

NASA

National Aeronautics and Space Administration

Office of Inspector General

Office of Audits

AUDIT OF SPACE SCIENCE INSTITUTE

December 12, 2019

Report No. IG-20-007





Office of Inspector General

To report, fraud, waste, abuse, or mismanagement, contact the NASA OIG Hotline at 800-424-9183 or 800-535-8134 (TDD) or visit <https://oig.nasa.gov/hotline.html>. You can also write to NASA Inspector General, P.O. Box 23089, L'Enfant Plaza Station, Washington, D.C. 20026. The identity of each writer and caller can be kept confidential, upon request, to the extent permitted by law.

To suggest ideas or request future audits, contact the Assistant Inspector General for Audits at <https://oig.nasa.gov/aboutAll.html>.



RESULTS IN BRIEF

Audit of Space Science Institute

NASA Office of Inspector General
Office of Audits

December 12, 2019

IG-20-007 (A-19-009-00)

WHY WE PERFORMED THIS AUDIT

NASA missions use the vantage point of space to achieve a better scientific understanding of Earth, other planets and solar system bodies, the interplanetary environment, the Sun and its effects on the solar system, and the universe beyond. NASA engages scientists and researchers to explore these issues and funds this type of research largely through grants and cooperative agreements. Among the recipients of this funding is the Space Science Institute (SSI), a nonprofit, public benefit research and education corporation established in 1992.

In this follow-up to our 2016 audit that examined 60 NASA-funded institutes (defined as academic institutions, research entities, and related organizations), we examined the extent to which SSI supports NASA's science goals; whether the Institute used NASA funds for their intended purpose; and whether costs paid under the agreements were in accordance with applicable laws, regulations, and guidelines. In conducting this audit, we interviewed NASA and SSI personnel; reviewed relevant federal and Agency laws, regulations, policies, and procedures; and evaluated the acquisition of, compliance with, and accounting for SSI's NASA awards.

WHAT WE FOUND

In fiscal year 2018, SSI had 49 active NASA awards totaling about \$22 million. SSI supports the Agency in a wide range of scientific endeavors including analyzing data collected from the Cassini mission; collaborating on projects with NASA to support participation by the public in science, technology, engineering, and mathematics (STEM); and including SSI scientists as team members on high-profile robotic and spacecraft missions for NASA such as the Hubble Space Telescope, Stratospheric Observatory for Infrared Astronomy, and the Kepler space observatory.

We selected 10 NASA awards for review and found SSI submitted annual performance reports in a timely manner and provided required progress and closeout reports as specified in the solicitations. Further, these awards supported NASA science missions and goals, produced programs and models, and provided data to the Agency and scientific community, including: (1) the development of STEM programs to provide science-technology activities and resources for public libraries in order to reach youth and lifelong learners, particularly in rural and other underserved communities; (2) development of models to investigate chemical elements and compounds in Jupiter and Saturn's atmospheres; and (3) characterization of the flux radiation environment of the Earth's magnetosphere (the magnetic field around the planet that traps charged particles). NASA's procurement files for the awards showed each contained well-documented records that supported the selection and award to SSI, and a review of the Institute's financial records and expense data indicated funds and costs were accounted for effectively, handled appropriately, and complied with federal and NASA regulations and guidance.

WHAT WE RECOMMENDED

We made no recommendations in this report.

**For more information on the NASA
Office of Inspector General and to
view this and other reports visit
<http://oig.nasa.gov/>.**

TABLE OF CONTENTS

Introduction	1
Background	1
Space Science Institute Supported NASA’s Science Goals and Complied with Performance and Financial Requirements	5
Conclusion	7
Management’s Response and Our Evaluation	8
Appendix A: Scope and Methodology	9
Appendix B: Management’s Comments	11
Appendix C: Report Distribution	12

Acronyms

CFR	Code of Federal Regulations
NCIL	National Center for Interactive Learning
OIG	Office of Inspector General
SMD	Science Mission Directorate
SSI	Space Science Institute
STEM	science, technology, engineering, and mathematics

INTRODUCTION

NASA missions use the vantage point of space to achieve a better scientific understanding of Earth, other planets and solar system bodies, the interplanetary environment, the Sun and its effects on the solar system, and the universe beyond. NASA engages scientists and researchers to explore these issues and funds this type of research largely through grants and cooperative agreements. Such research helps NASA meet its science goals and objectives; supports participation by the public in science, technology, engineering, and mathematics (STEM); and drives research in a wide range of science and technology disciplines throughout the United States and around the world.

In June 2016, the NASA Office of Inspector General (OIG) examined 60 NASA-funded institutes—defined as academic institutions, research entities, and related organizations—to assess their alignment to Agency projects, programs, and missions; their history and funding; and their contributions to NASA’s mission.¹ We found that NASA uses these institutes to conduct research, review and analyze scientific data, develop equipment and technologies to meet mission requirements, and leverage knowledge. Included in that review was the Space Science Institute (SSI), a nonprofit, public benefit research and education corporation. SSI brings together scientific researchers and educators from a variety of backgrounds and institutions to advance understanding of Earth and the universe, engage the public in STEM learning opportunities, and inspire youth to pursue STEM careers. In fiscal year 2018, the Institute had 49 active NASA awards totaling about \$22 million.

For this audit, we examined the extent to which SSI supports NASA’s science goals; whether the Institute used NASA funds for their intended purpose; and whether costs paid under the agreements were in accordance with applicable laws, regulations, and guidelines. See Appendix A for details on the audit’s scope and methodology.

Background

Space Science Institute

Based in Boulder, Colorado, SSI is a nonprofit, public benefit research and education corporation founded in 1992 that seeks to expand humankind’s understanding and appreciation of Earth, our solar system, and the universe. The Institute’s research scientists participate in a broad array of space science activities, including Earth science, space physics, planetary science, and astrophysics through four research centers:

- *The Center for Space Plasma Physics* carries out scientific research to increase understanding of fundamental and applied aspects of space plasmas.² The Center initiated a diverse research effort involving theory, space flight data analysis, and ground-based experiments to increase

¹ NASA OIG, *Review of NASA-funded Institutes* (IG-16-023, June 9, 2016).

² Plasma is the fourth state of matter (solid, liquid, gas, and plasma), consisting of electrically charged remnants of atoms in the form of electrons and ions.

understanding of the plasma physics of the solar wind and Earth's magnetosphere and ionosphere.³ Research highlights include the development of spacecraft data analysis techniques to examine the nature and characteristics of plasma waves and fluctuations at very small-scale sizes and the development and analysis of computer simulations of these types of waves in the solar-wind plasma.

- *The Center for Extrasolar Planetary Systems* carries out scientific research to increase understanding of the characteristics of extrasolar planets and the diverse systems in which they are found. Current research focus areas include studies of the physical properties of planet-hosting stars, chemistry and physics of exoplanet atmospheres, influence of the host star on the planet and/or system characteristics, and the formation and evolution of planetary systems.
- *The Center for Mars Science* provides opportunities for interaction and cooperation between existing Mars surface and atmospheric research efforts including teleconferences where center researchers share aspects of their work and outreach activities such as participation in space science panels.
- *The Center for Polarimetric Remote Sensing* expands capabilities in retrieving information obtained using a photopolarimeter.⁴ The study of the polarized nature of light provides insight into numerous physical phenomena, including planetary surfaces and atmospheres, cosmic dust, and star and planet formation.

