

National Aeronautics and Space Administration



**Lunar Cargo Transportation And Landing by Soft Touchdown  
(Lunar CATALYST)  
Capability Development**

**Announcement Number: Lunar-CATALYST-01**

**Release Date: January 16, 2014  
Amendment 1: February 5, 2014**

**Proposals Due: March 17, 2014**

Advanced Exploration Systems Division  
NASA Human Exploration and Operations Mission Directorate

**For Questions Regarding This Announcement:**

**<http://www.nasa.gov/lunarcatalyst>**

# Lunar CATALYST Capability Development

## Lunar-CATALYST-01 Change Log

<u>Version</u>	<u>Description of Changes</u>	<u>Date</u>
Original Release	-----	Jan 16, 2014
Amendment 1	Template 1 in Appendix B was updated; Draft Space Act Agreement Articles 17-29 were re-numbered to correct an administrative error; Typographical error was corrected on Page 5 (last paragraph, "proposals")	Feb 5, 2014

## 1. INTRODUCTION

### 1.1 Purpose

Private-sector investment in technologies intended to enable commercial lunar activities has been increasing. As such, the National Aeronautics and Space Administration (NASA) believes that commercial lunar transportation represents a new area for commercial opportunity. NASA anticipates that industry will eventually be able to provide commercial cargo transportation services to the lunar surface to both public and private customers. In addition to supporting commercial activities on the Moon, robotic lunar lander capabilities would also enable science, exploration, and other missions of interest to the larger scientific and academic communities. By employing partnerships with industry to develop robotic lunar lander capabilities, NASA is committed to facilitating the commercial use of robotic lunar landers and related space transportation services.

### 1.2 Objective

NASA is charged with “seek[ing] and encourag[ing], to the maximum extent possible, the fullest commercial use of space” (51 U.S.C. §20112). Through its “Lunar Cargo Transportation and Landing by Soft Touchdown” (Lunar CATALYST) initiative, NASA intends to encourage the development of U.S. private-sector robotic lunar landers capable of successfully delivering small and medium class payloads (as described below) to the lunar surface using U.S. commercial launch capabilities. NASA anticipates entering into one or more no-funds-exchanged Space Act Agreements (SAAs) with U.S. private-sector partners as a result of this Announcement. Under the Lunar CATALYST initiative, NASA intends to select partner(s) that demonstrate a likelihood of successfully completing development of a commercially-viable lunar surface cargo capability by showing achievable approaches for lunar lander development and performance. Proposals limited to development of subsystems or components would not meet the objectives of this Announcement. These activities must be supported by realistic financial strategies to support development, demonstration and eventual commercial application.

Specifically, NASA seeks to facilitate the development of one or more robotic lunar lander capabilities that collectively:

- can deliver small (30 to 100 kg) and medium (250 to 500 kg) class payloads to the lunar surface, and
- can be integrated with U.S. commercial launch capabilities.

### 1.3 Approach

NASA envisions enabling the development of robotic lunar landing capabilities by providing the following resources as identified in the proposal:

- **NASA Civil Servant Technical Expertise:** NASA civil servants could provide lessons learned and feedback on lander design, development, and testing. NASA will not provide or develop any designs under the SAA.

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- **Facilities:** NASA can provide industry partners, at no cost, access to testing facilities such as thermal vacuum chambers, vertical flight test beds, clean rooms, etc., on a non-interference basis.
- **Equipment:** NASA may loan equipment (non-expendable hardware items) to industry partners, in accordance with NPD 4200.1 and NPR 4200.1.
- **Software:** NASA may be able to contribute specific software elements for the development and testing of the lander.

The actual number of SAAs will depend upon the strength of proposals and NASA's available resources. NOTE: Government resources are available only when not reasonably available on a commercial basis

NASA does not currently have a requirement for commercially-provided lunar lander or lunar cargo transportation services.

## 2. INFORMATION FOR PARTICIPANTS

### 2.1 General Information

**Agency:** National Aeronautics and Space Administration

**Announcement Title:** Lunar CATALYST Capability Development

**Responsible Office:** Advanced Exploration Systems Division  
Human Exploration and Operations Mission Directorate  
NASA Headquarters  
Washington, DC 20546

**Blackout:** A blackout notice will be issued upon publication of this Announcement.

**Proposal Due Date:** March 17, 2014, 4:00 pm EDT  
Note: Proposed NASA Contributions forms must be submitted by February 10, 2014, 4:00 pm EST, per procedures described in Section 3.2 and Appendix B of this Announcement. NASA will conduct a process to certify the viability of the proposed NASA contributions, and will provide feedback to Respondents regarding such certification by Feb 28, 2014. For forms received after February 10, 2014, 4:00 pm EST, NASA will provide feedback on a best-effort basis.

**Proposal Submittals:** Proposals shall be submitted electronically in Adobe pdf format to the Point of Contact email address below. Hardcopies will not be accepted.

**Point of Contact:** All questions shall be directed to the following NASA official:  
Mr. Nantel Suzuki  
Program Executive, Robotic Lunar Lander

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Human Exploration and Operations Mission Directorate  
NASA Headquarters  
Email: [hq-lander@mail.nasa.gov](mailto:hq-lander@mail.nasa.gov)

**Award Information:** NASA anticipates entering into no-funds-exchanged SAAs with one or more partners. NASA's intent is to announce its selected partner(s) by April of 2014, and execute the SAA(s) by May 2014.

**Website:** <http://www.nasa.gov/lunarcatalyst>

NASA will not issue paper copies of this Announcement. The Announcement, related documents, and other information may be obtained and downloaded from the above website. Proposers are encouraged to refer regularly to this site for updates and other information. Responses to submitted questions concerning the Announcement will be posted periodically on this website.

A pre-proposal teleconference will be scheduled for January 27, 2014, and proposers will have an opportunity to ask questions about this Announcement. The teleconference date and related information will be posted on the above website.

### 2.2 Eligible Participants

U.S. private-sector entities are eligible to submit proposals in response to this Announcement. NASA will not consider proposals that do not include a domestic entity as the lead proposer. U.S. federal, state, and local government entities, including National Laboratories, Federally Funded Research and Development Centers, and NASA Centers are not eligible to participate in proposals under this Announcement.

## 3 INSTRUCTIONS FOR PROPOSALS

### 3.1 Proposal Submittal

Proposals must comply with the following requirements.

<u>Proposal Section</u>	<u>Page Limitations</u>
Cover Page	1
Title Page	1
Executive Summary (Section I)	1
Proposal detail (Sections II-VII)	20
Attachments	No Limit

#### *Attachments*

- A. Proposed NASA Contributions
- B. Supporting Financial Information

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- C. Resumes
- D. Draft Space Act Agreement

A page is defined as one side of a sheet, 8 1/2" x 11", with at least one inch margins on all sides, using not smaller than 12 point type, with the exception of tables and figures, which may use 8 point type. Foldouts count as an equivalent number of 8 1/2" x 11" pages. Pages in excess of the page limits for each section will not be evaluated.

Proposals received by the government after the published date and time for receipt will not be accepted.

### 3.2 Proposal Content

Respondents must provide enough detail in the proposal for NASA to make informed assessments against the criteria in section 4.3 of this Announcement.

All proposals must contain the following information organized in the following outline format:

**Cover Page:** Include the title and number of this Announcement.

**Title Page:** Include any Notice of Restriction on Use and Disclosure of Proposal Information. An optional graphic image may be included. Also include the following contact information:

- Entity name and address;
- Point of Contact name, title, e-mail address, and phone number.

**Section I:** Executive Summary: Describe the proposal's prominent and distinguishing features.

**Section II:** Proof of Eligibility: Provide information showing that the Respondent is an eligible participant as stipulated in Section 2.2 of this Announcement.

**Section III:** Capability Performance Goals: Describe the targeted technical performance goals for the proposed robotic lunar lander capability, including:

- amount of payload mass to be delivered to the lunar surface;
- areas of the lunar surface that can be reached (e.g. low-latitudes, poles, far side);
- degree of operational autonomy;
- degree of precision landing capability;
- capability to land on hazardous terrain;
- ability to survive or operate in lunar nighttime thermal conditions;
- mission duration/longevity;
- payload interfaces (e.g. communications, thermal, and power);
- payload deployment capability;
- compatibility with various payload types (e.g. rovers and lunar ascent vehicles); and

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- compatibility with U.S. commercial launch services.

**Section IV:** Technical Approach: Describe how the proposed robotic lunar lander capability described in Section III will be developed (and demonstrated, if applicable) including:

- a schedule with key development gates and performance milestones representing the progress of significant technical and financial events in the Respondent's effort.;
- technical risks and mitigation plans;
- testing and demonstration plans;
- key resources required (human and physical), including those already developed or acquired; and
- significant external technical dependencies, including a general description of the proposed NASA contributions (details to be listed in a separate attachment).

**Section V:** Financial Plan Supporting Development: Describe the financial requirements for developing the proposed robotic lunar lander capability described in Section III, including:

- all sources of equity and debt financing, and sources of revenue;
- business partnerships required;
- level of current and planned financial commitments supporting the proposed efforts, including any third party financing required; and
- business plans for existing efforts and how they will contribute to this proposed effort;

**Section VI:** Commercialization Strategy: Describe the long-term plan for operating a sustained and profitable commercial enterprise after completion of capability development, including:

- the long-term business and market strategy for providing lunar cargo transportation services;
- non-Government market potential for providing robotic landers or lunar transportation services and what products and services will be provided;
- a roadmap of essential activities to bring the product to market beyond the development phase, including any reliance on U.S. Government activities; and
- the nature of missions and customers for the proposed services and how their requirements will be met, including projected number of missions and anticipated growth rates.

### *Attachments*

#### **A. Proposed NASA Contributions:**

Communications with NASA for the purpose of confirming the viability of proposed NASA contributions may continue during the Lunar CATALYST blackout period, but must be limited to the following Point of Contact: Greg Chavers ([greg.chavers@nasa.gov](mailto:greg.chavers@nasa.gov)). During the competition period, Respondents may not request, and NASA will not provide, assistance in preparing Lunar CATALYST proposals. Respondents shall provide the following information:

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- A list of proposed NASA contributions to development of the robotic lunar lander capability, using Template 1 in Appendix B of this Announcement. The list may include NASA technical expertise, test facilities, equipment loans, and software. Respondents should submit Proposed NASA Contributions forms by the due date established in Section 2.1 of this announcement to [greg.chavers@nasa.gov](mailto:greg.chavers@nasa.gov).
- NASA certification letter. NASA will assess the list of proposed NASA contributions, and if appropriate, will provide a certification letter, per the schedule documented in Section 2.1 of this Announcement. This letter shall be included in the submitted proposal.

### **B. Supporting Financial Information:**

Provide supporting information, consistent with the business plan and long-term business and market strategy, including:

- An Income Statement for the years 2014-2019, using Template 2 in Appendix B.
- Investor term sheets and contact information for financing sources.
- Letters of support or intent from non-NASA customers.

### **C. Resumes:**

Resumes may be included for key personnel. In general, resumes should be limited to no more than 2 pages each.

### **D. Draft Space Act Agreement**

The Respondent shall provide a proposed CATALYST SAA using the Draft Space Act Agreement template included in Appendix A of this Announcement. Any proposed changes to the Draft Space Act Agreement template by the Respondent shall be highlighted and rationale provided for the proposed change.

## **4 PROPOSAL EVALUATION AND SELECTION**

NASA reserves the right to select for negotiations all, some, or none of the proposals it receives in response to this Announcement.

### **4.1 Process**

#### **4.1.1 Compliance Check**

All proposals will be screened to evaluate whether they comply with the eligibility criteria (Section 2.2) and proposal requirements (Section 3) of this Announcement. Proposals that do not comply may be declared noncompliant and rejected without further review.

#### **4.1.2 Evaluation**

A Participant Evaluation Panel will evaluate proposals deemed compliant according to the evaluation criteria described in Section 4.3. NASA may request clarification of a specific point or points in a proposal. Such a request and the Respondent's response shall be in writing.



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After evaluating each proposal, NASA will compare the results as part of a tradeoff analysis. The purpose of this tradeoff analysis is to select one or more approaches that best meets Lunar CATALYST's objectives, as described in Section 1.2.

NASA may select a partner(s) based on initial proposal submissions. Therefore, Respondents should submit their best proposal in response to this Announcement. At its discretion, NASA may enter into due diligence with those companies whose proposals were most favorably evaluated. Due diligence may involve questions about the business, technical, and financial aspects of the proposals, requirements for NASA involvement, and any exceptions made to the draft SAA. If due diligence is conducted, proposers will be provided the opportunity to submit proposal updates.

### **4.1.3 Selection and Award**

Upon selection, final Space Act Agreement terms and conditions will be negotiated. Activities under the partnership will commence after the parties execute the SAA.

## **4.2 Personnel**

NASA may use contractor support personnel to provide technical, business, and investment expertise when evaluating proposals. Any support contractor involved in the evaluation process will be free of conflicts of interest, will be bound by appropriate non-disclosure agreements to protect proprietary and competition sensitive information, and must have accepted limitations on future contracting.

## **4.3 Evaluation Criteria**

NASA will use the following evaluation factors:

### Factor 1: Capability Performance Goals

The Government will evaluate the suitability of the technical capability proposed to be developed for consistency with the commercial opportunities identified in the proposal.

### Factor 2: Technical Approach

The Government will evaluate the overall merit, rationale, feasibility, quality of human and technical resources, and suitability of the proposed effort or concept and its relevance to providing robotic lander services to the Moon. Highest priority will be placed on a technical approach or concept that will provide a technically credible robotic lunar lander capability.

### Factor 3: Financial Plan Supporting Development

The Government will evaluate the overall merit, rationale, and feasibility of Respondent's Financial Plan Supporting Development

### Factor 4: Commercialization Strategy

The Government will evaluate the overall merit, rationale, and feasibility of Respondent's Commercialization Strategy.

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### Factor 5: Draft Space Act Agreement

The Government will evaluate any exceptions to the draft Space Act Agreement against the potential impact to the Government's objective and the potential enhancement of future commercial opportunities.

In addition, NASA reserves the right to assess information outside the proposal as it relates to the evaluation criteria stated above.

**APPENDIX A: DRAFT SPACE ACT AGREEMENT**

SPACE ACT AGREEMENT  
BETWEEN  
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
AND ABC CO.  
**FOR LUNAR CATALYST**

ARTICLE 1. AUTHORITY AND PARTIES

In accordance with the National Aeronautics and Space Act (51 U.S.C. § 20113), this Agreement is entered into by the National Aeronautics and Space Administration, located at 300 E Street SW, Washington, DC 20546 (hereinafter referred to as "NASA") and ABC Co., located at 123, Anywhere, ST 12345 (hereinafter referred to as "Partner" or "test"). NASA and Partner may be individually referred to as a "Party" and collectively referred to as the "Parties."

ARTICLE 2. PURPOSE

Through its "Lunar Cargo Transportation and Landing by Soft Touchdown" (Lunar CATALYST) initiative, NASA intends to encourage the development of U.S. private-sector robotic lunar landers capable of successfully delivering small (30 to 100 kg) and medium (250 to 500 kg) class payloads to the lunar surface using U.S. commercial launch capabilities.

ARTICLE 3. RESPONSIBILITIES

A. NASA will use reasonable efforts to:

Provide internal coordination of access to NASA resources as described below:

- **TBD**

B. Partner will use reasonable efforts to:

**TO BE COMPLETED PRIOR TO EXECUTION**

ARTICLE 4. SCHEDULE AND MILESTONES

The planned major milestones for the activities defined in the "Responsibilities" Article are as follows:

**PROVIDED BY RESPONDENT PRIOR TO EXECUTION**

ARTICLE 5. FINANCIAL OBLIGATIONS

There will be no transfer of funds between the Parties under this Agreement and each Party will fund its own participation. All activities under or pursuant to this Agreement are subject to the availability of funds, and no provision of this Agreement shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, (31 U.S.C. § 1341).

ARTICLE 6. PRIORITY OF USE

Any schedule or milestone in this Agreement is estimated based upon the Parties' current understanding of the projected availability of NASA goods, services, facilities, or equipment. In the event that NASA's projected availability changes, Partner shall be given reasonable notice of that change, so that the schedule and milestones may be adjusted accordingly. The Parties agree that NASA's use of the goods, services, facilities, or equipment shall have priority over the use planned in this Agreement. Should a conflict arise, NASA in its sole discretion shall determine whether to exercise that priority. Likewise, should a conflict arise as between two or more non-NASA Partners, NASA, in its sole discretion, shall determine the priority as between those Partners. This Agreement does not obligate NASA to seek alternative government property or services under the jurisdiction of NASA at other locations.

ARTICLE 7. NONEXCLUSIVITY

This Agreement is not exclusive; accordingly, NASA may enter into similar agreements for the same or similar purpose with other private or public entities.

ARTICLE 8. LIABILITY AND RISK OF LOSS

A. Each Party hereby waives any claim against the other Party, employees of the other Party, the other Party's Related Entities (including but not limited to contractors and subcontractors at any tier, grantees, investigators, customers, users, and their contractors or subcontractor at any tier), or employees of the other Party's Related Entities for any injury to, or death of, the waiving Party's employees or the employees of its Related Entities, or for damage to, or loss of, the waiving Party's property or the property of its Related Entities arising from or related to activities conducted under this Agreement, whether such injury, death, damage, or loss arises through negligence or otherwise, except in the case of willful misconduct.

B. Each Party further agrees to extend this cross-waiver to its Related Entities by requiring them, by contract or otherwise, to waive all claims against the other Party, Related Entities of the other Party, and employees of the other Party or of its Related Entities for injury, death, damage, or loss arising from or related to activities conducted under this Agreement. Additionally, each Party shall require that their Related Entities extend this cross-waiver to their Related Entities by requiring them, by contract or otherwise, to waive all claims against the other Party, Related Entities of the other Party, and employees of the other Party or of its Related Entities for injury, death, damage, or loss arising from or related to activities conducted under this Agreement.

ARTICLE 9. LIABILITY AND RISK OF LOSS - PRODUCT LIABILITY

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With respect to products or processes resulting from a Party's participation in an SAA, each Party that markets, distributes, or otherwise provides such product, or a product designed or produced by such a process, directly to the public will be solely responsible for the safety of the product or process.

### ARTICLE 10. INTELLECTUAL PROPERTY RIGHTS - DATA RIGHTS

#### A. General

1. "Related Entity" as used in this Data Rights Article means a contractor, subcontractor, grantee, or other entity having a legal relationship with NASA or Partner that is assigned, tasked, or contracted to perform activities under this Agreement.
2. "Data" means recorded information, regardless of form, the media on which it is recorded, or the method of recording.
3. "Proprietary Data" means Data embodying trade secrets developed at private expense or commercial or financial information that is privileged or confidential, and that includes a restrictive notice, unless the Data is:
  - a. known or available from other sources without restriction;
  - b. known, possessed, or developed independently, and without reference to the Proprietary Data;
  - c. made available by the owners to others without restriction; or
  - d. required by law or court order to be disclosed.
4. Data exchanged under this Agreement is exchanged without restriction except as otherwise provided herein.
5. Notwithstanding any restrictions provided in this Article, the Parties are not restricted in the use, disclosure, or reproduction of Data provided under this Agreement that meets one of the exceptions in 3., above. If a Party believes that any exceptions apply, it shall notify the other Party before any unrestricted use, disclosure, or reproduction of the Data.
6. The Parties will not exchange preexisting Proprietary Data under this Agreement unless authorized herein or in writing by the owner.
7. If the Parties exchange Data having a notice that the Receiving Party deems is ambiguous or unauthorized, the Receiving Party shall tell the Providing Party. If the notice indicates a restriction, the Receiving Party shall protect the Data under this Article unless otherwise directed in writing by the Providing Party.
8. The Data rights herein apply to the employees and Related Entities of Partner. Partner shall ensure that its employees and Related Entity employees know about and are bound by the obligations under this Article.

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9. Disclaimer of Liability: NASA is not restricted in, or liable for, the use, disclosure, or reproduction of Data without a restrictive notice under paragraphs A.3., B. or H. of this Article or for Data Partner gives, or is required to give, the U.S. Government without restriction.

10. Partner may use the following or a similar restrictive notice under paragraphs A.3., B. and H. of this Article.

### **Proprietary Data Notice**

The data herein include Proprietary Data and are restricted under the Data Rights provisions of Lunar CATALYST Space Act Agreement No. [provide applicable identifying information].

Partner should also mark each page containing Proprietary Data with the following or a similar legend: “Proprietary Data – Use and Disclose Only under the Notice on the Title or Cover Page.”

#### **B. Data First Produced by Partner Under this Agreement**

If Data first produced by Partner or its Related Entities under this Agreement is given to NASA, and the Data is Proprietary Data, and it includes a restrictive notice, NASA will use reasonable efforts to protect it. The Data will be disclosed and used (under suitable protective conditions) only in the performance of this Agreement.

#### **C. Data First Produced by NASA Under this Agreement**

If Partner requests that Data first produced by NASA or its Related Entities under this Agreement be protected, and NASA determines it would be Proprietary Data if obtained from Partner, NASA will mark it with a restrictive notice and use reasonable efforts to protect it for five (5) years. During this restricted period the Data may be disclosed and used (under suitable protective conditions) in the performance of this Agreement, and thereafter for any purpose. Neither party shall disclose such Data without the other’s written approval during the restricted period. The restrictions placed on NASA do not apply to Data disclosing a NASA owned invention for which patent protection is being considered.

#### **D. Publication of Results**

The National Aeronautics and Space Act (51 U.S.C. § 20112) requires NASA to provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof. As such, NASA may publish unclassified and non-Proprietary Data resulting from work performed under this Agreement. The Parties will coordinate publication of results allowing a reasonable time to review and comment.

#### **E. Data Disclosing an Invention**

If the Parties exchange Data disclosing an invention for which patent protection is being considered, and the furnishing Party identifies the Data as such when providing it to the

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Receiving Party, the Receiving Party shall withhold it from public disclosure for a reasonable time (one (1) year unless otherwise agreed or the Data is restricted for a longer period herein).

### F. Copyright

Data exchanged with a copyright notice and no indication of restriction under paragraphs A.3., B, C, or H of this Article (i.e., Data has no restrictive notice) is presumed to be published. The following royalty-free licenses apply.

1. If indicated on the Data that it was produced outside of this Agreement, it may be reproduced, distributed, and used to prepare derivative works only for carrying out the Receiving Party's responsibilities under this Agreement.

2. Data without the indication of 1. is presumed to be first produced under this Agreement. Except as otherwise provided in paragraph E. of this Article, and in the Invention and Patent Rights Article of this Agreement for protection of reported inventions, the Data may be reproduced, distributed, and used to prepare derivative works for any purpose.

### G. Data Subject to Export Control

Whether or not marked, technical data subject to the export laws and regulations of the United States provided to Partner under this Agreement must not be given to foreign persons or transmitted outside the United States without proper U.S. Government authorization.

### H. Handling of Background, Third Party Proprietary, and Controlled Government Data

1. NASA or Partner (as Disclosing Party) may provide the other Party or its Related Entities (as Receiving Party):

a. Proprietary Data developed at Disclosing Party's expense outside of this Agreement (referred to as Background Data);

b. Proprietary Data of third parties that Disclosing Party has agreed to protect or is required to protect under the Trade Secrets Act (18 U.S.C. § 1905) (referred to as Third Party Proprietary Data); and

c. U.S. Government Data, including software and related Data, Disclosing Party intends to control (referred to as Controlled Government Data).

2. All Background, Third Party Proprietary and Controlled Government Data provided by Disclosing Party to Receiving Party shall be marked by Disclosing Party with a restrictive notice and protected by Receiving Party in accordance with this Article.

3. Disclosing Party provides the following Data to Receiving Party. The lists below may not be comprehensive, are subject to change, and do not supersede any restrictive notice on the Data.

a. Background Data: **TO BE COMPLETED PRIOR TO EXECUTION**

b. Third Party Proprietary Data: **TO BE COMPLETED PRIOR TO EXECUTION**

c. Controlled Government Data: **TO BE COMPLETED PRIOR TO EXECUTION**

d. NASA software and related Data will be provided to Partner under a separate Software Usage Agreement (SUA). Partner shall use and protect the related Data in accordance with this Article. Unless the SUA authorizes retention, or Partner enters into a license under 37 C.F.R. Part 404, the related Data shall be disposed of as NASA directs: [*name and NASA case number of software*]. **TO BE COMPLETED PRIOR TO EXECUTION**

4. For Data with a restrictive notice and Data identified in this Agreement, Receiving Party shall:

- a. Use, disclose, or reproduce the Data only as necessary under this Agreement;
- b. Safeguard the Data from unauthorized use and disclosure;
- c. Allow access to the Data only to its employees and any Related Entity requiring access under this Agreement;
- d. Except as otherwise indicated in 4.c., preclude disclosure outside Receiving Party's organization;
- e. Notify its employees with access about their obligations under this Article and ensure their compliance, and notify any Related Entity with access about their obligations under this Article; and
- f. Dispose of the Data as Disclosing Party directs.

I. Oral and visual information

If Partner discloses Proprietary Data orally or visually, NASA will have no duty to restrict, or liability for disclosure or use, unless Partner:

1. Orally informs NASA before initial disclosure that the Data is Proprietary Data, and
2. Reduces the Data to tangible form with a restrictive notice as required by paragraphs A.3., B, and H of this Article, and gives it to NASA within ten (10) calendar days after disclosure.

ARTICLE 11. INTELLECTUAL PROPERTY RIGHTS - INVENTION AND PATENT RIGHTS

A. General

1. NASA has determined that 51 U.S.C. § 20135(b) does not apply to this Agreement. Therefore, title to inventions made (conceived or first actually reduced to practice) under this Agreement remain with the respective inventing party(ies). No invention or patent rights are exchanged or granted under this Agreement, except as provided herein.

2. "Related Entity" as used in this Invention and Patent Rights Article means a contractor, subcontractor, grantee, or other entity having a legal relationship with NASA or Partner assigned, tasked, or contracted with to perform activities under this Agreement.



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3. The invention and patent rights herein apply to employees and Related Entities of Partner. Partner shall ensure that its employees and Related Entity employees know about and are bound by the obligations under this Article.

B. NASA Inventions NASA will use reasonable efforts to report inventions made under this Agreement by its employees. Upon request, NASA will use reasonable efforts to grant Partner, under 37 C.F.R. Part 404, a negotiated license to any NASA invention made under this Agreement. This license is subject to paragraph E.1. of this Article.

C. NASA Related Entity Inventions NASA will use reasonable efforts to report inventions made under this Agreement by its Related Entity employees, or jointly between NASA and Related Entity employees, where NASA has the right to acquire title. Upon request, NASA will use reasonable efforts to grant Partner, under 37 C.F.R. Part 404, a negotiated license to any of these inventions where NASA has acquired title. This license is subject to paragraph E.2. of this Article.

### D. Joint Inventions with Partner

The Parties will use reasonable efforts to report, and cooperate in obtaining patent protection on, inventions made jointly between NASA employees, Partner employees, and employees of either Party's Related Entities. Upon timely request, NASA may, at its sole discretion and subject to paragraph E. of this Article:

1. refrain from exercising its undivided interest inconsistently with Partner's commercial business; or
2. use reasonable efforts to grant Partner, under 37 C.F.R. Part 404, an exclusive or partially exclusive negotiated license.

### E. Rights to be Reserved in Partner's License

Any license granted Partner under paragraphs B., C., or D. of this Article is subject to the following:

1. For inventions made solely or jointly by NASA employees, NASA reserves the irrevocable, royalty-free right of the U.S. Government to practice the invention or have it practiced on behalf of the United States or on behalf of any foreign government or international organization pursuant to any existing or future treaty or agreement with the United States.
2. For inventions made solely or jointly by employees of a NASA Related Entity, NASA reserves the rights in 1. above, and a revocable, nonexclusive, royalty-free license retained by the Related Entity under 14 C.F.R. § 1245.108 or 37 C.F.R. § 401.14 (e).

### F. Protection of Reported Inventions

For inventions reported under this Article, the Receiving Party shall withhold all invention reports or disclosures from public access for a reasonable time (1 year unless otherwise agreed or unless restricted longer herein) to facilitate establishment of patent rights.

### G. Patent Filing Responsibilities and Costs

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1. The invention and patent rights herein apply to any patent application or patents covering an invention made under this Agreement. Each Party is responsible for its own costs of obtaining and maintaining patents covering sole inventions of its employees. The Parties may agree otherwise, upon the reporting of any invention (sole or joint) or in any license granted.

2. Unless the Parties agree on an additional or more restrictive notice, Partner shall include the following in patent applications for an invention made jointly between NASA employees, its Related Entity employees and Partner employees: The invention described herein may be manufactured and used by or for the U.S. Government without the payment of royalties thereon or therefore. [Note: Partner should be informed that it can locate NASA technology available for licensing by visiting the following website address – <http://technology.nasa.gov>.]

### ARTICLE 12. USE OF NASA NAME AND EMBLEMS

#### A. NASA Name and Initials

Partner shall not use “National Aeronautics and Space Administration” or “NASA” in a way that creates the impression that a product or service has the authorization, support, sponsorship, or endorsement of NASA, which does not, in fact, exist. Except for releases under the “Release of General Information to the Public and Media” Article, Partner must submit any proposed public use of the NASA name or initials (including press releases and all promotional and advertising use) to the NASA Associate Administrator for the Office of Communications or designee (“NASA Communications”) for review and approval. Approval by NASA Office of Communications shall be based on applicable law and policy governing the use of the NASA name and initials. B. NASA Emblems Use of NASA emblems (i.e., NASA Seal, NASA Insignia, NASA logotype, NASA Program Identifiers, and the NASA Flag) is governed by 14 C.F.R. Part 1221. Partner must submit any proposed use of the emblems to NASA Communications for review and approval.

### ARTICLE 13. RELEASE OF GENERAL INFORMATION TO THE PUBLIC AND MEDIA

NASA or Partner may, consistent with Federal law and this Agreement, release general information regarding its own participation in this Agreement as desired.

### ARTICLE 14. DISCLAIMER OF WARRANTY

Goods, services, facilities, or equipment provided by NASA under this Agreement are provided “as is.” NASA makes no express or implied warranty as to the condition of any such goods, services, facilities, or equipment, or as to the condition of any research or information generated under this Agreement, or as to any products made or developed under or as a result of this Agreement including as a result of the use of information generated hereunder, or as to the merchantability or fitness for a particular purpose of such research, information, or resulting product, or that the goods, services, facilities or equipment provided will accomplish the intended results or are safe for any purpose including the intended purpose, or that any of the above will not interfere with privately-owned rights of others. Neither the government nor its contractors shall be liable for special, consequential or incidental damages attributed to such equipment, facilities, technical information, or services provided under this Agreement or such

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research, information, or resulting products made or developed under or as a result of this Agreement.

### ARTICLE 15. PRODUCTS LIABILITY

A. With respect to products or processes resulting from a Party's participation this Agreement, each Party that markets, distributes, or otherwise provides such product, or a product designed or produced by such a process, directly to the public will be solely responsible for the safety of the product or process.

B. In the event the U.S. Government incurs any liability based upon Partner's, or Partner's Related Entity's, use or commercialization of products or processes resulting from a Party's participation under this Agreement, Partner agrees to indemnify and hold the U.S. Government harmless against such liability, including costs and expenses incurred by the U.S. Government in defending against any suit or claim for such liability.

### ARTICLE 16. DISCLAIMER OF ENDORSEMENT

NASA does not endorse or sponsor any commercial product, service, or activity. NASA's participation in this Agreement or provision of goods, services, facilities or equipment under this Agreement does not constitute endorsement by NASA. Partner agrees that nothing in this Agreement will be construed to imply that NASA authorizes, supports, endorses, or sponsors any product or service of Partner resulting from activities conducted under this Agreement, regardless of the fact that such product or service may employ NASA-developed technology.

### ARTICLE 17. COMPLIANCE WITH LAWS AND REGULATIONS

A. The Parties shall comply with all applicable laws and regulations including, but not limited to, safety; security; export control; environmental; and suspension and debarment laws and regulations. Access by a Partner to NASA facilities or property, or to a NASA Information Technology (IT) system or application, is contingent upon compliance with NASA security and safety policies and guidelines including, but not limited to, standards on badging, credentials, and facility and IT system/application access.

B. With respect to any export control requirements:

1. The Parties will comply with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 C.F.R. Parts 120 through 130, and the Export Administration Regulations (EAR), 15 C.F.R. Parts 730 through 799, in performing work under this Agreement or any Annex to this Agreement. In the absence of available license exemptions or exceptions, the Partner shall be responsible for obtaining the appropriate licenses or other approvals, if required, for exports of hardware, technical data and software, or for the provision of technical assistance.

2. The Partner shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of work under this Agreement or any Annex under

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this Agreement, including instances where the work is to be performed on-site at NASA and where the foreign person will have access to export-controlled technical data or software.

3. The Partner will be responsible for all regulatory record-keeping requirements associated with the use of licenses and license exemptions or exceptions.

4. The Partner will be responsible for ensuring that the provisions of this Article apply to its Related Entities.

C. With respect to suspension and debarment requirements:

1. The Partner hereby certifies, to the best of its knowledge and belief, that it has complied, and shall comply, with 2 C.F.R. Part 180, Subpart C, as supplemented by 2 C.F.R. Part 1880, Subpart C.

2. The Partner shall include language and requirements equivalent to those set forth in subparagraph C.1., above, in any lower-tier covered transaction entered into under this Agreement.

### ARTICLE 18. TERM OF AGREEMENT

This Agreement becomes effective upon the date of the last signature below (“Effective Date”) and shall remain in effect until the completion of all obligations of both Parties hereto, or three years from the Effective Date, whichever comes first.

### ARTICLE 19. RIGHT TO TERMINATE

Either Party may unilaterally terminate this Agreement by providing thirty (30) calendar days written notice to the other Party.

### ARTICLE 20. CONTINUING OBLIGATIONS

The rights and obligations of the Parties that, by their nature, would continue beyond the expiration or termination of this Agreement, e.g., “Liability and Risk of Loss” and “Intellectual Property Rights” related clauses shall survive such expiration or termination of this Agreement.

### ARTICLE 21. POINTS OF CONTACT

The following personnel are designated as the Points of Contact between the Parties in the performance of this Agreement.

Points of Contact

NASA  
Name and Title  
Address  
Phone:  
Email:

**INSERT RESPONDENT’S POINT OF  
CONTACT FOR THIS AGREEMENT**

ARTICLE 22. DISPUTE RESOLUTION

Except as otherwise provided in the Article entitled “Priority of Use,” the Article entitled “Intellectual Property Rights – Invention and Patent Rights” (for those activities governed by 37 C.F.R. Part 404), and those situations where a pre-existing statutory or regulatory system exists (e.g., under the Freedom of Information Act, 5 U.S.C. § 552), all disputes concerning questions of fact or law arising under this Agreement shall be referred by the claimant in writing to the appropriate person identified in this Agreement as the “Points of Contact.” The persons identified as the “Points of Contact” for NASA and the Partner will consult and attempt to resolve all issues arising from the implementation of this Agreement. If they are unable to come to agreement on any issue, the dispute will be referred to the signatories to this Agreement, or their designees, for joint resolution. If the Parties remain unable to resolve the dispute, then the NASA signatory or that person’s designee, as applicable, will issue a written decision that will be the final agency decision for the purpose of judicial review. Nothing in this Article limits or prevents either Party from pursuing any other right or remedy available by law upon the issuance of the final agency decision.

ARTICLE 23. INVESTIGATIONS OF MISHAPS AND CLOSE CALLS

In the case of a close call, mishap or mission failure, the Parties agree to provide assistance to each other in the conduct of any investigation. For all NASA mishaps or close calls, Partner agrees to comply with NPR 8621.1, "NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping" and [insert Center safety policies, as appropriate].

ARTICLE 24. MODIFICATIONS

Any modification to this Agreement shall be executed, in writing, and signed by an authorized representative of NASA and the Partner.

ARTICLE 25. ASSIGNMENT

Neither this Agreement nor any interest arising under it will be assigned by the Partner or NASA without the express written consent of the officials executing, or successors, or higher- level officials possessing original or delegated authority to execute this Agreement.

ARTICLE 26. APPLICABLE LAW

U.S. Federal law governs this Agreement for all purposes, including, but not limited to, determining the validity of the Agreement, the meaning of its provisions, and the rights, obligations and remedies of the Parties.

ARTICLE 27. INDEPENDENT RELATIONSHIP

This Agreement is not intended to constitute, create, give effect to or otherwise recognize a joint venture, partnership, or formal business organization, or agency agreement of any kind, and the

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rights and obligations of the Parties shall be only those expressly set forth herein.

ARTICLE 28. LOAN OF GOVERNMENT PROPERTY

A. In order to further activities set forth in this Agreement, the Parties acknowledge that NASA shall lend the following Government property to Partner: **TO BE COMPLETED**

B. The property listed above (hereinafter referred to as the "Property") is not being provided to Partner as a substitute for the purchasing of the same type of property by Partner under any contract or grant that Partner has, or may have, with a third party. Furthermore, such Property is not excess to NASA's requirements and its use is anticipated upon its return to NASA.

C. In support of this loan the Partner shall:

- 1. Install, operate, and maintain the Property at Partner's expense;
- 2. Furnish all utilities (e.g., water, electricity) and operating materials required for the operation of the Property;
- 3. Bear all costs associated with the use and enjoyment of the Property under the terms of this Agreement, including but not limited to such costs as packing, crating, shipping, installing, maintaining, licensing, and operating the Property;
- 4. Transport the Property in accordance with good commercial practice;
- 5. Acknowledge that the privilege of using and enjoying the said Property exists solely by virtue of this Agreement with NASA, the owner of said Property, and not as of right;
- 6. Identify, mark, and record all of the Property promptly upon receipt, and maintain such identity so long as it remains in the custody, possession, or control of Partner.
- 7. Maintain suitable records for each item of Property. At a minimum, such records shall include a description, identification number, unit cost, quantity, dates of receipt, condition upon receipt, and location. Partner shall perform an inventory of the Property one (1) year from the Effective Date of this Agreement, and every year thereafter, if the Agreement is still in effect, and send such inventory report to NASA. The report shall include a statement validating any requirement to continue the loan. Further, Partner shall provide to NASA upon reasonable request, records sufficient to disclose the date of inspections, the deficiencies discovered as a result of inspections, and any maintenance actions performed. This annual report shall be submitted to the following NASA point of contact (POC): NASA Property Point of Contact:  
Name Title Email Telephone Cell Fax Address
- 8. Report any loss, damage, or destruction of Property to the NASA POC identified above within ten (10) calendar days from the date of the discovery thereof.

ARTICLE 29. SIGNATORY AUTHORITY

The signatories to this Agreement covenant and warrant that they have authority to execute this Agreement. By signing below, the undersigned agrees to the above terms and conditions.

NATIONAL AERONAUTICS AND SPACE  
ADMINISTRATION

**IDENTIFY SIGNING OFFICIAL OF  
RESPONDENT**

BY: \_\_\_\_\_

BY: \_\_\_\_\_

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DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

**APPENDIX B: DATA TEMPLATES**

Use of the following templates is required in order to facilitate a streamlined and equitable evaluation process.

**Template 1: Proposed NASA Contributions**

Complete Template 1 to identify any NASA services, facilities, equipment (loans), or software requested by Respondent. Provide a description of the proposed NASA contribution, an estimate of when the NASA resource is needed (round to the month), and rationale to demonstrate that it is not reasonably available on a commercial basis.

*Template 1*

<b>Proposed NASA Contributions</b>		
<b>Brief Description of Proposed Service, Facilities, Equipment, or Software</b>	<b>Timing of Need</b>	<b>Rationale to demonstrate that proposed NASA contribution is not reasonably available on a commercial basis</b>
Ex. Thermal Vacuum Chamber – xx days	Oct – Dec 2016	

**Template 2: Income Statement**

Complete Template 2 to provide a year-by-year summary of anticipated revenues and expenses, consistent with the business plan.

*Template 2*

<b>Income Statement</b>						
<b>Fiscal Year</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Revenue						
Cost of Goods Sold						
Gross Profit						
Operating Expenses						
Research & Development						
Sales, Marketing, Bus Dev						
Other						
Total Operating Expenses						
Operating Income						