



# AUDIT AND ADVISORY SERVICES

## Space Sciences Laboratory Audit Project No. 16-669

June 30, 2016

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June 30, 2016

Paul Alivisatos  
Vice Chancellor for Research

Vice Chancellor Alivisatos:

We have completed our audit of the Space Sciences Laboratory as per our annual service plan in accordance with the Institute of Internal Auditors' *Standards for the Professional Practice of Internal Auditing* and the University of California Internal Audit Charter.

The results of our test work are expounded upon in the accompanying report. Please destroy all copies of draft reports and related documents. Thank you to the staff of the Space Sciences Laboratory for their cooperative efforts throughout the audit process. Please do not hesitate to call on Audit and Advisory Services if we can be of further assistance in this or other matters.

Respectfully reported,

Wanda Lynn Riley  
Chief Audit Executive

cc: Director Stuart Bale  
Executive Officer Patricia Dobson  
Senior Vice President and Chief Compliance and Audit Officer Sheryl Vacca  
Associate Chancellor Khira Griscavage  
Assistant Vice Chancellor and Controller Delphine Regalia

**University of California, Berkeley  
Audit and Advisory Services  
Space Sciences Laboratory**

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# OVERVIEW

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## Executive Summary

The purpose of the audit was to assess departmental controls in the Space Sciences Laboratory (SSL) to assure sound business practices are in place to support operational effectiveness and efficiency including compliance with university policies and federal regulations.

Based upon our understanding of the overall mission and management objectives for SSL, we conducted a preliminary survey and risk assessment that included the following areas:

- contract and grant management
- payroll and human resource management
- purchasing
- information technology
- recharge services
- facilities and asset management
- travel and entertainment
- risk management
- event coordination
- petty cash

Based on our preliminary survey and risk assessment, we conducted further inquiry and document and transaction review into some of the areas listed above including selecting a sample of various types of payroll and non-payroll expense transactions for a more focused review of contracts and grants related to effort reporting and the allowability of expenses in accordance with budget documentation and the Office of Management and Budget's *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (OMB Uniform Guidance), as applicable.

Based upon the audit work performed, we observe that SSL appears to have adequate control activities to support effective and efficient operations as well as compliance with university policies and federal regulations for those areas in the scope our review. As with all of our audits, our audit procedures were designed to provide a reasonable, but not absolute, level of management assurance at the time of our fieldwork.

## **Source and Purpose of the Audit**

The purpose of the audit was to assess the departmental controls to assure sound business practices are in place to support operational effectiveness and efficiency including compliance with university policies, as well as, state and federal regulations.

## **Scope of the Audit**

Based upon our understanding of the overall mission and management objectives for SSL, we conducted a preliminary survey and risk assessment that included the following areas:

- contract and grant management
- payroll
- purchasing
- information technology
- recharge services
- facilities and asset management
- travel and entertainment
- risk management
- event coordination
- petty cash

Audit techniques included document review and interviews with department staff to gain an understanding of established internal controls and identify high-risk activities for further review. Based on our preliminary survey and risk assessment, we conducted further inquiry and document and transaction review into some of the areas listed above including selecting a sample of various types of payroll and non-payroll expense transactions for a more focused review of contracts and grants related to effort reporting and the allowability of expenses in accordance with budget documentation and OMB Uniform Guidance, as applicable. Our audit fieldwork was completed in June 2016.

## **Background Information**

SSL is an organized research unit (ORU) reporting to the Vice Chancellor for Research. SSL's primary goal is to foster outstanding research in space-related sciences and provide space science education. Research at SSL is led by campus faculty and SSL Senior Fellows focusing on experiments and observations carried out in space, as well as research with the potential of leading to future space experiments and theoretical research that are associated with experimental and observational programs.

SSL provides unique engineering and technical capabilities required to develop and fabricate individual space instruments or an entire scientific payload for spacecraft. SSL is also capable of handling an entire space mission from start to finish, complete with in-house instrument design and fabrication including instrument and spacecraft integration and test/launch support, mission and science operations, commanding the spacecraft, transmitting data to SSL's ground station, and data processing and analysis.

Currently, there are 299 active staff (administrative and academic) at SSL that make up various positions including professors, research scientists, students, engineers, technicians, and programmers.

For fiscal year 2015-16 (as of May 31, 2016), contract and grant funding was approximately \$72.8 million and expenses were approximately \$71.8 million. Non-contract and grants revenue and operating transfers totaled approximately \$3.2M and expenses were approximately \$2.2M.

### **Summary Conclusion**

Based upon the audit work performed, we observe that SSL appears to have adequate control activities to support effective and efficient operations as well as compliance with university policies and federal regulations for those areas in the scope our review. As with all of our audits, our audit procedures were designed to provide a reasonable, but not absolute, level of management assurance as of the time of our fieldwork.