U.S. DEPARTMENT OF ENERGY OFFICE OF INSPECTOR GENERAL

AUDIT OF SELECTED GOVERNMENT-FUNDED GRANTS AND CONTRACTS AT PRINCETON UNIVERSITY

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AUDIT OF SELECTED GOVERNMENT-FUNDED GRANTS AND CONTRACTS AT PRINCETON UNIVERSITY

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U.S. DEPARTMENT OF ENERGY OFFICE OF INSPECTOR GENERAL OFFICE OF AUDIT SERVICES

AUDIT OF SELECTED GOVERNMENT-FUNDED GRANTS AND CONTRACTS AT PRINCETON UNIVERSITY

Report Number: ER-B-98-04 November 24, 1997

DESCRIPTION OF AUDIT

As the cognizant audit agency for Princeton University (Princeton), we audited Princeton's costs claimed under 20 Government-funded, cost-reimbursement grants and contracts (agreements). The Defense Contract Audit Agency had advised us that several Princeton employees, including two principal investigators, were also employed by a commercial business. These 2 principal investigators were responsible for 28 Government-funded agreements at Princeton between October 1, 1986, and December 31, 1996. After becoming aware that Princeton employees were also working at a commercial business, we initiated this audit of the agreements assigned to the two principal investigators. The audit covered 20 of the agreements with claimed costs of \$19 million. We did not audit the remaining eight agreements because the record retention period had expired.

The objective of the audit was to determine the allowability of costs claimed by Princeton under the 20 agreements. Details of the agreements covered in the audit are contained in appendix A.

For this audit, we obtained a sufficient understanding of Princeton's cost accounting system and internal controls to plan the audit and to determine the nature, timing, and extent of tests to be performed. Our purpose was not to form an opinion on the cost accounting system and internal controls. For direct costs, the audit included test procedures for validating Princeton's claimed costs by tracing the costs to books of original entry and supporting records. For indirect costs and employee benefit costs, the audit determined whether the claimed costs were based on approved fixed rates applied to appropriate allocation bases.

In addition to reviewing Princeton's records, we reviewed time sheets and other documentation from the commercial business and other organizations to determine the extent to which the principal investigators and other Princeton employees were engaged in outside paid professional activities.

We conducted the audit in accordance with generally accepted Government auditing standards for financial-related audits. Criteria used in evaluating the claimed costs included the terms of the Government-funded agreements and Office of Management and Budget Circular A-21, Cost Principles for Educational Institutions (Circular A-21), which provides the principles for

determining allowable costs at colleges and universities. As a general rule, Circular A-21 states that allowable costs must be reasonable, allocable, consistent with generally accepted accounting principles, and conform to limitations and exclusions contained in Circular A-21 or the individual agreements. For labor costs to be allowable, Circular A-21 states that the compensation paid to individuals should conform to the established policy of the university, consistently applied, and the charges to agreements should be determined and supported in accordance with one of the methods described in Circular A-21. Circular A-21 also requires colleges and universities to establish and follow an institution-wide policy on the amount of outside paid professional activities that employees can perform.

We did not perform a technical evaluation of Princeton's performance under the agreements.

The Office of Naval Research had requested us to conduct a final audit of Department of the Navy contract N00014-86-K-0759, one of the 20 agreements covered in this audit. We selected October 1, 1986, as the beginning date for our audit coverage in order to include the performance period of this Navy contract.

We completed our onsite work on July 30, 1997.

AUDIT RESULTS

Our audit identified conditions that called into question the amount of labor effort and expenditures incurred on the 20 Princeton agreements. Specifically, the number of hours that the principal investigators and other Princeton employees reported to have worked at the commercial business raised doubt about the amount of effort that was actually devoted to agreements at Princeton. This condition was exacerbated by Princeton's inadequate documentation of labor effort. In addition, the similarity of the work at Princeton and the commercial business and the major role played by one of the principal investigators at both Princeton and the commercial business obscured whether the labor effort and expenditures claimed by Princeton were incurred solely for the benefit of Princeton's agreements.

A discussion of these conditions follows.

Outside Paid Professional Activities

We found extensive violations of Princeton's policy on outside paid professional activities. At various times, the principal investigators for the agreements audited and 14 other Princeton professional employees assigned to the agreements worked for the commercial business. This outside employment often exceeded Princeton's policy limitations on the permissible amount of outside activities.

To be in compliance with Circular A-21, Princeton must follow its institution-wide policies and practices concerning the permissible extent of outside paid professional activities that its employees can perform. Princeton's policy generally limited the amount of time that could be devoted to outside paid professional activities to an average of one day a calendar week during the academic year for full-time faculty and two days per month for non-faculty. Further, Princeton's policy prohibited any employee from becoming a regular and continuing employee of an outside organization, either part-time or full-time; accepting a position with significant responsibility for the management of an outside enterprise; or, accepting any outside position that would tend to create conflicts of interest with the employee's university position.

