Ms. Tammy Fetterolf
The Pennsylvania State University
201 Old Main
University Park, PA 16802-1503

Subject: Grant Number 80NSSC20M0097

Dear Ms. Fetterolf:

The NASA Shared Services Center (NSSC) has completed the award of the subject grant/cooperative agreement and looks forward to working with your organization in its administration. Please take time to read through the award documents and note the contact information for the Administrative Grant Officer entered in Section 13 of the NASA Form 1687 as Administrator. To facilitate efficient processing of grant awards, the NSSC utilizes the Customer Contact Center for answering recipient questions and requests. This enables the Grant Officer to effectively review and award grant packages and funding supplements in a timely manner.

The grant award and administration by the NSSC does not change the line of communication between your organization and the NASA scientific, technical and educational communities. Please access the NSSC Grant Status Query System at https://www.nssc.nasa.gov/grantstatus to check the status of any future supplements to this award.

As of August 2019, all NASA Terms and Conditions have been pulled from 2 CFR 1800 to the NASA Grant and Cooperative Agreement Manual (GCAM), Appendix D. The terms and conditions are the same only the reference number is different.

NASA Grant Recipients are able to draw down funds as necessary through the Department of Health and Human Services (DHHS) Payment Management System (PMS) unless indicated in the award. Grant Recipients who do not have an account with the DHHS Payment Management System (PMS) are required to complete an SF-1199A and Direct Deposit Sign-up on PMS's website. The instruction to begin the process may be found at https://pms.psc.gov/grant-recipients/access-newuser.html. NOTE: The SAM account information for your organization should be the same information when the DHHS Payment Management System account is set up.

NASA Insignia Guidelines
NASA has formulated new guidelines which are aimed to simplify and expand NASA Insignia use by NASA grantees (including cooperative agreement recipients, collectively herein, “Grantees”). The purpose of these guidelines is to increase awareness of NASA’s mission activities via Grantee partnerships for a broader and more diverse population. Please see Guidance of NASA Insignia Use - UPDATED located at https://www.nssc.nasa.gov for more details.
Single Audit Requirements:
Remember, if your organization expends $750,000 or more during your fiscal year in Federal awards your organization must have a single audit conducted in accordance with 2 CFR 200.514 of the Uniform Guidance.

Required Publications and Reports:
Recipients must submit the publications and reports by the due dates to the personnel listed in the “Required Publications and Reports” section of the award documents. The contact information for these individuals is listed in the “Point of Contact” section of the award documents.

All reports related to the Grant Officer must be submitted to the NSSC Procurement Office by fax, e-mail or mail at the numbers or address below. Please include the Grant Number in the subject line.

Fax : (866) 779-6772
E-mail: nssc-grant-report@mail.nasa.gov

Mail: NASA Shared Services Center
       Attn: Office of Procurement –SP
       Building 1111, Jerry Hlass Road
       Stennis Space Center, MS 39529

Please submit the “Subject Inventions/Reportable Items Interim and Final Summary Report” electronically on the New Technology Reporting Web site (eNTRe) located at http://invention.nasa.gov.

All other final reports submitted for closeout (pursuant to the “Required Publications and Reports” section of the award documents) should be sent by e-mail to NSSC-closeout@mail.nasa.gov. Any questions regarding the closeout process may also be sent to this e-mail address.

Any questions, please contact 1-877-677-2123 (1-877-NSSC123) or send an e-mail to nssc-contactcenter@nasa.gov.

Sincerely,

NSSC
Grants Officer

Enclosure
# NASA Grant and Cooperative Agreement

**CFDA No.:** 43.008 Education

**CFOA Grant and Cooperative Agreement Web Site:** [http://prod.nais.nasa.gov/pub/pub_library/srba/index.html](http://prod.nais.nasa.gov/pub/pub_library/srba/index.html)

## 1. FEDERAL AWARD IDENTIFICATION NO.

80NSSC20M0097

## 2. SUPPLEMENT NUMBER


## 3. PERIOD OF PERFORMANCE

05/01/2020 - 04/30/2024

## 4. RECIPIENT

**NAME/ADDRESS (No., Street, City/County, State, Zip):**

PENNSYLVANIA STATE UNIVERSITY, THE
201 OLD MAIN
UNIVERSITY PARK PA 16802-1503

## 5. AWARDING ORGANIZATION

**NASA**

Shared Services Center (NSSC)
Building 1111, Jerry Hlass Road
Stennis Space Center MS 39529-0001

## 6. EMPLOYER IDENTIFICATION NO. (EIN)

003403953

## 7. UNIQUE ENTITY IDENTIFIER


## 8. PRINCIPAL INVESTIGATOR/STUDENT/ORGANIZATION'S PROJECT OR PROGRAM MGS. (Name, Email & Phone)

CHRISTOPHER HOUSE, CHOUSE@GEOSC.PSU.EDU, 814-865-8802

## 9. PROPOSAL NO., TITLE, AND PROJECT DESCRIPTION

19-SG2020-2-0048; The NASA Pennsylvania Space Grant Consortium (PSGC)

## 10A. AMOUNT OF AWARD

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<tr>
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<tbody>
<tr>
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## 11. NASA ACCOUNTING AND APPROPRIATION DATA

See Continuation Sheet If Applicable

## 12. PR NUMBER

4200728305

## 13. NASA POINTS OF CONTACT

**REQUIRING CENTER:** Langley Research Center

<table>
<thead>
<tr>
<th>NAME</th>
<th>MAIL STOP</th>
<th>TELEPHONE</th>
<th>E-MAIL ADDRESS</th>
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<tbody>
<tr>
<td>TECHNICAL OFFICER</td>
<td>CLARENCE BOSTIC</td>
<td>757-864-7836</td>
<td><a href="mailto:CLARENCE.E.BOSTIC@NASA.GOV">CLARENCE.E.BOSTIC@NASA.GOV</a></td>
</tr>
<tr>
<td>NEGOTIATOR</td>
<td>XD010</td>
<td>877-677-2123</td>
<td><a href="mailto:NSSC-CONTACTCENTER@NASA.GOV">NSSC-CONTACTCENTER@NASA.GOV</a></td>
</tr>
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<td>ADMINISTRATOR</td>
<td>XD010</td>
<td>877-677-2123</td>
<td><a href="mailto:NSSC-CONTACTCENTER@NASA.GOV">NSSC-CONTACTCENTER@NASA.GOV</a></td>
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<td><a href="mailto:NSSC-CONTACTCENTER@NASA.GOV">NSSC-CONTACTCENTER@NASA.GOV</a></td>
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</table>

## 14. THIS AWARD IS MADE UNDER THE AUTHORITY OF 51 U.S.C. 20113(e) AND IS SUBJECT TO ALL APPLICABLE LAWS AND REGULATIONS OF THE UNITED STATES IN EFFECT ON THE DATE OF THIS AWARD, INCLUDING, BUT NOT LIMITED TO

- 14 CFR PART 1274.
- 2 CFR 1800.

## 15. APPLICABLE STATEMENT(S), IF CHECKED:

- NO CHANGE IS MADE TO EXISTING TERMS AND CONDITIONS
- R&D TERMS AND CONDITIONS AND NASA AGENCY-SPECIFIC REQUIREMENTS APPLY TO THIS GRANT

## 16. APPLICABLE ENCLOSURE(S), IF CHECKED:

- TERMS AND CONDITIONS
- SPECIAL CONDITIONS
- REQUIRED PUBLICATIONS AND REPORTS
## NASA Grant and Cooperative Agreement

**CFDA No.:** 43.008 Education

### CHOOSE ONE:
- [X] COOPERATIVE AGREEMENT
- [ ] GRANT

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<table>
<thead>
<tr>
<th>THE UNITED STATES OF AMERICA</th>
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<tbody>
<tr>
<td>NATIONAL AERONAUTICS</td>
</tr>
<tr>
<td>AND SPACE ADMINISTRATION</td>
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**Recipient**

A recipient indicates acceptance of an award and its associated terms and conditions by drawing or requesting funds from the designated NASA payment system or office.

- [X] Recipient is required to sign this document and return copies.

---

**NAME OF GRANT OFFICER**

Racheal Down

**NAME AND TITLE OF AUTHORIZED REPRESENTATIVE**

(Type or print)

**SIGNATURE**

Digitally signed by Racheal Down

**DATE**

5/20/2020

**SIGNATURE**

**DATE**

---
The budget was fully accepted and no exception was taken.

The Pennsylvania Space Grant Consortium (PSGC) offers programs and projects in support of NASA priorities, aligned with the priorities of Mission Directorates and the goals of the National Space Grant College and Fellowship Program to contribute to the STEM priorities of the Commonwealth of Pennsylvania. The mission of the PSGC is to expand opportunities in Pennsylvania for citizens to learn about and participate in NASA programs by supporting STEM education, training, research, and public understanding while promoting multi-faceted diversity among project participants. The Pennsylvania State University (Penn State) provides leadership for PSGC efforts by partnering with higher education institutions, by supporting cooperative activities with NASA and aerospace-related industries, and by facilitating relevant public outreach. PSGC programs and projects are designed to suit the strengths of member institutions and serve the needs of Pennsylvania while emphasizing NASA-relevant research and hands-on discovery through competitive direct and mini-grant award programs. PSGC prioritizes funding for participants who plan to pursue STEM and NASA-related research and careers. The PSGC supports the following 14 Affiliate institutions: California University of PA, Carnegie Mellon University, Cheyney University of PA, Drexel University, Franklin & Marshall College, Gannon University, Gettysburg College, Lehigh University, Lincoln University, Abington College and Wilkes-Barre campuses of Penn State, Temple University, the

<table>
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<th>ITEM NO. (A)</th>
<th>ITEM OR SERVICE (Include Specifications and Special Instructions) (B)</th>
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<th>UNIT (D)</th>
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University of Pittsburgh, and West Chester University of PA. The PSGC follows NASA STEM Engagement principles in determining program and project development and support: Mission-driven authentic STEM experiences; evidence-based practices; diversity and inclusion; and scalability through partnerships and networks. Collectively, PSGC institutions offer programming that aligns with the priorities of all Mission Directorates. The three focus areas of NASA STEM engagement inform PSGC goals and objectives: Goal 1: Enable contributions to NASA efforts that also align with Mission Directorate priorities. Objective 1: Enable student contributions to NASA efforts in exploration and discovery. Competitive Internships, Fellowships, and other direct awards to inspire, engage, educate and employ the next generation of explorers. Objective 2: Enhance research and development capacity of educational institutions. Graduate Fellows through a competitive selection process, prioritizing NASA-relevant research. Competitive Research Infrastructure mini-grant program to support NASA-relevant projects. Goal 2: Contribute to building a diverse, skilled future STEM workforce. Objective 1: A broad and diverse set of students are attracted to STEM education and careers through NASA opportunities. NASA-unique authentic STEM learning opportunities. Aerospace technology learning opportunities in dedicated space hardware laboratories. Objective 2: Students, including those from underrepresented and underserved communities, explore and pursue STEM pathways through NASA-relevant authentic learning experiences and research opportunities. Promote opportunities to a diverse range of participants. Objective 3: Strategic partnerships enhance and extend the impact of NASA efforts in STEM engagement. Competitive Higher Education

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<td></td>
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</table>
### mini-grant program to encourage collaboration and NASA-relevant interdisciplinary training and research.

**Goal 3: Strengthen understanding of STEM through powerful connections to NASA.**

**Objective 1:** Youth are introduced to STEM concepts through NASA-related resources. Competitive Pre-College mini-grant program for professional development to promote K-12 STEM education.

**Objective 2:** Students gain exposure to STEM careers through direct and virtual experiences with NASA people and work. Competitive Pre-College mini-grant program to facilitate public STEM engagement.

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<tr>
<th>ITEM NO. (A)</th>
<th>ITEM OR SERVICE (Include Specifications and Special Instructions) (B)</th>
<th>QUANTITY (C)</th>
<th>UNIT (D)</th>
<th>UNIT PRICE (E)</th>
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Purchase Requisition: 4200728305 Fund: EDUX22020D Appropriation: 8020/210128 Amount: $760,000.00
### AWARD TERMS AND CONDITIONS

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<tr>
<td>GCAM Appendix D1</td>
<td>Compliance with OMB Guidance on Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal awards.</td>
<td>Aug. 1, 2019</td>
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<tr>
<td>GCAM Appendix D2</td>
<td>Technical publications and reports.</td>
<td>Aug. 1, 2019</td>
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<tr>
<td>GCAM Appendix D3</td>
<td>Extensions.</td>
<td>Aug. 1, 2019</td>
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<tr>
<td>GCAM Appendix D4</td>
<td>Termination and enforcement.</td>
<td>Aug. 1, 2019</td>
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<tr>
<td>GCAM Appendix D5</td>
<td>Change in principal investigator or scope.</td>
<td>Aug. 1, 2019</td>
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<td>GCAM Appendix D6</td>
<td>Financial management.</td>
<td>Aug. 1, 2019</td>
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<td>GCAM Appendix D7</td>
<td>Equipment and other property.</td>
<td>Aug. 1, 2019</td>
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<td>GCAM Appendix D8</td>
<td>Patent rights.</td>
<td>Aug. 1, 2019</td>
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<tr>
<td>GCAM Appendix D9</td>
<td>Rights in data.</td>
<td>Aug. 1, 2019</td>
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<tr>
<td>GCAM Appendix D10</td>
<td>National security.</td>
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<tr>
<td>GCAM Appendix D11</td>
<td>Nondiscrimination.</td>
<td>Aug. 1, 2019</td>
</tr>
<tr>
<td>GCAM Appendix D12</td>
<td>Clean air and water.</td>
<td>Aug. 1, 2019</td>
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<tr>
<td>GCAM Appendix D13</td>
<td>Investigative requirements.</td>
<td>Aug. 1, 2019</td>
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<tr>
<td>GCAM Appendix D14</td>
<td>Travel and transportation.</td>
<td>Aug. 1, 2019</td>
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<tr>
<td>GCAM Appendix D15</td>
<td>Safety.</td>
<td>Aug. 1, 2019</td>
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<tr>
<td>GCAM Appendix D16</td>
<td>Buy American encouragement.</td>
<td>Aug. 1, 2019</td>
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<tr>
<td>GCAM Appendix D17</td>
<td>Investigation of research misconduct.</td>
<td>Aug. 1, 2019</td>
</tr>
<tr>
<td>GCAM Appendix D18</td>
<td>Allocation of risk/liability.</td>
<td>Aug. 1, 2019</td>
</tr>
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</table>

Unless otherwise specified, the terms and conditions in D1 to D18 and the requirements in 2 CFR 170,
Basic

Full text of these requirements and terms and conditions go to [https://prod.nais.nasa.gov/pub/pub_library/srba/index.html](https://prod.nais.nasa.gov/pub/pub_library/srba/index.html) to view the NASA Grant and Cooperative Agreement Manual (GCAM).

