THE MATHEMATICAL ASSOCIATION OF AMERICA
Washington, D.C.

Financial and Compliance Audit
of
Indirect Costs
For the Year Ended
December 31, 2000

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SECTION I

INTRODUCTION AND AUDIT RESULTS
SECTION I - INTRODUCTION AND AUDIT RESULTS

BACKGROUND

The Mathematical Association of America (MAA) was incorporated in 1920 in the state of Illinois. The mission of the MAA is to advance the mathematical sciences, especially at the collegiate level. To achieve its mission, the MAA produces various publications, journals, and magazines. Those published materials disseminate and expose high quality mathematical and teaching ideas to the MAA members. The MAA also provides various mathematics competitions, workshops and meetings. The MAA also offers in-depth training for participants in preparation of the Mathematics Olympiad competition.

The MAA receives approximately $7 million of annual revenues from journals, magazines, federal financial assistance, meetings, workshops, mathematics competitions, and member services. Of about $7 million of annual revenues, federal financial assistance and other special projects approximates $759,000. The National Science Foundation (NSF) provides 79% of the federal financial assistance to the MAA and is the cognizant federal audit agency.

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 proposal (IDCP) prepared by the MAA for the year ended December 31, 2000 to determine a final indirect cost rate for that year. During the period of our audit, there were eight NSF awards that included indirect costs. Our audit objectives were: (1) to determine whether the MAA complied with federal requirements in computing its IDCP for the year ended December 31, 2000; (2) to determine whether the MAA over or under-recovered indirect costs on each NSF award active during the audit period, based upon the audit-determined indirect cost rate; and (3) to evaluate the adequacy of the MAA’s internal controls to administer, account for, and monitor indirect cost charges to federal awards.

To accomplish the objectives of the audit, we:

• Conducted an on-site survey with sufficient observations, interviews, and examinations of documents to make an initial determination whether the predetermined rate was 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 the MAA’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 the MAA’s control environment.
• Prepared an internal control audit planning document for OIG review and approval. The internal control planning document included the proposed audit program/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 internal controls in 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 pool and the direct cost base.

• Performed testing procedures so as to determine whether the IDCP and the resultant indirect cost rate comply with OMB Circulars A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals and Other Non-Profit 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 the provisions of the *NSF Grant Policy Manual*, 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 the MAA's calculation of its actual indirect cost rate for the year ended December 31, 2000. Total audit adjustments and eliminations necessary to correct the inaccuracies in the rate calculation amounted to $312,989 in the indirect cost pool and $89,968 in the direct cost base. As a result, MAA charged $12,064 or 12% more indirect costs on NSF's awards active during calendar year 2000 than it actually incurred.

Because MAA's awards from NSF provided for a predetermined indirect cost rate, which is not subject to adjustment, NSF may not recover for these additional costs. However, based on the seven-percentage point reduction found between the 38.87% proposed rate and the 31.89% audit-determined rate, NSF should evaluate whether the use of a predetermined fixed rate is appropriate for MAA. The use of an overstated predetermined rate could result in a larger amount of indirect costs that NSF may not be able to recover in the future.

We found the following compliance and internal control deficiencies in the MAA's processes for accounting for its indirect costs:

Material Non-Compliance

- The MAA incorrectly included, in its IDCP, general ledger accounts used to record allocations of indirect costs, as well as accounts used to allocate internal cost sharing to grant awards. This resulted in double-recorded costs in the IDCP that overstated the indirect cost pool by $88,698 and the direct cost base by $78,080. These adjustments represent 5% of the indirect cost pool and 2% of the direct cost base.

- The MAA misclassified $56,585 of MAA member-related direct costs as indirect costs. This adjustment represents 3% of the indirect cost pool. These direct costs consist of credit card processing fees and subcontract costs for fulfillment services that relate to publications and membership services.

- The MAA did not properly exclude all participant support, subcontracts, and cost sharing expenses from the direct cost base, totaling $116,958. In addition, MAA incorrectly removed marketing, bank service fees and direct service administrative expenses totaling $289,783 from the direct cost base. These adjustments represent a 4% net adjustment to the direct cost base.

- The MAA did not properly offset its occupancy expenses in the indirect cost pool by all of the income it received for rent, parking, and contributions for building maintenance. This resulted in overstating the indirect cost pool by $9,427. In addition, a direct program donation of $34,737 was not recorded as an offset for utility costs included in the direct cost base.
Non-Material Non-Compliance

- The MAA included unallowable costs for travel and a bad debt transaction, totaling $155,778, in the indirect cost pool because the accounting staff overlooked specific federal regulations stating that such costs cannot be charged to the government. This adjustment represents 9% of the indirect cost pool.

Internal Control Weaknesses

The MAA does not have adequate control procedures related to the preparation and submission of its IDCP. We identified material errors in the MAA's calculation of its indirect cost rate for the year ended December 31, 2000, that resulted in an audited indirect cost rate seven percentage points lower than the approved predetermined rate, which represents an 18% change in the rate. We found that the MAA 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 the MAA's time and effort reporting. Specifically, a $2,501 adjustment was required to reclassify direct payroll costs from the indirect cost pool to the direct cost base due to an accounting error.

To address the compliance and internal control deficiencies identified in our audit, 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 the MAA receive training in how to properly and accurately prepare an IDCP and develop written policies and procedures documenting these processes. We also recommend that NSF evaluate the adequacy of MAA's corrective actions on these recommendations and determine whether the continued use of a predetermined indirect cost rate is appropriate for MAA.

Summary of Auditee's Response

With respect to the compliance issues presented in the report, the MAA has indicated their agreement with the findings regarding the elimination of double-recorded costs, the misclassification of direct costs as indirect, the incorrect adjustment of the direct cost base, the lack of proper offset of applicable credits, and the unallowables included in the indirect cost pool. They indicated that they have discussed the findings with their external auditors and have revised accounting procedures to ensure the errors are corrected.