Time sheets obtained from the commercial business and information obtained from other organizations showed that the principal investigators and other professional employees often violated Princeton's policy. These individuals exceeded Princeton's limitations on the amount of time that could be devoted to outside activities. In addition, although prohibited by Princeton's policy, these individuals were at times regular and continuing employees of the commercial business and, in some cases, held positions of management responsibility. For example, at the commercial business, one principal investigator, a full-time faculty member, was also a full-time employee and the company chairman, working an average of 170 hours monthly between June 1989 and October 1994. In addition, this individual was also engaged in outside activities at other entities as a consultant, officer, or director. The other principal investigator, also a full-time faculty member, worked an average of 89 hours monthly for the commercial business between September 1989 and September 1993. One non-faculty employee worked an average of 99 hours monthly for the commercial business for all but 3 months between June 1989 and September 1993. Another employee worked an average of 74 hours monthly for 44 months between July 1989 and May 1995 and exceeded 160 hours in 6 of the months.

Nepotism

We also found that Princeton's policy on nepotism had been violated. Princeton's policy prohibited employees from initiating or participating in, directly or indirectly, decisions involving a direct benefit to those related by blood or marriage. However, Princeton claimed salary and wage costs of \$16,960 for an hourly employee who was also a member of the principal investigator's immediate family. In addition, we have concerns about the actual effort that this hourly employee devoted to Princeton's agreements because the employee recorded hours at both Princeton and the commercial business on the same days. For example, on 18 days the employee's combined total hours at Princeton and the commercial business exceeded 12 hours, and on 8 of these days combined total hours were 18 or more. We also noted that Princeton reported that the employee worked on Princeton holidays and on non-existent days (June 31, 1991, and September 31, 1991). Furthermore, we doubt whether the principal investigator, who approved the Princeton labor, was knowledgeable of the actual hours worked by the employee because the investigator was working 10 hours per day for the commercial business on 61 of the days when the employee worked at Princeton.

After-the Fact Activity Reports

We also found that Princeton's support for direct labor effort was not adequate because Princeton did not always have timely after-the-fact activity reports. For most of the months identified above, when the principal investigators and other employees violated Princeton policy limitations on outside employment, the activity reports were not adequately confirmed.

For labor costs to be allowable, Circular A-21 states that the compensation paid to individuals should conform to the established policy of the university, consistently applied, and the charges to agreements should be determined and supported in accordance with one of the methods described in Circular A-21.

Princeton's policy for charging labor costs to Government-funded agreements was based on the "After-the-Fact Activity Records" method, one of the methods described in Circular A-21. Under this method, Princeton does not record actual hours worked or require employees to work a minimum number of hours. Rather, Princeton charges labor costs based on estimated percentages of employee effort. To ensure that the estimated charges are reasonably representative of actual employee effort, Circular A-21 requires that the actual effort be confirmed once every six months for professional employees and monthly for all other employees. To comply with Circular A-21, Princeton's policy requires principal investigators or departmental administrators to confirm and sign monthly after-the-fact activity reports. These reports, prepared for each agreement, list estimated percentages of monthly effort and cost for each employee assigned to the agreement. If the review of an activity report indicates that there was a significant difference between actual employee effort and estimated effort, Princeton adjusts the charges to reflect the actual effort.

To support labor effort for the 20 agreements, Princeton should have had 970 confirmed and signed after-the-fact activity reports. However, out of 970 monthly reports, 322, or 33 percent, which represented salary costs of about \$3.1 million, were not confirmed as required by Circular A-21. Specifically, 258 were not signed within 1 year after the work was performed, 43 were signed but not dated, 15 were missing, and 6 were unsigned. Of the 258 activity reports that were not signed within 1 year, 81 were not signed within 3 years and, of these, 24 were not signed within 5 years. In order for the review of employee effort to be meaningful, the after-the-fact activity reports should be confirmed and signed within a reasonable period of time after the work was performed. We considered activity reports to be untimely if the reports were not signed within one year after the work was performed.

Other Conditions

In addition, we found other conditions that raised concern about the labor effort and expenditures claimed under the agreements. We were concerned about the similarity of work and the major role played by one of the principal investigators at Princeton and the commercial business.

Similarity of Work

We could not draw the distinction between work for Princeton and that of the commercial business because the commercial business' research agreements were in the same specialized field as the agreements at Princeton. Some of these agreements were funded by the same Federal agencies and the same procurement offices that funded the Princeton agreements. During some months, individuals worked on agreements at Princeton and at the commercial business that were funded by the same agency. Princeton employees even served as principal investigators on some of the commercial business' Government-funded agreements. At times for some individuals, Government agencies were simultaneously funding full-time or nearly full-time labor effort at both Princeton and the commercial business.

