PARTIALLY REIMBURSABLE SPACE ACT AGREEMENT
BETWEEN
SURFACE OPTICS CORPORATION
AND
NASA
FOR
HYPERSPECTRAL IMAGING (HSI) DEMO PROOF-OF-CONCEPT FOR VALUE-ADDED SERVICES

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 300 E Street SW, Washington, DC 20546 (hereinafter referred to as "NASA HQ," "HQ," or "NASA") and Surface Optics Corporation located at 11555 Rancho Bernardo Road, San Diego, CA 92127, (hereinafter referred to as "SOC" or "PARTNER"). NASA and Partner may be individually referred to as a "Party" and collectively referred to as the "Parties."

ARTICLE 2. PURPOSE

NASA is operating a share of the U.S. accommodations of the International Space Station (ISS) as a national laboratory in accordance with Section 507 the NASA Authorization Act of 2005 (51 U.S.C. § 70905). Section 507 of said Act designated the U.S. segment of the ISS a national laboratory and instructed NASA to "seek to increase the utilization of the ISS by other Federal entities and the private sector through partnerships, cost-sharing agreements, and other arrangements that would supplement NASA funding of the ISS." (51 U.S.C. §§ 70905(b) and (c)(1).)

In furtherance of this mandate, NASA released an announcement entitled "OPPORTUNITY FOR THE USE OF THE INTERNATIONAL SPACE STATION BY DOMESTIC ENTITIES OTHER THAN U.S. FEDERAL GOVERNMENT AGENCIES" (the "Announcement") in August of 2009. In the Announcement, NASA sought proposals from domestic entities, other than U.S. federal government agencies, interested in conducting "basic and applied research, technology development and industrial processing (collectively, R&D)" on the U.S. ISS national laboratory.

Surface Optics Corporation (SOC) responded to the Announcement with a proposal to test and demonstrate a hyperspectral imaging (HSI) system's potential for providing value-added services in the agricultural industry. NASA reviewers evaluated SOC's proposal in accordance with the process, criteria, and factors outlined in the Announcement. Based on that assessment, the reviewers recommended that NASA begin negotiations with SOC to define the terms and conditions of a Space Act Agreement supporting the project and to align the proposal with the on-orbit resources available. This Agreement is the result of those negotiations.

The ISS offers a unique vantage point for the assessment of natural and agricultural resources on the Earth. With this in mind, the ISS's Destiny module is equipped with a nadir window observation research facility (WORF). Under this Agreement, SOC and NASA will collaborate to mount an HSI system in the WORF, integrate the HSI system with the Software Toolkit for Ethernet Lab-like Architecture (STELLA) aboard the ISS, and operate the HSI system to capture images of, and data about, certain agricultural areas in the United States. The Parties' will initially focus on using the HSI system to monitor California's cotton crop, but may expand its use to monitoring other large cash crops in California. Images and data from this demonstration project will be integrated into NASA's STEM programs such as those at the Colorado Springs Challenger Learning Center.

ARTICLE 3. RESPONSIBILITIES

A. SOC, itself, or through its related entities, will use reasonable efforts to:

1. Provide a flight-certified HSI system, including by:
 a. Providing a 16-band visible near infrared hyperspectral imager.
 b. Designing, constructing, and providing mounting brackets, light shade(s), and any unique cables needed to mount the hyperspectral imager in the WORF rack.
 c. Developing and providing the payload integration products required to certify and operate the hyperspectral imager.

2. Identify the spectral response for cotton crops in various stages of growth.

3. Integrate the hyperspectral imager hardware and software with STELLA.

4. Operate the hyperspectral imager and accompanying software to generate data on the overall health of the cotton crop in California and compare said data to ground-generated data.

5. If successful, expand the use of the HSI system to other states and other crops beyond the California cotton crop.

6. Provide NASA's ISS Program Science Team with operational reports on and findings from the research and development conducted with the instrument and payloads flown under this agreement, subject to confidentiality agreements with customers concerning research results.

B. NASA/will use reasonable efforts to:

1. Provide access to testing facilities and sensor off-gas, Electromagnetic Interference (EMI), and vibration testing of the hyperspectral imager on a fully reimbursable basis.
2. Provide upmass for launch of the HSI system (including the hyperspectral imager, mounting hardware, and payload integration products).
3. Install and integrate the hyperspectral imager in the WORF rack.
4. Perform payload physical, analytical and operational integration.
5. NASA will return resulting payload data to SOC for further analysis/processing. Details for data return will be contained within the Payload Integration Agreement (PIA).