With respect to the internal control findings, the MAA also indicated their agreement with the need to revise its written policies and procedures to include detailed information to aid in calculating the indirect cost rate and to ensure that adequate controls are established and implemented to strengthen its time and reporting system. In addition, the MAA staff are currently registered to attend training in federal cost principles and developing indirect cost proposals.
EXIT CONFERENCE

An exit conference was held on February 21, 2002 at the Auditee's office located at 1529 Eighteenth Street, North West, Washington, D.C. The findings on compliance along with the adjustments, eliminations and exclusions related to the IDCP were discussed by the following individuals.

For The Mathematical Association of America:

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

FINDINGS AND RECOMMENDATIONS
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 (Schedule B) which summarize the IDCP prepared by The Mathematical Association of America for the year ended December 31, 2000, and have issued our report thereon dated February 21, 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 Mathematical Association of America'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 the instances of noncompliance, as reported in the accompanying Findings and Recommendations on Compliance and the adjustments and eliminations noted in Schedules C-1 and C-2, 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 Mathematical Association of America's 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 Mathematical Association of America's 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 number I to be a material weakness.

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

February 21, 2002

M.D. Fishbein & Company, P.C.
Material Deficiencies

1. **Double-Recorded Costs Overstate Indirect and Direct Costs**

OMB Circular A-110 states that financial management systems should provide for accurate, current and complete disclosure of financial results. The MAA double-recorded costs in the books of account to allocate indirect costs and internal cost sharing to its grant awards. Instead of reclassifying these costs from one cost center to another, the costs were recorded a second time with a matching increase in grant revenue. The doubled costs were incorrectly included in the IDCP for the year ended December 31, 2000 which resulted in an overstatement of the indirect cost pool by $88,698 and a net overstatement of the direct cost base by $78,080 ($184,280 - $106,200; see Schedule C-2).

The MAA financial staff did not understand that cost allocations recorded for financial reporting purposes should be identified and segregated from indirect cost allocations required in compliance with federal cost principles. This lack of understanding resulted in an overlap of cost allocation methodologies in the books of account and errors in the preparation of the IDCP.

**Recommendation**

We recommend that the Directors of NSF's DACS and DGA require that the MAA staff receive training on how to properly and accurately prepare an IDCP; and ensure that the MAA's future indirect cost submissions do not include duplicate costs in its indirect cost pool and direct cost base.

**Auditee's Response**

This matter has been discussed with the staff of both M.D. Oppenheim and BDO Seidman, MAA's external auditors. Revised accounting procedures will eliminate double-recorded costs in the books of account for allocated indirect costs and internal cost sharing to grant awards. MAA staff are currently registered to attend training courses in federal cost principles and developing indirect cost proposals.

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

The MAA's proposed actions will correct the weaknesses noted. We recommend that the Directors of NSF's DGA and DACS require that the MAA provide documentation that its proposed accounting procedures have been implemented.
2. **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. The MAA's mission is to advance the mathematical sciences. To achieve this mission the MAA produces publications, journals, and magazines. Therefore, all costs specifically identifiable with these 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 year ended December 31, 2000, the MAA erroneously included mission-related costs totaling $56,585 in the indirect cost pool. The expenses consist of credit card processing fees ($27,459) and subcontract costs ($29,126) for fulfillment services related to publications sales and membership services. The MAA accounts for these costs as administrative expenses of the organization; however, these amounts should be excluded from the indirect cost pool because they are specifically identifiable to particular direct cost objectives.

The MAA included these costs in the indirect cost pool because the staff did not understand that federal cost principles require all mission-related costs to be treated as direct program costs.

**Recommendation**

We recommend that the Directors of NSF's DACS and DGA require that the MAA develop and implement written policies and procedures for the classification of direct and indirect costs, and ensure that the MAA's future indirect cost rate proposals do not include mission-related costs in the indirect cost pool.

**Auditee's Response**

Direct mission-related costs have been identified as direct costs for all future reference. MAA's written policies and procedures are currently being re-written to clarify and correct this misclassification.

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

The MAA's proposed actions will correct the weaknesses noted. We recommend that the Directors of NSF's DGA and DACS require that the MAA 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 items that could distort the calculation such as major subcontracts, participant support, and cost sharing expenses. In addition, direct costs should be allocated their fair share of the organization's indirect costs if they benefit from the organization's indirect costs. We found that the MAA did not properly exclude all subcontract, participant support, and external cost sharing amounts from the direct cost base. The MAA partially excluded these costs but an additional audit adjustment totaling $116,958 was required to fully remove the balance of these distorting items from the direct cost base.

We also found that direct costs totaling $289,783 ($308,146 - $18,363) related to marketing, bank service fees and direct service administrative expenses were incorrectly removed from the direct cost base. Of this amount, $308,146 in marketing costs was excluded as unallowable, and the remaining $18,363 was incorrectly doubled in the exclusion process due to a math error. Our audit found that these marketing costs benefit from the MAA's indirect costs, and therefore, should be included in the direct cost base.

It appears that the MAA did not adequately review the IDCP to ensure all adjustments and eliminations were complete and mathematically accurate. In addition, unallowable costs were incorrectly removed from the direct cost base because the MAA endeavored to duplicate the same adjustment made by NSF when it assisted the MAA in the preparation of its IDCP for the year ended December 31, 1999. Our examination of these amounts recorded in 2000 found no basis for the adjustment.

**Recommendation**

We recommend that the Directors of NSF's DACS and DGA require that the MAA develop and implement policies and procedures to identify distorting costs that should be excluded from the direct cost base and ensure that an independent review of the MAA's annual IDCP is performed to verify its accuracy and compliance with federal cost principles before submission to NSF.

