NATIONAL SCIENCE FOUNDATION 4201 Wilson Boulevard ARLINGTON, VIRGINIA 22230



MEMORANDUM

Date: April 27, 2012

To: Jeffrey M. Lupis, Director

Division of Acquisition and Cooperative Support

From: Dr. Brett M. Baker /s/

Assistant Inspector General for Audit

Subject: NSF OIG Audit Report No. 12-1-004

Institute for Defense Analyses

At the request of the NSF Director, we contracted with the Defense Contract Audit Agency's (DCAA), Chesapeake Branch Office to perform an audit of NSF Contract Number OIA-0408601 awarded to the Institute for Defense Analyses (IDA). The audit determines the allowability of NSF-funded direct costs claimed for the contractor's fiscal years 2004 to 2010 totaling \$31,433,483 for the award. IDA, a non-profit corporation, operates the Science and Technology Policy Institute (STPI), a Federally Funded Research and Development Center (FFRDC), which provides independent technical analysis and advice to the Office of Science and Technology Policy (OSTP) within the Executive Office of the President as well as other federal agencies.

Except for \$26,957 of questioned NSF-funded costs, the auditors determined that the costs claimed by IDA under the NSF award are acceptable as adjusted by DCAA's examination.

Specifically, the auditors questioned \$24,822 of direct costs claimed under the NSF contract. The questioned direct costs are \$22,737 for travel costs (\$21,714 for unreasonable coach class airfare costs and \$1,023 in unsupported travel costs); and \$2,085 for unsupported materials expenses. The auditors also questioned a total of in associated indirect costs (for FYs 2004 through 2007 based on final indirect cost rates and for FYs 2008 through 2010 based on provisional indirect costs). Therefore, the total direct and indirect costs questioned under this report are (\$224 of the \$24,822 questioned direct costs were included and questioned in IDA's FY 2010 OMB Circular A-133 report).

We recommend that the NSF Director of the Division of Acquisition and Cooperative Support resolve the questioned costs identified in the audit report.

IDA did not agree with the questioned travel costs or the methodology the auditor used to determine reasonable costs. The IDA response is described after the findings and recommendations in the audit report and is included in its entirely in Appendix 1.

We are providing copies of this memorandum to the Assistant Director, Directorate for Mathematical and Physical Sciences and to the Contracting Officer's Representative in that Directorate. The responsibility for audit resolution rests with the Division of Institution and Award Support, Cost Analysis and Audit Resolution Branch (CAAR). Accordingly, we ask that no action be taken concerning the report's findings without first consulting CAAR at 703-292-8244.

OIG Oversight of Audit

To fulfill our responsibilities under Government Auditing Standards, the Office of Inspector General:

- Reviewed DCAA's approach and planning of the audit;
- Reviewed DCAA's process for evaluating the qualifications and independence of the auditors;
- Monitored the progress of the audit at key points;
- Coordinated periodic meetings with DCCA and NSF officials, as necessary, to discuss audit progress, findings, and recommendations;
- Reviewed the audit report, prepared by DCAA to ensure compliance with Government Auditing Standards; and
- Coordinated issuance of the audit report.

DCAA is responsible for the attached auditor's report on IDA and the conclusions expressed in the report. The NSF OIG does not express any opinion on IDA's incurred cost submissions, the indirect rate applications, or the conclusions presented in DCAA's audit report.

We thank your staff for the assistance that was extended to our auditors during this audit. If you have any questions regarding this report, please contact Jannifer Jenkins at 703-292-4996.

