

REIMBURSABLE SPACE ACT AGREEMENT  
BETWEEN  
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
GODDARD SPACE FLIGHT CENTER WALLOPS FLIGHT FACILITY  
AND  
OLD DOMINION UNIVERSITY RESEARCH FOUNDATION  
FOR  
UNMANNED AERIAL SYSTEMS FLIGHT TESTS

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 Goddard Space Flight Center Wallops Flight Facility, located at Wallops Island, VA 23337 (hereinafter referred to as "NASA GSFC," "GSFC," "NASA WFF," "WFF," or "NASA") Old Dominion University Research Foundation, a Virginia non-profit corporation under contract with Old Dominion University for the performance of certain research administration and technology transfer functions, with principal offices at 4111 Monarch Way, Suite 204, Norfolk, VA 23508-2559 (hereinafter referred to as "Partner" or "ODURF"). NASA and ODURF may be individually referred to as a "Party" and collectively referred to as the "Parties."

ARTICLE 2. PURPOSE

This reimbursable Space Act Agreement shall be for supporting Unmanned Aerial Systems (UAS) flight tests utilizing Beyond Visual Line of Sight (BVLOS) capabilities for Old Dominion University in a controlled and restricted range environment. NASA WFF will support the flight tests by providing airfield, range, and safety and mission assurance support in Wallops controlled restricted airspace.

ARTICLE 3. RESPONSIBILITIES

A. NASA WFF will use reasonable efforts to:

1. Provide a single NASA Point of Contact, who will work with ODURF.
2. Provide the following services:
  - a. Contracted range surveillance support.
  - b. Contracted airfield support for testing, logistics, and transport.
  - c. Provide support to operate EchoDyne Radar.
  - d. Provide controlled and restricted Airspace.
3. Participate in reviews and other meetings, as required.

B. Partner will use reasonable efforts to:

1. Provide a single ODURF Point of Contact, who will work with NASA WFF.
2. Provide documentation to WFF, as required.
3. Participate in reviews and other meetings, as required by NASA.

#### ARTICLE 4. SCHEDULE AND MILESTONES

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

ODURF will provide Foreign National badge requests to NASA Technical Contact (if required)	30 days prior to testing
ODURF will provide a test plan and all supporting documentation to NASA	30 days prior to testing
Project Kick Off	30 days prior to testing
ODURF will manage badge requests to NASA Technical Contact.	30 days prior to testing
NASA will support team meetings/teleconferences with partner	As required
ODURF will provide NASA Project Plan Concurrence	30 days prior to testing
NASA will create a Range Safety Plan	15 days prior to testing
NASA will create a Range Operational Directive	15 days prior to testing
ODURF will review and provide concurrence/acceptance of or changes to the Range Safety Plan	10 days prior to testing
ODURF will review and provide concurrence/acceptance of or changes to the Range Operational Directive	10 days prior to testing
NASA will conduct Airfield Readiness Review	7 days prior to testing
ODURF will participate in NASA Airfield Readiness Review	7 days prior to testing
NASA will conduct Range Readiness Review	5 days prior to testing
ODURF will participate in Range Readiness Review	5 days prior to testing
NASA and ODURF will conduct Pre-mission briefing meeting.	1 day prior to testing
NASA and ODURF will conduct Testing.	Testing Date
NASA will provide any required test data to ODURF	7 days after testing completion

#### ARTICLE 5. FINANCIAL OBLIGATIONS

A. ODURF agrees to reimburse NASA an estimated cost of \$16,412.61 for NASA to carry out its responsibilities under this Agreement. In no event will NASA transfer any U.S. Government funds to ODURF under this Agreement. Payment must be made by Partner in advance of

initiation of NASA's efforts on behalf of the Partner. Each payment shall be marked with GSFC WFF and Agreement number GSFC-24-40299.