**Auditee's Response**

MAA's financial staff has reviewed OMB Circular A-122. This issue has been specifically addressed to understand the errors made in the December 31, 2000 proposal. Revised written policies and procedures will include detailed information to aid in calculating the total direct cost base.

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

The MAA's proposed actions will correct the weaknesses noted. We recommend that the Directors of NSF's DGA and DACS require that the MAA provide NSF with documentation that its policies and procedures have been revised and implemented.
4. **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." The MAA receives revenue from the rental of office space, parking revenue, and a contribution for building maintenance costs. For the year ended December 31, 2000, building revenue totaled $110,709. The MAA's total occupancy costs for this period were $359,392. However, the amount of offset the MAA applied as a reduction of indirect costs was $101,282 rather than $110,709. The MAA calculated this amount based on the occupancy cost allocation methodology applied for financial reporting purposes. Because all the MAA occupancy costs should be properly included in the indirect cost pool in compliance with federal cost principles, amounts and allocations of cost for financial reporting purposes are not applicable. The building income received annually should have been directly offset against total occupancy costs. The MAA's calculation of the applicable credit resulted in the indirect cost pool being overstated by an additional $9,427 ($110,709 - $101,282).

The MAA also recorded revenue for the donation of $34,737 of utility costs incurred by the University of Nebraska in support of the American Mathematics Competitions. However, the expense totaling this amount should be properly offset in the direct cost base in the IDC. Because it does not benefit from the MAA indirect costs. This resulted in an overstatement of total direct costs by this amount.

The MAA staff did not understand the errors caused by overlapping the internal cost allocations used for financial reporting with cost allocations required in compliance with federal cost principles. The MAA also did not adequately understand the cost principle related to the offset of applicable credits.

**Recommendation**

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

**Auditee's Response**

MAA's financial staff has reviewed OMB Circular A-122. Applicable credits not properly offset was an issue addressed to understand the errors made in the December 31, 2000 proposal. Revised written policies and procedures will include detailed information to aid in the calculation for the offset of applicable credits related to the MAA operations.

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

The MAA's proposed actions will correct the weaknesses noted. We recommend that the Directors of NSF's DGA and DACS require that the MAA provide NSF with documentation that its policies and procedures have been revised and implemented.
5. **Unallowable Costs Included in the Indirect Cost Pool**

Federal cost principles state that travel costs should be allowable if they are reasonable. In determining reasonableness, consideration shall be given to..."the restraints or requirements imposed by such factors as generally accepted sound business practices, arms length bargaining, federal and state laws and regulations, and terms and conditions of the award." Standard Government Travel Regulations provide a measure of approved per diem or mileage rates. The MAA travel policy states that federal travel regulations related to per diem for meals and incidental expenses and mileage rates should be followed, but does not provide guidance on allowable lodging charges. Our testing identified $7,371 of indirect costs in excess of federal travel regulations that are unallowable costs.

Also, **OMB Circular A-122** states that bad debt is unallowable. However, the MAA included a $148,407 write-off cost in the indirect cost pool due to the cancellation of a private grant. The MAA staff overlooked this cost when preparing the IDCP because it was not recorded as a bad debt in the books of account.

**Recommendation**

We recommend that the Directors of NSF’s DACS and DGA ensure that the MAA complies with all provisions in **OMB A-122** regarding the unallowability of specific cost categories.

**Auditee's Response**

The $148,407 write-off of a private grant was required by our external auditors. The inclusion in the indirect cost pool was, indeed, overlooked during the preparation of the IDCP because it was not recorded as a bad debt in the books of account. Revised written policies and procedures will include detailed information to aid in the identification and calculation of unallowable costs that should not be included in the indirect cost pool.

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

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

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

NSF guidance requires organizations having awards to submit IDCPs reconciled to financial statements after the close of each accounting year during which an award is active. In addition, awardees submitting a proposal for the first time are encouraged to request guidance from the NSF's Cost Analysis and Audit Resolution Branch. Although the awardee is encouraged to seek advice, NSF Grant General Conditions state that such advice does not diminish the awardee's responsibility for making sound administrative judgments.

Our audit identified significant weaknesses in the MAA's processes for accounting for its indirect costs. In particular, the MAA staff did not completely understand federal regulations related to the preparation and submission of IDCPs. Further, the MAA did not have written policies and procedures documenting its indirect cost calculation processes.

In accordance with NSF guidance, the MAA requested and received assistance from NSF in preparing its IDCP for the year ended December 31, 1999. The MAA then endeavored to duplicate the approach used by NSF in preparing its proposal for the year ended December 31, 2000. As a result, errors we found in the 1999 indirect cost calculation (e.g., double-recorded costs were not identified by NSF and excluded) were duplicated in the proposal in the following year. We also found additional compliance errors that occurred in the indirect rate calculation for the year ended December 31, 2000 (see Compliance Findings). Without adequate training in federal regulations or written policies and procedures to document the indirect cost calculation process, the MAA cannot ensure its IDCP is accurately prepared. It is not sufficient for the MAA to rely on NSF assistance.

These problems resulted in material errors in MAA's calculation of its indirect cost rate for the year ended December 31, 2000. The indirect cost pool was overstated by $312,989 and the direct cost base was understated by $89,968. This resulted in the MAA charging $12,064 or 12% more indirect costs on NSF’s awards active during calendar year 2000 than it actually incurred.

Because a predetermined indirect cost rate is not subject to adjustment, NSF may not recover its costs. Thus, the primary value of this finding is to provide NSF with guidance on the MAA's future indirect cost rates. Based on the seven percentage point reduction (an 18% change in the rates) found between the 38.87% predetermined fixed rate and the 31.89% audit-determined rate, NSF may want to consider whether the use of a predetermined fixed rate is appropriate.