Attachment: DCAA Audit Report No. 6171-2011N17900001, Independent Audit of Institute for Defense Analyses Fiscal Year 2004 to 2010 Incurred Direct Costs for its NSF FFRDC Contract No. OIA-0408601: dated April 11, 2012.

cc: Edward Seidel, Assistant Director, MPS/OAD Susan Hamm, MPS/OAD, Contracting Officer Representative

Defense Contract Audit Agency



United States Department of Defense



April 11, 2012

Independent Audit of Institute for Defense Analyses
Fiscal Year 2004 to 2010 Incurred Direct Costs for its NSF
FFRDC Contract No. OIA-0408601

AUDIT REPORT NO. 6171-2011N17900001

RESTRICTIONS

The contents of this audit report should not be released or disclosed, other than to those
persons whose official duties require access in accordance with DoD 5200.1-R, Information
Security, January 1997, Appendix 3, paragraph AP3.2.3. This document may contain
information exempt from mandatory disclosure under the Freedom of Information Act.
Exemption 4, of the Freedom of Information Act, which addresses proprietary information,
may apply.

It is not practical to identify during the conduct of the audit those elements of the data which are proprietary. Proprietary determinations should be made in the event of an external request for access. Unauthorized disclosure of proprietary information violates 18 U.S.C. 1905 and, if the information is contractor bid or proposal or source selection information, 41 U.S.C. 423. Any person who unlawfully discloses such information is subject to penalties such as fines, imprisonment, and/or removal from office or employment.

- 2. Under the provisions of Title 32, Code of Federal Regulations, Part 290.7(b), DCAA will refer any Freedom of Information Act requests for audit reports received to the cognizant contracting agency for determination as to releasability and a direct response to the requestor.
- The Defense Contract Audit Agency has no objection to the release of this report, at the
 discretion of the contracting agency, to authorized representatives of The Institute for
 Defense Analyses.
- 4. Do not use the information contained in this audit report for purposes other than action on the subject of this audit without first discussing its applicability with the auditor.

DEFENSE CONTRACT AUDIT AGENCY

PREPARED	FOR:	National	Science	Foundation

Office of Inspector General

ATTN: Ms. Jannifer C. Jenkins, Senior Audit Manager

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REFERENCES:

Contract No. OIA-0408601

Relevant Dates: See Page 11

CONTRACTOR:

Institute for Defense Analyses

4850 Mark Center Drive Alexandria, VA 22311-1882

CONTENTS:

Subject of Audit	1
Executive Summary	1
Scope of Audit	1
Results of Audit	2
Contractor Organization and Systems	10
DCAA Personnel and Report Authorization	10
Audit Report Distribution	12
Appendixes	13

Page

SUBJECT OF AUDIT

We examined the Institute for Defense Analyses (IDA) fiscal years 2004 through 2010 incurred direct costs for The National Science Foundation (NSF) NSF Contract No. OIA-0408601. The purpose of the examination was to determine allowability, allocability and reasonableness of direct costs for fiscal years 2004 to 2010.

Test procedures were applied from October 17, 2011 to February 15, 2012.

The proposal is the responsibility of the contractor. Our responsibility is to express an opinion based on our examination.

EXECUTIVE SUMMARY

We questioned \$24,822 of direct costs consisting of:

- \$21,714 of unreasonable coach class airfare costs;
- \$1,023 of unsupported coach class airfare costs; and
- \$2,085 of unsupported materials costs.

SCOPE OF AUDIT

We conducted our examination in accordance with generally accepted government auditing standards except DCAA does not currently have an external opinion on its quality control system as required by GAGAS 3.55. The most recent external quality control review opinion expired on August 26, 2009. GAGAS require that we plan and perform the audit to obtain reasonable assurance about whether the contractor has complied with the requirements referred to above. An examination includes:

- evaluating the contractor's internal controls, assessing control risk, and determining the extent of audit testing needed based on the control risk assessment;
- examining, on a test basis, evidence supporting the amounts and disclosures in the data and records evaluated;
- assessing the accounting principles used and significant estimates made by the contractor;
- evaluating the overall data and records presentation; and
- determining the need for technical specialist assistance.

We evaluated the proposal using the applicable requirements contained in the:

- Federal Acquisition Regulation (FAR),
- · National Science Foundation FAR Supplement,
- · Cost Accounting Standards (CAS), and
- Contract Provisions.

We consider IDA's accounting, labor and billing systems adequate for the accumulation and reporting of costs on government contracts (see the Organization and Systems Section of the report). Our audit scope reflects our assessment of control risk and provides a reasonable basis for our opinion.

