

**THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.**  
College Park, Maryland

Financial and Compliance Audit  
of  
Indirect Costs  
For the Years Ended  
December 31, 1997, 1998, 1999 and 2000

M.D. Oppenheim & Company, P.C.  
Certified Public Accountants  
8403 Colesville Road  
Suite 340  
Silver Spring, MD 20910-3367

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.

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THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.

Acronyms

<u>Acronym</u>	<u>Explanation of Acronym</u>
AAPT	American Association of Physics Teachers, Inc.
AICPA	American Institute of Certified Public Accountants
DACS	Division of Acquisition and Cost Support
DGA	Division of Grants and Agreements
FCTR	Federal Cash Transactions Report
IDCP	Indirect Cost Proposal
MTDC	Modified Total Direct Costs
NSF	National Science Foundation
OIG	Office of Inspector General
OMB	Office of Management and Budget

**SECTION I**

**INTRODUCTION AND AUDIT RESULTS**

## **SECTION I - INTRODUCTION AND AUDIT RESULTS**

### **BACKGROUND**

The American Association of Physics Teachers, Inc. (AAPT) is a not-for-profit, tax-exempt organization established with the objective of improving the quality of physics instruction and enhancing the appreciation of the role of physics in our culture.

AAPT receives approximately \$3.6 million of annual revenues, mainly from publication subscriptions, membership dues, meetings, workshops and federal financial assistance. Of the \$3.6 million of annual revenues, federal financial assistance approximates \$711,000. During the four-year period of our audit, the National Science Foundation (NSF) provided 100% of the federal financial assistance to AAPT, and, as such, was the cognizant federal audit agency for AAPT's indirect cost rates.

### **OBJECTIVE AND SCOPE OF AUDIT**

At the request of the NSF, M. D. Oppenheim & Company, P.C. conducted a financial and compliance audit of the indirect cost proposals prepared by AAPT for the years ended December 31, 1997, 1998, 1999 and 2000 to determine final indirect cost rates for those years. During the period of our audit, there were ten NSF awards. Two awards were based on a maximum provisional rate specified in the award letter and/or budget. One did not have any indirect costs. The other seven awards did not state the type of rate in the award letter and/or budget. Our audit objectives were: (1) to determine whether AAPT complied with federal requirements in computing its indirect cost proposal; (2) determine whether AAPT over or under-recovered indirect costs on each NSF award active during the audit period, based on audit-determined indirect cost rates, and (3) to evaluate the adequacy of AAPT's internal controls to administer, account for, and monitor indirect cost charges to federal awards. Over/under recovery of costs was calculated using provisional rates.

To accomplish the objectives of the audit, we:

- Conducted an on-site audit survey with sufficient observations, interviews, and examinations of documents to make an initial determination whether the maximum provisional rates were based on allowable indirect costs and whether controls to administer, account for, and monitor indirect costs are adequate to ensure compliance with federal cost principles and administrative requirements.
- Prepared an audit planning document for OIG review and approval. The planning document included a description of AAPT's organizational structure and the process used to administer, account for, and monitor indirect cost charges to federally sponsored awards. As part of the planning process we performed an assessment of audit risk and obtained an understanding of AAPT's control environment.

- Prepared an internal control audit planning document, for OIG review and approval. The internal control planning document included the proposed audit programs/procedures for testing the significant internal controls necessary to accurately administer, account for, and charge indirect cost charges to federally sponsored awards. As part of the internal control process, we assessed the areas of control environment, risk assessment, information and communication, monitoring and control activities.
- Prepared a substantive audit testing planning document for OIG review and approval. The substantive planning document included the preliminary results of the internal control phase of the audit, including any findings and recommendations and the proposed audit program, which included the tests on compliance with applicable laws and regulations and substantive testing procedures to be applied to the indirect cost pools and the direct cost base.
- Performed testing procedures so as to determine whether the indirect cost proposals and the resultant indirect cost rates comply with OMB Circulars A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals and Other Nonprofit Organizations*, and A-122, *Cost Principles for Non-Profit Organizations*.

We conducted our audit in accordance with AICPA auditing standards generally accepted in the United States of America, Comptroller General's *Government Auditing Standards* and included tests of the accounting records and other auditing procedures that we considered necessary to fully address the audit objectives.

## SUMMARY OF AUDIT RESULTS

We identified significant deficiencies in AAPT's calculation of its indirect cost rates for the four-year period ending December 31, 2000. The total audit adjustments and eliminations necessary to correct inaccuracies in the rate calculations amount to \$929,175 in total reductions to the indirect cost pools and \$414,025 total additions to the direct cost bases for the four-year period. As a result, AAPT over-charged \$58,906 or 8% of total claimed indirect costs on five of its NSF awards active during the four years.

AAPT included a schedule of its indirect cost calculation in its Single Audit report for the years 1997-2000. However, NSF never recognized receipt of AAPT's indirect cost proposals. As a result, AAPT was assigned a maximum provisional rate of 40.51 % that was not finalized for four years. This rate is higher than the audited rate by as much as 11 % and resulted in the \$58,906 cost over-recovery. The deficiencies and internal control weaknesses cited in our report could affect the reliability of AAPT cost information that NSF would use to establish future AAPT indirect cost rates. Therefore, because of these control weaknesses, NSF should continue to use a maximum provision indirect cost rate with AAPT, although OMB encourages the use of predetermined indirect cost rates.

We found the following instances of non-compliance and internal control weaknesses in AAPT's accounting for its indirect costs:

### **Material Non-Compliance**

- AAPT misclassified \$535,193 of direct program costs as indirect costs. This represents 11 % of total indirect costs for the audit period. These direct costs consisted of AAPT support for its primary mission of improving the quality of physics instruction and enhancing the appreciation of the role of physics in our culture. These errors occurred because the staff lacked adequate training regarding the applicable federal cost principles.
- AAPT did not offset various sources of income used to reimburse administrative payroll and operational expenses in the indirect cost pools totaling \$322,269. This represents 6% of total indirect costs for the audit period. These errors occurred because the staff lacked adequate training regarding the applicable federal cost principles.
- AAPT did not exclude subcontract costs from the direct cost base totaling \$121,168. This represents 2% of total direct costs for the audit period. It appears these errors were due to an oversight when the indirect cost proposals were prepared since some years excluded more costs than other years.
- AAPT did not submit an indirect cost proposal to NSF for the four-year period ending December 31, 2000. AAPT believed that schedules submitted as an attachment to its Single Audit report met its required yearly submission of an indirect cost proposal. The lack of compliance was undetected by AAPT because NSF continued to annually fund the organization. It was not until May 2001 that NSF notified AAPT in writing that its indirect cost submissions were outstanding for the four-year period.

## **Non-Material Non-Compliance**

- AAPT included unallowable costs for bad debt expense, penalties, some travel expenses, entertainment and unrealized investment losses in its indirect cost pools totaling \$42,351. This represents .8% of total indirect costs for the audit period. This occurred because its staff overlooked specific federal regulations stating that such costs could not be charged to the federal government.

## **Internal Control Weakness**

AAPT does not have adequate control procedures related to the preparation and submission of its IDCP. We identified material errors in AAPT's calculation of its indirect cost rates for the four-years ended December 31, 2000 that resulted in audited indirect cost rates as much as 11 percentage points lower than the approved maximum provisional rate. We found that AAPT staff did not completely understand federal regulations related to the preparation and submission of IDCPs and did not have written policies and procedures documenting this process. In addition, we found immaterial control weaknesses related to AAPT's time and effort reporting, and an adjustment totaling \$29,362 was required because of inadequate source documentation provided to support some expenditures.

To address the compliance deficiencies and internal control weaknesses, we recommend that the Directors of NSF's Division of Acquisition and Cost Support, (DACS) and the Division of Grants and Agreements (DGA) require that AAPT develop and implement written policies and procedures that address (1) the proper classification of direct and indirect costs to ensure that AAPT's future indirect cost rate proposals do not include mission-related costs in its indirect cost pools, (2) identification of applicable credits related to AAPT's operations, (3) identification of distorting costs that should be excluded from the direct cost base, and (4) the adequacy and retention of original supporting documentation. We also recommend that NSF require AAPT to ensure its accounting staff receives training, as needed, in the preparation of indirect cost proposals and federal cost principles. AAPT should work with NSF to ensure that its indirect cost rates are finalized timely.

## **Summary of Auditee's Response**

With respect to the compliance issues presented in the report, AAPT has indicated their concurrence with the findings regarding the misclassification of direct costs as indirect costs, the lack of proper offset of applicable credits, the incorrect adjustment of the direct cost base, failure to submit an indirect cost proposal annually, and unallowable costs included in the indirect cost pool. They indicated that written policies and procedures will be developed and implemented to address these issues and that its IDCP will be submitted annually.

With respect to the internal control findings, AAPT also indicated concurrence with the need to improve their procedures related to the preparation of the IDCP, the need to retain adequate original supporting documentation, and the need to strengthen controls over their time and effort reporting system. They indicated that the staff will attend training on how to develop indirect cost proposals and that written policies and procedures will be developed and implemented to address these control weaknesses.

**EXIT CONFERENCE**

An exit conference was held on March 4, 2002 at the Auditee's office located at One Physics Ellipse, College Park, Maryland. The findings on compliance and internal control along with the adjustments, eliminations and exclusions related to the indirect cost proposals were discussed by the following individuals.

For The American Association of Physics Teachers, Inc.:

[REDACTED]

For M.D. Oppenheim & Company, P.C.:

[REDACTED]

**SECTION II**

**FINDINGS AND RECOMMENDATIONS**

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

**INDEPENDENT AUDITORS' REPORT ON COMPLIANCE  
AND INTERNAL CONTROL**

We have audited the summary schedule of over/(under) recovered indirect costs (Schedule A) and the schedules of indirect/direct costs (B-1 to B-4) which summarize the indirect cost proposals prepared by The American Association of Physics Teachers, Inc. for the years ended December 31, 1997, 1998, 1999 and 2000, and have issued our report thereon dated March 4, 2002. 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* issued by the Comptroller General of the United States and the *National Science Foundation Audit Guide* (September 1996).

**Compliance**

As part of obtaining reasonable assurance about whether The American Association of Physics Teacher's financial schedules are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, and policies, noncompliance with which could have a direct and material effect on the determination of the financial schedules 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 disclosed instances of noncompliance, as reported in the accompanying Findings and Recommendations on Compliance and the adjustments and eliminations noted in Schedules C-1 to C-5, that are required to be reported under *Government Auditing Standards* and the *National Science Foundation Audit Guide*.

