MEMORANDUM OF UNDERSTANDING BETWEEN THE FEDERAL AVIATION ADMINISTRATION (FAA)

AND

THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA) FOR

ACHIEVEMENT OF MUTUAL GOALS IN HUMAN SPACE TRANSPORTATION

STATEMENT OF INTENT

NASA's Commercial Crew Program (CCP) aims to facilitate the development of a U.S. commercial crew space transportation capability with the goal of achieving safe, reliable, and cost effective access to and from low-Earth orbit and the International Space Station (ISS). Under the CCP, NASA is partnering with U.S. industry by providing technical and financial assistance to facilitate industry's development of an integrated crew transportation system. NASA plans to buy transportation and rescue services to the ISS from commercial entities for U.S. and U.S. operating segment astronauts once NASA has certified such entities. NASA intends that all launches supporting ISS crew transportation services will be licensed by the FAA for public safety and wishes to work with FAA to reach a common understanding and approach for meeting that objective.

NASA and FAA have complementary and interdependent interests in ensuring that commercially-developed human-rated systems and vehicles for low-Earth orbit are effective and safe. Both agencies seek to avoid conflicts between the goals of the two agencies. Both seek to avoid duplicating each other's roles. These interests are consistent with the National Space Policy of the United States of America (June 28, 2010) which directs Federal agencies to "minimize, as much as possible, the regulatory burden for commercial space activities and ensure that the regulatory environment for licensing space activities is timely and responsive;" and "pursue potential opportunities for transferring routine, operational space functions to the commercial space sector where beneficial and cost effective, except where the government has legal, security, or safety needs that would preclude commercialization."

This MOU is intended to support the transition to commercial transport of Government and non-Government passengers to low-Earth orbit in a manner that avoids conflicting requirements and multiple sets of standards. In developing these standards, the parties will exchange knowledge and best practices in the disciplines of space flight health, medical, engineering, and safety and mission assurance requirements for space systems and vehicles and operations.

AUTHORITY

This MOU is entered into on behalf of NASA under the authority of the National Aeronautics and Space Act, 51 U.S.C. § 20113. This MOU is entered into on behalf of FAA under the authority of Sections 226 and 227 of the FAA Reauthorization Act of 1996, 49 USC § 106(l)(m), 51 U.S.C. Subtitle V, Chapter 509 – Commercial Space Launch Activities, and Executive Order 12465.

SCOPE

NASA and FAA agree to collaboratively engage to understand and coordinate their respective roles to:

- Provide a stable framework for the U.S. space launch industry.
- Avoid conflicting requirements and multiple sets of standards.
- Advance both public safety and crew safety
- Advance the interests of NASA-certified U.S. commercial launch operators responsible for transporting U.S. and U.S. operating segment astronauts to the ISS.

IMPLEMENTATION

The FAA and NASA will jointly determine the tasks needed to reach the goals set forth herein. Task Statements outlining the activities to be conducted under this agreement will be appended to this document. Approval authority for Task Statements may be delegated to officials with resource authority to execute their terms. Task Statements will include the following:

- A. Overall goals/objectives
- B. Work requirements by each party
- C. Time constraints/completion dates
- D. Agreed resource commitments by agency
- E. Approval points/milestones
- F. Logistics requirements
- G. Other pertinent information

Task Statements may not be used to modify the terms of this MOU, and in the event any Task Statement is inconsistent with the terms of this MOU, the terms of the MOU will govern. This MOU in no way restricts the Parties from participating, subject to applicable law, in similar activities or arrangements with each other, other public or private agencies, organizations, or individuals intended to enhance the objectives of this partnership. Disputes concerning scope or conduct of any Task Statement will be raised to the signatories or their designated representatives set forth in this MOU. An annual progress review of all Task Statements will be held.

FINANCIAL OBLIGATIONS

There will be no transfer of funds between the Parties under this MOU and each Party will fund its own participation. This MOU does not obligate the Parties to expend appropriations on any particular project or purpose or to enter into any agreements, contracts, or other obligations, even if funds are available. Each Party shall accept full and primary responsibility for any and all expenses incurred by that Party relating to this MOU. All activities under or pursuant to this MOU are subject to the availability of funds, and no provision of this MOU shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act (31 U.S.C. § 1341).