ARTICLE 4. SCHEDULE AND MILESTONES

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

1. Construct final hyperspectral imager	Mid July 2011
2. Certification of hyperspectral imager and mounting hardware	Mid September 2011
3. Delivery of HSI system (including hyperspectral imager, mounting hardware, and integration hardware) for launch	October 2011
4. STELLA software integration	October 2011
5. Development of payload certification and integration products	November 2011
6. $52,000 advanced payment to NASA (see Article 5)	No later than one month before off-gas, EMI, and vibration testing
7. Off-gas, Electromagnetic Interference (EMI), and vibration testing of the hyperspectral imager.	No later than 2 months before delivery of payload
8. Launch	No earlier than December 2011
9. Operation of the HSI system on orbit	No earlier than 3 months after launch (Milestone 8)

ARTICLE 5. FINANCIAL OBLIGATIONS

1. Partner agrees to reimburse NASA an estimated cost of $52,000 for NASA to carry out its fully-reimbursable responsibilities under this Agreement. In no event will NASA transfer any U.S. Government funds to Partner under this Agreement. Payment must be

made by Partner in advance of initiation of NASA's fully-reimbursable efforts. $52,000 advanced payment shall be scheduled to ensure that funds are resident with NASA before Federal obligations are incurred in support of this Agreement.

2. Payment shall be payable to the National Aeronautics and Space Administration through U.S. Treasury FEDWIRE Deposit System, Federal Reserve Wire Network Deposit System, pay.gov at https://www.nssc.nasa.gov/portal/site/customerservice/menuitem.bb29c518138071c056969daf4dd72749, or check. A check should be payable to Marshall Space Flight Center and sent to:

NASA Shared Service Center (NSSC)-FMD Accounts Receivable
Attn: For the Accounts of NASA Marshall Space Flight Center
Bldg. 1111, C Road
Stennis Space Center, MS 39529

3. NASA will not provide fully-reimbursable services or incur costs beyond the available funding amount. Although NASA has made a good faith effort to accurately estimate its costs, it is understood that NASA provides no assurance that the proposed effort under this Agreement will be accomplished for the above estimated amount. Should the effort cost more than the estimate, Partner will be advised by NASA as soon as possible. Partner shall pay all costs incurred and have the option of canceling the remaining effort, or providing additional funding in order to continue the proposed effort under the revised estimate. Should this Agreement be terminated, or the effort completed at a cost less than the agreed-to estimated cost, NASA shall account for any unspent funds within one (1) year after completion of all effort under this Agreement, and promptly thereafter, return any unspent funds to Partner.

4. 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, 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

1. General

(a) "Related Entity" as used in this Data Rights clause, 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 specified NASA or Partner activities under this Agreement.

(b) "Data," as used in this Data Rights clause, means recorded information, regardless of form, the media on which it may be recorded, or the method of recording. The term includes, but is not limited to, data of a scientific or technical nature, computer software and documentation thereof, and data comprising commercial and financial information.

(c) "Proprietary Data," as used in this Data Rights clause, means Data embodying trade secrets developed at private expense or comprising commercial or financial information that is privileged or confidential, and is marked with a suitable restrictive notice, provided that such Data: is not known or available from other sources without obligations concerning its confidentiality; has not been made available by the owners to others without obligation concerning its confidentiality; is not already available to the Government without obligation concerning its confidentiality; has not been developed independently by persons who have had no access to the information; and, is not required to be disclosed pursuant to Federal statute, law, regulation, or valid court order.

(d) The Data rights set forth herein are applicable to employees of Partner and employees of any Related Entity of Partner. Partner shall ensure that its employees and employees of any Related Entity that perform Partner activities under this Agreement are aware of the obligations under this clause and that all such employees are bound to such obligations.

(e) Data exchanged between NASA and Partner under this Agreement will be exchanged without restriction as to its disclosure, use, or duplication except as otherwise provided in this clause.

(f) No preexisting Proprietary Data will be exchanged between the Parties under this Agreement unless specifically authorized in this clause or in writing by the owner of the Proprietary Data.

(g) In the event that Data exchanged between NASA and Partner include a restrictive notice that NASA or Partner deems to be ambiguous or unauthorized, NASA or Partner

may notify the other Party of such condition. Notwithstanding such a notification, as long as the restrictive notice provides an indication that a restriction on use or disclosure was intended, the Party receiving such Data will treat the Data pursuant to the requirements of this clause unless otherwise directed in writing by the Party providing such Data.

(h) Notwithstanding any restriction on use, disclosure, or reproduction of Data provided in this clause, the Parties will not be restricted in the use, disclosure, or reproduction of Data provided under this Agreement that:

(i) is publicly available at the time of disclosure or thereafter becomes publicly available without breach of this Agreement;

(ii) is known to, in the possession of, or developed by the receiving Party independent of carrying out the receiving Party's responsibilities under this Agreement and independent of any disclosure of, or without reference to, Proprietary Data or otherwise protectable Data hereunder;

(iii) is received from a third party having the right to disclose such information without restriction; or

(iv) is required to be produced or released by the receiving Party pursuant to a court order or other legal requirement.

