FUNDED SPACE ACT AGREEMENT
BETWEEN
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AND
Lockheed Martin Inc.
FOR
Joining Demonstrations In-Space (JOINS)

BACKGROUND

NASA Space Technology Mission Directorate (STMD) seeks to establish partnerships through selection of industry developed technologies at a “Tipping Point” in their development cycle. Through the award of funded Space Act Agreements, NASA STMD intends to foster the development of commercial space capabilities and benefit future NASA missions, enabling technology development that results in commercial products and services that NASA can purchase as a user. The objectives of Tipping Point Opportunity are:

- To catalyze multiple domestic industry-developed technologies leading to commercial goods and services and a market from which NASA and other customers can purchase them in the future
- Lower industry barriers to entry through NASA cost contributions

ARTICLE 1. AUTHORITY AND PARTIES

In accordance with the National Aeronautics and Space Act (51 U.S.C. § 20113(e)), this Agreement is entered into by the National Aeronautics and Space Administration, located at 4th and E Streets, SW, Washington, D.C. (hereinafter referred to as "NASA” or “Government”), and Lockheed Martin Inc., located at 12257 S Wadsworth Blvd, Littleton, CO 80125 (hereinafter referred to as "Lockheed Martin" or "Partner"). NASA and Partner may be individually referred to as a “Party” and collectively referred to as the “Parties.” This agreement will be implemented by NASA Space Technology Mission Directorate, NASA Headquarters, Washington, DC.

ARTICLE 2. PURPOSE

This Agreement (“Agreement”) shall be for the purpose of accelerating the development and testing of critical technologies for space system capabilities consistent with the capabilities articulated in the STMD 2022 Tipping Point Opportunity. The Parties’ specific responsibilities, schedule, and milestones are described in the Responsibilities, Schedule, and Milestone document (Appendix A) and incorporated fully by reference into this Agreement.

ARTICLE 3. RESPONSIBILITIES

The Parties agree they will use reasonable efforts to fulfill the Responsibilities set forth in the Appendix A to this Agreement.

ARTICLE 4. SCHEDULE AND MILESTONES

The scheduled milestones, acceptance criteria, and payments for each milestone are identified in Appendix A to this Agreement.

ARTICLE 5. FINANCIAL OBLIGATIONS

A. Obligation

NASA's liability to make payments to the Partner is limited to only those funds obligated under this Agreement. NASA may obligate funds to the Agreement incrementally at its sole discretion.

B. Acceptance and Payment for Milestones

(1) Partner shall notify the NASA principal points of contact, listed in Article 19 at least 30 calendar days prior to the completion of any milestone to arrange for the NASA Technical Contact or designee to witness the event or accept delivery of documents. NASA shall have 5 calendar days to determine whether Milestone 1 meets its corresponding acceptance criteria as described in Appendix A of this Agreement and shall provide written notice to Partner's Principal Points of Contact of NASA's acceptance or non-acceptance within 5 calendar days of that determination. For all other milestones, NASA shall have 30 calendar days to determine whether the milestone event meets its corresponding acceptance criteria as described in Appendix A of this Agreement and shall provide written notice to Partner's Principal Points of Contact of NASA's acceptance or non-acceptance within 10 calendar days of that determination. Acceptance of milestones will be at NASA's sole discretion.

(2) Partner shall submit a written invoice requesting payment from NASA within 5 calendar days of notification of acceptance by NASA of each milestone. The amount of the submitted invoice may not differ from the mutually agreed upon amounts described in Appendix A of this Agreement. Partner shall submit all invoices utilizing Treasury's Invoice Processing Platform (IPP). For instructions on submitting invoices through IPP reference: https://www.nssc.nasa.gov/vendorpayment. After receipt and review of the invoice, the NASA Administrative Contact will prepare a written determination of milestone completion and authorize payment.

(3) The following information shall be included on each Partner invoice to NASA:

(a) Agreement Number;
(b) Invoice Number;
(c) A description of milestone event;
(d) Terms of Payment;
(e) Payment Office; and
(f) Amount of the fixed contribution claimed.

(4) Financial Records and Reports: Except as otherwise provided in this Agreement, the Partner's relevant financial records associated with this Agreement shall not be subject to examination or audit by NASA.

(5) Comptroller General Access to Records: The Comptroller General, at its discretion and pursuant to applicable regulations and policies, shall have access to and the right to examine records of any Party to the Agreement or any entity that participates in the performance of this Agreement that directly pertain

to and involve transactions relating to the Agreement for a period of three (3) years after the Government makes the final milestone payment under this Agreement. This paragraph only applies to any record that is created or maintained in the ordinary course of business or pursuant to a provision of law. The terms of this paragraph shall be included in any subcontracts or other arrangements in excess of $5,000,000.00, which the Partner has or may enter into related to the execution of the milestone events in this Agreement.

(6) Notwithstanding any other provision of this Agreement, 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 U.S. private or public entities.

ARTICLE 8. LIABILITY

A. The objective of this Article is to establish a cross-waiver of liability in the interest of encouraging participation in the exploration, exploitation, and use of outer space through the International Space Station (ISS). The Parties intend that the cross-waiver of liability be broadly construed to achieve this objective.

B. For the purposes of this Article:

1. The term "Damage" means:

a. Bodily injury to, or other impairment of health of, or death of, any person;

b. Damage to, loss of, or loss of use of any property;

c. Loss of revenue or profits; or

d. Other direct, indirect, or consequential Damage.

2. The term "Launch Vehicle" means an object, or any part thereof, intended for launch, launched from Earth, or returning to Earth which carries Payloads, persons, or both.

3. The term "Partner State" includes each Contracting Party for which the Agreement Among the Government of Canada, Governments of Member States of the European Space Agency, the Government of Japan, the Government of the Russian Federation, and the Government of the United States of America concerning Cooperation on the Civil International Space Station (IGA) has entered into force, pursuant to Article 25 of the IGA or pursuant to any successor agreement. A Partner State includes its Cooperating Agency. It also includes any entity specified in the

Memorandum of Understanding (MOU) between NASA and the Government of Japan to assist the Government of Japan's Cooperating Agency in the implementation of that MOU.

4. The term “Payload” means all property to be flown or used on or in a Launch Vehicle or the ISS.

5. The term “Protected Space Operations” means all Launch Vehicle or Transfer Vehicle activities, ISS activities, and Payload activities on Earth, in outer space, or in transit between Earth and outer space in implementation of this Agreement, the IGA, MOUs concluded pursuant to the IGA, and implementing arrangements. It includes, but is not limited to:

a. Research, design, development, test, manufacture, assembly, integration, operation, or use of Launch Vehicles or Transfer Vehicles, the ISS, Payloads, or instruments, as well as related support equipment and facilities and services; and

b. All activities related to ground support, test, training, simulation, or guidance and control equipment and related facilities or services.

“Protected Space Operations” also includes all activities related to evolution of the ISS, as provided for in Article 14 of the IGA.

