

**CARNEGIE INSTITUTION OF WASHINGTON**  
Washington, D.C.

Financial and Compliance Audit  
of  
Indirect Costs  
For the Year Ended  
June 30, 2000

M.D. Oppenheim & Company, P.C.  
Certified Public Accountants  
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CARNEGIE INSTITUTION OF WASHINGTON

Acronyms

<u>Acronym</u>	<u>Explanation of Acronym</u>
ADMIN	Administration Department
AICPA	American Institute of Certified Public Accountants
CIW	Carnegie Institution of Washington
DACS	Division of Acquisition and Cost Support
DGA	Division of Grants and Agreements
DTM	Department of Terrestrial Magnetism
EMB	Department of Embryology
FAR	Federal Acquisition Regulation
FCTR	Federal Cash Transaction Report
GEO	Geophysical Laboratory
IDCP	Indirect Cost Proposal
MTDC	Modified Total Direct Costs
NSF	National Science Foundation
PBIO	Department of Plant Biology
OBS	The Observatories
OIG	Office of Inspector General
OMB	Office of Management and Budget
RP	Research Projects

**SECTION I**

**INTRODUCTION AND AUDIT RESULTS**

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

### **BACKGROUND**

The Carnegie Institution of Washington (CIW) was founded in 1902 by Andrew Carnegie. The mission of CIW is to encourage investigation, research discovery, and the application of knowledge to the improvement of mankind. CIW conducts advanced research and training in five research centers located throughout the United States and at an observatory in Chile. This research and training is conducted within CIW's Departments of Embryology, Plant Biology, Terrestrial Magnetism, the Geophysical Laboratory, Research Projects and the Observatories. CIW's headquarters is in Washington, D.C. where it conducts its administration and fundraising activities, in addition to a small number of research projects. To achieve a more equitable distribution of costs, separate indirect cost rates are used at each of the research centers/observatories and one for headquarters.

CIW receives approximately \$69 million of annual revenues from investments, grants and contracts, and other contributions and income. Federal agencies provide approximately \$14 million or 20 percent of CIW's total revenues. The National Science Foundation (NSF) provides \$7 million or 50 percent of the federal financial assistance annually to CIW. Because NSF provides the most funds out of seven federal agencies, NSF is the cognizant federal audit agency for CIW's indirect cost rates.

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

At the request of NSF, M.D. Oppenheim & Company, P.C. conducted a financial and compliance audit of the indirect cost proposals prepared by CIW for the year ended June 30, 2000 to determine the final indirect cost rates for that year. CIW prepared a separate indirect cost proposal for each of the following:

- Department of Embryology (EMB)
- Department of Plant Biology (PBIO)
- Department of Terrestrial Magnetism (DTM)
- Geophysical Laboratory (GEO)
- Research Projects (RP)
- The Observatories (OBS)

During the period of our audit (July 1, 1999 to June 30, 2000), there were 53 NSF awards that included indirect costs based on a maximum provisional rate in the award letter and/or budget and 17 awards that had no indirect costs. Our audit objectives were: (1) to determine whether CIW complied with federal requirements in computing its indirect cost proposals for the year ended June 30, 2000; (2) to determine whether CIW over or under-recovered indirect costs on each NSF award active during the audit period, based upon audit-determined indirect cost rates; and (3) to evaluate the adequacy of CIW's internal controls to administer, account for, and monitor indirect cost charges to federal awards.

To accomplish the objectives of the audit, we:

- Conducted on-site surveys with sufficient observations, interviews, and examinations of documents to make an initial determination whether the maximum provisional rate was based on allowable indirect costs and whether controls to administer, account for, and monitor indirect costs were 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 CIW'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 CIW'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 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 of compliance with applicable laws and regulations and substantive testing procedures to be applied to the indirect cost pools and the direct cost bases.
- 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 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 and the 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 deficiencies in CIW's calculation of its indirect cost rates for the year ended June 30, 2000. Total audit adjustments and eliminations necessary to correct the inaccuracies in the rate calculations amounted to \$1,398,996 for the indirect cost pools or █ percent of total indirect cost pools, and \$2,037,315 for the direct cost bases or 11 percent of total direct cost bases (see Schedules C for detail listings of the adjustments and eliminations). This resulted in audit recommended indirect cost rates that were substantially less than both the maximum provisional rates approved by NSF for each department, as well as the rates CIW proposed in its indirect cost proposals. CIW's actual rates on its individual grants were significantly lower than the maximum provisional rates negotiated with NSF. A comparison of these maximum, actual, proposed rates and audit rates are as follows:

Department	Maximum Provisional Rates <sup>1</sup>	Actual Billed Rates <sup>2</sup>	Proposed Rates	Audit Recommended Rates
RP	23%	N/A	█	25.45%
DTM	75%	57%	█	58.53%
GEO	75%	59%	█	58.61%
EMB	59%	56%	█	48.92%
PBIO	73%	58%	█	59.19%
OBS	75%	75%	█	82.43%

CIW generally proposed and billed indirect cost rates on its individual grants that were significantly lower than the maximum provisional rates negotiated with NSF. CIW believed their grant proposals would be more competitive if they used lower rates, generally under 60 percent. CIW over-recovered only a minimal amount of funds in excess of allowable amounts because our audit recommended rates closely matched the rates that CIW used to bill indirect costs on their NSF awards. We found that CIW claimed only \$4,661 more than it actually incurred on 16 out of 53 NSF awards active during fiscal year 2000 (see Schedule A-Summary). Had CIW billed at the lower of the maximum provisional rates or the proposed indirect cost rates, CIW would have substantially over-recovered indirect costs on its NSF awards.

We found the following compliance and internal control deficiencies in CIW's procedures and processes to administer, account for, and monitor its indirect costs.

### **Material Non-Compliance**

- CIW did not properly offset third party income against its indirect costs. This resulted in overstating the indirect cost pools by \$948,794 (█ percent of indirect cost pools).

<sup>1</sup> NSF negotiated maximum provisional rates for CIW's research centers that covered the period July 1, 1999 through June 30, 2000.

<sup>2</sup> On most awards, CIW used the same billing rate to charge indirect costs. However on eight awards, CIW used lower rates to charge indirect costs to comply with award terms.

- CIW excluded from the direct cost bases the stipends paid to fellows and postdoctoral associates because CIW incorrectly believed government policy required stipends to be considered part of the participant support costs, which normally are excluded from the direct cost bases. However, CIW incurred the stipend costs on-site at the departments and postdoctoral associates and fellows benefited from indirect costs, and therefore, the stipends should be included in the direct cost bases. The stipends totaled \$1,743,052 (■ percent of total direct cost bases), which resulted in CIW significantly understating the direct cost bases.
- CIW improperly classified \$13,522 of direct costs as indirect costs at the Department of Terrestrial Magnetism (less than ■ percent of direct cost base). This was the result of cost overruns where CIW did not have funds in the award for the costs to be charged, so CIW charged the direct costs as indirect. This resulted in costs that are unallowable under one award being charged to all awards through the indirect cost allocation.
- CIW mistakenly excluded from the direct cost bases equipment purchases that were less than the organization's capitalization threshold. These exclusions total \$226,883 (■ percent of total direct cost bases), thereby understating the direct cost bases.
- CIW did not exclude unallowable costs for travel, entertainment, alcoholic beverages, fines and penalties, investment management, contributions and gifts, and other costs. Total audit adjustments of \$113,909 (less than ■ percent of total indirect cost pools) were necessary to remove these costs from the indirect cost pools. The accounting staff overlooked or were not adequately trained in the application of specific federal regulations stating that such costs cannot be charged to the government.

### **Immaterial Non-Compliance**

- In the fiscal year 2000 indirect cost proposal, CIW mistakenly included costs that were incurred either in a prior or subsequent fiscal year. This resulted in indirect cost pools being overstated by \$90,262 (less than ■ percent of total indirect cost pools).
- CIW mistakenly included the full cost of equipment purchases that were more than the organization's capitalization threshold in its indirect cost pools. These equipment purchases should have been capitalized as an asset and only the depreciation of the asset should have been included in the indirect cost pools. These costs included computers, furniture, and other specialized equipment. This resulted in indirect cost pools being overstated by \$93,519 (less than 1 percent of total indirect cost pools).

### **Internal Control Weakness**

These improper charges occurred because CIW did not have adequate internal controls to administer, account for, and monitor indirect costs to ensure compliance with federal cost principles. We noted deficiencies in the proper offset of applicable credits, exclusion of participant support costs, classification of direct and indirect costs, treatment of capital and non-capital equipment costs, year-end cut-off procedures, and cost allowability. These internal



control weaknesses were due to the lack of adequate written policies and procedures related to indirect costs and the lack of adequate training in the application of federal cost principles to CIW operations.

To address the compliance and internal control deficiencies, 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 CIW develop written policies and procedures related to indirect costs and receive training in the application of federal cost principles to ensure that these weaknesses are resolved in CIW operations. We also recommend that NSF evaluate the adequacy of CIW's corrective actions on these recommendations and determine whether maximum provisional rates approved by NSF subsequent to FY2000 should be adjusted.

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

Except for the items listed below, CIW generally agreed with the findings relating to the capitalization of equipment, and the costs recorded in the wrong fiscal year. We have summarized CIW's response below and after each finding. CIW's response is included in its entirety in the Appendix.

- CIW disagreed that rental income of \$372,616 should be offset against indirect costs. CIW does not believe that rental revenue is an applicable credit as defined by OMB Circular A-122, and that it would be inappropriate for the government to recover these revenues by reducing the indirect cost rates. With respect to the remaining \$948,794 revenue, CIW agrees that these revenues should be offset against the indirect cost pools. However, CIW believes that the revenues, related to a fixed fee for site use (\$123,100), should be offset against the Observatories indirect cost pool rather than the Administrative indirect cost pool.
- CIW disagreed that stipends paid to postdoctoral associates and fellows should be included in the direct cost base. CIW believes that these payments are training related and in accordance with OMB Circular A-122 guidance, these stipends should be excluded from the direct cost base. OMB guidance states that stipends to trainees should be excluded from the base.
- CIW disagreed that the shifting of costs from a direct cost center to an indirect cost center was inappropriate because CIW should have initially classified the costs as indirect.
- Regarding unallowable costs, CIW believed the fines and penalties, investment manager expenses, and entertainment costs, are all allowable under federal cost principles.
- Regarding the internal control weakness, CIW took strong exception to our finding that they do not have adequate internal controls to administer, account for, and monitor indirect costs to ensure compliance with federal cost principles. CIW also stated that the vast majority of the issues we identified were issues related to interpretation of federal guidelines rather than issues of compliance.

## Summary of Auditors' Comments

With respect to the compliance issues presented in the report with which CIW disagreed, our responses can be summarized as follows:

- We agreed with CIW's position on applicable credits relating to building revenues and have modified our report accordingly. With respect to the fixed fee for site use, we also agreed with CIW that these revenues should offset the Observatories indirect costs, and have modified our report accordingly.
- We do not believe CIW adequately understood our position that the postdoctoral associates and fellows benefited from the indirect costs and CIW should have allocated indirect costs to these individuals by including the stipend costs in the direct cost bases. The postdoctoral associates and fellows benefited from indirect costs when CIW paid stipends on a regular basis for a year or longer through CIW's payroll department. Furthermore, postdoctoral associates and fellows benefited from indirect costs by CIW providing human resource support from the CIW personnel office and CIW providing on-site office space and supplies. CIW included in its indirect cost pools personnel support and office space, including maintenance and utilities.
- We agreed with CIW's position that an \$11,611 adjustment was appropriate because CIW transferred costs between two indirect cost objectives and we have adjusted our report. With respect to the remaining \$13,522 of misclassified costs, we disagreed with CIW's position that the shifting of costs from direct to indirect within DTM was appropriate, since these are cost overruns, which are unallowable as direct or indirect costs.
- We disagreed with CIW that the fines and penalties, the Endowment Manager expenses, and the entertainment costs should be allowable. The fines and penalties consisted of attorney's fees incurred to investigate misappropriation of federal funds. This investigation activity was not part of CIW ordinary operations and should not be allowable. Also, the misappropriation of federal funds was due to a lack of adequate internal controls, and therefore, we believe it is not reasonable to charge these costs to the federal government directly or indirectly. For the Endowment Manager expenses, we believe the job description fits the definition of OMB Circular A-122 regarding unallowable investment management expenses. Finally, we believe the entertainment costs also are unallowable. While a holiday party may boost employee morale, these costs do not meet the definition of employee morale as allowed in OMB Circular A-122, but rather meet the definition of an unallowable social activity.
- Regarding the internal control weakness, we do acknowledge that the federal guidance can be interpreted differently. However, CIW will help ensure compliance with federal guidelines by training staff in the application of these federal guidelines to CIW operations, developing written procedures to implement federal guidelines, along with conducting reviews of the operation of these procedures.

## EXIT CONFERENCE

An exit conference was held on September 9, 2002 at the Auditee's office located at 1530 P Street, Northwest, Washington, D.C. The findings on compliance along with the adjustments, eliminations and exclusions related to the indirect cost proposals were discussed by the following individuals:

For CIW:

[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 schedules of over/(under) recovered indirect costs (Schedules A) and the schedules of indirect/direct costs (Schedules B) which summarize the indirect cost proposals prepared by the Carnegie Institution of Washington for the year ended June 30, 2000, and have issued our report thereon dated September 9, 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 Carnegie Institution of Washington'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 through C-7, 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 Carnegie Institution of Washington'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 Carnegie Institution of Washington'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 Finding and Recommendation on Internal Control.

National Science Foundation  
Office of Inspector General  
Arlington, Virginia

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 1 to be a material weakness.

This report is intended solely for the information and use of the Carnegie Institution of Washington 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.* |

September 9, 2002

CARNEGIE INSTITUTION OF WASHINGTON  
Findings and Recommendations on Compliance  
For the year ended June 30, 2000

Material Deficiencies

**1. Applicable Credits Not Properly Offset**

Office of Management and Budget (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." Applicable credits is defined by this circular as those receipts, or reduction of expenditures, which operate to offset or reduce expense items that are allocable to awards as direct or indirect costs. CIW receives revenue from a fixed fee for site use, contributions from a third party to cover library subscriptions at the Department of Embryology (EMB), and contributions from third-parties to cover operational costs at the Observatories (OBS). These amounts totaled \$948,794 for the year ended June 30, 2000. However, CIW did not appropriately recognize these credits in its indirect cost rate calculations. The following are examples:

- A fee for site use of \$123,100 was received by the Administration Department (ADMIN), but was not recorded as an offset to the Observatories' indirect cost pool. These revenues relate to expenses incurred at the Observatories which were included as indirect costs in the Observatories pool. Therefore, the indirect cost pool for the Observatories was overstated by this amount. In another instance, a workers compensation dividend of \$68,064 was received by ADMIN but was not offset against the associated indirect costs.
- At EMB, CIW received payment of \$22,000 for library subscriptions from a third party. CIW did not offset this amount against its indirect costs, resulting in an overstatement of its indirect cost pool for EMB of \$22,000.
- CIW also recorded revenue for the contributions of \$735,630 from third parties for the use of the Magellan telescopes. However, all operating expenses of the Magellan telescopes are included in the indirect cost pool for OBS. These revenues were not properly offset against the expenses, resulting in an overstatement of the indirect cost pool.

CIW 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 CIW develop and implement policies and procedures to identify applicable credits related to CIW operations and ensure that future indirect cost proposals reflect the correct application of these offsets.

### **Auditee's Response**

CIW took exception to our recommendation to credit \$372,616 of space rental revenue in the draft audit report. CIW believes it has allocated building expenses appropriately in its indirect cost proposal.

