

The Boeing Company

Request for Experimental License Exhibit

Robust Surface Navigation (RSN)
Contracted Research and Development Project for DARPA

St. Louis, MO
Butler, IN

Updated and Submitted: 6/21/2007

by

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Request for Experimental License

See Confidential Items Document.

Sensitive Information

See Confidentiality Statement Document.

Timely Response Appreciated

Boeing will greatly appreciate a determination as quickly as possible to meet the directive schedule.

Locations

The Boeing Company

Bldg 73-105

6300 James S McDonnell Blvd

St. Louis (ST. LOUIS COUNTY), MO 63134

1 KMRA of

38° 45' 18"N

90° 20' 49"W

WGS84/NAD83



Figure 1 – Boeing, St. Louis, MO

The Boeing Company

Antenna Test Range

St. Charles County Smartt Field

Hwy B

St. Charles (ST. CHARLES COUNTY), MO 63301

1 KMRA of

38° 55' 34"N

90° 25' 23"W

WGS84/NAD83

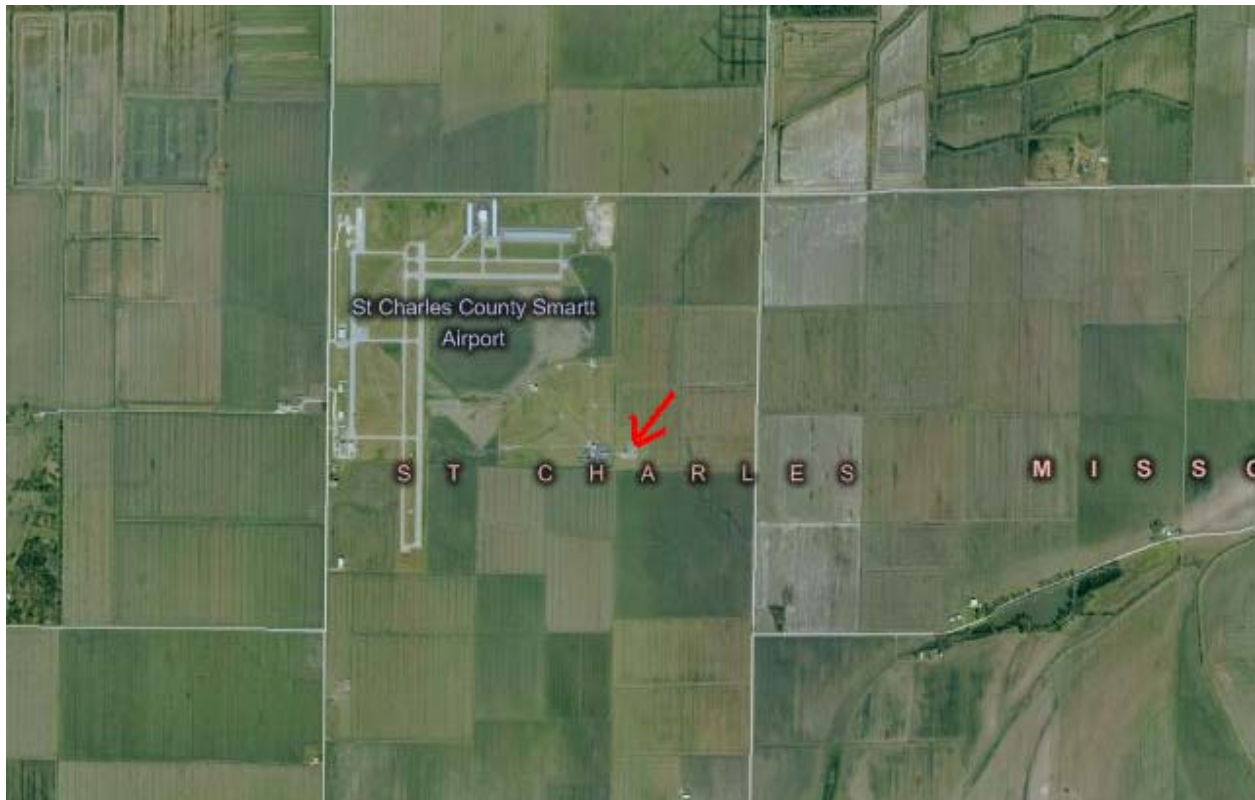


Figure 2 – St. Charles County Smartt Field

Washington University in St. Louis

One Brookings Drive

St. Louis, MO 63110

1 KMRA of

38° 38' 55"N

90° 18' 34"W

WGS84/NAD83

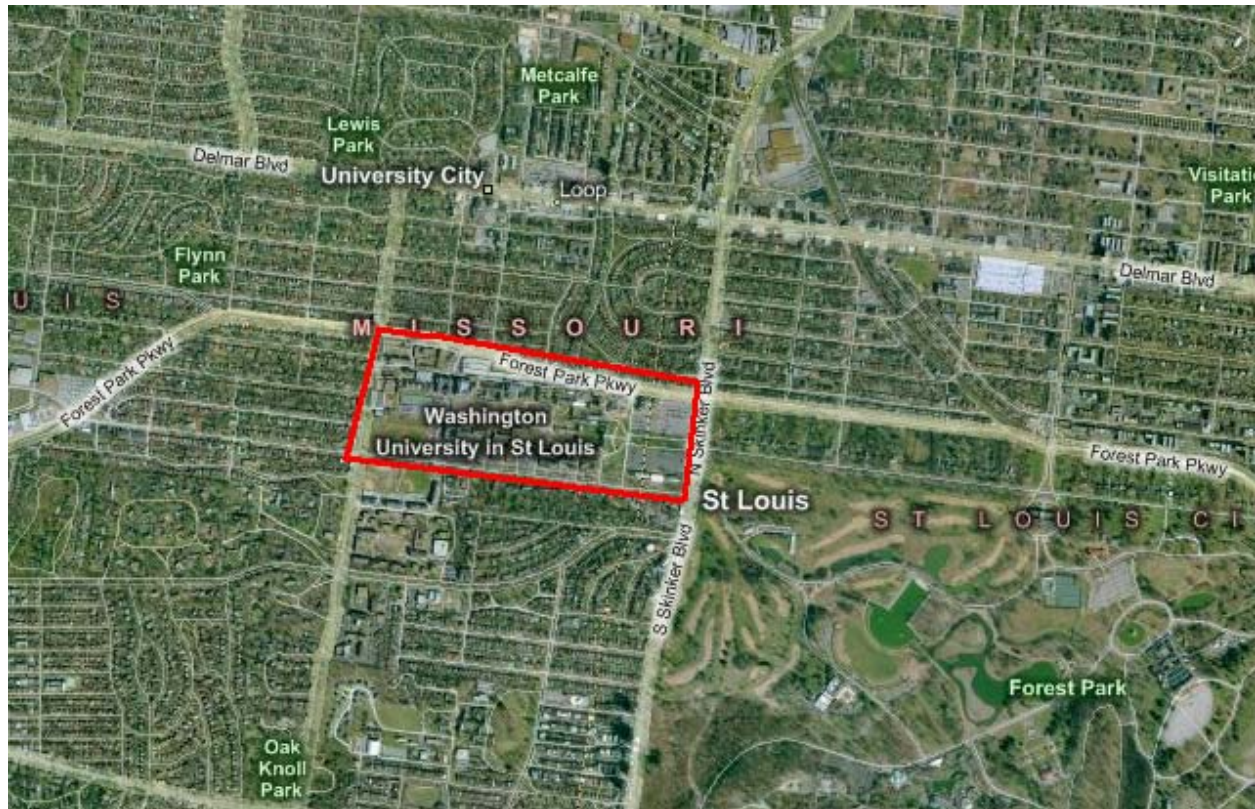


Figure 3 – Washington University in St. Louis, MO

Indiana National Guard Muscatatuck Urban Training Center

PO Box 77

Butlerville, Indiana 47223

1 KMRA of

39-02-58 N

85-31-43 W

WGS84/NAD83

<http://www.mutc.org/Index.htm>



Figure 4 – Indiana National Guard Muscatatuck Urban Training Center, Butlerville, IN

Schedule

The requested STA is to be effective for 2-years upon a grant for the FCC/OET. Operations will be at any time, 24 hours a day, 7 days a week, as needed. If there is a possibility of an application for renewal, Boeing will re-coordinate with the SBE Regional Coordinators.