**Recommendation**

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

We also recommend that NSF evaluate the adequacy of MAA’s corrective actions on these recommendations and determine whether the continued use of a predetermined indirect cost rate is appropriate for MAA.

**Auditee's Response**

Revised written policies and procedures will include detailed information to aid in calculating the indirect cost rate. MAA staff are currently registered to attend training courses in federal cost principles and developing IDCPs.

As we discussed during the exit conference held on February 21, 2002, we looked to the NSF staff to direct us in preparing the IDCP of The Mathematical Association of America for the year ended December 31, 2000. We were instructed by NSF staff to use the NSF created template to prepare the IDCP for the year ended December 31, 1999. It is now clear that this information was inadequate and inaccurate.

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

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

1. Weak Controls Over Time and Effort Reporting

NSF guidance to awardees states that adequate time and effort records should contain the following information: 1) the name and signature of the employee; 2) the hours, or percentage of effort an employee worked each day; 3) the activities of the employee during the pay period; and 4) the name and signature of the employee’s supervisor. 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.

An adjustment of $2,501 was required to reclassify direct payroll costs from the indirect cost pool to the direct cost base. This accounting error occurred because the spreadsheet used to summarize payroll time allocations by program was not updated to reflect correct time allocations for the current pay period based on the timesheets. Data from the previous pay period was not cleared before current data was entered so the mistake was undetected.

In addition, we found that of 102 timesheets tested, 10 out of 17 directors’ timesheets (senior MAA management) were not signed by a supervisor, two timesheets were signed by the supervisor but not the employee, and the total hours recorded on the front of five timesheets did not agree with the total hours allocated to programs reported on the back of the timesheets. Although these audit errors did not result in an indirect cost rate adjustment, they indicate general control weaknesses in the MAA’s time and effort reporting process.

At the time of the audit, the MAA was in the process of upgrading to an automated timekeeping system to help improve the timeliness and accuracy of timekeeping reports.

Recommendation

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

Auditee’s Response

Revised written policies and procedures will include detailed information to ensure adequate controls are established and implemented to strengthen its time and effort reporting system. This will include accurately reporting of time spent on charged projects and approval by applicable supervisor.
**Auditor's Response to Auditee's Response**

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

FINANCIAL SCHEDULES
INDEPENDENT AUDITORS' REPORT

We have audited the IDCP The Mathematical Association of America has proposed as applicable to the National Science Foundation and other federal awards for the year ended December 31, 2000. This IDCP, as presented in the schedule of indirect/direct costs (Schedules B-1 and B-2) and the summary schedule of over/(under) recovered indirect costs (Schedule A) are the responsibility of The Mathematical Association of America's management. Our responsibility is to express an opinion on Schedules A, B-1 and B-2 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 IDCP (Schedules B-1 and B-2) and the resultant over/(under) recovered indirect costs (Schedule A) for the year ended December 31, 2000 on the basis of accounting described in Note 1.

In accordance with Government Auditing Standards, we have also issued our report dated February 21, 2002 on our consideration of The Mathematical Association of America'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 and C-2 contain indirect costs in the amount of $312,989 that are reductions to the indirect costs proposed and $89,968 that are net additions to the direct costs proposed for the
year ended December 31, 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 Mathematical Association of America and the National Science Foundation and is not intended to be and should not be used by anyone other than these specified parties.

February 21, 2002
The amounts agree with the indirect cost rate proposal prepared by The Mathematical Association of America (MAA).

Total indirect and direct costs agree with the MAA's books of account. However, the direct cost base per the books of account is overstated by $37,522 and the indirect cost pool is understated by the same amount. An adjustment has been made to properly reflect the proposed costs per the books of account before auditors' adjustments & eliminations.

See accompanying notes to financial statements.
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<th></th>
<th>Totals</th>
<th>(Schedule C-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ 4,184,416</td>
<td>$ 4,146,894</td>
</tr>
<tr>
<td></td>
<td>(37,522)</td>
<td>$ 89,968</td>
</tr>
<tr>
<td></td>
<td>$ 4,236,862</td>
<td>$ 4,236,862</td>
</tr>
</tbody>
</table>

(A) The amounts agree with the indirect cost rate proposal prepared by The Mathematical Association of America (MAA).
(B) Total indirect and direct costs agree with the MAA's books of account. However, the direct cost base per the books of account is overstated by $37,522 and the indirect cost pool is understated by the same amount. An adjustment has been made to properly reflect the costs proposed per the books of account before auditors' adjustments & eliminations.

See accompanying notes to financial statements.
The amounts as proposed by the MAA in their IDCP for the year ended December 31, 2000 (Schedules B-I and B-2) required various adjustments and eliminations to the indirect cost or direct cost pools. These adjustments and/or eliminations are presented in Schedules B-I and B-2. On the following pages in Schedules C-I and C-2 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.

<table>
<thead>
<tr>
<th>Adjustment and/or Elimination</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct program costs were included in the indirect cost pool for bank card processing fees and incorrectly allocated payroll hours.</td>
<td>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.</td>
</tr>
<tr>
<td>Double-recorded costs overstated the indirect cost pool and the direct cost base.</td>
<td>OMB Circular A-110, Subpart C .21(b)(1) states recipients' financial management systems shall provide for the following... accurate, current and complete disclosure of the financial results.</td>
</tr>
<tr>
<td>Direct costs were erroneously adjusted from the direct cost base.</td>
<td>OMB Circular A-122, Attachment A, Part B states that direct costs [should be] allocated their share of the organization's indirect costs if they benefit from the organization's indirect costs.</td>
</tr>
<tr>
<td>Direct costs were erroneously included in the direct cost base.</td>
<td>OMB Circular A-122, Attachment A, Part D (2) states that the distribution base may be total direct costs (excluding... other distorting items such as major subcontracts ... participant support costs. In addition, Part B states that direct costs [should be] allocated their share of the organization's indirect costs if they benefit from the organization's indirect costs.</td>
</tr>
<tr>
<td>Adjustment and/or Elimination</td>
<td>Criteria</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Unallowable travel and bad debt were included in the indirect cost pool.</td>
<td><em>Federal regulations state that travel costs should be allowable if they are reasonable. In determining reasonableness, consideration should be given to... the restraints or requirements imposed by such factors as generally accepted sound business practices, arms length bargaining, federal and state laws and regulations, and terms and conditions of the award. In addition, OMB Circular A-122, Attachment B (3) states that bad debts are unallowable.</em></td>
</tr>
<tr>
<td>Applicable credits for all rental and other building income and University of Nebraska donations were not properly offset.</td>
<td><em>OMB Circular A-122, Attachment A, Part A (5) states 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.</em></td>
</tr>
<tr>
<td>Adjustments to correct prior-year cost sharing amounts were erroneously included in the direct cost base.</td>
<td><em>OMB Circular A-110, Subpart C .21(b)(1) states recipients’ financial management systems shall provide for the following... accurate, current and complete disclosure of the financial results.</em></td>
</tr>
</tbody>
</table>
### THE MATHEMATICAL ASSOCIATION OF AMERICA

**Schedule of Auditors' Adjustments and Eliminations - Indirect Costs**

**For the year ended December 31, 2000**

<table>
<thead>
<tr>
<th>Adjustment and Elimination Explanation</th>
<th>Total Amount</th>
<th>Salaries</th>
<th>Travel</th>
<th>Bank Service Fees</th>
<th>Bank Card Processing Fees</th>
<th>Other Exp (Bad Debt) - Fulfillment</th>
<th>Subcontract Cost</th>
<th>Project Support/ Cost Sharing</th>
<th>Applicable Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct program costs were included in</td>
<td>(29,960)</td>
<td>(2,501)</td>
<td>$</td>
<td>$</td>
<td>(27,459)</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>the indirect cost pool. These costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>include bank card processing fees and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>incorrectly allocated payroll hours.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double-recorded expenses resulted in</td>
<td>(88,698)</td>
<td></td>
<td>(25,210)</td>
<td>(63,488)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>overstated indirect costs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unallowable travel and bad debt were</td>
<td>(155,778)</td>
<td>(7,371)</td>
<td>(223)</td>
<td>(148,184)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>erroneously included in the indirect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cost pool.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct cost exclusion erroneously</td>
<td>(29,126)</td>
<td></td>
<td>(29,126)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>included in the indirect cost pool.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applicable credits for all building</td>
<td>(9,427)</td>
<td></td>
<td></td>
<td>(9,427)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>income were not offset against indirect costs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(312,989)</td>
<td>(2,501)</td>
<td>(7,371)</td>
<td>(223)</td>
<td>(52,669)</td>
<td>(148,184)</td>
<td>(29,126)</td>
<td>(63,488)</td>
<td>(9,427)</td>
</tr>
</tbody>
</table>
Direct program costs were included in the indirect cost pool. These costs include bank card processing fees and incorrectly allocated payroll hours.

Indirect costs allocated to federal awards were double-recorded in the books of account which resulted in erroneous inclusion in the direct cost base.

Direct costs were erroneously adjusted from the direct cost base.

Direct costs were erroneously included in the direct cost base.

Adjustments to correct prior-year cost sharing amounts were erroneously included in the direct cost base.

Applicable credits for University of Nebraska donations were not offset against the direct cost base.

Totals

<table>
<thead>
<tr>
<th>Category of Expense</th>
<th>Total</th>
<th>Salaries</th>
<th>Awards/ grants</th>
<th>Participant's Costs</th>
<th>Subcontract - Publishing</th>
<th>Subcontract - Others</th>
<th>Marketing</th>
<th>Bank Service Fees</th>
<th>Bank Card Processing Fees</th>
<th>Dir Serv</th>
<th>Allocated Indirect Costs</th>
<th>Project Support/ Cost Sharing</th>
<th>Applicable Credits</th>
</tr>
</thead>
</table>
1. Summary of Significant Accounting Policies:

The accompanying financial schedules have been prepared in conformity with National Science Foundation (NSF) instructions. Schedules B-1 and B-2 have been prepared from the IDCP prepared by The Mathematical Association of America, and Schedule A has been prepared based upon the results of the audit of Schedules B-1 and B-2. The schedules do not present the complete financial position of the Mathematical Association of America. In accordance with NSF instructions, there is no statement of financial position, statement of activities or statement of cash flows.

2. Income Taxes:

The Mathematical Association of America is a private nonprofit corporation, incorporated under the laws of the State of Illinois. The Mathematical Association of America is exempt from income taxes under Section 501(c)(3) of the Internal Revenue Code.
SECTION IV

SUPPLEMENTARY INFORMATION
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 Mathematical Association of America for the year ended December 31, 2000, appears in Schedule A and Schedules B-1 and B-2. 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-8 are presented for the purpose 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.