“Protected Space Operations” excludes activities on Earth which are conducted on return from the ISS to develop further a Payload's product or process for use other than for ISS-related activities in implementation of the IGA.

6. The term “Related Entity” means:

a. A contractor or subcontractor of a Party or a Partner State at any tier;

b. A user or customer of a Party or a Partner State at any tier; or

c. A contractor or subcontractor of a user or customer of a Party or a Partner State at any tier.

The terms “contractor” and “subcontractor” include suppliers of any kind.

The term “Related Entity” may also apply to a State, or an agency or institution of a State, having the same relationship to a Partner State as described in paragraphs B.6.a. through B.6.c. of this Article or otherwise engaged in the implementation of Protected Space Operations as defined in paragraph B.5. above.

7. The term “Transfer Vehicle” means any vehicle that operates in space and transfers Payloads or persons or both between two different space objects, between two different locations on the same space object, or between a space object and the surface of a celestial body. A Transfer Vehicle also includes a vehicle that departs from and returns to the same location on a space object.

C. Cross-waiver of liability:

1. Each Party agrees to a cross-waiver of liability pursuant to which each Party waives all claims against any of the entities or persons listed in paragraphs C.1.a. through C.1.d. of this Article based on Damage arising out of Protected Space Operations. This cross-waiver shall apply only if the person, entity, or property causing the Damage is involved in Protected Space Operations and the person, entity, or property damaged is damaged by virtue of its involvement in Protected Space Operations. The cross-waiver shall apply to any claims for Damage, whatever the legal basis for such claims, against:

a. Another Party;

b. A Partner State other than the United States of America;

c. A Related Entity of any entity identified in paragraph C.1.a. or C.1.b. of this Article; or

d. The employees of any of the entities identified in paragraphs C.1.a. through C.1.c. of this

Article.

2. In addition, each Party shall, by contract or otherwise, extend the cross-waiver of liability, as set forth in paragraph C.1. of this Article, to its Related Entities by requiring them, by contract or otherwise, to:

a. Waive all claims against the entities or persons identified in paragraphs C.1.a.through C.1.d. of this Article; and

b. Require that their Related Entities waive all claims against the entities or persons identified in paragraphs C.1.a. through C.1.d. of this Article.

3. For avoidance of doubt, this cross-waiver of liability includes a cross-waiver of claims arising from the Convention on International Liability for Damage Caused by Space Objects, which entered into force on September 1, 1972, where the person, entity, or property causing the Damage is involved in Protected Space Operations and the person, entity, or property damaged is damaged by virtue of its involvement in Protected Space Operations.

4. Notwithstanding the other provisions of this Article, this cross-waiver of liability shall not be applicable to:

a. Claims between a Party and its own Related Entity or between its own Related Entities;

b. Claims made by a natural person, his/her estate, survivors or subrogees (except when a subrogee is a Party to this Agreement or is otherwise bound by the terms of this cross-waiver) for bodily injury to, or other impairment of health of, or death of, such person;

c. Claims for Damage caused by willful misconduct;

d. Intellectual property claims;

e. Claims for Damage resulting from a failure of a Party to extend the cross-waiver of liability to its Related Entities, pursuant to paragraph C.2. of this Article; or

f. Claims by a Party arising out of or relating to another Party's failure to perform its obligations under this Agreement.

5. Nothing in this Article shall be construed to create the basis for a claim or suit where none would otherwise exist.

D. To the extent that activities under this Agreement are not within the definition of "Protected Space Operations," defined above, the following unilateral waiver of claims applies to activities under this Agreement.

1. Partner hereby waives any claims against NASA or one or more of its Related Entities for any inury to, or death of, Partner or one or more of its Related Entities, or for damage to, or loss of, Partner's property or the property of its Related Entities its 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. For the purposes of this Agreement, "Related Entities" shall mean contractors and subcontractors of a Party at any tier; grantees, investigators, customers, and users of a Party at any tier and their contractors or subcontractor at any tier; or, employees of the Party or any of the foregoing.

2. Partner further agrees to extend this unilateral waiver to its related entities by requiring them, by contract or otherwise, to waive all claims against NASA and its Related Entities for injury, death, damage, or loss arising from or related to activities conducted under this Agreement. In the event the U.S. Government incurs any liability based upon Partner's failure to provide for the waiver by Partner's Related Entities set out above, 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 liability by Partner's Related Entities.

3. In the event U.S. Government property is damaged as a result of activities conducted under this Agreement for the primary benefit of Partner, except in the case of gross negligence or (Amendment 2 changes) willful misconduct by NASA, Partner shall be solely responsible for the repair and restoration of such property subject to NASA direction.

4. Notwithstanding the other provisions of this Article, the waiver of liability set forth in this section shall not be applicable to:

i. Claims between Partner and its own Related Entity or between its own Related Entities;

ii. Claims made by a natural person, his/her estate, survivors, or anyone claiming by or through him/her (except when such person or entity is a Party to this Agreement or is otherwise bound by the terms of this waiver) for bodily injury to, or other impairment of health of, or death of, such person;

iii. Claims for damage caused by willful misconduct;

iv. Intellectual property claims;

v. Claims for damage resulting from a failure of Partner to extend the waiver of liability to its Related Entities, pursuant to paragraph D(2) of this Article; or

vi. Claims by Partner arising out of or relating to NASA's failure to perform its obligations under this Agreement.

ARTICLE 9. LIABILITY - PRODUCT LIABILITY

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. LIABILITY - PRODUCT LIABILITY INDEMNIFICATION

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 11. 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 with 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 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. "Practical Application," as used in this Data Rights Article, means to:

a. manufacture, in the case of a composition or product;

b. practice, in the case of a process or method; or

c. operate, in case of a machine or system;

and, in each case, under conditions establishing the invention, hardware, software, or service is being used, and its benefits are publicly available on reasonable terms, as permitted by law.

5. Data exchanged between NASA and Partner under this Agreement will be exchanged without restriction except as otherwise provided herein.

6. 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.

7. The Parties will not exchange preexisting Proprietary Data under this Agreement unless authorized herein or in writing by the owner.

8. 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.

9. 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.

10. Disclaimer of Liability: NASA is not restricted in, nor liable for, the use, disclosure, or reproduction of Data without a restrictive notice, or for Data Partner gives, or is required to give, the U.S. Government without restriction.

11. Partner may use the following or a similar restrictive notice:

Proprietary Data Notice

The data herein include Proprietary Data and are restricted under the Data Rights provisions of Space Act Agreement [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

(1) 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. Partner shall furnish such Data to NASA upon request and NASA may disclose and use such Data (under suitable protective conditions) only for evaluating Partner's performance of its milestones and validating the objectives of JOINS.

(2) Upon a successful completion by Partner of all milestones under this Agreement, NASA shall not assert rights in such Data or use such Data for any purpose except that NASA retains the right to: (1) maintain a copy of such Data for archival purposes; (2) use or disclose such archived data within the Government for continued validating and updating of the objectives of JOINS; and (3) may use or disclose such archived Data by or on behalf of NASA for Government purposes in the event the NASA determines that:

(a) Such action is necessary because Partner, its assignee, or other successor has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of inventions, hardware, software, or service related to such Data;

(b) Such action is necessary because Partner, its assignee, or other successor, having achieved practical application of inventions, hardware, software, or service related to such Data, has failed to maintain practical application;

(c) Such action is necessary because Partner, its assignee, or other successor has discontinued making the benefits of inventions, hardware, software, or service related to such Data available to the public or to the Federal Government;

(d) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by Partner, its assignee, or other successor; or

(e) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by Partner, its assignee, or successor.

In the event NASA determines that one of the circumstances listed in subparagraphs (a)-(e) above exists, NASA shall provide written notification to the Partner's Administrative Point of Contact. Upon mailing of such determination, Partner shall have thirty (30) days to respond by providing its objection to the determination as a dispute under the Article entitled "Dispute Resolution" of this Agreement. In the event that Partner does not respond in writing to NASA's determination, then such determination shall serve as a final agency decision for all purposes including judicial review.

(3) In the event NASA terminates this Agreement in accordance with Article 16.B, Termination for Failure to Perform, NASA may in its sole discretion have the right to use, reproduce, prepare derivative works, distribute to the public, perform publicly, display publicly, or disclose Data first produced by Partner in carrying

out Partner's responsibilities under this Agreement by or on behalf of NASA for Government purposes. The parties will negotiate rights in Data in the event of termination for any other reason.

C. Data First Produced by NASA under this Agreement

(1) As to Data first produced by NASA in carrying out NASA responsibilities under this Agreement that would be Proprietary Data if it had been obtained from Partner, such Data will be appropriately marked with a restrictive notice and NASA will use reasonable efforts to maintain it in confidence for five years after its development, with the express understanding that during the aforesaid restricted period such marked Data may be disclosed and used by NASA and any Related Entity of NASA (under suitable protective conditions) only for carrying out NASA's responsibilities under this Agreement, and thereafter for any purpose. Partner will use reasonable efforts not to disclose the Data without NASA'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.

(2) Upon a successful completion by Partner of all milestones under this Agreement, NASA shall not assert rights in such Data or use such Data for any purpose during the restricted period except that NASA retains the right to: (1) maintain a copy of such Data for archival purposes; (2) use or disclose such archived data within the Government for continued validating and updating of the objectives of JOINS; and (3) may use or disclose such archived Data by or on behalf of NASA for Government purposes in the event the NASA determines that:

(a) Such action is necessary because Partner, its assignee, or other successor has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of inventions, hardware, software, or service related to such Data;

(b) Such action is necessary because Partner, its assignee, or other successor, having achieved practical application of inventions, hardware, software, or service related to such Data, has failed to maintain practical application;

(c) Such action is necessary because Partner, its assignee, or other successor has discontinued making the benefits of inventions, hardware, software, or service related to such Data available to the public or to the Federal Government;

(d) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by Partner, its assignee, or other successor; or

(e) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by Partner, its assignee, or successor.

In the event NASA determines that one of the circumstances listed in subparagraphs (a)-(e) above exists, NASA shall provide written notification to the Partner's

Administrative Point of Contact. Upon mailing of such determination, Partner shall have thirty (30) days to respond by providing its objection to the determination as a dispute under the Article entitled "Dispute Resolution" of this Agreement. In the event that Partner does not respond in writing to NASA's determination, then such determination shall serve as a final agency decision for all purposes including judicial review.

(3) In the event NASA terminates this Agreement in accordance with Article 16.B, Termination for Failure to Perform, NASA may in its sole discretion have the right to use, reproduce, prepare derivative works, distribute to the public, perform publicly, display publicly, or disclose Data first produced by NASA in carrying out NASA's responsibilities under this Agreement by or on behalf of NASA for Government purposes during any remaining portion of the restricted period, and thereafter for any purpose. The parties will negotiate rights in Data in the event of termination for any other reason.

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 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 with 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 F.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:

The Disclosing Party's Background Data, if any, will be identified in a separate document.

b. Third Party Proprietary Data:

The Disclosing Party's Third-Party Proprietary Data, if any, will be identified in a separate document.

c. Controlled Government Data:

The Disclosing Party's Controlled Government Data, if any, will be identified in a separate document.

d. Notwithstanding H.4., 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:

"None."

4. For such Data identified with a restrictive notice pursuant to H.2., Receiving Party shall:

a. Use, disclose, or reproduce such Data only as necessary under this Agreement;

b. Safeguard such Data from unauthorized use and disclosure;

c. Allow access to such 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 such 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 and gives it to NASA within ten (10) calendar days after disclosure.

ARTICLE 12. INTELLECTUAL PROPERTY RIGHTS - INVENTION AND PATENT RIGHTS

A. Definitions

1. "Administrator," means the Administrator of the National Aeronautics and Space Administration (NASA) or duly authorized representative.

2. "Patent Representative" means the Agency Counsel for Intellectual Property. Correspondence with the Patent Representative under this clause will be sent to:

Agency Counsel for Intellectual Property
Mail Code: MA000
300 E St. SW
Washington, DC 20546
hq-patentoffice@mail.nasa.gov

3. "Invention," means any invention or discovery that is or may be patentable or otherwise protectable under title 35 of the U.S.C.

4. "Made," in relation to any invention, means the conception or first actual reduction to practice.

5. "Practical Application," means to:

a. manufacture, in the case of a composition or product;

b. practice, in the case of a process or method; or

c. operate, in case of a machine or system;

and, in each case, under conditions establishing the invention is being used, and its benefits are publicly available on reasonable terms, as permitted by law.

6. "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.

7. "Manufactured substantially in the United States" means over fifty percent (50%) of a product's components are manufactured in the United States. This requirement is met if the cost to Partner of the components mined, produced, or manufactured in the United States exceeds fifty

percent (50%) percent of the cost of all components (considering only the product and its components). This includes transportation costs to the place of incorporation into the product and any applicable duty (whether or not a duty-free entry certificate is issued). Components of foreign origin of the same class or kind for which determinations under Federal Acquisition Regulation 25.103(a) and (b) exist, are treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic.

B. Allocation of principal rights

1. Presumption of NASA title in Partner inventions

a. Partner inventions under this Agreement are presumed made as specified in subparagraphs (A) or (B) of 51 U.S.C. § 20135(b)(1). The above presumption is conclusive unless Partner's invention disclosure to the Patent Representative includes a written statement with supporting details, demonstrating that the invention was not made as specified above.

b. Regardless of whether title to such an invention is subject to an advance waiver or a petition for individual waiver, Partner may still file the statement in B.1.a. The Administrator (or Administrator's designee) will review the information from Partner and any other related information and will notify Partner of his or her determination.

2. *NASA Property rights in Partner inventions*

Inventions made under this Agreement where the presumption of paragraph B.1.a. of this Article is conclusive or when a determination exists that it was made under subparagraphs (A) or (B) of 51 U.S.C. § 20135(b)(1) are the exclusive property of the United States as represented by NASA. The Administrator may waive all or any part of the United States' rights to Partner, as provided in paragraph B.3. of this Article.

