

John Kennedy

From: John Kennedy
Sent: Friday, August 15, 2008 2:10 PM
To: 'sglaya@elitetest.com'
Subject: FCC File # 0322-EX-ST-2008

Mr. Steve Laya,

The FAA nonconcurs to conducting the test outdoors at this time. This test is similar to testing that has been requested by the DoD and denied. Work is underway to establish a standard that provides maximum field strength limits at given distances for various frequency bands to support this kind of testing, but unless you can exclude the 74.8-75.2, 108-137, 225-400, and 960-1390 bands (all in MHz), the FAA cannot currently concur. Don Nellis is the POC within the FAA for participation in the development of these standards and can be contacted at 202-267 9779 if you would like any additional information.

The Federal Government objects to this STA unless no emissions are authorized in the following bands, in accordance with US246:

73 - 74.6 MHz
608 - 614 MHz
1400 - 1427 MHz
1660.5 - 1668.4 MHz

Furthermore, the Federal Government requires the following assigned frequencies be protected from harmful interference:

Class	Frequency	State	Tx Antenna Location
UE	M170.025	IA	MISSOURI VALLEY
UE	M170.025	NE	FORT CALHOUN
UE	M171.5375	IA	MISSOURI VALLEY
UE	M171.5375	NE	FORT CALHOUN
UE	M171.5375	NE	FORT CALHOUN

The National Science Foundation requests prior coordination with its North Liberty, Iowa, VLBA station before operating in the following bands allocated exclusively or on a shared basis with the radio astronomy service:

25.55 - 25.67 MHz (primary exclusive)
37.5 - 38 MHz (secondary)
38 - 38.25 MHz (primary shared)
406.1 - 410 MHz (primary shared)
1610.6 - 1613.8 MHz (primary shared)
1660 - 1660.5 MHz (primary shared)
1668.4 - 1670 MHz (primary shared)

The Department of Defense objects to the use of the 225.0-328.6 MHz and 335.4-399.9 MHz bands due to the fact there has been no Military Assignment Group (MAG) prior coordination.

In addition, the Department of Defense requires that the following frequencies be notched:

M154.77
M154.80
M154.89
M236.20

You should be aware that the AFTRCC bands (1435-1525 MHz, 2310-2320 MHz and 2345-2390 MHz) should be prior coordinated (or excluded) as well.

John W. Kennedy

Federal Communications Commission
Experimental Licensing Branch
(202) 418-2484

John Kennedy

From: Dan Crowder [decrowder@elitetest.com]
Sent: Monday, August 18, 2008 3:16 PM
To: John Kennedy
Cc: 'Steve Laya'; 'Craig Fanning'
Subject: File number 0322-EX-ST-2008

Hello John,

I have modified the application to remove all the bands including the FM band that we talked about on Aug. 15, 2008. I also put the exact frequencies that we will be transmitting at on the application. I hope this helps. If you need any further modifications, please let me know. As we also talked about, the date that we need the license is September 10, 2008. If there is anything that we can do to help expedite this please let us know. Thanks again for all your help.

Regards,

Dan Crowder
Elite Electronic Engineering Inc.
1516 Centre Circle
Downers Grove, IL 60515
ph: 630-495-9770 x 101
fx: 630-495-9785
email: decrowder@elitetest.com
web: <http://www.elitetest.com>

"PLEASE NOTE": The preceding information may be confidential or privileged. It only should be used or disseminated for the purpose of conducting business with Elite Electronic Engineering, Inc. If you are not the intended recipient, please notify the sender by replying to this message and then delete the information from your system. Thank you for your cooperation."

8/25/2008

**Experimental Licensing Branch
Office of Engineering and Technology**

The following application is attached for your review:

Applicant: Elite Electronic Engineering, Inc.
File Number: 0322-EX-ST-2008

Start Date: 9/9/2008 **End Date:** 9/13/2008

Why STA Is Necessary :
Reason for Outdoor Testing

Elite Electronic Engineering, Inc. is requesting Special Temporary Authorization (STA) for the purpose of conducting an outdoor radiated radio frequency susceptibility test on a large agricultural vehicle

The evaluation of this vehicle requires a chamber having a ceiling clearance height of 24ft tall. The agricultural vehicle manufacturer has indicated that their search of indoor EMC test facilities has resulted in finding no commercial test facilities (including Elite) which are able to fit the machine within their shielded chambers. Since this vehicle is not capable of being tested indoors, the only alternative is to perform the test outdoors and minimize the level of interference with neighboring transceivers.