February 21, 2002
National Science Foundation Award Number DUE-9617077
Awarded to
The Mathematical Association of America
Detailed Schedule of Over/(Under) Recovered Indirect Costs
For the year ended December 31, 2000 (A)
Interim
(Unaudited)

Schedule D-1

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Original Award</th>
<th>Supplement</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel costs</td>
<td>$8,460</td>
<td>$</td>
<td>$8,460</td>
</tr>
<tr>
<td>Travel</td>
<td>$2,107</td>
<td>$2,500</td>
<td>$4,607</td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>$2,545</td>
<td></td>
<td>$2,545</td>
</tr>
<tr>
<td>Consultant services</td>
<td>$12,265</td>
<td></td>
<td>$12,265</td>
</tr>
<tr>
<td>Financial management</td>
<td>$4,280</td>
<td></td>
<td>$4,280</td>
</tr>
<tr>
<td><strong>Total direct costs</strong></td>
<td><strong>29,657</strong></td>
<td><strong>2,500</strong></td>
<td><strong>32,157</strong></td>
</tr>
</tbody>
</table>

Exclusions:
- Consultant services (12,265)

**Modified total direct cost base (C)**
- 17,392
- 2,500

**Final audited indirect cost rate**
- 31.89%

**Calculated allowable indirect costs**
- 5,546
- 797

**Claimed indirect costs (C)**
- 4,696
- 900
- $5,596

**Over/(under) recovered indirect costs**
- $(850)
- $103

(A) The award period is October 1, 1996 to March 31, 2001.

(B) The total direct costs plus the claimed indirect costs per the general ledger agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended 12/31/00.

(C) A 27.0% rate was approved in the grant budget based on a MTDC, excluding consultant service costs. A 19.7% rate is stated in the award letter because NSF incorrectly calculated the rate from the budget without excluding these costs. The type of rate was not stated in the award letter. Additionally, no rate was stated in the supplemental award letter but the calculated rate per the budget was 36.0%. Indirect costs were claimed based upon application of 27.0% and 36.0%, respectively.

See accompanying independent auditors' report.
National Science Foundation Award Number DUE-9653383
Awarded to
The Mathematical Association of America
Detailed Schedule of Over/(Under) Recovered Indirect Costs
For the year ended December 31, 2000 (A)
Interim
(Unaudited)

Schedule D-2

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Year末了</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12/31/2000</td>
</tr>
<tr>
<td>Personnel costs</td>
<td>$9,513</td>
</tr>
<tr>
<td>Travel</td>
<td>8,594</td>
</tr>
<tr>
<td>Participants' support costs</td>
<td>15,734</td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>880</td>
</tr>
<tr>
<td>Publications costs</td>
<td>1,794</td>
</tr>
<tr>
<td>Consultant services</td>
<td>6,200</td>
</tr>
<tr>
<td>Subawards</td>
<td>6,887</td>
</tr>
<tr>
<td>Other direct cost</td>
<td>952</td>
</tr>
<tr>
<td>Total direct costs</td>
<td>50,554(B)</td>
</tr>
<tr>
<td>Exclusions:</td>
<td></td>
</tr>
<tr>
<td>Subawards</td>
<td>(6,887)</td>
</tr>
<tr>
<td>Modified total direct cost base (C)</td>
<td>43,667 (B)</td>
</tr>
<tr>
<td>Final audited indirect cost rate</td>
<td>31.89%</td>
</tr>
<tr>
<td>Calculated allowable indirect costs</td>
<td>13,925</td>
</tr>
<tr>
<td>Claimed indirect costs (C)</td>
<td>15,284 (B)</td>
</tr>
<tr>
<td>Over/(under) recovered indirect costs</td>
<td>$1,359</td>
</tr>
</tbody>
</table>

(A) The award period is February 15, 1997 to January 31, 2002.

(B) The total direct costs plus the claimed indirect costs per the general ledger agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended 12/31/00.

(C) Indirect costs were claimed based upon the application of a 35.00% rate. The type of rate was not stated in the award letter.

See accompanying independent auditors' report.
National Science Foundation Award Number DUE-9616685
Awarded to
The Mathematical Association of America
Detailed Schedule of Over/(Under) Recovered Indirect Costs
For the year ended December 31, 2000 (A)
Interim
(Unaudited)

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Year Ended 12/31/2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel costs</td>
<td>$ 4,140</td>
</tr>
<tr>
<td>Travel</td>
<td>6,876</td>
</tr>
<tr>
<td>Participants' support costs</td>
<td></td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>1,809</td>
</tr>
<tr>
<td>Publications costs</td>
<td>878</td>
</tr>
<tr>
<td>Consultant services</td>
<td></td>
</tr>
<tr>
<td>Subawards</td>
<td>33,192</td>
</tr>
<tr>
<td>Other direct cost</td>
<td></td>
</tr>
<tr>
<td><strong>Total direct costs</strong></td>
<td>46,895 (B)</td>
</tr>
<tr>
<td><strong>Exclusions:</strong></td>
<td></td>
</tr>
<tr>
<td>Subawards</td>
<td>(33,192)</td>
</tr>
<tr>
<td><strong>Modified total direct cost base (C)</strong></td>
<td>13,703</td>
</tr>
<tr>
<td><strong>Final audited indirect cost rate</strong></td>
<td>31.89%</td>
</tr>
<tr>
<td><strong>Calculated allowable indirect costs</strong></td>
<td>4,370</td>
</tr>
<tr>
<td><strong>Claimed indirect costs (C)</strong></td>
<td>5,070 (B)</td>
</tr>
<tr>
<td><strong>Over/(under) recovered indirect costs</strong></td>
<td>$ 700</td>
</tr>
</tbody>
</table>

(A) The award period is August 1, 1997 to January 31, 2002.

(B) The total direct costs plus the claimed indirect costs per the general ledger is less than the cumulative net disbursements reported on the FCTR by $1,300 as of the quarter ended 12/31/00.

(C) Indirect costs were claimed based upon the application of a predetermined fixed rate of 37.00%.