**Internal Control Over Financial Reporting**

In planning and performing our audit, we considered The American Association of Physics Teachers' internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial schedules and not to provide assurance on the internal control over financial reporting. However, we noted certain matters involving internal control over financial reporting and its operation that we consider to be reportable conditions. Reportable conditions involve matters coming to our attention relating to significant deficiencies in the design or operation of the internal control

over financial reporting that, in our judgment, could adversely affect The American Association of Physics Teachers' ability to record, process, summarize and report financial data consistent with the assertions of management in the financial schedules. The reportable conditions noted are described in the accompanying Findings and Recommendations on Internal Control.

A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial schedules being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control that might be reportable conditions and, accordingly, would not necessarily disclose all reportable conditions that are also considered to be material weaknesses. However, we consider the reportable condition described in finding I to be a material weakness.

This report is intended solely for the information and use of The American Association of Physics Teachers, Inc. and the National Science Foundation and is not intended to be and should not be used by anyone other than these specified parties.

*M.D. Oppenheim & Company, P.C.*

March 4, 2002

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
Findings and Recommendations on Compliance  
For the years ended December 31, 1997, 1998, 1999, and 2000

Material Deficiencies

**1. Misclassification of Direct Costs as Indirect Costs**

**OMB** Circular A-122 states that "[d]irect costs are those that can be identified specifically with a particular final cost objective, i.e., a particular award, project, service, or other direct activity of an organization." In a broader sense, direct costs are those that can be specifically identified with an organization's mission. AAPT's mission is to improve the quality of physics instruction and to enhance the appreciation of the role of physics in our culture. Therefore, all costs specifically identifiable with those activities should be classified as direct costs. In addition, **OMB** Circular A-122 states that "the costs of activities performed primarily as a service to members, clients, or the general public when significant and necessary to the organization's mission must be treated as direct costs whether or not allowable...."

For the four years under audit, AAPT erroneously included mission-related costs totaling \$535,193 in the indirect cost pool. The expenses consisted of various marketing and award expenditures, collection of membership dues, an international science and engineering fair, and the Campaign for Physics for membership promotion and recruitment. These expenditures were included in administrative indirect cost pools identified as the "Executive Office", "Membership Dues" and "Display and Outreach" cost centers.

AAPT included these costs in the indirect cost pool because the staff lacked adequate training regarding the applicable cost principles requiring all mission-related costs to be treated as direct program costs.

**Recommendation**

We recommend that the Directors of NSF's Divisions of DACS and DGA require that AAPT develop and submit for NSF approval written policies and procedures for the classification of direct and indirect costs, and ensure that AAPT's future indirect cost rate proposals do not include mission-related costs in its indirect cost pools. In addition, we recommend that NSF ensure that AAPT receives training on how to properly and accurately prepare an indirect cost proposal.

**Auditee's Response**

We concur and will attend training on how to prepare an indirect cost proposal. We will write policies and procedures for the classification of direct and indirect costs.

**Auditor's Response to Auditee's Response**

AAPT's proposed actions address the weaknesses noted. We recommend that the Director's of NSF's DGA and DACS require that AAPT provide NSF with documentation that its policies and procedures have been revised and implemented.

## **2. Applicable Credits Not Properly Offset**

OMB Circular A-122 requires that "to the extent that such credits accruing or received by the organization relate to allowable cost, they shall be credited to the Federal Government." AAPT did not apply credits and various revenues as offsets to costs recorded in the indirect cost pool. For example, AAPT received \$200,133 of program income that was used to reimburse the organization for some of its Executive Administrative department payroll. These payroll costs are included in the indirect cost pool and should be reduced in the indirect cost rate calculation to recognize the extent to which AAPT has already been reimbursed for these costs. Other credits found that were not properly offset against indirect costs included (1) the write-down of accounts payable totaling \$106,030, which AAPT had recorded as an increase to revenue rather than a reduction of expense, (2) member donations received to defray administrative and membership costs included in the indirect cost pool; and (3) \$16,106 of building rental income which offset occupancy costs. Because these credits were not applied to reduce costs in the indirect cost rate calculations, it resulted in the rates being overstated.

AAPT staff lacked adequate training regarding the federal cost principles, specifically the cost principle related to the offset of applicable credits.

### **Recommendation**

We recommend that the Directors of NSF's Divisions of DACS and DGA require that AAPT develop and implement policies and procedures to identify applicable credits related to AAPT's operations and ensure that future indirect cost proposals reflect the correct application of these offsets.

### **Auditee's Response**

We concur and will write policies and procedures to identify applicable credits and properly offset.

### **Auditor's Response to Auditee's Response**

AAPT's proposed actions address the weaknesses noted. We recommend that the Director's of NSF's DGA and DACS require that AAPT provide NSF with documentation that its policies and procedures have been revised and implemented.

### **3. Direct Cost Base Incorrectly Adjusted**

OMB Circular A-122 states that a total direct cost base used in the indirect cost calculation should exclude distorting items such as major subcontracts. In addition, direct costs should be allocated their fair share of the organization's indirect costs only if they benefit from the organization's indirect costs. We found that AAPT did not properly exclude all subcontract costs from the direct cost base totaling \$121,168.

It appears that AAPT did not adequately review the indirect cost proposal to ensure all adjustments and eliminations were complete and accurate as some years excluded most of the costs while other years did not.

#### **Recommendation**

We recommend that the Directors of NSF's Divisions of DACS and DGA require that AAPT develop and implement written policies and procedures to identify distorting costs that should be excluded from the direct cost base and ensure that AAPT review its annual indirect cost proposal for accuracy and compliance with the federal cost principles prior to submission to NSF.

#### **Auditee's Response**

We concur and will write policies and procedures to identify costs that should be excluded from the direct cost base.

#### **Auditor's Response to Auditee's Response**

AAPT's proposed actions address the weaknesses noted. We recommend that the Director's of NSF's DGA and DACS require that AAPT provide NSF with documentation that its policies and procedures have been revised and implemented.

#### **4. Indirect Cost Proposal Not Submitted Annually**

OMB Circular A-122 specifies that "[o]rganizations that have previously established indirect cost rates must submit a new indirect cost proposal to the cognizant agency within six months after the close of each fiscal year." AAPT believed it had properly submitted its indirect cost proposal in a timely manner by including schedules of the calculation of its indirect cost rates in its Single Audit report. As AAPT had not received any response from NSF and continued to receive funding from the agency on a yearly basis, AAPT assumed that it was in compliance with federal regulations. However, in May 2001 NSF corresponded with AAPT requesting it submit its indirect cost proposals for the years 1997 - 2000. This was the first communication AAPT received from NSF to indicate it may not be in compliance concerning its indirect costs submissions. The result was that AAPT operated with the same maximum provisional rate over the four-year period. Additionally, because of a lack of knowledge about the indirect cost rate process, AAPT also did not contact NSF during this same period to ensure its rates were finalized in a timely manner. This has left the organization vulnerable for a liability for over-recovery of costs.

#### **Recommendation:**

We recommend that the Directors of NSF's Divisions of DACS and DGA ensure that AAPT submit its indirect cost proposal annually and contact NSF, as needed, to ensure its indirect cost rate is finalized in a timely manner.

#### **Auditee's Response**

We concur and will submit an indirect cost proposal annually and follow up with NSF as needed.

#### **Auditor's Response to Auditee's Response**

AAPT's proposed actions address the weaknesses noted. We recommend that the Directors of NSF's DGA and DACS require that AAPT submit its indirect cost proposal annually and ensure that the indirect cost rate is finalized in a timely manner.

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
Findings and Recommendations on Compliance  
For the Years ended December 31, 1997, 1998, 1999, and 2000

Non-Material Deficiency

**5. Unallowable Costs Included in the Indirect Cost Pool**

OMB Circular A-122 and federal regulations state that costs such as bad debt expense, penalties, some travel expenses, entertainment costs, and unrealized investment losses are unallowable costs in the indirect cost pool. Federal cost principles state that travel costs should be allowable if they are reasonable. In the absence of specific written AAPT travel policies, Standard Government Travel Regulations provide a measure of approved per diem and mileage rates. Unallowable costs identified totaled \$42,351. In some instances, AAPT included these costs in its indirect cost pool because its accounting staff overlooked the federal provisions that state these costs are not allowable. At other times, AAPT staff lacked adequate knowledge and training regarding the applicable federal cost principles for certain unallowable expenditures.

**Recommendation:**

We recommend that the Directors of NSF's Divisions of DACS and DGA ensure that AAPT complies with all federal regulations and the provisions in OMB Circular A-122 regarding the unallowability of specific cost categories. In addition, we recommend that NSF ensure that AAPT's chart of accounts be designed to facilitate the identification and segregation of unallowable charges.

**Auditee's Response**

We concur and will review our chart of accounts to ensure the identification and segregation of unallowable charges.

**Auditor's Response to Auditee's Response**

AAPT's proposed action address the weaknesses noted. We recommend that the Directors of NSF's DGA and DACS require that AAPT provide NSF with documentation that its chart of accounts has been designed to facilitate the identification and segregation of unallowable charges.

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
Findings and Recommendations on Internal Control  
For the Years ended December 31, 1997, 1998, 1999, and 2000

Material Weakness

**1. Inadequate Procedures Related to the Preparation of the IDCP**

Our audit identified significant weaknesses in the Association's processes for accounting for indirect cost charges to NSF awards. In particular, AAPT has experienced high turnover among its financial staff over the last several years, which has played a role in the staffs' lack of understanding of federal cost principles related to indirect costs. In addition, the problems caused by staff turnover were exacerbated because AAPT did not have written procedures related to its indirect cost calculation process. Written procedures would have provided a greater degree of continuity and guidance to new employees unfamiliar with federal regulations or AAPT's federal grant administration operations.

As a result, we identified material errors in AAPT's calculation of its indirect cost rates for the four-year period ended December 31, 2000 (see Summary of Audit Results). AAPT's indirect costs were overstated by a net amount of \$929,175 while its direct costs were understated by \$414,025. This resulted in AAPT proposing to NSF indirect cost rates as much as 11 percent higher than it actually incurred. In addition, NSF was over-charged \$58,906, or 8% of total claimed indirect costs, on 5 of the NSF awards active in the audit period.

