

NATIONAL SCIENCE FOUNDATION
4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230



OFFICE OF
INSPECTOR GENERAL

MEMORANDUM

Date: DEC 23 2008

To: Mary F. Santonastasso, Director
Division of Institution and Award Support

Thru: Jannifer Jenkins
Senior Audit Manager *Jannifer Jenkins*

From: Arnie Garza
Audit Manager *Arnie Garza*

Subject: Audit Report No. OIG-09-1-002
American Institute of Physics

Attached is the final audit report, prepared by Foxx & Company, an independent public accounting firm, on the audit of NSF Grant Agreement No. ESI-0307862 awarded to American Institute of Physics (AIP). The audit covers NSF-funded costs claimed from October 1, 2003 to December 31, 2006 aggregating to \$2,348,603 of NSF direct funded costs and \$234,859 of cost sharing.

Except for the \$77,658 in questioned subcontract costs, the auditors determined that the costs claimed by AIP appear fairly stated and are allowable, allocable, and reasonable for the NSF award. The \$77,658 in questioned costs consist of [REDACTED] and [REDACTED] for the Ivanhoe Broadcast News, Inc. and NewsProNet, Inc. subcontracts respectively. Ivanhoe billed and received payment from AIP for Spanish speaking *Discoveries and Breakthroughs Inside Science: Science TV News That Matters* (DBIS) episodes that had not been delivered at the time of the audit. NewsProNet did not pay AIP for program income that was part of a final settlement with NewsProNet, Inc.

The audit also found three instances of non-compliance with grant terms and conditions and federal requirements. The first two non-compliances were also significant internal control deficiencies that contributed to the subcontractor questioned costs and the related program income that was not paid to AIP. Specifically:

- The audit found that AIP's procurement practices for awarding subcontracts were not in accordance with federal requirements. AIP did not obtain adequate cost and pricing data for contracts over \$100,000. Further, AIP awarded subcontracts that had vague terms and did not include all the federally required contract clauses.

- AIP did not have adequate procedures to monitor its subcontractor activities in a timely manner. There were no policies or internal controls in place to ensure that invoiced amounts were accurate, allocable, allowable, and adequately supported with documentation, in accordance with NSF and OMB grant requirements.
- The award milestones for subscription sales in AIP's award agreement with NSF (both the original and the revised) were not being met; thus increasing the possibility that the DBIS project would not become self-sustaining as originally proposed by the end of the NSF award period.

To address these compliance deficiencies, the auditors recommend that your office direct AIP to (1) establish and implement procurement contract procedures to obtain and evaluate cost and pricing data; specify the type of contract and firm contract ceilings; and include all required contract clauses in all subcontracts over \$100,000; (2) establish and implement an adequate subcontract monitoring program to ensure that the subcontractors comply with the subcontract provisions and the accumulation of program income; and (3) work with its subcontractor to find additional subscribing TV stations for the DBIS project and seek additional funding sources to fund the DBIS project after the NSF award is completed.

AIP's response stated that it did obtain pricing information before it awarded the NPN subcontract; it had a subcontractor monitoring plan; and it met all of its milestones, except the one for subscription sales.

Please coordinate with our office during the six-month resolution period, as specified by OMB Circular A-50, to develop a mutually agreeable resolution of the audit findings. Also, the findings should not be closed until NSF determines that all recommendations have been adequately addressed and the proposed corrective actions have been satisfactorily implemented.

We are providing a copy of this memorandum to the Division Director and Program Director in Education and Human Resources (EHR) and the Director of the Division of Grants and Agreements. 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 Foxx & Company's approach and planning of the audit;
- Evaluated the qualifications and independence of the auditors;
- Monitored the progress of the audit at key points;

- Coordinated periodic meetings with Foxx & Company and NSF officials, as necessary, to discuss audit progress, findings, and recommendations;
- Reviewed the audit report, prepared by Foxx & Company to ensure compliance with Government Auditing Standards and the NSF Audit Guide; and
- Coordinated issuance of the audit report.

Foxx & Company is responsible for the attached auditor's report on American Institute of Physics and the conclusions expressed in the report. We do not express any opinion on the Schedule of Award Costs, internal control, or conclusions on compliance with laws and regulations.

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 me at 703-292-5026.

Attachment

cc:

Joan Ferrini-Mundy, Division Director, EHR/DRL
Sandra Welch, Program Director, EHR/DRL
Karen Tiplady, Director, DGA

Interim Audit of Award No. ESI-0307862
Awarded by the
National Science Foundation to the
American Institute of Physics
College Park, Maryland

FINANCIAL AUDIT OF
FINANCIAL SCHEDULES AND
INDEPENDENT AUDITORS' REPORTS
FOR THE PERIOD
October 1, 2003 –December 31, 2006

Foxx & Company
700 Goodall Complex
324 West Ninth Street
Cincinnati, Ohio 45202-1908

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AMERICAN INSTITUTE OF PHYSICS

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EXECUTIVE SUMMARY

BACKGROUND

We audited funds awarded by the National Science Foundation (NSF) to the American Institute of Physics (AIP), College Park, MD under Grant No. ESI-0307862 for the period October 1, 2003 through December 31, 2006. AIP, as an NSF awardee, is governed by the cost principles specified by Office of Management and Budget (OMB) Circular A-122, *Cost Principles for Non Profit Organizations*. Additionally, AIP is required to follow the provisions for administrative requirements contained in OMB Circular A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations*. (OMB Circular A-110 has been incorporated into 2 CFR 215).

AIP is an educational and scientific nonprofit organization chartered to advance and diffuse the knowledge of physics and its application to human welfare. NSF granted AIP Award No. ESI-0307862 for \$2,348,603 on September 9, 2003, with an effective date of October 1, 2003. The award included a \$234,859 cost share requirement and is scheduled to expire on September 30, 2008. AIP claimed \$2,034,850 in NSF funding and \$222,807 in cost sharing as of December 31, 2006. The award is approximately a five-year continuing grant approved on scientific/technical merit.

The purpose of the award is to support eight goals of the DBIS project and to evaluate the effectiveness of STEM news in local TV news programming in increasing the viewers' awareness and appreciation of the role of STEM in society. *Discoveries and Breakthroughs Inside Science: Science TV News That Matters* (DBIS) brings together a diverse coalition of professional science, technology, engineering, and mathematical (STEM) organizations to provide peer-reviewed research news to large audiences who use local TV news as their primary source of information. The project provides twelve 90-second science news reports and a complementary Web component each month to subscribers. DBIS exposes the public to the role of STEM in society; and, promotes the awareness of, appreciation for, accessibility to, and understanding of these fields. One of the eight goals of the DBIS project was to develop a model that would be self-sustaining beyond the NSF funding. In that regard one of the award's three measurable milestones was the amount of revenue generated from non NSF and AIP sources. The other two milestones were the number of STEM partners and the number subscribing stations. According to the AIP grant application the basic costs of DBIS would be covered when 165 TV stations paid an average of \$600 per month. The grant application and award suggested that projected revenue would result in self-sufficiency by the end of Year Four.

According to the DBIS' annual report, 144 DBIS episodes were produced between May 2005 and April 2006. Also, the 2006 annual report stated that the DBIS team produced Spanish DBIS episodes and a web page for each story which expanded on the science content in the reports. Based on information provided by AIP there were an additional 108 episodes produced through December 31, 2006.

AIP, in addition to their staff, engaged three subcontractors to provide services related to the production, marketing, evaluation, and monitoring of 90-second science news stories aired on local TV stations:

- *NewsProNet, Inc.* (NPN) located in Gainesville, GA provided production, marketing, and distribution services from October 2003 until March 2005.
- *Ivanhoe Broadcast News, Inc.* (Ivanhoe) located in Winter Park, FL provided production, marketing, and distribution services beginning in March 2005 and ending April 30, 2006. The agreement was to renew automatically for one year terms.
- *The University of Minnesota*, St. Paul, MN provided evaluations of each science news story beginning in October 2003. The contract included a timeline for different phases of the project with due dates. However, the agreement did not contain a specific end date.

In June of 2005, AIP terminated the NewsProNet subcontract because of organizational changes at NPN that affected the subcontract performance. At this time a new organization emerged, NewsProNet Interactive, LLC (NPNI). AIP sued both NPN and NPNI in Prince Georges County Circuit Court, Maryland. Among other things NPNI agreed to pay \$[REDACTED] in net unpaid program income from TV subscription revenues owed to AIP at the rate of \$[REDACTED] per month. AIP subsequently awarded a contract to Ivanhoe Broadcasting in June 2005, with a retroactive performance period going back to March 2005 to continue the work previously performed by NPN.

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

The objectives of our audit were to:

1. Determine whether AIP's Schedule of Award Costs (Schedules A-1) presents fairly, in all material respects, the costs claimed on the Federal Cash Transactions Reports (FCTRs), and whether the costs claimed including cost sharing by AIP are in conformity with the Federal and NSF award requirements.
2. Identify matters concerning instances of noncompliance with laws, regulations, and the provisions of the award agreements pertaining to the NSF awards and weaknesses in AIP's internal control over financial reporting that could have a direct and material effect on the Schedule of Award Costs (Schedule A-1) and AIP's ability to properly administer, account for, and monitor the NSF award.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards* (2003 Revision), issued by the Comptroller General of the United States; and the

guidance provided in the *National Science Foundation Audit Guide* (December 2004), as applicable. These standards and the *National Science Foundation Audit Guide* require that we plan and perform the audit to obtain reasonable assurance about whether the amounts claimed to NSF as presented in the Schedule of Award Costs (Schedule A-1) are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the Schedule of Award Costs. An audit also includes assessing the accounting principles used and the significant estimates made by AIP, as well as evaluating the overall financial schedule presentation. We believe that our audit provides a reasonable basis for our opinion.

SUMMARY OF AUDIT RESULTS

An audit was performed on the costs claimed on the financial reports submitted to NSF, as well as cost sharing provided by AIP for the NSF award. These costs and the results of our audit are shown in the Schedule of Award Costs (Schedule A-1) and are summarized as follows:

Award No.	Funding Source	Budget	Claimed Costs	Questioned Costs
ESI-0307862	NSF-Funded	\$2,348,603	\$2,034,850	\$77,658
	Cost Sharing	\$234,859	\$222,807	-
	Total Project	\$2,583,462	\$2,257,657	\$77,658

Except for the \$77,658 in questioned subcontract costs, we determined that the costs claimed by AIP appear fairly stated and are allowable, allocable, and reasonable for the NSF award. The \$77,658 in questioned subcontract costs included \$ [REDACTED] under the Ivanhoe Broadcast News, Inc. subcontract award because of billings to AIP for Spanish speaking DBIS episodes it had not delivered at the time of our audit. We also questioned \$ [REDACTED] of program income that was not paid to AIP as part of a final settlement with NewsProNet, Inc. (Note that AIP expended costs in addition to the claimed costs on this project. See Note B-3 on the Schedule of Questioned Costs in Schedule B-1 for a detailed explanation of these costs).

Our audit found three instances of non compliance with grant terms and conditions and federal requirements; the first two were also significant internal control deficiencies that contributed to the questioned subcontractor costs, and the grant related income that was not paid to AIP. Specifically:

- AIP's procurement practices for awarding subcontracts were not in accordance with federal requirements. We found that AIP (a) did not obtain adequate cost and pricing data for contracts over \$100,000 and (b) awarded subcontracts that had vague terms. For example, in some instances the type of contract or the firm dollar ceiling price was not identified. In addition, some contracts did not include all the federally required contract clauses, such as provisions for termination, access to records, and records retention. This occurred because AIP did not have adequate policies and procedures that required that it comply with federal procurement requirements. As a result, there was no assurance that the subcontract costs were reasonable or that AIP had enforceable terms in its subcontracts.

- AIP did not have adequate procedures to monitor its subcontractor activities in a timely manner. AIP claimed subaward costs of \$798,525 which represented 39 percent of the total costs claimed through December 31, 2006. However, there were no policies or internal controls in place to ensure that invoiced amounts were accurate, allocable, allowable, and adequately supported with documentation, in accordance with NSF and OMB grant requirements. AIP's failure to adequately monitor and review subcontractor's costs in a timely manner reduced AIP's ability to (1) efficiently and effectively manage and monitor NSF-funded expenditures, (2) determine proper payment of program income, and (3) adequately monitor the activities of its subcontractors. This resulted in invoices for \$ [REDACTED] being paid by AIP for services and deliverables that were not provided and \$ [REDACTED] in program income that was due to AIP but not paid.
- The award milestones for subscription sales in AIP's award agreement with NSF (both the original and the revised) were not being met; thus increasing the possibility that the DBIS project would not become self-sustaining as originally proposed by the end of the NSF award period. [REDACTED]

[REDACTED] As a result, there is a high risk that the DBIS program may not be able to continue beyond the NSF grant award period without a considerable amount of financial support by AIP and its contributing partners.

We recommend that the NSF Director for the Division of Institution and Award Support (DIAS) ensure that AIP, for current and future NSF awards:

- a. Establish and implement procurement contract procedures to obtain and evaluate adequate cost and pricing data; specify the type of contract and firm contract ceilings; and include all required contract clauses in all subcontracts over \$100,000;
- b. Establish and implement an adequate subcontract monitoring program to ensure that the subcontractors comply with the subcontract provisions and the accumulation of program income; and
- c. Work with Ivanhoe to find additional subscribing TV stations for the DBIS project and seek additional funding sources to fund the DBIS project after the NSF award is completed.

AIP's response stated that it did obtain pricing information before it awarded the NPN subcontract; it had a subcontractor monitoring plan; and it met all of its milestones, except the one for subscription sales. AIP provided its response embedded within the draft audit report and included Appendices A through T. Because these materials are voluminous, they are contained in a separate volume of this report and are available upon request from the NSF OIG. The auditor summarized AIP's response after each finding in the audit report and included an overall summary in Attachment A.

The findings in this report should not be closed until NSF has determined that all the recommendations have been adequately addressed and corrective actions have been satisfactorily implemented.

For a complete discussion of the audit findings, refer to the Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Schedules Performed in Accordance with Government Auditing Standards.

FOLLOW-UP OF PRIOR AUDIT FINDINGS

[REDACTED]

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EXIT CONFERENCE

We conducted an on-site exit conference on April 27, 2007, at AIP. We discussed the findings, as well as other observations contained in this report with those attending:

Representing AIP was:

Name	Title
[REDACTED]	[REDACTED]

Representing Foxx & Company was:

Name	Title
[REDACTED]	[REDACTED]

AUDIT FINDINGS AND RECOMMENDATIONS



National Science Foundation
Office of Inspector General
4201 Wilson Boulevard
Arlington, Virginia 22230

INDEPENDENT AUDITORS' REPORT ON FINANCIAL SCHEDULES

We have audited the costs claimed by the American Institute of Physics (AIP) to the National Science Foundation (NSF) on the Federal Cash Transactions Reports (FCTR) for the NSF award listed below. In addition, we audited the amount of cost sharing claimed for the award. The FCTRs, as presented in the Schedule of Award Costs (Schedule A-1), are the responsibility of AIP's management. Our responsibility is to express an opinion on the Schedule of Award Costs (Schedule A-1) based on our audit.

<u>Award Number</u>	<u>Award Period</u>	<u>Audit Period</u>
ESI-0307862	10/01/2003 to 09/30/08	10/01/2003 to 12/31/06

We conducted our audit in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in the *Government Auditing Standards* (2003 revision), issued by the Comptroller General of the United States; and the guidance provided in the *National Science Foundation Office of Inspector General Audit Guide* (December 2004), as applicable. These standards and the *National Science Foundation Office of Inspector General Audit Guide* require that we plan and perform the audit to obtain reasonable assurance that the amounts claimed to NSF as presented in the Schedule of Award Costs (Schedule A-1) are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the Schedule of Award Costs (Schedule A-1). An audit also includes assessing the accounting principles used and significant estimates made by AIP's management, as well as evaluating the overall financial schedule presentation. We believe that our audit provides a reasonable basis for our opinion.

