

July 15, 2014

ART MILLER
Director, CASPO
0206

***Subject: Climate, Atmospheric Sciences, and Physical Oceanography
Audit & Management Advisory Services Project 2014-10***

The final audit report for Climate, Atmospheric Sciences, and Physical Oceanography, Audit Report 2014-10, 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. While management corrective actions have been included in the audit report, we may determine that additional audit procedures to validate the actions agreed to or implemented are warranted. We will contact you to schedule a review of the corrective actions, and will advise you when the findings are closed.

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. We also request that draft reports not be photocopied or otherwise redistributed.

David Meier
Director
Audit & Management Advisory Services

Attachment

cc: D. Bennett
J. Bruner
A. Footer
M. Leinen
S. Matheson
D. Rico
S. Vacca

UC San Diego

AUDIT & MANAGEMENT ADVISORY SERVICES

Climate, Atmospheric Sciences, and Physical Oceanography
July 2014

Performed By:

Mareline Godfrey, Auditor
Greg Buchanan, Manager

Approved By:

David Meier, Director

Project Number: 2014-10

*Climate, Atmospheric Sciences, and Physical Oceanography
Audit & Management Advisory Services Project 2014-10*

Table of Contents

I.	Background	1
II.	Audit Objective, Scope, and Procedures.....	2
III.	Conclusion	4
IV.	Observations and Management Corrective Actions	4
	A. Express Card Restricted Purchases	4
	B. Express Card Administration.....	5

ATTACHMENT A - Audit Results by Business Office Functional Process

*Climate, Atmospheric Sciences, and Physical Oceanography
Audit & Management Advisory Services Project 2014-10*

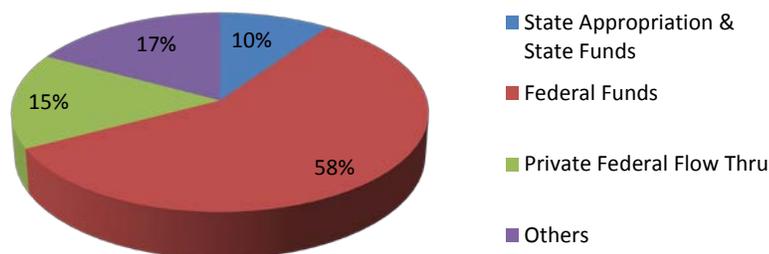
I. Background

Audit & Management Advisory Services (AMAS) has completed a review of Climate, Atmospheric Sciences, and Physical Oceanography (CASPO) as part of the approved audit plan for Fiscal Year 2013-14. This report summarizes the results of our review.

CASPO is a scientific research division of UC San Diego Scripps Institution of Oceanography (SIO). CASPO's primary objective is to promote scientific research in a wide variety of topics involving mainly the physical ocean-atmosphere system, including important connections with chemistry, biology, hydrology and social issues. Aside from collaborations with numerous UC San Diego colleagues, CASPO collaborates with various US and international, private and government laboratories. CASPO's extramural funding includes awards from the National Oceanic and Atmospheric Administration (NOAA), the National Science Foundation (NSF), and the National Institutes of Health (NIH) among others.

The majority of CASPO's NOAA funding comes through the Cooperative Institute for Marine Ecosystems and Climate (CI-MEC). CI-MEC acts much like a funding portal for NOAA and sets forth its own terms and conditions. The funds are awarded and allocated to departments on an annual basis. Approximately 85% of CI-MEC monies are awarded to CASPO researchers.

During Fiscal Year 2012-13, CASPO incurred approximately \$16.9 million in expenditures, comprised of \$9.2 million in salaries and benefits, \$2.1 million in supplies and other expenses, \$1.4 million in equipment, \$0.5 million in travel, and \$3.7 million in overhead. The sources of funding for these expenditures were federal contracts and grants as well as private and other sources, as depicted in the following chart.



*Climate, Atmospheric Sciences, and Physical Oceanography
Audit & Management Advisory Services Project 2014-10*

CASPO also operates and manages the Instrument Development Group (IDG), a recharge facility of the UC San Diego established in 1972. IDG plays a major role in the development and fabrication of instruments for oceanographic use, including profiling floats and underwater gliders. These instruments perform various oceanographic measurements. Spray gliders are battery-operated robotic instruments deployed from small boats to collect real-time data using sensors, and remain deployed for several months at a time. They are controlled and tracked via Global Positioning System (GPS), and are retrievable. Gliders are recharged 100% upon completion. The second-generation autonomous profiling floats called Sounding Oceanographic Lagrangian Observer (SOLO) are much larger than gliders, usually stay underwater for up to seven years and are not retrievable. SOLO floats make up about half of IDG revenues and are mostly funded by NOAA through CIMEC awards.

Like all other research departments at SIO, CASPO utilizes a labor clearing account for the purpose of recharging payroll costs. Effort is charged directly to the department labor clearing account, and is recharged one month in arrears to appropriate fund sources based on the time reported and certified by personnel using manual timesheets. The labor clearing account is reconciled at the end of the fiscal year to ensure that payroll expenses agree with costs recharged to other accounts, and that any necessary adjustments to the payroll recharge rates are considered.

II. Audit Objective, Scope, and Procedures

The objective of our review was to evaluate whether CASPOs internal control procedures 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 our review was limited to activities and business practices for the Fiscal Year ended 2013, and for the period July 1, 2013 through March 31, 2014.

In order to achieve our objectives we completed the following:

- Reviewed CASPO business documentation and information including department website, the organizational charts, and financial information;
- Interviewed CASPO management and key personnel to discuss business practices and any potential areas of concern;
- Evaluated business process controls, utilizing internal control questionnaires and segregation of duties matrices;
- Evaluated Integrated Financial Information Systems (IFIS) approval hierarchies, PPS approval hierarchies, and internal signature delegations;
- Reviewed selected applicable federal requirements and University policies including, but not limited to:
 - UC Contract and Grant Manual, *Chapter 7*,

*Climate, Atmospheric Sciences, and Physical Oceanography
Audit & Management Advisory Services Project 2014-10*

- UC San Diego Accounting Manual,
 - UC San Diego PPM 395-4-3: *Payroll Timekeeping Review of Charges*,
 - UC San Diego PPM 510: *Use of University Property – payroll expenditure transactions*,
 - UC Business and Finance Bulletin BUS 29: *Management and Control of University Equipment*,
 - UC Business and Finance Bulletin BUS 79: *Expenditures for Entertainment, Business Meetings and Other Occasions*,
 - UC Business and Finance Bulletin G-28: *Policy and Regulation Governing Travel*,
 - UC Business and Finance Bulletin 43: *Material Management*,
 - UCSD PPM 150-35: *Classification, Acceptance and Administration of Awards from Private Sources*, and
 - UCSD BLINK guidance and links to policy including but not limited to self-supporting activities, express card practices, purchasing, travel, entertainment, equipment, fabrication, delegation of authorities, approval hierarchies, and Statement of Auditing Standard (SAS) 115 compliance;
- Verified the financial status of department funds for the Fiscal Year ended June 30, 2013 and for the period July 1, 2013 through March 31, 2014; and
 - Analyzed procedures and performed limited transaction testing 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,
 - Electronic payroll and non-payroll expenditures and expense transfers, and
 - Equipment.

AMAS completed a review of Marine Sciences distributed network security in June 2010 (AMAS project 2010-10). As such, we did not evaluate information system security as part of this review. Oceans Observatory Initiative (OOI) funds were also excluded from this review due to the review of OOI funds at SIO that was completed in April, 2014 (AMAS project 2014-50).

*Climate, Atmospheric Sciences, and Physical Oceanography
Audit & Management Advisory Services Project 2014-10*

III. Conclusion

Based on our review procedures, we concluded that CASPO's internal controls were generally adequate to provide reasonable assurance that operations were effective, performed in compliance with University policies and procedures, and resulted in accurate financial reporting. CASPO Business Office personnel appeared to have a good working knowledge of internal controls and, in general, applied them consistently and appropriately to CASPO and IDG operations. However, we noted that process and controls for Express Card could be improved. These observations are discussed in detail in the remainder of this report.

A summary of the results of our review by business Office function is provided as *Attachment A*.

IV. Observations and Management Corrective Actions

A. Express Card Restricted Purchases

Two of the 23 Express Card transactions selected for review were identified as restricted purchases.

UCSD's Express Card (EC) is a procurement option in the form of a Visa credit card for faculty and staff who have buying responsibilities. Cardholders and EC department administrators (ECDA) are required to complete a training program prior to obtaining authorization and issuance of an EC. The training provides guidance on the use of and restrictions in EC purchases. The ECDA's responsibilities include ensuring timely reconciliation, review and appropriate recordkeeping. Cardholders and ECDAs are also required to be familiar with their funding sources and card restrictions. The EC program simplifies buying and paying for most routine, low-cost goods and services. However, certain types of purchases are restricted.