Marathon Valley Overlook on the Surface of Mars



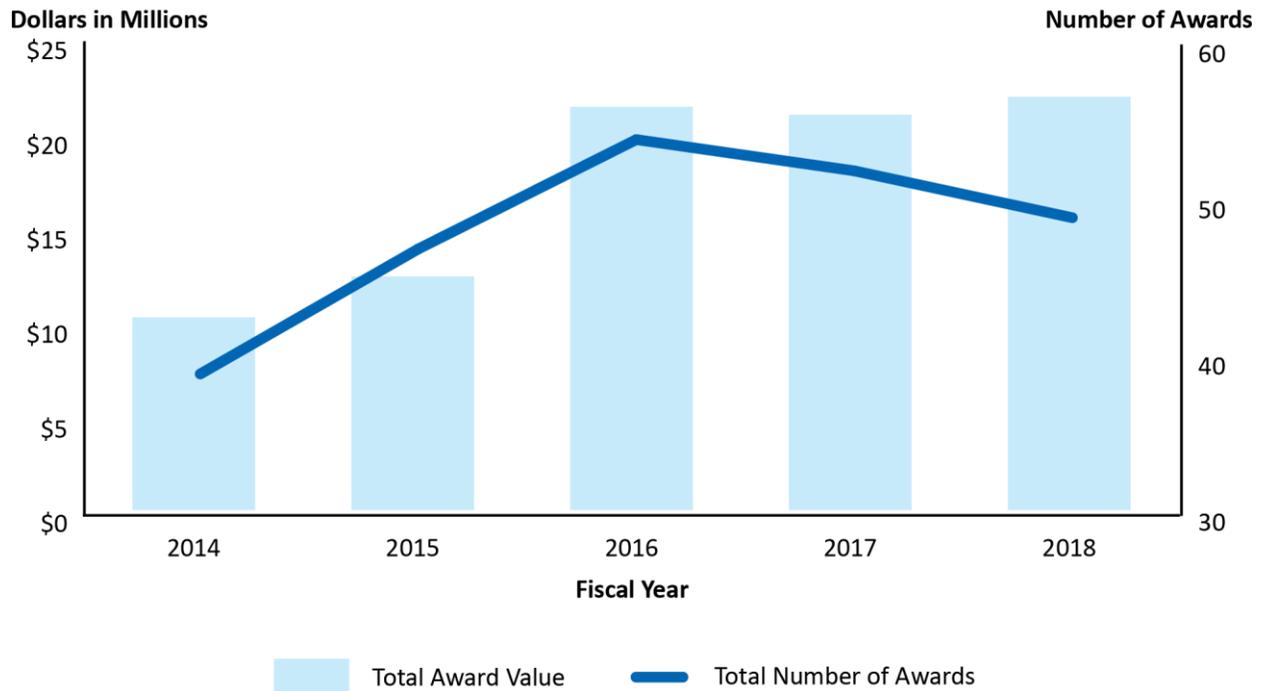
Source: NASA.

In addition to SSI's four centers, research and education programs provide access to STEM learning for cross-generational and often underserved audiences. Through the National Center for Interactive Learning (NCIL), the Institute strives to foster collaboration between scientists and educators to bring educational opportunities to people where they are already engaged, including libraries, museums, and digital media. Figure 1 depicts SSI's active awards from fiscal years 2014 through 2018.

³ The magnetosphere is a region surrounding a planet, star, or other celestial body, including Earth, in which the body's magnetic field traps charged particles like a gigantic magnet. The magnetosphere is important because it mitigates or blocks the effects of solar and cosmic particle radiation, thereby protecting living organisms from potentially dangerous consequences. It also shields the Earth from erosion of the atmosphere by solar wind, which is the constant flow of charged particles streaming from the Sun. The ionosphere is a layer of electrons, ionized atoms, and molecules in the Earth's atmosphere. This region grows and shrinks based on solar conditions and is what makes radio communications possible.

⁴ A photopolarimeter is an instrument used for photographing stars and galaxies to measure the intensity and polarization of reflected light.

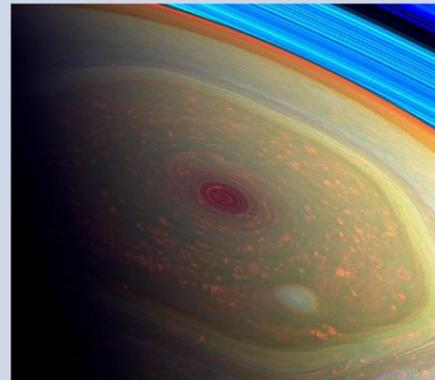
Figure 1: SSI Value and Number of SSI Awards, Fiscal Years 2014 through 2018



Source: NASA OIG.