The Schedule of Questioned Costs (Schedule B) explains the \$77,658 (■■■■) of total claimed NSF funded costs that we have questioned for allowability under the award agreement. These questioned costs include \$25,000 for ■■■■ Spanish speaking DBIS episodes billed by IBN but not completed or delivered by IBN to AIP and \$■■■■ of grant related income that was not paid by NPN to AIP. However, NSF should consider the over expenditure of funds on this project by AIP when considering the action to be taken on the questioned cost. (See Note B-3 on the Schedule of Questioned Costs for a detailed explanation of these costs).

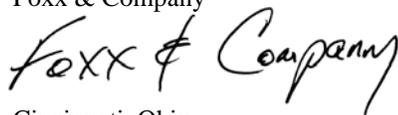
Questioned costs are (1) costs for which documentation exists to show that the recorded costs were expended in violation of the laws, regulations or specific conditions of the award, (2) costs that require additional support by the awardee, or (3) costs that require interpretation of allowability by NSF's Division of Institution and Award Support (DIAS). NSF will make the final determination regarding whether such costs are allowable. The ultimate outcome of this determination cannot presently be determined. Accordingly, no adjustment has been made to costs claimed for any potential disallowance by NSF.

In our opinion, except for \$77,658 of questioned NSF-funded costs, the Schedule of Award Costs (Schedule A-1) presents fairly, in all material respects, the costs claimed on the FCTRs for the period October 1, 2003, to December 31, 2006, in conformity with the provisions of the *NSF OIG Audit Guide*, *NSF Grant Policy Manual*, terms and conditions of the NSF award, federal requirements, and on the basis of accounting described in the Notes to the Financial Schedule, which is a comprehensive basis of accounting other than generally accepted accounting principles. This schedule is not intended to be a complete presentation of financial position of AIP in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards* and the guidance provided in the *National Science Foundation Office of Inspector General Audit Guide*, we have also issued a report dated April 27, 2007 on our tests of AIP's internal control over financial reporting and on compliance and other matters. The purpose of that report is to describe the scope of our testing over internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audit.

This report is intended solely for the information and use of the AIP's management, NSF, AIP's cognizant Federal audit agency, the Office of Management and Budget, and the Congress of the United States, and is not intended to be and should not be used by anyone other than these specified parties.

Foxx & Company

A handwritten signature in cursive script that reads "Foxx & Company". The signature is written in black ink and is positioned to the right of the typed name "Foxx & Company".

Cincinnati, Ohio

April 21, 2008

INTERNAL CONTROLS AND COMPLIANCE



National Science Foundation
Office of Inspector General
4201 Wilson Boulevard
Arlington, Virginia 22230

**INDEPENDENT AUDITORS' REPORT ON
INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE
AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL SCHEDULES
PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

We have audited the costs claimed as presented in the Schedule of Award Costs (Schedule A-1), which summarizes the financial reports submitted by the American Institute of Physics (AIP) to the National Science Foundation (NSF) and claimed cost sharing for the award listed below and have issued our report thereon dated April 21, 2008.

Award Number	Award Period	Audit Period
ESI-0307862	10/01/2003 to 9/30/08	10/01/03 to 12/31/06

We conducted our audit of the Schedule of Award Costs as presented in Schedule A-1 in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in the *Government Auditing Standards* (2003 revision), issued by the Comptroller General of the United States; and the guidance provided in the *National Science Foundation Office of Inspector General Audit Guide* (December 2004), as applicable.

INTERNAL CONTROL OVER FINANCIAL REPORTING

In planning and performing our audit of the Schedule of Award Costs (Schedule A-1) for the period October 1, 2003, to December 31, 2006, we considered AIP's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial schedule, but not for the purpose of expressing an opinion on the effectiveness of AIP's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of AIP's internal control over financial reporting.

Our consideration of internal control over financial reporting was for the limited purpose described in the preceding paragraph and would not necessarily identify all deficiencies in internal control over financial reporting that might be significant deficiencies or material weaknesses. However, as discussed below, we identified certain deficiencies in internal control over financial reporting that we consider to be significant deficiencies.

A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the entity's ability to initiate, authorize, record, process, or report financial data reliably in accordance with generally accepted accounting principles such that there is more than a remote likelihood that a misstatement of AIP's financial schedule that is more than inconsequential will not be prevented or detected by AIP's internal control. We consider the deficiencies described below as Finding Nos. 1 and 2, to be significant deficiencies in internal control over financial reporting.

A material weakness is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the financial schedules will not be prevented or detected by AIP's internal control.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in the internal control that might be significant deficiencies and, accordingly, would not necessarily disclose all significant deficiencies that are also considered to be material weaknesses. However, we believe that none of the significant deficiencies described below are a material weakness.

COMPLIANCE AND OTHER MATTERS

As part of obtaining reasonable assurance about whether AIP's financial schedule is free of material misstatement, we performed tests of AIP's compliance with certain provisions of applicable laws, regulations, and NSF award terms and conditions, noncompliance with which could have a direct and material effect on the determination of financial schedule amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests of compliance disclosed three instances of noncompliance that are required to be reported under *Government Auditing Standards* and the *National Science Foundation Office Of Inspector General Audit Guide* and are described in Finding Nos. 1 through 3 below.

AIP provided its response embedded within the draft audit report and included Appendices A through T. Because these materials are voluminous, they are contained in a separate volume of this report and are available upon request from the NSF OIG. The auditor summarized AIP's response after each finding in the audit report and included an overall summary in Attachment A. We did not audit AIP's response, and, accordingly, we express no opinion on it.

FINDINGS AND RECOMMENDATIONS

Finding No. 1 - Inadequate Procurement Practices for Awarding Subcontracts

AIP’s procurement practices for awarding subcontracts were not in accordance with federal requirements. We found that AIP (a) did not obtain adequate cost and pricing data for contracts over \$100,000 and (b) awarded subcontracts that had vague terms. For example, in some instances the type of contract or the firm dollar ceiling price was not identified. In addition, some contracts did not include all the federally required contract clauses such as provisions for termination, access to records, and records retention. This occurred because AIP did not have adequate policies and procedures that required that it comply with federal procurement requirements. As a result, there was no assurance that the subcontract costs were reasonable or that AIP had enforceable terms in its subcontracts.

(a) Lack of Cost and Pricing Data

AIP negotiated three separate sole source subcontracts with three subcontractors under the NSF award for amounts greater than \$100,000 without evidence of performing a cost or price analysis before awarding the subcontracts. Adequate documentation was not available to indicate how AIP determined that the subcontract amounts were reasonable. As a result, there was no assurance that AIP received the best price for the services procured.

According to OMB Circular A-110, Paragraph 45 (OMB Circular A-110 has been incorporated into 2 CFR 215) some form of cost or price analysis should be made for all procurement actions... Cost Analysis is the review and evaluation of each element of cost to determine reasonableness, allocability and allowability. Paragraph 46 states that procurement records and files for purchases in excess of the small purchase threshold, (\$100,000 for NSF), shall include the following at a minimum... (c) basis for award cost or price.

AIP negotiated contracts valued at over \$100,000 with the following entities under the NSF award:

Subcontractor	Contract Amount per year	Total Billed by Subcontractor to AIP Through 12/31/06	Claimed by AIP on the NSF Award Through 12/31/06
NewsProNet (NPN)	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Ivanhoe Broadcasting (Ivanhoe)	[REDACTED]	[REDACTED]	[REDACTED]
Univ. of Minnesota	\$350,000	\$252,612	\$174,979

AIP requested, received, and accepted estimates from NPN, Ivanhoe Broadcasting, and the University of Minnesota for subcontract effort without evidence that the amounts

proposed were reasonably priced. AIP stated that they had an independent estimate from an outside company that showed that the NPN contract amount was reasonable. However, the outside information was only a list of services which was not and could not be reconciled to the NPN contract amount. AIP did not provide any information on how they determined the Ivanhoe and the University of Minnesota subcontracts were reasonably priced.

For example, we found that the June 11, 2003 agreement between AIP and NPN that was included on the NSF award was more than double in price than a previous agreement dated January 2003 for essentially the same amount of work. The January 2003 agreement had a price of [REDACTED]

[REDACTED] represented the total amount of the costs to produce the DBIS episodes. NPN and AIP were to share [REDACTED]

[REDACTED] However, on June 11, 2003, AIP revised the agreement with NPN stating that the total cost of the production was [REDACTED]. NPN was to produce 144 DBIS English speaking episodes and 72 Spanish speaking episodes annually. AIP was to reimburse NPN annually for production costs estimated at \$ [REDACTED] marketing costs estimated at \$ [REDACTED] and web page costs estimated at \$ [REDACTED]. According to the agreement, [REDACTED]

The new subcontract was included in the grant application and approved by NSF. The new agreement did not address previous agreements or contracts between AIP and NPN nor did it discuss a [REDACTED]

As noted above, the June 2003 agreement was twice the cost of the January 2003 agreement to produce the same number of DBIS episodes. The only difference between the two agreements that we could determine was that the January 2003 agreement did not provide for the 72 Spanish speaking episodes (valued at about \$1,000 each by Ivanhoe) and the June 2003 agreement did not provide for the 50/50 split of revenues from subscriptions. In actual practice, the program income was split 50/50 between AIP and NPN. Therefore, NPN should have been offering AIP the discounted price provided in the January 2003 agreement for the June 2003 agreement that became part of the NSF grant award. AIP officials stated that the June 2003 NPN agreement used the "market rate" because of the change in the market. However, AIP did not provide documentation that the market had change in the 5 months between the January 2003 and the June 2003 agreement. With such a price analysis, which did not reconcile to the NPN contract price or a cost analysis of the NPN proposed costs, we could not determine if the June 2003 agreement represented a fair and reasonable price. We attempted to audit the records of NPN to determine the reasonableness of the costs and the amount of program income received. However, NPN and its successor, NPNI had gone out of business and the

accounting records could not be located. AIP officials stated that they did not know where the records were located. Attempts to locate former NPN officials were unsuccessful.

For the Ivanhoe subcontract that replaced the NPN subcontract, AIP was to pay for [REDACTED]. AIP could not demonstrate how it arrived at a reasonable price for the subcontract. Our audit of Ivanhoe disclosed that records were not readily available to support the subcontract amount. After several days of research, Ivanhoe was able to provide support for about [REDACTED] of the subcontract price. Ivanhoe stated that it had a fixed price contract with AIP and did not have to fully support the cost. In addition, AIP could not provide support for the portion of the subcontract that provided Ivanhoe Broadcasting with 50 percent of the revenues generated by the sale of DBIS episodes to TV stations. [REDACTED]

[REDACTED] AIP told us it was based on current market conditions. However, neither AIP nor Ivanhoe, provided documentation to support that the Ivanhoe subcontract price or the revenue split were fair and reasonable.

The subcontract price awarded to the University of Minnesota was based on a detailed estimate provided by the University. According to the subcontract, the contract price was either \$350,000 with overhead or \$323,060, if the University waived the overhead costs. Although requested, AIP could not provide evidence that a cost or price analysis of the University's estimate was performed. The final ceiling amount for the University subcontract was never clarified. As a result, there was no assurance that a fair and reasonable price was obtained for the subcontract.

In summary, without cost or pricing analysis to support the subcontract prices, AIP had no assurance that subcontract prices were fair and reasonable. In fact, subcontract prices for the NPN subcontract were significantly increased from the prior NPN agreement without any explanation and the Ivanhoe and University of Minnesota subcontract prices could not be fully supported.

(b) Vague and Inadequate Subcontract Terms

The terms and type of contracts held between AIP and its three subcontractors, NPN, Ivanhoe, and the University of Minnesota, could not be determined because the subcontracts did not identify ceiling prices or type of subcontract. The subcontract agreements did not include the type of contract (i.e. fixed or cost reimbursable), firm ceiling prices, or the clauses required by federal regulations such as provisions for termination (with the exception of the Ivanhoe contract), access to records and records retention. As a result, there was no assurance that AIP and NSF interests were adequately protected under these subcontract agreements.

According to Paragraph 48 of OMB Circular A-110, (2 CFR 215.48) contracts in excess of the small purchase threshold (\$100,000 for NSF), shall have provisions or conditions that allow for termination. Paragraph 48 also provides that all subcontracts over \$100,000 must have access to records for authorized representatives of the federal government. In addition Paragraph 48 (c) states that the type of procuring instrument used (fixed price, cost reimbursable, purchase orders, incentive contracts) shall be determined by the recipient. Furthermore, Appendix A of OMB Circular A-110 has required clauses that should be included in all subcontracts including Equal Employment Opportunity, Copeland "Anti-Kickback" Act, Contract Work Hours and Safety Standards, Rights to Inventions Made Under a Contract or Agreement, Clean Air Act, Byrd Anti-Lobbying Amendment, and Debarment and Suspension clauses.

Our review disclosed that the three subcontracts did not specify the type of contract such as fixed or cost reimbursable, did not always contain firm contract amounts, and did not include certain clauses required by federal regulations. For example, each of the three subcontracts did not specify whether the subcontracts were fixed or cost reimbursable, nor did any of the subcontracts have firm ceiling prices. Wording such as "about", or "estimated cost of", were used without specifying a "not to exceed" amount. With the exception of the Ivanhoe subcontract termination provision, the three subcontracts did not contain clauses required by OMB Circular A-110, such as access to records, termination and records retention. Furthermore, clauses required by OMB Circular A-110 were not included in the subcontracts.

The failure of AIP to ensure that subcontract documents described the type of contract, had firm contract ceilings and included all the subcontract clauses required by federal requirements provided no assurance that AIP and NSF interests were adequately protected. Also, if a record retention clause had been included in the NPN subcontract, the records might have been available for audit. Furthermore, had an adequate termination clause been included in the NPN subcontract, the termination of the NPN subcontract might have been conducted without legal involvement.

Recommendation No. 1:

We recommend that for all future subcontracts awarded by AIP under NSF awards, the NSF Director for the Division of Institution and Award Support (DIAS) direct AIP to develop and implement written policies and procedures to:

1. Obtain and evaluate adequate cost and/ or pricing support for all subcontracts prior to award;
2. Specify the type of contract, fixed or reimbursable, within all subcontracts and include specific contract ceiling amounts;
3. Include all applicable clauses in subcontracts as required by federal requirements - including termination procedures and access to records.

AIP Comments:

AIP states that it did obtain pricing information for the NPN subcontract prior to the award of the NSF grant and submitted it to NSF. AIP also states that the pricing data shows that the NPN prices were reasonable. AIP does not say anything about the Ivanhoe subcontract or the University of Minnesota subcontract in regard to cost or pricing analysis. AIP states that the reason the January 2003 subcontract [REDACTED]. The June 2003 agreement is at the market rate which was about twice as much as the January amounts. AIP stated that the market had changed and NPN's prices were what the market rate was. For both the Ivanhoe and the University of Minnesota contract AIP refers to Appendices E, H, I, J, and K.

For the (b) section of the finding, AIP provides its procurement procedures that include the Attachment from OMB Circular A-110 with the required clauses. AIP states that the NPN agreement had a termination clause and AIP still had a problem with terminating NPN.

Auditor's Response:

The Appendices E, H, I, J, and K do not constitute a price or cost analysis of the NPN, University of Minnesota, or Ivanhoe subcontracts. Specifically, Appendix E refers to prices received from Conus Communications which AIP represented as a price analysis for NPN. These prices could not be reconciled to the prices in the NPN subcontract. It is also not a cost analysis. Also, NPN did not offer any support for why the June 2003 agreement with NPN was so much more than the January 2003 agreement for essentially the same services. Therefore, the example remains in the final report. In addition, it is our belief that AIP did not perform an adequate cost or price analysis of the three major subcontracts. AIP does not offer any pricing or cost analysis data for either the Ivanhoe or the University of Minnesota subcontract. Therefore, the finding remains the same.

In regard to the (b) portion of the finding, although we did receive a copy of AIP's procurement procedures during the audit, the procedures did not contain the appendix with the required contract clauses. AIP did not contest that the necessary subcontracts clauses were missing. Also, AIP did not offer a reason for not having ceiling subcontract prices or stating what type of subcontract it was, cost reimbursable or fixed price. Therefore, the finding will remain the same. This finding should not be closed until NSF has determined that the recommendation has been adequately addressed and corrective actions have been satisfactorily implemented.

Finding No. 2: Inadequate Subcontractor Monitoring

AIP did not have adequate procedures to monitor its subcontractor activities in a timely manner. AIP claimed subaward costs of \$798,525 which represented [REDACTED] of the total costs claimed through December 31, 2006. However, there were no policies or internal controls in place to ensure that invoiced amounts were accurate, allocable, allowable, and adequately supported with documentation in accordance with NSF and OMB grant requirements. This resulted in invoices being paid by AIP for services and deliverables that were not provided and program income due AIP not being paid. Specifically, AIP paid subcontractor Ivanhoe \$ [REDACTED] for DBIS episodes that were not delivered. Additionally, AIP was not paid \$ [REDACTED] in program income owed to it by subcontractor, NPN.

OMB Circular A-110, Paragraph 47, (2 CFR 215.47) states that awardees are required to have a contract administration system to ensure contractor conformance with the terms, conditions and specifications of the contract. Paragraph 51 (a) requires recipients to manage and monitor each project, program and subaward. OMB Circular A-133, Subpart D, Section 400 (d.3) requires and awardee to “monitor the activities of subrecipients as necessary to ensure that federal awards are used for authorized purposes in compliance with laws, regulations, and the provisions of contracts or grant agreements and that performance goals are achieved. In addition, OMB Circular A-110, Paragraph 53b states that grantees and sub-grantees must maintain records associated with the government funded project for three years after the final payment on the award. Furthermore, Paragraph 24, states that awardees are required to account for program income related to projects financed in whole or in part with federal funds. Program income should be used to further the advancement of the funded project.

AIP did not have policies or internal controls in place to ensure the amounts on the invoices were accurate, allocable, allowable, and properly supported per NSF and OMB grant requirements. With the exception of the monthly subscription receipt reports provided by NPN and Ivanhoe to AIP, the subcontractors were not required to submit any supporting documentation with the invoices. In addition, with the exception of the internal audit of NPN discussed below, there was no evidence that indicated that AIP conducted financial monitoring at subcontractor locations. This situation occurred because AIP lacked adequate policies and procedures for a risk-based system to monitor and report its subcontract costs. As a result, the following two examples consisting of untimely monitoring and payments made but deliverables not provided were noted:

(a) *Untimely Monitoring of NPN Subcontract*

AIP did not perform timely monitoring of the NPN subcontract. NPN had performed the DBIS work since 1999 prior to the NSF award. However, AIP’s internal auditor did not perform a review of the reliability of NPN’s transactions relating to the DBIS program until late 2004 early 2005 completing the review in February 2005, just before the subcontract was terminated by AIP. Although the internal audit found that cash transactions for grant related income were not adequately supported and that contracts with subscribing stations were not always signed, before the internal audit could be issued as a final report, AIP had taken action to terminate the subcontract. As a result, AIP issued a replacement subcontract to Ivanhoe which was signed on June 10, 2005 but was made effective as of March 17, 2005 to cover the 3-month interim period where Ivanhoe had performed work without having a formal contract. Had the internal audit or some other form of monitoring been performed earlier, action could have been taken to resolve the issues disclosed.

Also, as mentioned, AIP terminated the subcontract with NPN in June 2005 and reached a court ordered settlement of ██████ with NPNI a successor entity. The ██████ represented net unpaid program income accumulated prior to the termination date. The outstanding program income due AIP was reduced to ██████ through payments by NPNI until it went out of business and ceased making payments. It was determined by AIP that the outstanding balance could not be recovered. Had monitoring been actively pursued by AIP, the program

income payments may not have become delinquent and the [REDACTED] would not be currently outstanding. Because AIP did not recover the [REDACTED] we consider it a questioned cost.

In addition, accounting records supporting costs incurred under the NPN subcontract were not available for audit. As discussed in Finding No. 1, AIP failed to include a record retention clause in its subcontract. Had AIP been performing subcontract monitoring the records may have been reviewed or obtained by AIP and been available for audit.

(b) *Lack of Monitoring of Ivanhoe Contract*

We found that Ivanhoe billed AIP [REDACTED] for Spanish speaking episodes that had not been delivered. Ivanhoe officials stated that they were billing in accordance with the terms of the subcontract, which allowed for [REDACTED] per Spanish speaking episode at the rate of two per month. However, we found that IBN had billed for 40 Spanish speaking episodes but had only completed and delivered 15 episodes as of February 2007. IBN officials stated that the episodes were in production but were waiting for AIP to select Spanish speaking experts for each episode. We consider that the [REDACTED] AIP paid for incomplete and undelivered episodes as a questioned cost.

AIP's failure to monitor and review subcontractor's costs in a timely manner reduced AIP's ability to (1) efficiently and effectively manage and monitor NSF-funded expenditures, (2) determine proper payment of program income, and (3) monitor the activities of its subcontractors. Inadequate subcontractor monitoring also resulted in \$77,658 of questioned subcontract costs.

Recommendation No. 2:

We recommend that the NSF Director of DIAS require AIP, for this and future NSF awards, to establish and implement an adequate program that monitors subcontractors' adherence to subcontract provisions and the accumulation of program income.

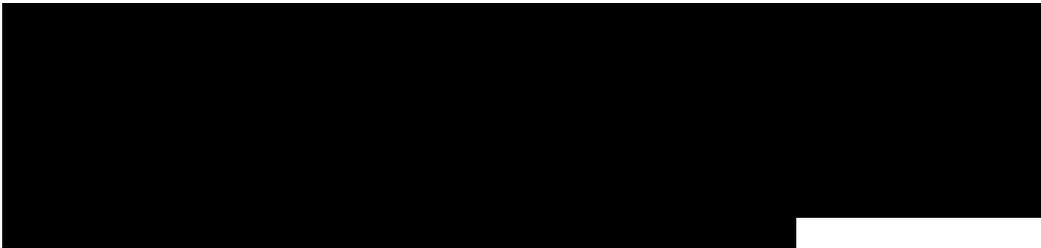
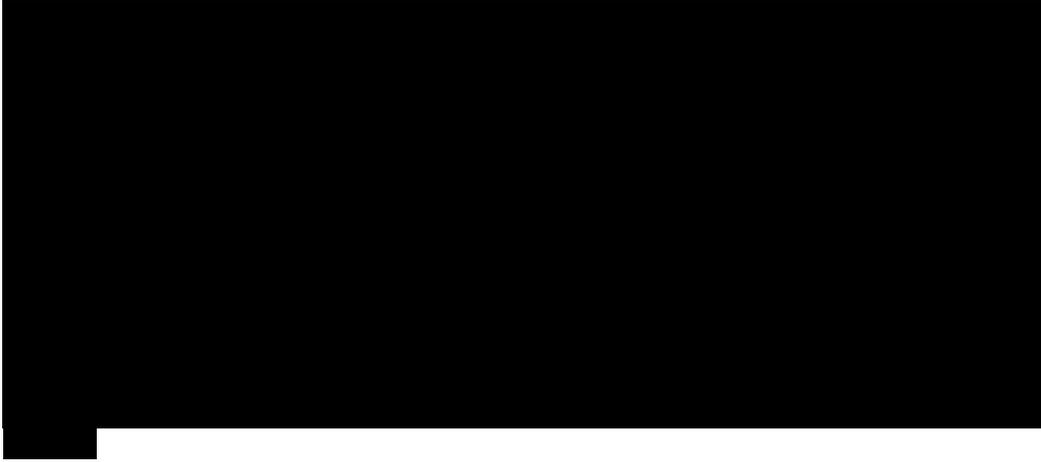
AIP Comments:

AIP stated that it did have a subcontract monitoring program that it provided to NSF. They believed that they did an adequate job of monitoring the subcontractor's performance. AIP also states it was aware that NPN was having problems and it was working with them. Also, they state that Ivanhoe has, since the audit, provided the 25 Spanish speaking DBIS episodes.

