# ANNEX BETWEEN

# THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION LYNDON B. JOHNSON SPACE CENTER AND AXIOM SPACE, INC. UNDER SPACE ACT UMBRELLA AGREEMENT NO. 36162, DATED 4/6/2022 (ANNEX NUMBER 9).

# ARTICLE 1. PURPOSE

This Annex will facilitate materials, fluids, and component testing and analysis, and sharing of technical expertise in the areas of engineering analysis and testing through the Energy Systems Test Area (ESTA) at NASA JSC. These tests will assist partner in validating and furthering designs of spaceflight and human habitation components.

ESTA provides spaceflight and hazardous testing unique to NASA within propulsion, power, pressure, and lunar environments testing.

The legal authority for this Annex, consistent with the Umbrella Agreement, is in accordance with the Space Act, Other Transactions Authority (OTA), 51 U.S.C. § 20113(e).

# ARTICLE 2. RESPONSIBILITIES

#### A. NASA JSC will use reasonable efforts to:

- 1. Provide testing and results within the following categories:
  - a. Propulsion testing per the limits of existing equipment
  - b. Shock and vibration hazardous testing
  - c. Battery and battery cell testing (COTS Test)
  - d. Battery and battery cell testing (Thermal Runaway Test)
  - e. Hazardous thermal cycle testing
  - f. Lunar Environment Testing
  - g. Hazardous vacuum or thermal vacuum testing
  - h. Pressure or burst testing
  - i. Power quality testing
  - i. Fuel cell testing
- 2. Provide test hardware fabrication and setup
- 3. Participate at the following review cycles for each test
  - a. 2-hour meeting for documentation development and Test Readiness Review (TRR)
  - b. Phase 1 Testing Data review, 3 hours, virtual or in-person
  - c. Quarterly Review of Plans, Ongoing, and Upcoming Work -2 hours, virtual or in-person

- B. Partner will use reasonable efforts to:
- 1. Provide test articles and hardware required for test setup
- 2. Provide additional instrumentation required for specific tests
- 3. Return facility to nominal configuration if changes are made by Axiom personnel

#### ARTICLE 3. SCHEDULE AND MILESTONES

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

The planned major milestones are measured from and Not To Exceed (NTE) completion of the following milestones dates for this Agreement are as follows for each of ten (10) outlined test types:

Not to Exceed (NTE), Agreement Effective Date (ED), Receipt of Partner Request to Test (RT), Pre-Test Activities (PT), Receipt of Test Hardware (RH), Test Setup (TS), and Test Completion (TC)

Pre-Test Activities (Paperwork, TRR)	NTE RT $+ 30$ Days
Test Preparation: Test Hardware Fabrication/Setup	NTE PT + 60 Days
Test Setup	NTE RH + 14 Days
NASA JSC will perform the testing	NTE TS + 50 Days
NASA JSC will discuss teste results and share data with Axiom	TC + 60 Days

NASA JSC and Axioms POCs meet monthly to determine contingent testing dates and estimated project spend until all tests are complete

ED + 30 Day Intervals

# ARTICLE 4. FINANCIAL OBLIGATIONS

A. Partner agrees to reimburse NASA an estimated cost of \$1,000,000 for NASA to carry out its responsibilities under this Annex. The Partner agrees to pay NASA JSC \$50,000 prior to initiation of work under this Agreement. Subsequent advance payments will be determined based on the testing requested and scheduled to ensure that funds are resident with NASA before Federal Obligations are incurred in support of this agreement.

Each payment shall be marked with JSC and Annex 9.

B. NASA will not provide services or incur costs beyond the current funding. 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 Annex will be accomplished for the 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 Annex 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 year after completion of all effort under this Annex, and promptly thereafter, at Partner's option return any unspent funds to Partner or apply any such unspent funds to other activities under the Umbrella Agreement. 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).

# ARTICLE 5. INTELLECTUAL PROPERTY RIGHTS - DATA RIGHTS

- A. Data produced under this Annex which is subject to paragraph C. of the Intellectual Property Rights Data Rights Article of the Umbrella Agreement will be protected for the period of two years.
- B. Under paragraph H. of the Intellectual Property Rights Data Rights Article of the Umbrella Agreement, Disclosing Party provides the following Data to Receiving Party. The lists below may not be comprehensive, are subject to change, and do not supersede any restrictive notice on the Data provided.
- 1. Background Data:

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

2. Third Party Proprietary Data:

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

3. Controlled Government Data:

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

4. The following software and related Data will be provided to Partner under a separate Software Usage Agreement:

None

#### ARTICLE 6. TERM OF ANNEX

This Annex becomes effective upon the date of the last signature below ("Effective Date") and shall remain in effect until the completion of all obligations of both Parties hereto, or three years from the Effective Date, whichever comes first, unless such term exceeds the duration of the Umbrella Agreement. The term of this Annex shall not exceed the term of the Umbrella Agreement. The Annex automatically expires upon the expiration of the Umbrella Agreement.

# ARTICLE 7. RIGHT TO TERMINATE

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

# ARTICLE 8. POINTS OF CONTACT

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

# Management Points of Contact

NASA Lyndon B. Johnson Space Center

Michael Salinas

Deputy Division Chief, Propulsion &

Power Division Mail Stop: EP111

2101 NASA Parkway

Houston, Texas 77058 Phone: 281-483-4595

michael.j.salinas@nasa.gov

AXIOM SPACE, INC.

Andrew S. Cooke
Director of Contracts
1290 Hercules Ave.

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andrew.cooke@axiomspace.com

#### Technical Points of Contact

NASA Lyndon B. Johnson Space Center

Michael Reddington

Technical Content Manager

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AXIOM SPACE, INC.

John Applewhite

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Houston, TX 77058-2769 Phone: 832-969-7934

johna@axiomspace.com

# ARTICLE 9. MODIFICATIONS

Any modification to this Annex shall be executed, in writing, and signed by an authorized representative of NASA and the Partner. Modification of an Annex does not modify the terms of the Umbrella Agreement.

# ARTICLE 10. <u>SIGNATORY AUTHORITY</u>

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

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	AXIOM SPACE, LLC
LYNDON B. JOHNSON SPACE	
CENTER	
BY:	BY: Mark Gruly
Julie Kramer White	Mark Greeley
Director, Engineering	Program Manager
DATE:	September 28, 2023 DATE: