

NATIONAL CAMPAIGN – 1 FLIGHT ANNEX
BETWEEN
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AND
WISK
UNDER SPACE ACT UMBRELLA AGREEMENT
NO. 30572, DATED 06/10/2020.

ARTICLE 1. PURPOSE

This Annex shall be for the purpose of allowing Partner to provide a vehicle (and any associated Advanced Air Mobility airspace service provider) to fly in the Advanced Air Mobility (AAM) National Campaign 1 (NC-1) and demonstrate key integrated operational AAM scenarios. All flight activities of Partner aircraft must be conducted at a flight test range in the United States.

ARTICLE 2. RESPONSIBILITIES

A. NASA will use reasonable efforts to:

1. Dedicate NASA management and systems engineering teams to develop and execute the NC-1 activity by coordinating with Partner vehicle and any associated airspace service provider to execute NC-1 integrated scenarios.
2. Provide a Flight Safety Review and sign-off for Partner vehicle/vehicles that will be flown unmanned as part of the NC-1 activity using the process outlined in AFOP- 7900.3-023. Provide a NASA Flight Readiness Review board to review Partner vehicle and proposed scenarios to be flown as part of the NC-1 activity, and provide a flight clearance, in accordance with NPR 7900.3D. Additional details on the Flight Safety Review and sign-off process will be provided to the Partner after signing Annex.
3. Provide an Airworthiness and Flight Safety Review and sign-off for Partner vehicle/vehicles that will be flown with one or more people on-board as part of the NC-1 activity, using the process outlined in AFOP-7900.3-023. Provide a NASA Flight Readiness Review board to review the Partner vehicle and proposed scenarios to be flown as part of the NC-1 activity, and provide a flight clearance, in accordance with NPR 7900.3D. Additional details of the Airworthiness and Flight Safety Review and sign-off process will be provided to the Partner after signing Annex.
4. Provide a NASA Liaison to help the Partner through the NASA Airworthiness (if applicable) and Flight Safety Review Process.
5. Provide a set of NC-1 range requirements to Partner that details the requirements for Partner NC-1 flight activities conducted at a test range external to NASA. The NC-1 range requirements include: instrumentation, infrastructure and safety requirements, and allowance for NASA to be present at and monitor NC-1 activities.
6. Review range capabilities of Partner's range provider to ensure they are consistent with the NC-1 range requirements.

7. Integrate Partner-provided command and control or telemetry link and any AAM airspace services within a flight test infrastructure to connect to the NASA communications system for communications and data recording. Specific details of the communications system requirements will be provided to the Partner after signing Annex.
8. Provide Differential GPS (DGPS) payload package for the Partner to mount on their vehicle for onboard recording of aircraft high precision position during NC-1 flights. This system is not used for real-time data monitoring.
9. Assist Partner and any associated airspace services provider in developing Interconnection Security Agreement(s) in accordance with NIST 800-47.
10. Collect Partner AAM vehicle data to include tracking and trajectory compliance, and vehicle robustness to contingencies of the Partner AAM vehicle, and other data such as pilot workload and vehicle emergency procedures during execution of the NC-1 scenarios.
11. Publish a final report with the findings from NC-1 that covers the Partner activities and results, provided that such final report will incorporate feedback from Partner and only identify Partner or aircraft if approved by Partner in writing before publication.

B. Partner will use commercially reasonable efforts to:

1. Provide documentation of intent to fly Partner vehicle(s) as part of the NC-1 activity, including: intended range or location for NC-1 flights, a schedule of anticipated NC-1 flights at the intended range or location, descriptions of the integrated scenarios that would be attempted, description of airspace services provider partner systems and capabilities, a list of additional partners and partner capabilities that will be leveraged in participating in NC-1, and any other information reasonably relevant solely to the Partner NC-1 flight activities.
2. Provide reasonably relevant vehicle design and analysis data to enable NASA to review range and ground safety for vehicles that will be flown unmanned, and additionally full airworthiness for vehicles that will be flown manned.
3. Arrange for a test range at which to conduct Partner's NC-1 flight activities. Partner shall be responsible for assuring that the range can accommodate NASA attendance at all Partner NC-1 flight activities with sufficient support to allow NASA to view and perform all actions necessary in the conduct of the Partner NC-1 flight activities. Partner will provide NASA a description of the test range and test range capabilities that will be utilized for Partner NC-1 flight activities and ensure that, relevant to Partner's NC-1 flight activities, the test range meets the NC-1 range requirements provided by NASA.
4. Provide description of the proposed integrated vehicle and airspace operations that Partner intends to perform as part of the NC-1 flight activities to enable NASA to review intended flight operations and provide a flight release prior to NC-1 flights.
5. Provide VHF/UHF radio to Partner's pilot in command for standard National Airspace System (NAS) operations.
6. Provide C-Band Beacon for primary Range Safety Tracking of Partner's aircraft.
7. Provide Partner vehicle with ADS-B Out for secondary source of Range Safety Tracking.

8. Integrate NASA-provided DGPS payload package onboard Partner vehicle for recording of aircraft position during NC-1 flight operations, and de-integrate and return the package to NASA post flight activities.
9. Comply with the NASA communications and any other interfaces that NASA defines for the Partner NC-1 activity and provide relevant real-time flight data from Partner aircraft during execution of NC-1 scenarios.
10. Provide and fly a AAM vehicle or vehicles to conduct safety and integration scenarios for the NC-1 activity in accordance with the NC-1 Scenarios document.
11. Provide input to NASA covering Partner NC-1 flight activity lesson learned, details of flights conducted, and scenarios performed. This input will be used by NASA to write the report referenced in the NASA responsibilities section.