Auditor's Response:

AIP's subcontractor monitoring program was not effective. NPN did not pay the grant related income to AIP as required. Not until it was too late, AIP sent its internal auditor to review NPN's accounting for subscription sales. Shortly thereafter, AIP started legal proceedings to terminate NPN. Also, AIP does not explain why Ivanhoe was paid even though it had not delivered the 25 Spanish speaking DBIS episodes. We believe that this condition resulted from inadequate monitoring of these two subcontractors. Therefore, the finding will remain the same. This finding should not be closed until NSF has determined that the recommendation has been adequately addressed and corrective actions have been satisfactorily implemented.

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Foxx & Company

Foxx & Company

Cincinnati, Ohio
April 21, 2008

**FINANCIAL SCHEDULES AND
SUPPLEMENTAL INFORMATION**

SCHEDULE A-1

AMERICAN INSTITUTE OF PHYSICIS
COLLEGE PARK, MARYLAND
INTERIM AUDIT OF
NATIONAL SCIENCE FOUNDATION AWARD NO. ESI-0307862
SCHEDULE OF AWARD COSTS
OCTOBER 1, 2003, TO DECEMBER 31, 2006

Cost Category	Approved Budget (A)	Claimed Costs (B)	Questioned Costs	Schedule B Note Reference
Total Senior Personnel	[REDACTED]	[REDACTED]	\$ -	
Total other professional	[REDACTED]	[REDACTED]	-	
Fringe Benefits	[REDACTED]	[REDACTED]	-	
<i>Other Direct Costs:</i>				
Consultant services	[REDACTED]	[REDACTED]	-	
Sub awards/subcontracts	[REDACTED]	[REDACTED]	77,658	B-1&B-2
Other	[REDACTED]	[REDACTED]	-	
	<hr/>	<hr/>	<hr/>	
Total direct costs	\$ 2,348,603	\$2,034,850	\$ 77,658	
	<hr/>	<hr/>	<hr/>	
Cost Incurred in Excess of Claimed Costs	-	\$1,160,879	-	B-3
Cost sharing	\$ 234,859	\$222,807	-	
	<hr/>	<hr/>	<hr/>	

(A) Indirect costs were not awarded for this award.

(B) The total costs claimed agree with the total expenditures reported on the FCTR as of December 31, 2006. The claimed costs reported above are taken directly from the awardee's books of accounts. In addition, AIP's accounting records included a significant amount of additional expenditures on this project that were not claimed. See Note B-3.

The accompanying notes are an integral part of the financial schedules

SCHEDULE B-1

**AMERICAN INSTITUTE OF PHYSICS
COLLEGE PARK, MARYLAND
NATIONAL SCIENCE FOUNDATION AWARD NO. ESI-0307862
SCHEDULE OF QUESTIONED COSTS
OCTOBER 1, 2003 to DECEMBER 31, 2006**

Note B-1: The [REDACTED] questioned represents billings for Spanish speaking DBIS episodes billed by Ivanhoe Broadcasting that had not been delivered to AIP at the time of our audit. According to the subcontract between Ivanhoe and AIP, Ivanhoe was to bill [REDACTED] per Spanish speaking episode at the rate of two per month. At the time of our audit, Ivanhoe had billed for 40 episodes that were in various stages of production but not yet finished. According to Ivanhoe officials the episodes were not completed because Ivanhoe was awaiting AIP to find Spanish speaking experts that could discuss the subject matter of the particular DBIS episode. Because the episodes had not been delivered at the time of the audit, we have questioned the [REDACTED] billed for the 25 episodes.

Note B-2: The [REDACTED] questioned represents the remaining amount owed AIP from the final settlement with NewsProNet (NPN). In November 2006, AIP was notified that the successor to NPN, NPNI was ceasing monthly payments to AIP under the final settlement. AIP provided us with documentation stating that the assets of NPN and its successor NPNI had been purchased and the owners were not going to honor the settlement agreement. AIP officials stated that they were not going to take any additional legal action to recover the remaining balance plus interest of approximately [REDACTED] on the settlement. Because the settlement amount consisted of royalties (grant related income) which should have been used to further the DBIS program, we have questioned the [REDACTED].

Note B-3: Our audit disclosed that AIP had incurred additional expenditures over and above the amount claimed to NSF for the DBIS project by about \$1.1 million as of December 31, 2006. Specifically, AIP's accounting records indicated that AIP had expended \$4,785,778 on this project while the NSF funding and the actual cost share as claimed to NSF totaled \$2,257,657. Although this represented an over expenditure of \$2,528,121, there were certain amounts in the over expenditure which could not be accepted. Specifically, included in the over expenditure was [REDACTED] of overhead costs which were excluded from this project by the NSF award, and [REDACTED] of "in kind" expenditures from the NPN subcontract which could not be supported by AIP. Accordingly, there was a net over expenditure of \$1,160,879 (\$2,528,121-\$[REDACTED] - [REDACTED]). Because we audited the total expenditures shown on AIP's records, the \$[REDACTED] net over expenditures could be used by NSF to offset the questioned costs discussed in Note B-1 and B-2 if the NSF program officials determine that the additional expenditures are valid for award purposes.

The accompanying notes are an integral part of the financial schedules

Schedule C-1

**AMERICAN INSTITUTE OF PHYSICS
COLLEGE PARK, MARYLAND
INTERIM AUDIT OF
NATIONAL SCIENCE FOUNDATION AWARD NO. ESI-0307862
SUMMARY SCHEDULES OF AWARDS AUDITED AND AUDIT RESULTS
OCTOBER 1, 2003 to DECEMBER 31, 2006**

Summary of Award Audited

Award Number	Type of Award	Award Description
ESI-0307862	Grant	Discoveries and Breakthroughs Inside Science: Science TV News That Matters (DBIS)

Summary of Questioned and Unsupported Costs by Award

NSF Award Number	Award Budget	Claimed Costs	Questioned Costs	Unsupported Costs
ESI-0307862	\$2,348,603	\$2,034,850	\$77,658	-
Cost share	234,859	222,807	-	-
Total	\$2,583,462	\$2,257,657	\$77,658	-

Summary of Questioned Cost by Explanation

Condition	Questioned Cost Amount	Internal Control Weaknesses	Non-Compliance
Unfinished DBIS episodes		-	
Grant related income not paid to AIP		-	
Total Questioned Costs	\$77,658	-	\$77,658

Summary of Internal Control Weaknesses and Non-Compliance Issues

Condition	Internal Control or Non-Compliance	Significant Deficiency, Material Weakness, or Other	Amount of Questioned Cost Effected	Amount of Claimed/ Incurred Costs Effected
Inadequate Procurement Practices for Awarding Subcontracts	Internal Control and Non-compliance	Significant deficiency	\$0	\$798,525
Inadequate Subcontractor Monitoring	Internal Control and Non-compliance	Significant deficiency	\$77,658	\$798,525
AIP Not Meeting the Subscription Sales Milestones	Non-compliance	N/A	\$0	\$0

The accompanying notes are an integral part of the financial schedules

**AMERICAN INSTITUTE OF PHYSICS
INTERIM AUDIT OF
NATIONAL SCIENCE FOUNDATION AWARD NO. ESI-0307862
NOTES TO FINANCIAL SCHEDULES
OCTOBER 1, 2003 to DECEMBER 31, 2006**

Note 1: Summary of Significant Accounting Policies

Accounting Basis

The accompanying financial schedules have been prepared in conformity with National Science Foundation (NSF) instructions which are based on a comprehensive basis of accounting other than generally accepted accounting principles. Schedule A has been prepared by AIP from the Federal Cash Transaction Report submitted to NSF and AIP's accounting records. The basis of accounting utilized in preparation of these reports differs from generally accepted accounting principles. The following information summarizes these differences:

A. Equity

Under the terms of the award, all funds not expended according to the award agreement and budget at the end of the award period are to be returned to NSF. Therefore, the awardee does not maintain any equity in the award and any excess cash received from NSF over final expenditures is due back to NSF.