Elite is an independent EMC testing laboratory and routinely conducts radiated susceptibility test for this agricultural equipment manufacturer as well as other manufacturers providing similar equipment. For this client as well as others, Elite conducts radio frequency susceptibility testing within the confined environment of its whole vehicle EMC test chamber. The Elite whole vehicle chamber is fully shielded and measures 100feet long by 35feet wide and 17.5feet tall with an access door 15.9feet tall and 16.5feet wide. Elite's chamber at 17.5feet tall is not sized high enough for testing this large cotton harvesting machine.

Purpose of Operation :
Project Description

The agricultural vehicle is from a line of machinery developed to automate cotton harvesting. The cotton harvesting machine is very large and is fully equipped with electronic systems that control all aspects of the vehicle operations. The radiated susceptibility testing by Elite will determine the ability of the vehicle to operate safely in its electromagnetic environment without any change in state, function, or performance. The test will also determine if the machine will maintain a safe state while stopped (or during normal operation) without any uncommanded movements.

The vehicle manufacturer has specified testing to illuminate eight (8) critical locations on the vehicle where electronic subsystems and harnesses are mounted. The manufacturer has prescribed test levels and methodology from their corporate test specification. The rationale for their requirements takes into consideration the anticipated worst case RF vehicle environment plus a safety margin. Their corporate test requirements are also designed to envelope European and other international regulations for radiated immunity.

The manufacturer's requirements for radiated immunity state the test shall be conducted with an antenna positioned at a distance of 1 meter from the vehicle. The test amplitude is specified for 120V/m across the frequency band of 20MHz to 2,500MHz. The specific test frequencies are spaced logarithmically in 2% steps. The test will be performed with a 1kHz 80%AM modulation and as a continuous wave (CW) transmission. The test will be performed with a transmit dwell time of no longer than 2 seconds at any test frequency. The testing will occur between the hours of 7:00am to 8:00pm CST. The anticipated test dates are September 9th through September 13th 2008.

Contact: Daniel Crowder
Phone: 630-495-9770 x 101
Email: decrowder@elitetest.com
Nature of Service: EXPERIMENTAL
Class of Station: XT MO

Station Locations

MOBILE: Remote location near rural Kimballton Iowa., within 0.01 km , centered around NL 41-14-12; WL 95-57-01

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance(+/-)
20 MHz	MO	N0N	300W (ERP)	

20 MHz	MO	2K00A3E	300W (ERP)
21 MHz	MO	N0N	300W (ERP)
21 MHz	MO	2K00A3E	300W (ERP)
22.05 MHz	MO	N0N	300W (ERP)
22.05 MHz	MO	2K00A3E	300W (ERP)
23.153 MHz	MO	N0N	300W (ERP)
23.153 MHz	MO	2K00A3E	300W (ERP)
24.31 MHz	MO	N0N	300W (ERP)
24.31 MHz	MO	2K00A3E	300W (ERP)
25.526 MHz	MO	N0N	300W (ERP)
25.526 MHz	MO	2K00A3E	300W (ERP)
26.802 MHz	MO	N0N	300W (ERP)
26.802 MHz	MO	2K00A3E	300W (ERP)
27.185 MHz	MO	N0N	300W (ERP)
27.185 MHz	MO	2K00A3E	300W (ERP)
28.142 MHz	MO	N0N	300W (ERP)
28.142 MHz	MO	2K00A3E	300W (ERP)
29.549 MHz	MO	N0N	300W (ERP)
29.549 MHz	MO	2K00A3E	300W (ERP)
31.027 MHz	MO	N0N	300W (ERP)
31.027 MHz	MO	2K00A3E	300W (ERP)
32.578 MHz	MO	N0N	300W (ERP)
32.578 MHz	MO	2K00A3E	300W (ERP)
34.207 MHz	MO	N0N	300W (ERP)
34.207 MHz	MO	2K00A3E	300W (ERP)
35.917 MHz	MO	N0N	300W (ERP)
35.917 MHz	MO	2K00A3E	300W (ERP)
39.599 MHz	MO	N0N	300W (ERP)
39.599 MHz	MO	2K00A3E	300W (ERP)
41.579 MHz	MO	N0N	300W (ERP)
41.579 MHz	MO	2K00A3E	300W (ERP)
43.657 MHz	MO	N0N	300W (ERP)
43.657 MHz	MO	2K00A3E	300W (ERP)
45.84 MHz	MO	N0N	300W (ERP)