CIW agreed that the fee for site use for \$123,100 does offset the indirect costs, but CIW indicated that the appropriate offset is the costs at the OBS instead of ADMIN, as we have proposed. CIW agreed that the remaining offsets (\$735,630 for the Magellan Telescopes and \$22,000 for library subscriptions, and \$68,064 for worker's compensation refund) should have been credited to the appropriate indirect cost pool. CIW indicated it will provide training to its staff and review its revenues to ensure that all applicable credits are properly applied.

### **Auditor's Comments**

With respect to the building revenue at P Street and the Department of Embryology, we modified our report to remove our proposed adjustments. With respect to the fixed fee for site use for \$123,100, we modified our report to include these adjustments to the Observatories indirect cost pool, rather than the ADMIN indirect costs. With respect to the remaining applicable credits, CIW's proposed actions will correct the weaknesses noted. We recommend that the Directors of NSF's DGA and DACS require that CIW provide documentation that proposed accounting procedures and training have been implemented.

## **2. Participant Support Costs Improperly Excluded**

OMB Circular A-122 states that the distribution base for indirect costs may be total direct costs (excluding capital expenditures and other distorting items, such as subcontracts or subgrants.) It also states the distribution base shall generally exclude participant support costs. The Circular defines participant support costs as direct costs for items such as stipends or subsistence allowances, travel allowances, and registration fees paid to or on behalf of participants or trainees **(but not employees)** in connection with meetings, conferences, symposia, or training projects. Finally, NSF's Grant Proposal Guidance includes expenses related to graduate students and postdoctoral associates as components of salaries and wages and not participant support costs.

CIW excluded \$1,743,052 in payments of stipends to postdoctoral associates and fellows from the direct cost bases (See Schedules C for breakout by departments). However, these individuals worked on-site, used supplies, and are processed through CIW's payroll system, and therefore they benefited from indirect costs and should be included in the direct cost bases so they can be assigned their fair share of indirect costs. These stipend costs did not distort the direct cost bases like capital expenditures and subcontracts.

CIW was following the letter of NSF guidance which states participant support costs are excluded from the direct cost base, rather than the intent of the guidance, which is to exclude distorting items from the direct cost base. The costs that CIW included in participant support were not distorting items, and therefore should be included in the direct cost base.



A more accurate allocation of indirect costs would result from CIW including stipends in direct cost bases, and overall the federal government would pay less indirect costs; even though the federal government would pay additional indirect costs on some its awards with stipends. CIW charged █ percent of the stipends to non-federal sources and the remaining █ percent of stipends to federal agencies.<sup>3</sup> As a result of CIW not allocating indirect costs to stipends and non-federal projects having a higher proportion of stipends, CIW undercharged non-federal projects for CIW's indirect costs even though these projects benefited from the indirect cost activities. In effect, CIW undercharged non-federal awards resulting in a larger portion of the indirect cost pools being unfairly shifted to federal awards.

### **Recommendation**

We recommend that the Directors of NSF's DACS and DGA require that CIW develop and implement policies and procedures to identify distorting costs that should be excluded from the direct cost base and to identify items that are not distorting costs and should be included in the direct cost base.

### **Auditee's Response**

CIW disagreed with the position the auditors have taken regarding CIW's fellows. The Institution received its designation as a section 170 (b) (1) (A) (ii) educational organization from the IRS in February of 1971, and has maintained this status ever since. As the auditors' own text states, Circular A-122 provides for the exclusion of stipends and subsistence allowances for trainees. Payments CIW makes to its fellows are designed to support these individuals as they gain the additional experience they need in order to succeed as researchers or professors at other organizations. Typically, a fellow is only at CIW for two or three years, and then moves on to another organization. An individual seeks a fellowship at CIW with a particular staff member, because that individual wants training in a specific area, and seeks a particular body of knowledge. Once an individual receives a fellowship from CIW, he/she does not receive the supervision that employees do, but operates on a conferring basis with the staff member he/she has chosen. Fellows do not receive retirement benefits, life insurance coverage or disability, and they do not earn paid annual leave. CIW believes the auditors' position that fellows are de facto employees is not consistent with any of the facts and circumstances (fellows do not receive wages or salary and are not part of the direct labor allocation base).

The auditors' comment concerning the difference between "the letter of NSF guidance" and the "intent of the guidance" underscores a significant dilemma for CIW and all other contractors and recipients of federal funds. Rules and regulations are intended to be applied as written and are not to be left to the subjective interpretation of the contractor. If NSF intended some other interpretation it would have drafted it in the written regulation. Additionally, the auditors' comment refers to "distorting costs" which are not defined in any of the guidance available to CIW, and therefore contribute further to a sense of confusion.

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<sup>3</sup> Two NSF awards at CIW's Geophysical Laboratory (GEO) had \$40,621 (█) of stipend payments that should have been included in the direct cost base and allocated indirect cost rates during fiscal year 2000.

### **Auditor's Comments**

While the guidance and definitions in this area may appear confusing and unclear, we believe these stipends should not be excluded from the base because the postdoctoral associates and fellows benefit from indirect costs, even though they may not benefit from all the fringe benefits that CIW mentions in their response. Capital expenditures, subcontracts, and participant support are generally excluded from the direct cost base because these expenditures do not benefit from the indirect costs the way other expenditures do, and therefore distort the base.

Participant support costs are typically one time payments in which the direct costs for items such as a stipend, travel cost, or registration fee, does not benefit from indirect costs (such as office space and supplies). In these cases, it is appropriate to exclude these costs from the direct cost base because they are distorting (OMB Circular A- 122, Attachment A, Section D. 2. c., states that the distribution base may be total direct costs (excluding capital expenditures and other distorting items, such as major subcontracts or subgrants). We do not believe the fact that the postdoctoral associates and fellows are receiving training is relevant because the stipends are not participant support costs involving a one-time payment but are labor costs paid via stipend. The stipend payments directly relate to indirect costs. For example:

- The fellows were paid on a monthly basis, and are often on the payroll for a year or longer. These individuals were processed through a third-party payroll system, whose costs were included in the indirect cost pool. In addition, the administrative staff at ADMIN had to create and maintain a personnel file, prepare and reconcile the payroll and record the payroll in the general ledger. These administrative tasks were charged to the indirect cost pool at ADMIN.
- The fellows worked on site at the various research labs, utilizing office space and supplies, which are included in the indirect costs of that particular lab.
- Both laboratory space and office supplies were included in the indirect cost pools.

Therefore, we disagree with CIW's arguments and believe our adjustments are appropriate.

### **3. Misclassification of Direct Costs as Indirect Costs**

OMB Circular A-122 defines direct costs as those that can be identified specifically with a particular award, project or other direct activity of an organization. It also states that cost overruns on any award are unallowable as a cost of any other award.

For the year ended June 30, 2000, CIW erroneously included \$13,522 of direct costs in the Department of Terrestrial Magnetism (DTM) indirect cost pool. These expenses consisted of research supplies and other services. In one instance, \$4,422 was originally recorded as a direct project cost and subsequently adjusted to the indirect cost pool after a scientific staff member stated the expense could not be charged to the grant. In another instance, \$15,600 was split

between direct (\$6,500) and indirect (\$9,100) because there was not enough money in the project budget. Accordingly, we eliminated \$9,100 from the DTM indirect cost pool.

CIW included these costs in the indirect cost pool because DTM staff did not understand that federal cost principles require cost overruns to be treated as direct costs and cannot be recorded as indirect costs simply because there are not project funds available to cover the costs.

### **Recommendation**

We recommend that the Directors of NSF's DACS and DGA require that CIW develop and implement written policies and procedures for the classification of direct and indirect costs and the prohibition of cost shifting from direct to indirect, to ensure that CIW's future indirect cost rate proposals do not include direct costs in the indirect cost pools.

### **Auditee's Response**

According to the Fiscal Officer at the Department of Terrestrial Magnetism, \$11,611 was transferred between two endowment cost centers, [REDACTED] and [REDACTED]; since these two cost centers are treated similarly in CIW's indirect cost proposal, the switch should have no impact on the calculated overhead rate. Within CIW's endowment, the Wood Fund (cost center [REDACTED]) is a special fund restricted for use in seismological research, and can be used for all the same purposes that general endowment funds may be used for at DTM. Since funds available from the Wood Fund are limited, expenses were transferred to a general endowment cost center.

CIW believed the auditors incorrectly noted that \$4,422 was moved from a grant cost center (direct activity) to an endowment cost center (indirect activity), as the result of comments made by a staff member to the Fiscal Officer that the particular expenses could not be charged directly to the grant. There does not appear to be anything out of order here; the staff member was exercising oversight responsibility with regard to his grants, and an expense that could not be charged directly to the grant was moved to a general endowment overhead cost center. The fact that an expense benefits a department so broadly that it cannot be charged directly to a particular grant does not make it unallowable, a point which seems to have been lost in the discussion of the \$4,422 adjustment.

### **Auditor's Comments**

With respect to the \$11,611 adjustment, we modified our report to remove our proposed adjustments as we concurred that these charges may be appropriately charged to the indirect cost pool at DTM based on additional information provided by CIW.

For the \$4,422 adjustment, the supporting documentation shows that these costs were originally charged as direct expenses and then shifted, not because the costs should be appropriately charged as an indirect cost, but as a result of a budget overrun. Lack of available grant funds does not make an otherwise direct cost an indirect cost to be charged to the department as a whole and results in inconsistent treatment of like costs. Adjustment of costs from direct costs to indirect costs because of a cost overrun is in violation of federal guidelines on allowable costs.

For the remaining \$9,100, CIW's response did not address the issue of splitting costs because there was not enough money in the grant budget, although the CIW does acknowledge that these costs do not belong in the indirect cost pool.

#### **4. Equipment Purchases Improperly Excluded**

OMB Circular A-122 states that the distribution base may be total direct costs (excluding capital expenditures (equipment) and other distorting items, such as major subcontracts or subgrants), direct salaries and wages, or another base which results in an equitable distribution. However, CIW excluded from the direct cost bases certain equipment purchases that did not meet the organization's capitalization threshold. Because these items properly were expensed in the books of account, these costs should be included in the direct cost bases. Audit adjustments of \$226,883 were made to include these non-capital costs as direct costs (See Schedules C for breakout of adjustments by department). It is unclear why these items were excluded from the bases, as most of these were recorded in an account titled "non-capital assets."

#### **Recommendation**

We recommend that the Directors of NSF's DACS and DGA require that CIW develop and implement policies and procedures to ensure that non-capital equipment costs are not excluded from the indirect cost rate calculations.

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

CIW agreed that these items should be expensed in the future, and included in the denominator of the indirect cost rate for each department. CIW clearly explained to the auditors that the pattern for treating "non-capital assets" evolved from the fact that CIW expected multiple years of use from these low dollar purchases. CIW agrees that the treatment is non-standard, and will correct it.

#### **Auditor's Comments**

We recommend that the Directors of NSF's DGA and DACS require that CIW provide documentation that proposed accounting procedures have been implemented.

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

OMB Circular A-122 and federal regulations state that costs such as certain travel expenses, entertainment, alcoholic beverages, fines and penalties, investment management expenses, contributions and gifts, and other unnecessary or unreasonable expenses are unallowable. Our audit identified \$113,909 in unallowable costs that CIW included in the indirect cost pools (See Schedules C for breakout of unallowable costs by department).

##### *Travel*

Federal cost principles state that travel costs should be allowable if they are reasonable. In the absence of specific written CIW travel policies, Standard Government Travel Regulations provide a measure of approved per diem and mileage rates. Our testing identified \$11,189 of

unallowable travel costs. CIW did not have specific policies concerning the amount of travel expense incurred but is currently working to update their policies to conform with Federal Travel Regulations.

#### Entertainment

CIW included \$10,599 of costs in its indirect cost pools related to holiday parties and other events that we considered to be entertainment costs. CIW considered these costs as employee morale, and therefore did not exclude them from the pool.

#### Alcoholic Beverages

CIW included in its indirect cost pools \$2,069 of alcoholic beverages. This was an oversight on CIW's part, as it had properly excluded other alcohol-related costs.

#### Fines and penalties

CIW included in its indirect cost pool \$7,666 of legal fees associated with the investigation of an allegation of fraud in the conduct of an NSF award. FAR 31.205-15 includes in its definition of fines and penalties costs incurred in connection with, or related to, the mischarging of costs on government contracts. Although not explicitly stated under Fines and Penalties in A-122, the concept is applicable, and therefore these costs should be excluded from the indirect cost pool because it is not reasonable to charge the government for these costs. CIW believes these costs do benefit the government and therefore should be allowable.

In other instances, CIW included \$75 related to the payment of a traffic violation and \$117 related to bank late fees in the indirect cost pools, which are also unallowable. This was an oversight on CIW's part.

#### Investment management expenses

OMB Circular A-122 states that the costs of investment counsel and staff and similar expenses incurred solely to enhance income from investments are unallowable. We noted that CIW charged \$42,000 of salaries, \$11,970 of related fringe benefits, and \$1,022 of expenses related to its investment advisor for a trip to San Francisco. These costs were included in the indirect cost pool at ADMIN; however, they should have been recorded as direct costs.

#### Contributions and gifts

CIW included in its indirect cost pools \$1,643 related to gift baskets, flowers, balloons, going-away gifts, and related items. These unallowable costs should be excluded from the indirect cost pools. These items were recorded in travel and meetings and supplies accounts and were therefore not excluded by CIW.

#### Other costs which are not ordinary and necessary and do not benefit the government

In order for costs to be allowable, they must be ordinary and necessary in order to be included in the indirect cost pool. CIW included certain costs in its indirect cost pools which we

believe were not ordinary and necessary expenses and for which there was no benefit to the government or appeared excessive. These costs included artwork, other decorative items, a deluxe stretch limo for transportation of a speaker, late fees, and the rental of Towncars. The total amount of these costs included in the indirect pools is \$25,559. These items were recorded in travel and meetings and supplies accounts and were therefore not excluded by CIW.

### **Recommendation**

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

### **Auditee's Response**

Travel: CIW agreed that travel expenses in excess of per diem rates need to be carefully monitored, and isolated from the overhead pools, so that expenses exceeding per diem rates are not allocated directly or indirectly to federal grants. Some departments interpreted "reasonable and necessary" to mean that an agency-approved budget was a safe-harbor.

Entertainment: CIW considered annual holiday parties and occasional other social events for employees critical for morale. CIW felt that the \$10,000 for holiday parties was well-spent, and contributed significantly to the unique environment that is CIW.

Alcoholic Beverages: These were isolated incidents; CIW will continue to monitor this area carefully.

Fines and Penalties: CIW disagreed with the auditors' assertion that \$7,666 of legal fees incurred as part of internal control procedures should be disallowed. CIW did not believe this seems reasonable in light of the fact that the legal services were obtained in connection with an internal audit of federal expenses (had the review not occurred and had CIW not voluntarily reported to NSF regarding the results of the internal review, it is unlikely that the federal government would have ever received repayment of any of the misappropriated funds). These legal fees were not incurred under the circumstances discussed in Circular A-122 (the situation was not precipitated by federal, state or local government and did not result in criminal, civil or administrative proceedings at the time), and therefore should be allowed. CIW notes that if the costs questioned had been incurred as part of an established internal control and compliance monitoring function (i.e., CIW had an attorney on staff to do this work, and had used all its own supplies), there would have been no question as to their allowability as recoverable expenses.

Investment Management Expense: CIW disagreed that the costs of investment management staff should be disallowed as indirect costs. CIW felt that the position title is misleading, since the individual holding the position does not, in the language of Circular A-122, operate "....solely to enhance income from investments". Duties of the Endowment Manager could realistically and appropriately be adopted by anyone on the Accounting Staff, since the Endowment Manager does not function as a financial advisor, but rather as an administrative assistant to the Director of Finance and the Board of Trustees, specializing in the area of investments. CIW felt that there was no reason, based on any authoritative guidance, to disallow the salary associated with this position.

Contributions and gifts: CIW agreed that these items should not have been allocated directly or indirectly to federal grants; similar charges will not be permitted to flow back to federal grants in the future.