SSI provides organizational, legal, and administrative support to scientific researchers who conduct work outside traditional universities and research institutes with colleagues in the United States and abroad. The Institute has the ability to remotely employ researchers who fund themselves through a combination of grants and contracts, primarily from NASA and the National Science Foundation. SSI and its researchers submit proposals in response to the NASA Science Mission Directorate’s (SMD) annual release of solicitations for research investigations. SSI supports the Agency in a wide range of scientific endeavors including analyzing data collected from the Cassini mission and collaborating on projects with NASA’s STEM Engagement office to educate and engage young Americans, educators, and the public.⁵

Image of Saturn Taken by Cassini



Source: NASA/Jet Propulsion Laboratory/SSI.

⁵ Launched in 1997, Cassini was a robotic spacecraft that was the first to orbit Saturn, provided the first landing in the outer solar system, and expanded knowledge of Saturn’s moon Titan. While this mission has since ended, data collected continues to be analyzed.

SSI scientists are also team members on high-profile robotic and spacecraft missions for NASA and the European Space Agency, as well as for the Hubble Space Telescope, Stratospheric Observatory for Infrared Astronomy, and the Kepler space observatory.⁶

Management of Government Funds for Scientific Research

SMD uses open competition and scientific peer reviews to evaluate and select research projects and solicit individual scientist-led research investigations primarily through the release of Research Opportunities in Space and Earth Sciences, SMD's annual compilation of NASA Research Announcements.⁷ SMD also considers noncompetitive proposals on specific research topics from specific entities for use in accomplishment of their missions.⁸

Government-wide regulations for managing grants and cooperative agreements are set forth in the Code of Federal Regulations (CFR) and supplemented by NASA regulations. The CFR establishes administrative requirements governing grants and cooperative agreements awarded to nonprofit organizations.⁹ The *NASA Grant and Cooperative Agreement Manual* provides guidance to NASA technical officers and grant officers for awarding and administering grants and cooperative agreements with nonprofit organizations. SSI must comply with federal acquisition and cost principles in addition to NASA requirements with respect to its use of NASA funds and with federal requirements that stipulate all expenditures be allowable, allocable, and reasonable.

⁶ Launched in 1990, the Hubble Space Telescope was the first astronomical observatory to be placed into orbit around Earth with the ability to record images in wavelengths of light spanning from ultraviolet to near-infrared. Launched in 2007, the Stratospheric Observatory for Infrared Astronomy is the largest airborne observatory in the world and uses a telescope onboard a modified Boeing 747SP aircraft to make observations impossible for even the largest ground-based telescopes on the highest mountain peaks. Launched in 2009, the Kepler spacecraft and its K2 extended mission, which became operational in 2014, were designed to monitor the stars to search for transiting exoplanets.

⁷ Scientific peer reviews may be conducted by scientists within NASA, outside the Agency, or both.

⁸ A noncompetitive proposal must be peer reviewed and have an approved justification for other than full and open competition as written evidence of review.

⁹ Grants and cooperative agreements are under the authority of 14 C.F.R. Part 1260, *Grant and Cooperative Agreements* (1999); 2 C.F.R. Part 230, *Cost Principles for Non-Profit Organizations (OMB Circular A-122)* (2012); and 2 C.F.R. Part 215, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations (OMB Circular A-110)* (2012).

SPACE SCIENCE INSTITUTE SUPPORTED NASA'S SCIENCE GOALS AND COMPLIED WITH PERFORMANCE AND FINANCIAL REQUIREMENTS

NASA research awards are governed by Part 200 of the CFR and the Agency's science management policies that include specific reporting requirements for performance.¹⁰ This should include published scientific articles and white papers peer reviewed by scientific journals.¹¹ For this audit, we selected 10 NASA awards to the Institute for detailed review.¹² We found SSI submitted annual performance reports in a timely manner and provided required progress and closeout reports as specified in the solicitations. These awards supported NASA science missions and goals, produced programs and models, and provided data to the Agency and scientific community, including:

- Establishing the NASA@ My Library project, an Earth and space science initiative that connects NASA with public libraries, state library agencies, and their patrons. SMD awarded \$6.5 million to SSI's NCIL to develop STEM programs and provide science-technology activities and resources in public libraries using NASA resources and subject matter experts to reach youth and lifelong learners, particularly in rural and other underserved communities. According to SSI, the project created collaborations between the public library community, other informal education organizations (e.g., science centers and museums), and NASA SMD personnel and programs, often centered on high-profile NASA, Earth, celestial, and library events such as the 2017 solar eclipse and Earth Day. NCIL has developed a number of educational activities and resources for classroom teachers and museum educators that include stand-alone curricular supplements, educational videos on a variety of science topics, and resources for scientists interested in developing effective education programs. The Institute's work with NASA on this project supported the Agency's STEM program and advanced SMD's education goal by engaging public audiences in informal and lifelong learning.
- Developing models to investigate hydrocarbon chemistry in Jupiter and Saturn's stratosphere and thermosphere, hydrocarbon-oxygen chemistry in Saturn's stratosphere during a massive storm outburst that lasted from 2010 to 2011, and coupled ammonia-phosphine-hydrocarbon

¹⁰ NASA science management policies include those listed in NASA's *Science Mission Directorate Management Handbook*, *NASA Shared Services Center Delivery Guide: Grants and Cooperative Agreements Manual*, and *Guidebook for Proposers Responding to a NASA Funding Announcement*.

¹¹ In academic publishing, a scientific journal is a periodical publication intended to further the progress of science, usually by reporting new research. All journal publications undergo peer review, which helps ensure that published results are scientifically valid and grounded in evidence.

¹² The awards from fiscal years 2014 through 2018 we reviewed were based on risk assessments using our ACL data analytic software tool and the period of performance of the award through its life cycle to include submission of progress and financial transaction reporting as well as final research deliverables. This was not a representative sample of awards but rather a sample selected based on our risk assessment criteria that included factors such as salary payments, principal investigators workload, and OIG investigative criteria.

chemistry in Jupiter and Saturn's troposphere.¹³ SSI's efforts in this field helped the scientific community gain an improved understanding of tropospheric ammonia and phosphine chemistry on Jupiter and Saturn. This is important not only for interpreting Cassini mission data (which explored Saturn), but also for validating reaction schemes that can be used to predict atmospheric chemistry and its observable consequences on extrasolar giant planets. SSI's work supported NASA's strategic goal of better understanding the solar system.

- Characterizing the flux radiation environment of the Earth's magnetosphere (the magnetic field around the planet that traps charged particles). SSI's research efforts in this area helped NASA address a heliophysics program goal of developing a model to determine the dynamics and coupling of Earth's magnetosphere, atmosphere, and ionosphere, and their response to solar winds.¹⁴

Our review of NASA's procurement files for the 10 awards found that each contained well-documented records that supported the selection and award to SSI. These records included the number of proposals submitted, proposal rankings, review panel evaluations, and justification for the award. One of the 10 awards we reviewed was a noncompetitive award that was subjected to a technical evaluation and cost analysis that included a formal justification for acceptance of a noncompetitive proposal.

In addition to reports on procurement award and performance, we reviewed SSI's financial records and found that for the approximately \$22 million in awards they received from NASA in fiscal year 2018, the Institute had adequate internal controls that effectively accounted for expenditures and complied with federal requirements. We also analyzed the Institute's expense data to determine if its grant and cooperative agreement funds and associated costs were handled appropriately. We found the financial records complied with NASA and federal guidance. Further, we evaluated the Institute's expenses related to its NASA's awards to determine whether transactions indicated patterns of internal control weaknesses or fraud. Of the 42 transactions selected for detailed review, all were determined to be allowable, allocable, and reasonable.¹⁵

¹³ Jupiter's atmosphere has a series of layers, each with its own specific traits. Closest to the surface is the troposphere, which contains ammonia, ammonium hydrosulfide, and water, and forms the red and white bands seen from Earth. Next is the stratosphere, which contains hydrocarbons, followed by the thermosphere, where auroras occur at the poles and the emission of weak light keeps the sky from going completely dark. Finally, the outermost layer is the exosphere, which gradually fades into interstellar space. Saturn's atmosphere, similar to Jupiter, is approximately 75 percent hydrogen and 25 percent helium with traces of other substances like methane and water. Saturn experiences enormous storms every 30 years, the most recent of which occurred from December 2010 to August 2011.

¹⁴ The Earth's atmosphere is made up of multiple layers, beginning with the troposphere, which starts at the Earth's surface and is where almost all weather occurs. The next layer is the stratosphere, which contains the ozone layer that absorbs and scatters solar ultraviolet radiation. That is followed by the mesosphere, where meteors burn up, then the thermosphere, where auroras occur and satellites are found. Finally, the exosphere is the upper limit of the atmosphere. As previously noted, the ionosphere is a layer of electrons, ionized atoms, and molecules in the Earth's atmosphere, and solar wind is the flow of charged particles streaming off the Sun.

¹⁵ We used the ACL data analytic tool to evaluate SSI expenditures, which we separated into 9 categories consisting of 62,257 transactions from fiscal years 2014 through 2018. ACL is a data extraction and analysis software used for fraud detection, prevention, and risk management. By sampling large data sets, the software identifies irregularities or patterns in transactions that could indicate control weaknesses or fraud. Based on this analysis, we identified 42 transactions (valued at about \$77,000) in categories related to Salaries and Wages, Revenue, Domestic Travel, International Travel, and Other Direct Costs for further review.

CONCLUSION

SSI research has focused on our understanding of Earth, other planets and solar system bodies, the interstellar environment, and the Sun and its effects on the solar system, all of which supported the Agency's science goals and objectives. We found that NASA followed its policies and federal guidelines when it solicited and awarded grants and cooperative agreements to SSI and, in turn, the Institute properly accounted for expenditures and complied with federal requirements. As a result, we are not making any recommendations within this report.

MANAGEMENT'S RESPONSE AND OUR EVALUATION

Although we made no recommendations in this report, we provided a draft copy to NASA management. Management's response to the draft report is reproduced in Appendix B. Technical comments provided by management have also been incorporated, as appropriate.

Major contributors to this report include Ridge Bowman, Space Operations Director; Vincent Small, Project Manager; Eugene Bauer; Ellis Lee; and Lauren Suls.

If you have questions about this report or wish to comment on the quality or usefulness of this report, contact Laurence Hawkins, Audit Operations and Quality Assurance Director, at 202-358-1543 or laurence.b.hawkins@nasa.gov.



Paul K. Martin
Inspector General

APPENDIX A: SCOPE AND METHODOLOGY

We performed this audit from March through November 2019 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

This review examined the extent to which SSI supports NASA's science goals; whether the Institute used NASA funds for their intended purpose; and whether costs paid under the agreements were in accordance with applicable laws, regulations, and guidelines. The scope of the audit was SSI's NASA-related activities. During this audit, we interviewed personnel from NASA's SMD, the NASA Shared Services Center, and SSI. We also reviewed relevant laws, regulations, policies, and procedures related to the Institute's subject area, such as:

- 2 C.F.R. Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (July 22, 2019)
- 2 C.F.R. Part 1800, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (January 1, 2015)
- 2 C.F.R. Part 1880, *Nonprocurement Debarment and Suspension* (January 1, 2012)
- 14 C.F.R. Part 1260, *Grants and Cooperative Agreements* (January 1, 1999)
- NASA, *NASA Grant and Cooperative Agreement Manual* (May 24, 2017)
- NASA, *Guidebook for Proposers Responding to a NASA Funding Announcement* (March 2018)
- NASA, *Science Mission Directorate Management Handbook* (October 31, 2013)
- NSSDG-5800-0001, Revision 6.0, *NASA Shared Services Center Delivery Guide: Grants and Cooperative Agreements* (February 23, 2018)
- SSI, *Space Science Institute Employee Policy Manual, Version 2018.1.01* (October 2018)
- SSI, *Space Science Institute Procedural Manual, Version 2018.1.01* (October 2018)

To evaluate the acquisition of SSI awards, we identified 49 awards valued at about \$22 million. We selected 10 for detailed review to evaluate NASA's compliance with acquisition requirements and determine whether the Institute complied with federal laws and regulations. We also verified whether the Institute followed grant terms and conditions, such as the completion of project work plans, and provided progress reports to NASA technical officers, as required.

To review transactions, we used the ACL data analytic tool to evaluate SSI's cost elements. The ACL tool highlights unusual transactions that require additional scrutiny when the transaction costs deviate from the amounts posted in the general ledger as well as identifying irregularities or patterns in transactions which may indicate patterns of internal control weaknesses or fraud. Based upon this analysis, we identified 42 transactions in our audit for detailed analysis and determined whether these transactions complied with federal laws and regulations and were allowable, allocable, and reasonable.

Use of Computer-Processed Data

We used computer-processed data to perform this audit. To determine the data's validity, we compared and evaluated records from the NASA Procurement system, the NASA Shared Services Center system, and SSI's accounting system. We tested those records and identified 42 transactions for more detailed review. In addition, we compared computer records to invoices, billings, and other appropriate records for accuracy. Based upon these tests and analysis, we concluded that the computer-processed data was valid.

Review of Internal Controls

We reviewed and evaluated the internal controls included in 2 C.F.R. Part 200, 2 C.F.R. Part 1800, the *NASA Grant and Cooperative Agreement Manual*, the *Science Mission Directorate Management Handbook*, the *NASA Shared Services Center Delivery Guide: Grants and Cooperative Agreements*, and SSI's policies and procedures. Based upon our tests, we concluded that the internal controls were adequate.

Prior Coverage

During the last 5 years, NASA OIG has issued 6 reports of significant relevance to the subject of this report. Unrestricted reports can be accessed at <https://oig.nasa.gov/audits/auditReports.html>.

Audit of SETI Institute (IG-19-011, March 6, 2019)

NASA's Management of GISS: the Goddard Institute for Space Studies (IG-18-015, April 5, 2018)

Audit of the National Space Biomedical Research Institute (IG-18-012, February 1, 2018)

Review of NASA-funded Institutes (IG-16-023, June 9, 2016)

Audit of NASA's Cooperative Agreement with BioServe Space Technologies—University of Colorado at Boulder (IG-14-028, August 4, 2014)

Audit of Grant Awarded to North Carolina State University (IG-14-027, July 23, 2014)

APPENDIX B: MANAGEMENT'S COMMENTS

National Aeronautics and Space Administration
Headquarters
Washington, DC 20546-0001



DEC 10 2019

Reply to Attn of: **Science Mission Directorate**

TO: Assistant Inspector General for Audits
FROM: Associate Administrator for Science Mission Directorate
Executive Director, NASA Shared Services Center
SUBJECT: Agency Response to OIG Draft Report, "Audit of Space Science Institute"
(A-19-009-00)

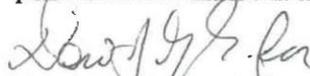
NASA appreciates the opportunity to review and comment on the Office of Inspector General (OIG) draft report entitled, "Audit of Space Science Institute" (A-19-009-00) dated November 20, 2019.

The OIG found that the Space Science Institute's research was consistent with NASA's science goals and objectives. The OIG also found that NASA followed its policies and Federal guidelines when it solicited and awarded grants and cooperative agreements to the Institute and, in turn, the Institute properly accounted for expenditures and complied with Federal requirements.

The OIG makes no recommendations to NASA in the enclosed draft report.

We have reviewed the draft report for information that should not be publicly released. As a result of this review, we have not identified any information that should not be publicly released.

Once again, thank you for the opportunity to review and comment on the subject draft report. If you have any questions or require additional information regarding this response, please contact Mr. Shea Kearns on (202) 358-0974.


Thomas H. Zurbruggen, Ph.D.


Anita Harrell

APPENDIX C: REPORT DISTRIBUTION

National Aeronautics and Space Administration

Administrator
Deputy Administrator
Associate Administrator
Chief of Staff
Associate Administrator for Science Mission Directorate
Executive Director, NASA Shared Services Center

Non-NASA Organizations and Individuals

Office of Management and Budget
Deputy Associate Director, Energy and Space Programs Division
Government Accountability Office
Director, Contracting and National Security Acquisitions Team
Executive Director, Space Science Institute

Congressional Committees and Subcommittees, Chairman and Ranking Member

Senate Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
Senate Committee on Commerce, Science, and Transportation
Subcommittee on Aviation and Space
Senate Committee on Homeland Security and Governmental Affairs
House Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
House Committee on Oversight and Reform
Subcommittee on Government Operations
House Committee on Science, Space, and Technology
Subcommittee on Investigations and Oversight
Subcommittee on Space and Aeronautics

(Assignment No. A-19-009-00)