Stop Buzzer Contact Information

The equipment will be operated by Boeing employees.

James Bornholdt
Engineer/Scientist 5
Email: james.m.bornholdt@boeing.com
Office: 636-458-9380
Mobile: 314-920-8991

Anne T Haddad
Associate Technical Fellow
Email: anne.t.haddad@boeing.com
Office: 314-232-0233
Mobile: 610-986-5054

Subcontractor employees present will be:

Dr. Guttorm Opshaug
Project Manager
gopshaug@rosum.com
650-704-9756

Todd Young
Dir. Product and Business Development
Email: tyoung@rosum.com
Office: 650-230-7341
Mobile: 408-202-1099

Frequencies, Power and Emission

6 to 8 channels per location will be required from the tables below. These are the final pre-coordinated frequency channels as determined by local conditions by each SBE regional coordinator. To the best of our research, we believe that the frequencies listed below are all vacant Part 74 channels in all locations or as noted. See attached exhibits from each local SBE coordinator. Local project engineers will verify by spectral analysis that the final selected channels are indeed vacant upon prior use at least daily.

Table 1 - Frequencies, Power and Emission for Butlerville, Indiana area only

Experimental License Application 50 km Clear Channels							
TV	MHz	Station Class	Emission A	Emission B	Emission C	Emission D	RF Power (Max EIRP)
20*	506-512	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
36	602-608	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
40	626-632	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
45*	656-662	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
50	686-692	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
53	704-710	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
57	728-734	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
59*	740-746	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
61	752-758	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0

* Contact SBE coordinator of your operations in advance, David Fort, 317-225-8114, davidfort@sbcglobal.net.

Provide contact information for immediate shut down on a mutually agreed schedule and arrangement.

50 km Clearance

100 km Clearance

Table 2 - Frequencies, Power and Emission for St. Louis, MO area only

Experimental License Application 50 km Clear Channels							
TV	MHz	Station Class	Emission A	Emission B	Emission C	Emission D	RF Power (Max EIRP)
15	476-482	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
20	506-512	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
25	536-542	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
32	578-584	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
36	602-608	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
45	656-662	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
53*	704-710	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
54	710-716	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
58	734-740	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
59	740-746	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0
61	752-758	MO	6M00F1D	6M00G7D	6M00G7F	6M00D7W	10.0

* Not available at the ST. Charles County Airport Smartt Field test location.

All channels - Contact SBE coordinator of your operations in advance, Sam Caputa, 314-566-2131 mobile, sam@stl.emmis.com. Provide contact information for immediate shut down on a mutually agreed schedule and arrangement.

50 km Clearance

100 km Clearance

Equipment and Antennas

See Confidential Items Document.

Operating Test Configuration

See Confidential Items Document.

Experimental Equipment Label

The following label will be attached to all of the experimental transmitters:

The Federal Communications Commission has granted this device an Experimental License identified by Call Sign: WXXXXXX and file number XXXX-EX-PL-2007 to operate under Part 5 of the FCC's Rules. The licensee is The Boeing Company. This licensee is required to operate the device as described in the licensee's application and under condition not to cause harmful interference to other licensed services. The operator is obligated to turn off the equipment immediately if interference is reported. The operation of this device is limited to the locations and within the Special Conditions listed on the Experimental License. This device is experimental and is not for sale and may not be offered for sale. Further information is available by calling Boeing Frequency Management Services; toll free at 866-248-1493.