Other costs which are not ordinary and necessary: CIW agreed that these items should not have been allocated directly or indirectly to federal grants; similar charges will not be permitted to flow back to federal grants in the future.

### **Auditor's Comments**

With respect to the following:

Travel, Alcoholic Beverages, Contributions and gifts, Other Costs not ordinary and necessary: CIW's proposed actions will correct the weaknesses noted. We recommend that the Directors of NSF's DGA and DACS require that CIW provide documentation that proposed travel policies have been developed and accounting procedures have been implemented.

Entertainment: While CIW felt that these social activities may benefit the organization in terms of employee morale, OMB Circular A-122, Attachment B, Paragraph 14 clearly states that these type of costs are unallowable.

Fines and Penalties: These legal fees were for time spent investigating the misappropriation of federal funds and not as part of the ordinary operations of the organization. The inisappropriation was due to a lack of adequate internal controls, and therefore, we believe that it is not reasonable to charge these costs to the federal government directly or indirectly.

Investment Management Expenses: CIW has investments in debt and equity securities, real estate and limited partnerships, and other investments totaling over \$480 million, which is the priinary source of support for CIW's activities. CIW uses external managers and partnerships to conduct investment activities. According to the job description provided to us by CIW personnel, the Endowment Manager oversees the performance of these external functions. The position summary of the Endowment Manager states:

"Provides a staff capability for the Institution in the oversight and management of its Endowment. As such, the individual will oversee and analyze the allocation and performance of the multiple managers and investment vehicles the Institution uses in the management of the Endowment. Some of the tasks undertaken by this individual will be derived by requests from the Finance Committee".

All of the essential functions enumerated in the job description relate to investment management functions, therefore we have adjusted the indirect cost pool by the entire amount of the Endowment Manager salary and the related fringe benefits. We believe that these duties are consistent with the definition in OMB Circular A-122 regarding investment activities, and as such are unallowable.

CARNEGIE INSTITUTION OF WASHINGTON  
Findings and Recommendations on Compliance  
For the year ended June 30, 2000

Immaterial Deficiencies

**6. Indirect Costs Charged to the Wrong Fiscal Year**

OMB Circular A-122 states that indirect costs should be allocated to the fiscal year in which such costs were incurred and accumulated to accurately allocate indirect costs to projects. However, CIW included in its indirect cost pools \$90,262 of costs that were incurred in either a prior fiscal year or the subsequent fiscal year (prepaid expenses) (See Schedules C for department breakout). In one instance at GEO, a payment of \$19,560 was made in June 2000 for a service contract which covered the subsequent period (July 2000 through July 2001). In another example at the Department of Plant Biology (PBIO), \$4,500 for a repair job was recorded in the general ledgers in June 2000 based on a purchase order. However, the supporting documentation showed that the repair job was not performed until the subsequent fiscal year in July 2000 and paid in October 2000. Other types of items include periodical subscriptions and service agreements. In some cases, the subscriptions or agreements run on a calendar year basis and therefore covered two fiscal years. In these instances, CIW should have charged 50 percent of periodical subscription and service agreement costs to one fiscal year and the remaining 50 percent to subsequent fiscal year. When CIW fails to properly allocate expenses between fiscal years, it can affect the accuracy of indirect costs billed to grantors and contractors. CIW did not have adequate cut-off procedures in place to ensure that all costs were recorded in the proper fiscal year.

**Recommendation**

We recommend that the Directors of NSF's DACS and DGA require that CIW develop and implement policies and procedures to ensure that all costs are recorded in the proper fiscal year based on the receipt of goods and services.

**Auditee's Response**

The vast majority of items that comprise the total \$90,262 were ongoing expenses, which continued over a period of years, and were renewed at a time other than the beginning of the fiscal year. The most typical items in this category are periodical subscriptions and maintenance contracts. Since such expenses represented long term relationships, the splitting of costs between fiscal years did not impact the indirect cost rate calculation.

In most cases, the auditors would have found similar payments in the prior fiscal year that were not allocated to prepaid expense and applied to FY 2000; therefore, most of the \$90,262 identified by the auditors did not represent potential cost savings to the federal government or over-billing of any agency. CIW understood that failing to properly allocate expense between fiscal years can, infrequently, impact grantors and contractors, so CIW will make every effort to



allocate material amounts to the appropriate fiscal years (one department has already re-applied for all its periodical subscriptions, so that they all renew at the start of the fiscal year).

### **Auditor's Comments**

Although there may be some offset from prior year's expenses, generally accepted accounting principles require the proper cut-off of expenses to ensure that all costs are recorded in the proper fiscal year. Allocation of costs to correct fiscal year helps ensure that maximum provisional rates are not excessive and projects are allocated the correct amount of indirect costs. While we agreed that cost/benefit factors should be considered, because CIW's accounting function is decentralized across its departments and in the absence of adequate policies and procedures in this area, CIW cannot ensure that consistent cut-off procedures are followed. We recommend that the Directors of NSF's DGA and DACS require that CIW provide documentation that proposed accounting procedures have been implemented.

### **7. Capital Expenditures Included in Indirect Cost Pool**

OMB Circular A-122 requires that both direct costs and indirect costs exclude capital expenditures. CIW capitalized assets with an original cost of \$1,000 or more having a useful life greater than one year. We noted that CIW included in its indirect cost pool \$93,519 related to purchases that should be capitalized (See Schedules C for department breakout). Examples include a \$1,405 computer monitor at GEO, 5 computers at \$1,082 each at DTM, one \$5,000 ion mill at DTM, a \$1,399 credenza and a \$1,034 file cabinet at PBIO. While we found that most capital expenditures were properly excluded, these items were overlooked by the accounting staff at the departments.

### **Recommendation**

We recommend that the Directors of NSF's DACS and DGA require that CIW develop and implement policies and procedures to ensure that capital expenditures are excluded from the indirect cost pools and direct cost bases.

### **Auditee's Response**

CIW had not been consistent in its treatment of items purchased in the \$1,000-\$5,000 range. The shift from a \$1,000 capitalization threshold to the current \$5,000 was put in motion a year early at DTM, which accounts for roughly \$50,000 of the \$93,000. As of July 1, 2001, the \$5,000 threshold had been fully implemented at all departments, so this is no longer an issue. Transactions at the Observatories account for another \$28,000. Within the past six months, members of the ADMIN's accounting staff conducted a review of expenses and procedures at the Observatories, and a new controller has been hired at a department.

Inexpensive items providing more than one year of useful life (an area of confusion) will be expensed in future proposals, and treated in the same manner as supplies. CIW will continue to work to improve the decentralized accounting functions at the CIW's departments and observatories.

CIW has attempted to adopt a conservative approach to the application and use of federal funds, and has opted to choose financial mechanisms in its indirect cost proposals that favor the federal agencies. In particular, the CIW uses a standard useful life of 15 years for all equipment (the use allowance method permitted by Circular A-122 for the computation of indirect cost rates), including highly specialized research equipment, which realistically has a much shorter actual useful life of 6 - 8 years.

**Auditor's Comments**

While the changing of the capitalization threshold would have an impact on the specific items noted in our audit, it did not address the underlying issue that these expenditures are adequately monitored for appropriate and consistent treatment. We recommend that CIW expand its review of procedures to include the other departments.

CARNEGIE INSTITUTION OF WASHINGTON  
Finding and Recommendation on Internal Control  
For the year ended June 30, 2000

Material Weakness

**1. Improper Application of Federal Cost Principles**

Our audit identified instances of non-compliance that were the result of internal control deficiencies in the application of federal cost principles pertaining to indirect costs. Specifically, CIW did not have adequate procedures and processes to administer, account for, and monitor its indirect costs. We noted deficiencies in the proper offset of applicable credits, exclusion of participant support costs, classification of direct and indirect costs, treatment of capital and non-capital equipment costs, year-end cut-off procedures, and cost allowability.

Applicable credits

CIW did not properly apply the OMB Circular A-122 provision regarding applicable credits, resulting in \$948,794 in adjustments to the indirect cost pools. CIW received reimbursements to offset certain indirect costs but did not reduce the indirect costs in the pools. Adequate procedures have not been established to ensure that all applicable credits are properly offset against indirect costs in the preparation of the indirect cost proposals.

Participant support

CIW inappropriately treated payments of stipends to postdoctoral associates and fellows as participant support and excluded these amounts from the direct cost bases. CIW treated these costs as distorting items in the indirect cost rate calculations, and therefore incorrectly excluded \$1,743,052 from the direct cost bases. These individuals, however, work on-site, utilize supplies, are processed through the payroll system, and therefore, should be included in the direct cost bases so they can be assigned their fair share of indirect costs.

Direct versus indirect costs

CIW improperly misclassified \$13,522 of direct costs as indirect costs in its indirect cost proposals. These costs related to cost overruns on several awards. Since the costs could not be charged to a particular award (because there was no remaining money in the budget), the costs were recorded as indirect costs when they should have been treated as additional direct costs in the indirect cost rate calculation. The Business Manager at the department where this occurred was not aware that this was improper. CIW does not have adequate written procedures instructing the departmental Business Managers on the assignment of costs.

Exclusions of non-capital equipment

CIW excluded \$226,883 of certain non-capital equipment purchases which should have been included in the direct cost bases. This appears to have been an oversight in the proposal preparation process, as most of equipment purchases were recorded in an account titled "non-capital assets." It does not appear that the proposals were adequately reviewed before submission to NSF.

Unallowable costs

OMB Circular A-122 requires that unallowable costs be segregated and excluded from the indirect cost pool. However, we found the process used by CIW to identify and exclude unallowable costs was inadequate to ensure compliance with federal cost principles.

CIW has a general ledger account to be used by each department to record cost exceptions. CIW then excluded these unallowable costs from the indirect cost pools in the proposals. In addition, at year end, the Financial Manager at ADMIN sent a questionnaire to the Business Managers to facilitate the identification of additional unallowable costs in each department (unallowable costs which may be recorded in other accounts). Based on the Business Managers' responses, adjustments were made to the indirect cost pools (the items were not adjusted in the general ledger).

While the procedures outlined above are designed to ensure that unallowable costs are excluded from the indirect cost pools, we found that CIW continued to include \$113,909 of unallowable costs in the indirect cost pools as follows:

<u>Department</u>	<u>Number of Unallowable Transactions</u>	<u>Amount</u>
ADMIN	9	\$72,364
DTM	12	4,653
GEO	19	2,616
EMB	4	6,719
PBIO	8	3,580
OBS	<u>40</u>	<u>23,977</u>
Totals	<u>92</u>	<u>\$113,909</u>

We identified several causes of this internal control weakness, including the Business Managers not properly utilizing the cost exception account, errors in the proposal preparation process by not properly excluding cost exceptions, and CIW not adequately understanding and applying federal cost principles.

Some of these unallowable costs should have been identified by the Business Managers at the departments and recorded in the cost exception accounts. The Business Managers had been provided guidance from ADMIN regarding unallowable costs outlined in OMB Circular A-122.

However, several of the Business Managers indicated they only use the cost exception account for alcoholic beverages, and the year-end review process did not adequately identify all of the unallowable costs that were recorded in other general ledger accounts.

In other instances, the cost exception account was used by the Business Managers, but the account was not excluded from the indirect cost rate calculations. For example, \$1,765 of unallowable costs was recorded by a Business Manager in the cost exception general ledger account but was treated as indirect costs in the proposal. This appears to have been an oversight by CIW.

Regarding investment manager expenses, excess travel costs, and costs of holiday parties, CIW did not have a policy regarding their allowability or examples of what types of items should be considered unallowable. In addition, CIW believes that the costs of holiday parties should be allowable as employee morale.

#### Costs recorded in the wrong fiscal year

CIW did not have proper cut-off procedures to ensure that costs were recorded in the proper fiscal year. CIW included in its indirect cost pools \$90,262 of costs that were incurred in either a prior or subsequent fiscal year. Costs should be charged in the period in which the goods or services were received.

#### Capital expenditures

CIW included in its indirect cost pool \$93,519 related to purchases that should be capitalized (assets with an original cost greater than \$1,000 and a useful life more than one year). These appeared to be oversights on the part of CIW staff, as most other capital purchases were properly excluded. It does not appear that these transactions were adequately reviewed to ensure they were recorded in the proper account.

#### **Recommendation**

We recommend that the Directors of NSF's DACS and DGA require that CIW develop and implement policies and procedures documenting its indirect cost procedures and processes to ensure compliance with federal cost principles and proper application of those principles throughout CIW.

We also recommend that the Directors of NSF's DACS and DGA require that CIW staff receive training on cost allowability as defined under federal cost principles and how costs should be properly recorded.

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

CIW took strong exception to the auditors' assertion that CIW "does not have adequate internal controls to administer, account for, and monitor indirect costs to ensure compliance with federal cost principles". Many members of CIW's business staff have attended professional

level indirect cost seminars. In addition, CIW has increased the number of Certified Public Accountants on the business staff over the last 2 years. At the time the FY 2000 proposal information was compiled, there was a process in place whereby detailed transactions in specific accounts were reviewed for errors before the information was rolled up for the indirect cost proposal. These processes will be documented as part of the department-specific procedures to be incorporated in the organization-wide procedures manual.

It is CIW's opinion that the vast majority of "issues" identified by the auditors were not issues of compliance with available guidance; rather they are issues related to the interpretation of available guidance, which is general and, in some cases, extremely ambiguous. This changes the focus of the discussion from internal control to the implied meaning of the federal guidance. CIW will work with NSF to address any deficiencies it identifies in CIW's procedures.

### **Auditor's Comments**

Although the auditee believes many of our conclusions are due to differences in interpretation, the majority of the compliance issues we identified were a result of internal control weaknesses, including ineffective controls over the recording and reviewing of unallowable costs, expense cut-off procedures, capital expenditures, and treatment of direct cost overruns. These weaknesses can be attributed to inadequate written guidance, lack of understanding on the part of the Business Managers, lack of adequate training in the application of federal cost principles to CIW operations on the part of the Business Managers, and lack of adequate review of transactions. The year-end review process did not effectively compensate for these control weaknesses.

We recommend that the Directors of NSF's DGA and DACS require that CIW provide documentation that proposed changes to accounting policies and procedures have been made, and that evidence of training and other proposed actions to correct weaknesses identified in this report have been 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 indirect cost proposals the Carnegie Institution of Washington has proposed as applicable to the National Science Foundation and other federal awards for the year ended June 30, 2000. The indirect cost proposals, as presented in the schedules of indirect/direct costs (Schedules B-1 through B-8) and the summary schedules of over/(under) recovered indirect costs (Schedules A-1 through A-6) are the responsibility of the Carnegie Institution of Washington's management. Our responsibility is to express an opinion on Schedules A-1 to A-6 and B-1 through B-8 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 through B-8) and the resultant over/(under) recovered indirect costs (Schedules A-1 through A-6) for the year ended June 30, 2000 on the basis of accounting described in Note 1.

In accordance with *Government Auditing Standards*, we have also issued our report dated September 9, 2002 on our consideration of the Carnegie Institution of Washington'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.



