July 18, 2012

THOMAS G. MASTERS
Director, Institute of Geophysics and Planetary Physics
0225

Subject: Institute of Geophysics and Planetary Physics
Audit Project 2012-08

The final audit report for Institute of Geophysics and Planetary Physics, Audit Report 2012-08, is attached. We would like to thank all members of the department for their cooperation and assistance during the audit.

The findings included in this report will be added to our follow-up system. We will contact you at the appropriate time to evaluate the status of the corrective actions. At that time, we may need to perform additional audit procedures to validate that actions have been taken prior to closing the audit findings.

UC wide policy requires that all draft audit reports, both printed (copied on tan paper for ease of identification) and electronic, be destroyed after the final report is issued. Because draft reports can contain sensitive information, please either return these documents to AMAS personnel, or destroy them, at the conclusion of the audit exit conference. AMAS also requests that draft reports not be photocopied or otherwise redistributed.

Terri Buchanan
Interim Assistant Vice Chancellor
Audit & Management Advisory Services

Attachment

cc: D. Bennett
    W. Farquharson
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AUDIT & MANAGEMENT ADVISORY SERVICES

Institute of Geophysics and Planetary Physics
June, 2012

Performed By:
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Approved By:
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Project Number: 2012-08
# Table of Contents

I. Background ......................................................................................................................... 1  
II. Audit Objective, Scope, and Procedures ............................................................................. 2  
III. Conclusion .......................................................................................................................... 3  
IV. Observations and Management Corrective Actions ........................................................... 4  
   A. Equipment Management ............................................................................................... 4  
   B. Express Card Reviewer/Administrator ......................................................................... 5  

ATTACHMENT A – Department Audit Report Card
I. Background

Audit & Management Advisory Services (AMAS) completed a departmental review of the Cecil H. and Ida M. Green Institute of Geophysics & Planetary Physics (IGPP) as part of the approved audit plan for Fiscal Year 2011-12. This report summarizes the results of our review.

IGPP is a division with the University of California San Diego (UCSD) Scripps Institution of Oceanography (SIO), whose primary objective is promote basic and fundamental research in the fields of geophysics, planetary and space physics, geochemistry, paleobiology, and astrophysics.

During the Fiscal Year 2010/2011, IGPP incurred approximately $17.3 million in expenditures, which was comprised of approximately $11.3 million in salaries and benefits, $3.2 million in supplies and expenses, $2.1 million in equipment and $.7 million in travel. These expenditures were funded primarily from federal contracts and grants, and from a variety of other funding sources as detailed in the following chart:

**FY2011/2012 Funding Sources**

![Pie chart showing funding sources]

Federal Contracts and Grants: 66.4%
Gifts: 16.9%
Indirect Cost Recovery: 7.4%
Other Contracts and Grants: 6.1%
Plant Fund: 2.4%
Self Supporting Activities: 0.3%

It is expected that the fund sources and uses of IGPP funds for 2011/2012 will be largely reflective of the sources and uses for 2010/2011.

One unique aspect of research departments at SIO, compared with the general campus, is that SIO departments utilize a labor clearing account for the purpose of recharging payroll costs. Effort is charged every payroll period directly to an Integrated Financial Information Systems (IFIS) clearing account. SIO personnel certify their effort monthly via timesheets. Payroll charges are then recharged by the IGPP Business Office personnel from the temporary clearing accounts to the appropriate IFIS accounts based on
the effort certified on the timesheets. At the end of the fiscal year, all clearing accounts are reconciled to ensure that payroll costs paid were materially consistent with costs charged to account via the recharge process.

II. Audit Objective, Scope, and Procedures

The objective of our review was to evaluate whether internal control procedures at IGPP were adequate to provide reasonable assurance that operations were effective, in compliance with University policies and procedures, and resulted in accurate financial reporting. The scope of the review was limited to activities and business practices for the Fiscal Year ended June 30, 2011, and for the period July 1, 2011 through February 29, 2012.

In order to achieve our objectives we completed the following:

- Reviewed IGPP business documentation and information including the department website, the organizational structure and financial information;
- Interviewed IGPP management and key personnel to discuss any potential areas of concern;
- Evaluated IFIS electronic financial approval hierarchies, PPS approval hierarchies and internal signature delegations;
- Evaluated business process controls, utilizing internal control questionnaires and segregation of duties matrices;
- Reviewed selected applicable federal requirements and University policies including but not limited to:
  - UCOP Contract & Grant Manual, Chapter 7;
  - UCSD Accounting Manual;
  - UCSD PPM 395-4.3: Payroll Timekeeping Review of Charges;
  - UCSD PPM 510: Use of University Property-payroll expenditure transactions;
  - UC Business and Finance Bulletin BUS 29: Management and Control of University Equipment;
  - Academic Personnel Manual, Section 025: Conflict of Commitment and Outside Activities of Faculty Members;
  - UC Business and Finance Bulletin BUS 79: Expenditures for Entertainment, Business Meetings and Other Occasions;
Institute of Geophysics and Planetary Physics
Audit & Management Advisory Services Project 2012-08

- UCSD PPM 150-35: Classification, Acceptance and Administration of Awards from Private Sources;
- UCSD BLINK guidance and links to policy including but not limited to self supporting activities, express card practices, purchasing, travel, entertainment, equipment, delegation of authorities, approval hierarchies and Statement of Auditing Standard (SAS) 112 compliance.

- Verified the financial status of department funds for the Fiscal Year ended June 30, 2011 and for the period July 1, 2011 through February 29, 2012;
- Confirmed that IGPP had fulfilled the support group administrative requirements for Fiscal Year 2011/2012 for the Cecil H. and Ida M. Green Foundation for Earth Sciences;
- Analyzed procedures and performed limited transaction sampling in the following areas to verify that internal controls were adequate and functioning in compliance with university policy:
  - Payroll and timekeeping,
  - Transaction processing for non-payroll expenditures,
  - Express card,
  - Travel and entertainment,
  - Operating ledger review,
  - Contract and grant administration,
  - Effort reporting/labor clearing account process,
  - Payroll and non-payroll expenditures and expense transfers, and
  - Equipment inventory.

The scope of our review did not include an analysis of the information systems and processes because we recently completed a review in this area (AMAS project number 2010-10).

III. Conclusion

Based on our review procedures, we concluded that internal controls within IGPP were adequate and functioning to provide a reasonable assurance that operations were effective, and were in compliance with University policies and procedures. IGPP Business Office personnel appeared to have a good working knowledge of internal controls and, in general, applied them appropriately to IGPP operations.
We noted a number of noteworthy internal control practices that supported a strong internal control structure including but not limited to the following:

- Open and consistent communication between the Business Office and PI's,
- Use of transaction sampling, and
- Use of the overdraft reporting system for monitoring funds in overdraft.

Controls for a few areas, including equipment management and review of Express Card transactions, could be improved.

*Attachment A* provides the results of the business process review. Specific management actions planned or in process for those areas that were rated “satisfactory” or “improvement suggested” are noted in *Attachment A*. Those areas which were rated “improvement suggested” are described in more detail in the remainder of this report.

IV. Observations and Management Corrective Actions

A. Equipment Management

Two of the nine equipment expenses reviewed were not posted to the Capital Asset Management System (CAMS) in a timely manner.

University policy BUS-29, *Management and Control of University Equipment*, sets forth requirements for management and control of inventorial equipment. In general, all equipment with a value equal to or greater than $5,000 that is purchased, received as a gift or fabricated must be assigned a property number (UCID) and tracked via an electronic database. Inventorial equipment at UCSD is tracked through the CAMS system.

For equipment expenses that are not part of a fabrication, and are not an accessory to an existing piece of equipment, the buyer responsible for initiating the purchase must indicate that a UCID number is to be assigned to the equipment when received. A UCID number is then generated and the equipment, when received, is tagged and entered into CAMS by the BFS-General Accounting Equipment Management staff.

Adding fabricated equipment through CAMS requires that the department submit a fabrication request form to Equipment Management before fabrication commences. Equipment Management, in turn, issues a fabrication number. Once the fabrication is complete, the department notifies Equipment Management via
email, and includes the operating ledger detail pertaining to the fabricated equipment. Equipment Management then adds the fabricated equipment to CAMS with a total cost based on the operating ledger detail that was received.

During our review, we judgmentally selected nine equipment purchases for review, and noted that two of these purchases were not updated in CAMS on a timely basis. One of these purchases was for an equipment fabrication that appears to have been completed prior to January 2012. The department had not yet notified Equipment Management of completion as of May 31, 2012. The other purchase was for multiple stand-alone pieces of equipment which each exceeded the $5,000 threshold. In this case, not all of the individual pieces of equipment were appropriately assigned a UCID number during the purchase order process.

IGPP performs a physical inventory on an annual basis during which equipment lists from CAMS are compared to equipment on-hand. Differences between CAMS and equipment on-hand are then identified, and CAMS is adjusted accordingly. IGPP could improve its equipment management processes by regularly reconciling equipment purchases posted in IFIS to CAMS. IGPP would also benefit by regularly reviewing indexes used to account for equipment fabrications and notifying Equipment Management on a timely basis when fabrications are complete.

**Management Corrective Actions:**

The IGPP Business Office will implement a process to reconcile equipment purchases posted to IFIS to CAMS on at least a semi-annual basis and notify Equipment Management when stand alone items are not appropriately posted to CAMS.

Further, the Business Office will regularly review IFIS indexes used to account for fabrications, and notify Equipment Management of completion in a timely manner.

**B. Express Card Reviewer/Administrator**

Purchases made by the IGPP Management Services Officer (MSO) via an Express Card were reviewed by an individual who was subordinate to the MSO, which was not in accordance with UC Policy BUS-43, Section 8.

UC policy BUS-43, section 8, addresses procurement cards, and requires that an individual other than the procurement cardholder be assigned responsibility for reviewing the procurement card purchases. This establishes a key internal control
to ensure that procurement card purchases are appropriate, in compliance with purchasing guidelines, and that the department receives copies of the itemized receipts supporting purchases made. One condition that must be met by the department when selecting a transaction reviewer is that the individual must not be subordinate to the procurement cardholder.\footnote{University of California, Business and Finance Bulletin BUS-43, Section 8.III (Revised 8/6/2007)}

At UCSD, each procurement card (Express Card) that is issued to a cardholder is assigned to an Express Card Department Administrator (ECDA) who is ultimately responsible for review of the Express Card purchases.

The IGPP MSO is an Express Card cardholder who uses the card for department purchases on a very limited basis. For convenience, the role of ECDA for this card was assigned to an IGPP Fiscal Manager that reports directly to the MSO.

**Management Corrective Action:**

The IGPP Business Office will reassign ECDA responsibilities for the MSO’s Express Card to the IGPP Director.
<table>
<thead>
<tr>
<th>Business Office Process</th>
<th>AMAS Audit Review Procedure</th>
<th>Risk &amp; Controls Balance Reasonable (Yes or No)</th>
<th>Audit Conclusion</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timekeeping &amp; Payroll</td>
<td>Reviewed eight payroll clearing account recharges, and agreed recharge reports to approved timesheets.</td>
<td>Yes</td>
<td>Satisfactory</td>
<td>Separation of duties appeared adequate. Payroll recharges were well documented and were supported by approved timesheets. No exceptions were noted.</td>
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<tr>
<td>Transaction Processing - Non-Payroll Expenditures</td>
<td>Reviewed 25 judgmentally selected transactions; traced to supporting documents.</td>
<td>Yes</td>
<td>Satisfactory</td>
<td>Separation of duties appeared adequate. Non-payroll expenditures appeared reasonable, and supported by documentation.</td>
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<tr>
<td>Express Card</td>
<td>Reviewed 25 judgmentally selected transactions; traced to supporting documents.</td>
<td>Yes</td>
<td>Improvement Suggested</td>
<td>The IGPP MSO was an Express Card cardholder, and the Express Card administrator/reviewer was subordinate to the MSO. (Refer to Section IV.B of the audit report)</td>
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<td>Travel</td>
<td>Reviewed 14 trips totaling $81,896; traced to electronic vouchers &amp; supporting documents.</td>
<td>Yes</td>
<td>Satisfactory</td>
<td>Travel activity was monitored for compliance with policies and procedures. No exceptions were noted.</td>
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<td>Entertainment</td>
<td>Analytical Review of Financial Data</td>
<td>Yes</td>
<td>Satisfactory</td>
<td>Entertainment activity was monitored for compliance with policies and procedures. No exceptions were noted.</td>
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<td></td>
<td>Internal Control Questionnaire/ Separation of Duties Matrix</td>
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<td></td>
<td>Process Walk-through (Lid Document Review)</td>
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<td>Transaction Testing (Sample Basis)</td>
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<td>Reviewed 19 entertainment events totaling $34,450; verified compliance with BUS-79.</td>
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<td>Operating Ledger Review</td>
<td>Analytical Review of Financial Data</td>
<td>Yes</td>
<td>Satisfactory</td>
<td>Operating ledgers were reviewed and reconciled by the IGPP Business Office and PIs. The Overdraft Reporting Tool and Ledger Reviewer were effectively used.</td>
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<td>&amp; Financial Reporting</td>
<td>Internal Control Questionnaire/ Separation of Duties Matrix</td>
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<td>Process Walk-through (Lid Document Review)</td>
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<tr>
<td>Contract &amp; Grant Activity (Post Award Admin.)</td>
<td>Analytical Review of Financial Data</td>
<td>Yes</td>
<td>Satisfactory</td>
<td>Financial activity was routinely monitored for compliance with relevant requirements. No exceptions were noted.</td>
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<td>Internal Control Questionnaire/ Separation of Duties Matrix</td>
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<tr>
<td>Effort Reporting (Labor Clearing Account)</td>
<td>Analytical Review of Financial Data</td>
<td>Yes</td>
<td>Satisfactory</td>
<td>Processes appeared adequate and certification by employees was timely and accurate. No exceptions were noted.</td>
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<td>Transaction Testing (Sample Basis)</td>
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<td>Reviewed the labor clearing account financial activity and year end balance for the Fiscal Year 2011/2012.</td>
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<td>Business Office Process</td>
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<td>Payroll Expenditure Transfers</td>
<td>Judgmentally selected five EPETS, and reviewed the transaction in the FinancialLink EPET module to determine if the transaction appeared timely, adequately documented and appropriately approved.</td>
<td>Yes</td>
<td>Satisfactory</td>
<td>Payroll Expense Transfers were timely, adequately documented and appropriately approved. No exceptions were noted.</td>
</tr>
<tr>
<td>Non-Payroll Expenditure Transfers</td>
<td>Judgmentally selected five ENPET transactions and reviewed them for timeliness and to determine if they were adequately documented.</td>
<td>Yes</td>
<td>Satisfactory</td>
<td>Transfer were timely and explanations appeared reasonable. No exceptions were noted.</td>
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<tr>
<td>Equipment Management</td>
<td>Judgmentally selected nine equipment purchases, and reviewed them for appropriate approval and to ensure that the purchases were updated to CAMS on a timely basis.</td>
<td>Yes</td>
<td>Improvement Suggested</td>
<td>Physical inventories were completed on a regular basis in accordance with BUS-29. However, controls would be improved by implementing a regular review of equipment purchases posted to IFIS to ensure that new equipment is appropriately posted to CAMS in a timely manner. (Refer to Section IV.A of the audit report)</td>
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