

GRAND CHALLENGE VEHICLE PROVIDER INFORMATION EXCHANGE ANNEX
BETWEEN
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AND
THE BOEING COMPANY
UNDER SPACE ACT UMBRELLA AGREEMENT
NO. 30572, DATED _____ (ANNEX NUMBER).

ARTICLE 1. PURPOSE

This Annex shall be for the purpose of allowing NASA and Boeing to partner and exchange information with the intent of collaboratively facilitating the development, evaluation, refinement, and validation of a safe and effective UAM Operational Concept in conjunction with the broader aviation community that is informed and validated through the Grand Challenge Series, and other flight and simulation activities.

ARTICLE 2. RESPONSIBILITIES

A. NASA will use reasonable efforts to:

1. Dedicate NASA management and systems engineering teams to jointly create a plan to develop and evaluate a UAM Operational Concept to be informed and validated through the Grand Challenge Series, and other flight and simulation activities.
2. Provide an early flight readiness review of any anticipated Partner vehicle flight activities as part of GC-1 to inform and validate the UAM Operational Concept. This review will leverage, to the greatest extent possible, existing Partner flight readiness review data.
3. Contribute towards the development and refinement a UAM Operational Concept through development and refinement of Grand Challenge scenarios, and other relevant means.
4. Host and/or participate in workshops, tabletop exercises, experiments, simulations and evaluations towards development and validation of a UAM Operational Concept and Grand Challenge scenarios.
5. Contribute towards analysis of data produced from workshops, tabletop exercises, experiments, and evaluations.
6. Serve as a focal point for teaming with the FAA on the development a UAM Operational Concept.
7. As appropriate, oversee live flight evaluations of the UAM Operational Concept and/or Grand Challenge scenarios, including analysis of data collected.
8. Publish a final publicly released report with the findings from development of UAM Operational Concept and Grand Challenge scenarios.

B. Boeing will use reasonable efforts to:

1. Dedicate aviation experts and thought leaders to jointly create a plan to develop and evaluate a UAM Operational Concept through the Grand Challenge Series, and other flight and simulation activities.
2. If appropriate, provide details of any anticipated Partner vehicle flight activities as part of GC-1 to inform and validate the UAM Operational Concept, including vehicle design and analysis data, and any existing Partner flight readiness review data for an early NASA flight readiness review of any anticipated GC-1 flights.
3. Contribute towards the development and refinement a UAM Operational Concept through development and refinement of Grand Challenge scenarios, and other relevant means.
4. Host and/or participate in workshops, tabletop exercises, experiments, simulations and evaluations towards development and refinement of a UAM Operational Concept and Grand Challenge scenarios.
5. Contribute towards analysis of data produced from workshops, tabletop exercises, experiments, and evaluations.
6. Provide surrogate and/or prototype UAM aircraft for flight evaluations of UAM Operational Concepts and/or Grand Challenge scenarios.
7. Participate in information exchange meetings with NASA and provide feedback on GC-1 plans, procedures and goals, external range options and requirements, and integrated UAM scenarios.

ARTICLE 3. SCHEDULE AND MILESTONES

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

Conduct kick-off meeting to share information on current UAM plans, and research and development activities at NASA and Boeing	Within 2 months of signing Annex
NASA and Boeing to jointly produce a first draft of the UAM Operational Concept document, along with a plan to continue joint development of the document and Grand Challenge scenarios	Within 4 months of signing Annex
Write and publish findings from development of UAM Operational Concept and Grand Challenge related activities.	December 2020

Additional milestones and dates will be jointly agreed upon in the collaborative development of the UAM Operational Concept and Grand Challenge scenarios. As needed

ARTICLE 4. 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 five (5) 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 5. 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 five 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 6. RIGHT TO TERMINATE

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

ARTICLE 7. 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
Starr Ginn
UAM Grand Challenge Lead
Advance Air Mobility Project
Mail Stop: 2701
P.O. Box 273
Edwards, CA, 93523-0273
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The Boeing Company
Sherry Yang, Program Manager
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15059 Conference Dr.
Chantilly, VA 20151-3802
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ARTICLE 8. 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 9. 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

THE BOEING COMPANY

BY: 
Mr. Robert A. Pearce
Acting Associate Administrator for
Aeronautics Research Mission Directorate

BY: 
Tarrah Wiley
Contracts Specialist

DATE: 2/28/2020

DATE: 27 Feb 2020