

March 6, 2015

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***Subject: Shipboard Technical Support
Project 2015-12B***

The final audit report for Shipboard Technical Support Audit Report 2015-12B, 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. We also request that draft reports not be photocopied or otherwise redistributed.

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Attachments

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AUDIT & MANAGEMENT ADVISORY SERVICES

Shipboard Technical Support March 2015

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Project Number: 2015-12B

***Shipboard Technical Support
Project 2015-12B***

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ATTACHMENT A – Audit Results by Business Functional Process

ATTACHMENT B – November 2014 Timesheet Testing Summary

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I. Background

Audit & Management Advisory Services (AMAS) has completed a review of Shipboard Technical Support as part of the approved audit plan for Fiscal Year 2014-15. This report summarizes the results of our review.

Shipboard Technical Support (STS) works in tandem with the Marine Facility to provide specialized services pertaining to oceanographic research vessels, and is capable of servicing both UCSD's research vessels and non-UCSD research vessels if circumstances arise. Services provided include, but are not limited to, design and development of instrumentation, maintenance and repair of electronic equipment, hydrographic measurements, temperature and pressure calibrations, as well as seismic services. STS technicians also travel abroad if necessary to service UCSD vessels.

STS is primarily funded from Federal sources, such as the National Science Foundation (NSF). During 2014, STS received several awards directly from the NSF, totaling approximately \$200 million over the next 3 years. Awards are typically for specific purposes, such as the purchase of equipment or ship upgrades. However, the cost of STS ship operations are incorporated into a daily rate calculation which is then used to recharge various campus departments. STS personnel are initially paid through labor clearing accounts, and payroll costs are then recharged to various departments.

Certain business office functions are shared between the Marine Facility and STS, including the Management Services Officer position as well as human resources. Business processes specific to the Marine Facility are covered within audit report 2015-12 and are not included within the scope of this review.

II. Audit Objective, Scope, and Procedures

The objective of our review was to evaluate if STS internal control procedures are adequate to provide reasonable assurance that operations were effective, in compliance with applicable UC policies, and resulted in accurate financial reporting.

In order to achieve our objectives we completed the following:

- Interviewed STS management and key personnel to discuss business processes and potential areas of concern;
- Reviewed completed internal control questionnaires and separation of duties matrices with department management;
- Analyzed departmental organizational and financial information and reports, including the departmental Transaction Sampling Management Report, Electronic Certification of Effort and Reporting Tool (ECERT) aging report, and overdraft reports;

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- Performed limited transaction testing to evaluate key business processes, as summarized in *Attachment A*.

III. Conclusion

We concluded that STS's internal controls provided reasonable assurance that financial activities were conducted in accordance with University and campus policies and procedures. However, we did identify opportunities to improve business processes and internal controls. Our observations are discussed in the balance of this report.

IV. Observations and Management Corrective Actions

A. Effort Certification

STS's timekeeping practices could be improved to ensure that effort charged to federal funding sources is explicitly approved and certified in accordance with Office of Management and Budget (OMB) standards.

All employee salaries charged to federal and federal flow-through funds must be certified according to the OMB Uniform Administrative Requirements, Cost Principles, and Audit Requirements (2 Code of Federal Regulations, part 200)¹. Salaries that are charged to federal funds directly based on Payroll/Personal System (PPS) distribution can be certified using the UCSD Electronic Certification Effort Reporting Tool (ECERT) system. However, the ECERT system cannot be used to certify effort when payroll is charged to federal funds using the SIO payroll clearing account recharge mechanism. Alternatively, many SIO departments include a certification statement on paper timesheets that are signed by the principal investigator (PI) or the PI's designee, which is usually the employee's direct supervisor.

Because STS technicians are oftentimes out to sea on research vessels, physical paper timesheets are generally not practical. Instead, timesheets are submitted via email, either by the supervisor or the employee themselves. When timesheets are submitted by the employee, STS timekeeping staff are expected to ensure that they also receive a supervisor's email with approval clearly stated. Emailed timesheets do not include an explicit statement certifying that the effort charged is correct. Rather, a supervisor's email is accepted as an implicit indication of the supervisor's review and certification. Electronic timesheets that do not contain an explicit certification statement may not be satisfactory in the viewpoint of federal auditors.

¹ Federal funds awarded prior to December 26, 2014 were required to comply with OMB Circular A-21, which contained similar requirements relating to payroll and effort certification.

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AMAS reviewed 30 employee timesheets from November 2014 and noted that eight timesheets submitted by STS employees via email were not explicitly approved via email by the supervisor. The results of our timesheet review is summarized in ***Attachment B***.

Unapproved timesheets for employees whose pay was recharged to federal awards, directly in the form of labor hours, or indirectly in the day ship rate, may result in cost disallowances in the event of a federal audit.

Management Corrective Action:

STS will take steps to ensure that effort certification is clearly stated on all timesheets and/or timesheet email submissions, and that all timesheets are explicitly approved by supervisors. STS will also ensure that timesheet submission processes are defined and clearly communicated to all employees.

B. Ledger Transaction Verification

STS is not utilizing the UCSD Transaction Sampling system to document the monthly ledger transaction verification process.