**Restrictions on Funding Activities with China**

(a) Pursuant to The Department of Defense and Full-Year Appropriation Act, Public Law 112-10, Section 1340(a); The Consolidated and Further Continuing Appropriation Act of 2012, Public Law 112-55, Section 539; and future-year appropriations (hereinafter, "the Acts"), NASA is restricted from using funds appropriated in the Acts to enter into or fund any grant or cooperative agreement of any kind to participate, collaborate, or coordinate bilaterally with China or any Chinese-owned company, at the prime recipient level or at any subrecipient level, whether the bilateral involvement is funded or performed under a no-exchange of funds arrangement.

(b) Definition: "China or Chinese-owned Company" means the People's Republic of China, any company owned by the People's Republic of China, or any company incorporated under the laws of the People's Republic of China.

(c) The restrictions in the Acts do not apply to commercial items of supply needed to perform a grant or cooperative agreement.

(d) Subaward - The recipient shall include the substance of this provision in all subawards made hereunder.

[End of Provision]

**Personal Identity Verification of Recipient Personnel (Dec 2014)**


(b) The Recipient shall account for all forms of Government-provided identification issued to the Recipient employees in connection with performance under this contract. The Recipient shall return such identification to the issuing agency at the earliest of any of the following, unless otherwise determined by the Government:

1. When no longer needed for grant performance.
2. Upon completion of the Recipient’s employee’s employment.
3. Upon grant completion or termination.

(c) The Grant Officer may delay final payment under a grant if the Recipient fails to comply with these requirements.

(d) The Recipient shall insert the substance of this clause, including this paragraph (d), in all subcontracts or subagreements when their employees are required to have routine physical access to a Federally-controlled facility and/or routine access to a Federally-controlled information system. It shall be the responsibility of the Recipient to return such identification to the issuing agency in accordance with the terms set forth in paragraph (b) of this section, unless otherwise approved in writing by the Grant Officer.
Restrictions on the Use of the NASA Seal, Insignia, Logotype, Program Identifiers, or Flags (Aug 2019)

(a) In accordance with 14 CFR Part 1221, the NASA Seal, NASA Insignia, NASA Logotype, NASA Program Identifiers, and the NASA Flags are protected and shall be used exclusively to represent NASA, its programs, projects, functions, activities, or elements.

(b) The use of these devices by recipients shall be governed by the requirements and restrictions set forth at 14 CFR §§ 1221.109-113. This is updated per the GCAM

(c) The use of these devices by recipients for any purpose other than as authorized by NASA regulations shall be prohibited. Their misuse shall be subject to the penalties authorized by statute, as set forth in 14 CFR §1221.115 and shall be reported as provided in 14 CFR §1221.116.

Recipient Integrity and Performance Matters (January 2016)

A. General Reporting Requirement

If the total value of your currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds $10,000,000 for any period of time during the period of performance of this Federal award, then you as the recipient during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

2. Proceedings About Which You Must Report

Submit the information required about each proceeding that:

a. Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;
b. Reached its final disposition during the most recent five year period; and
c. Is one of the following:
   (1) A criminal proceeding that resulted in a conviction, as defined in paragraph 5 of this award term and condition;
   (2) A civil proceeding that resulted in a finding of fault and liability and payment of a monetary fine, penalty, reimbursement, restitution, or damages of $5,000 or more;
   (3) An administrative proceeding, as defined in paragraph 5. of this award term and condition, that resulted in a finding of fault and liability and your payment of either a monetary fine or penalty of $5,000 or more or reimbursement, restitution, or damages in excess of $100,000; or
   (4) Any other criminal, civil, or administrative proceeding if:
      (i) It could have led to an outcome described in paragraph 2.c.(1), (2), or (3) of this award term and condition;
(ii) It had a different disposition arrived at by consent or compromise with an acknowledgment of fault on your part; and
(iii) The requirement in this award term and condition to disclose information about the proceeding does not conflict with applicable laws and regulations.

3. Reporting Procedures

Enter in the SAM Entity Management area the information that SAM requires about each proceeding described in paragraph 2 of this award term and condition. You do not need to submit the information a second time under assistance awards that you received if you already provided the information through SAM because you were required to do so under Federal procurement contracts that you were awarded.

4. Reporting Frequency

During any period of time when you are subject to the requirement in paragraph 1 of this award term and condition, you must report proceedings information through SAM for the most recent five year period, either to report new information about any proceeding(s) that you have not reported previously or affirm that there is no new information to report. Recipients that have Federal contract, grant, and cooperative agreement awards with a cumulative total value greater than $10,000,000 must disclose semiannually any information about the criminal, civil, and administrative proceedings.

5. Definitions

For purposes of this award term and condition:

a. Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative proceedings, Civilian Board of Contract Appeals proceedings, and Armed Services Board of Contract Appeals proceedings). This includes proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include audits, site visits, corrective plans, or inspection of deliverables.

b. Conviction, for purposes of this award term and condition, means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of nolo contendere.

c. Total value of currently active grants, cooperative agreements, and procurement contracts includes—
   (1) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and
   (2) The value of all expected funding increments under a Federal award and options, even if not yet exercised.

[End of Provision]

**Micro-purchase Threshold (October 2017)**

The non-Federal entity must use one of the methods of procurement as prescribed in 2 CFR 200.320 (A). As defined in 2 CFR 200.67, the micro-purchase threshold for acquisitions of supplies or services made under grant and cooperative agreement awards is —

(i) $10,000; or

(ii) As set by 48 CFR Subpart 2.1 FAR or
(iii) Such higher threshold as determined appropriate by the head of the relevant executive agency and consistent with audit findings under chapter 75 of Title 31, United States Code, internal institutional risk assessment, or State law.

[End of Provision]

GCAM Appendix D19 Cooperative Agreement Special Condition. (Aug 2019)

(a) This award is a cooperative agreement as it is anticipated there will be substantial NASA involvement during performance of the effort. NASA and the Recipient mutually agree to the following statement of anticipated cooperative interactions which may occur during the performance of this effort:

NASA shall be responsible for the following contributions to the joint activity:

1) Serve as Technical Officer for the Space Grant base award with overall responsibility for the technical direction for NASA’s portion of the effort.
2) Act as the primary liaison between the Consortium and NASA’s Office of STEM Engagement (OSTEM)
3) Provide the interface between the Consortium and NASA Space Grant Program Management and with the extended NASA community.
4) NASA will facilitate communication and connections between the Consortium, and relevant NASA OSTEM partners in order to promote synergy, prevent duplication of effort, leverage best practices, and support relationship building.
   a) NASA will schedule periodic teleconference/webinars and discussions with the awardees regarding various project activities and program level updates.
5) NASA will define OSTEM metrics and deadlines to each Principal Investigator (PI) for this project and will provide timelines for the submission to the NASA Office of Education Performance Measurement (OEPM) tools for collecting metrics data.
6) NASA will coordinate one site visit to be held between NASA and the Consortium to discuss the Consortium’s operations, budget, progress/metrics and milestones. This site visit will be either conducted virtually or in-person.