(i) If either NASA or Partner believes that any of the events or conditions that remove restriction on the use, disclosure, or reproduction of the Data apply, NASA or Partner will promptly notify the other Party of such belief prior to acting on such belief, and, in any event, will notify the other Party prior to an unrestricted use, disclosure, or reproduction of such Data.

(j) Disclaimer of Liability: Notwithstanding any restriction on use, disclosure, or reproduction of Data provided in this clause, NASA will not be restricted in, nor incur any liability for, the use, disclosure, or reproduction of any Data not identified with a suitable restrictive notice in accordance with paragraphs 1 (c), 2 and 8 of this clause or of any Data included in Data which Partner has furnished, or is required to furnish to the U.S. Government without restriction on disclosure and use.

(k) Partner may use the following, or a similar, restrictive notice as required by paragraphs 1 (c), 2 and 8 of this clause. In addition to identifying Proprietary Data with such a restrictive notice, Partner should mark each page containing Proprietary Data with the following, or a similar, legend: "Proprietary Data – use and disclose only in accordance with notice on title or cover page."

Proprietary Data Notice

These data herein include [enter as applicable: "Background Data" or "Data Produced by Partner under a Space Act Agreement"] in accordance with the Data Rights provisions under Space Act Agreement [provide applicable identifying information] and embody Proprietary Data. In accordance with the Space Act Agreement, NASA will use reasonable efforts to maintain the data in confidence and limit use, disclosure, and reproduction by NASA and any Related Entity of NASA in accordance with restrictions identified in the Space Act Agreement [may list specific restrictions listed in the Agreement].

2. Data First Produced by Partner Under this Agreement

In the event Data first produced by Partner in carrying out Partner responsibilities under this Agreement is furnished to NASA, and Partner considers such Data to be Proprietary Data, and such Data is identified with a suitable restrictive notice, NASA will use reasonable efforts to maintain the Data in confidence and such Data will be disclosed and used by or on behalf of the U.S. Government (under suitable protective conditions) only for U.S. Government purposes.

3. Data First Produced by NASA Under this Agreement

Except for data disclosing an invention owned by NASA for which patent protection is being considered, in the event Partner requests that Data first produced by NASA (or any Related Entity of NASA) in carrying out NASA's responsibilities under this Agreement be maintained in confidence, and to the extent NASA determines that such Data would be Proprietary Data if it had been obtained from Partner, NASA will mark such Data with a restrictive notice and will maintain such marked Data in confidence for a period of 1 year after development of the Data, with the express understanding that during the aforesaid restricted period such marked Data may be disclosed and used (under suitable protective conditions) by or on behalf of the U.S. Government for U.S. Government purposes only, and thereafter for any purpose whatsoever without restriction on disclosure and use. Partner agrees not to disclose such marked Data to any third party without NASA's written approval until the aforesaid restricted period expires.

4. Publication of Results

Recognizing that section 20112(a)(3) of the National Aeronautics and Space Act (51 U.S.C. § 20112(a)(3)) requires NASA to provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof, and that the dissemination of the results of NASA activities is one of the considerations for this Agreement, the Parties agree to coordinate proposed publication of results with each other in a manner that allows each Party a reasonable amount of time to review and comment on proposed publications.

5. Data Disclosing an Invention

In the event Data exchanged between NASA and Partner discloses an invention for which patent protection is being considered, the furnishing Party specifically identifies such Data, and the disclosure and use of such Data is not otherwise limited or restricted herein, the receiving Party agrees to withhold such Data from public disclosure for a reasonable time (presumed to be 1 year unless mutually agreed otherwise or unless such information is restricted for a longer period herein) in order for patent protection to be obtained.

6. Copyright

In the event Data is exchanged with a notice indicating that the Data is copyrighted and there is no indication that such Data is subject to restriction under paragraphs 2 or 3 of this clause (i.e., Data is not marked with a restrictive notice as required by paragraphs 2 or 3 of this clause), such Data will be presumed to be published and the following royalty-free licenses will apply.

(a) If it is indicated on the Data that the Data existed prior to, or was produced outside of, this Agreement, the receiving Party and others acting on its behalf, may reproduce, distribute, and prepare derivative works only for carrying out the receiving Party's responsibilities under this Agreement.

(b) If the Data does not contain the indication of (a) above, the Data will be presumed to have been first produced under this Agreement and, except as otherwise provided in paragraph 5 of this clause and in the Inventions and Patent Rights clause of this Agreement for protection of reported inventions, the receiving Party and others acting on its behalf may reproduce, distribute, and prepare derivative works for any purpose.