Although OMB encourages the use of predetermined indirect cost rates, these internal control weaknesses suggest that NSF should continue to use a maximum provisional indirect cost rate with AAPT. A maximum provisional rate is a "temporary rate established for an award to permit funding and reimbursement of indirect cost pending establishment of a final rate using actual cost data." In cases where an awardee is new to NSF funding or if there are significant audit-reported compliance deficiencies and/or internal control weaknesses, the use of a maximum provisional rate is warranted because it "limits indirect cost recoveries to the lower of the maximum provisional rate established at the time of the award, or the final rate...."

**Recommendation**

We recommend that the Directors of NSF's DACS and DGA require that AAPT develop written policies and procedures documenting its indirect cost calculation process and that AAPT financial staff receive training on how to properly and accurately prepare an IDCP.

**Auditee's Response**

We concur and will develop policies and procedures to document our indirect cost calculation process. Staff will attend training on how to develop indirect cost proposals.

**Auditor's Response to Auditee's Response**

AAPT's proposed actions address the weaknesses noted. We recommend that the Directors of NSF's DGA and DACS require that AAPT provide NSF with documentation that its policies and procedures have been revised and implemented.

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
Findings and Recommendations on Internal Control  
For the Years ended December 31, 1997, 1998, 1999, and 2000

Immaterial Weaknesses

1. **Inadequate Source Documentation**

OMB Circular A-110 requires that award recipients have a financial management system that provides accounting records supported by source documentation. For various invoices totaling \$29,362, AAPT was not able to provide adequate support for the expenditures other than check requests, credit card statements with no corresponding receipts, or cost allocation spreadsheets without a documented methodology. As a result, we could not determine if the expenditures were valid, accurate, or allowable. Because of high personnel turnover in the finance department over the last four years, AAPT was unable to identify the reasons for the lack of documentation for these costs.

**Recommendation:**

We recommend that the Directors of NSF's Divisions of DACS and DGA require AAPT to develop written policies and procedures concerning the adequacy and retention of original supporting documentation.

**Auditee's Response**

We concur and will develop policies and procedures concerning the adequacy and retention of original supporting documentation.

**Auditor's Response to Auditee's Response**

AAPT's proposed actions address the weaknesses noted. We recommend that the Directors of NSF's DGA and DACS require that AAPT provide NSF with documentation that its policies and procedures have been revised and implemented.

## 2. **Weak Controls Over Time and Effort Reporting**

NSF requirements state that accounting systems must provide for the maintenance of adequate source documentation as well as complete and accurate financial reports. We found that over the four-year audit period, internal control weaknesses related to AAPT's time and effort reporting improved. However, we found throughout the period personnel files were not updated with the latest pay increases supporting the pay rates being charged to the government, and personnel files were missing direct deposit authorizations. Additionally, the Director of Finance is responsible for summarizing and entering time allocations into the payroll job report system, but these reports are not being independently reviewed to ensure the accuracy of the data entry. Although these audit errors did not result in an indirect cost rate adjustment, they indicate there are still general control weaknesses in AAPT's time and effort reporting process. Because payroll costs represent the most significant costs charged to the government as both direct and indirect costs, it is important that salary charges to an award can be adequately supported.

### **Recommendation**

We recommend that the Directors of NSF's DACS and DGA require that AAPT develop written policies and procedures to ensure adequate controls are established and implemented to strengthen its time and effort reporting system.

### **Auditee's Response**

We concur and will develop policies and procedures to ensure adequate controls over the time and reporting system.

### **Auditor's Response to Auditee's Response**

AAPT's proposed actions will correct the weaknesses noted. We recommend that the Directors of NSF's DGA and DACS require that AAPT provide NSF with documentation that its policies and procedures have been revised and implemented.

**SECTION III**  
**FINANCIAL SCHEDULES**

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

### **INDEPENDENT AUDITORS' REPORT**

We have audited the IDCs of The American Association of Physics Teachers, Inc. as proposed as applicable to the National Science Foundation and other federal awards for the years ended December 31, 1997, 1998, 1999 and 2000. These IDCs, as presented in the schedules of indirect/direct costs (Schedules B-1 to B-4) and the summary schedule of over/(under) recovered indirect costs (Schedule A), are the responsibility of The American Association of Physics Teachers, Inc.'s management. Our responsibility is to express an opinion on Schedules A and B-1 to B-4 based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America, *Government Auditing Standards* issued by the Comptroller General of the United States, and the *National Science Foundation Audit Guide* (September 1996). Those standards and the *National Science Foundation Audit Guide* require that we plan and perform the audit to obtain reasonable assurance about whether the financial schedules are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial schedules. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial schedule presentation. We believe our audit provides a reasonable basis for our opinion.

The accompanying financial schedules were prepared for the purpose of complying with the requirements of the *National Science Foundation Audit Guide* as described in Note 1, and are not intended to be a complete presentation of financial position in conformity with accounting principles generally accepted in the United States of America.

In our opinion, the financial schedules referred to above present fairly, in all material respects, the indirect cost proposals (Schedules B-1 to B-4) and the resultant over/(under) recovered indirect costs (Schedule A) for the years ended December 31, 1997, 1998, 1999 and 2000, in conformity with the *National Science Foundation Audit Guide*, *NSF Grant Policy Manual*, and on the basis of accounting described in Note 1.

In accordance with *Government Auditing Standards*, we have also issued our report dated March 4, 2002 on our consideration of The American Association of Physics Teachers, Inc.'s internal control over financial reporting and on our tests of its compliance with laws and regulations. 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.

Schedules C-1 to C-5 contain indirect costs in the amount of \$929,175 that are reductions to the indirect costs proposed and \$414,025 that are additions to the direct costs proposed for the years ended December 31, 1997, 1998, 1999 and 2000. The final determination, as to whether such costs are allowable or unallowable, will be made by the National Science Foundation. The ultimate outcome of this determination cannot presently be determined.

This report is intended solely for the information and use of The American Association of Physics Teachers, Inc. and the National Science Foundation and is not intended to be and should not be used by anyone other than these specified parties.

*M.D. Oppenheim & Company, P.C.*

March 4, 2002

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Summary Schedule of Over/(Under) Recovered Indirect Costs on National Science Foundation Awards  
 For the years ended December 31, 1997, 1998, 1999 and 2000

Number	Award Period	Indirect Cost Approved in Award			Indirect Cost Rates Proposed/Audited				Indirect Cost			Comment/ Notes
		Cost Method	Rate		Year Ended	Proposed Rate	Audited Rate	Schedule Reference	Claimed To NSF	Per Audit	Over/(Under) Recovered	
ESI-9619041	05/01/97-04/30/02	Maximum Provisional	40.50%	(A)	12/31/1997	45.76%	36.15%	B-1	\$ 40,744	\$ 36,412	\$ 4,332	
					12/31/1998	49.45%	38.17%	B-2	87,724	82,712	5,012	
					12/31/1999	48.32%	37.23%	B-3	105,316	96,813	8,503	
					12/31/2000	47.20%	38.10%	B-4	106,909	94,005	12,904	
								<del>0</del> 34693	\$309,942	\$30751		
DUE-9450160	03/15/95-02/28/01		42.00%	(A)	12/31/1997	45.76%	36.15%	B-1	\$ 64,510	\$ 55,526	\$ 8,984	
					12/31/1998	49.45%	38.17%	B-2	53,104	46,353	6,751	
					12/31/1999	48.32%	37.23%	B-3	45,671	40,483	5,188	
					12/31/2000	47.20%	38.10%	B-4	22,786	20,670	2,116	
								\$186,071	\$ 163,032	\$23,039		
DUE-9554625	03/15/96-02/29/00		40% plus 1% of subcontracts	(A)	12/31/1997	45.76%	36.15%	B-1	\$ 31,483	\$ 31,779	\$ (296)	
					12/31/1998	49.45%	38.17%	B-2	27,338	36,501	(9,163)	
					12/31/1999	48.32%	37.23%	B-3	16,615	15,435	1,180	
					12/31/2000	47.20%	38.10%	B-4	8,284	7,875	409	
								\$ 83,720	\$ 91,590	(7,870)	(E)	
DUE-9554738	02/15/96-12/31/00		40.00%	(A)	12/31/1997	45.76%	36.15%	B-1	\$ 9,756	\$ 8,817	\$ 939	
					12/31/1998	49.45%	38.17%	B-2	7,769	11,503	(3,734)	
					12/31/1999	48.32%	37.23%	B-3	13,131	12,227	904	
					12/31/2000	47.20%	38.10%	B-4	21,213	20,205	1,008	
								\$ 51,869	\$ 52,752	\$ (883)	(C), (E)	
DUE-9816632	09/01/98-08/31/00		42.00%	(A)	12/31/1998	49.45%	38.17%	B-2	\$ 13,898	\$ 9,644	\$ 4,254	
					12/31/1999	48.32%	37.23%	B-3	3,837	3,595	242	
								\$ 17,731	\$ 13,239	\$ 4,496	(D)	
DUE-9821027	10/15/98-08/14/99				12/31/1998	49.45%	38.17%	B-2	N/A	N/A	N/A	
					12/31/1999	48.32%	37.23%	B-3	N/A	N/A	N/A	(B)
ESI-9150111	07/01/91-06/30/97	Maximum Provisional	30.00%	(A)	12/31/1997	45.76%	30.00%	B-1	\$ 27,849	\$ 27,707	\$ 142	
ESI-9453830	06/15/94-05/31/97		48.00%	(A)	12/31/1997	45.76%	36.15%	B-1	\$ 1,940	\$ 1,462	\$ 478	
ESI-9150173	12/15/91-04/30/97		25.00%	(A)	12/31/1997	45.76%	36.15%	B-1	\$	\$ 1,744	\$ (1,744)	(E)
DUE-9496330	08/31/94-06/30/97		24.63%	(A)	12/31/1997	45.76%	36.15%	B-1	\$ 3,346	\$ 4,610	\$ C1 2541	(E)
<b>Grand Total</b>								\$713,223	\$666,078	\$47,145	(F), (E)	

Comments/Notes:

- (A) Modified total direct costs. (Total direct costs less participant support costs and subaward costs.)
  - (B) There were no indirect costs included in the budget or charged to this award.
  - (C) The total direct and indirect costs reflected in AAPT's books of account exceeds the total maximum award budget by \$43,141.
  - (D) The total direct and indirect costs reflected in AAPT's books of account exceeds the total maximum award budget by \$43,482.
  - (E) (Under) recovered indirect costs cannot be recovered on this award since the award is closed and the total costs (direct and indirect) were billed up to the budget maximum.
  - (F) Total reflects the net over-recovered indirect costs (\$58,906) with the (under)recovered indirect costs (\$11,761). See also Note (E).
- \*. The award letter did not state the type of rate.