B. Equipment

Equipment is charged to expense in the period during which it is purchased instead of being recognized as an asset and depreciated over its useful life. As a result, the expenses reflected in the Schedule of Award Costs include the cost of equipment purchased during the period rather than a provision for depreciation.

Except for awards with nonstandard terms and conditions, title to equipment under NSF awards vests in the recipient, for use in the project or program for which it was acquired, as long as it is needed. The recipient may not encumber the property without approval of the federal awarding agency, but may use the equipment for its other federally sponsored activities, when it is no longer needed for the original project.

C. Inventory

Minor materials and supplies are charged to expense during the period of purchase. As a result, no inventory is recognized for these items in the financial schedules.

D. Federal Income Tax

AIP has no Federal income tax liability as a nonprofit organization.

The accompanying notes are an integral part of the financial schedules

**AMERICAN INSTITUTE OF PHYSICS
INTERIM AUDIT OF
NATIONAL SCIENCE FOUNDATION AWARD NO. ESI-0307862
NOTES TO FINANCIAL SCHEDULES
OCTOBER 1, 2003 to DECEMBER 31, 2006**

Note 2: NSF Cost Sharing and Matching

The following represents the cost share requirements and actual cost share as of December 31, 2006:

	<u>Cost Share Required</u>	<u>Actual Cost Share Claimed</u>	<u>Unsupported Cost Share</u>	<u>Actual Supported Cost Share</u>	<u>Actual Cost Share Over/(Under) Required</u>
Award No. ESI-0307862	\$ 234,000	\$ 222,807	\$ -	\$ 222,807	\$ (11,193)
Total	<u>\$ 234,000</u>	<u>\$ 222,807</u>	<u>\$ -</u>	<u>\$ 222,807</u>	<u>\$ (11,193)</u>

Note 3: Indirect Cost

NSF did not award indirect costs for Award No. ESI-0307862.

The accompanying notes are an integral part of the financial schedules

ATTACHMENT A

**AWARDEE'S COMMENTS TO REPORT
Summarized by Auditor**

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SUMMARY OF AIP'S RESPONSE

The auditor has reviewed the comments submitted by AIP in detail and will address their proposed changes to the draft report, their comments and the appendices to their comments. The auditor has addressed the comments as the comments relate to the findings, the recommendations, the questioned costs and other parts of the draft report. Finally, each appendix is discussed.

A. *Finding No. 1 – Inadequate Procurement Practices for Awarding Subcontracts*

AIP contends it obtained cost and pricing data for the NPN subcontract. The cost and pricing data that AIP supplied as Appendix E was a two page email from a Company called Conus Communications. The email only quoted hourly rates for editing and studio camera, half and full day costs for two person camera crew, encoding and tracking, etc. There was no indication of how this information related to the costs in the NPN subcontract. Even though AIP had dealt with NPN for several years before the NSF award, AIP did not obtain or analyze cost data from NPN. The other Appendices mentioned, H and I do not discuss any cost or price data. Nothing is offered by AIP to support how the contract prices for Ivanhoe or the University of Minnesota were arrived at.

In summary, even though AIP may have procurement procedures, AIP did not obtain adequate cost or pricing data for the subcontracts or did not put in the required contract clauses.

For the NPN example, the Appendices K, M, and J do not explain how the NPN price was arrived at or why the January contract amount was almost half of the June 2003 contract amount that became part of the NSF award. Appendix J, the negotiation memo that was never provided to the auditor during the audit, states that NPN agreed to produce the DBIS episodes [REDACTED]. The January 2003 agreement doesn't mention the [REDACTED]. Furthermore, 5 months later the agreement between AIP and NSF was increase to nearly [REDACTED]. [REDACTED]. The negotiation memo does not explain how the January 2003 agreement with NPN that resulted in a price of [REDACTED] per year which consisted of [REDACTED] to produce the DBIS episodes and [REDACTED] for marketing costs relates to the [REDACTED] to produce the DBIS episodes and [REDACTED] in marketing costs for essentially the same amount of work in the June 2003 agreement. The only difference was the [REDACTED] Spanish speaking DBIS videos per month which Ivanhoe produced several years later for [REDACTED] a piece. The negotiation agreement only states that the June 2003 agreement was at the market rate. No explanation is provided to support how the contract amount increased so dramatically in only a few months. Because a cost analysis was not performed and NPN's records

were not available there is no documentation available to determine what NPN's actual costs were or if the costs were reasonable.

For the University of Minnesota subcontract, AIP only provided the cost information provided by the University. Documentation supporting that AIP performed a cost analysis of the amounts was not provided during fieldwork or with AIP's response to the draft report.

For the Ivanhoe subcontract, no documentation was provided to support that a cost analysis was performed or the subcontract price was reasonable. AIP's only comment is that the Ivanhoe subcontract is a fixed price contract. As discussed in the audit report the auditor's review of Ivanhoe's records disclosed that Ivanhoe could not support the contract price.

Finding 1 (b) Vague and Inadequate Contract terms

In regard to the lack of contract clauses, AIP only refers to its procurement procedures at Appendix K. The procurement procedures that were provided with the comments to the draft have an added attachment that covers the required clauses. However, the procurement procedures that were provided to the auditor during the audit fieldwork did not have this attachment. AIP addresses the termination provision of the contracts, not the other clauses. The draft report acknowledged that the Ivanhoe subcontract had a termination clause but the NPN agreement provided to the auditor during the audit and the one submitted as Appendix M does not have a termination clause. Also, the NPN agreement does not refer to previous agreements that might have had a termination clause. Therefore, even though AIP states that the NPN subcontract had a termination clause, it doesn't. AIP did not address the University of Minnesota subcontract.

In summary, the subcontracts did not have the clauses required by federal regulations, nor were the subcontracts clear on what type of subcontracts, fixed or cost reimbursable. Also, the subcontracts did not have firm ceiling prices.

Finding No. 2- Inadequate Monitoring of subcontracts

AIP disagrees that they didn't have subcontract monitoring procedures for subcontracts. At Appendix F, AIP has provided their subcontractor monitoring procedures. AIP's subrecipient monitoring plan appears to have come from the federal regulations with AIP's name inserted. AIP stated that they were aware of NPN's problems and were working with them. However, during the audit, AIP officials told the auditor that NPN was terminated because the President left, not because they were having trouble performing. Had AIP performed adequate monitoring of NPN it might not have been necessary to initiate legal action against NPN to terminate the subcontract and get an agreement for NPN's successor to pay AIP subscription revenue owed. AIP did not provide the auditor with documentation

during the audit fieldwork which showed that AIP was working with NPN nor did AIP provide any with its comments.

In regard to the Spanish language DBIS episodes that Ivanhoe had billed for but not delivered at the time of our audit, AIP stated that the Spanish episodes had been delivered. However, AIP did not say that Ivanhoe has stopped billing on a monthly basis for Spanish language episodes, even though episodes might not be delivered. Accordingly, Ivanhoe could still be billing for episodes before actually delivering the Spanish speaking episodes. Also, if AIP was adequately monitoring the subcontract they should not have let Ivanhoe bill when episodes had not been delivered.

In summary, even though AIP had subcontract monitoring procedures, NPN still had to be sued to obtain monies owed AIP and Ivanhoe still billed for episodes not delivered

Finding No. 3-Milestones

AIP has provided much information about the milestones. AIP has used all subscribers in the number of subscribers for FY 2006, both paying and non paying. Foxx has used only paying subscribers. Our position has to do with the DBIS program becoming self sufficient.