See accompanying independent auditors' report.
National Science Foundation Award Number DUE-9752755
Awarded to
The Mathematical Association of America
Detailed Schedule of Over/(Under) Recovered Indirect Costs
For the year ended December 31, 2000 (A)
Interim
(Unaudited)

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Year Ended 12/31/00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel costs</td>
<td>$ 7,850</td>
</tr>
<tr>
<td>Travel</td>
<td></td>
</tr>
<tr>
<td>Participants' support costs</td>
<td></td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>88</td>
</tr>
<tr>
<td>Publications costs</td>
<td>20,462</td>
</tr>
<tr>
<td>Consultant services</td>
<td>(7,850)</td>
</tr>
<tr>
<td>Subawards</td>
<td></td>
</tr>
<tr>
<td>Other direct cost</td>
<td>4,941</td>
</tr>
<tr>
<td><strong>Total direct costs</strong></td>
<td><strong>25,491</strong> (B)</td>
</tr>
</tbody>
</table>

Exclusions:
- Participants' support costs

**Modified total direct cost base (C)** 25,491

**Final audited indirect cost rate** 31.89%

**Calculated allowable indirect costs** 8,129

**Claimed indirect costs (C)** 9,584 (B)

**Over/(under) recovered indirect costs** $ 1,455

(A) The award period is February 1, 1998 to January 31, 2001.

(B) The total direct costs plus the claimed indirect costs per the general ledger agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended 12/31/00.

(C) Indirect costs were claimed based upon the application of a 37.60% rate. The type of rate was not stated in the award letter.

See accompanying independent auditors' report.
National Science Foundation Award Number DUE-9752757  
Awarded to  
The Mathematical Association of America  
Detailed Schedule of Over/(Under) Recovered Indirect Costs  
For the year ended December 31, 2000 (A)  
Interim  
(‘Unaudited  

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Original</th>
<th>Supplement</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel costs</td>
<td>$19,586</td>
<td>$1,343</td>
<td>$20,929</td>
</tr>
<tr>
<td>Travel</td>
<td>3,554</td>
<td>4,454</td>
<td>8,008</td>
</tr>
<tr>
<td>Participants’ support costs</td>
<td>13,927</td>
<td></td>
<td>13,927</td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>(1,052)</td>
<td></td>
<td>(1,052)</td>
</tr>
<tr>
<td>Consultant services</td>
<td>19,478</td>
<td>500</td>
<td>19,978</td>
</tr>
<tr>
<td>Total direct costs</td>
<td>55,493</td>
<td>6,297</td>
<td>$61,790</td>
</tr>
</tbody>
</table>

Exclusions:  

<table>
<thead>
<tr>
<th>Description</th>
<th>Original</th>
<th>Supplement</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants’ support costs (original)</td>
<td>(13,927)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fringe benefits (supplement)</td>
<td>(108)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Modified total direct cost base (C)            | 41,566   | 6,189      |           |

Final audited indirect cost rate                | 31.89%   | 31.89%     |           |

Calculated allowable indirect costs             | 13,255   | 1,974      |           |

Claimed indirect costs (C)                      | 15,172   | 2,116      | $17,288   |

Over/(under) recovered indirect costs           | $1,917   | $142       |           |

(A) The award period is March 15, 1998 to February 28, 2002.

(B) The total direct costs plus the claimed indirect costs per the general ledger agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended 12/31/00.

(C) Indirect costs were claimed based upon the application of predetermined fixed rates of 36.50% and 34.20% for the original and supplemental awards, respectively.

See accompanying independent auditors' report.
National Science Foundation Award Number ESI-9730329
Awarded to
The Mathematical Association of America
Detailed Schedule of Over/(Under) Recovered Indirect Costs
For the year ended December 31, 2000 (A)
Interim
(Uunaudited)

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Year Ended 12/31/2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel costs</td>
<td>$ 64,438</td>
</tr>
<tr>
<td>Travel</td>
<td>35,369</td>
</tr>
<tr>
<td>Participants' support costs</td>
<td></td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>1,109</td>
</tr>
<tr>
<td>Publications costs</td>
<td>1,737</td>
</tr>
<tr>
<td>Consultant services</td>
<td>5,000</td>
</tr>
<tr>
<td>Other</td>
<td>307</td>
</tr>
<tr>
<td><strong>Total direct costs</strong></td>
<td><strong>107,960 (B)</strong></td>
</tr>
<tr>
<td><strong>Exclusions:</strong></td>
<td></td>
</tr>
<tr>
<td>Participants' support costs</td>
<td></td>
</tr>
<tr>
<td><strong>Modified total direct cost base (C)</strong></td>
<td><strong>107,960</strong></td>
</tr>
<tr>
<td><strong>Final audited indirect cost rate</strong></td>
<td><strong>31.89%</strong></td>
</tr>
<tr>
<td><strong>Calculated allowable indirect costs</strong></td>
<td><strong>34,428</strong></td>
</tr>
<tr>
<td><strong>Claimed indirect costs (C)</strong></td>
<td><strong>40,593 (B)</strong></td>
</tr>
<tr>
<td><strong>Over/(under) recovered indirect costs</strong></td>
<td><strong>$ 6,165</strong></td>
</tr>
</tbody>
</table>


(B) The total direct costs plus the claimed indirect costs per the general ledger agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended 12/31/00.

(C) Indirect costs were claimed based upon the application of a 37.60% rate. The type of rate was not stated in the award letter.

See accompanying independent auditors' report.
National Science Foundation Award Number DUE-9952530  
Awarded to  
The Mathematical Association of America  
Detailed Schedule of Over/(Under) Recovered Indirect Costs  
For the year ended December 31, 2000 (A)  
Interim  
(Unaudited)

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Year Ended 12/31/2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel costs</td>
<td>$ 30,200</td>
</tr>
<tr>
<td>Travel</td>
<td>1,646</td>
</tr>
<tr>
<td>Participants' support costs</td>
<td>17,178</td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>624</td>
</tr>
<tr>
<td>Publications costs</td>
<td>589</td>
</tr>
<tr>
<td>Computer services</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>879</td>
</tr>
<tr>
<td>Total direct costs</td>
<td>51,116(B)</td>
</tr>
</tbody>
</table>

Exclusions:  
Participants' support costs (17,178)

Modified total direct cost base (C) 33,938

Final audited indirect cost rate 31.89%

Calculated allowable indirect costs 10,823

Claimed indirect costs (C) 11,606(B)

Over/(under) recovered indirect costs $ 783

(A) The award period is May 1, 2000 to April 30, 2002.

