

**Special Temporary Authority to Experimental License
The Boeing Company
Cabin Systems
8 Locations**

Formerly Reference: File Number 0295-EX-ST-2004 – WB9XXK – Expired Nov. 20, 2004

12/20/04

Submitted by:

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This application is to replace WB9XXK that expired Nov. 20, 2004 prior to the completion of the developmental and research work was completed. If additional time is required, a subsequent application for an experimental license with prior coordination from the FAA will be obtained. The work is only for BOEING COMMERCIAL AIRPLANES and IS NOT classified.

Refer to the Confidentiality Items Document for non-disclosed information.

Frequencies:

5150 to 5250 MHz	FX	100MWXX	OFDM	220 mW (ERP)
5250 to 5350 MHz	FX	100MWXX	OFDM	220 mW (ERP)
5725 to 5825 MHz	FX	100MWXX	OFDM	220 mW (ERP)
5470 to 5725 MHz	FX	100MWXX	OFDM	220 mW (ERP)

Note: All other technical information and exhibits provided in the original ST application for WB9XXK such as... test equipment, antenna, locations, antenna height relative to ground, frequencies and modulation apply to this application. An 8th location is being added to this application that was not originally included in the STA that expired.

The purpose of this application is to continue testing with suppliers for research and development.

The elevation listed below is for the nearest township, not the actual airfield, so it may be off by a few feet.

Some of the contacts below may change. If the Commission requires updates, Boeing will maintain a current list and make it available.

Locations:

1) Phoenix-Litchfield Airport, Goodyear, (Maricopa County), AZ

Mobile 3 KMRA of 33° 25' 48"N, 112° 21' 49"W (WGS84/NAD83)
Elevation = 963 ft

Contact is TIMCO-Goodyear - John Martin 623-792-1333

Link to location:

<http://www.topozone.com/map.asp?z=12&n=3699805.00006684&e=373233.999998748&datum=nad83&u=7>

2) Marana Air Park, Marana, (Pinal County), AZ

Mobile 3 KMRA of 32° 30' 42"N, 111° 19' 11"W (WGS84/NAD83)
Elevation = 1992 ft

Contact is Evergreen - Dave Querio 520-682-4181

Link to location:

<http://www.topozone.com/map.asp?z=12&n=3597207&e=469964&s=100&size=l&u=6&datum=nad83&layer=DRG25>

3) Mojave Airport, Mojave, (Kern County), CA

Mobile 3 KMRA of 35° 03' 24"N, 118° 09' 26"W (WGS84/NAD83)
Elevation = 2757 ft

Contact is AVTEL - Vern Alexander 661-824-4517

Link to location:

<http://www.topozone.com/map.asp?z=11&n=3879959&e=394463&s=100&size=m&u=6&datum=nad83&layer=DRG25>

4) George Air Force Base, Victorville, (San Bernardino County), CA

Mobile 3 KMRA of 34° 35' 16"N, 117° 22' 31"W (WGS84/NAD83) Elevation = 2715 ft

Contact is Pratt & Whitney - Steve White 760-403-8451

Link to location:

<http://www.topozone.com/map.asp?z=11&n=3827405&e=465576&s=100&size=m&u=6&datum=nad83&layer=DRG25>

5) Roswell Industrial Air Center Airport, Roswell, (Chaves County), NM

Mobile 3 KMRA of 33° 24' 24"N, 104° 32' 36"W (WGS84/NAD83) Elevation = 3573 ft

Contact is American Airlines - David Vaughn 918-292-2025

Link to location:

<http://www.topozone.com/map.asp?z=13&n=3696469.0000798&e=542467&datum=nad83&u=6>

6) Boeing Field, Seattle, (King County), WA

Mobile 3 KMRA of 47° 32' 20"N, 122° 18' 46"W (WGS84/NAD83) Elevation=15 ft

Contact is Boeing - Don Schultz 425-239-9674

Link to location

<http://www.topozone.com/map.asp?z=10&n=5265278.00017739%20&e=551707.000000014&u=6&datum=nad83>

7) Paine Field, Everett, (Snohomish County), WA

Mobile 3 KMRA of 47° 54' 43"N, 122° 16' 20"W (WGS84/NAD83) Elevation=583 ft

Contact is Boeing - Don Schultz 425-239-9674

Link to location

<http://www.topozone.com/map.asp?lat=47.911944444444&lon=-122.272222222222&datum=nad83&u=6>

8) Network Lab Building, Redmond (King County), WA

Fixed 47° 38' 44.3" N 122° 07' 55.5" W (WGS84/NAD83) Elevation=211 ft

Contact is Boeing - Don Schultz 425-239-9674

Link to location

<http://www.topozone.com/map.asp?latd=47&latm=38&latS=44.3&lond=122&lonm=7&lons=55.5&datum=NAD83&u=6>

Period of Research and Development

Boeing requests that the STA be authorized from January 20, 2005 to June 20, 2005.

RF Equipment

Wireless Access Points:

Cisco Air-AP 1200, 2 units, not experimental

Orinoco AP2000, 2 units, not experimental

Antennas

Experimental

Directional

Beam width at half power point is 30 degrees

Horizontal Plane orientation is 36 degrees

Vertical Plane is 18 degrees

The antenna will not be more than 6 meters above the ground. At locations 1 through 7, the antenna is always located inside the aircraft that will always be on the ground, never airborne and never with any passengers. The aircraft will be positioned within the airport near hangars or in a hangar and never near runways. At location 8, the antenna is located inside a building in a network lab.