

NONREIMBURSABLE SPACE ACT AGREEMENT
BETWEEN
NANORACKS, LLC
AND
NASA
FOR
DEVELOPMENT OF A NANORACKS-CUBELAB COMPATIBLE SYSTEM FOR
BIOLOGICAL RESEARCH ON THE INTERNATIONAL SPACE STATION

ARTICLE 1. AUTHORITY AND PARTIES

In accordance with The National Aeronautics and Space Act of 1958, as amended (42 U.S.C. 2473 (c)), this Agreement is entered into by the NASA located at 300 E Street SW, Washington, DC 20546 (hereinafter referred to as "NASA") and NanoRacks, LLC located at 2313 Via Puerta, Laguna Woods, CA 92637, (hereinafter referred to as "NanoRacks" or "PARTNER"). NASA and Partner may be individually referred to as a "Party" and collectively referred to as the "Parties."

ARTICLE 2. PURPOSE

NASA plans to operate a share of the United States accommodations of the International Space Station (ISS) as a National Laboratory in accordance with the NASA Authorization Act of 2005. As a follow on to the previous work with NanoRacks, NASA and NanoRacks wish to collaborate on the development of a NanoRacks-CubeLab compatible system for biological research on the ISS. NASA Ames Research Center (ARC) will provide design data from previous biological experiment hardware that used the CubeSat form factor. This same form factor is used by NanoRacks in their CubeLab system. In order to use the existing NASA ARC designs in the NanoRacks-CubeLab system, modifications must be made to the interfaces including power and data systems. This agreement will provide design data and technical support to NanoRacks so the interface modifications can be made which will open up the biological research opportunities for NASA as well as other commercial entities through the NanoRacks system.

ARTICLE 3. RESPONSIBILITIES

Partner will use reasonable efforts to:

1. Adapt the NASA ARC developed designs to the NanoRacks-CubeLab system.
2. Ensure the resulting designs are available in the public domain.
3. Provide technical expertise, as required, to aid in the transfer of knowledge back to NASA that enables NASA research to utilize the modified versions of those payloads that would be compatible for the Nano-Racks-CubeLab interface.

NASA will use reasonable efforts to:

1. Provide NASA ARC developed designs for in-orbit biological payload experimentation originally developed for free flying Nano-Satellites (i.e GeneSat and PharmaSat) to the public domain.
2. Provide technical expertise, as required, to aid in the transfer of knowledge to the Partner that enables the Partner to design, development, and test the modified versions of those payloads that would be compatible for the NanoRacks-CubeLab interface.

ARTICLE 4. SCHEDULE AND MILESTONES

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

NASA develop plans and execute the transfer of NASA existing designs into the public domain. (i.e. Genesat and PharmaSat)	within 30 days from signature of agreement
NanoRacks provides updated CubeLab compatible design of initial NASA released designs back to public domain.	within 6 months of receipt of designs
Assess on a bi-Annual basis additional payload designs that would be compatible for free flying satellites and NanoRacks-CubeLab modules on ISS	Every 6 Months for the term of the Agreement

ARTICLE 5. FINANCIAL OBLIGATIONS

There will be no transfer of funds or other financial obligations 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, Title 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 personnel, facilities and 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 usage of the facilities, equipment, and personnel shall have priority over the usage 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 commercial users, NASA, in its sole discretion, shall determine the priority as between the two users. 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 AND RISK OF LOSS

1. 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.

2. For the purposes of this Article:

a. The term "Damage" means:

- (i) Bodily injury to, or other impairment of health of, or death of, any person;
- (ii) Damage to, loss of, or loss of use of any property;
- (iii) Loss of revenue or profits; or
- (iv) Other direct, indirect, or consequential Damage.

b. 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.

c. 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.

d. The term "Payload" means all property to be flown or used on or in a Launch Vehicle or the ISS.

e. 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:

- (i) 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
- (ii) 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.

f. The term "Related Entity" means:

- (i) A contractor or subcontractor of a Party or a Partner State at any tier;
- (ii) A user or customer of a Party or a Partner State at any tier; or

(iii) 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 (2)(f)(i) through (2)(f)(iii) of this Article or otherwise engaged in the implementation of Protected Space Operations as defined in paragraph (2)(e) above.

g. 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.

3. Cross-waiver of liability:

a. 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 (3)(a)(i) through (3)(a)(iv) 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:

(i) Another Party;

(ii) A Partner State other than the United States of America;

(iii) A Related Entity of any entity identified in paragraph (3)(a)(i) or (3)(a)(ii) of this Article; or

(iv) The employees of any of the entities identified in paragraphs (3)(a)(i) through (3)(a)(iii) of this Article.

b. In addition, each Party shall, by contract or otherwise, extend the cross-waiver of liability, as set forth in paragraph (3)(a) of this Article, to its Related Entities by requiring them, by contract or otherwise, to:

(i) Waive all claims against the entities or persons identified in paragraphs (3)(a)(i) through (3)(a)(iv) of this Article; and

(ii) Require that their Related Entities waive all claims against the entities or persons identified in paragraphs (3)(a)(i) through (3)(a)(iv) of this Article.

c. 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.

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

(i) Claims between a Party and its own Related Entity or between its own Related Entities;

(ii) 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;

(iii) Claims for Damage caused by willful misconduct;

- (iv) Intellectual property claims;
- (v) Claims for Damage resulting from a failure of a Party to extend the cross-waiver of liability to its Related Entities, pursuant to paragraph (3)(b) of this Article; or
- (vi) Claims by a Party arising out of or relating to another Party's failure to perform its obligations under this Agreement.