B. Payment shall be payable to the National Aeronautics and Space Administration through the NASA Shared Services Center (NSSC) (choose one form of payment):

(1) U.S. Treasury FEDWIRE Deposit System, Federal Reserve Wire Network Deposit System;  
(2) pay.gov at <https://www.nasa.gov/specials/nssc-pay/> and select the appropriate NASA Center for the agreement from the drop down; or

(3) check. A check should be payable to NASA and sent to: NASA Shared Services Center FMD – Accounts Receivable For the Accounts of: Wallops Flight Facility Building 1111, Jerry Hlass Rd., Stennis Space Center, MS 39529 Payment by electronic transfer (#1 or #2, above), is strongly encouraged, and payment by check is to be used only if circumstances preclude the use of electronic transfer. All payments and other communications regarding this Agreement shall reference the Center name, title, date, and number of this Agreement.

C. NASA will not provide services or incur costs beyond the existing payment. 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 has 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 [insert timeframe, cannot exceed one (1) year] after completion of all effort under this Agreement, and promptly thereafter return any unspent funds to Partner. Return of unspent funds will be processed via Electronic Funds Transfer (EFT) in accordance with 31 C.F.R. Part 208 and, upon request by NASA, Partner agrees to complete the Automated Clearing House (ACH) Vendor/Miscellaneous Payment Enrollment Form (SF 3881).

D. 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 private or public entities.

#### ARTICLE 8. LIABILITY

A. Partner hereby waives any claims against NASA or one or more of its Related Entities for any injury 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, 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 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.

B. 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.

C. In the event U.S. Government property is damaged as a result of activities conducted under this Agreement, except in the case of gross negligence or willful misconduct by NASA, Partner shall be solely responsible for the repair and restoration of such property subject to NASA direction. Prior to issuing such direction, NASA will consider input from Partner and other factors such as the extent to which damage was attributable to the activity and the respective responsibilities of each party as described in the agreement.

D. 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 B 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 - INSURANCE FOR DAMAGE TO NASA PROPERTY

A. Partner shall, at no cost to NASA, maintain throughout the term of the Agreement, insurance covering claims for bodily injury, personal injury, death, property damage, or other loss or damages arising from any activities conducted under this Agreement at such limits and upon such terms as are acceptable to NASA in its reasonable discretion, and shall provide NASA acceptable evidence of such insurance. Policy(ies) for property insurance must cover the cost of repair or replacement (as reasonably determined by NASA) of any U.S. Government property (real or personal) damaged as a result of activities conducted under this Agreement.

B. By signing this Agreement, Partner certifies that all insurance required under this Agreement is in effect, and is issued by companies with a credit rating of at least "A-" and a financial size category of at least "VIII" in the current edition of Best's Insurance Reports (or its equivalent successor, or, if there is no equivalent successor rating, otherwise mutually acceptable to the Parties) and are licensed to do and doing business in all states in which activities will be conducted under the Agreement. NASA is not obligated to provide access to its facilities or equipment under this Agreement until and unless the insurance required by this section is in effect. Any deductibles selected by Partner for any insurance coverage shall be the sole responsibility of Partner.

## ARTICLE 11. INTELLECTUAL PROPERTY RIGHTS - DATA RIGHTS

Information and data exchanged under this Agreement is exchanged without restrictions unless required by national security regulations (e.g., classified information) or as otherwise provided in this Agreement or agreed to by the Parties for specifically identified information or data (e.g., information or data specifically marked with a restrictive notice).

## ARTICLE 12. INTELLECTUAL PROPERTY RIGHTS - INVENTION AND PATENT RIGHTS

A. General 1. NASA has determined that 51 U.S.C. § 20135(b) does not apply to this Agreement. Therefore, title to inventions made (conceived or first actually reduced to practice) under this Agreement remain with the respective inventing party(ies). No invention or patent rights are exchanged or granted under this Agreement, except as provided herein. 2. "Related Entity" as used in this Invention and Patent Rights Article means a contractor, subcontractor, grantee, or other entity having a legal relationship with NASA or Partner assigned, tasked, or contracted with to perform activities under this Agreement. 3. The invention and patent rights herein apply to employees and Related Entities of Partner. Partner shall ensure that its employees and Related Entity employees know about and are bound by the obligations under this Article.

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

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

D. Joint Inventions With Partner The Parties will use reasonable efforts to report, and cooperate in obtaining patent protection on, inventions made jointly between NASA employees, Partner employees, and employees of either Party's Related Entities. Upon timely request, NASA may, at its sole discretion and subject to paragraph E. of this Article: 1. refrain from exercising its undivided interest inconsistently with Partner's commercial business; or 2. use reasonable efforts to grant Partner, under 37 C.F.R. Part 404, an exclusive or partially exclusive negotiated license.