Principal Investigator's Role

In addition, the distinction between work at Princeton and the commercial business was further obscured because one individual played a major role at both Princeton and the commercial business. This individual held a position of responsibility for the research effort and supervision of staff at both Princeton and the commercial business. At Princeton, this individual was principal investigator or co-principal investigator on 14 of the 20 agreements. For these Princeton agreements, the individual was responsible for directing and overseeing the performance of research, supervising the research staff, confirming after-the-fact activity reports, and initiating and approving most expenditures. Meanwhile, at the commercial business, this individual was a full-time employee and the company's chairman. This individual and his spouse, who was the company's president, were the only directors of the company. The spouse and children held full ownership of the business. At the commercial business, this individual was in a position to direct the performance of research agreements and supervise research staff. The individual also served as principal investigator on some of the commercial business' Government-funded agreements. We also found instances when Princeton charged agreements for travel costs for this individual, while time sheets for the commercial business showed that this individual also worked for the commercial business during the trip period.

Prior Audit Identified System Weaknesses

In a prior audit at Princeton, we identified several policy and system weaknesses that contributed to these conditions. The *Audit of Princeton University's System for Distributing Salaries and Wages to Government-Funded Agreements*, ER-C-95-02, dated April 14, 1995, reviewed Princeton's policies and practices for outside professional activities and documenting labor effort.

The prior audit concluded that Princeton's policy on outside professional activities was ambiguous and not enforced, and the system for confirming after-the-fact activity reports was not in full compliance with Circular A-21. The audit found that Princeton's policy did not adequately define limitations on outside professional activities. For example, Princeton departments had differing interpretations of the "average of one day a calendar week" limitation, and the policy did not address faculty who worked on sponsored agreements during summer months. Further,

Princeton did not require employees to report the number of days spent on outside professional activities or follow-up instances when an employee reported a significant number of outside activities. For labor effort, Princeton did not have timely signed after-the-fact activity reports or ensure that individuals who signed activity reports had adequate knowledge of actual employee effort. In addition, Princeton did not account for days when professional employees were absent nor define the effort that principal investigators should devote to the agreements for which they were assigned. Also, Princeton did not provide for independent internal evaluations of its labor reporting system and did not have all its policies and procedures in writing.

The Department of Energy's cognizant contracting officer advised us that, after receiving our prior audit report, Princeton promptly began taking corrective action which the contracting officer found acceptable to address the prior audit report and some of the concerns in the current audit. Specifically, Princeton revised its *Rules and Procedures of the Faculty* and implemented a new procedure for reporting outside professional activities to strengthen internal control and compliance mechanisms. Further, Princeton issued new policies and procedures for charging and verifying salary payments to sponsored agreements and has continued implementing system enhancements designed to strengthen controls over its salary payment system.

In our current audit, we did not address the status of these prior audit findings; rather, we focused on the costs claimed for the 20 agreements.

Cost Impact

For the conditions we identified in this audit, Princeton's labor charging method prevented us from quantifying the impact on claimed labor effort and costs. It is reasonable to expect that the extensive number of hours worked by Princeton employees at the commercial business reduced the time available for work at Princeton. However, we could not quantify the impact that hours worked at the commercial business had on available Princeton time because Princeton's labor charging method did not record actual hours worked. In order to evaluate the labor effort expended at Princeton in view of the conditions we identified, contracting agencies need to determine the reasonable effort that would have been required for the tasks accomplished at both Princeton and the commercial business.

In addition, we could only review the commercial business' time sheets for the period June 1989 to October 1994. However, we had reason to conclude that the outside employment conditions existed throughout the performance periods of the Princeton agreements. At the time of our audit, the Defense Contract Audit Agency had not completed its audit of the time sheets and costs claimed by the commercial business for its Government-funded contracts and grants.

Pending the contracting agencies' determination of reasonable effort for the tasks accomplished at both Princeton and the commercial business and the Defense Contract Audit Agency's audit of the commercial business' contracts and grants, we consider costs claimed under the 20 agreements to be unresolved.

RECOMMENDATIONS

We recommend that the Manager, Chicago Operations Office, furnish our audit results to the contracting officers responsible for the agreements audited and ensure that Princeton implements corrective actions to address the conditions identified in this audit. The contracting officers should recover costs that they determine to be unallowable. Their determinations should consider the results of technical reviews of the tasks accomplished at both Princeton and the commercial business and the results of the Defense Contract Audit Agency's audit of the commercial business' contracts and grants. We also recommend that the Manager alert procurement offices responsible for the agreements audited to the condition that some individuals were being funded on a full-time or nearly full-time basis at more than one entity.