RESULTS OF AUDIT

In our opinion, IDA's FY 2004 through 2010 claimed direct costs for its NSF contract are acceptable as adjusted by our examination. We questioned \$24,822 of direct costs claimed under the NSF contract. The questioned costs are \$22,737 for travel costs (\$21,714 for unreasonable and \$1,023 for unsupported) and \$2,085 for unsupported materials expenses. Direct costs not questioned are provisionally approved pending final acceptance. Final acceptance of amounts proposed under Government contracts does not take place until performance under the contract is completed and accepted by the cognizant authorities and the audit responsibilities have been completed. Claimed and Questioned direct costs by element are presented in the summary of direct costs:

SUMMARY OF REVIEW OF DIRECT COSTS

Cost Element	Proposed	Questioned Costs	Difference	Note
Labor		\$0		1
Consultant		0		2
Travel		22,737		3
Materials		2,085		4
Facilities		0		5
Services		0		6
ODC		<u>0</u>	_	7
Total Direct		<u>\$24,822</u>		
Staff Fringe Benefits		\$0		8
ASM Fringe Benefi		0		8
Onsite Overhead		0		8
Offsite Overhead		0		8
G&A				8
Cost of Money		×	0.0	8
Total Indirect Total Cost		\$	S	

Labor Costs

Summary of Conclusions: We take no exception to the labor costs claimed by IDA from FY 2004 to FY 2010.

Basis of Contractor's Costs: The contractor records labor costs in general ledger accounts beginning with 11-1100 through 15-1500. The costs are accumulated using project ID numbers for each contract. The labor costs in these accounts represent all direct labor incurred in performance of each project.

Audit Evaluation: We tested the transactions for FY 2004 to 2010 to determine allowability, allocability, and reasonableness. We reviewed the corresponding labor distribution and timesheets and verified amounts claimed against accounting records.

2. Consultants Costs

Summary of Conclusions: We take no exception to the consultant costs claimed by IDA from FY 2004 to FY 2010.

Basis of Contractor's Costs: The contractor records consultant costs in general ledger accounts 16-1600 through 17-1700. The costs are accumulated using project ID numbers for

each contract. The consultant costs in these accounts represent all consultant charges incurred in performance of each project.

Audit Evaluation: We reviewed the transactions for FY 2004 to 2010 to determine allowability, allocability, and reasonableness. We traced the selected transactions to supporting source documentation such as invoices and consultant agreements.

Travel Costs

Summary of Conclusions: We questioned \$21,714 of direct travel costs for FY 2004 to 2010 due to unreasonable airfare on domestic flights. In addition, \$224 was questioned in our FY 2010 A-133 audit report no. 6171-2011N10110001 R-1, dated June 20, 2011, Appendix 1, Section III, Note 10-1 based on reasonableness. The costs do not meet the FAR 31.205-46(b) criteria for reasonableness and allowability. FAR 31.205-46(b) states "Airfare costs in excess of the lowest priced airfare available to the contractor during normal business hours are unallowable." In addition, we questioned \$1,023 of travel costs due to lack of supporting documentation. FAR 31.202-2(d) states that "a contractor is responsible for...maintaining records, including supporting documentation, adequate to demonstrate that costs claimed have been incurred, are allocable to the contract, and comply with applicable cost principles." The referenced FY 2010 A-133 audit report provides a statement of condition related to unreasonable coach fare and unreasonable premium class airfare.

Basis of Contractor's Cost: The contractor records travel costs in general ledger accounts 43-2000 through 43-2007. The costs are accumulated using project ID numbers for each contract. The travel costs in these accounts represent all travel incurred in performance of each project.

Audit Evaluation: We reviewed the transactions for FY 2004 to 2010 to determine allowability, allocability, and reasonableness. We reviewed the supporting documentation provided by the contractor that includes copies of airfares itineraries, travel order authorizations, voucher accounting records and compared them to historical rates. The cost principle for airfare requires the lowest priced airfare with specific exceptions that requires documented justification.