(B) The total direct costs plus the claimed indirect costs per the general ledger agreed with the cumulative net disbursements reported on the FCTR as of the quarter ended 12/31/00.

(C) Indirect costs were claimed based upon the application of a 34.20% rate. The type of rate was not stated in the award letter.

See accompanying independent auditors' report.
National Science Foundation Award Number DUE-0085861
Awarded to
The Mathematical Association of America
Detailed Schedule of Over/(Under) Recovered Indirect Costs
For the year ended December 31, 2000 (A)
Interim
(Unaudited)

Schedule D-8

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Year Ended 12/31/2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel costs</td>
<td>$ -</td>
</tr>
<tr>
<td>Travel</td>
<td>2,714</td>
</tr>
<tr>
<td>Participants' support costs</td>
<td>-</td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>-</td>
</tr>
<tr>
<td>Publications costs</td>
<td>-</td>
</tr>
<tr>
<td>Consultant services</td>
<td>9,515</td>
</tr>
<tr>
<td>Computer services</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>296</td>
</tr>
<tr>
<td>Total direct costs</td>
<td>12,525 (B)</td>
</tr>
</tbody>
</table>

Exclusions:
Subawards and equipment

Modified total direct cost base (C) 12,525

Final audited indirect cost rate 31.89%

Calculated allowable indirect costs 3,994
Claimed indirect costs (C) 4,284 (B)

Over/(under) recovered indirect costs $ 290

(A) The award period is September 15, 2000 to August 31, 2002.

(B) The total direct costs plus the claimed indirect costs per the general ledger agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended 12/31/00.

(C) Indirect costs were claimed based upon the application of a 34.20% rate. The type of rate was not stated in the award letter.

See accompanying independent auditors' report.
SECTION V

AWARDEE' S RESPONSE
We received your draft audit report on the financial and compliance audit you conducted of the indirect cost proposal of the Mathematical Association of America for the year ended December 31, 2000.

We have reviewed this report and, as requested, will respond to the five Compliance Findings, as noted on pages 11 to 15.

1. Double-Recorded Costs Overstate Indirect and Indirect Costs (page 11)
   This matter has been discussed with staff of both MD Oppenheim and BDO Seidman, MAA's external auditors. Revised accounting procedures will eliminate double-recorded costs in the books of account for allocated indirect costs and internal cost sharing to grant awards.

2. Misclassification of Direct Costs as Indirect Costs (page 12)
   Direct mission-related and payroll costs have been identified as direct costs for all future reference. MAA's written policies and procedures are currently being re-written to clarify and correct this misclassification.

3. Direct Cost Base Incorrectly Adjusted (page 13)
   MAA's financial staff has reviewed OMB Circular A-122. This issue has been specifically addressed to understand the errors made in the December 31, 2000 proposal. Revised written policies and procedures will include detailed information to aid in calculating the total direct cost base.

4. Applicable Credits Not Properly Offset (page 14)
   As noted in item 3, MAA's financial staff has reviewed OMB Circular A-122. Applicable credits not properly offset was an issue addressed to understand the errors made in the December 31, 2000 proposal. Revised written policies and procedures will include detailed information to aid in the calculation for the offset of applicable credits related to the MAA operations.
5. Unallowable Costs Included in the Indirect Cost Pool (page 15)

   The $148,407 write-off of a private grant was required by our external auditors. The inclusion in the indirect cost pool was, indeed, overlooked during the preparation of the IDCP because it was not recorded as a bad debt in the books of account. Revised written policies and procedures will include detailed information to aid in the identification and calculation of unallowable costs that should not be included in the indirect cost pool.

We have reviewed this report and, as requested, will respond to the Material Weakness, as noted on pages 16 and 17.

Inadequate Procedures Related to the Preparation of the IDCP (Page 16)

   Revised written policies and procedures will include detailed information to aid in calculating the indirect cost rate. MAA staff are currently registered to attend training courses in federal cost principles and developing IDCPs.

   As we discussed during the exit conference held on February 21, 2002, we looked to the NSF staff to direct us in preparing the IDCP of the Mathematical Association of America for the year ended December 31, 2000. We were instructed by NSF staff to use the NSF created template to prepare the IDCP for the year ended December 31, 1999. It is now clear that this information was inadequate and inaccurate.

We have reviewed this report and, as requested, will respond to the Immaterial Weakness, as noted on page 18.

Weak Controls Over Time and Effort Reporting (Page 18)

   Revised written policies and procedures will include detailed information to ensure adequate controls are established and implemented to strengthen its time and effort reporting system. This will include accurately reporting of time spent on charged projects and approval by applicable supervision.

   MAA has a senior staff accountant, [redacted] devoted to financial oversight for all externally funded programs. This includes federally funded and private foundation programs. [redacted] started a Grants Management Certification Program conducted through Management Concepts. [redacted] will be taking a Management Concepts course in "Cost Principles: OMB Circulars A-21, A-122, and A-87, and FAR 31.2", in January 2003. In addition, both [redacted] and I will attend a Management Concepts course in "Developing an Indirect Cost Rate Proposal Under OMB Circular A-122", in May 2003. If you know of any courses offered by the NSF please let me know.
In conclusion, we want to personally thank you for your patience in explaining the issues of this audit. The information you provided has been invaluable and will be of great assistance in improving MAA's financial management of externally funded programs. We will send a copy of the audit report to BDO Seidman for their comments.

If we can be of any further assistance please contact us directly:

Very truly yours,

{redacted}  {redacted}