The recipient shall be responsible for the performance of the following agreed objectives:

1) Work with NASA and the rest of the Space Grant Program Office to carry out the specific activities described in the proposal.
2) Maintain responsibility for the management, staffing, operation, and self-assessment of the Consortium.
3) Institute appropriate policies, programs, and procedures that will ensure demonstrable progress towards achieving the program's general objectives.
4) Maintain and execute the personally identifiable information (PII) data management plan as applicable
5) Maintain current and updated Consortium websites that describe the program, affiliates members, student awards, current/recent past highlights, funding opportunities and relevant contact information
6) Maintain with the Space Grant Program Office current contact information to include the PI’s email address, program coordinator’s email address and Consortium mailing address
7) The recipient (Lead Institution), in concert with the Space Grant PI (Director), is responsible for the financial management of the Consortium as specified in the basic award notice under the terms and conditions issued by NASA and in the NASA GCAM
8) Collaborate with a NASA-awarded third party in support of a program-level evaluation of the Space Grant Consortia.

9) Participant in NASA sponsored meetings designed specifically to convene PIs and other designated project personnel.

10) The recipient shall ensure that all peer-reviewed scientific research publications authored or co-authored by investigators and sub-recipients and funded, in whole or in part by NASA, are submitted to PubMed Central system at https://www.nasa.gov/open/researchaccess/pubspace. The recipient shall provide a list of publications with annual and final reports.

11) Provide reporting as stipulated in Section 3.9 of the Solicitation (see below):
   a) Within one month (30 days) after award, using required report formats, recipients shall:
      i) Submit a descriptive project abstract for the nasa.gov website.
   b) Six months before the yearly award anniversary date using required report formats, recipients shall:
      i) Summarize Consortium progress as it relates to project milestones
      ii) Summarize cost expenditures
          NOTE: A template of the semiannual report will be provided. These reports will not be as comprehensive as the annual performance report.
          NOTE: Feedback would be provided should edits/corrections be necessary or if there are concerns about performance.
          NOTE: The frequency of these reports can be modified in the future based upon programmatic requirements.
   c) On an annual basis, using required report formats, recipients shall:
      i) Participate in an annual Site Visit (in-person and virtual) conducted by NASA OSTEM Space Grant Staff. The Space Grant Program Office will determine at the start of each Fiscal Year which Consortia will have an in-person site visit.
      ii) Submit a pre-site visit Self-Assessment that includes, at a minimum:
          (1) Project activities completed during the award period of performance;
          (2) Project accomplishments measured against the proposed goals and objectives;
          (3) Evidence of how project activities have furthered stakeholder priorities;
          (4) Extent to which collaborations and/or partnerships have evolved;
          (5) Plan of activities for the next year; and
          (6) Financial Report (spreadsheet of side-by-side comparison, cumulative and by year, by category, of budget versus actual with explanation of deviations from plan).
      iii) Submit performance data into the Office of Education Performance Management (OEPM) OEDC portal by January 31 of the next calendar year. For example, Year 1 data will be due January 31, 2021.
         (1) Submit accurate Student Data Tables and Expenditure Summaries in conjunction with their OEPM data. Student Data Tables will be used to verify Student Award numbers in OEPM as well as longitudinally track students after the conclusion of the award. Awardees will report the status of longitudinal tracking results annually to the NASA Office of Education. The template for these reports will be provided to the Consortia each year by the Space Grant Program Office and are essential to verifying OEPM data.
         (2) Proposed activities under the Competitive Projects shall be aligned with the respective Mission Directorate for reporting purposes. NOTE: See Table 3: Example Awardee Metrics Supporting Federal, Agency and OSTEM Priorities. NOTE: OSTEM is developing an updated system for award performance. This system should be ready for deployment in time for year 1 reporting, however, in the event that the system is not ready, OSTEM will communicate with awardees about contingency reporting plans.
d) Submit annual progress reports, i.e., annual performance report (APR). Consortia will be given guidelines for the submission of the annual progress reports. In addition to the annual progress report, awardees shall:
   i) Submit an updated milestone chart along for the next performance year
   ii) Submit a signed letter from all new partners or collaborators (to include sub-awards) that are established or awarded after the start of Year One
   iii) Submit a signed Certification of Assurance (see Inside Space Grant for up to date version of this document)
   iv) NOTE: Every effort will be made to streamline the reporting burden for the consortia while facilitating the compliance with Federal and OSTEM reporting requirements by the National Space Grant Office.

e) Within 90 days of the expiration of the project using required report formats, recipients shall:
   i) Submit a final report with summary information from the entire project period of performance. Awardees shall also complete all required reports as requested by the NASA Shared Services Center (NSSC) as listed on the cooperative agreement Required Publications and Reports within the award document.

12) In the event of a Federal Government shut down or unavailability of the Space Grant Program Office and NASA Technical Officer(s), continue the project without interruption to the extent possible.

13) In the event of a PI change, the Consortium shall follow the published process for notifying the Space Grant Program Office (https://www.nasa.gov/offices/education/programs/national/spacegrant/inside-space-grant.html).

14) Participate (at least the PI and/or a designee) in all OSTEM required meetings (e.g., PI meeting).

15) NASA reserves the right to impose additional requirements during the Cooperative Agreement’s period of performance in order to achieve broader Space Grant or NASA objectives.

(b) The terms “award” and “Recipient” mean “cooperative agreement” and “Recipient of cooperative agreement,” respectively, wherever the language appears in terms and conditions included in this agreement.

c) NASA’s ability to participate and perform its collaborative effort under this cooperative agreement is subject to the availability of appropriated funds and nothing in this cooperative agreement commits the United States Congress to appropriate funds therefor.

[End of Term and Condition]

GCAM Appendix D20 Multiple Year Award (Aug 2019)

This is a multiple-year award contingent on the availability of funds, scientific progress of the project, and continued relevance to NASA programs. NASA anticipates continuing support at approximately the following levels:

Second year $685,000.00, Anticipated funding date 05/01/2021.
Third year $685,000.00, Anticipated funding date 05/01/2022.
Fourth year $685,000.00, Anticipated funding date 05/01/2023.

[End of Term and Condition]

GCAM Appendix D21 Incremental Funding (Aug 2019)
(a) Only $760,000.00 of the amount indicated on the face of this award is available for payment and allotted to this award. NASA contemplates making additional allotments of funds during performance of this effort. It is anticipated that these funds will be obligated as appropriated funds become available without any action required by the recipient. The recipient will be given written notification by the NASA Grant Officer.

(b) The recipient agrees to perform work up to the point at which the total amount paid or payable by the Government approximates but does not exceed the total amount actually allotted to this award. NASA is not obligated to reimburse the recipient for the expenditure of amounts in excess of the total funds allotted by NASA to this grant or cooperative agreement. The recipient is not authorized to continue performance beyond the amount allotted to this award.