National Science Foundation  
Office of Inspector General

Schedules C-1 through C-7 contain indirect costs in the amount of \$1,398,996 that are reductions to the indirect costs proposed and \$2,037,315 that are net additions to the direct costs proposed for the year ended June 30, 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 Carnegie Institution of Washington 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.*

September 9, 2002

**CARNEGIE INSTITUTION OF WASHINGTON**  
**Summary Schedule of Over-Recovered Indirect Costs on National Science Foundation Awards**  
**For the year ended June 30, 2000**

NSF Award Number	Award Period	Indirect Cost Approved in Award		Indirect Cost Rate			Indirect Costs					Comment/Notes
				Proposed/Audited			Claimed to NSF	Per Audit	Allowed (Approved Rate x MTDC)	Over/ (Under) Recovered Per Audited Rate	Over/ (Under) Recovered Per Allowed Rate	
				Proposed Rate	Audited Rate	Schedule Reference						
<b>GEOPHYSICAL LABORATORY</b>												
EAR-9973018	8/1/99 - 7/31/01	Maximum Provisional	59.00%	██████	58.61%	B-3a	\$ 17,821	\$ 17,703	\$ 17,703	\$ 118	\$ 118	
DMR-9972750	5/1/99 - 4/30/02	Maximum Provisional	59.00%	██████	58.61%	B-3a	39,044	38,787	38,787	257	257	
EAR-9901886	7/1/99 - 6/30/02	Maximum Provisional	59.00%	██████	58.61%	B-3a	11,142	11,068	11,068	74	74	
EAR-9873577	2/15/99 - 1/31/02	Maximum Provisional	59.00%	██████	58.61%	B-3a	17,010	16,897	16,897	113	113	
EAR-9870328	10/1/98 - 9/30/01	Maximum Provisional	59.00%	██████	58.61%	B-3a	25,240	25,073	25,073	167	167	
EAR-9817964	9/15/98 - 8/31/00	Maximum Provisional	59.00%	██████	58.61%	B-3a	15,063	14,964	14,964	99	99	
EAR-9814819	1/1/99 - 12/31/01	Maximum Provisional	59.00%	██████	58.61%	B-3a	33,710	33,487	33,487	223	223	
EAR-9805282	9/1/98 - 8/31/00	Maximum Provisional	59.00%	██████	58.61%	B-3a	14,272	14,178	14,178	94	94	
EAR-9730617	3/15/98 - 2/28/01	Maximum Provisional	59.00%	██████	58.61%	B-3a	41,027	40,756	40,756	271	271	
EAR-9725346	7/1/98 - 6/30/00	Maximum Provisional	59.00%	██████	58.61%	B-3a	3,218	3,196	3,196	22	22	
ATM-9714893	9/1/97-11/30/00	Maximum Provisional	59.00%	██████	58.61%	B-3a	19,172	19,045	19,045	127	127	
EAR-9710475	9/1/97 - 8/31/99	Maximum Provisional	59.00%	██████	58.61%	B-3a	6,302	6,260	6,260	42	42	
EAR-9706624	7/15/97 - 6/30/00	Maximum Provisional	59.00%	██████	58.61%	B-3a	31,810	31,599	31,599	211	211	
EAR-9628861	9/1/96 - 2/28/00	Maximum Provisional	59.00%	██████	58.61%	B-3a	12,987	12,902	12,902	85	85	
EAR-9526840	9/1/96-8/31/01	Maximum Provisional	59.00%	██████	58.61%	B-3a	7,963	7,911	7,911	52	52	
<b>DEPARTMENT OF EMBRYOLOGY</b>												
IBN-9604844	2/15/97-1/31/00	Maximum Provisional	56.00%	██████	48.92%	B-4a	<u>21,401</u>	<u>18,695</u>	<u>18,695</u>	<u>2,706</u>	<u>2,706</u>	(A)
Grand Total							<u>\$ 317,182</u>	<u>\$ 312,521</u>	<u>\$ 312,521</u>	<u>\$ 4,661</u>	<u>\$ 4,661</u>	

(A) Allowed indirect costs equal the audited indirect costs because the audited rate is less than the maximum provisional rate.

CARNEGIE INSTITUTION OF WASHINGTON  
 Summary - All Departments  
 Schedule of Over or (Under) Recovered Indirect Costs on National Science Foundation Awards  
 For the year ended June 30, 2000

Department	# of Awards	Claimed to NSF	Per Audit	Indirect Costs			Schedule
				Allowed (Approved Rate x MTDC)	Over/ (Under) Recovered Per Audited Rate	Over/ (Under) Recovered Per Allowed Rate	
Research Projects		No active awards during audit period.					A-1
Department of Terrestrial Magnetism	18	\$227,533	\$234,901	\$228,764	\$ (7,368)	\$ (1,231)	A-2
Geophysical Laboratory	18	303,551	309,404	309,404	(5,853)	(5,853)	A-3
Department of Embryology	2	22,388	19,682	19,682	2,706	2,706	A-4
Department of Plant Biology	7	324,875	362,962	325,424	(38,087)	(549)	A-5
The Observatories	8	183,721	211,387	184,829	(27,666)	(1,108)	A-6
Grand Total	<u>53</u>	<u>\$1,062,068</u>	<u>\$1,138,336</u>	<u>\$1,068,103</u>	<u>\$(76,268)</u>	<u>\$(6,035)</u>	

CARNEGIE INSTITUTION OF WASHINGTON  
 Research Projects  
 Schedule of Over or (Under) Recovered Indirect Costs on National Science Foundation Awards  
 For the year ended June 30, 2000

NSF Award Number	Award Period	Indirect Cost Approved in Award		Indirect Cost Rate				Per Audit	Indirect Costs			Comment/ Notes
				Proposed Rate	Audited Rate	Schedule Reference	to NSF		Claimed	(Approved Rate x MTDC)	Over/ (Under) Recovered Per Audited Rate	

No active awards during the audit period.

See accompanying notes to these financial schedules.

CARNEGIE INSTITUTION OF WASHINGTON

Department of Terrestrial Magnetism  
 Schedule of Over or (Under) Recovered Indirect Costs on National Science Foundation Awards  
 For the year ended June 30, 2000

NSF Award Number	Award Period	Indirect Cost Approved in Award		Indirect Cost Rate Proposed/Audited			Indirect Costs						
				Proposed Rate	Audited Rate	Schedule Reference	Claimed to NSF	Per Audit	Allowed (Approved Rate x MTDC)	Over/ (Under) Recovered Per Audited Rate	Over/ (Under) Recovered Per Allowed Rate	Comment/ Notes	
													Rate (A)
EAR-9980525	03/15/00 - 02/28/03	Maximum Provisional	57.00%		58.53%	B-2a	\$ 796	\$ 816	\$ 796	\$ (20)	\$ 0		
OCE-9911243	04/01/00 - 03/31/02	Maximum Provisional	57.00%		58.53%	B-2a	3,939	4,044	3,939	(105)	0		
OCE-9907174	11/01/99 - 10/31/01	Maximum Provisional	57.00%		58.53%	B-2a	1,018	1,045	1,018	(27)	0		
OCE-9907173	11/01/99 - 10/31/00	Maximum Provisional	57.00%		58.53%	B-2a	15,434	15,848	15,434	(414)	0		
AST-9900742	08/01/99 - 07/31/02	Maximum Provisional	57.00%		58.53%	B-2a	1,346	1,382	1,346	(36)	0		
EAR-9811348	10/01/98 - 09/30/01	Maximum Provisional	57.00%		58.53%	B-2a	31,428	32,272	31,428	(844)	0		
EAR-9804875	06/15/98 - 05/31/01	Maximum Provisional	57.00%		58.53%	B-2a	20,309	21,439	20,879	(1,130)	(570)		
EAR-9725351	01/01/98 - 12/31/99	Maximum Provisional	57.00%		58.53%	B-2a	10,982	11,277	10,982	(295)	0		
EAR-9713946	05/15/97 - 04/30/02	Maximum Provisional	57.00%		58.53%	B-2a	376	386	376	(10)	0		
OCE-9712278	11/15/97 - 10/31/01	Maximum Provisional	57.00%		58.53%	B-2a	6,994	7,181	6,994	(187)	0		
EAR-9707193	07/01/97 - 06/30/02	Maximum Provisional	57.00%		58.53%	B-2a	348	357	348	(9)	0		
EAR-9628092	09/01/96 - 08/31/99	Maximum Provisional	57.00%		58.53%	B-2a	3,132	3,216	3,132	(84)	0		
OCE-9626934	08/15/97 - 07/31/00	Maximum Provisional	57.00%		58.53%	B-2a	3,970	4,076	3,970	(106)	0		
AST-9616093	03/15/97 - 08/31/00	Maximum Provisional	57.00%		58.53%	B-2a	7,519	7,721	7,519	(202)	0		
AST-9529263	08/01/96 - 07/31/00	Maximum Provisional	57.00%		58.53%	B-2a	2,766	2,840	2,766	(74)	0		
EAR-9526840	09/01/96 - 08/31/01	Maximum Provisional	57.00%		58.53%	B-2a	98,683	101,955	99,289	(3,272)	(606)	(B)	
EAR-9526682	07/01/96 - 12/31/99	Maximum Provisional	57.00%		58.53%	B-2a	7,586	7,790	7,586	(204)	-		
OCE-9402991	06/01/96 - 08/31/00	Maximum Provisional	57.00%		58.53%	B-2a	10,907	11,256	10,962	(349)	(55)	(C)	
Grand Total							18 awards	\$ 227,533	\$ 234,901	\$ 228,764	\$ (7,368)	\$ (1,231)	

Comments/Notes:

MTDC - Modified Total Direct Costs. (Total direct program costs less equipment, participant support costs and subcontract costs.)

- (A) Negotiated approved indirect cost rate for FY2000 is 75.00%. CIW proposed a lower rate in the grant budgets to be more competitive.
- (B) Indirect costs claimed based upon application of a 56.65% rate, which is less than the maximum provisional rate of 57%. As of June 30, 2000, funds remained available in the award budget to claim these under-recovered costs.
- (C) Indirect costs claimed based upon application of a 56.71 % rate, which is less than the maximum provisional rate of 57%. As of June 30, 2000, funds remained available in the award budget to claim these under-recovered costs.

See accompanying notes to these financial schedules

CARNEGIE INSTITUTION OF WASHINGTON  
Geophysical Laboratory  
Schedule of Over or (Under) Recovered Indirect Costs on National Science Foundation Awards  
For the year ended June 30, 2000

NSF Award Number	Award Period	Indirect Cost Approved in Award		Indirect Cost Rate			Indirect Costs					Comment/Notes	
				Proposed/Audited			Claimed to NSF	Per Audit	Allowed (Approved Rate x MTDC)	Over/ (Under) Recovered Per Audited Rate	Over/ (Under) Recovered Per Allowed Rate		
				Proposed Rate	Audited Rate	Schedule Reference							
EAR-9973018	08/01/99 - 07/31/01	Maximum Provisional	59.00%	██████	58.61%	B-3a	\$ 17,821	\$ 17,703	\$ 17,703	\$ 118	\$ 118		
DMR-9972750	05/01/99 - 04/30/02	Maximum Provisional	59.00%	██████	58.61%	B-3a	39,044	38,787	38,787	257	257		
EAR-9901886	07/01/99 - 06/30/02	Maximum Provisional	59.00%	██████	58.61%	B-3a	11,142	11,068	11,068	74	74		
EAR-9876909	05/01/99 - 04/30/01	Maximum Provisional	15.00%	██████	15.00%	B-3a	5,968	11,961	11,961	(5,993)	(5,993)	(B)	
EAR-9873577	02/15/99 - 01/31/02	Maximum Provisional	59.00%	██████	58.61%	B-3a	17,010	16,897	16,897	113	113		
EAR-9870328	10/01/98 - 09/30/01	Maximum Provisional	59.00%	██████	58.61%	B-3a	25,240	25,073	25,073	167	167		
EAR-9817964	09/15/98 - 08/31/00	Maximum Provisional	59.00%	██████	58.61%	B-3a	15,063	14,964	14,964	99	99		
EAR-9814819	01/01/99 - 12/31/01	Maximum Provisional	59.00%	██████	58.61%	B-3a	33,710	33,487	33,487	223	223		
EAR-9805282	09/01/98 - 08/31/00	Maximum Provisional	59.00%	██████	58.61%	B-3a	14,272	14,178	14,178	94	94		
EAR-9730617	03/15/98 - 02/28/01	Maximum Provisional	59.00%	██████	58.61%	B-3a	41,027	40,756	40,756	271	271		
EAR-9725346	07/01/98 - 06/30/00	Maximum Provisional	59.00%	██████	58.61%	B-3a	3,218	3,196	3,196	22	22		
ATM-9714893	09/01/97 - 11/30/00	Maximum Provisional	59.00%	██████	58.61%	B-3a	19,172	19,045	19,045	127	127		
EAR-9710475	09/01/97 - 08/31/99	Maximum Provisional	59.00%	██████	58.61%	B-3a	6,302	6,260	6,260	42	42		
EAR-9706624	07/15/97 - 06/30/00	Maximum Provisional	59.00%	██████	58.61%	B-3a	31,810	31,599	31,599	211	211		
EAR-9628861	09/01/96 - 02/28/00	Maximum Provisional	59.00%	██████	58.61%	B-3a	12,987	12,902	12,902	85	85		
DMR-9624050	08/15/96 - 04/30/00	Maximum Provisional	59.00%	██████	58.61%	B-3a	346	1,682	1,682	(1,336)	(1,336)	(C)	
EAR-9614352	01/15/97 - 12/31/00	Maximum Provisional	59.00%	██████	58.61%	B-3a	1,456	1,935	1,935	(479)	(479)	(D)	
EAR-9526840	09/01/96 - 08/31/01	Maximum Provisional	59.00%	██████	58.61%	B-3a	7,963	7,911	7,911	52	52		
Grand Total							18 awards	<u>\$ 303,551</u>	<u>\$ 309,404</u>	<u>\$ 309,404</u>	<u>\$ (5,853)</u>	<u>\$ (5,853)</u>	(E)

Comments/Notes:

MTDC - Modified Total Direct Costs. (Total direct program costs less equipment, participant support costs and subcontract costs.)

- (A) Negotiated approved indirect cost rate for FY2000 is 75.00%. CIW proposed a lower rate in the grant budgets to be more competitive.
- (B) Indirect costs claimed based upon application of a 14.94% rate which is less than the maximum provisional rate of 15%. Claimed indirect costs excluded stipends in the MTDC base, which has been included in the audited amounts. As of June 30, 2000, funds remained available in the award budget to claim these under-recovered costs.
- (C) Indirect costs claimed based upon application of a 12% rate, which is less than the maximum provisional rate of 59%. Grant period expired April 30, 2000, so recovery of under-recovered indirect costs is not available as of June 30, 2000.
- (D) Claimed indirect costs excluded stipends in the MTDC base, which has been included in the audited amounts. As of June 30, 2000, funds remained available in the award budget to claim these under-recovered costs.
- (E) Includes an over-recovery of \$1,955 for 15 awards and an under-recovery of (\$7,808) for 3 awards, for a net of \$(5,853).

See accompanying notes to these financial schedules.

CARNEGIE INSTITUTION OF WASHINGTON  
 Department of Embryology  
 Schedule of Over or (Under) Recovered Indirect Costs on National Science Foundation Awards  
 For the year ended June 30, 2000

NSF Award Number	Award Period	Indirect Cost Approved in Award		Indirect Cost Rate			Indirect Costs					Comment/Notes	
				Proposed/Audited			Claimed to NSF	Per Audit	Allowed (Approved Rate x MTDC)	Over/ (Under) Recovered Per Audited Rate	Over/ (Under) Recovered Per Allowed Rate		
				Proposed Rate	Audited Rate	Schedule Reference							
IBN-9604844	2/15/97-1/31/00	Maximum Provisional	56.00%	██████	48.92%	B-4a	\$ 21,401	\$ 18,695	\$ 18,695	\$ 2,706	\$ 2,706	(B)	
IBN-9604844	2/15/97-1/31/00	Maximum Provisional	25.00%	██████	25.00%	B-4a	987	987	987			(C)	
Grand Total							2 awards	\$ 22,388	\$ 19,682	\$ 19,682	\$ 2,706	\$ 2,706	

Comments/Notes:

MTDC = Modified Total Direct Costs. (Total direct program costs less equipment, participant support costs and subcontract costs.)

- (A) Negotiated approved indirect cost rate for FY2000 is 59.00%. CIW proposed a lower rate in the grant budgets to be more competitive.
- (B) Allowed indirect costs equal the audited indirect costs because the audited rate is less than the maximum provisional rate.
- (C) The Research Experiences for Undergraduates portion of this grant includes student stipends and is limited to a maximum provisional rate of 25%.