MANAGEMENT AND CONTRACTOR COMMENTS

We discussed our audit results with the Department of Energy's cognizant contracting officer and Manager, Chicago Operations Office Princeton Group (Princeton Group). We also discussed our audit results with Princeton University's General Counsel, Associate Treasurer, and Director of Research and Project Administration. A draft version of this report was furnished to the Chicago Operations Office and Princeton University.

The Manager, Princeton Group, provided comments on our draft report concerning the focus of our recommendations and the corrective actions taken by Princeton in response to our prior audit report. Specifically, Princeton Group agreed to ensure that Princeton University implements corrective actions to address the conditions identified in this report. In addition, Princeton Group agreed to alert the procurement offices responsible for the audited agreements to the condition that some individuals were being funded on a full-time or nearly full-time basis at more than one entity. We have considered the Manager's comments and made appropriate adjustments to our report.

Princeton University also provided comments on our draft report. At the request of the Manager, Princeton Group, we included Princeton University's comments as appendix B.

/s/ Office of Inspector General

AUDIT OF SELECTED GOVERNMENT-FUNDED GRANTS AND CONTRACTS AT PRINCETON UNIVERSITY

Summary of Government-Funded Grants and Contracts Audited

Department of the Air Force

Grant Number: AFOSR-90-0261

Research Title: "Development and Validation of RNG Methodology for

Compressible Turbulence"

Period of Performance: March 31, 1990, to March 31, 1993 Contracting Office: Air Force Office of Scientific Research

Amount Claimed: \$455,388

Grant Number: AFOSR-90-0124

Research Title: "Numerical Studies of the Structure of Compressible

Turbulent Shear"

Period of Performance: January 15, 1990, to September 30, 1992 Contracting Office: Air Force Office of Scientific Research

Amount Claimed: \$484,941

Contract Number: F49620-91-C-0059

Research Title: "Mathematical Library Software for Application of Parallel

Supercomputer"

Period of Performance: September 1, 1991, to September 30, 1994 Contracting Office: Air Force Office of Scientific Research

Amount Claimed: \$1,409,071

Grant Number: F49620-92-J-0425

Research Title: "Mathematical Library Software for Applications of Parallel

Supercomputers"

Period of Performance: September 1, 1992, to January 31, 1996 Contracting Office: Air Force Office of Scientific Research

Amount Claimed: \$132,213

Contract Number: F49620-93-1-0296

Research Title: "Numerical Studies of Unsteady Compressible Turbulent

Shear Flows"

Period of Performance: April 12, 1993, to June 21, 1996

Contracting Office Air Force Office of Scientific Research

Amount Claimed: \$493,317

Contract Number: F49620-85-C-0026

Research Title: "Numerical Studies of Turbulent Spots and Bursts in Wall-

Bound Flows"

Period of Performance: December 1, 1984, to November 30, 1986 Contracting Office: Air Force Office of Scientific Research

Amount Claimed: \$400,620

National Science Foundation

Grant Number: ECS-9023760

Research Title: "Computational Modeling of Transport Phenomena and

Electro-mechanical Dynamics in Microsales"

Period of Performance: July 15, 1991, to December 31, 1994

Contracting Office: National Science Foundation

Amount Claimed: \$249,183

Grant Number: DMS-9106162

Research Title: "Mathematical Sciences: Local Hyperchannel

Superworkstation - Minisupercomputer Interconnect for

Fluid Mechanical Studies"

Period of Performance: September 5, 1991, to December 31, 1992

Contracting Office: National Science Foundation

Amount Claimed: \$40,000

Grant Number: OCE-9010851

Research Title: "Generalized Turbulence Transport Modeling of Oceanic

Flows"

Period of Performance: September 1, 1990, to February 28, 1994

Contracting Office: National Science Foundation

Amount Claimed: \$240,999

Grant Number: OCE-8716027

Research Title: "Generalized Turbulence Transport Modeling of Rotating,

Stratified Oceanic Flows"

Period of Performance: December 1, 1987, to May 31, 1990

Contracting Office: National Science Foundation

Amount Claimed: \$238,000

Grant Number: CTS-8914422

Research Title: "Numerical Computation of Drag Reduction in Turbulent

Flow Over Rough Walls"

Period of Performance: January 1, 1990, to June 30, 1993 Contracting Office: National Science Foundation

Amount Claimed: \$396,941

Grant Number: ECS-9023362

Research Title: "Simulations of Systems with Spatio-Temporal Structure:

A Model Reduction Approach for Complex Geometrics"