Special Note—Balance is contingent on availability of funds. The remaining balance to fully fund this year is $0.00.

[End of Term and Condition]

**GCAM Appendix D22 Cost Sharing**

(a) NASA and the recipient will share in providing the resources necessary to perform the award. NASA funding and non-cash contributions (personnel, equipment, facilities, etc.) and the dollar value of the recipient's cash and/or non-cash contribution will be on a 45.5 percent recipient basis.

(b) The funding and non-cash contributions by both parties are represented by the following dollar amounts –

Government Share - $2,815,000.00  
Recipient Share - $2,255,071.00  
Total Amount - $5,070,071.00

(c) Criteria and procedures for allowable and allocable costs of cash and non-cash contributions shall be governed by § 200.306, Cost Sharing or Matching. The applicable Federal cost principles are cited in 2 CFR 200 Subpart E.

(d) The Recipient's share shall not be charged to the Government under this award or under any other contract or award.

[End of Term and Condition]


(a) For purposes of administration of the term and condition entitled “New Technology,” or “Patent Rights” whichever is included, the following named representatives are hereby designated by the Grant Officer to administer such term and condition—

• New Technology Representative  
• Patent Representative
Basic

(b) Reports of reportable items, and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by the term and condition, as well as any correspondence with respect to such matters, should be directed to the New Technology Representative, with notification to the Grant Officer, unless transmitted in response to correspondence or request from the Patent Representative. Inquiries or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This term and condition shall be included in any subaward/subcontract hereunder requiring a “New Technology” term and condition or “Patent Rights—Retention by the Contractor (Short Form)” term and condition unless otherwise authorized or directed by the Grant Officer. The respective responsibilities and authorities of the above named representatives are set forth in the Grants and Cooperative Agreement Manual.

[End of Term and Condition]

GCAM Appendix D30 Access to Research Results (Aug 2019)

ACCESS TO RESEARCH RESULTS

(a) This award is subject to the requirements of the, “NASA Plan: Increasing Access to the Results of Scientific Research,” which covers public access to digital scientific data and peer-reviewed publications. For purposes of this term and condition, the following definitions apply:

1. Awardee: Any recipient of a NASA grant or cooperative agreement, its investigators, and subrecipient (subaward or contract as defined in 2 CFR Part 200.92 and 200.22, respectively) at any level.

2. Final Peer-Reviewed Manuscript: The final text version of a peer-reviewed article disclosing the results of scientific research which is authored or co-authored by the Awardee or funded, in whole or in part, with funds from a NASA award, that includes all modifications from the publishing peer review process, and all graphics and supplemental material prepared by Awardee.

(b) The recipient shall:

1. Comply with their approved Data Management Plan submitted with its proposal, and as modified upon agreement by the recipient and NASA from time to time during the course of the period of performance.

2. Ensure that any Final Peer-Reviewed Manuscript is submitted to the NASA-designated repository, currently the PubMed Central system at http://www.ncbi.nlm.nih.gov/pmc/. NASA will provide instructions for completing the submission process under separate cover. Ensure that the Final Peer-Reviewed Manuscript is submitted to PubMed Central within one year of completion of the peer-review process.

3. Ensure that any publisher’s agreements entered into by an Awardee will allow for the Awardee to comply with these requirements including submission of Final Peer-Reviewed Manuscripts to the NASA-designated repository, as listed in (b)(2), with sufficient rights to permit such repository to use such Final Peer-Reviewed Manuscript in its normal course, including rights to permit users to download XML and plain text formats.

4. Hereby represent and warrant that Awardee has secured for recipient the right to submit the Final Peer-Reviewed Manuscript to the NASA-designated repository for use as set forth herein.

5. Include in annual and final reports a list of Final Peer-Reviewed Manuscripts covered by this term and condition.

[End of Term and Condition]

Reporting Requirements Regarding Sexual Harassment, Other Forms of Harassment, or Sexual Assault (April 9, 2020)
(a) The Principal Investigator (PI) and any Co-Investigator(s) (Co-I) identified on a NASA award are in a position of trust. These individuals must comport themselves in a responsible and accountable manner during the award period of performance, whether at the recipient’s institution, on-line, or at locales such as field sites, facilities, or conferences/workshops. Above all, NASA wishes to assure the safety, integrity, and excellence of the programs and activities it funds.

2) For purposes of this term and condition, the following definitions apply:
   a) Administrative Leave/ Administrative Action: Any temporary/ interim suspension or permanent removal of the PI or Co-I, or any administrative action imposed on the PI or Co-I by the recipient under organizational policies or codes of conduct, statutes, regulations, or executive orders, relating to activities, including but not limited to the following: teaching, advising, mentoring, research, management/ administrative duties, or presence on campus.
   b) Finding/Determination: The final disposition of a matter involving sexual harassment or other form of harassment under organizational policies and processes, to include the exhaustion of permissible appeals exercised by the PI or Co-I, or a conviction of a sexual offense in a criminal court of law.
   c) Other Forms of Harassment: Non-gender or non-sex-based harassment of individuals protected under federal civil rights laws, as set forth in organizational policies or codes of conduct, statutes, regulations, or executive orders.
   d) Sexual harassment: May include but is not limited to gender or sex-based harassment, unwelcome sexual attention, sexual coercion, or creating a hostile environment, as set forth in organizational policies or codes of conduct, statutes, regulations, or executive orders.

3) The recipient is required to report to NASA:
   a) Any finding/determination regarding the PI or any Co-I that demonstrates a violation of the recipient’s policies or codes of conduct, relating to sexual harassment, other forms of harassment, or sexual assault; and/or
   b) If the PI or any Co-I is placed on administrative leave or if any administrative action has been imposed on the PI or any Co-I by the recipient relating to any finding/determination or an investigation of an alleged violation of the recipient’s policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault. Such reporting must be submitted by the Authorized Organizational Representative (AOR) to NASA’s Office of Diversity and Equal Opportunity at https://missionstem.nasa.gov/term-condition-institutional-harassment-discr.html within 10 business days from the date of the finding/determination, or the date of the placement of a PI or Co-I by the recipient on administrative leave or the imposition of an administrative action.

4) Recipient agrees to insert the substance of this term and condition in any subaward/subcontract involving a co-investigator. Recipient will be responsible for ensuring that all reports, including those related to co-investigators, comply with this term and condition.

5) Each report must include the following information:
   a) NASA Award Number;
      a) Name of PI or Co-I being reported;

Type of Report: Select one of the following:
j) Finding/Determination that the reported individual has been found to have violated the recipient’s policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault; or

i) Placement by the recipient of the reported individual on administrative leave or the imposition of any administrative action on the PI or any Co-I by the recipient relating to any finding/determination, or an investigation of an alleged violation of the recipient’s policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault.

The recipient must also provide:

b) A description of the finding/determination and action(s) taken, if any; and/or

c) The reason(s) for, and conditions of placement of the PI or any Co-I on administrative action or administrative leave.

The recipient, at any time, may propose a substitute investigator if it determines the PI or any Co-I may not be able to carry out the funded project or activity and/or abide by the award terms and conditions.