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

ARTICLE 9. INTELLECTUAL PROPERTY RIGHTS - DATA RIGHTS

NASA and Partner agree that the information and data exchanged in furtherance of the activities under this Agreement will be exchanged without use and disclosure restrictions unless required by national security regulations (e.g., classified information) or otherwise agreed to by NASA and Partner for specifically identified information or data (e.g., information or data specifically marked with a restrictive notice).

ARTICLE 10. INTELLECTUAL PROPERTY RIGHTS - INVENTION AND PATENT RIGHTS

1. The invention and patent rights set forth herein are applicable to any employees, contractors, subcontractors, or other entities having a legal relationship with Partner that are assigned, tasked, or contracted with to perform specified Partner activities under this Agreement. Partner agrees to inform such employees, contractors, subcontractors, or other entities of the obligations under this clause and to bind them to such obligations.

2. Based on the purpose and scope of this Agreement, and the responsibilities of the Parties, NASA has made an administrative determination that the provisions of section 305(a) of the National Aeronautics and Space Act of 1958, as amended (42 U.S.C. § 2457(a)), do not apply to this Agreement. Therefore, title to inventions made (conceived or first actually reduced to practice) as a result of activities performed under this Agreement will remain with the respective inventing party(ies). No invention or patent rights are exchanged between or granted by such parties under this Agreement except that NASA and Partner agree to use reasonable efforts to identify and report to each other any invention that is believed to have been made jointly by employees of Partner and employees of NASA (including employees of such NASA contractors, subcontractors, or other entities), and to consult and agree as to the responsibilities and course of action to be taken to establish and maintain patent protection on such invention and on the terms and conditions of any license or other rights to be exchanged or granted by or between NASA and Partner.

ARTICLE 11. USE OF NASA NAME AND NASA EMBLEMS AND RELEASE OF GENERAL INFORMATION TO THE PUBLIC

1. NASA Name and Initials

Partner agrees the words "National Aeronautics and Space Administration" and the letters "NASA" will not be used in connection with a product or service in a manner reasonably

calculated to convey any impression that such product or service has the authorization, support, sponsorship, or endorsement of NASA, which does not, in fact, exist. In addition, with the exception of release of general information in accordance with paragraph 3 below, Partner agrees that any proposed public use of the NASA name or initials (including press releases resulting from activities conducted under this Agreement and all promotional and advertising use) shall be submitted by Partner in advance to the NASA Assistant Administrator for Public Affairs or designee ("NASA Public Affairs") for review and approval. Approval by NASA Public Affairs shall be based on applicable law and policy governing the use of the NASA name and initials.

2. NASA Emblems

Use of NASA emblems/devices (i.e., NASA Seal, NASA Insignia, NASA logotype, NASA Program Identifiers, and the NASA Flag) are governed by 14 C.F.R. Part 1221. Partner agrees that any proposed use of such emblems/devices shall be submitted for review and approval by NASA Public Affairs in accordance with such regulations.

3. Release of General Information to the Public

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

ARTICLE 12. DISCLAIMER OF WARRANTY

Equipment, facilities, technical information, and services provided by NASA under this Agreement are provided "as is." NASA makes no express or implied warranty as to the condition of such equipment, facilities, technical information, or services, 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 equipment, facilities, technical information, or services 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 13. DISCLAIMER OF ENDORSEMENT

NASA does not endorse or sponsor any commercial product, service, or activity. NASA's participation in this Agreement or supply of equipment, facilities, technical information, or services 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 14. COMPLIANCE WITH LAWS AND REGULATIONS

The Parties shall comply with all applicable laws and regulations including, but not limited to, safety, security, export control, and environmental laws and regulations. Access by Partner to a 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.

With respect to any export control requirements:

(a) The Parties will comply with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, in performing work under this Agreement. In the absence of available license exemptions/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.

(b) The Partner shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of work 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.

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

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

ARTICLE 15. TERM OF AGREEMENT

This Agreement becomes effective upon the date of the last signature below and shall remain in effect until the completion of all obligations of both Parties hereto, or 3 years from the date of the last signature, whichever comes first.

ARTICLE 16. RIGHT TO TERMINATE

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

ARTICLE 17. 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" shall survive such expiration or termination of this Agreement.

ARTICLE 18. MANAGEMENT POINTS OF CONTACTS

The following personnel are designated as the principal points of contact between the Parties in the performance of this Agreement.

Technical Points of Contact

NASA Ames Research Center
John Hines
Center Chief Technologist
Ames Research Center
Moffett Field, CA 94035-1000
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john.hines@nasa.gov

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Michael Johnson
Chief Technology Officer
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Business/Administrative Points of Contact

NASA Lyndon B. Johnson Space Center
Marybeth Edeen
Manager, ISS National Lab
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2101 NASA Parkway
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ARTICLE 19. 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 "Management Points of Contact." The persons identified as the "Management 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 section limits or prevents either Party from pursuing any other right or remedy available by law upon the issuance of the final agency decision.

ARTICLE 20. MODIFICATIONS

Any modification to this Agreement shall be executed, in writing, and signed by an authorized representative of NASA and the Partner. Any modification that creates an additional commitment of NASA resources must be signed by the original NASA signatory authority, or successor, or a higher level NASA official possessing original or delegated authority to make such a commitment.

ARTICLE 21. 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 this Agreement.

ARTICLE 22. 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 23. INDEPENDENT RELATIONSHIP

This Agreement is not intended to constitute, create, give effect 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 24. 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

BY: William H. Gerstenmaier
William H. Gerstenmaier
Associate Administrator
for Space Operations
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300 E Street SW
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NANORACKS, LLC

BY: Jeffrey Mamber
Jeffrey Mamber
Managing Director
2313 Via Puerta
Laguna Woods, CA 92637

DATE: October 4, 2010

DATE: 10/13/10