See accompanying notes to these financial schedules.

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THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Schedule of Direct and Indirect Costs  
 For the year ended December 31, 1997

<u>Expenses</u>	(B) <u>Proposed</u> <u>Costs</u>	Auditors' <u>Adjustments</u> <u>&amp; Eliminations</u>	Allowable <u>Costs</u>
Total direct costs			<b>E</b>
Indirect costs:			
Salaries			
Fringe benefits			
Temporary help			
Office insurance			
Van			
Depreciation			
Equipment rental and maintenance			
Professional fees			
Office supplies and expense			
Postage			
Photocopying			
Telephone			
Travel and meetings			
Library			
Computer supplies and training			
Printing			
Miscellaneous			
Officers' expenses			
Committee expenses			
AIP dues			
Building expense (net of interest)			
Total indirect expenses	\$1,235,686	\$(245,298)	\$ 990,388
		(Schedules C1 and C5)	
Computation of Indirect Cost Rate:	Per AAPT	Per Audit	
Total indirect costs	\$ 1,235,686	\$ 990,388	
Total direct costs	\$2,700,206	\$2,739,447	
Computed Indirect Cost Rate	45.76%	36.15%	

(A) In the indirect cost proposal, direct cost base expenses were not presented in expense categories, as were the indirect cost pool expenses.

(B) The amount agrees with the indirect cost rate proposal prepared by The Association of Physics Teachers, Inc. The total costs before auditors' adjustments and eliminations agree with AAPT's books of account.

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Schedule of Direct and Indirect Costs  
 For the year ended December 31, 1998

<u>Expenses</u>	(B) Proposed Costs	Auditors' Adjustments & Eliminations	Allowable Costs
Total direct costs	[REDACTED]	[REDACTED]	[REDACTED]
Indirect costs:			
Salaries	[REDACTED]	[REDACTED]	[REDACTED]
Fringe benefits	[REDACTED]		[REDACTED]
Temporary help	[REDACTED]		[REDACTED]
Office insurance	[REDACTED]		[REDACTED]
Van	[REDACTED]		[REDACTED]
Depreciation	[REDACTED]		[REDACTED]
Equipment rental and maintenance	[REDACTED]		[REDACTED]
Professional fees	[REDACTED]		[REDACTED]
Office supplies and expense	[REDACTED]		[REDACTED]
Postage	[REDACTED]		[REDACTED]
Photocopying	[REDACTED]		[REDACTED]
Telephone	[REDACTED]		[REDACTED]
Travel and meetings	[REDACTED]	[REDACTED]	[REDACTED]
Library	[REDACTED]		[REDACTED]
Computer supplies and training	[REDACTED]	[REDACTED]	[REDACTED]
Printing	[REDACTED]		[REDACTED]
Miscellaneous	[REDACTED]	[REDACTED]	[REDACTED]
Officers' expenses	[REDACTED]		[REDACTED]
Committee expenses	[REDACTED]	[REDACTED]	[REDACTED]
AIP dues	[REDACTED]	[REDACTED]	[REDACTED]
Building expense (net of interest)	[REDACTED]	[REDACTED]	[REDACTED]
Total indirect expenses	\$ 1,319,041	\$(251,740)	\$ 1,067,301

(Schedules C2 and C5)

Computation of Indirect Cost Rate:	Per AAPT	Per Audit
Total indirect costs	\$ 1,319,041	\$ 1,067,301
Total direct costs	\$2,667,387	\$2,796,503
Computed Indirect Cost Rate	49.45%	38.17%

- (A) In the indirect cost proposal, direct cost base expenses were not presented in expense categories, as were the indirect cost pool expenses.
- (B) The amount agrees with the indirect cost rate proposal prepared by the Association of Physics Teachers, Inc. The total costs before auditors' adjustments and eliminations agree with AAPT's books of account.
- (C) The adjustments represent unallowable costs, reclass of indirect expenses to direct expenses and revenue offsets that are to be charged to the indirect cost pool but cannot be identified to a specific expense line item.

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Schedule of Direct and Indirect Costs  
 For the year ended December 31, 1999

<u>Expenses</u>	(B) Proposed Costs	Auditors' Adjustments & Eliminations	Allowable Costs
Total direct costs	██████████	██████████	██████████
Indirect costs:			
Salaries	██████████	██████████	██████████
Fringe benefits	██████████		██████████
Temporary help	██████████		██████████
Office insurance	██████████		██████████
Van	██████████		██████████
Depreciation	██████████		██████████
Equipment rental and maintenance	██████████		██████████
Professional fees	██████████		██████████
Office supplies and expense	██████████		██████████
Postage	██████████		██████████
Photocopying	██████████		██████████
Telephone	██████████		██████████
Travel and meetings	██████████	██████████	██████████
Library	██████████		██████████
Computer supplies and training	██████████	██████████	██████████
Printing	██████████	██████████	██████████
Miscellaneous	██████████	██████████	██████████
Officers' expenses	██████████	██████████	██████████
Committee expenses	██████████	██████████	██████████
AIP dues	██████████	██████████	██████████
Building expense (net of interest)	██████████	██████████	██████████
Total indirect expenses	<u>\$ 1,268,990</u>	<u>\$(245,931)</u>	<u>\$ 1,023,059</u>

(Schedules C3 and C5)

Computation of Indirect Cost Rate:	Per AAPT	Per Audit
Total indirect costs	\$ 1,268,990	\$ 1,023,059
Total direct costs	\$2,626,096	\$2,747,671
Computed Indirect Cost Rate	48.32%	37.23%

- (A) In the indirect cost proposal, direct cost base expenses were not presented in expense categories, as were the indirect cost pool expenses.
- (B) The amount agrees with the indirect cost rate proposal prepared by the Association of Physics Teachers, Inc. The total costs before auditors' adjustments and eliminations agree with AAPT's books of account.
- (C) The adjustments represent unallowable costs, reclass of indirect expenses to direct expenses and revenue offsets that are to be charged to the indirect cost pool but cannot be identified to a specific expense line item.

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Schedule of Direct and Indirect Costs  
 For the year ended December 31, 2000

<u>Expenses</u>	(B) Proposed Costs	Auditors' Adjustments & Eliminations	Allowable Costs
Total direct costs	[REDACTED]	[REDACTED]	[REDACTED]
Indirect costs:			
Salaries	[REDACTED]	[REDACTED]	[REDACTED]
Fringe benefits	[REDACTED]		[REDACTED]
Temporary help	[REDACTED]		[REDACTED]
Office insurance	[REDACTED]		[REDACTED]
Van			
Depreciation	[REDACTED]		[REDACTED]
Equipment rental and maintenance	[REDACTED]		[REDACTED]
Professional fees	[REDACTED]		[REDACTED]
Office supplies and expense	[REDACTED]		[REDACTED]
Postage	[REDACTED]		[REDACTED]
Photocopying	[REDACTED]		[REDACTED]
Telephone	[REDACTED]		[REDACTED]
Travel and meetings	[REDACTED]	[REDACTED]	[REDACTED]
Library	[REDACTED]		[REDACTED]
Computer supplies and training	[REDACTED]		[REDACTED]
Printing	[REDACTED]		[REDACTED]
Miscellaneous	[REDACTED]	[REDACTED]	[REDACTED]
Officers' expenses	[REDACTED]	[REDACTED]	[REDACTED]
Committee expenses	[REDACTED]	[REDACTED]	[REDACTED]
AIP dues	[REDACTED]	[REDACTED]	[REDACTED]
Building expense (net of interest)	[REDACTED]	[REDACTED]	[REDACTED]
Total indirect expenses	\$ 1,210,724	\$(186,206)	\$ 1,024,518
		(Schedules C4 and C5)	
	Per AAPT	Per Audit	
Total indirect costs	\$ 1,210,724	\$ 1,024,518	
Total direct costs	\$2,565,237	\$2,689,330	
Computed Indirect Cost Rate	47.20%	38.10%	

- (A) In the indirect cost proposal, direct cost base expenses were not presented in expense categories, as were the indirect cost pool expenses.
- (B) The amount agrees with the indirect cost rate proposal prepared by the Association of Physics Teachers, Inc. The total costs before auditors' adjustments and eliminations agree with AAPT's books of account.
- (C) The adjustments represent unallowable costs, reclass of indirect expenses to direct expenses and revenue offsets that are to be charged to the indirect cost pool but cannot be identified to a specific expense line item.

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Schedule of Auditors' Adjustments and Eliminations  
 For the years ended December 31, 1997, 1998, 1999 and 2000

The amounts as proposed by AAPT in their indirect cost proposals for the years ended December 31, 1997, 1998, 1999 and 2000 (Schedules B-1 to B-4) required various adjustments and eliminations to the indirect cost or direct cost pools. These adjustments and/or eliminations are presented in Schedules B-1 to B-4. On the following pages in Schedules C-1 to C-5 these adjustments and/or eliminations are detailed. Presented below is a brief summary of the type of adjustment and/or elimination along with the relevant criteria.

<u>Adjustment and/or Elimination</u>	<u>Criteria</u>
Direct program costs included in the indirect cost pool for the following: Various Display and Outreach costs; Award costs; International Science and Engineering Fair costs; AIP dues; and Campaign for Physics costs which are direct programs of AAPT.	<i>OMB Circular A-122, Attachment A, Part B (1) states that direct costs are those that can be identified specifically with a particular cost objective. In addition, OMB Circular A-122, Attachment A, Part C (1) states indirect costs are those that have been incurred for common or joint objectives and cannot be readily identified with a particular final cost objective.</i>
Inadequate source documentation in the form of a credit card receipt. The credit card receipt was the only documentation available, with no actual vendor invoice; therefore, determination of the allowability of the cost cannot be determined.	<i>OMB Circular A-110, Subpart C, paragraph 21 (b) (7) requires accounting records that are supported by source documentation.</i>
Missing source documentation in the form of a vendor invoice. Without the vendor invoice determination of the allowability of the cost cannot be determined.	<i>OMB Circular A-110, Subpart C, paragraph 21 (b) (7) requires accounting records that are supported by source documentation.</i>
Accounts receivable written-off were included in the indirect cost pool.	<i>OMB circular A-122, Attachment B, item 3, states that bad debts, including losses (whether actual or estimate) arising from uncollectible accounts and other claims, related collection costs are unallowable.</i>
Various miscellaneous income included in the Executive Account, general contributions and grant income used for reimbursement of Executive Account administrative payroll were not deducted from the indirect cost pool.	<i>OMB Circular A-122, Attachment A, Part A (5) states that applicable credits refers to those receipts, or reductions of expenditures which operate to offset or reduce expense items that are allocable to awards as direct or indirect costs.</i>

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.