3. Waiver of property rights by NASA

a. NASA Patent Waiver Regulations, 14 C.F.R. Part 1245, Subpart 1, use Presidential Memorandum on Government Patent Policy of February 18, 1983 as guidance in processing petitions for waiver of rights under 51 U.S.C. § 20135(g) for any invention or class of inventions made or that may be made under subparagraphs (A) or (B) of 51 U.S.C. § 20135(b)(1).

b. NASA has determined that to stimulate and support the capability of a United States commercial cislunar/lunar surface and in-space infrastructure, commodities, and service industry to the public and the Federal Government, the interest of the United States would be served by waiving to Partner, in accordance with 51 U.S.C. § 20135(g) and the provisions of 14 C.F.R. Part 1245, Subpart 1, rights to any inventions or class of inventions made by Partner in the performance of work under this Agreement. Therefore, as provided in 14 C.F.R. Part 1245, Subpart 1, Partner may petition, prior to execution of the Agreement or within thirty (30) days after execution, for advance waiver of any such inventions Partner may make under this Agreement, and any such properly filed petition will be granted. If no petition is submitted, or if a petition is denied, Partner (or an employee inventor of Partner) may still petition for waiver of rights to an identified subject invention within eight (8) months after disclosure under paragraph E.2. of this Article, or within such longer period if authorized under 14 C.F.R.§ 1245.105, and such properly filed petition will be granted. See paragraph J. of this Article for procedures.

4. NASA inventions

a. No invention or patent rights in NASA or its Related Entity's inventions are exchanged or granted under this Agreement except as provided herein.

b. Upon request, NASA will use reasonable efforts to grant Partner a negotiated license, under 37 C.F.R. Part 404, to any NASA invention made under this Agreement.

c. Upon request, NASA will use reasonable efforts to grant Partner a negotiated license, under 37 C.F.R. Part 404, to any invention made under this Agreement by employees of a NASA Related Entity, or jointly between NASA and NASA Related Entity employees, where NASA has title.

C. Minimum rights reserved by the Government

1. For Partner inventions subject to a NASA waiver of rights under 14 C.F.R. Part 1245, Subpart 1, the Government reserves:

a. an irrevocable, royalty-free license to practice the invention throughout the world by or on behalf of the United States or any foreign government under any treaty or agreement with the United States; and

b. other rights as stated in 14 C.F.R. § 1245.107.

2. Nothing in this paragraph grants to the Government any rights in inventions not made under this Agreement.

3. Upon a successful completion by Partner of all milestones under this Agreement, NASA will refrain from exercising its Government Purpose License reserved in paragraph C.l.a. above for a period of five years following the expiration of this Agreement.

4. Nothing contained in this paragraph shall be considered to grant to the Government any rights with respect to any invention other than an invention made under this Agreement.

D. Minimum rights to Partner

1. Partner is granted a revocable, nonexclusive, royalty-free license in each patent application or patent in any country on an invention made by Partner under this Agreement where the Government has title, unless Partner fails to disclose the invention within the time limits in paragraph E.2. of this Article. Partner's license extends to its domestic subsidiaries and affiliates within its corporate structure. It includes the right to grant sublicenses of the same scope if Partner was legally obligated to do so at the time of this Agreement. The license is transferable only with approval of the Administrator except to a successor of that part of Partner's business to which the invention pertains.

2. Partner's domestic license may be revoked or modified by the Administrator but only if necessary to achieve expeditious practical application of the invention where a third party applies for an exclusive license under 37 C.F.R. Part 404. The license will not be revoked in any field of use or geographic area where Partner has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. A license in any foreign country may be revoked or modified at the discretion of the Administrator if Partner, its licensees, or its domestic subsidiaries or affiliates fail to achieve practical application in that country.

3. Before revocation or modification, Partner will receive written notice of the Administrator's intentions. Partner has thirty (30) days (or such other time as authorized by the Administrator) to show cause why the license should not be revoked or modified. Partner may appeal under 14 C.F.R. § 1245.112.

E. Invention disclosures and reports

1. Partner shall establish procedures assuring that inventions made under this Agreement are internally reported within six (6) months of conception or first actual reduction to practice, whichever occurs first. These procedures shall include the maintenance of laboratory notebooks or equivalent records, other records reasonably necessary to document the conception or the first actual reduction to practice of inventions, and records showing that the procedures were followed. Upon request, Partner shall give the Patent Representative a description of such procedures for evaluation.

2. Partner shall disclose an invention to the Patent Representative within two (2) months after the inventor discloses it in writing internally or, if earlier, within six (6) months after Partner becomes aware of the invention. In any event, disclosure must be before any sale, or public use, or publication known to Partner. Partner shall use the NASA New Technology Reporting system at http://ntr.ndc.nasa.gov/. Invention disclosures shall identify this Agreement and be sufficiently complete in technical detail to convey a clear understanding of the nature, purpose, operation, and physical, chemical, biological, or electrical characteristics of the invention. The disclosure shall also identify any publication, or sale, or public use of the invention, and whether a manuscript describing the invention was submitted or accepted for publication. After disclosure, Partner shall promptly notify

NASA of the acceptance for publication of any manuscript describing an invention, or of any sale or public use planned by Partner.

3. Partner shall give NASA Patent Representative:

a. Interim reports every twelve (12) months (or longer period if specified by Patent Representative) from the date of this Agreement, listing inventions made under this Agreement during that period, and certifying that all inventions were disclosed (or there were no such inventions) and that the procedures of paragraph E.1. of this Article were followed.

b. A final report, within three (3) months after completion of this Agreement, listing all inventions made or certifying there were none, and listing all subcontracts or other agreements with a Related Entity containing a Patent and Invention Rights Article (as required under paragraph G of this Article) or certifying there were none.

c. Interim and final reports shall be submitted at http://ntr.ndc.nasa.gov/.

4. Partner shall provide available additional technical and other information to the NASA Patent Representative for the preparation and prosecution of a patent application on any invention made under this Agreement where the Government retains title. Partner shall execute all papers necessary to file patent applications and establish the Government's rights.

5. Protection of reported inventions. NASA will withhold disclosures under this Article from public access for a reasonable time (1 year unless otherwise agreed or unless restricted longer herein) to facilitate establishment of patent rights.

6. The contact information for the NASA Patent Representatives is provided at

http://prod.nais.nasa.gov/portals/pl/new_tech_pocs.html.

F. Examination of records relating to inventions

1. The Patent Representative or designee may examine any books (including laboratory notebooks), records, and documents of Partner relating to the conception or first actual reduction to practice of inventions in the same field of technology as the work under this Agreement to determine whether:

a. Any inventions were made under this Agreement;

b. Partner established the procedures in paragraph E.1. of this Article; and

c. Partner and its inventors complied with the procedures.

2. If the Patent Representative learns of an unreported Partner invention he or she believes was made under this Agreement, he or she may require disclosure to determine ownership rights.

3. Examinations under this paragraph are subject to appropriate conditions to protect the confidentiality of information.

G. Subcontracts or Other Agreements

1. a. Unless otherwise directed by Patent Representative, Partner shall include this Invention and Patent Rights Article (modified to identify the parties) in any subcontract or other agreement with a Related Entity (regardless of tier) for the performance of experimental, developmental, or research work.

b. For subcontracts or other agreements at any tier, NASA, the Related Entity, and Partner agree that the mutual obligations created herein constitute privity of contract between the Related Entity and NASA with respect to matters covered by this Article.

2. If a prospective Related Entity refuses to accept the Article, Partner:

a. shall promptly notify Patent Representative in writing of the prospective Related Entity's reasons for refusal and other information supporting disposition of the matter; and

b. shall not proceed without Patent Representative's written authorization.

3. Partner shall promptly notify Patent Representative in writing of any subcontract or other agreement with a Related Entity (at any tier) containing an Invention and Patent Rights Article. The notice shall identify:

a. the Related Entity;

b. the applicable Invention and Patent Rights Article;

c. the work to be performed; and

d. the dates of award and estimated completion.

Upon request, Partner shall give a copy of the subcontract or other agreement to Patent Representative.

4. In any subcontract or other agreement with Partner, a Related Entity retains the same rights

provided Partner in this Article. Partner shall not require any Related Entity to assign its rights in inventions made under this Agreement to Partner as consideration for awarding a subcontract or other agreement.

5. Notwithstanding paragraph G.4., in recognition of Partner's substantial contribution of funds, facilities or equipment under this Agreement, Partner may, subject to the NASA's rights in this Article:

a. acquire by negotiation rights to inventions made under this Agreement by a Related Entity that Partner deems necessary to obtaining and maintaining private support; and

b. if unable to reach agreement under paragraph G.5.a. of this Article, request from Patent Representative that NASA provide Partner such rights as an additional reservation in any waiver NASA grants the Related Entity under NASA Patent Waiver Regulations, 14 C.F.R. Part 1245, Subpart 1. Partner should advise the Related Entity that unless it requests a waiver, NASA acquires title to all inventions made under this Agreement. If a waiver is not requested, or is not granted, Partner may then request a license from NASA under 37 C.F.R. Part 404. A Related Entity requesting waiver must follow the procedures in paragraph J. of this Article.

H. Preference for United States manufacture

Products embodying inventions made under this Agreement or produced using the inventions shall be manufactured substantially in the United States. Patent Representative may waive this requirement if domestic manufacture is not commercially feasible.

I. March-in rights

For inventions made under this Agreement where Partner has acquired title, NASA has the right under 37 C.F.R. § 401.6, to require Partner, or an assignee or exclusive licensee of the invention, to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to responsible applicant(s), upon reasonable terms. If Partner, assignee or exclusive licensee refuses, NASA may grant the license itself, if necessary:

1. because Partner, assignee, or exclusive licensee has not, or is not expected within a reasonable time, to achieve practical application in the field of use;

2. to alleviate health or safety needs not being reasonably satisfied by Partner, assignee, or exclusive licensee;

3. to meet requirements for public use specified by Federal regulations being not reasonably satisfied by Partner, assignee, or exclusive licensee; or

4. because the requirement in paragraph H of this Article was not waived, and Partner, assignee, or exclusive licensee of the invention in the United States is in breach of the requirement.

J. Requests for Waiver of Rights

1. Under NASA Patent Waiver Regulations, 14 C.F.R. Part 1245, Subpart 1, an advance waiver may be requested prior to execution of this Agreement, or within thirty (30) days afterwards. Waiver of an identified invention made and reported under this Agreement may

still be requested, even if a request for an advance waiver was not made or was not granted.

2. Each request for waiver is by petition to the Administrator and shall include:

a. an identification of the petitioner, its place of business and address;

b. if petitioner is represented by counsel, the name, address, and telephone number of counsel;

c. the signature of the petitioner or authorized representative; and

d. the date of signature.

3. No specific form is required, but the petition should also contain:

a. a statement that waiver of rights is requested under the NASA Patent Waiver Regulations;

b. a clear indication of whether the petition is an advance waiver or a waiver of an individual identified invention;

c. whether foreign rights are also requested and for which countries;

d. a citation of the specific section(s) of the regulations under which are requested;

e. whether the petitioner is an entity of or under the control of a foreign government; and

f. the name, address, and telephone number of the petitioner's point-of-contact.

4. Submit petitions for waiver to the Patent Representative for forwarding to the Inventions and Contributions Board. If the Board makes findings to support the waiver, it recommends to the Administrator that waiver be granted. The Board also informs Patent Representative if there is insufficient time or information to process a petition for an advance waiver without unduly delaying the execution of the Agreement. Patent Representative will notify petitioner of this information. Once a petition is acted on, the Board notifies petitioner. If waiver is granted, any conditions, reservations, and obligations are included in the Instrument of Waiver. Petitioner may request reconsideration of Board recommendations adverse to its request.

ARTICLE 13. 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 14. 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. Pursuant to Section 841(d) of the NASA Transition Authorization Act of 2017, Public Law 115-10 (the "NTAA"), NASA is obligated to publicly disclose copies of all agreements conducted pursuant to NASA's 51 U.S.C. §20113(e) authority in a searchable format on the NASA website within 60 days after the agreement is signed by the Parties. The Parties acknowledge that a copy of this Agreement will be disclosed, without redactions, in accordance with the NTAA.

ARTICLE 15. 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 research, information, or resulting products made or developed under or as a result of this Agreement.

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 Participant 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, including use of Interconnection Security Agreements (ISAs), when applicable.

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 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.

D. Partner shall annually certify for itself and its team members the following to the NASA Administrative Contact to this Agreement:

1. Neither Partner nor any of its subcontractors nor partners are presently debarred, suspended, proposed for debarment, or otherwise declared ineligible for award of funding by any Federal agency;
2. Neither Partner nor any of its subcontractors nor partners have been convicted or had a civil judgment rendered against them within the last three (3) years for fraud in obtaining, attempting to obtain, or performing a Government contract;
3. Partner and any of its team members, subcontractors, or partners receiving $100,000 or more in NASA funding for work performed under this Agreement must have not used any appropriated funds for lobbying purposes prohibited by 31 U.S.C. § 1352; and
4. The Lead Partner must be a for-profit entity organized under the laws of the United States.
5. The Lead Partner and all team members must be:

A. More than 50 percent owned and controlled by United States nationals; or
B. A subsidiary of a foreign company and such subsidiary has in the past evidenced a substantial commitment to the United States market through –
    a. Investments in the United States in long-term research, development, and manufacturing (including the manufacture of major components and subassemblies); and
    b. Significant contributions to employment in the United States

To the extent an entity proposes use of Government funding for any part of a commercial launch, the entity providing those launch services must meet the eligibility requirements of 51 USC 50913. In accordance with the National Space Transportation Policy, use of a non-U.S. manufactured launch vehicle is permitted only on a no-exchange-of-funds basis.