See accompanying notes to these financial schedules.

CARNEGIE INSTITUTION OF WASHINGTON  
 Department of Plant Biology  
 Schedule of Over or (Under) Recovered Indirect Costs on National Science Foundation Awards  
 For the year ended June 30, 2000

NSF Award Number	Award Period	Indirect Cost Approved in Award		Indirect Cost Rate Proposed/Audited			Indirect Costs					Comment/Notes
		Cost Method	Rate (A)	Proposed Rate	Audited Rate	Schedule Reference	Claimed to NSF	Per Audit	Allowed (Approved Rate x MTDC)	Over/ (Under) Recovered Per Audited Rate	Over/ (Under) Recovered Per Allowed Rate	
DBI-9978564	10/1/99 - 9/30/01	Maximum Provisional	45.00%	██████	59.19%	B-5a	\$106,581	\$ 140,189	\$ 106,581	\$ (33,608)	\$	
MCB-9975765	10/1/99 - 9/30/01	Maximum Provisional	58.00%	██████	59.19%	B-5a	24,235	24,733	24,235	(498)		
MCB-9727836	6/1/98 - 12/31/01	Maximum Provisional	58.00%	██████	59.19%	B-5a	37,674	38,447	37,674	(773)		
DEB-9727059	9/1/97 - 8/31/00	Maximum Provisional	58.00%	██████	59.19%	B-5a	76,857	78,434	76,857	(1,577)		
IBN-9601164	7/1/96-6/30/01	Maximum Provisional	58.00%	██████	59.19%	B-5a	47,621	48,598	47,621	(977)		
MCB-9513576	3/1/96-8/31/99	Maximum Provisional	58.00%	██████	59.19%	B-5a	18	18	18			
IBN-9506254	9/1/95-10/31/00	Maximum Provisional	59.00%	██████	59.19%	B-5a	31,889	32,543	32,438	(654)	(549)	(B)
Grand Total						7 awards	<u>\$ 324,875</u>	<u>\$ 362,962</u>	<u>\$ 325,424</u>	<u>\$ (38,087)</u>	<u>\$ (549)</u>	

Comments/Notes:

MTDC = Modified Total Direct Costs. (Total direct program costs less equipment, participant support costs and subcontract costs.)

- (A) Negotiated approved indirect cost rate for FY2000 is 73.00%. CIW proposed a lower rate in the grant budgets to be more competitive.
- (B) Indirect costs claimed based on application of a 58% rate, which is less than the maximum provisional rate of 59%. As of June 30, 2000, funds remained available in the award budget to claim these under-recovered costs.

See accompanying notes to these financial schedules.



CARNEGIE INSTITUTION OF WASHINGTON  
Observatories  
Schedule of Over or (Under) Recovered Indirect Costs on National Science Foundation Awards  
For the year ended June 30, 2000

NSF Award Number	Award Period	Indirect Cost Approved in Award		Indirect Cost Rate Proposed/Audited			Indirect Costs						
				Proposed Rate	Audited Rate	Schedule Reference	Claimed to NSF	Per Audit	Allowed (Approved Rate x MTDC)	Over/ (Under) Recovered Per Audited Rate	Over/ (Under) Recovered Per Allowed Rate	Comment/ Notes	
													Cost Method
AST-9977453	09/01/99 - 08/31/01	Maximum Provisional	75.00%	██████	82.43%	B-6a	\$ 73,894	\$ 81,214	\$ 73,894	\$ (7,320)	\$		
AST-9900806	08/01/99 - 07/31/01	Maximum Provisional	75.00%	██████	82.43%	B-6a	30,780	33,829	30,780	(3,049)			
AST-9900742	08/01/99 - 07/31/02	Maximum Provisional	57.00%	██████	82.43%	B-6a	19,776	28,599	19,776	(8,823)		(C)	
AST-9819786	08/01/99 - 07/31/01	Maximum Provisional	75.00%	██████	82.43%	B-6a	27,324	30,031	27,324	(2,707)			
AST-9800442	07/01/98 - 06/30/01	Maximum Provisional	75.00%	██████	82.43%	B-6a	7,483	8,225	7,483	(742)			
AST-9618875	03/15/97 - 11/20/00	Maximum Provisional	75.00%	██████	82.43%	B-6a	17,428	19,154	17,428	(1,726)			
AST-9618623	07/01/97 - 06/30/00	Maximum Provisional	75.00%	██████	82.43%	B-6a	4,156	4,567	4,156	(411)			
AST-9529263	08/01/96 - 07/31/00	Maximum Provisional	57.00%	██████	82.43%	B-6a	2,880	5,768	3,988	(2,888)	(1,108)	(B), (C)	
Grand Total							8 awards	\$ 183,721	\$ 211,387	\$ 184,829	\$ (27,666)	\$ (1,108)	

Comments/Notes:

MTDC = Modified Total Direct Costs. (Total direct program costs less equipment, participant support costs and subcontract costs.)

- (A) Negotiated approved indirect cost rate for FY2000 is 75.00%. CIW proposed a lower rate in the grant budgets to be more competitive.
- (B) Indirect costs claimed based upon application of a 41% rate, which is less than the 57% maximum provisional rate. As of June 30, 2000, funds remained available in the award budget to claim these under-recovered costs.
- (C) Grant split with Department of Terrestrial Magnetism, whose rate was used in the award.

See accompanying notes to these financial schedules.

CARNEGIE INSTITUTION OF WASHINGTON  
 Research Projects  
 Schedule of Indirect Costs  
 For the year ended June 30, 2000

<u>Expenses</u>	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Transfer occupancy costs	██████████	\$	██████████
Use allowance	██████████		██████████
Subtotal	██████████		██████████
Allocated administrative costs (B)	██████████	<u>3,115</u>	██████████
Total expenses	<u>\$ ██████████</u>	<u>\$ 3,115</u> (Schedule C-1a)	<u>\$ 129,229</u>
<u>Computation of Indirect Cost Rate:</u>	<u>Per CIW</u>	<u>Per Audit</u>	
<u>Total indirect costs</u>	<u>\$ ██████████</u>	<u>\$ 129,229</u>	
<u>Total direct costs</u>	<u>\$ ██████████</u>	<u>\$ 507,699</u>	
Computed Indirect Cost Rate	██████████	<u>25.45%</u>	

(A) The amounts agree with the indirect cost rate proposal prepared by CIW. The total costs before auditors' adjustments and eliminations agree with CIW's books of account.

(B) Administration Department costs are allocated to each Department based on a computed Administrative Rate (Schedule B-7).

See accompanying notes to these financial schedules.

CARNEGIE INSTITUTION OF WASHINGTON  
 Research Projects  
 Schedule of Direct Costs  
 For the year ended June 30, 2000

Expenses	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Salaries	██████████	\$	██████████
Fringe benefits	██████████		██████████
Travel-meetings	██████████		██████████
Education and research supplies	██████████		██████████
Other services	██████████		██████████
Supplies-general	██████████		██████████
Professional services	██████████		██████████
Participant support	██████████	<u>84,080</u>	██████████
Total expenses	██████████	<u>\$ 84,080</u> (Schedule C-1b)	<u>\$ 507,699</u>

(A) The amounts agree with the indirect cost rate proposal prepared by CIW. The total costs before auditors' adjustments and eliminations agree with CIW's books of account.

See accompanying notes to these financial schedules.

CARNEGIE INSTITUTION OF WASHINGTON  
 Department of Terrestrial Magnetism  
 Schedule of Indirect Costs  
 For the year ended June 30, 2000

Expenses	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Salaries	██████████	\$	██████████
Fringe benefits	██████████		██████████
Travel-meetings	██████████	(346)	██████████
Education and research	██████████	(45,102)	██████████
Other services	██████████	(9,133)	██████████
Building and equip. maintenance	██████████	(6,202)	██████████
Supplies-general	██████████	(24,972)	██████████
Professional services	██████████		██████████
Insurance & taxes	██████████		██████████
Use allowance	██████████	_____	██████████
Subtotal	██████████	(85,755)	██████████
Allocated administrative costs (B)	██████████	(5,126)	██████████
Total expenses	██████████	\$ (90,881) (Schedule C-2a)	\$ ██████████
<u>Computation of Indirect Cost Rate:</u>	<u>Per CIW</u>	<u>Per Audit</u>	
<u>Total indirect costs</u>	██████████	\$ 2,415,867	
<u>Total direct costs</u>	██████████	\$ 4,127,406	
Computed Indirect Cost Rate	██████████	<u>58.53%</u>	

- (A) The amounts agree with the indirect cost rate proposal prepared by CIW. The total costs before auditors' adjustments and eliminations agree with CIW's books of account.
- (B) Administration Department costs are allocated to each Department based on a computed Administrative Rate (Schedules B-7).

See accompanying notes to these financial schedules.

CARNEGIE INSTITUTION OF WASHINGTON  
 Department of Terrestrial Magnetism  
 Schedule of Direct Costs  
 For the year ended June 30, 2000

Expenses	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Salaries	██████████	\$	██████████
Fringe benefits	██████████		██████████
Honoraria	██████████		██████████
Travel-meetings	██████████		██████████
Education and research	██████████		██████████
Other services	██████████	9,100	██████████
Subcontracts	██████████		██████████
Building and equip. maintenance	██████████		██████████
Supplies-general	██████████	4,422	██████████
Professional services	██████████		██████████
Equipment (non-capital)	██████████	209,208	██████████
Participant support	██████████	<u>300,581</u>	██████████
Total expenses	██████████	<u>\$ 523,311</u> (Schedule C-2b)	██████████

(A) The amounts agree with the indirect cost rate proposal prepared by CIW. The total costs before auditors' adjustments and eliminations agree with CIW's books of account.

CARNEGIE INSTITUTION OF WASHINGTON  
 Geophysical Laboratory  
 Schedule of Indirect Costs  
 For the year ended June 30, 2000

Expenses	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Salaries	██████████	\$	██████████
Fringe benefits	██████████		██████████
Travel-meetings	██████████	(918)	██████████
Education and research	██████████		██████████
Other services	██████████	(21,567)	██████████
Building and equip. maintenance	██████████	(6,203)	██████████
Supplies-general	██████████	(22,342)	██████████
Insurance & taxes	██████████		██████████
Use allowance	██████████	_____	██████████
Subtotal	██████████	(51,030)	██████████
Allocated administrative costs (B)	██████████	(33,882)	██████████
Total expenses	██████████	<u>\$ (84,912)</u> (Schedule C-3a)	<u>\$ 2,693,690</u>
<u>Computation of Indirect Cost Rate:</u>	<u>Per CIW</u>	<u>Per Audit</u>	
Total indirect costs	██████████	\$ 2,693,690	
Total direct costs	██████████	\$ 4,595,639	
Computed Indirect Cost Rate	██████████	58.61%	

(A) The amounts agree with the indirect cost rate proposal prepared by CIW. The total costs before auditors' adjustments and eliminations agree with CIW's books of account.

(B) Administration Department costs are allocated to each Department based on a computed Administrative Rate (Schedules B-7).

See accompanying notes to these financial schedules.

CARNEGIE INSTITUTION OF WASHINGTON  
 Geophysical Laboratory  
 Schedule of Direct Costs  
 For the year ended June 30, 2000

Expenses	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Salaries	██████████	\$	██████████
Fringe benefits	██████████		██████████
Honoraria	██████████		██████████
Travel-meetings	██████████		██████████
Education & research	██████████		██████████
Other services	██████████		██████████
Professional services	██████████		██████████
Supplies-general	██████████		██████████
Participant support	██████████	<u>215,048</u>	██████████
Total expenses	██████████	<u>\$ 215,048</u> (Schedule C-3b)	<u>\$ 4,595,639</u>

(A) The amounts agree with the indirect cost rate proposal prepared by CIW. The total costs before auditors' adjustments and eliminations agree with CIW's books of account.

See accompanying notes to these financial schedules.

CARNEGIE INSTITUTION OF WASHINGTON  
 Department of Embryology  
 Schedule of Indirect Costs  
 For the year ended June 30, 2000

Expenses	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Salaries	██████████	\$	██████████
Fringe benefits	██████████		██████████
Travel-meetings	██████████	(6,719)	██████████
Education and research	██████████		██████████
Other services	██████████		██████████
Building and equip. maintenance	██████████	(3,125)	██████████
Professional services	██████████		██████████
Supplies-general	██████████	(20,256)	██████████
Use allowance	██████████		██████████
Less: allowance for building rental	██████████		██████████
Less: applicable credits	██████████	(22,000)	██████████
Subtotal	██████████	(52,100)	██████████
Allocated administrative costs (B)	██████████	17,908	██████████
Total expenses	██████████	\$ (34,192) (Schedule C-4a)	\$ 1,967,834
<u>Computation of Indirect Cost Rate:</u>	<u>Per CIW</u>	<u>Per Audit</u>	
Total indirect costs	██████████	\$ 1,967,834	
Total direct costs	██████████	\$ 4,022,722	
Computed Indirect Cost Rate	██████████	48.92%	

(A) The amounts agree with the indirect cost rate proposal prepared by CIW. The total costs before auditors' adjustments and eliminations agree with CIW's books of account.

(B) Administration Department costs are allocated to each Department based on a computed Administrative Rate (Schedules B-7).

See accompanying notes to these financial schedules.



CARNEGIE INSTITUTION OF WASHINGTON  
 Department of Embryology  
 Schedule of Direct Costs  
 For the year ended June 30, 2000

Expenses	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Salaries	██████████	\$	██████████
Fringe benefits	██████████		██████████
Honoraria	██████████		██████████
Travel-meetings	██████████		██████████
Education and research	██████████		██████████
Other services	██████████		██████████
Supplies-general	██████████		██████████
Equipment (non-capital)		2,710	██████████
Participant support	██████████	<u>709,478</u>	██████████
<b>Total expenses</b>	██████████	<u>\$ 712,188</u> (Schedule C-4b)	<u>\$ 4,022,722</u>

(A) The amounts agree with the indirect cost rate proposal prepared by CIW. The total costs before auditors' adjustments and eliminations agree with CIW's books of account.

CARNEGIE INSTITUTION OF WASHINGTON  
 Department of Plant Biology  
 Schedule of Indirect Costs  
 For the year ended June 30, 2000

Expenses	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Salaries	██████████	\$	██████████
Fringe benefits	██████████		██████████
Travel-meetings	██████████	(3,580)	██████████
Education and research	██████████	(505)	██████████
Other services	██████████		██████████
Building and equip. maintenance	██████████	(12,946)	██████████
Professional services	██████████		██████████
Supplies-general	██████████	(869)	██████████
Use allowance	██████████	_____	██████████
Subtotal	██████████	(17,900)	██████████
Allocated administrative costs (B)	██████████	(24,462)	██████████
Total expenses	██████████	<u>\$ (42,362)</u> (Schedule C-5a)	<u>\$ 2,124,362</u>
<u>Computation of Indirect Cost Rate:</u>	<u>Per CIW</u>	<u>Per Audit</u>	
Total indirect costs	██████████	\$ 2,124,362	
Total direct costs	██████████	\$ 3,588,852	
Computed Indirect Cost Rate	██████████	<u>59.19%</u>	

(A) The amounts agree with the indirect cost rate proposal prepared by CIW. The total costs before auditors' adjustments and eliminations agree with CIW's books of account.

Administration Department costs are allocated to each Department based on a computed Administrative Rate (Schedules B-7).

See accompanying notes to these financial schedules.