7. Data Subject to Export Control

Technical data, whether or not specifically identified or marked, that is subject to the export laws and regulations of the United States and that is provided to Partner under this Agreement will be treated as such, and will not be further provided to any foreign persons or transmitted outside the United States without proper U.S. Government authorization, where required.

8. Background Data

(a) In the event Partner furnishes NASA with Data developed at private expense (or in the case of state or local government, Data developed at government expense) that existed prior to, or was produced outside of, this Agreement, and such Data embody Proprietary Data, and such Data is so identified with a suitable restrictive notice, NASA will use reasonable efforts to maintain the Data in confidence and such Data will be disclosed and used by NASA and any Related Entity of NASA (under suitable protective conditions) only for carrying out NASA responsibilities under this Agreement. Upon completion of activities under this Agreement, such Data will be disposed of as requested by Partner.

(b) At the time of execution of this Agreement, the Parties agree that the following Background Data embodies Proprietary Data that will be provided to NASA: "Not Applicable"

9. Handling of Data

(a) In the performance of this Agreement, Partner and any Related Entity of Partner may have access to, be furnished with, or use the following categories of Data:

(i) Proprietary Data of third parties that the U.S. Government has agreed to handle under protective arrangements; and/or

(ii) U.S. Government Data, the use and dissemination of which, the U.S. Government intends to control.

(b) Data provided by NASA to Partner under the Agreement

(i) At the time of execution of this Agreement, the Parties agree that the following Proprietary Data of third parties will be provided to the Partner with the express understanding that Partner will use and protect such DATA in accordance with this clause: None

(ii) At the time of execution of this Agreement, the Parties agree that the following U.S. Government Data will be provided to Partner with the express understanding that Partner will use and protect such U.S. Government Data in accordance with this clause: "Not Applicable"

(iii) At the time of execution of this Agreement, the Parties agree that the following software and related Data will be provided to Partner under a separate Software Usage Agreement with the express understanding that Partner will use and protect such related Data in accordance with this clause. Unless retention of such Data is otherwise authorized under the Software Usage Agreement or Partner has entered into a license, consistent with 37 C.F.R. Part 404, for software provided under this Agreement, upon completion of activities under this Agreement, such related Data will be disposed of as instructed by NASA: "Not Applicable"

(c) With respect to such Data specifically identified in this Agreement or specifically marked with a restrictive notice, Partner agrees to:

(i) Use, disclose, or reproduce such Data only to the extent necessary to perform the work required under this Agreement;

(ii) Safeguard such Data from unauthorized use and disclosure;

(iii) Allow access to such Data only to its employees and any Related Entity that require access for their performance under this Agreement;

(iv) Except as otherwise indicated in (c)(iii) above, preclude access and disclosure of such Data outside Partner's organization;

(v) Notify its employees who may require access to such Data about the obligations under this clause and ensure that such employees comply with such obligations, and notify its Related Entity that may require access to such Data about their obligations under this clause; and

(vi) Return or dispose of such Data, as NASA may direct, when the Data is no longer needed for performance under this Agreement.

10. Oral and visual information

If information that Partner considers to be Proprietary Data is disclosed orally or visually to NASA, NASA will have no duty to limit or restrict, and will not incur any liability for, any disclosure or use of such information unless: (a) Partner orally informs NASA before initial disclosure that such information is considered to be Proprietary Data, and (b) Partner reduces such information to tangible, recorded form that is identified and marked with a suitable restrictive notice as required by paragraphs 1 (c), 2 and 8 above and furnishes the resulting Data to NASA within 10 days after such oral or visual disclosure.

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, (51 U.S.C. § 20135(b)), 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 the Office of Communications or designee ("NASA Communications") for review and approval. Approval by NASA Communications 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 Communications 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 5 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., "Financial Obligations," "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 National Aeronautics and Space Administration
Marybeth Edeen
ISS National Lab Manager
Mail Stop: OZ1
2101 Nasa Rd 1
Houston, TX 77058
Phone: 281-483-9122
Fax: 281-244-8292
marybeth.a.edeen@nasa.gov

Surface Optics Corporation
Mark Dombrowski
Executive Vice President
11555 Rancho Bernardo Road
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Phone: 858-675-7404
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markd@surfaceoptics.com

Business/Administrative Points of Contact

NASA National Aeronautics and Space Administration
Jason Crusan
Chief Technologist for Space Operations
Mail Stop: 7N39
300 E Street SW
Washington, DC 20546
Phone: 202-358-0635
jason.crusan@nasa.gov

Surface Optics Corporation
John Dummer
11555 Rancho Bernardo Road
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Fax: 858-675-2028
jdummer@surfaceoptics.com

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
Mail Suite: 7K39
300 E Street SW
Washington, DC 20546

DATE: 14 June 2011

SURFACE OPTICS CORPORATION

BY: [signature]

John Dummer / Mark Dombrowski, Executive VP
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DATE: 16 June 2011