

**INTERAGENCY ANNEX  
BETWEEN  
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
AND  
NAVAL INFORMATION WARFARE CENTER PACIFIC  
UNDER INTERAGENCY UMBRELLA AGREEMENT NO. 36625  
(ANNEX NUMBER TWO)**

**ARTICLE 1. PURPOSE**

This Annex is for the Nanosatellite Unique Identification (UID) satellite demonstration conducted jointly by NIWC Pacific and NASA ARC. This demonstration is hosting the NIWC UID Radio Frequency Identification (RFID) Tag on a NASA ARC Payload Accelerator for CubeSat Endeavors (PACE) Advanced Developments Projects (ADP) spacecraft. With the increasing number of commercial launch service providers and easier access to space for all, it has proved extremely difficult to perform precise orbit determination and successfully track a spacecraft early-on during mission operations. NIWC has been developing the UID, which is a RFID tag to tackle this problem. Together NIWC and PACE will demonstrate the different iterations of the UID to determine which is best suited for CubeSats and iterate the technology

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). NIWC enters into this IAA in accordance with Space Act, Other Transactions Authority (OTA), 51 U.S.C. § 20113(e).

**ARTICLE 2. RESPONSIBILITIES**

- A. NASA ARC will use reasonable efforts to:
1. Provide the platform and flight for a UID demonstration
  2. Provide lessons learned from previous RF tracker demonstrations into the planning of the UID demo
  3. Obtain necessary/relevant regulatory payload approvals (dependent on final technical implementation, flight service provider requirements, and spectrum office requirements)
  4. Lead payload integration
  5. Provide necessary/relevant test facilities for the integrated spacecraft (dependent on final technical implementation, risk reduction requirements, cost, and schedule)
  6. Adhere to Center, project, and lab safety plans
  7. Ensure all launch service provider technical and safety requirements are met
  8. Coordinate any transfer of custody of hardware with the Center property management division
  9. Participate in joint planning meetings, telecons and reviews
  10. Disseminate lessons learned in a joint final briefing with NIWC
  11. Collaborate on dissemination of demo results and lessons learned via community of practice seminars, after-action reviews, and/or publications

B. NIWC will use reasonable efforts to:

1. Develop, test, and deliver the payload
2. Coordinate radar tasking required for UID mission operations
3. Assist in payload integration, system-level test of the payload, and mission operations
4. Provide necessary/relevant test facilities for the integrated spacecraft (dependent on final technical implementation, risk reduction requirements, cost, and schedule)
5. Participate in joint planning meetings, telecons and review
6. Adhere to Center, project, and lab safety plans
7. Ensure all launch service provider technical and safety requirements are met
8. Coordinate any transfer of custody of hardware with their property management division
9. Provide times and required corresponding satellite orientation to conduct UID mission
10. Disseminate lessons learned in a joint final briefing with NASA ARC

### ARTICLE 3. SCHEDULE AND MILESTONES

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

<b>UID Milestones</b>	<b>Estimated Completion Date</b>
NIWC / ARC Kick-off Meeting at NIWC (combined with SOLD Demo)	Jul 2022
Delivery of UID for PACE-3 Integration	Apr 2023
Notional PACE-3 Launch & Tracking Operations	June 2023
Delivery of UID for PACE-4 Integration	Sep 2023
Notional PACE-4 Launch & Tracking Operations	Jan 2024

### ARTICLE 4. FINANCIAL OBLIGATIONS

There will be no transfer of funds between the Parties under this Agreement and each Party will fund its own participation. All activities under or pursuant to this Agreement are subject to the availability of funds, and no provision of this Agreement shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act (31 U.S.C. § 1341).

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

A. Under paragraph C of the Intellectual Property Rights - Data Rights - Handling of Data 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.

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

2. Controlled Government Data: The Disclosing Party's Controlled Government Data, if any, will be identified in a separate technical document.
3. 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 two years from the Effective Date, whichever comes first, unless such term exceeds the duration of the Umbrella IAA. The term of this Annex shall not exceed the term of the Umbrella IAA. The Annex shall automatically expire upon the expiration of the Umbrella IAA.

#### 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 Ames Research Center  
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##### Technical Points of Contact

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#### ARTICLE 9. MODIFICATIONS

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

ARTICLE 10. SIGNATORY AUTHORITY

Approved and authorized on behalf of each Party by:

**NATIONAL AERONAUTICS AND  
SPACE ADMINISTRATION  
AMES RESEARCH CENTER**

**NAVAL INFORMATION WARFARE  
CENTER PACIFIC**

BY: \_\_\_\_\_  
Dan Andrews  
Director of Engineering

BY: \_\_\_\_\_  
Mike McMillan  
Department Head

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_