CARNEGIE INSTITUTION OF WASHINGTON  
 Department of Plant Biology  
 Schedule of Direct Costs  
 For the year ended June 30, 2000

Expenses	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Salaries	██████████	\$	██████████
Fringe benefits	██████████		██████████
Honoraria	██████████		██████████
Travel-meetings	██████████		██████████
Education and research	██████████		██████████
Other services	██████████		██████████
Building and equip maintenance	██████████		██████████
Professional services	██████████		██████████
Supplies-general	██████████		██████████
Equipment		10,466	██████████
Participant support		<u>160,028</u>	██████████
<b>Total expenses</b>	██████████	<u>\$ 170,494</u> (Schedule C-5b)	<u>\$ 3,588,852</u>

(A) The amounts agree with the indirect cost rate proposal prepared by CIW. The total costs before auditors' adjustments and eliminations agree with CIW's books of account.

See accompanying notes to these financial schedules.

CARNEGIE INSTITUTION OF WASHINGTON  
Observatories  
Schedule of Indirect Costs  
For the year ended June 30, 2000

Expenses	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Salaries	██████████	\$	██████████
Fringe benefits	██████████		██████████
Travel-meetings	██████████	(1,625)	██████████
Education and research	██████████	(114)	██████████
Other services	██████████	(12,449)	██████████
Building and equip. maintenance	██████████	(23,548)	██████████
Insurance	██████████		██████████
Professional services	██████████		██████████
Supplies-general	██████████	(16,327)	██████████
Use allowance	██████████		██████████
Less: applicable credits	██████████	(858,730)	██████████
Subtotal	██████████	(912,793)	██████████
Allocated administrative costs (B)	██████████	(96,543)	██████████
Total expenses	██████████	<u>\$ (1,009,336)</u> (Schedule C-6a)	<u>\$ 2,822,712</u>
<u>Computation of Indirect Cost Rate:</u>	<u>Per CIW</u>	<u>Per Audit</u>	
<u>Total indirect costs</u>	██████████	<u>\$ 2,822,712</u>	
<u>Total direct costs</u>	██████████	<u>\$ 3,424,533</u>	
Computed Indirect Cost Rate	██████████	<u>82.43%</u>	

(A) The amounts agree with the indirect cost rate proposal prepared by CIW. The total costs before auditors' adjustments and eliminations agree with CIW's books of account.

(B) Administration Department costs are allocated to each Department based on a computed Administrative Rate (Schedules B-7).

See accompanying notes to these financial schedules.

CARNEGIE INSTITUTION OF WASHINGTON  
Observatories  
Schedule of Direct Costs  
For the year ended June 30, 2000

Expenses	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Salaries	██████████	\$	██████████
Fringe benefits	██████████		██████████
Travel-meetings	██████████		██████████
Education and research	██████████		██████████
Other services	██████████		██████████
Professional services	██████████		██████████
Supplies-general	██████████		██████████
Equipment (non-capital)		4,499	██████████
Participant support	██████████	<u>273,837</u>	██████████
Total expenses	██████████	<u>\$ 278,336</u> (Schedule C-6b)	<u>\$ 3,424,533</u>

(A) The amounts agree with the indirect cost rate proposal prepared by CIW. The total costs before auditors' adjustments and eliminations agree with CIW's books of account.

See accompanying notes to these financial schedules.

CARNEGIE INSTITUTION OF WASHINGTON  
Administration Department Costs\*  
For the year ended June 30, 2000

Expenses	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Salaries	██████████	\$ (42,000)	██████████
Fringe benefits	██████████	(11,970)	██████████
Retiree costs	██████████		██████████
Travel-meetings	██████████	(10,728)	██████████
Other services	██████████		██████████
Professional services	██████████	(7,666)	██████████
Supplies-general	██████████		██████████
Insurance and taxes	██████████		██████████
Building and equip. maintenance	██████████		██████████
Transfer occupancy costs	██████████		██████████
Use allowance	██████████		██████████
Less: allowance for building rental	██████████		██████████
Less: applicable credits	██████████	(68,064)	██████████
 Total administration cost	 ██████████	 \$ (140,428) (Schedule C-7a)	 \$ 2,479,685
 <u>Computation of Administrative Rate:</u>	 <u>Per CIW</u>	 <u>Per Audit</u>	
<u>Total administrative costs</u>	██████████	\$ 2,479,685	
<u>Total allocation base</u>	██████████	\$ 31,010,154	
 Computed Administrative Rate	 ██████████	 <u>7.9964%</u>	

\* Administration Department costs exclude the Research Projects and Fundraising, which are treated as direct costs. The remaining Administration Department costs are allocated back to the departments through the administrative allocation. This allocation is based on the computed Administration Department rate applied against each department's direct and indirect costs.

(A) The amounts agree with the indirect cost rate proposal prepared by CIW. The total costs before auditors' adjustments and eliminations agree with CIW's books of account.

See accompanying notes to these financial schedules.

CARNEGIE INSTITUTION OF WASHINGTON  
 Schedule of Administration Department Allocation Base\*  
 For the year ended June 30, 2000

Expenses	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
<b>Direct Costs</b>			
- Research Projects	██████████	\$ 84,080	██████████
- Fundraising	██████████	53,970	██████████
- Department of Terrestrial Magnetism	██████████	523,311	██████████
- Geophysical Laboratory	██████████	215,048	██████████
- Department of Embryology	██████████	712,188	██████████
- Department of Plant Biology	██████████	170,494	██████████
- Observatories	██████████	278,336	██████████
<b>Indirect Costs (excluding allocated administrative)</b>			
- Research Projects	██████████		██████████
- Fundraising			
- Department of Terrestrial Magnetism	██████████	(85,755)	██████████
- Geophysical Laboratory	██████████	(51,030)	██████████
- Department of Embryology	██████████	(52,100)	██████████
- Department of Plant Biology	██████████	(17,900)	██████████
- Observatories	██████████	(912,793)	██████████
<b>Unallowable Department Costs (B)</b>			
- Research Projects	██████████		██████████
- Fundraising			
- Department of Terrestrial Magnetism	██████████		██████████
- Geophysical Laboratory	██████████		██████████
- Department of Embryology	██████████		██████████
- Department of Plant Biology	██████████		██████████
- Observatories	██████████		██████████
Total base	██████████	<u>\$ 917,849</u>	<u>\$ 31,010,154</u>

\* The Administration Department allocation base consists of all the direct, indirect, and unallowable costs at all of the departments combined. This is to ensure that all costs, including unallowables are charged their fair share of the Administration Department costs.

(A) The amounts agree with the indirect cost rate proposal prepared by CIW. The total costs before auditors' adjustments and eliminations agree with CIW's books of account.

(B) Unallowable costs identified by CIW and included in the allocation base per the indirect cost proposal.

See accompanying notes to these financial schedules.

CARNEGIE INSTITUTION OF WASHINGTON  
 Schedule of Fundraising Costs\*  
 For the year ended June 30, 2000

Expenses	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Salaries	██████████	\$ 42,000	██████████
Fringe benefits	██████████	11,970	██████████
Honoraria	██████████		██████████
Travel-meetings	██████████		██████████
Professional services	██████████		██████████
Other services	██████████		██████████
Building and equip. maintenance	██████████		██████████
Supplies-general	██████████		██████████
Transfer occupancy costs from ADMIN	██████████		██████████
Use allowance	██████████	_____	██████████
 Subtotal	 ██████████	 53,970	 ██████████
Allocated administrative costs (B)	_____██████████	_____ (112)	_____██████████
 Total expenses	 ██████████	 <u>\$ 53,858</u> (Schedule C-7b)	 <u>\$ 728,337</u>

\* Fundraising costs are incurred at the Administration Department and treated as direct costs for purposes of calculating the Administration Department rate. The effect is that Fundraising costs are assigned their fair share of Administration Department costs.

- (A) The amounts agree with the indirect cost rate proposal prepared by CIW. The total costs before auditors' adjustments and eliminations agree with CIW's books of account.
- (B) Administration Department costs are allocated to each Department based on a computed Administrative Rate (Schedules B-7).

See accompanying notes to these financial schedules.



CARNEGIE INSTITUTION OF WASHINGTON  
Schedule of Auditors' Adjustments and Eliminations  
For the year ended June 30, 2000

The amounts as proposed by CIW in its indirect cost proposal for the year ended June 30, 2000 (Schedules B-1 through B-8) required various adjustments and eliminations to the indirect cost pool or direct cost base. These adjustments and/or eliminations are presented in Schedules B-1 through B-8. On the following pages in Schedules C-1 through C-7 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>
Applicable credits for building income and other costs were not offset against indirect costs.	<i>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. "Applicable credits is defined by this circular as those receipts, or reduction of expenditures which operate to offset or reduce expense items that are allocable to awards as direct or indirect cost.</i>
Capitalizable costs were included in indirect cost pool.	<i>OMB Circular A-122 states that both direct costs and indirect costs shall exclude capital expenditures.</i>
Direct program costs were included in the indirect cost pool.	<i>OMB Circular A-122 defines direct costs as those that can be identified specifically with a particular final cost objective. In addition, under "Losses on other awards", A-122 states that excess of costs over income on any award is unallowable as a cost of any other award.</i>

CARNEGIE INSTITUTION OF WASHINGTON  
Schedule of Auditors' Adjustments and Eliminations (Cont.)  
For the year ended June 30, 2000

Adjustment and/or Elimination

Criteria

Unallowable travel, investment management, fines and penalties, entertainment, and other items erroneously included in indirect cost pool.

*Federal cost principles state that travel costs should be allowable if reasonable which is determined by considering federal and state laws and regulations including Standard Government Travel Regulations, and terms and conditions of the award.*

*OMB Circular A-122 states that costs of the following are unallowable.*

- Amusement, diversion, social activities, and ceremonials.*
- Alcoholic beverages are expressly unallowable.*
- Costs of investment counsel and staff and similar expenses incurred solely to enhance income from investments.*
- Contributions and donations by the organization to others.*
- Fines and penalties from violations or failure to comply with laws and regulations are unallowable. FAR 31.205-15 includes in its definition Offines and penalties costs incurred relating to the mischarging of costs on government contracts are also excluded from the indirect cost pool.*

Costs not chargeable to FY 2000.

*OMB Circular A-122 states that the base period for the allocation of indirect costs is the period in which such costs are incurred and accumulated for allocation to work performed in the period.*

CARNEGIE INSTITUTION OF WASHINGTON  
Schedule of Auditors' Adjustments and Eliminations (Cont.)  
For the year ended June 30, 2000

<u>Adjustment and/or Elimination</u>	<u>Criteria</u>
Stipends attracting indirect costs were excluded from direct cost base.	<i>OMB Circular A-122 states that the distribution base for indirect costs may be total direct costs (excluding capital expenditures and other distorting items, such as subcontracts or subgrants). NSF's Grant Proposal Guidance includes expenses related to grad students and postdoctoral associates as components of salaries and wages, not participant support.</i>
Non-capital equipment erroneously excluded from direct cost base.	<i>Federal cost principles state that the distribution base may be total direct costs (excluding capital expenditures and other distorting items, such as major subcontracts or subgrants), direct salaries and wages, or other base, which results in an equitable distribution. Costs that do not meet the \$1,000 capitalization threshold should be included in the direct cost base.</i>

CARNEGIE INSTITUTION OF WASHINGTON  
 Summary - All Departments  
 Schedule of Auditors' Adjustments and Eliminations - Indirect Costs  
 For the year ended June 30, 2000

Adjustment and Elimination Explanation	Total Amount	Department						
		RP (C-1a)	DTM (C-2a)	GEO (C-3a)	EMB (C-4a)	PBIO (C-5a)	OBS (C-6a)	ADMIN (C-7a)
Applicable credits for building income and other costs were not offset against indirect costs.	\$ (948,794)	\$	\$	\$	\$ (22,000)	\$	\$ (858,730)	\$ (68,064)
Capitalizable costs were included in indirect cost pool.	(93,519)		(50,532)	(9,361)	(3,125)	(2,435)	(28,066)	
Direct program costs were included in the indirect pool.	(13,522)		(13,522)					
Unallowable travel, fines and penalties, and other items erroneously included in indirect cost pool.	(113,909)		(4,653)	(2,616)	(6,719)	(3,580)	(23,977)	(72,364)
Costs not chargeable to FY 2000.	(90,262)		(17,048)	(39,053)	(20,256)	(11,885)	(2,020)	
Adjustment to administrative allocation as a result of other adjustments.	(138,990)	3,115	(5,126)	(33,882)	17,908	(24,462)	(96,543)	
	<u>\$ (1,398,996)</u>	<u>\$ 3,115</u>	<u>\$ (90,881)</u>	<u>\$ (84,912)</u>	<u>\$ (34,192)</u>	<u>\$ (42,362)</u>	<u>\$ (1,009,336)</u>	<u>\$ (140,428)</u>

CARNEGIE INSTITUTION OF WASHINGTON  
 Summary - All Departments  
 Schedule of Auditors' Adjustments and Eliminations - Direct Costs  
 For the year ended June 30, 2000

Adjustment and Elimination Explanation	Total Amount	Department						
		RP (C-1b)	DTM (C-2b)	GEO (C-3b)	EMB (C-4b)	PBIO (C-5b)	OBS (C-6b)	FUND (C-7b)
Stipends attracting indirect costs were excluded from direct cost base.	\$ 1,743,052	\$ 84,080	\$ 300,581	\$ 215,048	\$ 709,478	\$ 160,028	\$ 273,837	\$
Non-capital equipment erroneously excluded from direct cost base.	226,883		209,208		2,710	10,466	4,499	
Direct program costs were included in the indirect pool.	67,492		13,522					53,970
Adjustment to administrative allocation as a result of other adjustments.	(112)							(112)
	<u>\$ 2,037,315</u>	<u>\$ 84,080</u>	<u>\$ 523,311</u>	<u>\$ 215,048</u>	<u>\$ 712,188</u>	<u>\$ 170,494</u>	<u>\$ 278,336</u>	<u>\$ 53,858</u>

CARNEGIE INSTITUTION OF WASHINGTON  
 Research Projects  
 Schedule of Auditors' Adjustments and Eliminations - Indirect Costs  
 For the year ended June 30, 2000

Adjustment and Elimination Explanation	Total Amount	Category of Expense Administrative Allocation
Applicable credits for building income and other costs were not offset against indirect costs.	\$	\$
Capitalizable costs were included in indirect cost pool.		
Direct program costs were included in the indirect pool.		
Unallowable travel, fines and penalties, and other items erroneously included in indirect cost pool.		
Costs not chargeable to FY 2000.		
Adjustment to administrative allocation as a result of other adjustments.	3,115	3,115
	<u>3,115</u>	<u>3,115</u>
	<u>\$ 3,115</u>	<u>\$ 3,115</u>

CARNEGIE INSTITUTION OF WASHINGTON  
Research Projects  
Schedule of Auditors' Adjustments and Eliminations - Direct Costs  
For the year ended June 30, 2000

<u>Adjustment and Elimination Explanation</u>	<u>Total Amount</u>	<u>Category of Expense Participant Support</u>
Stipends attracting indirect costs were excluded from direct cost base.	\$84,080	\$84,080
Non-capital equipment erroneously excluded from direct cost base.		
Direct program costs were included in the indirect pool.		
	<u>\$84,080</u>	<u>\$84,080</u>

CARNEGIE INSTITUTION OF WASHINGTON  
 Department of Terrestrial Magnetism  
 Schedule of Auditors' Adjustments and Eliminations - Indirect Costs  
 For the year ended June 30, 2000

Adjustment and Elimination  Explanation	Total Amount	Category of Expense					
		Building and Equipment Maintenance	Education and Research	Supplies	Travel	Other Services	Administrative Allocation
Applicable credits for building income and other costs were not offset against indirect costs.	\$	\$	\$	\$	\$	\$	\$
Capitalizable costs were included in indirect cost pool.	(50,532)	(6,202)	(40,680)	(3,650)			
Direct program costs were included in the indirect pool.	(13,522)		(4,422)			(9,100)	
Unallowable travel, fines and penalties, and other items erroneously included in indirect cost pool.	(4,653)			(4,274)	(346)	(33)	
Costs not chargeable to FY 2000.	(17,048)			(17,048)			
Adjustment to administrative allocation as a result of other adjustments.	(5,126)						(5,126)
	<u>\$ (90,881)</u>	<u>\$ (6,202)</u>	<u>\$ (45,102)</u>	<u>\$ (24,972)</u>	<u>\$ (346)</u>	<u>\$ (9,133)</u>	<u>\$ (5,126)</u>



