

RIVERSIDE: AUDIT & ADVISORY SERVICES

May 18, 2011

TO: Tom Stahovich, Department Chair
Mechanical Engineering

RE: Mechanical Engineering Department Review

Ref: Audit Report Number R2011-17

We have completed a review of the Mechanical Engineering (ME) Department in accordance with the UC Riverside Audit Plan. Our report is attached for your review.

We will perform audit follow-up procedures in the future to review the status of management action. This follow-up may take the form of a discussion or perhaps additional fieldwork, as we deem necessary. Audit R2011-17 will remain open until we have evaluated the actions taken.

We appreciate the cooperation and assistance provided by your staff. Should you have any questions concerning the report, please do not hesitate to contact me.

Michael R. Jenson
Director

Attachment

xc: UCR Audit Committee Members
BCoE Assistant Dean Finance & Administration Hartney
ME Department Financial & Administrative Officer Barron

Table of Contents

<u>Section</u>	<u>Page</u>
I. Management Summary	1
II. Introduction	
A. <i>Purpose</i>	2
B. <i>Background</i>	2
C. <i>Scope</i>	3
D. <i>Internal Controls and Compliance</i>	3
III. Observations, Comments, and Recommendations	
A. <i>Planning, Goals, and Objectives</i>	3
B. <i>Documentation of Policies and Procedures</i>	4
C. <i>Personnel Management</i>	4
D. <i>Financial Management</i>	5
E. <i>Payroll Processing and Record Keeping</i>	6
F. <i>Purchasing – Separation of Duties</i>	7
G. <i>Procurement – Test of Transactions</i>	7
H. <i>Extramural Awards and Contracts</i>	9
I. <i>Equipment Management</i>	9
J. <i>Cash Controls</i>	10
K. <i>Records Management</i>	10

UNIVERSITY OF CALIFORNIA AT RIVERSIDE
AUDIT & ADVISORY SERVICES
MEMBER OF ASSOCIATION OF COLLEGE & UNIVERSITY AUDITORS

AUDIT REPORT NUMBER R2011-17
MECHANICAL ENGINEERING DEPARTMENT

May 2011

Approved by:

Richard Melton
Principal Auditor

Michael R. Jenson
Director

**UC RIVERSIDE
MECHANICAL ENGINEERING DEPARTMENT
INTERNAL AUDIT REPORT R2011-17
MAY 2011**

I. MANAGEMENT SUMMARY

Based upon the results of work performed within the purpose and scope of the review, it appears overall that the Mechanical Engineering (ME) Department's systems of internal controls are operating satisfactorily and in compliance with University policies and procedures. In addition, there was no evidence to indicate based on our limited testing of extramural award transactions that there were any non-compliance issues with respect to federal, state and private grant/contract restrictions and regulations.

Positive observations included:

- Accounting, budgetary and operating control practices and procedures were in place to ensure overall compliance with University policies. Administrative and accounting functions appear to be effectively managed by an experienced Financial Administrative Officer (FAO).
- Over the past 5 years, the undergraduate and graduate enrollments have nearly doubled in size and both programs are highly ranked on a national scale. Also, new extramural awards have increased from approximately \$1.5 million to \$3 million per year.

The review identified certain opportunities to strengthen internal controls or improve business practices. These included the following:

- The FAO's Time Record was not always being approved on a monthly basis. To maintain compliance with campus policy, we are recommending that Time Records be approved each month by the employee's supervisor prior to being submitted to the employee responsible for further payroll processing. (III.E).

Additional information on this and other matters is presented in the following section of this report. Other items, not of a magnitude to warrant inclusion in the report, were discussed verbally with departmental personnel and management agreed to make the suggested changes.

II. INTRODUCTION

A. PURPOSE

UC Riverside Audit & Advisory Services, as part of its fiscal year 2010-11 audit plan, conducted a limited scope review of internal controls over the ME Department's administrative and accounting operations and performed tests of selected financial records.

B. BACKGROUND

A Department within the Bourns College of Engineering, ME is celebrating its 10th Anniversary this year. The first cohort of graduate students was initially admitted to the Chemical and Environmental Engineering Department until the Department established its own graduate program in September 2001.

The mission of the ME Department is to provide quality education, conduct strong research, foster close partnership with industry and government and provide related service to the campus community and the community at large. The mission is guided by a commitment to the continuous improvement in the overall quality of teaching, research, and service, while adhering to the highest standard of ethics. The Department's overall vision is to be nationally recognized as an innovator in both research and education in mechanical engineering.

During the period of this review, the Department had 14 faculty members, thirty-seven graduate student researchers and 28 teaching assistants/lecturers. The ME faculty are leaders in a variety of areas including: materials science, air pollution modeling, biomedical technology, human-computer interaction, nanotechnology, and education research. ME has an established undergraduate program with over 500 students and there are approximately sixty students currently enrolled in the graduate program.

An administrative staff of four full time employees, including a Graduate Student Affairs Assistant, and two part time student employees support the operations of the Center. At this time, the Payroll/Purchasing Assistant position is unfilled. The ME Chairperson reports directly to the BCoE Dean.

At the close of fiscal year 09-10, ME had total expenditures of nearly \$4.7 million of which approximately \$1.8 million was spent from federal, state and private grants and contracts previously awarded the Department. At this time, the Department does not expect to incur a deficit in their operational accounts or extramural funds for fiscal year 10-11.

C. SCOPE OF THE AUDIT

The scope of the audit included completion of internal control questionnaires pertaining to various administrative, accounting, and other risk areas. Meetings were held with the FAO, Payroll/Purchasing Assistant and in some cases the Chairperson to obtain responses for each questionnaire. Questionnaires covered the areas of administrative controls, budgetary controls, financial management, payroll/leave accounting, non-payroll expenditures, grants and contracts, equipment inventory, and records management controls including computerized records.

In addition, the audit scope included tests of payroll and non-payroll financial transactions from the 09-10 fiscal year through December 31, 2010 that were selected from ME's general operating and grant/contract accounts. Supporting documentation for each transaction was reviewed for propriety, accuracy and compliance with University policies and federal, state and private restrictions and requirements.

D. INTERNAL CONTROLS AND COMPLIANCE

The general condition of internal controls was evaluated within the scope of the review. Internal control is a process designed to provide reasonable, but not absolute, assurance regarding the achievement of objectives as they relate to the effectiveness and efficiency of operations, separation of duties and compliance with University policies and procedures.

Review procedures were performed in February and March 2011. Accordingly, this evaluation of internal controls is based on our knowledge as of that time and should be read with that understanding.

III. OBSERVATIONS, COMMENTS AND RECOMMENDATIONS**A. Planning, Goals and Objectives**

ME had a comprehensive web site with details pertaining to their undergraduate and graduate programs, faculty and staff, research currently being conducted and other information pertaining to the Department. A mission/vision statement outlining the Department's basic purposes and principles had been prepared. Although the mission statement was noted as not being a part of the Department's web site, after discussion with the Department Chair and FAO, it was immediately uploaded to provide an added benefit to the site.

Specific plans and goals, objectives, accomplishments and the future direction of the Department had been documented in a 5 year plan by a previous Chairperson and submitted to the BCoE Dean. During the course of our review, an updated five year plan was prepared by the current Chair and has also been submitted to the Dean. According to the new Chairperson, departmental objectives are determined by both the Chair and faculty with the BCoE Dean's objectives in mind.

Formalized plans had been completed to hire two new faculty members in order to meet certain goals shown in the UCR 2020 strategic plan. Also, goals and objectives for the undergraduate program had recently been documented and a comprehensive review of that program was performed by the Committee on Education Policy. A three-year review of the Graduate Program was performed by the Graduate Council in 2006 and responses to that review and recommendations made were included in a formal report.

The Department had a formal organizational chart identifying reporting relationships.

B. Documentation of Policies and Procedures

Aside from the financial and accounting processes and procedures available on UCR's R'Space, the Department had formally documented additional operating policies and procedures for staff use. These included certain administrative policies and procedures, business practices and financial management of operating accounts and grant and contract funds. For example, a campus ledger review and reconciliation policy with detailed reconciliation processes and payroll and reimbursement check distribution procedures had been formally documented for responsible employees' use.

In addition, staff responsible for ensuring compliance also had access to the appropriate campus specific and University system-wide policy/procedures, according to employee responses to internal control questionnaires. In our opinion, the various policies and procedures currently available in the Department should facilitate the training of new employees and ensure continuity of operations in the event of prolonged employee absences or turnover.

C. Personnel Management

A Performance Management Certification Letter had been signed by the previous Department Chair in September 2009 and submitted to the BCoE Dean. This certification attested to actions taken within the Department in connection with the Staff Performance Management Program for FY 2010/11 which covered the evaluation period of July 1, 2009 – June 30, 2010. The FAO orally confirmed to our office that all departmental performance appraisals were on file for the

evaluation period and that each performance evaluation had been appropriately signed by the employee and their respective supervisor. According to responses to internal control questions, staff employee job descriptions were on file and accurately reflect current job duties and responsibilities.

At the onset of our audit the Contract & Grant Analyst position had been vacant for a number of months. As a result, departmental accounting functions, financial reporting processes and grant/contract processing responsibilities were being performed by the FAO and Payroll/Purchasing Assistant. Most recently, the Payroll/Purchasing Assistant was hired to fill the Contract & Grant Analyst position. As a result of this hiring, the Department still has an open full time position; therefore, the FAO and new Contract & Grant Analyst will continue fulfilling three administrative/accounting positions.

We spent a number of hours working with both of these employees during the course of this review. Based on discussions held, these individuals are working a significant number of overtime hours in order to maintain departmental business operations on a current basis. The Auditor observed that at times both employees appeared to be intensely engaged in the work. Based on conversations held and observations made, if funding is available, we believe that the College should consider filling the Payroll/Purchasing Assistant position or the sharing of such a resource.

NOTE: Prior to finalization of this report, the position discussed above was filled by the Department. The title of the Payroll/Purchasing Assistant has been changed to Purchasing/Personnel Assistant.

D. Financial Management

The Department was preparing annual financial plans for their general operating accounts, which included allocations and budgeted expenditures to cost category levels. Detailed financial statements, separate from the University's general ledger, are prepared monthly and used to control expenditures paid from both the Department's operating and faculty initial compliment accounts. Monthly financial statements for sponsored projects are prepared using the PI Web Reporting System.

According to discussions with staff personnel, financial statements were being reconciled to the general ledger on a monthly basis and provided to the Chairperson and/or related faculty member/PI. The responsible employee documents the review by signing and dating the general ledger reports, according to staff responses to our internal control questionnaires. Reconciliation of the UCRFS was current based on discussions held with the FAO.

The 2010 fiscal close certification letter was signed by the former chairperson and the FAO. Acknowledgement was made by this certification that the Department manages its funds in compliance with laws, regulations, provisions of contract and grant agreements, and donor restrictions that apply to these funds.

As a part of this audit, we also performed an analytical review of departmental expenses for fiscal years 08-09 and 09-10 and found satisfactory reasons for any variances noted over the past two fiscal years. There were no unusual patterns in spending from departmental funds that management was unable to fully explain.

E. Payroll Processing and Record Keeping

Time Records for one staff employee were not being approved on a monthly basis as required by policy.

COMMENTS

Payroll processing and record keeping procedures were reviewed to determine if appropriate internal controls were in place and six employees were selected for detailed testing. Time worked and leave records for the two staff employees selected were reviewed for the months of September 2010 through November 2010 for accuracy and compliance with University policies. Four academic employees were also selected for specific payroll tests.

The following conditions were observed:

- Payroll duties were adequately separated for control purposes.
- The Distribution of Payroll Expense Report (DOPE) was being reviewed for accuracy and validity and reconciled to employee Time Records on a monthly basis, according to management responses to related questions. The review was being documented by signature and date of the responsible employee according to our review of selected DOPE reports. There were no exceptions noted in our verification of the DOPE reports to leave postings made to employee Time Records. We were also able to reconcile employee monthly salaries and pay rates per the DOPE reports to the PPS.
- Verification of employment contracts to the corresponding pay rate per the PPS was performed for selected employees hired in calendar year 2010. No exceptions were noted.
- Based on discussions held with the employee responsible for payroll checks distribution (Graduate Student Affairs Assistant), a reconciliation of actual warrants received was not being made against the payroll check listing that accompanies the payroll checks. As a result of this finding, the FAO

immediately implemented formal procedures so that the check custodian verifies actual payroll checks received to the check disposition log. The new procedure is now being performed upon receipt of the checks in order to provide timely notification to the campus Payroll Office of any discrepancy.

- Staff attendance and vacation/sick leave records (Time Records) had been prepared and were on file to support hours worked and vacation/sick leave balances. All Time Records had been signed by the employee and approved by their immediate supervisor. However, it was noted that the FAO's Time Record was not always approved on a monthly basis as required by campus policy. We found that the FAO's September through November 2010 Time Records were approved by the Department Chair in December 2010.

RECOMMENDATION

According to Campus Policy Number 200-01 titled Attendance, Time Reporting & Leave Accrual Records, Time Records should always be approved by the employee's immediate supervisor prior to being submitted to the Department's responsible employee for further payroll processing. To maintain compliance with campus policy, we recommend that the FAO's Time Record be approved by the Department Chair on a monthly basis.

MANAGEMENT'S RESPONSE

We concur with the recommendation that an employee's time record should always be approved by the employee's immediate supervisor prior to being submitted to the Department's Payroll transactor for processing. Therefore, effective immediately, the Department Chair will begin approving the FAO's time record on a monthly basis.

F. Purchasing – Separation of Duties

Non-payroll disbursements were reviewed to determine if appropriate internal controls were in place. Based on the Department's responses to internal control questionnaires, purchasing related duties were adequately separated for control purposes. Also, signature authorizations were up to date on the online accountability structure, according to staff.

G. Procurement – Test of Transactions

Our office generated an expenditure listing of non-payroll transactions charged to the Department's general operating accounts and grant/contract funds during the fiscal year 09-10 and the first six months of fiscal year 10-11. From this listing, 34 expenditures totaling approximately \$260,000 were judgmentally selected for detailed testing.

Procurement transactions included travel, equipment, materials to fabricate research equipment, sub-contract charges, low value purchases and other disbursements. Also included in the above mentioned test sample were certain non-payroll cost transfers. For those transactions tested, we found that the cost transfers had been made at the request of the College as a result of possible budget problems occurring in the BCoE 19900 fund balances in fiscal year 09-10. As a result, certain expenditures were transferred from the Department's general operating fund to an indirect cost recovery fund source.

Review of selected expenses disclosed that the ME Department was in compliance with University policies and extramural awards and contract restrictions related to the procurement of materials, equipment and services. Equipment items tested had been registered with Equipment Management and were noted as being part of the listing of equipment items owned by the Department.

Travel expenses were properly supported by expense receipts. However, in one case the conversion rates for lodging in Europe were not properly documented by the Travel Coordinator in order to provide a proper audit trail. Through discussion with the FAO, we were able to reconcile the room receipts to the dollar amount reimbursed to the faculty member. Subsequently, the FAO discussed with the Travel Coordinator the need to provide adequate documentation on travel receipts in order to properly support travel claim reimbursement amounts.

We did note that there are expenses charged to grant projects by other UC campuses which relate to multi-campus awards. In those cases, the Department does not receive documentation to fully support the expenses being charged. Rather, ME receives an Intercampus Request for Reimbursement showing the actual costs that were charged to the specific grant project without any supporting details.

However, based on the Operating Guidance Memo issued by the UCOP Research Administration Office in 2002, this is accepted business practice within in the UC system. This Memo specifically indicates that unless required by the prime award, standard line-item invoices will not be submitted to the related campus. There was not any evidence in the Notification of Campus Subaward document we reviewed of requiring additional detailed expenditure information. We do believe though that responsible PIs should review the Intercampus Request for Reimbursement form for reasonableness of the charges being made by "sister campuses". For any questionable expenses, the Department should request adequate documentation to properly support the award charges.

H. Extramural Awards and Contracts

Federal, state and private grants and contracts appeared to be effectively administered and monitored according to limited test work performed in this area and completion of an internal control questionnaire. The Department maintains accounting records separate from the campus general ledger system to monitor the status of contracts and awards and account activity. Income and expense projections are also prepared on a monthly basis.

According to discussions held with management, procedures were in place to ensure that sponsored agreements do not exceed their budgets and PIs have responsibility for reviewing costs monthly that are charged to their contracts. Departmental procedures also include examining payroll and non-payroll cost transfer transactions for overall appropriateness, completeness, accuracy and compliance with policies, regulations and other requirements.

Based on conversations held with the campus Accounting Office Extramural Funds Supervisor, there have been not been any specific problems related to grants/contracts administered by ME during the audit scope period. In addition, the Extramural Funds Supervisor confirmed that there is only one grant project in a deficit situation (less than \$5) and that the Department is in the process of making the appropriate cost transfer to close this fund.

I. Equipment Management

The Department was accountable for 74 equipment items with an original cost of approximately \$1.3 million. Physical observation of equipment items were not performed as a part of our review scope. However, those equipment items selected and tested as part of our non-payroll transactions were noted as being on the Equipment Management listing of items owned by the Department.

A physical inventory had been taken within the last two years as required by policy. Equipment management duties were found to be adequately separated for control purposes based on management responses to related internal control questions.

J. Cash Controls

According to responses to internal control questionnaires, the Department receives gift checks from outside companies and organizations on a sporadic basis. According to the Chair and FAO, these checks are immediately transferred to the campus Development Office for further processing. The Department does not maintain a petty cash or change fund nor does ME receive any intra-campus recharge revenues. This information is based on responses received to internal control questions.

Based on information gathered as it pertains to the receipt of cash and checks, no additional audit work was performed in the area of cash controls.

K. Records Management

The effectiveness of the Department's controls over University records, including computerized data and documents, was reviewed. The Department utilizes the BCoE – Dean's Office computer server. Responses to internal control questions pertaining to records management included the following:

- Staff is knowledgeable about those records that should be kept and "Official Records" are being maintained according to the University's "Records Disposition Schedules Manual".
- Confidential records are being kept in specially locked files or password protected computer records.
- Computers are adequately secured from theft and confidential files are accessible only to authorized personnel. The computer hardware had firewalls and virus protection.
- Back-up copies of computer-based records are being created at appropriate time intervals to ensure that damaged or lost files could be reconstructed. Important computerized records are being stored at an off-site location.
- Procedures addressing data processing and back-up and disaster recovery plans had been documented.