During our review, 23 transactions were judgmentally selected for review. Each of the transactions was traced to the supporting documents, and most transactions appeared allowable, appropriately approved, adequately supported, and properly allocated. However, two of the transactions were identified as restricted purchases, as follows:

- A donation for \$501 to a student organization within the University that was charged to discretionary funds was paid using EC. The cardholder intended to provide support to the SIO graduate students who often have difficulty seeking funding to support their activities. The student organization maintains a website where donations can be processed via

*Climate, Atmospheric Sciences, and Physical Oceanography
Audit & Management Advisory Services Project 2014-10*

credit card payment on line or PayPal. The cardholder used his EC to process the payment for the funds donated. Because the transaction was intended to help support fund the student organization activities, the ECDA and transaction reviewer did not consider that it was a restricted purchase. Business and Financial Services (BFS) - Disbursements requires that donations be processed through the Payment Authorization and be reviewed by the BFS-Disbursements Director for approval.

- Engineering services totaling \$7,550 was paid using an EC. The total amount paid to the vendor was broken into two separate transactions, \$4,000 when the service began and the balance when the services were completed. Based on the EC guidelines, purchases of goods or services in excess of \$4,999 are restricted, and any attempt to avoid high value purchase process by artificially dividing purchases into individual orders less than \$4,999 is prohibited and subject to withdrawal of purchase authority. The business office has instructed the cardholder to no longer use the EC for purchases of goods or services exceeding \$4,999. In addition, a more experienced reviewer/administrator was also assigned to review future purchases.

Management Corrective Actions:

1. CASPO Business Office has instructed all ECDA's to remind cardholders of EC guidelines pertaining to restricted purchases. ECDA's have also been instructed to periodically email cardholders the hyperlink containing the listing of EC restricted purchases.
2. CASPO management will alert all Fund Managers and ECDA's of this issue, and the resulting corrective action plan, during an upcoming post-audit staff meeting.

B. Express Card Administration

The ECDA and transaction reviewer assigned to one EC were not compliant with University policy.

University policy provides that EC transaction reviewers may not be in a subordinate relationship to the cardholder (Business and Finance Bulletin BUS 43: *Material Management*, Procurement Card Program).

The ECDA and transaction reviewer assigned to the CASPO Director's EC were both subordinate to CASPO Director.

*Climate, Atmospheric Sciences, and Physical Oceanography
Audit & Management Advisory Services Project 2014-10*

Management Corrective Action:

In order to comply with University policy, and to demonstrate adequate internal controls, the ECDA role for the CASPO Director's EC will be reassigned to an individual who does not report directly or indirectly to the CASPO Director.

**Climate, Atmospheric Sciences, and Physical Oceanography
Audit Results by Business Office Functional Process
Audit & Management Advisory Services Project #2014-10**

Business Office Process	AMAS Audit Review Procedure				Risk & Controls Balance Reasonable (Yes or No)	Audit Conclusion ¹	Comments
	Analytical Review of Financial Data	Internal Control Questionnaire/ Separation of Duties Matrix	Process Walk-through (Ltd Document Review)	Transaction Testing (Sample Basis)			
Timekeeping & Payroll	√	√	√	Reviewed 9 judgmentally selected payroll account recharges; agreed recharge reports to approved timesheets and labor clearing charges.	Yes	Satisfactory	Separation of duties appeared adequate. Payroll recharges were adequately supported by approved timesheets. No exceptions were noted.
Transaction Processing - Non-Payroll Expenditures	√	√	√	Reviewed 20 judgmentally selected transactions; traced to supporting documents.	Yes	Satisfactory	Separation of duties appeared adequate. Non-payroll expenditures appeared reasonable and adequately supported.
Travel	√	√	√	Judgmentally selected and reviewed 9 trips totaling \$55,287; traced to vouchers (TEV's) & supporting documents.	Yes	Satisfactory	Travel activity was monitored for compliance with policies and procedures. No exceptions were noted.

