for B&P costs related to acquiring commercial work.

We believe B&P costs related to NASA work should be allocated to NASA total cost input. Similarly, non-NASA work related B&P costs should be allocated to non-NASA work total cost input. This method properly allocates the costs in reasonable proportion to the beneficial relationship of the pooled costs to the cost objectives, and eliminates B&P charges to NASA for commercial work. Our position is illustrated below.

	<i>B&P Costs Incurred</i>	<i>Current Allocation</i>	<i>Proposed Allocation</i>	<i>Difference</i>
1994				
NASA work	\$5775	\$6261	\$5775	-\$486
Non-NASA work:				
Other U.S. Government	\$896	\$638	\$896	+\$258
Commercial (Note 1)	\$272	\$44	\$272	+\$228
Total	\$6943	\$6943	\$6943	-0-
1995				
NASA work	\$5735	\$7029	\$5735	-\$1294
Non-NASA work:				
Other U.S. Government	\$1211	\$401	\$1211	+\$810
Commercial (Note 1)	\$527	\$43	\$527	+\$484
Total	\$7473	\$7473	\$7473	-0-

(Dollars in thousands)

Note 1: Includes work for private industry and other non-government organizations.

RECOMMENDATION 1

The NMO should ensure JPL's B&P costs are allocated in a reasonable proportion to their beneficial or causal relationship. The use of a special allocation, in accordance with the provisions of FAR 9904.420-50(f)(2), should be evaluated, and if considered appropriate, incorporated into the current or future JPL contract.

Management's Response

Nonconcur. The NMO agrees that B&P costs should be allocated in a reasonable proportion to their beneficial or causal relationship, but does not disagree that a beneficial or causal relationship can be determined from a simple ratio of B&P cost to business base. The

OIG's conclusion ignores the benefit that NASA projects derive from the expansion of the JPL business base resulting from these B&P activities.

The NMO does not believe a case has been made which would require the contractor to pursue a method of allocation which contradicts the explicitly preferred allocation method prescribed by CAS 420.

Only a single contract or final cost objective exists at JPL. The use of a special allocation, as recommended by the OIG, would result in allocating costs to a level lower than a final cost objective. Such an allocation is not supported by CAS 420.

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

We are not suggesting that non-NASA work be discontinued, but rather are recommending that participants more equitably share the costs associated with expanding JPL's business base. We did not ignore the potential benefits NASA may derive from JPL's work on non-NASA projects. While NASA may derive some benefits, non-NASA projects derive much greater benefits from technologies developed at JPL with NASA funds. More than 90% of the research and development projects at JPL are funded by NASA. More importantly, these benefits would not be impacted by the use of a special allocation. The business base can still be expanded and benefits will accrue to both NASA and non-NASA customers.

Our conclusion that NASA could pay an estimated additional \$5.4 million of B&P costs for non-NASA work at JPL during the next five years was based on a detailed review of JPL's actual accounting data and records. NASA should not pay for costs incurred for non-NASA work. The non-NASA sponsors (other government agencies and commercial entities) should pay their fair share of these costs through a special allocation method that distributes B&P cost equitably. NASA can use the savings on other projects or programs.

We do not agree only one final cost objective exists at JPL because there is only one contract. As stated in GAO's July 1993 report on NASA Procurement, "Proposed Changes to the Jet Propulsion Laboratory," the JPL contract is an "umbrella" mechanism. Rather than signing separate contracts for individual work projects, funding for JPL is provided under "task orders." Furthermore, the contract

requires JPL to segregate, account, summarize, and report accrued costs and expenditures by each task order. The above clearly demonstrates that the one contract arrangement is not intended to treat all task orders as one final cost objective. Final cost objectives need not be contracts, yet they can exist within contracts. Tasks, deliverables, projects or line items can be final cost objectives.

We believe the NMO should reevaluate its position.

RECOMMENDATION 2

The NMO should evaluate JPL's FY 1994 and 1995 B&P costs (\$712,000) attributable to commercial and other non-U.S. government work and determine whether these costs are allowable.

Management's Response

Nonconcur. As outlined in the response to Recommendation 1, the OIG has not established that an inequitable allocation exists. Discussions with DCAA indicate that it is general industry practice to collect all B&P costs in a single pool which is allocated based on total cost input, the same method being followed by JPL and the preferred method according to CAS 420. Further, the OIG has concluded that the overall level of B&P costs appear reasonable, and therefore, the NMO currently has no basis for disallowing these costs through any provision of the FAR. The NMO will, however, review the OIG's concerns as part of its negotiation of the next contract for operation of JPL. The NMO also reserves the right to determine any specific B&P costs unallowable should new information related to cost charging become available.