Period of Performance: July 1, 1991, to December 31, 1994

Contracting Office: National Science Foundation

Amount Claimed: \$267,295

Grant Number: CTS-8906911

Research Title: "Augmentation of Transitional and Turbulent Heat Transfer

by Eddy-Promoters in Wall-Bounded Flows"

Period of Performance: August 1, 1989, to July 31, 1991 Contracting Office: National Science Foundation

Amount Claimed: \$105,000

Grant Number: DMS-8906292

Research Title: "Integrated Analytical/Numerical Methods for Advanced

Scientific Computing Applications"

Period of Performance: June 19, 1989, to December 31, 1991

Contracting Office: National Science Foundations

Amount Claimed: \$69,300

Department of the Navy

Grant Number: N00014-92-J-1796

Research Title: "Fundamental Physicochemical Processes in High Reynolds

Number Flows: Theory, Simulation, and Experiments"

Period of Performance: June 1, 1992, to September 13, 1997

Contracting Office: Office of Naval Research

Amount Claimed: \$6,399,548

Contract Number: N00014-86-K-0759

Research Title: "Mathematical Theory of Complex Flows in Complex

Geometries"

Period of Performance: September 15, 1986, to September 14, 1991

Contracting Office: Office of Naval Research

Amount Claimed: \$6,755,987

Grant Number: N00014-90-J-1315

Research Title: "Numerical, Analytical, and Experimental Investigation of

Laminar and Turbulent Wakes"

Period of Performance: December 1, 1989, to January 31, 1995

Contracting Office: Office of Naval Research

Amount Claimed: \$372,833

Grant Number: N00014-93-1-0791

Research Title: "Numerical and Analytical Investigation of Laminar and

Turbulent Wakes"

Period of Performance: July 1, 1993, to June 30, 1995 Contracting Office: Office of Naval Research

Amount Claimed: \$21,158

Department of the Army

Contract Number: DAAL01-92-K-0248

Research Title: "Advanced Simulation and Modeling Technology for x-ray

and E-Beam Lithography"

Period of Performance: April 10, 1992, to April 9, 1993

Contracting Office: Office of Naval Research

Amount Claimed: \$273,522

Department Of Energy

Grant Number: DE-FG02-93ER54204

Research Title: "Numerical Simulation of Transport and Turbulation in

Tokamak Plasmas: Quantitative Tests of Coarse Grained

Fluid Courses"

Period of Performance: June 13, 1993, to May 31, 1995 Contracting Office: Office of Energy Research

Amount Claimed: \$196,999

PRINCETON UNIVERSITY'S RESPONSE TO

U.S. DEPARTMENT OF ENERGY OFFICE OF INSPECTOR GENERAL OFFICE OF AUDIT SERVICES DRAFT REPORT ON

AUDIT OF SELECTED GOVERNMENT-FUNDED GRANTS AND CONTRACTS AT PRINCETON UNIVERSITY

In its draft audit report, the Department of Energy Office of Inspector General (DOE IG) identifies a number of audit conditions concerning costs claimed by Princeton University under twenty federal contracts and grants during the period from October 1986 through December 1996. Princeton appreciates the thoroughness with which the DOE IG performed this audit, as well as the willingness of the DOE IG and DOE's contracting officials to work with the University to improve the administration of federally sponsored research at Princeton.

As discussed in this response, Princeton has already taken decisive action to address all issues reflected in the draft report that are within Princeton's control. In addition, Princeton strongly endorses the DOE IG's conclusion that the allowability of Princeton's claimed costs should be resolved by the contracting officer responsible for each of the twenty audited agreements. Princeton stands ready to discuss all relevant issues with these contracting officers and is confident that the University will be able to establish that its claimed costs are allowable.

I. PRINCETON'S PERSONNEL AND POLICY CHANGES

Prior to the issuance of the DOE IG's draft report, Princeton had already adopted measures designed to avoid any recurrence of the conditions identified in the report. Princeton's extensive actions in this regard, which entailed a major investment of resources and will require a continuing expenditure of significant resources, demonstrate the University's commitment to maintaining the highest compliance standards in its conduct of federal research.

A. Personnel Issues

The DOE IG's current audit focuses on the activities of a single Princeton faculty member. The other individuals affiliated with Princeton whose activities are discussed in the draft report were members of a group assembled by this faculty member to assist him with his research projects. There is no doubt that this faculty member directed and controlled the activities of

concern to the DOE IG. Thus, the DOE IG's current audit is really an outgrowth of the activities of one person.

Prior to the issuance of the DOE IG's draft report, the Government had raised concerns about activities of the Princeton faculty member in question. Immediately upon being advised of such concerns, Princeton voluntarily ceased charging any time for this faculty member to government contracts or grants and commenced an in-depth investigation of the concerns. Based upon this investigation, Princeton concluded that this faculty member had not met certain University standards for the administration of federal research. Moreover, the faculty member refused to provide Princeton with the information that would allow it to determine if he had failed to meet other compliance standards. Therefore, Princeton on its own initiative rescinded the faculty member's authority to administer federal agreements, secured his retirement from the faculty, and disbanded his research group. These voluntary actions by Princeton should enhance the Government's confidence in Princeton's conduct of federal research.

In taking these personnel actions, Princeton did not intend in any way to disparage the quality of the work produced by the faculty member in question. By all accounts, this faculty member has made distinguished contributions in the areas in which he has worked. Princeton's view in this regard was formed in substantial part by the decisions of numerous federal agencies over an extended period repeatedly to fund this professor's research projects at the University. Princeton has every reason to believe that the faculty member's work under the particular agreements audited by the DOE IG has produced excellent results and substantial benefit to the Government.

B. Policy And Procedures

In 1995, the DOE IG issued a report on its "Audit of Princeton University's Systems For Distributing Salaries And Wages To Government-Funded Agreements" (Report No. ER-C-95-02, April 14, 1995). Princeton understands that this systems audit was also prompted by concerns about the activities of the faculty member whose work is the focus of the current audit. The systems audit addressed two of the major issues in the DOE IG's current audit: 1) Princeton's policy on outside professional activities by faculty and staff; and 2) Princeton's procedures for executing timely verifications of salaries and wages charged to federal research.

¹ This systems audit began in 1994. The Government also initiated a criminal investigation in 1994 to determine, among other things, whether illegal charges had been made to any federally sponsored research at Princeton on which the faculty member in question and members of his research group had worked. The Government has specifically informed Princeton that it is not a target of this investigation. Princeton is unaware of the current status of the investigation.

Upon receiving the systems audit report in April 1995, Princeton promptly undertook steps to address the DOE IG's recommendations. In the current draft report, the DOE IG decided not to address the status of its findings from the earlier audit, on the ground that the DOE's "cognizant contracting officer and Princeton are in the process of taking corrective action." (Draft Report at 6). Princeton fully agrees that the current audit is not the proper context in which to discuss the details of the changes in its policy and procedures.

Princeton has been advised by DOE's cognizant contracting officials that DOE has already approved the changes made by Princeton in response to the DOE IG's systems audit. Accordingly, Princeton requests that the DOE IG amend Recommendation #1 in its draft report to reflect DOE's conclusion that Princeton's current policies and systems are fully sufficient to protect the Government's interests in the administration of federally sponsored research at the University.²

It is a truism that no policies or accounting systems can prevent all violations of the requirements for performing federal contracts. This is why the Government requires only that its contractors maintain policies and systems reasonably designed to ensure compliance and that, if unforeseen issues arise, they promptly take measures to address such issues. This is precisely what Princeton has done in this matter. In so doing, the University has demonstrated why it deserves its status as one of the most responsible federal contractors.

² See Draft Report at 6 (The DOE IG should "[e]nsure that Princeton implements corrective actions to address the weaknesses identified in our prior report ER-C-95-02 and the conditions identified in this report.")

II. PRINCETON'S RESPONSE TO AUDIT CONDITIONS IN THE DOE IG'S DRAFT REPORT

A. Policy On Outside Professional Activities

The DOE IG states that it "found extensive violations of Princeton's policy on outside paid professional activities." (Draft Report at 2). The DOE IG based this finding on its review of time records from a commercial business for the period from June 1989 through October 1994. This commercial business was owned by the immediate family of the faculty member in question, and the DOE IG reports that the faculty member served as chairman of this business. (Draft Report at 3). Prior to the issuance of the draft report, Princeton was unaware that he had held this position.

On September 25, 1997, the DOE IG provided Princeton with access to the daily time records indicating how much time the commercial business charged the Government for work ascribed to Princeton faculty members and other employees. The faculty member in question had previously rejected Princeton's repeated requests for these commercial records, including requests by the Dean of the Faculty, and Princeton lacked the ability to force him to produce them.⁴ As a result, Princeton did not have detailed information about the amount of time allegedly worked at the commercial business by the faculty member and his research group until the DOE IG recently provided Princeton with access to that business's time records.

Princeton has not been provided an opportunity to test the accuracy of the commercial business's time records or to analyze any documentation relating to them. Despite this, Princeton agrees that, on their face, these records raise legitimate issues concerning the extreme manner in which the faculty member in question apparently interpreted the University's policy on outside activities. At this point, the Government and Princeton should focus their attention on whether the most appropriate remedy for this situation has been identified.

³ The DOE IG also found that the faculty member in question and others affiliated with Princeton violated Princeton's prohibition against managing or being employed by an outside enterprise. (Draft Report at 3, 5). Princeton concurs in this finding.

The draft report indicates that the DOE IG reviewed information concerning the outside activities of Princeton faculty members and employees "obtained from other organizations." (<u>Id</u>. at 3). In addition, the report indicates that the faculty member in question "also engaged in outside activities at other entities...." (<u>Id</u>.) Princeton has not been provided with any information from those other organizations or about the faculty member's work at such other entities.

⁴ As indicated in Section I.A. of this response, the faculty member's refusal to provide the

As indicated in Section I.A. of this response, the faculty member's refusal to provide the requested records served as a basis for Princeton's disciplinary actions against him.

Princeton's previous policy on outside commitments was not written with the precision of an accounting manual and, therefore, was subject to varying interpretations.⁵ For the most part, this approach served the University well over the years, by allowing faculty members flexibility and discretion to judge how to balance research and other University commitments. The success of the policy is evident in Princeton's commanding reputation as both a teaching and research institution, and by the lack of any prior significant abuses resulting from paid outside activities by federal researchers.

Moreover, prior to the events that gave rise to the current audit, Princeton had not foreseen or been put on any reasonable notice that a faculty member would attempt to interpret the policy in the manner that it apparently has been interpreted. Plainly stated, Princeton was shocked to learn that a faculty member believed that the policy could accommodate the magnitude of outside work that may have taken place in this situation.

Under these circumstances, Princeton believes that the appropriate remedy is to restate Princeton's policy on outside activities in a more precise form and to establish procedures for monitoring compliance with it. This is exactly what Princeton already has done.⁶

Significantly, the DOE IG's draft report rejects a mechanical application of a selected interpretation of Princeton's previous policy as a means to determine the allowability of costs claimed by Princeton under the twenty audited agreements. Princeton believes that this decision by the DOE IG is prudent and will serve to avoid unproductive disagreements over the meaning of the previous policy and its application to the historical facts at issue.

Princeton's new policy and procedures in this area will produce significantly added administrative burdens and costs for the University, in addition to the unquantifiable costs from the loss of flexibility and discretion available to the faculty. Princeton will absorb these costs as part of its commitment to improving the administration of federal research at the University.

⁵ The DOE IG documented this in its systems audit at Princeton. <u>See</u> DOE IG Report No. ER-C-95-02 at 6-7.

⁶ Princeton assigned a high priority to this restatement of its policy and procedures on outside activities, and the University expended significant resources and institutional energy on this matter. Princeton's efforts included the establishment of a special Faculty Committee, which examined the issue extensively and then submitted a report that was approved by Princeton's faculty.

B. <u>Verification of Salary and Wage Charges</u>

Princeton concurs in the DOE IG's conclusion that "Princeton did not always have timely after-the-fact activity reports." (Draft Report at 4). In its earlier systems audit, the DOE IG found that there were weaknesses in Princeton's procedures in this area. As a result, Princeton revised these procedures and now has in place a significantly enhanced framework of internal controls designed to avoid the weaknesses identified by the DOE IG. As with Princeton's policy on outside activities, the University believes that this is the appropriate remedy for this issue. Here again, Princeton appreciates the fact that the DOE IG in its draft report does not attempt to develop a mechanical formula for assessing cost allowability based on the timeliness of these records.

C. The DOE IG's Concerns Over Similarity Of Work At Princeton And The Commercial Business

The DOE IG expresses concern over its inability to "draw the distinction between work for Princeton and that of the commercial business because the commercial business' research agreements were in the same specialized field as the agreements at Princeton." (Draft Report at 5). In support of this concern, the DOE IG states that 1) the same federal agencies and procurement offices funded work at both entities; 2) during certain months, individuals worked at both entities on work funded by the same federal agency; 3) for some individuals, federal agencies simultaneously funded full-time work at both entities; and 4) Princeton employees served as principal investigators on federally sponsored agreements at the commercial business. (Id.)

Through no fault of its own, Princeton is not in a position to respond meaningfully to this issue. In fact, of the three parties involved in this matter -- the Government, the commercial business and Princeton -- Princeton has the least amount of information relevant to the "similarity of work" issue. For example, Princeton has not been provided with access to the commercial business's federal contracts or grants and, therefore, cannot even address the threshold issue whether the agreements at both entities were in the same "specialized field."

Simply put, the apparent simultaneous funding and effort identified by the DOE IG is a result that either the Government or the commercial business could have avoided, but one that Princeton lacked the information and the authority to prevent. Princeton certainly supports the DOE IG's recommendation to "[a]lert procurement offices to the condition that some researchers are being funded simultaneously at more than one entity." (Draft Report at 7). However, it would be unfair to hold Princeton responsible for any problems that might arise from this issue.⁷

⁷ Princeton can represent that it never sought federal funding for an employee's labor unless it believed in good faith that the employee could devote the requisite time to the federal contract or grant at issue.

D. The DOE IG's Concern Over Principal Investigator's Role

The DOE IG also expresses concern that "one individual played a major role at both Princeton and the commercial business." (Draft Report at 5). This individual was the Princeton faculty member whose activities are the focus of the draft report.

As Princeton understands the facts, the manner in which this faculty member performed his dual roles constituted violations of: 1) the terms of his original appointment to Princeton's faculty; 2) Princeton's prohibition against managing or being employed by an outside enterprise; and 3) Princeton's policy against engaging in activities that create a conflict of interest, or an appearance of such a conflict, with a faculty member's University commitments. Moreover, this faculty member refused to provide Princeton with the information that it needed to establish that these violations existed. Under Princeton's new procedures for monitoring outside activities, the risk of a recurrence of this type of conduct is significantly minimized.

Princeton's new procedures to detect violations of University policies arising from outside activities will not foreclose all concerns that the DOE IG has expressed over a principal investigator who performs multiple roles. This is clear from the example provided by the DOE IG in its draft report. In discussing its concern over the dual roles of the faculty member in question, the DOE IG states that it "found instances when Princeton charged agreements for travel costs for this individual, while time sheets for the commercial business showed that this individual also worked for the commercial business during the trip period." (Draft Report at 5).

Princeton has been able to confirm from its own documentation that these travel costs were incurred for a legitimate purpose in connection with Princeton's federally sponsored agreements. Princeton, however, has no feasible way to determine whether the out-of-town activity was of such a nature as to leave time for other work, or whether other work was in fact performed. Both the Government and the commercial business have far better access to this type of information than does Princeton. Thus, while Princeton is committed to cooperating fully with the Government in the administration of federally sponsored research, such limits on its access to information will necessarily limit the extent to which it can assist the Government on issues like this.

E. Violation Of Princeton's Nepotism Policy

The DOE IG found that Princeton's nepotism policy was violated in one instance by an hourly employee. (Draft Report at 3). This issue involved labor charges for the son of the faculty member in question. The labor charges at issue were approved by a Principal Investigator or Co-

⁸ Of course, this statement assumes the accuracy of the information provided to Princeton by the faculty member who submitted the reimbursement request for this travel.

Principal Investigator other than this faculty member. As a result, the authorizing name on the labor charging forms was different from the surname of the hourly employee. Under these circumstances, Princeton was not alerted to perform a review under its internal control system for monitoring compliance with its nepotism policy. Nevertheless, Princeton has voluntarily refunded to the appropriate funding agencies the \$16,960 in compensation costs claimed for this hourly employee.⁹

⁹ This voluntary action does not constitute an admission of wrongdoing by Princeton.

III. THE DOE IG'S SUGGESTED APPROACH TO COST IMPACT

To resolve whether Princeton claimed any unallowable costs under the twenty audited agreements, the DOE IG recommends that contracting agencies should: 1) perform "technical reviews of the tasks accomplished at both Princeton and the commercial business," and 2) await the outcome of the Defense Contract Audit Agency's audit of the commercial business's federal contracts and grants. (Draft Report at 7).¹⁰

Princeton supports this approach because it assigns cost allowability decisions to those most familiar with the work performed under Princeton's agreements and because it focuses on the value of the services delivered by Princeton to the Government. Princeton's only concern about this approach derives from the DOE IG's suggestion that cost allowability decisions under its federal agreements be linked to technical reviews and audits of work done at the commercial business. If such reviews of the commercial business result in action adverse to Princeton, Princeton should be given full access to all materials contributing to the conclusions reached in the reviews and a fair opportunity to challenge any alleged negative impact on Princeton of the activities at the commercial business.

The DOE IG states that it "could not quantify the impact that hours worked at the commercial business had on available Princeton time because Princeton's labor charging method did not record actual hours worked." (Draft Report at 6). To the extent that this statement represents a criticism of Princeton's labor charging system, Princeton takes exception to it. As the DOE IG itself recognizes in its draft report, Princeton is not required by federal regulation to record "actual hours worked." See Draft Report at 4.

CONCLUSION

As indicated in this response, Princeton concurs in the approach recommended by the DOE IG in its draft audit report for the resolution of Princeton's claimed costs under the audited agreements. In addition, Princeton requests that the DOE IG and DOE's contracting officials give due consideration to the University's comments on other aspects of this report as the parties proceed to resolve all outstanding matters in a manner consistent with the longstanding, mutually beneficial relationship between Princeton and the Government.

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