CARNEGIE INSTITUTION OF WASHINGTON  
 Department of Terrestrial Magnetism  
 Schedule of Auditors' Adjustments and Eliminations - Direct Costs  
 For the year ended June 30, 2000

Adjustment and Elimination Explanation	Total Amount	Category of Expense			
		Equipment	Supplies	Other Services	Participant Support
Stipends attracting indirect costs were excluded from direct cost base.	\$ 300,581	\$	\$	\$	\$ 300,581
Non-capital equipment erroneously excluded from direct cost base.	209,208	209,208			
Direct program costs were included in the indirect pool.	<u>13,522</u>	_____	<u>4,422</u>	<u>9,100</u>	_____
	<u>\$ 523,311</u>	<u>\$ 209,208</u>	<u>\$ 4,422</u>	<u>\$ 9,100</u>	<u>\$ 300,581</u>

CARNEGIE INSTITUTION OF WASHINGTON  
 Geophysical Laboratory  
 Schedule of Auditors' Adjustments and Eliminations - Indirect Costs  
 For the year ended June 30, 2000

Adjustment and Elimination Explanation	Category of Expense					
	Total Amount	Building and Equipment Maintenance	Supplies	Travel	Other Services	Administrative Allocation
Applicable credits for building income and other costs were not offset against indirect costs.	\$	\$	\$	\$	\$	\$
Capitalizable costs were included in indirect cost pool.	(9,361)	(6,203)	(3,158)			
Direct program costs were included in the indirect pool.						
Unallowable travel, fines and penalties, and other items erroneously included in indirect cost pool.	(2,616)		(1,665)	(918)	(33)	
Costs not chargeable to FY 2000.	(39,053)		(17,519)		(21,534)	
Adjustment to administrative allocation as a result of other adjustments.	(33,882)					(33,882)
	<u>\$ (84,912)</u>	<u>\$ (6,203)</u>	<u>\$ (22,342)</u>	<u>\$ (918)</u>	<u>\$ (21,567)</u>	<u>\$ (33,882)</u>

CARNEGIE INSTITUTION OF WASHINGTON  
 Geophysical Laboratory  
 Schedule of Auditors' Adjustments and Eliminations - Direct Costs  
 For the year ended June 30, 2000

Adjustment and Elimination <u>Explanation</u>	Total <u>Amount</u>	<u>Category of Expense</u> Participant <u>Support</u>
Stipends attracting indirect costs were excluded from direct cost base.	\$ 215,048	\$215,048
Non-capital equipment erroneously excluded from direct cost base.		
Direct program costs were included in the indirect pool.		
	<u>\$ 215,048</u>	<u>\$ 215,048</u>

CARNEGIE INSTITUTION OF WASHINGTON  
 Department of Embryology  
 Schedule of Auditors' Adjustments and Eliminations - Indirect Costs  
 For the year ended June 30, 2000

Adjustment and Elimination  Explanation	Total Amount	Category of Expense				
		Building and Equipment Maintenance	Supplies	Travel	Administrative Allocation	Applicable Credits
Applicable credits for building income and other costs were not offset against indirect costs.	\$ (22,000)	\$	\$	\$	\$	\$ (22,000)
Capitalizable costs were included in indirect cost pool.	(3,125)	(3,125)				
Direct program costs were included in the indirect pool.						
Unallowable travel, fines and penalties, and other items erroneously included in indirect cost pool.	(6,719)			(6,719)		
Costs not chargeable to FY 2000.	(20,256)		(20,256)			
Adjustment to administrative allocation as a result of other adjustments.	17,908				17,908	
	<u>\$ (34,192)</u>	<u>\$ (3,125)</u>	<u>\$ (20,256)</u>	<u>\$ (6,719)</u>	<u>\$ 17,908</u>	<u>\$ (22,000)</u>

CARNEGIE INSTITUTION OF WASHINGTON  
 Department of Embryology  
 Schedule of Auditors' Adjustments and Eliminations - Direct Costs  
 For the year ended June 30, 2000

Adjustment and Elimination <u>Explanation</u>	Total <u>Amount</u>	<u>Category of Expense</u>	
		<u>Equipment</u>	<u>Participant Support</u>
Stipends attracting indirect costs were excluded from direct cost base.	\$709,478	\$	\$709,478
Non-capital equipment erroneously excluded from direct cost base.	2,710	2,710	
Direct program costs were included in the indirect pool.			
	<u>\$712,188</u>	<u>\$2,710</u>	<u>\$709,478</u>

CARNEGIE INSTITUTION OF WASHINGTON  
 Department of Plant Biology  
 Schedule of Auditors' Adjustments and Eliminations - Indirect Costs  
 For the year ended June 30, 2000

Adjustment and Elimination  Explanation	Category of Expense					
	Total Amount	Building and Equipment Maintenance	Education and Research	Supplies	Travel	Administrative Allocation
Applicable credits for building income and other costs were not offset against indirect costs.	\$	\$	\$	\$	\$	\$
Capitalizable costs were included in indirect cost pool.	(2,435)	(2,435)				
Direct program costs were included in the indirect pool.						
Unallowable travel, fines and penalties, and other items erroneously included in indirect cost pool.	(3,580)				(3,580)	
Costs not chargeable to FY 2000.	(11,885)	(10,511)	(505)	(869)		
Adjustment to administrative allocation as a result of other adjustments.	(24,462)					(24,462)
	<u>\$ (42,362)</u>	<u>\$ (12,946)</u>	<u>\$ (505)</u>	<u>\$ (869)</u>	<u>\$ (3,580)</u>	<u>\$ (24,462)</u>

CARNEGIE INSTITUTION OF WASHINGTON  
 Department of Plant Biology  
 Schedule of Auditors' Adjustments and Eliminations - Direct Costs  
 For the year ended June 30, 2000

Adjustment and Elimination Explanation	Total Amount	Category of Expense	
		Equipment	Participant Support
Stipends attracting indirect costs were excluded from direct cost base.	\$ 160,028	\$	\$ 160,028
Non-capital equipment erroneously excluded from direct cost base.	10,466	10,466	
Direct program costs were included in the indirect pool.	_____	_____	_____
	<u>\$ 170,494</u>	<u>\$ 10,466</u>	<u>\$ 160,028</u>

CARNEGIE INSTITUTION OF WASHINGTON  
Observatories  
Schedule of Auditors' Adjustments and Eliminations - Indirect Costs  
For the year ended June 30, 2000

Adjustment and Elimination Explanation	Total Amount	Category of Expense						Applicable Credits
		Building and Equipment Maintenance	Education and Research	Supplies	Travel	Other Services	Administrative Allocation	
Applicable credits for building income and other costs were not offset against indirect costs.	\$ (858,730)	\$	\$	\$	\$	\$	\$	\$ (858,730)
Capitalizable costs were included in indirect cost pool.	(28,066)	(19,681)		(8,385)				
Direct program costs were included in the indirect pool.								
Unallowable travel, fines and penalties, and other items erroneously included in indirect cost pool.	(23,977)	(3,867)	(114)	(5,922)	(1,625)	(12,449)		
Costs not chargeable to FY 2000.	(2,020)			(2,020)				
Adjustment to administrative allocation as a result of other adjustments.	(96,543)						(96,543)	
	<u>\$ (1,009,336)</u>	<u>\$ (23,548)</u>	<u>\$ (114)</u>	<u>\$ (16,327)</u>	<u>\$ (1,625)</u>	<u>\$ (12,449)</u>	<u>\$ (96,543)</u>	<u>\$ (858,730)</u>



CARNEGIE INSTITUTION OF WASHINGTON  
Observatories  
Schedule of Auditors' Adjustments and Eliminations – Direct Costs  
For the year ended June 30, 2000

Adjustment and Elimination Explanation	Total Amount	Category of Expense	
		Equipment	Participant Support
Stipends attracting indirect costs were excluded from direct cost base.	\$ 273,837	\$	\$ 273,837
Non-capital equipment erroneously excluded from direct cost base.	4,499	4,499	
Direct program costs were included in the indirect pool.	_____	_____	_____
	<u>\$ 278,336</u>	<u>\$ 4,499</u>	<u>\$ 273,837</u>

CARNEGIE INSTITUTION OF WASHINGTON  
Administration Department  
Schedule of Auditors' Adjustments and Eliminations - Indirect Costs  
For the year ended June 30, 2000

Adjustment and Elimination Explanation	Total Amount	Category of Expense				
		Travel	Professional Services	Applicable Credits	Salary	Fringe Benefits
Applicable credits for building income and other costs were not offset against indirect costs.	\$ (68,064)	\$	\$	\$ (68,064)	\$	\$
Capitalizable costs were included in indirect cost pool.						
Direct program costs were included in the indirect pool.						
Unallowable travel, fines and penalties, and other items erroneously included in indirect cost pool.	(72,364)	(10,728)	(7,666)		(42,000)	(11,970)
Costs not chargeable to FY 2000.						
Adjustment to administrative allocation as a result of other adjustments.						
	<u>\$ (140,428)</u>	<u>\$ (10,728)</u>	<u>\$ (7,666)</u>	<u>\$ (68,064)</u>	<u>\$ (42,000)</u>	<u>\$ (11,970)</u>

Schedule C-7a

CARNEGIE INSTITUTION OF WASHINGTON  
Fundraising  
Schedule of Auditors' Adjustments and Eliminations - Direct Costs  
For the year ended June 30, 2000

Adjustment and Elimination Explanation	Total Amount	Category of Expense		
		Salaries	Fringe Benefits	Administrative Allocation
Stipends attracting indirect costs were excluded from direct cost base.	\$	\$	\$	\$
Non-capital equipment erroneously excluded from direct cost base.				
Direct program costs were included in the indirect pool.	53,970	42,000	11,970	
Adjustment to administrative allocation as a result of other adjustments.	(112)			(112)
	<u>\$ 53,858</u>	<u>\$ 42,000</u>	<u>\$ 11,970</u>	<u>\$ (112)</u>

CARNEGIE INSTITUTION OF WASHINGTON  
Notes to Financial Schedules  
For the year ended June 30, 2000

1. Summary of Significant Accounting Policies:

The accompanying financial schedules have been prepared in conformity with NSF instructions. Schedules B-1 through B-8 have been prepared from the IDCP prepared by the Carnegie Institution of Washington, and Schedules A-1 through A-6 have been prepared based upon the results of the audit of Schedules B-1 through B-8. The schedules do not present the complete financial position of the Carnegie Institution of Washington. In accordance with NSF instructions, there is no statement of financial position, statement of activities, or statement of cash flows.

2. Income Taxes:

Carnegie Institution of Washington is a private nonprofit corporation, incorporated in Washington, DC by Act of Congress. Carnegie Institution of Washington is exempt from income taxes under Section 501(c)(3) of the Internal Revenue Code.

**SECTION IV**

**AWARDEE'S RESPONSE**

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

The fact that CIW could have "substantially over-recovered indirect costs on its NSF contracts" is not relevant. Of the roughly \$7 million provided by NSF for Carnegie research, the absolute over-recovery calculated by Oppenheim (\$11,332), constitutes only 0.16% of the total funding from NSF. Furthermore, the NET amount of over-recovery identified by Oppenheim, on Schedule A-Summary 2, comes to \$1,581, or .0226% of NSF funding for the Institution.

Carnegie has attempted to adopt a conservative approach to the application and use of federal funds, and has opted to choose financial mechanisms in its indirect cost proposals that favor the agencies. In particular, the Institution uses a standard useful life of 15 years for all equipment (the use allowance method permitted by Circular A-122 for the computation of indirect cost rates), including highly specialized research equipment, which realistically has a much shorter actual useful life of 6 - 8 years. In addition, the Institution has excluded the non-cash component of postretirement benefit costs, providing further cost savings to the federal government. If Carnegie was to make adjustments to its 2000 indirect cost rate proposal to reflect these two items alone, it would be clear that Carnegie has not over billed any government or private agency. In light of these facts, we feel that the tone of the report is inconsistent with the actual circumstances.

#### Response to Material Non-Compliance point 1:

Based on all available expertise and documentation, CIW treated rental revenue and expenses appropriately in most cases. The exception involves revenues attributable to operations at the Observatories field site in Chile (please see "Auditee Response" in "Applicable Credits"). Essentially, Oppenheim insists that Circular A-122 dictates that all rental revenues be netted against all overhead costs. The language of A-122 is non-specific and ambiguous about the revenue streams which the government finds related to its grants. None of the professionals we discussed this report with, could cite guidance from any of the Circulars to support the approach to revenue suggested by Oppenheim. CIW believes that the Oppenheim auditors clearly misinterpreted the Credits Cost Principle provision which states "The term applicable credits refers to those receipts, or reductions of expenditures which operate to offset or reduce expense items that are allocable as direct or indirect costs. Typical examples of such transactions are: purchase discounts, rebates or allowances, recoveries or indemnities on losses, insurance refunds, and adjustments of overpayments or erroneous charges. To the extent that such credits relate to allowable costs they shall be credited to the Government either as a cost reduction or cash refund as appropriate." The clause identifies the types of credits to be considered; it is important to recognize that these "credits" are all cost-related and represent the restatement or adjustment of allowable costs incurred.

We interpret this to mean that the applicable credit for leased spaces represents the elimination of the cost applicable to leased spaces. The provisions of subparagraph 5, b. under Applicable Credits, in A-122 do not apply. The term applicable credits cannot be extended to all of the revenue resulting from the leasing of space. The crediting of the expenses allocated to leased spaces meets the letter and the spirit of the Cost Principle.

Response to Material Non-Compliance point 2:

We disagree with the position Oppenheim has taken regarding CIW's fellows. The Institution received its designation as a section 170 (b) (1) (A) (ii) educational organization from the IRS in February of 1971, and has maintained this status ever since. As Oppenheim's own text states, Circular A-122 provides for the exclusion of stipends and subsistence allowances for trainees. Payments Carnegie makes to its fellows are designed to support these individuals as they gain the additional experience they need in order to succeed as researchers or professors at other organizations. Typically, a fellow is only at Carnegie for two or three years, and then moves on to another organization. An individual seeks a fellowship at Carnegie with a particular staff member, because that individual wants training in a specific area, and seeks a particular body of knowledge. Once an individual receives a fellowship from Carnegie, he/she does not receive the supervision that employees do, but operates on a conferring basis with the staff member he/she has chosen. Fellows do not receive retirement benefits, life insurance coverage or disability, and they do not earn paid annual leave. Oppenheim's position that fellows are de facto employees is not consistent with any of the facts and circumstances (fellows do not receive wages or salary and are not part of the direct labor allocation base).

Response to Material Non-Compliance point 3:

Please see discussion in "Auditee's Response" section under the heading Misclassification of Direct Costs as Indirect Costs.

Response to Material Non-Compliance point 4:

CIW has not been consistent in its treatment of items purchased in the \$1,000-\$5,000 range. The shift from a \$1,000 capitalization threshold to the current \$5,000 was put in motion a year early at DTM, causing many of the inconsistencies noted by Oppenheim (as of 7/1/01, the \$5,000 threshold had been fully implemented at all departments, so this is no longer an issue). Inexpensive items providing more than 1 year of benefit (an area of confusion) will be expensed in future proposals, and treated in the same manner as supplies.