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

Our conclusion that in FY 1994 and 1995, NASA paid \$712,000 of B&P costs attributable to commercial work was based on an extensive review of JPL's accounting data and records. The costs charged to NASA were for non-NASA work. We agree that the generally accepted allocation method collects B&P costs in a single pool and allocates them based on total cost input. However, the Cost Accounting Standards recognize that this method may not result in an equitable cost allocation. According to FAR 9904.420-50(f)(2), the use of a special allocation is appropriate if a particular final cost objective receives significantly more or less benefit from B&P costs than would be reflected by the allocation of such costs.

We believe JPL's current method of B&P costs allocation fails to distribute the cost equitably in accordance with the causal and

beneficial relationship. In our opinion sufficient grounds exist to establish a special allocation. This allocation can be established at any time during the contract when the government determines that the current practices are inappropriate.

We request the NMO reevaluate its position. At a minimum, the NMO should revisit this issue during negotiation of any future contracts with the California Institute of Technology.

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MAJOR CONTRIBUTORS TO THIS AUDIT

Ned Echerd	Audit Director
Roger Flann	Supervisory Auditor
Rita Wu	Auditor-in-Charge

**Increased Costs Paid by NASA
in FYs 1994 and 1995**

	Line	In Thousand of Dollars	
		FY 1994	FY 1995
TAP's Bid and Proposal Costs by Sponsor			
NASA	1	365	373
Non-NASA : Other U.S. Government (Note 1)	2	896	1,211
Commercial and Other (Note 1)	3	272	527
Total (See Note 2)	4=1+2+3	1,533	2,111
JPL's Bid and Proposal Costs			
TAP Total Programs (See Note 3)	5	1,520	2,105
Other NASA Programs	6	5,423	5,368
JPL Total	7=5+6	6,943	7,473
Total Cost (Business Base)			
TAP - NASA Programs	8	71,300	73,600
TAP - Non-NASA Programs	9	100,200	63,300
Total TAP Programs	10=8+9	171,500	136,900
Other NASA Programs	11	848,100	928,500
JPL Total	12=10+11	1,019,600	1,065,400
Estimated Total Cost Input Base Ratio			
TAP - NASA Programs	13=7/12	6.993%	6.908%
TAP - Non-NASA Programs/Other US Government (Note 4)	14	9.195%	5.362%
TAP - Non-NASA Programs/Commercial & Other (Note 4)	15	0.633%	0.580%
TAP Total	16=13+14+15	16.821%	12.850%
Other NASA Programs	17=11/12	83.179%	87.150%
JPL Total	18=16+17	100.000%	100.000%
Estimated Bid and Proposal Costs Allocated to			
TAP - NASA Programs	18=13x7	486	516
TAP - Non-NASA Programs/Other US Government	19=14x7	638	401
TAP - Non-NASA Programs/Commercial & Other	20=15x7	44	43
TAP Total	21=18+19+20	1,168	960
Other NASA Programs	22=17x7	5,775	6,513
JPL Total	23=21+22	6,943	7,473
Increased Costs Paid by NASA (Costs Not Recovered by NASA)			
Increased Costs Attributable to Other US Government Work	24=2-19	258	810
Increased Costs Attributable to Commercial & Other Work	25=3-20	228	484
Total		486	1,294

Explanatory Notes:

1. According to JPL amounts in line 2 may incidentally include a small amount of costs related to non-US government work. Similarly, amounts in line 3 may include a small amount of costs related to other US government work. However, these amounts are not readily determinable at this time.
2. The amounts represent data included in a TAP's management report. They are different from line 4 because they were adjusted to include only the costs from B&P accounts set up for the current year.
3. The amounts represent JPL's financial accounting data. They include all B&P costs posted in the current year.
4. The amounts were computed by applying other US government and commercial work percentages to the total TAP non-NASA work on line 9. The percentages for other US government and commercial work in FY 1994 were 93.57% and 6.43%. In FY 1995 the percentages were 90.24% and 9.76%.

**Estimated Increased Costs to NASA
In the Next Five Years**

		In Thousand of Dollars					
	Line	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	Total
TAP's Bid and Proposal Costs by Sponsor							
NASA (See Note 1)	1	365	426	447	447	467	2,152
Non-NASA (See Note 1)	2	1,435	1,674	1,753	1,753	1,833	8,448
Total (See Note 2)	3=1+2	1,800	2,100	2,200	2,200	2,300	10,600
JPL's Bid and Proposal Costs							
TAP Total Programs	4	1,800	2,100	2,200	2,200	2,300	10,600
Other NASA Programs	5	6,200	5,900	5,800	5,800	5,700	29,400
JPL Total (See Note 3)	6=4+5	8,000	8,000	8,000	8,000	8,000	40,000
Total Cost (Business Base)							
TAP - NASA Programs	7	88,900	90,900	91,300	91,600	95,300	458,000
TAP - Non-NASA Programs	8	66,100	71,100	76,700	85,400	86,700	386,000
TAP Total (See Note 2)	9=7+8	155,000	162,000	168,000	177,000	182,000	844,000
Other NASA Programs	10	885,000	838,000	832,000	823,000	818,000	4,196,000
JPL Total (Note 3)	11=9+10	1,040,000	1,000,000	1,000,000	1,000,000	1,000,000	5,040,000
Estimated Total Cost Input Base Ratio							
TAP - NASA Programs	12=7/11	8.548%	9.090%	9.130%	9.160%	9.530%	9.087%
TAP - Non-NASA Programs	13=8/11	6.356%	7.110%	7.670%	8.540%	8.670%	7.659%
TAP Total	14=12+13	14.904%	16.200%	16.800%	17.700%	18.200%	16.746%
Other NASA Programs	15=10/11	85.096%	83.800%	83.200%	82.300%	81.800%	83.254%
JPL Total	16=14+15	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
Estimated B&P Costs Allocated to							
TAP - NASA Programs	17=12 X 6	684	727	730	733	762	3,635
TAP - Non-NASA Programs	18=13X6	508	569	614	683	694	3,063
TAP Total	19=17+18	1,192	1,296	1,344	1,416	1,456	6,698
Other NASA Programs	20=15X6	6,808	6,704	6,656	6,584	6,544	33,302
JPL Total	21=19+20	8,000	8,000	8,000	8,000	8,000	40,000
Estimated Increased Costs to NASA (Note 4)	**22=2-18	\$926	\$1,105	\$1,140	\$1,070	\$1,140	\$5,385

** Total may not equal the sum of the parts because of rounding differences.

Explanatory Notes:

1. Amounts in lines 1 and 2 are computed by applying 20.3% and 79.7% respectively to amounts in line 3. The percentages represent average ratio of the FYs 1994 and 1995 composition (Refer to Exhibit 1).
2. The amounts represent forecast by the Office of TAP.
3. The amounts represent forecast/estimates by the Office of the Associate Director.
4. \$3.231 and \$2.154 million of the total increased costs are attributable to other government and commercial work, respectively. The amounts are computed by applying 60% and 40% to the \$5.385 million. The percentages represent an average of the FYs 1994 and 1995 increased cost ratio attributable to other U.S. government and commercial work (refer to lines 24 and 25 in Exhibit 1).

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APPENDIX A FEDERAL ACQUISITION REGULATIONS

1. FAR 9904.418-40(b) and (c) - Fundamental Requirements for Allocation of Direct and Indirect Costs

"Indirect costs shall be accumulated in indirect cost pools which are homogeneous" and "Pooled costs shall be allocated to cost objectives in reasonable proportion to the beneficial or causal relationship of the pooled costs to cost objectives...."

2. FAR 9904.418-50(b)(2) - Homogeneous Indirect Cost Pools

"An indirect cost pool is not homogeneous if the costs of all significant activities in the cost pool do not have the same or similar beneficial or causal relationship to cost objectives and, if the costs were allocated separately, the resulting allocation would be materially different,"

3. FAR 9904.410-50(i) - Techniques for Application for Allocation of Business Unit General and Administrative Expenses to Final Cost Objectives

"Where a particular final cost objective in relation to other final cost objectives receives significantly more or less benefit from G&A expense than would be reflected by the allocation of such expenses ..., the business unit shall account for this particular final cost objective by a special allocation from the general and administrative (G&A) expense pool to the particular final cost objective commensurate with the benefits received. The amount of a special allocation to any such final cost objective shall be excluded from the G&A expense pool ..., and the particular final cost objective's cost input data shall be excluded from the base used to allocate this pool."