Schedule of Auditors' Adjustments and Eliminations  
For the years ended December 31, 1997, 1998, 1999 and 2000

<u>Adjustment and/or Elimination</u>	<u>Criteria</u>
Penalties were included in indirect cost pool.	<i>OMB Circular A-122, Attachment B, item 16, states fines and penalties resulting from violations of or failure of the organization to comply with Federal laws are unallowable.</i>
Reimbursed travel vouchers paid to employees in excess of the maximum amount allowable under federal regulations were included in the indirect cost pool and direct cost base.	<i>Federal regulations state that in order for travel costs to be considered reasonable, costs claimed may be measured against the current per diem or mileage rates approved under Standardized Government Travel Regulations.</i>
Entertainment costs which included celebrations for birthdays, employee picnics, holiday parties and other similar type expenses were included in the indirect cost pool.	<i>OMB Circular A-122, Attachment B, item 14, states that costs of amusement, diversion, social activities, ceremonials, and costs relating thereto, such as meals, lodging, rentals, transportation, and gratuities are unallowable.</i>
Unrealized investment losses were charged to indirect costs from the "Building Expense Account".	<i>OMB Circular A-122, Attachment A, Part A, (1), (3), (a), states that reasonable costs are of a type generally recognized as ordinary and necessary for the operation of the organization or the performance of the award.</i>
Subcontract costs were included in the direct cost base.	<i>OMB Circular A-122, Attachment A, Part D, (2), (c), states that the distribution base may be total costs (excluding capital expenditures and other distorting items, such as major subcontractors or sub grants), direct salaries and wages, or other base which results in an equitable distribution.</i>

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
Schedule of Auditors' Adjustments and Eliminations - Indirect Costs  
For the year ended December 31, 1997

Adjustment and Elimination Explanation	Total	Salaries	Postage	Travel and Meeting	Computer Supplies and Training	Miscellaneous	Committee Expenses	AIP Dues
<b>Unallowable Costs</b>								
Reimbursable travel costs in excess of federal guidelines.	\$ (316)	\$	\$	\$ (316)	\$	\$	\$	\$
Penalties included in the indirect cost pool.	(3,088)					(3,088)		
Various unallowable expenses erroneously charged to indirect costs from the Miscellaneous Executive Account.	(1,713)					(1,713)		
<b>Reclass of Indirect Expenses to Direct</b>								
Various Display and Outreach costs erroneously charged to indirect costs	(18,890)			(18,890)				
Award costs erroneously charged to indirect costs.	(22,156)						(22,156)	
International Science and Engineering Fair costs charged to indirect costs.	(1,431)						(1,431)	
AIP dues erroneously charged to indirect costs.	(45,400)							(45,400)
Campaign for Physics erroneously charged to indirect costs.	(19,500)					(19,500)		

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THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Schedule of Auditors' Adjustments and Eliminations - Indirect Costs (Cont.)  
 For the year ended December 31, 1997

Adjustment and Elimination Explanation	Total	Salaries	Postage	Travel and Meeting	Computer Supplies and Training	Miscellaneous	Committee Expenses	AIP Dues
<b><u>Offsetting Revenues to Administrative Indirect Costs</u></b>								
Miscellaneous income included in the Executive Account not offset against administrative indirect costs.	\$ (11,959)	\$	\$	\$	\$	\$ (11,959)	\$	\$
General contributions not offset against administrative indirect costs.	(1,445)	(1,445)						
Grant income used for reimbursement of Executive administrative payroll not offset against indirect costs.	(103,157)	(103,157)						
<b><u>Inadequate Source Documentation</u></b>								
Inadequate source documentation - credit card charges [no detailed receipt (i.e. restaurant bill, plane ticket etc.) was provided to determine the propriety of the expense (i.e. alcoholic beverages, first class fare, etc.)].	(5,190)		(5,190)					
<b><u>Missing Documentation</u></b>								
Missing documentation (vendor invoice not available or insufficient detail provided).	(11,053)		(5,970)		(4,464)	(619)		
<b>Total</b>	<b>(245,298)</b>	1 4 2)	<b>\$(11,1520)</b>	<b>"1,206)</b>	<b>-(A,464)</b>	<b>\$ (3,6,519)</b>	<b>\$(23,587)</b>	<b>\$(45,400)</b>

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
Schedule of Auditors' Adjustments and Eliminations - Indirect Costs  
For the year ended December 31, 1998

Adjustment and Elimination Explanation	Total	Salaries	Travel and Meeting	Computer Supplies and Training	Miscellaneous	Committee Expenses	AIP Dues
<b>Unallowable Costs</b>							
Reimbursable travel costs in excess of federal guidelines.	\$ (45)	\$	\$ (45)	\$	\$	\$	\$
Penalties included in the indirect cost pool.	(1,039)				(1,039)		
Various unallowable expenses erroneously charged to indirect costs from the Miscellaneous Executive Account.	(1,011)				(1,011)		
<b>Reclass of Indirect Expenses to Direct</b>							
Miscellaneous expenses erroneously charged to indirect costs.	(52,158)				(52,158)		
Various Display and Outreach costs erroneously charged to indirect costs.	(37,253)		(6,112)		(31,141)		
Marketing expenses erroneously charged to indirect costs.	(1,334)				(1,334)		
Award costs erroneously charged to indirect costs.	(24,387)					(24,387)	
International Science and Engineering Fair costs charged to indirect costs.	(1,212)					(1,212)	

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THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Schedule of Auditors' Adjustments and Eliminations - Indirect Costs (Cont.)  
 For the year ended December 31, 1998

Adjustment and Elimination Explanation	Total	Salaries	Travel and Meeting	Computer Supplies and Training	Miscellaneous	Committee Expenses	AIP Dues
<b><u>Reclass of Indirect Expenses to Direct (Cont.)</u></b>							
AIP dues erroneously charged to indirect costs.	\$ (41,000)	\$	\$	\$	\$	\$	\$ (41,000)
Campaign for Physics erroneously charged to indirect costs.	(7,500)		(7,500)				
<b><u>Offsetting Revenues to Administrative Indirect Costs</u></b>							
Miscellaneous income included in the Executive Account not offset against administrative indirect costs.	(6,899)				(6,899)		
General contributions not offset against administrative indirect costs.	(2,188)	(2,188)					
Grant income used for reimbursement of Executive administrative payroll not offset against indirect costs.	(73,779)	(73,779)					
<b><u>Inadequate Source Documentation</u></b>							
Inadequate source documentation - credit card charges [no detailed receipt (i.e. restaurant bill, plane ticket etc.) was provided to determine the propriety of the expense (i.e. alcoholic beverages, first class fare, etc.)].	(1,935)		(1,101)	(834)			
<b>Total</b>	<b>(251,740)</b>	<b>&amp;--(75.7%)</b>	<b>\$(14,751)</b>	<b>\$ (834)</b>	<b>&amp;-(91.5-V2)</b>	<b>-\$-(25,92)</b>	<b>~41,000 )</b>

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THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Schedule of Auditors' Adjustments and Eliminations - Indirect Costs  
 For the year ended December 31, 1999

Adjustment and Elimination Explanation	Total	Salaries	Travel and Meeting	Computer Supplies and Training	Miscellaneous	Officer's Expense	Committee Expenses	AIP Dues	Building Expense
<b><u>Unallowable Costs</u></b>									
Various unallowable expenses erroneously charged to indirect costs from the Miscellaneous Executive Account.	\$ (8,315)	\$	\$	\$	\$ (8,315)	\$	\$	\$	\$
Unallowable unrealized investment losses charged to indirect costs from the Building Expense Account.	(14,616)								(14,616)
<b><u>Reclass of Indirect Expenses to Direct</u></b>									
Miscellaneous expenses erroneously charged to indirect costs.	(12,469)				(12,469)				
Various Display and Outreach costs erroneously charged to indirect costs.	(26,377)		(26,377)						
Marketing expenses erroneously charged to indirect costs.	(306)		(306)						
Member Recruitment costs erroneously charged to indirect costs.	(334)		(334)						
Award costs erroneously charged to indirect costs.	(29,290)						(29,290)		
International Science and Engineering Fair costs charged to indirect costs.	(2,493)						(2,493)		

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Schedule of Auditors' Adjustments and Eliminations - Indirect Costs (Cont.)  
 For the year ended December 31, 1999

Adjustment and Elimination Explanation	Total	Salaries	Travel and Meeting	Computer Supplies and Training	Miscellaneous	Officer's Expense	Committee Expenses	AIP Dues	Building Expense	
<b>Reclass of Indirect Expenses to Direct (Cont.)</b>										
AIP dues erroneously charged to indirect costs.	\$ (50,589)		\$	\$	\$	\$	\$	\$ (50,589)	\$	
Campaign for Physics erroneously charged to indirect costs.	(13,500)				(13,500)					
<b><u>Offsetting Revenues to Administrative Indirect Costs</u></b>										
Miscellaneous income included in the Executive Account not offset against administrative indirect costs.	(47,532)				(47,532)					
Miscellaneous rental income not offset against rental expenses.	(6,622)								(6,622)	
General contributions not offset against administrative indirect costs.	(1,045)	(1,045)								
Grant income used for reimbursement of Executive administrative payroll not offset against indirect costs.	(23,197)	(23,197)								
<b><u>Inadequate Source Documentation</u></b>										
Inadequate source documentation - credit card charges [no detailed receipt (i.e. restaurant bill, plane ticket etc.) was provided to determine the propriety of the expense (i.e. alcoholic beverages, first class fare, etc.)].	(9,246)			(8,648)		(598)				
<b>Total</b>	<u>24</u>	<u>1</u>	<u>\$ 4 42</u>	<u>\$ (27,017)</u>	<u>\$ (8,648)</u>	<u>\$ (81,816)</u>	<u>\$ (598)</u>	<u>\$ (31,783)</u>	<u>\$ (50,589)</u>	<u>\$ (21,336)</u>

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THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
Schedule of Auditors' Adjustments and Eliminations - Indirect Costs  
For the year ended December 31, 2000