E. Rights to be Reserved in Partner's License Any license granted Partner under paragraphs B., C., or D. of this Article is subject to the following: 1. For inventions made solely or jointly by NASA employees, NASA reserves the irrevocable, royalty-free right of the U.S. Government to practice the invention or have it practiced on behalf of the United States or on behalf of any foreign government or international organization pursuant to any existing or future treaty or agreement with the United States. 2. For inventions made solely or jointly by employees of a NASA Related Entity, NASA reserves the rights in 1. above, and a revocable, nonexclusive, royalty-free license retained by the Related Entity under 14 C.F.R. § 1245.108 or 37 C.F.R. § 401.14 (e).

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

G. Patent Filing Responsibilities and Costs 1. The invention and patent rights herein apply to any patent application or patents covering an invention made under this Agreement. Each Party is responsible for its own costs of obtaining and maintaining patents covering sole inventions of its employees. The Parties may agree otherwise, upon the reporting of any invention (sole or joint) or in any license granted. 2. Partner shall include the following in patent applications for an invention made jointly between NASA employees, its Related Entity employees and Partner employees: The invention described herein may be manufactured and used by or for the U.S. Government for U.S. Government purposes without the payment of royalties thereon or therefore. [Note: Partner should be informed that it can locate NASA technology available for licensing by visiting the following website address – <http://technology.nasa.gov>.]

### ARTICLE 13. USE OF NASA NAME AND NASA 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 Partner to NASA facilities or property, or to a NASA Information Technology (IT) system or application, is contingent upon compliance with NASA security and safety policies and guidelines including, but not limited to, standards on badging, credentials, and facility and IT system/application access, 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. 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 one year from the Effective Date, whichever comes first.

ARTICLE 19. RIGHT TO TERMINATE

Either Party may unilaterally terminate this Agreement by providing thirty (30) calendar days written notice to the other Party. In the event of such termination, Partner will be obligated to reimburse NASA for all costs for which the Partner was responsible and that have been incurred in support of this Agreement up to the date the termination notice is received by NASA. Where Partner terminates this Agreement, Partner will also be responsible for termination costs.

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”, “Intellectual Property Rights”-related clauses, and “Financial Obligations” shall survive such expiration or termination of this Agreement.

ARTICLE 21. POINTS OF CONTACT

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

Management Points of Contact

NASA Wallops Flight Facility

David L. Pierce  
Director of Suborbital and Special Orbital  
Projects Directorate and Wallops Flight  
Facility  
Wallops Island, VA 23337  
Phone: 757-824-1201  
david.l.pierce@nasa.gov

Old Dominion University

Richard Brammer  
Director of Sponsored Programs  
Old Dominion University Research  
Foundation 4111 Monarch Way, Suite  
204 Norfolk, VA 23508  
757-683-7224  
rbrammer@odu.edu

Technical Points of Contact

NASA Wallops Flight Facility

Victor Mask  
Administrative Manager  
34200 Fulton Street  
Wallops Island, VA 23337

Old Dominion University

David Bowles, Ph.D.  
Senior Research Fellow  
Virginia Institute for Spaceflight and  
Autonomy (VISA)

Phone: 757-990-2017  
victor.mask@nasa.gov

1030 University Blvd Suffolk, Va. 23435-0047  
Phone: 757-287-8517  
dbowles@odu.edu

#### ARTICLE 22. DISPUTE RESOLUTION

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

#### ARTICLE 23. INVESTIGATIONS OF MISHAPS AND CLOSE CALLS

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

#### ARTICLE 24. MODIFICATIONS

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

#### ARTICLE 25. ASSIGNMENT

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

#### ARTICLE 26. APPLICABLE LAW

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

#### ARTICLE 27. INDEPENDENT RELATIONSHIP

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

OLD DOMINION UNIVERSITY RESEARCH  
FOUNDATION

BY: \_\_\_\_\_  
David L. Pierce  
Director of Suborbital and Special Orbital  
Projects Directorate and Wallops Flight  
Facility

BY: \_\_\_\_\_  
Richard Brammer  
Director of Sponsored Programs