We questioned \$1,023 of travel costs for fiscal year 2005 because they are unsupported. The travel costs were accumulated in IDA's accounting system under voucher number 366910.

We questioned trips for domestic coach class travel using the historical market value rates published by the Department of Transportation, Office of Aviation Analysis in its Air Travel Consumer Report data. We use the data as a baseline for evaluating reasonableness and noted a substantial difference between the fares purchased by the contractor and the average market rates. We establish the questioned amount for unreasonable air fare based on the difference. Airfare questioned based on reasonableness are summarized below:

Audit Report No. 6171-2011N17900001

Fiscal	Voucher	80000000 B V		Cost		
Year	Number	TO Number	Description	Proposed Questioned	Difference	
2004	Management of the State of the			1,230		
2004				1,278		
2004				768		
2004				828		
2004				534		
2004				495		
2004				460		
2004				387		
2005				2,109		
2005				1,972		
2005				818	Q1	
2005				1,105		
2005				994		
2005				152		
2005				479		
2006				992		
2006				473		
2006				583		
2006				355		
2006				455		
2006				385	~	
2007				549		
2007				175		
2008				514		
2008				123		
2008				131		
2008				420		
2008				42	v	
2008				96		
2009				493		
2009				539		
2009				460		
2009				394		
2009				355		
2009				345		
5				21,488	\$	

Contractor's Response: IDA does not concur with our questioned travel costs based on reasonableness. In summary IDA questions the validity of the methodology used by DCAA to determine reasonableness. The contractor questions the likelihood of being able to purchase all tickets at or below the average price of the market rates and that there price was nothing more than the standard range of deviation. See IDA's full response to questioned travel costs in Appendix A.

Auditor's Response: We continue to question \$22,737 of the questioned airfare costs. We disagree with IDA's response that there was no consideration in the comparison of fares at actual time of purchase because as we based our questioned cost on historical fares for the applicable fiscal year. We took into consideration IDA's response that the average has a high and low point and its prices reflect standard deviation. We compared the claimed amounts to our difference amount which is based on the historical average and noted that the claimed amounts ranged from 106 percent to 499 percent higher than the average. This range of deviation is substantially high therefore we maintain our position that IDA's travel costs are unreasonable. We agree that our basis for questioning the costs is not precise however it is a reasonable measure that provides a reliable baseline for establishing a reasonable amount.

Materials Costs

Summary of Conclusions: We questioned \$2,085 of materials costs due to lack of supporting documentation. The invoice, expense report, voucher, and/or receipts were not supplied. FAR 31.202-2(d) states that "a contractor is responsible for...maintaining records, including supporting documentation, adequate to demonstrate that costs claimed have been incurred, are allocable to the contract, and comply with applicable cost principles."

Basis of Contractor's Cost: The contractor records material costs in general ledger accounts 44-3000 through 44-3002. The costs are accumulated using project ID numbers for each contract. The material costs in these accounts represent all material charges incurred in performance of each project.

Audit Evaluation: We reviewed the transactions for FY2004 to 2010 to determine allowability, allocability, and reasonableness. We traced significant material costs to supporting documentation such as purchase orders and invoices. We questioned unsupported material costs in the amount of \$2,085 for fiscal year 2004. The material costs were accumulated in IDA's accounting system under voucher number 351453.

Contractor's Response: IDA did not expressly agree or disagree on this finding. See IDA's response to questioned travel costs in Appendix A

Auditor Response: We continue to question \$2,085 of material costs because there was no support for the material costs. IDA stated that due to the age of the vouchers, the documentation was no longer available. It is IDA's responsibility to maintain adequate records and documentation of incurred costs until final settlement of contract costs.

5. Facilities Costs

Summary of Conclusions: We take no exception to the facilities costs claimed by IDA from FY 2004 to FY 2010.

Basis of Contractor's Cost: The contractor records facilities costs in general ledger accounts 47-5000. The costs are accumulated using project ID numbers for each contract. The facilities costs in these accounts represent all facilities charges incurred in performance of each project.

