

**PUBLIC INTEREST STATEMENT**

By the instant application (“Application”), Leidos, Inc. (“Leidos”) requests that the Commission grant Special Temporary Authority (“STA”) to permit Leidos to operate the facilities specified in the instant application.

**1. Purpose of Operation**

Leidos wishes to test functionality and evaluate the performance of the Rockwell Collins VHF-22C multichannel VHF voice transceiver and AN/ARC-210 radio, Harris AN/PRC-117G multiband radio, and Honeywell HF-1050 radio that are installed on Leidos’ de Havilland dash-8 aircraft.

The proposed operation – comprised of both ground-based and airborne transmissions – will be used to test the mobile aircraft mounted communications suite for system reliability and performance. This STA will support Leidos’ integration, testing and fielding of the communications systems into multiple aircraft that are directly supporting DOD operations worldwide. The intended purpose of this experiment is to prove operability and performance, pursuant to government contract requirements.

Waiver of the Station ID rules set forth at Section 5.115 is respectfully requested.

The applicable government contract information is as follows;

Customer/Agency: U.S. Army  
Contract No.: W56KGY-16-D-0001  
Contract POC’s:

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**A. Ground-Based Transmissions**

1. Bridgewater, VA:

Ground based transmissions conducted will be located at the test area center point at 38°22'00" N; 78°57'37"W, on a radius of 1km about the center point. Ground elevation above sea level at the center point coordinates is 355.1m at this location. The antenna will be no more than 5 meters above ground level when transmitting from the ground.

2. Manassas VA:

Ground based transmissions conducted will be located at the test area center point at 38°43'15" N; 77°30'54.36"W, on a radius of 1km about the center point. Ground elevation above sea level at the center point coordinates is 58.6m at this location. The antenna will be no more than 5 meters above ground level when transmitting from the ground.

**B. Airborne Transmissions**

1. Airborne Operations Around Bridgewater VA Ground Location:

Mobile airborne transmissions conducted within a flight pattern centered on the test area center point at 38°22'00" N; 78°57'37"W, with the furthest waypoints lying on a radius of 370km about the center point. The maximum flight ceiling planned is 4572m (15,000 feet) above ground level (AGL) (range will be from 14-15,000 ft). Ground elevation above sea level at the center point coordinates is 355.1m at this location. The nearest airport to the center point coordinates is the Bridgewater Airpark (VBW) at 1402 Airport Rd, Bridgewater VA, within 1 km from the center point coordinates.

2. Airborne Operations Around Manassas VA Ground Location:

Mobile airborne transmissions conducted within a flight pattern centered on the test area center point at 38°43'15" N; 77°30'54.36"W, with the furthest waypoints lying on a radius of 370km about the center point. The maximum flight ceiling planned is 5486.4m (18,000 feet) above ground level (AGL) (range will be from 15-18,000 ft). Ground elevation above sea level at the center point coordinates is 58.6m at this location. The nearest airport to the center point coordinates is Manassas Regional Airport/Harry P. Davis Field Washington, District of Columbia, USA within 1 km from the center point coordinates.

## 2. Frequency Requirements

STA is requested for transmit frequencies that will fall within the following band ranges:

| Source          |                   | Source Frequencies |                 |                 |
|-----------------|-------------------|--------------------|-----------------|-----------------|
|                 |                   | Low (MHz)          | Middle (MHz)    | High (MHz)      |
| Collins VHF-22C | VHF-AM            | 115.000-121.000    | 122.000-128.750 | 132.000-138.900 |
| AN/ARC-210      | VHF-FM Military   | 27.000-33.100      | 45.000-51.550   | 84.000-90.900   |
|                 | VHF-AM            | 115.000-121.000    | 132.000-138.900 | 147.000-153.500 |
|                 | VHF-FM Civil      | 135.000-141.000    | 153.000-159.000 | 169.000-175.200 |
|                 | UHF-AM            | 223.000-229.400    | 296.000-302.100 | 396.000-402.700 |
|                 | UHF SATCOM Uplink | 289.000-295.000    | 301.000-307.000 | 315.000-321.000 |
| AN/PRC-117G     | VHF-FM Military   | 27.000-33.100      | 45.000-51.550   | 84.000-90.900   |
|                 | VHF-AM            | 115.000-121.000    | 132.000-138.900 | 147.000-153.500 |
|                 | VHF-FM Civil      | 135.000-141.000    | 153.000-159.000 | 169.000-175.200 |
|                 | UHF-AM            | 223.000-229.400    | 296.000-302.100 | 396.000-402.700 |
|                 | UHF-FM Low        | 381.000-387.000    | 437.000-443.000 | 507.000-513.000 |
|                 | UHF-FM High       | 528.000-534.000    | 726.000-732.000 | 946.000-952.000 |
|                 | UHF SATCOM Uplink | 289.000-295.000    | 301.000-307.000 | 315.000-321.000 |

## 3. Other technical information

### Emission Designators:

- 16K0F3E – 30-88 MHz (PRC-117)
- 25K0F1D / 1M20G1D – 225-400 MHz (PRC-117)
- 25K0K3E – 117-137 MHz (VHF-22C)
- 25K0F3E – 30-2000 MHz (ARC-210)

## 4. Stop Buzzers

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