Response to Material Non-Compliance point 5:

Oppenheim claims to have identified \$113,909 of unallowable costs in the indirect cost pools. We agree that the results of the Oppenheim review suggest that additional training and oversight are necessary in the area of allowable indirect costs; however, we feel that almost half the costs identified by Oppenheim are actually allowable under the current circulars and agency guidelines. The most significant item identified by Oppenheim in this category is the salary of the Endowment Manager. The position title is misleading, since the individual holding the position does not, in the language of Circular A-122, operate "...solely to enhance income from investments". Duties of the Endowment Manager could realistically and appropriately be adopted by anyone on the Accounting Staff, since the Endowment Manager does not function as a financial advisor, but rather as an administrative assistant to the Director of Finance and the Board of Trustees, specializing in the area of investments. While Oppenheim may find that

"Endowment Manager" is a poorly advised position title, there is no reason, based on any authoritative guidance, to disallow the salary associated with this position.

In the area of "employee morale costs", the vagueness of available guidance from agencies and the federal government makes it almost impossible for well-meaning users to correctly apply the cost principles. Many of our colleagues are frustrated and confused by the actions of federal auditors who challenge the expense of coffee and donuts at meetings. We are similarly confused over the attempt to disallow such items, provided on a non-routine basis at staff meetings. In good faith, Carnegie has also included a portion of the expense for holiday parties and trustee meetings in the overhead rate. We would welcome clear and concise written guidance from NSF in the areas of employee morale costs and trustee expenses.

#### Response to Non-Material Non-Compliance items:

The vast majority of items that comprise the total \$90k are ongoing expenses, which continue over a period of years, and renew at a time other than the beginning of the fiscal year. The most typical items in this category are periodical subscriptions and maintenance contracts. Since such expenses represent long term relationships, the splitting of costs between fiscal years does not impact the indirect cost rate calculation. In most cases, Oppenheim would have found similar payments in the prior fiscal year that were not allocated to prepaid expense and applied to FY 2000; therefore, most of the \$90k identified by Oppenheim does not represent potential cost savings to the federal government or over-billing of any agency. We understand that failing to properly allocate expense between fiscal years can, infrequently, impact grantors and contractors, so we will make every effort to allocate material amounts to the appropriate fiscal years (one department has already re-applied for all its periodical subscriptions, so that they all renew at the start of the fiscal year).

Capital items were included in the indirect cost pool at one department as the result of early implementation of a higher capitalization threshold. Please see "Summary of Auditee's Response".

#### Response to Internal Control Weakness:

We take strong exception to Oppenheim's assertion that Carnegie "does not have adequate internal controls to administer, account for, and monitor indirect costs to ensure compliance with federal cost principles". Many members of Carnegie's business staff have attended professional level indirect cost seminars sponsored by NACUBO or one of the state accounting societies. In addition, Carnegie has increased the number of Certified Public Accountants on the business staff over the last 2 years. At the time the FY 2000 proposal information was compiled, there was a process in place whereby detailed transactions in specific accounts were reviewed for errors before the information was rolled up for the indirect cost proposal. These processes are still in place, and will be documented as part of the department-specific procedures to be incorporated in the organization-wide procedures manual.

It is our opinion that the vast majority of "issues" identified by Oppenheim are not issues of compliance with available guidance; rather they are issues related to the interpretation of available guidance, which is general and, in some cases, extremely



ambiguous. This changes the focus of the discussion from internal control to the implied meaning of the federal guidance.

With respect to Oppenheim's audit, we note the following:

- 1) If the three major areas of disagreement between Carnegie and Oppenheim (P Street rental revenue, HHMI rental revenue, fellow support) are resolved in a manner consistent with Carnegie's interpretation of the federal guidance, then by Oppenheim's own calculations, Carnegie would have under-billed NSF. We strongly believe that we are correct in our reading of the federal guidance in these areas. Furthermore, indirect cost rates for departments have been capped by NSF or Carnegie. Carnegie has never applied an indirect cost rate in excess of 75% for the Observatories, or 60% for any of the other departments. The largest single element that Carnegie agrees was inappropriately handled is the Magellan Consortium operating revenue at the Observatories. The amount of the credit would NOT have had any impact on the rate that Carnegie applies to grants at the Observatories, nor would it have affected the 75% cap formally adopted by NSF in 2000.
- 2) Oppenheim only sought out interpretations that could be favorably applied with respect to their status as a government auditor. At no time did Oppenheim look into the conventions which Carnegie applied that favored the government, such as the application of the 6% use allowance in lieu of full-cost depreciation or the exclusion of the non-cash portion of postretirement benefits. In the case of postretirement benefits, there is no question that an additional \$348,000 should be added to the indirect cost rate numerator in order to fully cost out services to the government. If the purpose of Oppenheim's audit is to determine the appropriateness/fairness of Carnegie's overhead rates, then full cost depreciation and post retirement benefits should be included in the analysis.
- 3) One of the hallmarks of scientific investigation at Carnegie is unfettered access to exceptional resources for staff scientists, so that the process of investigation and discovery is unimpeded. For example, the department with the highest indirect cost rate, the Observatories, has extraordinary capital needs; technology is expanding the "field of vision" for astronomers so rapidly, that any organization which expects to maintain a "cutting edge" astronomy department must constantly invest in new instruments and facilities. Carnegie has just completed a twin telescope facility called "Magellan", which is considered a premiere observing facility that provides unique opportunities for interferometry. Including the Magellan telescopes, there are a total of four telescopes at the Observatories' field site in Chile. Carnegie has approximately 12 staff astronomers and 12 fellows pursuing postdoctoral research in astronomy. The observer/telescope ratio is uniquely low, and provides each Carnegie astronomer with exceptional opportunities, and in turn, provides any contributor to Carnegie's astronomy operations with significant leverage for each dollar of funding provided. Facilities are similarly available to scientists working in other Carnegie departments. This is the environment which should provide the context by which to judge overhead rates.

With respect to other comments from Oppenheim, the Institution is working on an organization-wide procedures manual, which addresses the issue of written, formal procedures raised in this report. We will continue to encourage administrative and scientific staff alike to attend training classes in order to gain a greater understanding of the federal cost principles.

We wish to convey our strong desire to work with NSF in whatever way possible to resolve differences in the interpretation of federal regulations, and provide the agency with assurance that Carnegie is accurately and fairly calculating the indirect costs it is apportioning to federal projects. We consider NSF a key partner in our continuing efforts to extend the frontiers of scientific knowledge; our relationship with NSF stretches back to the time of Vannevar Bush, former Carnegie President, whose efforts led directly to the establishment of the National Science Foundation. We welcome the opportunity to work with NSF to create a body of documentation which will serve as a road map to prevent misunderstandings in future years.

## **Auditee's Response to Compliance Findings:**

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

General assertions made by Oppenheim staff about the treatment of rental revenue are not echoed by any of the professionals we consulted. We believe that it was entirely inappropriate for the government to seek to recover revenues in excess of actual expenses related to rental activities. In discussions with our professional colleagues, we found none who would support the Oppenheim approach to the treatment of rental revenue and expense.

The language from A-122 to which Oppenheim refers ("to the extent that such credits accruing or received by the organization relate to allowable costs, they shall be credited to the Federal Government") does not reflect the intent of the entire clause. The clause identifies the types of credits to be considered (i.e., purchase discounts, rebates or allowances, recoveries or indemnities on losses, insurance refunds, and adjustments or overpayments or erroneous charges). It is important to recognize that these "credits" are all cost-related and represent the restatement or adjustment of allowable costs incurred. If the intent of regulators was to recover rental revenue in excess of expense, why isn't this clearly stated? If the treatment of net rental income is to be consistent and if Oppenheim's approach is correct, the government would be willing to absorb losses on rental activities; however, this is not the case.

We feel that we have treated the income and expense associated with rental of the P Street facility (the auditorium, and excess office space) appropriately in the context of the Institution's indirect cost rate submission. We also maintain that the expense and income associated with the use of Carnegie's Baltimore facility by Howard Hughes Medical Institute staff is appropriately treated.

Oppenheim staff maintain that the portion of Nagoya revenue allocated to Administration should be netted with expenses at P Street, in order to reduce the administrative rate. The allocation of Nagoya's fixed fee to headquarters reflects an internal agreement to address cash flow and budget issues, and does not reflect the origin of expenses related to Nagoya operations. The appropriate match for all Nagoya revenue, is really the cost of running Carnegie's telescope facility in Las Campanas, Chile.

We agree that some of the revenue items mentioned in "Applicable Credits Not Properly Offset" were inadvertently left in the wrong categories when the final rate submission for FY 2000 was compiled. The refund of Workers' Compensation expense from a prior year was overlooked, and should have been netted against administrative expense for FY 2000. Likewise, the \$20,000 supplement from Howard Hughes Medical Institute for the cost of reference books should have been netted against other library costs in the Department of Embryology indirect cost pool. The last item, revenue contributed by Consortium members to help cover the operating costs of the Magellan telescopes, should have been netted with indirect expenses generated by operations in Chile before the indirect cost rate for the Observatories was computed.

Several members of the accounting staff have already received training in the computation of indirect costs; we will encourage all business staff to seek training relevant to Circular A-122, including department personnel who code expenses to the general ledger. We will also step up review of revenues, to ensure that all applicable credits (those that are not in question, such as rent receipts in excess of cost) are applied to the pool of indirect expenses.

With regard to Oppenheim's comments that CIW 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, we believe that we accurately, fairly, and appropriately implemented the guidance provided by the federal government and NSF.

## **2. Participant Support Costs Improperly Excluded**

The issue of stipends has been discussed in the section entitled "Summary of Auditee's Response.

Oppenheim's comment concerning the difference between "the letter of NSF guidance" and the "intent of the guidance" underscores a significant dilemma for CIW and all other contractors and recipients of federal funds. Rules and regulations are intended to be applied as written and are not to be left to the subjective interpretation of the contractor. If NSF intended some other interpretation it would have drafted it in the written regulation. Additionally, Oppenheim's comment refers to "distorting costs" which are not defined in any of the guidance available to CIW, and therefore contribute further to a sense of confusion.

## **3. Misclassification of Direct Costs as Indirect Costs**

According to the Fiscal Officer at the Department of Terrestrial Magnetism, \$11,611 was transferred between two endowment cost centers, [REDACTED] and [REDACTED]; since these two cost centers are treated similarly in CIW's indirect cost proposal, the switch should have no impact on the calculated overhead rate. Within Carnegie's endowment, the Wood Fund (cost center [REDACTED]) is a special fund restricted for use in seismological research, and can be used for all the same purposes that general endowment funds may be used for at DTM. Since funds available from the Wood Fund are limited, expenses were transferred to a general endowment cost center.

Oppenheim also notes that \$4,422 was moved from a grant cost center to an endowment cost center, as the result of comments made by a staff member to the Fiscal

Officer that the particular expenses could not be charged directly to the grant. There does not appear to be anything out of order here; the staff member was exercising oversight responsibility with regard to his grants, and an expense that could not be charged directly to the grant was moved to a general endowment overhead cost center. The fact that an expense benefits a department so broadly that it cannot be charged directly to a particular grant does not make it unallowable, a point which seems to have been lost in the discussion of the \$4,422 adjustment.

The balance of the \$25,133 is composed of items in two categories previously discussed (items not capitalized by **DTM**, due to early implementation of \$5,000 capitalization threshold; and cost exceptions inadvertently shifted to the wrong column on worksheets used by Carnegie to develop its 2000 indirect cost rates).

#### **4. Equipment Purchases Improperly Excluded**

We agree that these items should be expensed in the future, and included in the denominator of the indirect cost rate for each department. We clearly explained to Oppenheim personnel that the pattern for treating "non-capital assets" evolved from the fact that Carnegie expected multiple years of use from these low dollar purchases. We agree that the treatment is non-standard, and will correct it.

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

Travel: We agree that travel expenses in excess of per diem rates need to be carefully monitored, and isolated from the overhead pools, so that expenses exceeding per diem rates are not allocated directly or indirectly to federal grants. From CIW's point of view, it would be very helpful if federal guidelines would clearly state that per diem rates, not approved budgets, are the standard for reasonableness (some departments interpreted "reasonable and necessary" to mean that an agency-approved budget was a safe-harbor).

Entertainment: We do consider annual holiday parties and occasional other social events for employees critical for morale. If the government feels that no level of expense associated with social events (designed to foster collegiality and team spirit) is appropriate, then federal/agency guidance discussing employee morale costs should clearly state this. We feel that the \$10,000 for holiday parties was well-spent, and contributed significantly to the unique environment that is Carnegie. We will be glad to comply with whatever concise and illustrative documentation is developed by NSF to guide federal recipients in the area of employee morale costs.

Alcoholic Beverages: These were isolated incidents; we will continue to monitor this area carefully.

Fines and Penalties: Oppenheim asserts that \$7,666 of legal fees incurred as part of internal control procedures should be disallowed. This does not seem reasonable in light of the fact that the legal services were obtained in connection with an internal audit of federal expenses (had the review not occurred and had Carnegie not voluntarily reported to NSF regarding the results of the internal review, it is unlikely that the federal government would have ever received repayment of any of the misappropriated funds). These legal fees were not incurred under the circumstances discussed in Circular A-122 (the situation was not

precipitated by federal, state or local government and did not result in criminal, civil or administrative proceedings at the time), and therefore should be allowed. It seems inconsistent, given the specificity of some passages in Circular A-122, to expect federal recipients to intuit the full range of possibilities that the federal government intended when writing the text of the Circular. We note that if the costs questioned had been incurred as part of an established internal control and compliance monitoring function (i. e., Carnegie had an attorney on staff to do this work, and had used all its own supplies), there would have been no question as to their allowability as recoverable expenses.

Since the date representatives arrived from the National Science Foundation's Office of Inspector General to do their own review of potential misappropriations, Carnegie has carefully isolated all costs (legal fees, staff time, copying services, etc.) linked to the review in order to ensure that none of the expense is inadvertently charged back to the federal government or private grantors.

Investment Management Expense: As explained above in "Summary of Auditee's Response".

Contributions and gifts: We agree that these items should not have been allocated directly or indirectly to federal grants; similar charges will not be permitted to flow back to federal grants in the future.

Other costs which are not ordinary and necessary: We agree that these items should not have been allocated directly or indirectly to federal grants; similar charges will not be permitted to flow back to federal grants in the future.

## **6. Indirect Costs Charged to the Wrong Fiscal Year**

Please see previous comments in "Summary of Auditee's Response" regarding the cutoff of fiscal year expenses. We will comply with the recommendations NSF provides in this area.

## **7. Capital Expenditures Included in Indirect Cost Pool**

As noted previously in the Summary of Auditee's Response, DTM implemented a \$5,000 capitalization threshold ahead of the rest of the Institution, which accounts for roughly \$50,000 of the \$93,000. Transactions at the Observatories account for another \$28,000. Within the past 6 months, members of the P Street accounting staff have conducted a review of expenses and procedures at the Observatories, and a new controller has been hired for the department. We will continue to work to improve the decentralized accounting functions at the Institution.

## **Auditee's Response to Internal Control Finding:**

### **1. Improper Application of Federal Cost Principles**

Carnegie has nearly completed an institution-wide procedures manual, and continues to work on write-ups of department-specific procedures. We will work with NSF to address

any deficiencies it identifies in Carnegie's procedures. We note that many of the issues raised in the Oppenheim report result from the lack of available, clear and concise guidelines for the treatment of certain revenues and expenses, rather than a lack of training.

There is no question in our minds that we have treated stipends (the largest amount identified by Oppenheim) properly by excluding them from the allocation of indirect costs. We believe that our basic approach to the treatment of facilities rental is appropriate, except for the one significant exception of the Magellan Consortium (FY 2000 was the first year in which we received operating contributions from Consortium Members; we have been able to standardize processes related to the receipt of these contributions in the meantime). The majority of the capitalization problems are related to the actions of one department, which prematurely raised its capitalization threshold; this inconsistency has been addressed.

Carnegie has a relationship with NSF which extends back over a period of years. We look forward to resolving any substantive matters quickly with NSF.

The additional attachment has been redacted in its entirety.