Adjustment and Elimination Explanation	Total	Salaries	Travel and Meeting	Miscellaneous	Committee Expenses	AIP Dues	Building Expense
<b>Unallowable Costs</b>							
Reimbursable travel costs in excess of federal guidelines.	\$ (44)	\$	\$ (44)	\$	\$	\$	\$
Various unallowable expenses erroneously charged to indirect costs from the Miscellaneous Executive Account.	(1,041)			(1,041)			
Unallowable unrealized investment losses charged to indirect costs from the Building Expense Account.	(11,123)						(11,123)
<b>Reclass of Indirect Expenses to Direct</b>							
Various Display and Outreach costs erroneously charged to indirect costs.	(22,670)		(22,670)				
Award costs erroneously charged to indirect costs.	(13,131)				(13,131)		
International Science and Engineering Fair costs charged to indirect costs.	(2,195)				(2,195)		
AIP dues erroneously charged to indirect costs.	(51,084)					(51,084)	
Campaign for Physics erroneously charged to indirect costs.	(38,534)			(38,534)			

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Schedule of Auditors' Adjustments and Eliminations - Indirect Costs (Cont.)  
 For the year ended December 31, 2000

Adjustment and Elimination Explanation	Total	Salaries	Travel and Meeting	Miscellaneous	Committee Expenses	AIP Dues	Building Expense
<b><u>Offsetting Revenues to Administrative Indirect Costs</u></b>							
Miscellaneous income included in the Executive Account not offset against administrative indirect costs.	\$ (25,150)	\$	\$	\$ (25,150)	\$	\$	
Miscellaneous rental income not offset against rental expenses.	(9,484)						(9,484)
General contributions not offset against administrative indirect costs.	(9,812)	(9,812)					
<b><u>Inadequate Source Documentation</u></b>							
Inadequate source documentation - credit card charges [no detailed receipt (i.e. restaurant bill, plane ticket etc.) was provided to determine the propriety of the expense (i.e. alcoholic beverages, first class fare, etc.)].	(1,938)		(1,938)				
<b>Total</b>	<b>\$ (186,000)</b>	<b>\$ (9,812)</b>	<b>\$ (24,652)</b>	<b>\$ (64,125)</b>	<b>\$ 1</b>	<b>\$ 1,84</b>	<b>\$ (20,607)</b>

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**THE AMERICAN ASSOCIATION OF PHYSICIS TEACHERS, INC.**  
 Schedule of Auditors' Adjustments and Eliminations - Direct Costs  
 For the years ended December 31, 1997, 1998, 1999 and 2000

Adjustments and Eliminations Explanation	Year Ended				Total
	1997	1998	1999	2000	
<b><u>Exclusion - Subcontract</u></b>					
Subcontract costs erroneously included in the direct cost base.	\$ (68,136)	\$ (35,728)	\$ (13,783)	\$ (3,521)	\$ (121,168)
<b><u>Reclass of Indirect Expenses to Direct</u></b>					
Miscellaneous expenses erroneously charged to indirect costs.		52,158	12,469		64,627
Various Display and Outreach Costs erroneously charged to indirect costs	18,890	37,253	26,377	22,670	105,190
Marketing expenses erroneously charged to indirect		1,334	306		1,640
Member Recruitment costs erroneously charged to indirect costs.			334		334
Award costs erroneously charged to indirect costs.	22,156	24,387	29,290	13,131	88,964
International Science and Engineering Fair costs charged to indirect costs.	1,431	1,212	2,493	2,195	7,331
AIP dues erroneously charged to indirect costs.	45,400	41,000	50,589	51,084	188,073
Campaign for Physics erroneously charged to indirect costs.	19,500	7,500	13,500	38,534	79,034
<b>Total</b>	<b>\$ 39,241</b>	<b>\$ 129,116</b>	<b>\$ 121,575</b>	<b>\$ 124,093</b>	<b>\$ 414,025</b>

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.

Notes to Financial Schedules

For the years ended December 31, 1997, 1998, 1999 and 2000

1. Summary of Significant Accounting Policies:

The accompanying financial schedules have been prepared in conformity with National Science Foundation (NSF) instructions. Schedules B-1 to B-4 have been prepared from the indirect cost proposals prepared by The American Association of Physics Teachers, Inc., and Schedule A has been prepared based upon the results of the audit of Schedules B-1 to B-4. The schedules do not present the complete financial position of The American Association of Physics Teachers, Inc. In accordance with NSF instructions, there are no schedules of financial position, statement of activities or statement of cash flows.

2. Income Taxes:

The American Association of Physics Teachers, Inc. is a private nonprofit corporation, incorporated under the laws of the Commonwealth of Massachusetts. The American Association of Physics Teachers, Inc. is exempt from income taxes under Section 501(c)(3) of the Internal Revenue Code. It is also exempt from Commonwealth of Massachusetts franchise or income tax.

**SECTION IV**  
**SUPPLEMENTARY INFORMATION**

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

**INDEPENDENT AUDITORS' REPORT ON SUPPLEMENTARY INFORMATION**

Our report on our audit of the schedule of over/(under) recovered indirect costs and schedules of indirect and direct costs (the basic financial schedules) of The American Association of Physics Teachers, Inc. for the years ended December 31, 1997, 1998, 1999 and 2000, appears in Schedules A and Schedules B-1 to B-4. The audit was made for the purpose of forming an opinion on the basic financial schedules taken as a whole. The supplementary information presented in Schedules D-1 to D-10 are presented for purposes of supplementary analysis and are not a required part of the basic financial schedules. The supplementary information has not been subjected to the auditing procedures applied in the audit of the basic financial schedules and, accordingly, we express no opinion on them.

*M.D. Oppenheim & Company, P.C.*

March 4, 2002

National Science Foundation Award Number ESI 9619041  
 Awarded To  
 The American Association of Physics Teachers, Inc.  
 Detailed Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period May 1, 1997 to December 31, 2000 (A)  
 Interim  
 (Unaudited)

Cost Category	Year Ended				Total
	12/31/97	12/31/98	12/31/99	12/31/00	
Personnel costs	████████	████████	████████	████████	\$ 323,090
Equipment					
Participant support costs	██████	████████	██████	████████	550,910
Subawards					
Other direct costs	████████	████████	████████	████████	<u>501,099</u>
Total direct costs	168,601	292,456	450,829	463,213	<u>\$ 1,375,099</u>
Exclusions:					(B)
Equipment					
Participant support	██████	████████	██████	████████	
Subawards > than \$25,000					
Modified total direct cost base	100,724	216,693	260,041	246,731	<u>\$ 824,189</u>
					(C)
Final audited indirect cost rate	<u>36.15%</u>	<u>38.17%</u>	<u>37.23%</u>	<u>38.10%</u>	
Calculated allowable indirect costs	36,412	82,712	96,813	94,005	
Claimed indirect costs (C)	<u>40,744</u>	<u>87,724</u>	<u>105,316</u>	<u>106,909</u>	<u>\$ 340,693</u>
					(B)
Over/(under) recovered indirect costs	<u>\$ 4,332</u>	<u>\$ 5,012</u>	<u>\$ 8,503</u>	<u>\$ 12,904</u>	

(A) The award period is May 1, 1997 to April 30, 2002.

(B) The total direct costs plus the claimed indirect cost totals \$1,715,792 for the period May 1, 1997 to April 30, 2000. This amount agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.

(C) The approved indirect cost rate was 40.50%, the maximum provisional rate. Indirect costs were claimed at a rate of 41.34%.

National Science Foundation Award Number DUE 9450160  
 Awarded To  
 The American Association of Physics Teachers, Inc.  
 Detailed Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period January 1, 1997 to December 31, 2000(A)  
 Interim  
 (Unaudited)

Cost Category	Year Ended				Total
	12/31/97	12/31/98	12/31/99	12/31/00	
Personnel costs	████████	████████	████████	████████	\$ 184,403
Equipment					
Participant support costs	██████	██████	██████		118,266
Subawards					
Other direct costs	████████	████████	████████	████████	<u>253,622</u>
Total direct costs	211,740	163,929	126,371	54,251	<u>\$ 556,291</u>
Exclusions:					(B)
Equipment					
Participant support	████████	████████	████████		
Subawards > than \$25,000					
Modified total direct cost base	153,599	121,437	108,738	54,251	<u>\$ 438,025</u>
					(C)
Final audited indirect cost rate	<u>36.15%</u>	<u>38.17%</u>	<u>37.23%</u>	<u>38.10%</u>	
Calculated allowable indirect costs	55,526	46,353	40,483	20,670	
Claimed indirect costs (C)	<u>64,510</u>	<u>53,104</u>	<u>45,671</u>	<u>22,786</u>	<u>\$ 186,071</u>
					(B)
Over/(under) recovered indirect costs	<u>\$ 8,984</u>	<u>\$ 6,751</u>	<u>\$ 5,188</u>	<u>\$ 2,116</u>	

(A) The award period is March 15, 1995 to February 28, 2001.

(B) The total direct costs plus the claimed indirect cost totals \$742,362 for the period January 1, 1997 to February 28, 2000. This amount added to the cumulative costs at December 31, 1996 of \$405,869, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.

(C) The approved indirect cost rate was 42%. Indirect costs were claimed at a rate of 42.48% for the above period.

National Science Foundation Award Number DUE 9554625  
 Awarded To  
 The American Association of Physics Teachers, Inc.  
 Detailed Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period January 1, 1997 to February 29, 2000(A)  
 Final  
 (Unaudited)

Cost Category	Year Ended				Total
	12/31/97	12/31/98	12/31/99	12/31/00	
Personnel costs	████████	████████	████████	████████	\$ 95,295
Equipment					
Participant support costs	████████	████████	████████		49,789
Subawards	████████	████████	████████	████████	80,754 (C)
Other direct costs	████████	████████	████████	████████	<u>139,992</u>
Total direct costs	150,806	145,496	47,138	22,390	<u>\$ 365,830</u>
Exclusions:					(B)
Equipment					
Participant support	████████	████████	████████		
Subawards > than \$25,000	████████	████████	████████	████████	
Modified total direct cost base	87,908	95,628	41,459	20,669	<u>\$ 245,664</u>
					(C)
Final audited indirect cost rate	<u>36.15%</u>	<u>38.17%</u>	<u>37.23%</u>	<u>38.10%</u>	
Calculated allowable indirect costs	31,779	36,501	15,435	7,875	
Claimed indirect costs (C)	<u>31,483</u>	<u>27,338</u>	<u>16,615</u>	<u>8,284</u>	<u>\$ 83,720</u>
					(B)
Over/(under) recovered indirect costs (D)	<u>\$ (296)</u>	<u>\$ (9,163)</u>	<u>\$ 1,180</u>	<u>\$ 409</u>	

(A) The award period is March 15, 1996 to February 29, 2000.