¹ Scale: Satisfactory - Improvement Suggested - Improvement Needed - Unsatisfactory

**Climate, Atmospheric Sciences, and Physical Oceanography
 Audit Results by Business Office Functional Process
 Audit & Management Advisory Services Project #2014-10**

Business Office Process	AMAS Audit Review Procedure				Risk & Controls Balance Reasonable (Yes or No)	Audit Conclusion ²	Comments
	Analytical Review of Financial Data	Internal Control Questionnaire/ Separation of Duties Matrix	Process Walk-through (Ltd Document Review)	Transaction Testing (Sample Basis)			
Contract & Grant Activity (Post Award Admin.)	√	√	√	Reviewed 3 awards totaling \$14.1 million; evaluated journal vouchers, non-payroll and payroll expenses, timesheets, and DOPE reports.	Yes	Satisfactory	Financial activity was routinely monitored for compliance with relevant requirements and policy. No exceptions were noted.
Effort Reporting (Labor Clearing Account)	√	√	√	Reviewed the labor clearing account financial activity and yearend balances for FY 2012 and FY2013.	Yes	Satisfactory	Processes appear adequate, certification by employees were timely and accurate. Labor clearing account was reconciled with payroll recharges in a timely manner. No exceptions were noted.

² Scale: Satisfactory - Improvement Suggested - Improvement Needed - Unsatisfactory

**Climate, Atmospheric Sciences, and Physical Oceanography
 Audit Results by Business Office Functional Process
 Audit & Management Advisory Services Project #2014-10**

Business Office Process	AMAS Audit Review Procedure				Risk & Controls Balance Reasonable (Yes or No)	Audit Conclusion ³	Comments
	Analytical Review of Financial Data	Internal Control Questionnaire/ Separation of Duties Matrix	Process Walk-through (Ltd Document Review)	Transaction Testing (Sample Basis)			
Payroll Expenditure Transfers		√		Judgmentally selected five EPETS; reviewed transactions in FinancialLink, and verified that adjusted payroll charges were appropriately reflected on operating ledgers & distribution of payroll expense reports (DOPEs).	Yes	Satisfactory	Payroll expense transfers were timely, adequately supported and appropriately approved. No exceptions were noted.
Non-Payroll Expenditure Transfers		√		Judgmentally selected 5 ENPETS; reviewed for timeliness, and that the business justification appeared reasonable.	Yes	Satisfactory	Non-payroll transfers were timely and justifications appeared reasonable. No exceptions were noted.

³ Scale: Satisfactory - Improvement Suggested - Improvement Needed - Unsatisfactory

**Climate, Atmospheric Sciences, and Physical Oceanography
 Audit Results by Business Office Functional Process
 Audit & Management Advisory Services Project #2014-10**

Business Office Process	AMAS Audit Review Procedure				Risk & Controls Balance Reasonable (Yes or No)	Audit Conclusion ⁴	Comments
	Analytical Review of Financial Data	Internal Control Questionnaire/ Separation of Duties Matrix	Process Walk-through (Ltd Document Review)	Transaction Testing (Sample Basis)			
Equipment Management	√	√	√	Judgmentally selected 9 equipment purchases; reviewed supporting documents, and agreed equipment to CAMS.	Yes	Satisfactory	Physical inventories were completed on a regular basis in accordance with BUS-29. New equipment purchases were appropriately posted to IFIS and CAMS in a timely manner.
Recharge Activity	√	√	√	Judgmentally selected 5 recharges; reviewed rates used and agree with current approved recharge rate, reviewed supporting documents and proposed/approved recharge rates, and verified that recharge statements were sent to users in a timely manner.	Yes	Satisfactory	Processes appear adequate, approved recharge rates were used.

⁴ Scale: Satisfactory - Improvement Suggested - Improvement Needed - Unsatisfactory

**Climate, Atmospheric Sciences, and Physical Oceanography
 Audit Results by Business Office Functional Process
 Audit & Management Advisory Services Project #2014-10**

Business Office Process	AMAS Audit Review Procedure				Risk & Controls Balance Reasonable (Yes or No)	Audit Conclusion ⁵	Comments
	Analytical Review of Financial Data	Internal Control Questionnaire/ Separation of Duties Matrix	Process Walk-through (Ltd Document Review)	Transaction Testing (Sample Basis)			
Operating Ledger Review & Financial Reporting		√	√	Examined operating ledgers and financial reports.	Yes	Satisfactory	Operating ledgers were reviewed and reconciled by the Business Office and its PIs. Ledger Reviewer and Overdraft Reporting Tools were effectively used.
Express Card	√	√	√	Reviewed 23 judgmentally selected transactions; traced to supporting documents.	Yes	Improvement Suggested	Two transactions were found to be restricted purchases. Refer to Section IV.B of the audit report. The ECDA and transaction reviewer assigned to one EC were not compliant with policy.

⁵ Scale: Satisfactory - Improvement Suggested - Improvement Needed - Unsatisfactory