On a monthly basis, all UCSD departments are required to validate transactions posted to the operating ledger to ensure expenditures, liens, and revenues are correct, accurate and reasonable. Departments must also ensure that evidence of this review is adequately documented. This process entails following-up on unusual items, including verifying amounts to supporting documentation, resolving exceptions, and ensuring that corrective actions are taken in a timely manner. It is recommended that departments adopt one of two different approaches to document their validation of financial transactions:

1. Ledger Reviewer – The UCSD Ledger Reviewer system samples transactions, and all sampled items are reviewed to ensure that adequate supporting documentation exists, the transaction was processed appropriately, and that the transaction is allowable under University policy, federal regulations, or award terms and conditions.
2. Non-Financial Link Process – Some other process for performing and documenting that demonstrates that monthly revenue, budget, and expenditure transactions were reviewed and verified.

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During the review, we had the initial understanding that STS had opted to utilize Ledger Review to document their ledger transaction verification process. Between July 1, 2013, and January 8, 2015, the transaction sampling system sampled 751 transactions. AMAS noted that 135 transactions had not been reviewed and 110 of these were over 60 days old. After we inquired about the un-reviewed transactions, the STS business office clarified that they had not opted to utilize Ledger Reviewer, but rather utilized a non-Financial Link process that entailed reviewing every transaction line-by-line.

Due to the volume of the STS transactions each month, a line-by-line ledger transaction verification process may not be as effective or efficient as it would be using Ledger Reviewer.

Management Corrective Action:

STS has adopted the Ledger Reviewer transaction sampling process to improve efficiency and effectiveness of the required ledger transaction verification process.

C. Documentation of Key Control Activities

Evidence that STS' key internal controls were being performed was not being documented in accordance with UCSD guidelines.

All departments are required to provide documented evidence that key internal control activities are being performed on a regular basis in accordance with the Statement on Auditing Standards (SAS) 115. Documented evidence helps to demonstrate to individuals external to the department, including external auditors, that control activities are actually being performed.

In July 2014, a web-based tool called Control Tracker was released to the campus to help departments document performance of internal control activities. Prior to the release of Control Tracker, departments were required to document performance of internal controls using manual paper-based forms.

During our review, we noted that STS had not yet implemented a process to regularly document performance of their key internal controls.

Management Corrective Action:

STS has adopted Control Tracker to document performance of key internal control activities.

**Shipboard Technical Support
Audit Results by Business Office Functional Process
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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)			
Transaction Processing - Non-Payroll Expenditures	√	√	√	Reviewed judgmentally-selected transactions; traced to supporting documents.	Yes	Satisfactory	Controls over Non-payroll Expenditures appeared adequate.
Travel	√	√	√	Reviewed 10 trips totaling \$28,350; traced to vouchers (TEV's) & supporting documents.	Yes	Satisfactory	Controls over Travel processing appeared adequate.
Contract & Grant Activity (Post Award Admin.)	√	√	√	Reviewed 2 awards totaling \$4.8 million; evaluated journal vouchers, non-payroll and payroll expenses, and DOPE reports.	Yes	Satisfactory	Controls over Contract and Grant Activity appeared adequate.
Payroll Expenditure Transfers	√	√		Verified adjusted payroll charges per operating ledgers & DOPE reports.	Yes	Satisfactory	Controls over payroll expenditure transfers appeared adequate.

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

**Shipboard Technical Support
Audit Results by Business Office Functional Process
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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)			
Non-Payroll Expenditure Transfers	√	√		Reviewed ENPET's for timeliness and business justification.	Yes	Satisfactory	Controls over non-payroll expenditure transfers appeared adequate.
Express Card Management		√	√	Reviewed supporting documentation for 10 express card transactions totaling \$16,684.81.	Yes	Satisfactory	Controls over Express Card Management appeared adequate.
Equipment Management	√	√	√	Reviewed inventory listing and equipment file for purchases, transfers, and deletes.	Yes	Satisfactory	Controls over equipment management appeared adequate.
Timekeeping, Payroll and Effort Certification	√	√	√	Reviewed November 2014 timesheets, DOPE reports, leave activity approvals.	Yes	Improvement Needed	Timekeeping practices will be improved to ensure that effort charged to Federal funding sources is explicitly approved and certified in accordance with Office of Management and Budget (OMB) standards.

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

**Shipboard Technical Support
Audit Results by Business Office Functional Process
Project 2015-12B**

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)			
Operating Ledger Review & Financial Reporting		√	√	Examined operating ledgers and financial reports.	Yes	Improvement Suggested	Ledger Reviewer will be used to improve the ledger validation process; Control Tracker will be utilized to document performance of key internal controls .

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

**Shipboard Technical Support
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November 2014 Timesheet Testing Summary**

The following table summarizes the results of AMAS' review of STS timesheets. See Observation A for discussion of the data below.

Row #	EMP ID	Employee Submitted via Email	Supervisor Email Approval	Notes
1	50948	Y	Y	
2	119339	Y	N	
3	152946	Y	Y	
4	155781	Y	Y	
5	179009	Y	Y	
6	193976	Y	Y	
7	195180	Y	N	
8	203487	Y	N	
9	221380	Y	Y	
10	329342	Y	Y	
11	358753	Y	Y	
12	373828	Y	Y	
13	393054	Y	Y	
14	420010	Y	Y	
15	427976	N - Manual timesheet submitted	N/A - Manual approval was obtained	
16	432281	N	Y	
17	432540	N	N	
18	469403	N	N	
19	480913	N/A	N/A	A
20	523983	N	Y	
21	538235	N	Y	
22	637917	N	N	
23	678419	N	Y	
24	734874	N	Y	
25	742802	N	Y	
26	755049	N	Y	
27	814642	N	N	
28	848453	N	Y	
29	882826	N	N	
30	926342	N	Y	

of Unapproved Timesheets: 8
Total Timesheets: 30

Notes:

N/A - Not applicable.
A - Employee is part-time and did not work during November.