Audit Evaluation: We reviewed the transactions for FY 2004 to 2010 to determine allowability, allocability, and reasonableness. We reviewed the corresponding supporting documentation and verified transactions for amounts claimed against accounting records.

6. Services Costs

Summary of Conclusions: We take no exception to the services costs claimed by IDA from FY 2004 to FY 2010.

Basis of Contractor's Rates: The contractor records services costs in general ledger accounts 48-4000 through 48-4500. The costs are accumulated using project ID numbers for each contract. The services costs in these accounts represent all services charges incurred in performance of each project.

Audit Evaluation: We reviewed the transactions for FY2004 to 2010 to determine allowability, allocability, and reasonableness. We reviewed the corresponding supporting documentation and verified transactions for amounts claimed against accounting records.

ODC Costs

Summary of Conclusions: We take no exception to the ODC costs claimed by IDA from FY 2004 to FY 2010.

Basis of Contractor's Costs: The contractor records ODC costs in general ledger accounts 49-6000 through 49-6003. The costs are accumulated using project ID numbers for each contract. The ODC costs in these accounts represent all ODC charges incurred in performance of each project.

Audit Evaluation: We reviewed the transactions for FY 2004 to 2010 to determine allowability, allocability, and reasonableness and to verify that contractor internal controls were operating effectively. We reviewed the corresponding supporting documentation and verified transactions for amounts claimed against accounting records.

8. Indirect Costs

Summary of Conclusions: We questioned of indirect costs associated with our questioned direct costs based on the final indirect cost rates for fiscal years 2004 through 2007. Because we have note audited the fiscal year 2008 through 2010 rates we will provide a

memorandum with the cost the associated indirect costs for our fiscal years 2008 through 2010 questioned costs.

Basis of Contractor's Costs: The contractor has indirect pools for fringe benefits, onsite overhead, offsite overhead, G&A, and Cost of Money. We used the final indirect rates for fiscal years 2004 through 2007 are summarized in contract modification number 14.

Audit Evaluation: We applied the final indirect rates summarized in Contract Modification number 14 to our questioned costs identified during the audit of fiscal years 2004 through 2007 direct costs. Our audit of fiscal year 2008 through 2010 indirect rates have not been completed therefore the fiscal year 2008 through 2010 provisional billing rates are the applicable rates for fiscal years 2008 through 2010 questioned costs. The associated indirect costs for fiscal year 2008 through 2010 are based on unaudited provisional billing rates therefore the costs for these years are not included in this audit report, which is an audit evaluation. Instead we will provide the associated indirect costs for fiscal years 2008 through 2010 questioned direct costs in a memorandum to be issued under this assignment number. Because no labor was questioned during the audit, we did not recalculate the fringe benefits and overhead costs as they are acceptable as claimed.

For the G&A rate, we have included the associated G&A costs for our questioned direct costs. See summary below:



We discussed the results of our examination with

Accounting, in an exit conference held on March 7, 2012. IDA was requested to provide a response no later than May 13, 2012, IDA provided its response on March 26, 2012 (Appendix A).

CONTRACTOR ORGANIZATION AND SYSTEMS

1. Organization

IDA is a non-profit corporation providing services in the area of studies and analysis. During FY 2010, IDA administered three Federally Funded Research and Development Center (FFRDC) contracts. IDA was incorporated in the state of Delaware in 1956. The contractor's operation is labor intensive with 1,082 employees located in Alexandria, Virginia; Suffolk, VA; Princeton, New Jersey; San Diego, California; Washington, D.C., and Bowie, Maryland. For the fiscal year ended September 24, 2010, IDA reported sales of approximately \$227.8 million, of which 100 percent were to the Government.

Accounting System

IDA's fiscal year ends on the last Friday of September. IDA maintains an accounting system on the accrual basis in accordance with generally accepted accounting principles.

IDA maintains a job cost accounting system wherein contracts are assigned individual project numbers that are used to accumulate direct costs. Indirect costs are identified with and accumulated under individual intermediate cost centers and service centers, which in turn are identified to the various indirect cost pools. Indirect expenses are recorded and billed to projects using provisional rates.