Following is a discussion of each of the Appendices to AIP's comments:

Appendix A-Project Summary and Proposal to NSF

This document shows that the award had 7 other objectives besides self sufficiency of the DBIS program at the end of the NSF grant period. AIP contends that the draft report only focused on one of the 8 objectives of the award, building a self sufficiency model for the DBIS program. AIP believes that the other 7 objectives are equally or more important. The auditor did focus on the self sufficiency objective because it tied into the measurable goals of the award. The background of the audit report has been revised to include all 8 objectives. The finding on meeting milestones has been revised to only discuss the number of subscription paying stations and the amount of revenue generated.

Appendix B-Response to NSF grant application reviewer

This document provides questions asked by NSF prior to the award and AIP's responses. [REDACTED]

[REDACTED]. AIP still proposes self sufficiency and subscription sales amounts in both the original and revised milestones (See Appendix G)

Appendix C-AIP and Ivanhoe Agreement

The subcontract document supports that the Ivanhoe subagreement had an end date and a termination clause. However it also shows that the subcontract did not have the clauses required by federal regulations or whether the contract is fixed price or cost reimbursable. It also doesn't address a fixed ceiling contract price.

Appendix D-University of Minnesota agreement

This document represents the University of Minnesota subcontract. The subcontract does not have not a firm end date but states that the contract period is August 2006 to the end of project. The agreement does show that the required clauses are missing and that there is no termination agreement. The subcontract does not state whether it is cost reimbursable or fixed price.

Appendix E-Estimate for Subcontract – CONUS Communications

According to AIP this document represents how AIP determined that the NPN subcontract price was reasonable. It is just a listing of prices. AIP claims that this document which AIP states was submitted with its grant application to NSF supports that a price/cost analysis was performed of the NPN subcontract. It cannot be reconciled to the NPN subcontract. It doesn't qualify as a price analysis and it is surely not a cost analysis.

Appendix F-AIP's Subrecipient Monitoring Plan

AIP provided a document that represents their subrecipient monitoring plan. The final report will mention AIP submitted a plan. However, the fact remains that NPN had to be sued to obtain the grant related income and Ivanhoe still billed for Spanish DBIS episodes that were not delivered. If the plan was in effect during the audit period, it does not appear to very effective.

Appendix G-AIP's request to change the milestones

This document shows all of the milestones involved with the award. Because of the confusion between number of contributing organizations, subscribing stations, and the non NSF/ non AIP funding, we have revised the finding on milestones to deal with only subscription revenue. We have used the subscription revenue milestones included in this letter to NSF for both the original and revised milestones. See Finding No. 3 of the revised draft report.

Appendix H-Production and Marketing Company Backgrounds

AIP provided these documents to show how Ivanhoe was selected to replace NPN. It shows how AIP narrowed their search for replacement for Ivanhoe. The report findings does not have to do with the selection of Ivanhoe but have to do with the reasonableness of the costs, no cost or price analysis and the lack of required clauses.

Appendix I-Subrecipient Monitoring Plan

This document represents AIP's monitoring plan. However, it appears to be just the regulations on subrecipient monitoring. The auditor does not believe this was provided during the field work. It does not explain why AIP waited so long to send the internal auditor out to NPN or let Ivanhoe bill for episodes not delivered.

Appendix J-Negotiation Summary between AIP and NPN

AIP has provided this document to show that negotiations took place before the NPN contract was awarded. The document is undated and the auditor was not provided the document during the audit field work. Whenever the auditor asked about how NPN was selected AIP stated that the subcontract was approved as part of the grant award. AIP also said there was no other company that could do the work. The document does not adequately explain how the NPN contract price was arrived at. There is no evidence of a cost analysis or even an adequate price analysis. The document just says that another firm would produce the DBIS episodes for [REDACTED] a piece without showing how the [REDACTED] amount was calculated.

Appendix K-Price estimate for a large study

This document is an email that has a price for a study from an outside company. It mentions [REDACTED] and a [REDACTED] contingency. It was sent to the President of NPN. However, we are not sure how it relates to the prices of the three subcontracts.

Appendix L-AIP's Purchasing Procedures

This document represents AIP's purchasing procedures. The auditor was provided these procedures during the audit. However, there was not an Attachment with the required subcontract clauses on the copy the auditor received during the audit. However, as discussed in the draft report, AIP did not perform adequate cost or price analysis for the three large subcontracts nor did AIP put in the required clauses in the awarded subcontracts.

Appendix M-AIP and NPN June 2003 Agreement

This appendix consists of the agreement between AIP and NPN which outlines what was to be performed by each party. A review of the agreement shows that there is not a termination clause or any other of the clauses required federal grant regulations included in the agreement.

Appendix N-AIP and Ivanhoe Agreement June 6, 2005

This is a memorandum of understanding between AIP and Ivanhoe that was apparently arrived at two days before the Appendix C agreement. The last two pages, the sub agreement budget, were not included on the agreement that was provided to the auditor during fieldwork. Also, these two budget pages are in a different font than the rest of the agreement. As we discuss in the report, Ivanhoe could not support the cost of producing the DBIS episodes nor did they have anything like these budget sheets to provide us when the auditor performed the audit of Ivanhoe's books and records.

Appendix O-Questions generated by NSF prior to the award

This document is an email from the NSF program personnel asking a number of questions about AIP's proposal and it includes AIP's responses to the NSF questions. AIP did not provide the attachments or NSF's response. The auditor can only assume that the purpose of this document is to show that AIP did inform NSF about the NPN subcontract and provide the CONUS memo on prices that is supposed to represent a price analysis supporting the NPN contract price. It is interesting to note that NSF asked what type of contract the NPN agreement was and NPN replied fixed price. But AIP never put that in the agreement or any of its agreements. Just because NSF awarded the grant to AIP and the award included the NPN subcontract does not change the report comments about the NPN subcontract. The subcontract did not state the type of contract, did not have the required clauses, an adequate cost or price

analysis was not performed, and the price analysis could not be reconciled to the NPN contract.

Appendix P-Email from NSF Stating that the Changed Milestones did not require a grant amendment

This memo is from NSF stating that a grant amendment is not necessary for a change in the milestones. This was not provided to the auditor during field work. It is actually dated after the audit exit conference. It is interesting that a reduction in the milestones did not require a grant amendment. The final report includes a statement about the NSF memo.

Attachment Q-Email to NSF supporting the selection of Ivanhoe to replace NPN

AIP provided this memo to show that they did inform NSF how they selected Ivanhoe.

Attachment R-Letters to NSF with Results of DBIS project for 2004 and 2006

These letters to NSF are updates to show AIP's progress toward the milestones and justification for the 2007 award amount. The number of stations for 2006 does not reconcile to the number of stations at the conclusion of the audit fieldwork. The auditor obtained information from Ivanhoe and AIP that showed only [REDACTED] while the memo to NSF shows [REDACTED]. Also, the dollar amounts cannot be verified. Because of this, we have revised the third finding to deal with paid subscriptions not any of the other milestones. (It is curious that NSF decided that a grant amendment was not necessary for the changed milestones but that is what AIP focused on when asking for the FY2007 funding)

Attachment S-Summary of DBIS project as of April 2008

It appears that this information was put together as a result of the audit report to show where AIP stood on the NSF funded project. It also may be used by AIP to get additional funding from NSF which it does mention. Also, it does state that during 2007 subscription revenue was [REDACTED] which is not even [REDACTED] of the 2007 milestone for subscription revenue. Because the 2007 amount is outside the scope of the audit, it does not pertain to the final audit report.

Attachment T-2005 and 2006 Subscribers

This document is apparently a presentation that lists the DBIS subscribers for 2005 and 2006. It does not reconcile to the numbers was provided during the fieldwork from AIP and Ivanhoe for 2006 during our audit. Our work papers only show [REDACTED] total subscribers for 2006. In any event, we have revised Finding No. 3 to focus on paid subscriptions and the amounts which were received for the project.

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