NASA conducts research with foreign entities only on a cooperative, no-exchange-of funds basis. Although foreign individuals employed by a Partner in support of this FSAA may receive NASA funds, NASA funding may not support research efforts, including travel, by non-U.S. organizations, including sub-Partners, at any level. The direct purchase of supplies and/or services, which do not constitute research, from non-U.S. sources by the Partner is permitted.

E. 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 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. Partner hereby certifies that it is not China or a Chinese-owned company, and that the Partner will not 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.

(a) 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.

(b) The restrictions in the Acts do not apply to commercial items of supply needed to perform this agreement. However, Partner shall disclose to NASA if it anticipates making any award, including those for the procurement of commercial items, to China or a Chinese-owned entity.

(c) Subawards – The Partner shall include the substance of this provision in all subawards made hereunder.

In addition to the above certification, Partner shall immediately disclose to the NASA Administrative Contact, for any individual involved in this NASA-funded activity, any current or pending professional and educational affiliations or commitments to China or a Chinese-owned company, including Chinese universities.

F. Regarding INKSNA requirements, Partner shall disclose to NASA if it intends to rely upon Russian entities for its demonstration. Partner shall not subcontract to Russian entities without first receiving written approval from NASA.

(a) Definitions: In this provision:

(1) The term “Russian entities” means:

(A) Russian persons, or

(B) Entities created under Russian law or owned, in whole or in part, by Russian persons or companies including, but not limited to, the following:

(i) The Russian Federal Space Agency (Roscosmos),

(ii) Any organization or entity under the jurisdiction or control of Roscosmos, or

(iii) Any other organization, entity or element of the Government of the Russian Federation.

(2) The term “extraordinary payments” means payments in cash or in kind made or to be made by the United States Government prior to December 31, 2025, for work to be performed or services to be rendered prior to that date necessary to meet United States obligations under the Agreement Concerning Cooperation on the Civil International Space

Station, with annex, signed at Washington January 29, 1998, and entered into force March 27, 2001, or any protocol, agreement, memorandum of understanding, or contract related thereto.

(b) This clause implements the reporting requirement in section 6(i) of the Iran, North Korea, and Syria Nonproliferation Act. The provisions of this clause are without prejudice to the question of whether the Partner or its subcontractor(s) are making extraordinary payments under section 6(a) or fall within the exceptions in section 7(1)(B) of the Act. NASA has applied the restrictions in the Act to include funding of Russian entities via U.S. Contractors (Awardees).

(c) (1) The Partner shall not subcontract with Russian entities without first receiving written approval from the NASA Administrative Contact. In order to obtain this written approval to subcontract with any Russian entity as defined in paragraphs (a), the Partner shall provide the NASA Administrative Contact with the following information related to each planned new subcontract and any change to an existing subcontract with entities that fit the description in paragraph (a):

(A) A detailed description of the subcontracting entity, including its name, address, and a point of contact, as well as a detailed description of the proposed subcontract including the specific purpose of payments that will made under the subcontract.

(B) The Partner shall provide certification that the subcontracting entity is not, at the date of the subcontract approval request, on any of the lists of proscribed denied parties, especially designated nationals and entities of concern found at:

BIS's Listing of Entities of Concern

(see http://www.bis.doc.gov/index.php/policy-guidance/lists-of-parties-of-concern/entity-list)

BIS's List of Denied Parties

(see http://www.bis.doc.gov/index.php/policy-guidance/lists-of-parties-of-concern/denied-persons-list)

OFAC's List of Specially Designated Nationals

(see http://www.treasury.gov/resource-center/sanctions/SDN-List/Pages/default.aspx)

List of Unverified Persons in Foreign Countries
(see http://www.bis.doc.gov/index.php/policy-guidance/lists-of-parties-of-concern/unverified-list)

State Department’s List of Parties Statutorily Debarred for Arms Export Control Act Convictions

(see https://www.pmddtc.state.gov/ddtc_public?id=ddtc_kb_article_page&sys_id=7188dac6db3cd30044f9ff621f961914)

State Department’s Lists of Proliferating Entities
(see http://www.state.gov/t/isn/c15231.htm)

(2) Unless relief is granted by the NASA Administrative Contact, the information necessary to obtain approval to subcontract shall be provided to the NASA Administrative Contact 30 business days prior to executing any planned subcontract with entities defined in paragraph (a).

(d) After receiving approval to subcontract, the Partner shall provide the NASA Administrative Contact with a report every six months that documents the individual payments made to an entity in paragraph (a). The reports are due on July 15th and January 15th. The July 15th report shall document all of the individual payments made from the previous January through June. The January 15th report shall document all of the individual payments made from the previous July through December. The content of the report shall provide the following information for each time a payment is made to an entity in paragraph (a):

(1) The name of the entity
(2) The subcontract number
(3) The amount of the payment
(4) The date of the payment

(e) The NASA Administrative Contact may direct the Partner to provide additional information for any other prospective or existing subcontract at any tier. The NASA Administrative Contact may direct the Partner to terminate for the convenience of the Government any subcontract at any tier with an entity described in paragraph (a), subject to an equitable adjustment.

(f) On or after December 31, 2025, the Partner shall be responsible to make payments to entities defined in paragraph (a) of this provision. Any subcontract with entities defined in paragraph (a), therefore, shall be completed in sufficient time to permit the U.S. Government to make extraordinary payments on subcontracts with Russian entities on or before December 31, 2025.

(g) The Partner shall include the substance of this clause in all its subcontracts, and shall require such inclusion in all other subcontracts of any tier. The Partner shall be responsible to obtain written approval from the NASA Administrative Contact to enter into any tier subcontract that involves entities defined in paragraph (a).

G. With respect to the requirements in Section 889 of the National Defense Authorization Act (NDAA) for Fiscal Year 2019, Public Law 115-232:

1. In performing this Agreement, Partner will not use, integrate with a NASA system, or procure with NASA funds (if applicable), “covered telecommunications equipment or services” (as defined in Section 889(f)(3) of the NDAA).

2. The Partner will ensure that the provisions of this Article apply to its Related Entities.

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 five (5) years from the Effective Date, whichever comes first.

ARTICLE 19. RIGHT TO TERMINATE

A. Termination by Mutual Consent.

This Agreement may be terminated at any time upon mutual written consent of both Parties.

B. Termination for Failure to Perform

(1) At its discretion, NASA may terminate this Agreement 30 days after issuance of a written notification that Partner has failed to perform under this Agreement, by failure to meet a scheduled milestone as identified and described in Appendix A. Before making such a notification, NASA shall consult with Partner to ascertain the cause of the failure and determine whether additional efforts are in the best interest of the Parties. Upon such a notification and determination, NASA will take all rights identified in Articles entitled “Intellectual Property Rights-Data Rights” and “Intellectual Property Rights-Invention and Patent Rights” of this Agreement.