IDA utilizes Deltek's Cost Point Version 5.1 accounting software. IDA's accounting system is posted on a current basis. Appropriate adjusting entries are made at the end of each month and at year-end. IDA prepares financial statements every accounting period. Pricewaterhouse Coopers audits the annual financial statements.

DCAA PERSONNEL

Primary contacts regarding this audit:

, Senior Auditor Supervisory Auditor

Other contacts regarding this audit report:

Branch Manager

Non-DoD FLA

Chesapeake Bay Branch Office Non-DoD FLA

Chesapeake Bay Branch Office

Telephone No.

General information on audit matters is available at http://www.dcaa.mil/.

RELEVANT DATES

Request Date: Request Letter from NSF IG September 17, 2010

Due Date:

April 20, 2012

AUDIT REPORT AUTHORIZED BY:

Digitally signed by

DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=DCAA,

cn=CRAIG.RONALD.T.1229397105 Date: <u>2012.04.11 11:05:28 -</u>04'00'

Branch Manager

DCAA Chesapeake Bay Branch Office

AUDIT REPORT DISTRIBUTION

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INSTITUTE FOR DEFENSE ANALYSES

March 23, 2012

Ms. Melondy Thomas Acting Branch Manager Chesapeake Bay Branch Office 10025 Governor Warfield Parkway, Suite 200 Columbia, MD 21044-3329

Dear

The following is IDA's response to questioned cost in audit report no. 6171-2011N17900001.

In the DCAA report \$21,488 of travel cost is listed as unreasonable. IDA questions the validity of the DCAA methodology for determining reasonableness which is, as we understand, to take the published quarterly average price for an itinerary and compare that price to the price that IDA paid for the same itinerary. There is no consideration in the comparison for the fares at the actual time of purchase, day of the week of travel, time in advance the ticket was purchased, and the many other factors that affect the price of an airline ticket. It would seem unlikely that IDA could purchase all tickets at or below the average price. IDA does not believe that the small number of flights in question, compared to the total, represents anything other than the standard range of airfares available around the average depending on the individual circumstances at the time of purchase.

Furthermore, the following excerpts are taken from the introduction provided in the Department of Transportation document used as the reference for "reasonable" prices:

"Airlines tend to offer a wide variety of prices in any given market and it is unlikely that the average fares from this report will be the same as any particular fare offered."

"In particular, a high average fare in a market is an indication that a broad range of fares is available and that the number of seats sold at low fares are likely to be both very limited and subject to various travel restrictions."

IDA believes that it is clear that actual prices paid will vary widely around the average. It would be ideal if IDA could always purchase air fares at the average price or below, but unfortunately there are many factors that affect the price of a ticket at the time of purchase. While the audit covers a long period of time and IDA has modified its travel policy over that time frame to reflect changes in the FAR, none of the changes affect the purchases cited here.

As for the unsupported travel cost of \$1,023 and \$2,085 of unsupported materials cost, IDA makes every effort to retain supporting documentation for all of its transactions. IDA's practice is to scan all documentation for electronic retrieval. When the electronic documentation is found to be incomplete, we can refer to the original receipts. In these two instances due to the age of the vouchers, the originals were no longer available.

4850 Mark Center Drive · Alexandria, Virginia 22311-1882 703-845-2458 · 703-845-2188 fax · jpowell@ida.org Should you have any questions or need additional information, please let me know.

Sincerely,

OTHER MATTERS TO BE REPORTED

To the extent that the indirect rates for fiscal years 2008 through 2010 are not audited rates providing this information does not constitute audited amounts. Instead this information is considered other matters to be reported. The audit of fiscal year 2008 through 2010 indirect rates have not been completed and as a result the indirect costs associated with the questioned direct costs for those fiscal years are not audited to the extent that the indirect rates for fiscal years 2008 through 2010 are only provisional approved for billing and still subject to audit and final negotiations.

Associated G&A costs based on provisional billing rates for the applicable years are as follows for G&A:

