

ANNEX NO. 1  
BETWEEN  
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION,  
NASA GEORGE C. MARSHALL SPACE FLIGHT CENTER AND  
MOON EXPRESS, INC.  
UNDER SPACE ACT UMBRELLA AGREEMENT  
NO. SAA8-1314744, DATED 7/11/13  
ANNEX SAA8-1314744.1

ARTICLE 1. PURPOSE

This Annex shall be for the purpose of MSFC providing support to Moon Express, Inc. (MEI) in their efforts to design, develop, integrate, and test their Guidance Algorithms for a terrestrial lander. The MEI provided algorithms will be integrated into the existing Guidance, Navigation and Control (GN&C) Software on-board MSFC's Warm Gas Test Article (WGTA) and used to perform a hazard avoidance test series.

ARTICLE 2. RESPONSIBILITIES

NASA MSFC will use reasonable efforts to:

1. Participate in technical interchange meetings and regular communication with MEI to include consultation and data exchange.
2. Provide MEI, on a non-interference basis, publicly available technical data and other information that is requested, in writing, by MEI and is necessary for MEI to fulfill its responsibilities under this Agreement.
3. Develop procedures for test activities.
4. NASA will make available the Warm Gas Test Article for test of Moon Express-provided software.
  - a. The WGTA will remain in NASA's custody and at MSFC during execution of the Annex.
5. Integrate Moon Express-provided Guidance Algorithms into Guidance, Navigation and Control Software on-board the Warm Gas Test Article for the Hazard Avoidance test series.
6. Provide Pre-Test Support to Ensure Software Integrates Properly On-Board the Warm Gas Test Article.
7. Conduct test readiness review.
8. Conduct test of Moon Express-provided Guidance Algorithms on Warm Gas Test Article.
9. Provide test results and related test data to Moon Express.

Partner will use reasonable efforts to:

1. Participate in technical interchange meetings and regular communication with MSFC, to include consultation, peer review and data exchange.
2. Provide MSFC, on a non-interference basis, publicly available technical data and other information that is requested, in writing, by MSFC and is necessary for MSFC to fulfill its responsibilities under this Agreement.

3. Provide guidance software files to be tested on-board the Warm Gas Test Article.

### ARTICLE 3. SCHEDULE AND MILESTONES

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

NASA Receives Guidance Software From MEI	July 2013
NASA Perform Subsystem Integration Test of MEI Software	July 2013
Test Procedures for Test Activities Complete	July 2013
MEI Guidance Software Integration on Warm Gas Test Article Complete	July 2013
Test Readiness Review	July 2013
Test Series Start	July 2013
Test Series Complete	August 2013
NASA Provide Post-Test Data to MEI	August 2013
Technical Telecons	Weekly

### ARTICLE 4. FINANCIAL OBLIGATIONS

1. Partner agrees to reimburse NASA an estimated cost of \$31,500.00 for NASA to carry out its responsibilities under this Annex.

Payment should be marked for SAA8-1314744.1

2. 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 (1) 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

### ARTICLE 5. INTELLECTUAL PROPERTY RIGHTS - DATA RIGHTS

1. Under paragraph 3 of the Intellectual Property Rights - Data Rights Article of the Umbrella Agreement, Data that is first produced by NASA under this Annex will be protected for the period of two (2) years.

2. Under paragraph 8 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.

(a) Background Data:

Moon Express, Inc. Guidance and Controls Software

(b) Third Party Proprietary Data:

None

(c) Controlled Government Data:

None

(d) 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 one (1) year 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. POINTS OF CONTACT

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

##### Technical Points of Contact

##### NASA George C. Marshall Space Flight Center

Jason R. Adam

Project Manager

Mail Suite: FP30

Marshall Space Flight Center, AL 35812

Phone: 256-961-2317

Fax: 256-544-2934

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##### Moon Express, Inc.

Jim Kaidy

Principal Engineer, GNC

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NASA Research Park

PO Box 309

Moffett Field, CA 94035

Phone: (b)(4)

jimkaidy@moonexpress.com

ARTICLE 8. SIGNATORY AUTHORITY

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  
GEORGE C. MARSHALL SPACE  
FLIGHT CENTER

MOON EXPRESS, INC.

BY: Jody Singer  
Jody Singer  
Manager, Flight Programs & Partnerships  
Office

BY: Robert D. Richards  
Robert D. Richards  
President & CEO

DATE: 7-11-2013

DATE: July 9, 2013