(2) If Partner fails to meet the criteria for successful completion of a milestone contained in Appendix A, Partner shall not be entitled to any payment from the Government associated with the failed milestone, nor shall Partner be entitled to any payments for termination-related expenses. NASA and Partner will negotiate in good faith any other issues unrelated to milestone completion and payments between the Parties. Partner shall retain all payments made and received as of the date of termination.

C. Unilateral Termination by NASA:

(1) NASA may unilaterally terminate this Agreement upon written notice as follows. NASA's obligations under this Agreement may be terminated, in whole or in part, (a) upon a declaration of war by the Congress of the United States; or (b) upon a declaration of a national emergency by the President of the United States; or (c) upon a NASA determination, in writing, that NASA is required to terminate for reasons beyond its control; or (d) upon a determination, in writing, by the Administrator of the National Aeronautics and Space Administration (NASA) or duly authorized representative that Tipping Point no longer aligns with the agency’s strategic objectives such that it is not in NASA’s best interests to continue performance of this Agreement. For purposes of Section C.(1)(c) of this Article, reasons beyond NASA's control include, but are not limited to, acts of God or of the public enemy, acts of the U.S. Government other than NASA, in either its sovereign or contractual capacity (to include failure of Congress to appropriate sufficient funding or Congressionally directed changes in agency priorities), fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, or unusually severe weather.

(2) Upon receipt of written notification that the Government is unilaterally terminating this Agreement, Partner shall immediately stop work under this Agreement and shall immediately cause any and all of its partners and suppliers to cease work, except to the extent that the Partner wishes to pursue these demonstrations exclusively using its own funding. Upon such a termination, NASA and the Partner agree to negotiate in good faith a final settlement payment to be made by NASA. However, in no instance shall NASA’s liability for termination exceed the total amount due under the next milestone of this Agreement that has not yet been completed, and only that such milestone, and is subject to the provisions of Article 5. Partner shall retain without liability or obligation of repayment all NASA payments made and received as of the date of termination. Failure of the parties to agree will be resolved pursuant to Article entitled, “Dispute Resolution.”

D. Limitation on Damages.

In the event of any termination by NASA, neither NASA nor the Partner shall be liable for any loss of profits, revenue, or any indirect or consequential damages incurred by the other Party, its contractors, subcontractors, or customers as a result of any termination of this Agreement. A Party's liability for any damages under this Agreement is limited solely to direct damages, incurred by the other Party, as a result of any termination of this Agreement subject to mitigation of such damages by the complaining party. However, in no instance shall NASA's liability for termination exceed the total amount due under the next milestone that has not yet been completed under this Agreement.

E. Rights in Property

Partner will have title to property acquired or developed by the Partner and its contractors/partners with Government funding, in whole or in part to conduct the work specified under this Agreement. In the event of termination of this Agreement for any reason, NASA may purchase such property as provided in Article entitled "Title and Rights in Real and Personal Property." Upon any termination under this Article, NASA may immediately exercise all rights identified in Articles entitled "Intellectual Property Rights-Data Rights" and "Intellectual Property Rights-Invention and Patent Rights."

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. PRINCIPAL POINTS OF CONTACT

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

NASA Administrative Contact
Preston Schmauch
Marshall Space Flight Center
ST40
Huntsville, AL 35812
256-544-1218
preston.b.schmauch@nasa.gov

Partner Administrative Contact
Elizabeth Wampler – Contracts Negotiator
Lockheed Martin Inc.
12257 S Wadsworth Blvd
Littleton, CO 80125
720-563-5645
elizabeth.a.wampler@lmco.com

NASA Technical Contact
Beth Adams Fogle
Engineer Program Management
Marshall Space Flight Center
Huntsville, AL 35812
256-961-7330
beth.adamsfogle@nasa.gov

Partner Technical Contact
Robert (Bobby) Biggs
Manager, Advanced Structures and Manufacturing
Lockheed Martin Inc.
13800 Old Gentilly Rd
New Orleans, LA 70129
504-235-1461
robert.w.biggs@lmco.com

ARTICLE 22. DISPUTE RESOLUTION

Except as otherwise provided in 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. In no event shall resolution of issues in Dispute result in liability above or beyond the funding obligated to the Agreement. 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 any applicable center-level mishap policies.

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

ARTICLE 28. LOAN OF GOVERNMENT PROPERTY

The Parties shall enter into a NASA Form 893, Loan of NASA Equipment, for NASA equipment loaned to Partner.

ARTICLE 29. TITLE AND RIGHTS IN REAL AND PERSONAL PROPERTY

Partner will have title to property acquired or developed by Partner under this Agreement, including developed or acquired by the Partner for demonstrations. In the event of termination of this Agreement for any reason under Article 19, NASA will have the right to purchase any such property additional to NASA's immediately exercised rights identified in Articles 11 and 12. The Parties will negotiate in good faith purchase prices for specific items of property. The negotiated prices will be based on the Partner's actual costs for purchase or development of the specific item(s), or fair market value, whichever is less. This price will then be discounted by a percentage that reflects the ratio of Government funding provided under the Agreement versus the amount of Partner funding used to develop the specific item(s) of property. ($2 of Government funds v. $1 of Partner funds = 2/3 = 66.6% discount).

ARTICLE 30. NASA FURNISHED INFORMATION AND SERVICES

A. NASA may, at its sole discretion and on terms to be negotiated between the Parties, accommodate low-level requests, such as for a document, telecon, or Technical Interchange Meeting (TIM) of one day or less duration. Unless NASA specifically requires Partner to use NASA furnished services, technical expertise or Government Property to fulfill its obligations under this Agreement, any decision by Partner to use NASA furnished services, technical expertise or Government Property shall be at Partner's option and sole discretion. Partner shall remain solely responsible for completion of its milestones under this Agreement regardless of the availability of use of such optional NASA services, technical expertise, or Government Property.

B. Partner has the ability to enter into separate fully reimbursable Space Act agreements with NASA Centers to use NASA resources in performance of this Agreement. The terms and conditions of other Space Act agreements will govern the use of NASA resources not being provided under this Agreement. With each of its subcontractors or partners, including NASA Centers, Partner will be responsible for

ensuring timely, accurate work, and replacing such subcontractors or partners, where necessary and appropriate and at the discretion of Partner, in order to meet milestones. Partner shall remain solely responsible for completion of its milestones under this Agreement regardless of the availability or use of reimbursable NASA services, technical expertise, or Government Property provided pursuant to section B. of this Article.

ARTICLE 31. SIGNATURE BLOCK

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

BY: Walter Engelund Digitally signed by Walter Engelund Date: 2023.07.20 09:58:30 -04'00'

Walter Engelund
Deputy Associate Administrator for Programs, Space Technology Mission Directorate at NASA

DATE: July 20, 2023

LOCKHEED MARTIN INC.

BY: Kevin Guilday

Kevin Guilday
Contracts Manager

DATE: 7 July 2023

APPENDIX A: RESPONSIBILITIES, SCHEDULE and PERFORMANCE MILESTONES

Responsibilities:

A. Lockheed Martin Inc. shall use reasonable efforts to:
   1. Conduct technology/capability development according to Milestones identified below.
   2. Coordinate and conduct milestone reviews with NASA.
   3. Provide NASA with access and appropriate data to demonstrate that Milestone entrance and success criteria have been met.
   4. Provide access to any other relevant data and facilities as requested by NASA.

B. NASA shall use reasonable efforts to:

   1. Provide milestone payments to Partner upon successful completion of each milestone.
   2. Attend and observe project milestones, at NASA's discretion and after coordination with Entity.
   3. Review milestone data provided by Entity to determine that entrance and success criteria have been met.
   4. Request access to any other relevant data and facilities needed to evaluate feasibility of the service for potential future mission needs.

Schedule and Performance Milestones:

A technical implementation plan (TIP) shall be developed that contains specific details regarding schedule and performance milestones, including dates, and the ratio of funding between the government and partner to develop a specific item. The TIP will be maintained outside this agreement. The TIP is anticipated to be a living document. Changes to the TIP can be made on an as-needed basis by mutual agreement of the parties. The TIP will be reviewed on an annual basis for purposes of updating the milestones in this agreement. The TIP is incorporated by reference into this agreement.

Milestone Entrance / Success Criteria	Estimated Target Completion Date Funding Amount
1. Kick-off Meeting	Target Date: ATP + 1 Month
	Amount: $1,118,292.00
Establishes program implementation plan. *Entrance Criteria:* 1. Kickoff Meeting held. 2. Program Review Board (PRB) members have been identified to support for project duration. 3. Process for generating, tracking, and closing review action items and liens has been established. *Success Criteria:* 1. Conduct kickoff meeting. 2. Delivery of kickoff presentation package to include top level integrated schedule; planned approach for Design, Development, Testing & Evaluation (DDT&E); planned approach for technology maturation; and risks and mitigation strategies. 3. Identify any actions and recommendations from the meeting.	
2. Integration and Safety Review 1	Target Date: ATP + 5 Months
	Amount: $1,491,056.00
Establishes expectations for flight demonstrations. *Entrance Criteria:* 1. Integration and Safety Review 1 held. 2. Actions from Milestone #1 have been addressed. 3. Connection to ISS Safety Board has been established. 4. ISS demonstration requirements are known. *Success Criteria:* 1. Delivery of Integration and Safety Review 1 presentation package in partner format. 2. Conduct Integration and Safety Review 1. 3. Delivery of Integration and Safety Review 1 presentation package to include assessment of flight and ISS requirements; planned approach for module flight certification testing; planned approach for joining and inspection demonstrations and evaluations; and status of safety and integration coordination for flight and ISS operations. 4. Identify any actions and recommendations from the review.	
3. Integration and Safety Review 2	Target Date: ATP + 9 Months
	Amount: $1,491,056.00

Establishes expectations for flight demonstrations.

Entrance Criteria:

1. Integration and Safety Review 2 held.
2. Actions from Milestone #2 have been addressed.
3. PRB has accepted that interim design is sufficient for this phase of the project.

Success Criteria:

1. Delivery of Integration and Safety Review 2 presentation package in partner format.
2. Conduct Integration and Safety Review 2.
3. Delivery of Integration and Safety Review 2 presentation package to include status of compliance to flight and ISS requirements; planned approach for module flight certification testing; planned approach for joining and inspection demonstrations and evaluations; and status of safety and integration coordination for flight and ISS operations.
4. Identify any actions and recommendations from the review.

4. Manufacturing Readiness Review (MRR)	Target Date: ATP + 15 Months
	Amount: $1,491,056.00

Establishes readiness for module assembly and integration.

Entrance Criteria:

1. MRR held.
2. Actions from Milestone #3 have been addressed.
3. Provide evidence that the integrated module design is in a build-ready state.
4. PRB has accepted that design is sufficient for this phase of the project

Success Criteria:

1. Delivery of MRR presentation package in partner format.
2. Conduct Manufacturing Readiness Review.
3. Delivery of MRR presentation package to include status of module subsystems fabrication and acceptance testing; status of compliance to system requirements; plans for module functional checkout and flight certification testing; and assessment of readiness of personnel, equipment, and procedures to begin module assembly & integration.
4. Identify any actions and recommendations from the review.

5. Module Checkout	Target Date: ATP + 21 Months
	Amount: $372,764.00

Establishes readiness for module flight certification testing.

Entrance Criteria:

1. Module Checkout performed.
2. Actions from Milestone #4 have been addressed.
3. PRB has accepted hardware and facility readiness for Module checkout activities.

Success Criteria:

1. Delivery of Module Checkout presentation package in partner format.
2. Conduct briefing of module checkout activities.
3. Delivery of Module Checkout presentation package to include power on test; functional operations testing; and assessment of readiness for flight certification testing.
4. Identify any actions and recommendations from the briefing.

6. Module Flight Certification	Target Date: ATP + 24 Months
	Amount: $372,764.00

Establishes readiness for flight demonstrations.

Entrance Criteria:

1. Module Flight Certification performed.
2. Actions from Milestone #5 have been addressed.
3. Flight safety and functional requirements have been verified.
4. Certification off light readiness has been prepared.
5. PRB has accepted hardware and facility readiness for Module flight certification.

Success Criteria:

1. Delivery of Module Flight Certification presentation package in partner format.
2. Conduct briefing of module flight certification activities.
3. Delivery of Module Flight Certification presentation package to include thermal vacuum exposure testing; electromagnetic compatibility testing; ground vibration testing; and assessment of readiness for flight.
4. Identify any actions and recommendations from the briefing.

7. Flight Demonstrations	Target Date: ATP + 33 Months
	Amount: $372,764.00

Indicates completion of flight demonstrations.

Entrance Criteria:

1. Flight Demonstrations performed.
2. Actions from Milestone #6 have been addressed.
3. PRB has accepted hardware and flight operations readiness for flight demonstration.

Success Criteria:

1. Delivery of Flight Demonstrations presentation package in partner format.
2. Conduct briefing of Flight Demonstration activities.
3. Delivery of Flight Demonstrations presentation package to include suborbital joining demonstrations in microgravity during parabolic aircraft flights; module delivery to ISS; and in space joining and inspection demonstrations in space environment on the ISS.
4. Identify any actions and recommendations from the briefing.

8. Final Project Review	Target Date: ATP + 36 Months
	Amount: $745,528.00

Indicates completion of flight demonstration evaluations.

Entrance Criteria:

1. Final Project Review held.
2. Actions from Milestone #7 have been addressed.

Success Criteria:

1. Delivery of Final Project Review presentation package in partner format.
2. Conduct briefing of final project results and next steps.
3. Delivery of Final Project Review presentation package to include results of ground joining and inspection demonstrations, flight joining and inspection demonstrations, post-joining characterization testing and evaluation, lessons learned, technology infusion status, and next steps.
4. Delivery of publicly releasable executive summary to include project objectives and accomplishments.