In reviewing the report, NASA will consider, at a minimum, the following factors:

   a. The safety and security of personnel supported by the NASA award;
   b. The overall impact to the NASA-funded activity;
   c. The continued advancement of taxpayer-funded investments in science and scientists; and
   d. Whether the recipient has taken appropriate action(s) to ensure the continuity of science and that continued progress under the funded project can be made.

(f) Upon receipt and review of the information provided in the report, NASA will consult with the AOR, or designee. Based on the results of this review and consultation, the Agency may, if necessary and in accordance with 2 CFR 200.338, assert its programmatic stewardship responsibilities and oversight authority to initiate the substitution or removal of the PI or any Co-I, reduce the award funding amount, or where neither of those previous options is available or adequate, to suspend or terminate the award. Other personnel supported by a NASA award must likewise remain in full compliance with the recipient’s policies or codes of conduct, statutes, regulations or executive orders relating to sexual harassment, other forms of harassment, or sexual assault. With regard to any personnel not in compliance, the recipient must make appropriate arrangements to ensure the safety and security of other award personnel and the continued progress of the funded project. Notification of these actions is not required under this term and condition.

Other personnel supported by a NASA award must likewise remain in full compliance with awardee policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault. With regard to any personnel not in compliance, the awardee must make appropriate arrangements to ensure the safety and security of other award personnel and the continued progress of the funded project. Notification of these actions is not required under this term and condition.
1 If a co-I is affiliated with a subrecipient organization, the AOR of the subrecipient must provide the requisite information directly to NASA and to the recipient. The subrecipient must act in accordance with Title 2 of the Code of Federal Regulations, Section 200.331, Requirements for Pass-Through Entities.

2 Recipient findings/determinations and placement of a PI or Co-I on administrative leave or the imposition of an administrative action must be conducted in accordance with organizational policies and processes. They also must be conducted in accordance with federal laws, regulations, and executive orders.

3 Such report must be provided regardless of whether the behavior leading to the finding/determination, or placement on administrative leave, or the imposition of an administrative action occurred while the PI or Co-I was carrying out award activities.

4 Other individuals involved in the matter must not be included in the report. In the rare circumstance that information regarding a PI or Co-I is subject to the Family Educational and Privacy Act, 20 U.S implementing regulations, 35 C.F.R. Part 99, the recipient shall comply with those requirements.

[End of Term and Condition]
REQUIRED PUBLICATIONS AND REPORTS

NOTE - Reports are valuable to ensure that the NASA Grants and Cooperative Agreement program is efficient and effective. The recipients must keep such records and submit to the responsible NASA official or designee timely, complete, and accurate reports.

The recipient shall submit the publications and reports indicated below:

ACRONYMS
AGO = ADMINISTRATIVE GRANT OFFICER
IPO = INDUSTRIAL PROPERTY OFFICER
NTR = NEW TECHNOLOGY REPRESENTATIVE
CC = CLOSEOUT CONTRACTOR
PO = PATENT COUNSEL OFFICE
FMO = FINANCIAL MANAGEMENT OFFICE
TO = TECHNICAL OFFICER
GO = NASA GRANT OFFICER
UAO = UNIVERSITY AFFAIRS OFFICER
HHS/PMS = HEALTH AND HUMAN SERVICES PAYMENT MANAGEMENT SYSTEM
STIPO = SCIENTIFIC & TECHNICAL INFORMATION PROGRAM OFFICE

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<th>REPORTS</th>
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<th>DISTRIBUTION</th>
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<tr>
<td>Quarterly Federal Cash Transactions Reports (SF 425)</td>
<td>Within 30 days following the end of each quarter of the Federal fiscal year. (Ref. GCAM Appendix D6)</td>
<td>HHS/PMS</td>
</tr>
<tr>
<td>(Required for all Grants and Cooperative except grants and agreements where invoicing is required per the terms and conditions of award)</td>
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</tr>
<tr>
<td>Annual Inventory Report of Federally-Owned Property in Custody of the Recipient (Required for all Grants and Cooperative Agreements, except when a commercial firm.)</td>
<td>No later than October 15 of each year. NOTE: Negative reports are not required. (Ref. GCAM Appendix D7)</td>
<td>FMO, IPO</td>
</tr>
<tr>
<td>Progress Reports (Required for all Grants and Cooperative Agreements; unless period of performance is less than one year.)</td>
<td>Annually, 60 days prior to the anniversary date of the grant/cooperative agreement (except final year). (Ref. GCAM Appendix D2)</td>
<td>TO, GO, NTR</td>
</tr>
<tr>
<td>Disclosure of Subject Inventions/Reportable Items (New Technology Report (NTR) (Required for all Grants and Cooperative Agreements except for those issued solely to support education programs)</td>
<td>Within 2 months after inventor discloses it to recipient. (Ref. GCAM Appendix D8, D23 and D24)</td>
<td>PO, TO, GO, NTR</td>
</tr>
<tr>
<td></td>
<td>eNTR (<a href="http://invention.nasa.gov">http://invention.nasa.gov</a>)</td>
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</tr>
<tr>
<td>Election of Title to a Subject</td>
<td>Within 2 years of disclosure of a</td>
<td>PO, TO, GO</td>
</tr>
<tr>
<td><strong>Invention</strong> <em>(Required for all Grants and Cooperative Agreements)</em></td>
<td>subject invention being elected, except in any case where publication, on sale or public use of the subject invention being elected has initiated the one-year statutory period wherein valid patent protection can still be obtained in the United States, at least 60 days prior to the end of the statutory period. <em>(Ref. GCAM Appendix D8 and D23)</em></td>
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<tr>
<td><strong>Interim New Technology Summary Report (NTSR)</strong> <em>(Required for all Grants and Cooperative Agreements except for those issued solely to support education programs)</em></td>
<td>Every 12 months from the date of the grant/cooperative agreement. <em>(Note: Negative reports are required.)</em> <em>(Ref. GCAM Appendix D8, D23 and D24)</em> eNTR (<a href="http://invention.nasa.gov">http://invention.nasa.gov</a>)</td>
<td>GO, NTR</td>
</tr>
<tr>
<td><strong>Notification of Decision to Forego Patent Protection</strong> <em>(Required for all Grants and Cooperative Agreements)</em></td>
<td>As applicable, not less than 30 days before the expiration of the response period required by the relevant patent office. <em>(Ref. GCAM Appendix D8 and D23)</em></td>
<td>PO, TO, GO</td>
</tr>
<tr>
<td><strong>Utilization of Subject Invention/Reportable Items</strong> <em>(Required for all Grants and Cooperative Agreements except for those issued solely to support education programs)</em></td>
<td>Every 12 months from the date a subject invention is elected. Note: Negative reports are required. <em>(Ref. GCAM Appendix D8 and D23)</em></td>
<td>PO, TO, GO</td>
</tr>
<tr>
<td><strong>Annual NASA Form 1018 Property in the Custody of Contractors</strong> <em>(Required for all Grants and Cooperative Agreements with commercial organizations)</em></td>
<td>Due not later than October 15 of each year. Note: Negative reports are required. <em>(Ref. GCAM Appendix D25)</em></td>
<td>FMO, IPO</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th><strong>FINAL REPORTS</strong></th>
<th><strong>REPORT DUE</strong></th>
<th><strong>RECIPIENT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Final New Technology Summary Report (NTSR)</strong> <em>(Required for all Grants and Cooperative Agreements except for those issued solely to support education programs)</em></td>
<td>Within 90 days after the expiration date of the grant/cooperative agreement. <em>(Note: Negative reports are required.)</em> <em>(Ref. GCAM Appendix D8, D23 and D24)</em> eNTR (<a href="http://invention.nasa.gov">http://invention.nasa.gov</a>)</td>
<td>PO, GO, NTR</td>
</tr>
<tr>
<td><strong>Properly Certified Final Federal Financial Report, SF 425</strong> <em>(Required for all Grants and Cooperative Agreements)</em></td>
<td>Within 90 days after the expiration date of the grant/cooperative agreement. <em>(Ref. GCAM Appendix D6)</em></td>
<td>FMO, GO</td>
</tr>
<tr>
<td><strong>Summary of Research / Education Activity Report</strong> <em>(Required for all Grants and)</em></td>
<td>Within 90 days after the expiration date of the grant/cooperative agreement. <em>(Ref. GCAM)</em></td>
<td>TO, GO, NTR, STIPO</td>
</tr>
</tbody>
</table>
**Cooperative Agreements**