PRIORITY OF USE

The Parties agree that NASA's and FAA's use of its own goods, services, facilities, or equipment shall have priority over the use planned in this MOU.

LIABILITY

Each Party agrees to assume liability for its own risks arising from or related to activities conducted under this MOU.

FREE EXCHANGE OF DATA

NASA and FAA agree that the information and data exchanged in furtherance of the activities under this MOU will be exchanged without use and disclosure restrictions unless required by national security regulations (e.g., classified information) or as otherwise provided in this MOU or agreed to by NASA and FAA for specifically identified information or data (e.g., information or data specifically marked with a restrictive notice). The Parties agree that when the following data of third parties is provided to each other, it is provided with the express understanding that:

- 1. The recipient of proprietary information or data may use, disclose, or reproduce such data only to the extent necessary to perform the work required under this MOU;
- 2. NASA and the FAA may not exchange proprietary information obtained from one commercial entity participating in NASA's CCP with another commercial entity;
- 3. The Parties agree to safeguard such data from unauthorized use or disclosure, including safeguarding any data provided by one launch operator from being disclosed to another launch operator;
- 4. 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, including the obligation that the data of one launch operator not be provided to a competing launch operator, and notify its contractors or subcontractors that may require access to such data about their obligations under this clause; and
- 5. Return or dispose of such data, as the disclosing Party may direct, when the data is no longer needed for performance under this Agreement.

RELEASE OF GENERAL INFORMATION TO THE PUBLIC AND MEDIA

NASA or FAA may, consistent with Federal law, release general information regarding its own participation in this MOU as desired. Insofar as participation of the other Party in this MOU is included in a public release, NASA and FAA will seek to consult with each other prior to any such release, consistent with the Parties' respective policies.

DISPUTE RESOLUTION

All disputes concerning questions of fact or law arising under this MOU shall be referred by the claimant in writing to the appropriate person identified in this MOU as the "Points of Contact" for NASA and the FAA, who will consult and attempt to resolve all issues arising from the implementation of this MOU. If they are unable to come to agreement on any issue, the dispute will be referred to the signatories to the MOU or their designees, for joint resolution after the Parties have separately documented in writing clear reasons for the dispute. As applicable, disputes will be resolved pursuant to Section VII (Resolving Intragovernmental Disputes and Major Differences) of the Intragovernmental Business Rules (Treasury Financial Manual, Vol. 1, Chapter 2, Part 4700, Appendix 10).

TERM

This MOU becomes effective upon the date of the last signature below ("Effective Date") and shall remain in effect for six (6) years after the Effective Date, unless otherwise modified or terminated.

MODIFICATIONS

Any modification to this MOU shall be executed, in writing, and signed by an authorized representative of NASA and FAA.

RIGHT TO TERMINATE

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

POINTS OF CONTACT

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

NASA

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Director, Commercial Spaceflight Development

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<u>FAA</u>

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Washington, DC 20591

LEGAL EFFECT

This MOU is strictly for internal management purposes for each of the Parties. It is not legally enforceable and shall not be construed to create any legal obligation on the Parties. This MOU shall not be construed to provide a private right or cause of action for or by any person or entity. Nothing in this MOU shall be interpreted as limiting, superseding, or otherwise affecting a Party from conducting normal operations or making decisions in carrying out its mission and duties.

SIGNATORY AUTHORITY

Approved and authorized on behalf of each party by:

NATIONAL AERONAUTICS

AND SPACE ADMINISTRATION

BY:

William H. Gerstenmaier

Associate Administrator for Human

Exploration and Operations Mission

Directorate

FEDERAL AVIATION

ADMINISTRATION

BY: Dr. George C. Nield

Associate Administrator for Commercial Space

Transportation

Mail Suite: 7L18 300 E Street SW Washington, DC 20546

DATE: 4 June 2012

Room 331 800 Independence Ave, SW Washington, DC 20591

DATE: 6/4/1Z