(B) The total direct costs plus the claimed indirect cost totals \$449,550 for the period March 1, 1997 to February 29, 2000. This amount added to the cumulative costs at December 31, 1996 of \$99,855, was reconciled to the net disbursements reported on the FCTR as of the quarter ended March 31, 2000.

(C) The approved indirect cost rate was 40% of direct costs plus 1% of subcontract costs. Indirect costs were claimed at a rate of 33.75% of direct costs plus 1% of subcontract costs for the above period.

(D) Under-recovered indirect costs cannot be recovered on this award since the award is closed and the total costs (direct and indirect) were billed up to the budget maximum.

National Science Foundation Award Number DUE 9554738  
 Awarded To  
 The American Association of Physics Teachers, Inc.  
 Detailed Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period January 1, 1997 to December 31, 2000(A)  
 Final  
 (Unaudited)

Cost Category	Year Ended				Total
	12/31/97	12/31/98	12/31/99	12/31/00	
Personnel costs	██████	██████	██████	██████	\$ 71,151
Equipment					
Participant support costs	██████	██████	██████		84,841
Subawards					
Other direct costs	██████	██████	██████	██████	<u>60,210</u>
Total direct costs	49,293	48,444	65,434	53,031	<u>\$ 216,202</u>
Exclusions:					(B)
Equipment					
Participant support	██████	██████	██████		
Subawards > than \$25,000					
Modified total direct cost base	24,391	30,136	32,841	53,031	<u>\$140,399</u>
					(C)
Final audited indirect cost rate	<u>36.15%</u>	<u>38.17%</u>	<u>37.23%</u>	<u>38.10%</u>	
Calculated allowable indirect costs	8,817	11,503	12,227	20,205	
Claimed indirect costs (C)	<u>9,756</u>	<u>7,769</u>	<u>13,131</u>	<u>21,213</u>	<u>\$ 51,869</u>
					(B)
Over/(under) recovered indirect costs (E)	<u>\$ 939</u>	<u>\$ (3,734)</u>	<u>\$ 904</u>	<u>\$ 1,008</u>	(D)

(A) The award period is February 15, 1996 to December 31, 2000.

(B) The total direct costs plus the claimed indirect cost totals \$268,071 for the period January 1, 1997 to December 31, 2000. This amount added to the cumulative costs at December 31, 1996 of \$45,070, less the amount in excess of total award budget of \$43,141, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.

(C) The approved indirect cost rate was 40%. Indirect costs were claimed at a rate of 36.94% for the above period.

(D) The total direct and indirect costs reflected in AAPT's books of account exceeds the total maximum award budget by \$43,141.

(E) Under-recovered indirect costs cannot be recovered on this award since the award is closed and the total costs (direct and indirect) were billed up to the budget maximum.

National Science Foundation Award Number DUE 9816632  
 Awarded To  
 The American Association of Physics Teachers, Inc.  
 Detailed Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period September 1, 1998 to August 31, 2000(A)  
 Final  
 (Unaudited)

<u>Cost Category</u>	<u>Year Ended</u>		<u>Total</u>
	<u>12/31/98</u>	<u>12/31/99</u>	
Personnel costs	████████	████████	\$ 19,962
Equipment			
Participant support costs	██████	████	37,574
Subawards			
Other direct costs	████████	████████	<u>14,782</u>
Total direct costs	62,663	9,655	<u>\$ 72,318</u>
Exclusions:			(B)
Equipment			
Participant support	████████		
Subawards > than \$25,000	_____	_____	
Modified total direct cost base	25,267	9,655	<u>\$ 34,922</u>
			(C)
Final audited indirect cost rate	<u>38.17%</u>	<u>37.23%</u>	
Calculated allowable indirect costs	9,644	3,595	
Claimed indirect costs (C)	<u>13,898</u>	<u>3,837</u>	<u>\$ 17,735</u>
			(B)
Over/(under) recovered indirect costs	<u>\$ 4,254</u>	<u>\$ 242</u>	(D)

(A) The award period is September 1, 1998 to August 31, 2000.

(B) The total direct costs plus the claimed indirect cost totals \$90,053 for the period September 1, 1998 to August 31, 2000. This amount less the amount in excess of the total award budget of \$45,482, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.

(C) The approved indirect cost rate was 42%. Indirect costs were claimed at a rate of 50.78%.

(D) The total direct and indirect costs reflected in AAPT's books of account exceeds the total maximum award budget by \$45,482.

National Science Foundation Award Number DUE 9821027  
 Awarded To  
 The American Association of Physics Teachers, Inc.  
 Detailed Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period October 15, 1998 to August 14, 1999(A)  
 Final  
 (Unaudited)

Cost Category	Year Ended		Total
	12/31/98	12/31/99	
Personnel costs	██████	██████	\$ 32,663
Equipment			
Participant support costs			
Subawards			
Other direct costs	_____	_____	_____
Total direct costs	9,467	23,196	<u>\$ 32,663</u>
Exclusions:			(B)&(C)
Equipment			
Participant support			
Subawards>than \$25,000	_____	_____	
Modified total direct cost base	9,467	23,196	
Final audited indirect cost rate	N/A	N/A	
Calculated allowable indirect costs	N/A	N/A	
Claimed indirect costs (C)	_____	_____	(B)
Over/(under) recovered indirect costs	<u>\$</u>	<u>\$</u>	

(A) The award period is October 15, 1998 to August 14, 1999.

(B) The total direct costs of \$32,663 for the period October 15, 1998 to August 14, 1999 agrees with the FCTR for the quarter ended September 30, 1999.

(C) No indirect costs were claimed on this grant.

National Science Foundation Award Number ESI 9150111  
 Awarded To  
 The American Association of Physics Teachers, Inc.  
 Detailed Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period January 1, 1997 to June 30, 1997(A)  
 Final  
 (Unaudited)

Cost Category	Year Ended 12/31/97
Personnel costs	
Equipment	
Participant support costs	
Subawards	██████████
Other direct costs	██████████
<b>Total direct costs</b>	<b>106,547(B)</b>
Exclusions:	
Equipment	
Participant support	
Subawards > than \$25,000	██████████
<b>Modified total direct cost base</b>	<b>92,358 (C)</b>
Final audited indirect cost rate	<u>30.00%</u>
Calculated allowable indirect costs	27,707
Claimed indirect costs (C)	<u>27,849(B)</u>
Over/(under) recovered indirect costs	<u>\$ 142</u>

(A) The award period is July 1, 1991 to June 30, 1997.

(B) The total direct costs plus the claimed indirect cost totals \$134,396 for the period January 1, 1997 to June 30, 1997. The cumulative amount for period prior to December 31, 1996 AAPT was unable to locate. However, the amount claimed for the period equaled the amount reported on the FCTR for the above noted period as of December 31, 1997.

(C) The approved indirect cost rate was the maximum provisional of 30% as of July 1991. Indirect costs were claimed at a rate of 30.15%.

National Science Foundation Award Number ESI 9453830  
 Awarded To  
 The American Association of Physics Teachers, Inc.  
 Detailed Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period January 1, 1997 to May 31, 1997(A)  
 Final  
 (Unaudited)

<u>Cost Category</u>	<u>Year Ended</u> <u>12/31/97</u>
Personnel costs	██████████
Equipment	██████████
Participant support costs	██████████
Subawards	██████████
Other direct costs	██████████
Total direct costs	4,486(B)
Exclusions:	
Equipment	██████████
Participant support	██████████
Subawards > than \$25,000	██████████
Modified total direct cost base	4,043(C)
Final audited indirect cost rate	<u>36.15%</u>
Calculated allowable indirect costs	1,462
Claimed indirect costs (C)	<u>1,940(B)</u>
Over/(under) recovered indirect costs	<u>\$ 478</u>

(A) The award period is June 15, 1994 to May 31, 1997.

(B) The total direct costs plus the claimed indirect cost totals \$6,426 for the period January 1, 1997 to May 31, 1997. The cumulative amount for period prior to December 31, 1996 AAPT was unable to locate. The amount claimed for the audit period was higher by \$125 than the amount reported on the FCTR for the above noted period as of September 30, 1997.

(C) The approved indirect cost rate was 48%. Indirect costs were claimed at a rate of 47.98%.

National Science Foundation Award Number ESI 9150173  
 Awarded To  
 The American Association of Physics Teachers, Inc.  
 Detailed Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period January 1, 1997 to April 30, 1997(A)  
 Final  
 (Unaudited)

Cost Category	Year Ended 12/31/97
Personnel costs	██████████
Equipment	
Participant support costs	██████████
Subawards	██████████
Other direct costs	██████████
Total direct costs	32,233
Exclusions:	
Equipment	
Participant support	██████████
Subawards > than \$25,000	██████████
Modified total direct cost base	4,824 (C)
Final audited indirect cost rate	<u>36.15%</u>
Calculated allowable indirect costs	1,744
Claimed indirect costs (C)	<u>          </u> (B)
Over/(under) recovered indirect costs (D)	<u>\$ (1,744)</u> (B)

(A) The award period is December 15, 1991 to April 30, 1997.

(B) The total direct costs plus the claimed indirect cost totals \$32,233 for the period January 1, 1997 to April 30, 1997. The cumulative amount for the period prior to December 31, 1996 AAPT was unable to locate. The amount claimed on the FCTR for the audit period was higher by \$12,804 than the amount reported on the general ledger for the above period as of the quarter ended June 30, 1997.

(C) The approved indirect cost rate was 25%. There were no amounts claimed per the accounting records.

(D) Under-recovered indirect costs cannot be recovered on this award since the award is closed and the total costs (direct and indirect) were billed up to the budget maximum.

National Science Foundation Award Number DUE 946330  
 Awarded To  
 The American Association of Physics Teachers, Inc.  
 Detailed Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period January 1, 1997 to June 30, 1997(A)  
 Final  
 (Unaudited)

<u>Cost Category</u>	<u>Year Ended 12/31/97</u>
Personnel costs	██████████
Equipment	
Participant support costs	
Subawards	██████████
Other direct costs	██████████
Total direct costs	20,525(B)
Exclusions:	
Equipment	
Participant support	
Subawards > than \$25,000	██████████
Modified total direct cost base	12,753(C)
Final audited indirect cost rate	<u>36.15%</u>
Calculated allowable indirect costs	4,610
Claimed indirect costs (C)	<u>3,346(B)</u>
Over/(under) recovered indirect costs (D)	<u>\$ (1,264)</u>

(A) The award period is August 31, 1994 to June 30, 1997.

(B) The total direct costs plus the claimed indirect cost totals \$23,871 for the period January 1, 1997 to June 30, 1997. The cumulative amount for the period prior to December 31, 1996 AAPT was unable to locate. The amount claimed for the audit period was higher by \$3,546 than the amount reported on the FCTR for the above period as of the quarter ended June 30, 1997.

(C) The award letter did not state a rate. The budget submitted with the proposal by AAPT indicated a rate of 24.63%. Indirect costs were claimed at a rate of 26.24%.

(D) Under-recovered indirect costs cannot be recovered on this award since the award is closed and the total costs (direct and indirect) were filled up the budget maximum.

SECTION V

AWARDEE'S RESPONSE

# American Association of Physics Teachers

Enhancing the understanding and appreciation of physics through teaching

**Finance**  
One Physics Ellipse  
College Park, MD 20740-3845  
phone: 301.209.3330  
fax: 301.209.0845  
aapt-exec@aapt.org  
www.aapt.org

December 12, 2002

████████████████████  
M..D. Oppenheim & Co., P.C.  
8403 Colesville Rd. Suite 340  
Silver Spring, Md. 20910-3367

Dear ██████████

I have reviewed the draft audit report on the financial and compliance audit of our indirect cost for the years ended December 31, 1997, 1998, 1999 and 2000.. The following are our written responses to your findings:

- |                                   |   |
|-----------------------------------|---|
| <u>Compliance Finding 1</u>       | We concur and will attend training on, how to prepare an indirect cost proposal. We will write policies and procedures for the classification of direct and indirect costs. |
| <u>Compliance Finding 2</u>       | We concur and will write policies and procedures to identify applicable credits and properly offset.  |
| <u>Compliance Finding 3</u>       | We concur and will write policies and procedures to identify costs that should be excluded from the direct cost base.   |
| <u>Compliance Finding 4</u>       | We concur and will submit an indirect cost proposal annually and follow up with NSF as needed.  |
| <u>Compliance Finding 5</u>       | We concur and will review our chart of accounts to ensure the identification and segregation of unallowable charges.  |
| <u>Internal Control Finding I</u> | We concur and will develop_ policies and procedures to document our indirect cost calculation process Staff will attend training on how to develop indirect cost proposals. |
| <u>Internal Control Finding I</u> | We concur and will develop procedures concerning the adequacy and retention of original supporting documentation. .   |

Internal Control Finding 2, We concur and will develop policies and procedures to ensure adequate controls over the time and reporting system.

If you have any questions, please call me.

Sincerely,

[REDACTED]

Xc [REDACTED]

[REDACTED]

**NATIONAL SCIENCE FOUNDATION**  
4201 WILSON BOULEVARD  
ARLINGTON, VIRGINIA 22230

MAR 7 2003



OFFICE OF  
INSPECTOR GENERAL

**MEMORANDUM**

To: Donna Fortunat, Director  
Division of Acquisition and Cost Support

Mary Santonastasso, Director  
Division of Grants and Agreements

From: **tJ . Can,**  
De orah H. Cureton  
Associate Inspector General for Audit

Subject: Audit Report 03-1004: Financial and Compliance of Indirect Costs for the  
Year Ended June 30, 2000, of the American Association of Physics  
Teachers, College Park, Maryland

Attached is the final Financial and Compliance Audit of Indirect Costs for the four-year period ending December 31, 2000, of the American Association of Physics Teachers (AAPT) located in College Park, Maryland. M.D. Oppenheim & Company, P.C., an independent public accounting firm under contract to the Office of the Inspector General, performed the audit.

NSF is the agency responsible for negotiating and approving indirect cost rates for AAPT on behalf of the Federal government. For the four-year period under audit, AAPT had ten active awards for which it had received \$7.7 million in NSF funding and had claimed \$713,223 in indirect costs.

The audit found that AAPT did not have adequate control procedures related to the preparation and submission of indirect cost proposals. The total adjustments necessary to correct errors in the rate proposals amounted to \$929,175 in total reductions to the indirect cost pools and \$414,025 total additions to the direct cost bases for the four-year period. As a result, AAPT over-charged \$58,906 or 8% of total claimed indirect costs on five of its NSF awards active during the four years. In addition, AAPT did not submit indirect cost proposals to NSF annually as required by regulation. The identified errors occurred because AAPT staff did not completely understand federal regulations related to the preparation and submission of indirect cost proposals and AAPT did not have written policies and procedures documenting this process..

In response to the audit, AAPT agreed with the findings and recommendations and stated that written policies and procedures will be developed and implemented to address these issues and that a proposal will be submitted annually to NSF.

In accordance with OMB Circular *A-50, Audit Followup*, and NSF's Standard Operating Guidance *2001-4, Policies and Procedures to Audit Reports Issuance and Resolution of Audit Findings Contained in Audits of NSF Awardees*, we request that NSF submit a written corrective action plan to our office identifying the specific actions and milestone dates for addressing our recommendations.

We thank you and your staff for the cooperation extended to us during this audit. If you have any questions about this report, please contact James Noeth on extension 5005, or William Harrison, on extension 4992.

**THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.**

**DETAILED (PERSONAL IDENTIFYING INFORMATION) ON  
SCHEDULES C-1 TO C-4**

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Details of Adjustments to Indirect Costs - Unallowable Costs Charged to the Miscellaneous Executive Account  
 For the year ended December 31, 1997

VENDOR/PAYEE	TRAN DATE	G/L ACCT NUMBER	ACCOUNT NAME	INDIRECT COST PROPOSAL LINE ITEM NAME	INDIRECT COST
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	\$ 48
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	14
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	15
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	95
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	48
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	10
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	9
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	10
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	250
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	10
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	10
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	25
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	10
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	35
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	190
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	25
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	130
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	14
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	15
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	9
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	90
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	651

\$ 1,713

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Details of Adjustments to Indirect Costs - Unallowable Costs Charged to the Miscellaneous Executive Account  
 For the year ended December 31, 1998

VENDOR/PAYEE	TRAN DATE	G/L ACCT NUMBER	ACCOUNT NAME	INDIRECT COST PROPOSAL LINE ITEM NAME	INDIRECT COST
██████████	██████████	██████████	Miscellaneous	██████████	\$ 428
████████████████████	██████████	██████████	Miscellaneous	██████████	583
					<u>\$ 1,011</u>

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Details of Adjustments to Indirect Costs - Unallowable Costs Charged to the Miscellaneous Executive Account  
 For the year ended December 31, 1999

VENDOR/PAYEE	TRAN DATE	G/L ACCT NUMBER	ACCOUNT NAME	INDIRECT COST PROPOSAL LINE ITEM NAME	INDIRECT COST
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	\$ 168
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	400
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	44
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	7,621
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	82
					\$ 8,315

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Details of Adjustments to Indirect Costs - Unallowable Costs Charged to the Miscellaneous Executive Account  
 For the year ended December 31, 2000

VENDOR/PAYEE	TRAN DATE	G/L ACCT NUMBER	ACCOUNT NAME	INDIRECT COST PROPOSAL LINE ITEM NAME	INDIRECT COST
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	\$ 900
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	84
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	31
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	26
					\$1,041

**THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.**  
 Details of Adjustments to Indirect Costs - Reclass of Indirect Expenses to Direct Expenses  
 From the Miscellaneous Account  
 For the year ended December 31, 1998

VENDOR/PAYEE	Tran DATE	G/L ACCT NUMBER	ACCOUNT NAME	INDIRECT COST PROPOSAL LINE ITEM NAME	INDIRECT COST
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	\$ 12,308
[REDACTED]	[REDACTED]	[REDACTED]	Miscellaneous	[REDACTED]	39 850
					\$52,158

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
Details of Adjustments to Indirect Costs - Reclass of Indirect Expenses to Direct Expenses  
From the Miscellaneous Account  
For the year ended December 31, 1999

<u>VENDOR/PAYEE</u>	<u>Tran DATE</u>	<u>G/L ACCT NUMBER ACCOUNT NAME</u>	<u>INDIRECT COST PROPOSAL LINE ITEM NAME</u>	<u>INDIRECT COST</u>
████████████████████	████████	████████ Miscellaneous	████████	<u>\$ 12,469</u>

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Details of Adjustments to Indirect Costs - Inadequate Source Documentation  
 For the year ended December 31, 1997

VENDOR/PAYEE	CHECK DATE	CHECK NUMBER	G/L ACCT NUMBER	<u>ACCOUNT NAME</u>	INDIRECT COST PROPOSAL LINE <u>ITEM NAME</u>	INDIRECT COST
██████████	██████	██████	██████████	██████████	██████	\$ 1,530
██████████	██████	██████	██████████	██████████	██████	2,660
██████████	██████	██████	██████████	██████████	██████	1 000
						\$5,190

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Details of Adjustments to Indirect Costs - Inadequate Source Documentation  
 For the year ended December 31, 1998

VENDOR/PAYEE	CHECK DATE	CHECK NUMBER	G/L ACCT NUMBER	ACCOUNT NAME	INDIRECT COST PROPOSAL LINE ITEM NAME	INDIRECT COST
██████████ ██████████	██████ ██████	█████ █████	██████████ ██████████	█████ ██████████ ██████████	█████ ██████████ ██████████	\$ 1,101
						<u>834</u>
						<u>\$ 1,935</u>



THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Details of Adjustments to Indirect Costs - Inadequate Source Documentation  
 For the year ended December 31, 2000

VENDOR/PAYEE	CHECK DATE	CHECK NUMBER	G/L ACCT NUMBER	ACCOUNT NAME	INDIRECT COST PROPOSAL LINE ITEM NAME	INDIRECT COST
██████████ ██████████	██████ ██████	█████ █████	██████████ ██████████	█████ █████	██████████ ██████████	\$ 973 965
						<u>\$ 1,938</u>

THE AMERICAN ASSOCIATION OF PHYSICS TEACHERS, INC.  
 Details of Adjustments to Indirect Costs -Missing Documentation  
 For the year ended December 31, 1997

VENDOR/PAYEE	CHECK DATE	CHECK NUMBER	G/L ACCT NUMBER	ACCOUNT NAME	INDIRECT COST PROPOSAL LINE ITEM NAME	INDIRECT COST
██████████	██████	████	██████████	██████████	██████	\$ 2,500
██████	██████		██████████	██████████	██████	1,575
██████	██████		██████████	██████████	██████	1,895
						5,970
████	██████	████	██████████	██████████ ██████████	██████████ ██████	4,464
██████████	██████		██████████	██████████	██████████	619
						\$ 11,053