<table>
<thead>
<tr>
<th>Appendix D2</th>
<th>For research related training program grants, the summary of research report is completed by the Student.</th>
</tr>
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</table>

<table>
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<tr>
<th>Final Inventory Report of Federally-Owned Property (Required for all Grants and Cooperative Agreements, except those issued solely for education programs and grants and cooperative agreements with commercial organizations)</th>
<th>Within 60 days after the expiration date of the grant/cooperative agreement. <em>(Ref. GCAM Appendix D7)</em></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Final NASA Form 1018 NASA Property in the Custody of Contractors (Required for Grants and Cooperative Agreements with commercial organizations)</th>
<th>Within 30 days after the expiration of the grant or cooperative agreement. <em>(Ref. GCAM Appendix D25)</em></th>
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</thead>
</table>

CC, IPO, GO

FMO, IPO

*Grants and cooperative agreements with colleges, universities, nonprofit organizations, and small businesses will reference GCAM Appendix D8. Grants and cooperative agreements with large businesses will reference GCAM Appendix D23.*
**SPECIAL CONDITIONS**
**RESEARCH TERMS AND CONDITIONS (RTC)**

For additional information, go to https://www.nsf.gov/awards/managing/rtc.jsp (the National Science Foundation hosts the Federal RTC website).

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<th>Section</th>
<th>Reference</th>
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<tr>
<td>Prior Written Approval (prior approval).</td>
<td>200.407</td>
<td></td>
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<tr>
<td>Use of grant agreements (including fixed amount awards), cooperative agreements, and contracts</td>
<td>200.407(a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in principal investigator (PI), project leader, project partner, or scope of effort.</td>
<td>200.201(b)(5)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Cost sharing or matching</td>
<td>200.407(b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of unrecovered indirect costs, including indirect costs on cost sharing or matching.</td>
<td>200.306(c)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td>Use of current fair market value to determine the value of non-Federal entity donations of services and property for the purposes of cost sharing or matching.</td>
<td>200.306(d)(2)</td>
<td>Waived</td>
<td>Required</td>
</tr>
<tr>
<td>Costs of the fair market value of equipment or other capital assets and fair rental charges for land when the Federal award supports activities that require use of equipment, buildings or land.</td>
<td>200.306(h)(2)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Program Income</td>
<td>200.407(c)</td>
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<tr>
<td>Use of program income during the period of performance (additive method).</td>
<td>200.307(e)(2)</td>
<td>Waived</td>
<td>Waived (1)</td>
</tr>
<tr>
<td>Revision of budget and program plans</td>
<td>200.407(d)</td>
<td></td>
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<tr>
<td>Change in the scope or the objective of the project or program.</td>
<td>200.308(c)(1)(i)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Change in PI/PD specified in the application or Federal award.</td>
<td>200.308(c)(1)(ii)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Disengagement from the project for more than three months, or a 25 percent reduction in time devoted to the project by the approved PI/PD.</td>
<td>200.308(c)(1)(iii)</td>
<td>Required</td>
<td>Required (2)</td>
</tr>
<tr>
<td>Inclusion, unless waived, of costs that require prior approval in accordance with Subpart E -- Cost Principles.</td>
<td>200.308(c)(1)(iv)</td>
<td>Required</td>
<td>Required</td>
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<tr>
<td>Transfer of funds budgeted for participant support costs to other categories of expense.</td>
<td>200.308(c)(1)(v)</td>
<td>Required</td>
<td>Waived (3)</td>
</tr>
<tr>
<td>Subawarding, transferring or contracting out any work under a Federal award. This provision does not apply to the acquisition of supplies, material, equipment or general purpose services.</td>
<td>200.308(c)(1)(vi)</td>
<td>Required</td>
<td>Waived</td>
</tr>
<tr>
<td>Changes in the approved cost-sharing or matching provided by the non-Federal entity.</td>
<td>200.308(c)(1)(vii)</td>
<td>Required</td>
<td>Waived</td>
</tr>
<tr>
<td>Need for additional Federal funding to complete the project.</td>
<td>200.308(c)(1)(viii)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Incur project costs 90 calendar days before the Federal awarding agency makes the award.</td>
<td>200.308(d)(1)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td>Incur project costs more than 90 calendar days pre-award.</td>
<td>200.308(d)(1)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Initiate a one-time extension of the period of performance by up to 12 months.</td>
<td>200.308(d)(2)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td>Subsequent no-cost extension or extension of more than 12 months.</td>
<td>200.308(d)(2)</td>
<td>Required</td>
<td>Required</td>
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<tr>
<td>Carry-forward of unexpended balances to subsequent funding periods.</td>
<td>200.308(d)(3)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td>Transfer amounts budgeted for indirect costs to absorb increases in direct costs, or vice versa.</td>
<td>200.308(d)(4)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td>Reclassification among direct cost categories for Federal awards in which the cumulative amount of such transfers exceeds or is expected to exceed 10 percent of the approved budget.</td>
<td>200.308(e)</td>
<td>Waived</td>
<td>Waived (3)</td>
</tr>
<tr>
<td>Transfer of funds between construction and non-construction activities.</td>
<td>200.308(g)(5)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Real Property</td>
<td>200.407(e)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encumber real property acquired with Federal funds.</td>
<td>200.311(b)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Transfer of title to the Federal awarding agency or to a third party.</td>
<td>200.311(c)(3)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Special arrangements and alterations costs incurred specifically for a Federal award.</td>
<td>200.462(a)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Equipment</td>
<td>200.407(f)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Basic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Encumber equipment acquired with Federal funds.</strong></td>
<td>200.313(c)(1)</td>
<td>Required</td>
<td>Waived</td>
</tr>
<tr>
<td><strong>Fixed amount subawards</strong></td>
<td>200.407(g)</td>
<td>200.332</td>
<td>Waived</td>
</tr>
<tr>
<td>Subawards based on fixed amounts at any dollar amount, provided the subawards meet the requirements for fixed amount awards in 200.201.</td>
<td>200.413(c)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td><strong>Direct Costs</strong></td>
<td>200.407(h)</td>
<td>200.430(b)(1)(ii)</td>
<td>Waived</td>
</tr>
<tr>
<td>Direct charge the salaries of administrative and clerical staff if all conditions in 200.413 are met, excluding 200.413(c)(3).</td>
<td>200.430(b)(2)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td><strong>Compensation -- personal services, paragraph (h)</strong></td>
<td>200.407(i)</td>
<td>200.430(b)(3)</td>
<td>Waived</td>
</tr>
<tr>
<td>Directly charge payments of incidental activities for which supplemental compensation is allowable under written institutional policy (at a rate not to exceed institutional base salary).</td>