ARTICLE 3. SCHEDULE AND MILESTONES

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

NASA to provide airworthiness, and range and ground safety process and requirements documents.	Within 1 month of signing Annex
NASA to provide communications interface documents and requirements to Partner.	
NASA to provide NC-1 range requirements to Partner that detail test range requirements for performing Partner NC-1 flight activities.	
Partner and NASA to start vehicle airworthiness, and range and ground safety, review process.	
NASA to provide a liaison contact to help Partner through Airworthiness and Range Safety process, and in developing Interconnection Security Agreement.	
Partner to provide documentation of intent to participate in Partner NC-1 flight activities, including a list of scenarios that will be flown, list of contributing partners (including airspace partner) and their capabilities, anticipated flight schedule, any other relevant information.	
Partner to provide documentation on test range and capabilities that will be utilized for Partner NC-1 flight activities and include documentation that the test range meetings the NC-1 range requirements.	Within 3 months of signing Annex
Partner to provide vehicle envelope expansion flight data to demonstrate vehicle flight readiness.	3 months prior to flying in NC-1
NASA to provide Differential GPS (DGPS) payload package for Partner to integration on their vehicle prior to flying in Partner NC-1 flight activities.	1 month prior to flying in NC-1
NASA and Partner to complete airworthiness, and range and ground safety, approvals for flight in Partner NC-1 flight activities.	
Partner associated airspace service capabilities to demonstrate and	

document compliance with the NASA UAM Core Services API.	
Partner to fly integrated scenarios as part of Partner NC-1 flight activities.	July 2022 – November 2022
Partner to provide input to NASA covering Partner lessons learned, recommendations for future NC events, and details of flights conducted and scenarios performed.	March 2023
NASA to provide to Partner final report with findings from Partner NC-1 flight activities to demonstrate integrated vehicle/airspace scenarios.	

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. LIABILITY AND RISK OF LOSS – INSURANCE PROTECTING THIRD PARTIES

A. For purpose of this Article, the following definition shall be applicable:

1. “Liability” shall include payments made pursuant to United States’ treaty or other international obligations, any judgment by a court of competent jurisdiction, administrative and litigation costs, and settlement payments.
2. “Damage” shall mean bodily injury to, or other impairment of health of, or death of any person; damage to, loss of, or loss of use of any property; soil, sediment, surface water, ground water, or other environmental contamination or damage; loss of revenue or profits; other direct damages; or any indirect, or consequential damage arising therefrom.

B. Liability and Damage:

1. Partner shall, at no cost to NASA, maintain insurance protecting the U.S. Government and U.S. Government contractors and subcontractors, at any tier, from any Liability as a result of any activities conducted under this Agreement, including launch and associated activities, resulting in Damage to:

- a. Partner's employees or agent; and
- b. Third parties, including U.S. Government employees, and U.S. Government contractor and subcontractor employees.

2. Insurance required under subparagraph B.1.a. above may be satisfied through a liability insurance policy or policies under subparagraph B.1.b. above. Notwithstanding any other requirement for notice in this Agreement, upon obtaining the insurance required under subparagraph B.1., or upon obtaining any modification or amendment thereof, Partner shall personally deliver, or send by registered or certified mail, postage prepaid, two copies of such insurance policy, or such modification or amendment, to NASA at the following address, or at such address as NASA may from time to time designate in writing:

National Aeronautics and Space Administration
Attn: Associate General Counsel (Commercial and Intellectual Property Law)
Washington, DC 20546

3. Partner shall maintain insurance with terms and conditions as are currently available in the market for reasonable insurance premiums, taking into account renewals, but shall not be obligated to provide insurance limits in excess of \$500,000,000 coverage. Partner shall provide to NASA certificates of insurance, and associated policies, evidencing the insurance required thereunder within a reasonable time before Partner begins to use Government property or Government services. Unless Partner provides evidence that such a condition in an insurance policy is not available at a reasonable premium, the insurance policy shall provide for the right of the U.S. Government to settle reasonably a claim after consultation with Partner and its underwriters.

4. Partner's insurance obtained pursuant to subparagraph B.1. shall not be the exclusive recourse of the United States in the event Liability exceeds the amount of coverage. The United States reserves the right to bring an action against any responsible party for Liability incurred by the United States under domestic or international law.

5. Each Party agrees to cooperate with the other in obtaining any information, data, reports, contracts, and similar materials in connection with the presentation or defense of any claim by either Party under any policy of insurance purchased to meet the requirements of this Article. If the U.S. Government takes control of the defense of its interests, which would otherwise have been within Partner's responsibility as established in this Article without the concurrence of Partner, Partner shall be released from any liability to the U.S. Government on account of the claim.

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 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 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.

Technical Points of Contact

NASA

Starr Ginn
National Campaign Lead Advance Air
Mobility Project Mail Stop: 2701
P.O. Box 273
Edwards, CA, 93523-0273 Phone: 661-
276-3434
Email: starr.r.ginn@nasa.gov

Wisk Aero LLC

Erick Corona
Director Products and UAS Operations Eng.
2700 Broderick Way,
Mountain View, CA, 94043
Phone: 206-910-9093
Email: erick.corona@wisk.aero

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. 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

BY: _____

Mr. Jon Montgomery
Deputy Associate Administrator for Policy,
Aeronautics Research Mission Directorate

BY:

Caryn M. Nightengale
CFO

DATE: _____

DATE: 03/31/2021

Signatures