4. FAR 9904.420-50(f)(2) - Techniques for Application for Allocation of IR&D or B&P Costs

"... where a particular final cost objective receives significantly more or less benefit from IR&D or B&P costs than would be reflected by the allocation of such costs, the Government and the contractor may agree to a special allocation of the IR&D or B&P costs to such final cost objective commensurate with the benefits received. The amount of special allocation to any such final cost objective made pursuant to such an agreement shall be excluded from the IR&D and B&P cost pools to be allocated to other final cost objectives and the particular final cost objective's base data shall be excluded from the base used to allocate these pools."

National Aeronautics and Space Administration

APPENDIX B



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

Internal Memorandum

SPJ

May 16, 1997

TO: W/Acting Inspector General for Auditing

FROM: SPJ/Deputy Manager

SUBJECT: OIG Draft Report Technology and Applications Programs' (TAP) Bid and Proposal Costs, Assignment No. A-JP-96-001

Below are NMO's comments on the recommendations contained in the subject draft report. JPL's comments have been incorporated and considered where appropriate. JPL's response in its entirety is attached for your information.

Recommendation 1

The NMO should ensure JPL's B&P costs are allocated in a reasonable proportion to their beneficial or causal relationship. The use of a special allocation, in accordance with the provisions of FAR 9904-420(f)(2), should be evaluated, and if considered appropriate, incorporated into the current or future JPL contract.

NMO Comments

Nonconcur: The NMO agrees that B&P costs should be allocated in a reasonable proportion to their beneficial or causal relationship, however, the NMO does not agree that a beneficial or causal relationship can be determined from a simple ratio of B&P costs to business base. We believe the OIG's conclusion ignores the benefit that NASA projects derive from the expansion of the JPL business base resulting from these B&P activities. Other factors also need to be considered including: 1) technical and other benefits to NASA of the work performed, 2) the maintenance of critical skills, 3) the absorption of allocated direct costs and award fee by non-NASA work, 4) other amounts paid by non-NASA sponsors including the contract administration fee charged to all non-NASA sponsors, and 5) the amount charged non-NASA sponsors for the JPL director's discretionary fund which funds independent research and development projects.

Contract NAS7-1260 C-1(b)(1) provides that "Work for non-NASA sponsors at JPL will be confined to work which can apply technology or abilities which were developed, used or acquired in the conduct of work by JPL for NASA or for others, or which are needed for

appear reasonable, and therefore, the NMO currently has no basis for disallowing these costs through any provision of the FAR. The NMO will, however, review the OIG's concerns as part of our negotiation of the next contract for operation of JPL. The NMO also, of course, reserves the right to determine any specific B&P costs unallowable should new information related to cost charging become available.



Thomas E. Sauret

cc:

SPJ/Mr. Lindstrom

SPI/Mr. Bennett

SPJ/Mr. Bromley

HK/Mr. Balinskas

HS/Mr. La Beau

CALIFORNIA INSTITUTE OF TECHNOLOGY

DIRECTOR OF INTERNAL AUDIT

April 30, 1997

Mr. Thomas E. Sauret
Deputy Manager/Procurement Officer
NASA Management Office - JPL
Jet Propulsion Laboratory
4800 Oak Grove Drive
Pasadena, CA 91109-8099

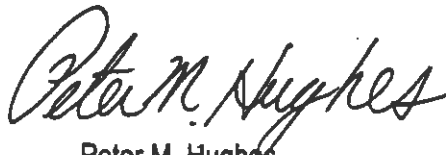
Subject: Response to Draft Audit Report of NASA OIG Audit Report on Technology and Applications Programs (TAP), Bid and Proposal Costs at the Jet Propulsion Laboratory dated April 22, 1997, Report No. A-JP-96-001

Reference: Letter from Mr. Daniel W. Bromley, Audit Liaison, NASA Management Office, to Mr. Peter Hughes, Director, Internal Audit, California Institute of Technology, dated April 23, 1997, Subject: OIG Draft Audit Report on Technology and Applications Program (TAP), Bid and Proposal Cost, Jet Propulsion Laboratory, Assignment No. A-JP-96-001

Dear Mr. Sauret:

The attached memorandum from Steve Proia constitutes an official response to the referenced letter.

Sincerely,




Peter M. Hughes
Director
Caltech Internal Audit

PMH:bij

Enclosure

cc: J. R. Curry
W. H. Harrison
H. M. Yohalem
D. W. Bromley, NMO
B. M. Meltzer

April 30, 1997

TO: Peter M. Hughes
FROM: Steve Proia 
SUBJECT: Response to Draft Audit Report of NASA OIG Audit Report on Technology and Applications Programs' (TAP). Bid and Proposal Costs at the Jet Propulsion Laboratory dated April 22, 1997, Audit Report Number A-JP-96-001

REFERENCE: Letter from Mr. Daniel W. Bromley, Audit Liaison, NASA Management Office, to Mr. Peter Hughes, Director, Internal Audit, California Institute of Technology, dated April 23, 1997, Subject: OIG Draft Audit Report on Technology and Applications Program (TAP), Bid and Proposal Cost, Jet Propulsion Laboratory, Assignment No. A-JP-96-001

The following are JPL's comments to the NASA OIG's findings and recommendations contained in the subject draft audit report.

FINDING:

OVERALL EVALUATION - TAP B&P costs appear reasonable, but NASA is paying an inappropriate share of these costs. This occurs because JPL's current accounting practice inequitably allocates these costs to NASA. As a result, in FY 1994 and 1995, NASA paid an inappropriate share of B&P costs totaling \$1.8 million. Of this amount, \$712,000 was attributable to commercial work. If this practice continues, we estimate NASA could pay an additional \$5.4 million of B&P costs for non-NASA work at JPL during the next five years.

1. **RECOMMENDATION:**

The NMO should ensure JPL's B&P costs are allocated in a reasonable proportion to the beneficial or causal relationship. The use of a special allocation, in accordance with the provisions of FAR 9904.420-50(f)(2), should be evaluated, and if considered appropriate, incorporated into the current or future JPL contract.

JPL COMMENTS:

JPL does not concur with the NASA OIG's assertion that JPL does not allocate pooled B&P costs to NASA and non-NASA programs in a reasonable proportion to their beneficial or causal relationship and that a special allocation of B&P costs is necessary. The NASA OIG bases its assertion solely on the percentage relationship of NASA and non-NASA B&P to NASA and non-NASA workloads. JPL is of the opinion that a special allocation of B&P costs is not required because NASA derives a true benefit from the performance of non-NASA work. In addition, the

allocated direct costs absorbed by the non-NASA work far exceeds the cost of non-NASA B&P efforts. Further details in support of our opinion can be found in the letter from Peter M. Hughes to Thomas E. Sauret, dated February 20, 1997, Subject: Response to Revised Discussion Draft of NASA OIG Audit Report on Technology and Applications Program (TAP), Bid and Proposal Costs at the Jet Propulsion Laboratory dated January 14, 1997, Report No. A-JP-96-001 (9670002) (Copy enclosed).

2. RECOMMENDATION

The NMO should evaluate JPL's FY 1994 and 1995 B&P costs (\$712,000) attributable to commercial and other non-U.S. government work and determine whether these costs are allowable.

JPL COMMENTS:

JPL concurs with the NASA OIG's opinion that the TAP B&P costs related to both NASA and non-NASA work are reasonable. In addition, it is JPL's opinion that these costs are also allocable and allowable under the terms of its contract with NASA and the applicable cost accounting standards. Further details in support of our opinion can be found in the letter from Peter M. Hughes to Thomas E. Sauret, dated February 20, 1997, Subject: Response to Revised Discussion Draft of NASA OIG Audit Report on Technology and Applications Program (TAP), Bid and Proposal Costs at the Jet Propulsion Laboratory dated January 14, 1997, Report No. A-JP-96-001 (9670002) (Copy enclosed).

SLP/DRI:bjj


Enclosure a/s

JET PROPULSION LABORATORY

INTEROFFICE MEMORANDUM

February 20, 1997

TO: Peter M. Hughes

FROM: Steve Proia 

SUBJECT: Response to Revised Discussion Draft of NASA OIG Audit Report on Technology and Applications Programs (TAP), Bid and Proposal Costs at the Jet Propulsion Laboratory dated January 14, 1997, Audit Report Number A-JP-96-001

REFERENCE: Letter from Mr. Daniel W. Bromley, Audit Liaison, NASA Management Office, to Mr. Peter Hughes, Director, Internal Audit, California Institute of Technology, dated January 14, 1997, Subject: OIG Revised Discussion Draft Audit Report on Technology and Applications Program (TAP), Bid and Proposal Cost, Jet Propulsion Laboratory, Assignment No. A-JP-96-001

JPL has performed a thorough review of the subject discussion draft audit report and finds both its proposed findings and recommendations, including the call for a cost disallowance, to be without basis in law, regulation, contract provisions, or generally accepted government accounting practices.

In the Overall Evaluation section of the draft, the NASA OIG asserts that NASA paid an unreasonable share of non-NASA bid and proposal (B&P) costs and that an existing contract provision unduly restricts NASA's ability to disallow costs for noncompliance with cost accounting standards. In our opinion, both of these assertions are based on the NASA OIG's misunderstanding of the underlying laws, regulations, and practices which govern how Government contractors accumulate and allocate costs. In addition, the NASA OIG has misinterpreted the purpose of Clause H-21 of Contract NAS7-1260, FAILURE TO COMPLY WITH CAS OR CONSISTENTLY FOLLOW COST ACCOUNTING PRACTICES. Clause H-21 merely clarifies the standard language contained in all of the CAS FAR 52-230 clauses which contain the language "costs paid by the United States" when discussing the determination of cost impacts resulting from non-compliances and changes in accounting practices.

In summary, the NASA OIG is proposing that NASA only reimburse JPL for B&P activity directly related to NASA and that the cost of other government and commercial B&P activity be borne solely by any work generated by these non-NASA activities. In fact, the NASA OIG recommends retroactively disallowing all cost incurred under the current contract for commercial B&P effort. While the NASA OIG's proposal provides "food for thought" regarding the future treatment of non-NASA B&P costs, its call for a retroactive cost disallowance is not supportable.

The NASA OIG appears to ignore OMB Circular A-21 Cost Principles for Educational Institutions, Section J., Paragraph 34, Proposal costs, which states that "Proposal costs are the costs of preparing bids or proposals on potential federally and non-federally-sponsored agreements or projects, including the development of data necessary to support the institution's bids or proposals. Proposal costs of the current

accounting period of both successful and unsuccessful bids and proposals normally should be treated as Facilities & Administrative costs and allocated currently to all activities of the institution...Regardless of the method used, the results obtained may be accepted only if found to be reasonable and equitable." Since the NASA OIG has determined that the total TAP B&P costs are reasonable in its Overall Evaluation, the determination of equitability should be governed by the rules covering cost allocability, i.e., the Cost Accounting Standards (CAS).

In Appendix A, the NASA OIG cites portions of CAS 410, 418, and 420 but fails to provide any rationale for the application of these citations to the findings and recommendations contained in the body of the draft. CAS 418 is not applicable to the allocation of B&P costs, because FAR 904.418 Allocation of direct and indirect costs, subparagraph 40 (d) states "To the extent that any cost allocations are required by the provisions of other Cost Accounting Standards, such allocations are not subject to the provisions of this Standard." In fact, FAR 9904.420 Accounting for independent research and development costs and bid and proposal costs requires that B&P costs be allocated in accordance with FAR 9904.410 Allocation of business unit general and administrative expenses to final cost objectives. JPL is fully compliant with this requirement and uses the preferred method of allocation, total cost input. We do note however, that FAR 9904.420 does allow the Government and a contractor to enter into a prospective special allocation agreement if an inequitable allocation is perceived. However, the amount of absorption of allocated direct cost as well as the benefit derived by NASA from the work performed under non-NASA programs far outweigh the perceived cost to NASA for its related non-NASA B&P effort.

JPL's practices are and have been fully compliant with CAS. There is no reason or basis for a special allocation for B&P costs. In fact, NASA's cost recovery through fee and allocated direct cost absorption exceeds its investment in the non-NASA B&P costs. In addition, the report's conclusions are based strictly on a mathematical ratio and questions the causal-beneficial relationship between NASA and non-NASA work without any determination of the benefits which NASA derives from the non-NASA work. This, in fact, was another portion of this audit's scope which is not yet completed. It should be noted that JPL is certain that NASA, the Government, the scientific community, and the Nation derive significant benefits from the JPL non-NASA work.

Based on the above, JPL respectfully requests that the NASA OIG withdraw the subject draft audit report and reconsider both the findings and recommendations.

SLP/MWG:bjj

APPENDIX C

REPORT DISTRIBUTION

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House Committee on Science
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Congressional Members

The Honorable Pete Sessions, U.S. House of Representatives