<td>200.431(i)(4)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Faculty salary in excess of Institutional Base Salary (IBS).</td>
<td>200.431(i)(5)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Intra-IHE faculty consulting on a Federal award that exceed a faculty member’s base salary.</td>
<td>200.439(b)(1)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td><strong>Compensation -- fringe benefits</strong></td>
<td>200.407(j)</td>
<td>200.439(b)(2)</td>
<td>Waived</td>
</tr>
<tr>
<td>Severance payments to foreign nationals employed by the non-Federal entity outside the US that exceed the amounts customary in the US.</td>
<td>200.440(a)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Severance payments to foreign nationals employed by the non-Federal entity outside the US due to termination of the foreign national as a result of the closing of, or curtailment of activities by, the non-Federal entity in that country.</td>
<td>200.442(a)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td><strong>Entertainment costs</strong></td>
<td>200.407(k)</td>
<td>200.445(b)</td>
<td>Required</td>
</tr>
<tr>
<td>Inclusion of costs of entertainment, including amusement, diversion, and social activities and any associated costs that have a programmatic purpose.</td>
<td>200.447(b)(2)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td><strong>Equipment and other capital expenditures</strong></td>
<td>200.407(l)</td>
<td>200.447(b)(2)</td>
<td>Required</td>
</tr>
<tr>
<td>Direct charge capital expenditures for general purpose equipment.</td>
<td>200.447(b)(2)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Direct charge capital expenditures for buildings and land use.</td>
<td>200.447(b)(3)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Direct charge capital expenditures for special purpose equipment over $5,000.</td>
<td>200.447(b)(4)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Capital expenditures for improvements to land or buildings which materially increase their value or useful life.</td>
<td>200.447(b)(5)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td><strong>Exchange rates</strong></td>
<td>200.407(m)</td>
<td>200.447(b)(6)</td>
<td>Waived</td>
</tr>
<tr>
<td>Exchange rate fluctuations that result in the need for additional Federal funding, or a reduction in the scope of the project.</td>
<td>200.447(b)(7)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td><strong>Fines, penalties, damages and other settlements</strong></td>
<td>200.407(n)</td>
<td>200.447(b)(8)</td>
<td>Waived</td>
</tr>
<tr>
<td>Costs resulting from non-Federal entity violations of, alleged violations of, or failure to comply with, Federal, State, tribal, local or foreign laws and regulations.</td>
<td>200.447(b)(9)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td><strong>Fund raising and investment management costs</strong></td>
<td>200.407(o)</td>
<td>200.447(b)(10)</td>
<td>Waived</td>
</tr>
<tr>
<td>Costs of organized fund raising for the purposes of meeting the Federal program objectives.</td>
<td>200.447(b)(11)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td><strong>Goods or services for personal use</strong></td>
<td>200.407(p)</td>
<td>200.447(b)(12)</td>
<td>Waived</td>
</tr>
<tr>
<td>Costs of housing (e.g. depreciation, maintenance, utilities, furnishings, rent), housing allowances and personal living expenses.</td>
<td>200.447(b)(13)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td><strong>Insurance and indemnification</strong></td>
<td>200.407(q)</td>
<td>200.447(b)(14)</td>
<td>Waived</td>
</tr>
<tr>
<td>Costs of insurance or of contributions to any reserve covering the risk of loss of, or damage to, Federal Government property.</td>
<td>200.447(b)(15)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td><strong>Memberships, subscriptions, and professional activity costs, paragraph (c)</strong></td>
<td>200.407(r)</td>
<td>200.447(b)(16)</td>
<td>Waived</td>
</tr>
<tr>
<td>Costs of membership in any civic or community organization.</td>
<td>200.447(b)(17)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td><strong>Organization costs</strong></td>
<td>200.407(s)</td>
<td>200.447(b)(18)</td>
<td>Waived</td>
</tr>
<tr>
<td>Costs such as incorporation fees, brokers’ fees, fees to promoters, organizers or management consultants, attorneys, accountants, or investment counselor, whether or not employees of the non-Federal entity in connection with establishment or reorganization.</td>
<td>200.447(b)(19)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td><strong>Participant support costs</strong></td>
<td>200.407(t)</td>
<td>200.308(c)(1)(v)</td>
<td>Required</td>
</tr>
<tr>
<td>Transfer of funds budgeted for participant support costs to other categories of</td>
<td>200.447(b)(20)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td>Pre-award costs</td>
<td>200.407(u)</td>
<td></td>
<td></td>
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<tr>
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<td></td>
</tr>
<tr>
<td>Inclusion of allowable pre-award costs.</td>
<td>200.458</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td>Incur project costs 90 calendar days before the Federal awarding agency makes the award.</td>
<td>200.308(d)(1)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
<tr>
<td>Incur project costs more than 90 calendar days pre-award.</td>
<td>200.308(d)(1)</td>
<td>Required</td>
<td>Required</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rearrangement and reconversion costs</th>
<th>200.407(v)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct charge special arrangements and alterations costs incurred specifically for a Federal award.</td>
<td>200.462(a)</td>
<td>Required</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Selling and marketing costs</th>
<th>200.407(w)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs of selling and marketing any products or services of the non-Federal entity (unless allowed under §200.421 Advertising and public relations).</td>
<td>200.467</td>
<td>Required</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Taxes (including Value Added Tax)</th>
<th>200.407(x)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of foreign tax reimbursement for approved activities under the Federal award.</td>
<td>200.470(c)</td>
<td>Required</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Travel costs</th>
<th>200.407(y)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusion of travel costs for officials covered by 200.444 General costs of government.</td>
<td>200.474(a)</td>
<td>Required</td>
</tr>
<tr>
<td>Travel costs for dependents for travel of duration of six months or more.</td>
<td>200.474(c)(2)</td>
<td>Required</td>
</tr>
</tbody>
</table>

* Any of the authorities may be over-ridden by a special term or condition of award.

1. With prior approval, may use to meet cost share requirement.
2. Applies to PIs and co-PIs.
3. Waived unless results in a change of scope.
4. Waived unless total cost share amount is reduced from what was approved in budget.
5. Waived if the cost of equipment is appropriately prorated among the activities to be benefitted.
6. Pertains only to items produced under this award in which the Federal share was used for all or part of the development.
LARC
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Stennis Space Center, MS 39529
 NSSC-Grant-Report@mail.nasa.gov

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NSSC-AccountsPayable@mail.nasa.gov
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NSSC-ContactCenter@mail.nasa.gov
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Fax Number: 866-779-6772

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