45.84 MHz	MO	2K00A3E	300W (ERP)
48.132 MHz	MO	N0N	300W (ERP)
48.132 MHz	MO	2K00A3E	300W (ERP)
50.539 MHz	MO	N0N	300W (ERP)
50.539 MHz	MO	2K00A3E	300W (ERP)
53.066 MHz	MO	N0N	300W (ERP)
53.066 MHz	MO	2K00A3E	300W (ERP)
55.719 MHz	MO	N0N	300W (ERP)
55.719 MHz	MO	2K00A3E	300W (ERP)
58.505 MHz	MO	N0N	300W (ERP)
58.505 MHz	MO	2K00A3E	300W (ERP)
61.43 MHz	MO	N0N	300W (ERP)
61.43 MHz	MO	2K00A3E	300W (ERP)
64.502 MHz	MO	N0N	300W (ERP)
64.502 MHz	MO	2K00A3E	300W (ERP)
67.727 MHz	MO	N0N	300W (ERP)
67.727 MHz	MO	2K00A3E	300W (ERP)
74.669 MHz	MO	N0N	300W (ERP)
74.669 MHz	MO	2K00A3E	300W (ERP)
78.403 MHz	MO	N0N	300W (ERP)
78.403 MHz	MO	2K00A3E	300W (ERP)
82.323 MHz	MO	N0N	300W (ERP)
82.323 MHz	MO	2K00A3E	300W (ERP)
86.439 MHz	MO	N0N	300W (ERP)
86.439 MHz	MO	2K00A3E	300W (ERP)
140.8 MHz	MO	N0N	300W (ERP)
140.8 MHz	MO	2K00A3E	300W (ERP)
147.84 MHz	MO	N0N	300W (ERP)
147.84 MHz	MO	2K00A3E	300W (ERP)
155.232 MHz	MO	N0N	300W (ERP)
155.232 MHz	MO	2K00A3E	300W (ERP)
162.993 MHz	MO	N0N	300W (ERP)
162.993 MHz	MO	2K00A3E	300W (ERP)
171.143 MHz	MO	N0N	300W (ERP)

171.143 MHz		MO		2K00A3E	300W (ERP)
179.7 MHz	MO		N0N		300W (ERP)
179.7 MHz	MO		2K00A3E		300W (ERP)
188.685 MHz		MO		N0N	300W (ERP)
188.685 MHz		MO		2K00A3E	300W (ERP)
198.119 MHz		MO		N0N	300W (ERP)
198.119 MHz		MO		2K00A3E	300W (ERP)
208.025 MHz		MO		N0N	300W (ERP)
208.025 MHz		MO		2K00A3E	300W (ERP)
218.427 MHz		MO		N0N	300W (ERP)
218.427 MHz		MO		2K00A3E	300W (ERP)
416.16 MHz	MO		N0N		300W (ERP)
416.16 MHz	MO		2K00A3E		300W (ERP)
424.483 MHz		MO		N0N	300W (ERP)
424.483 MHz		MO		2K00A3E	300W (ERP)
432.973 MHz		MO		N0N	300W (ERP)
432.973 MHz		MO		2K00A3E	300W (ERP)
441.632 MHz		MO		N0N	300W (ERP)
441.632 MHz		MO		2K00A3E	300W (ERP)
450.465 MHz		MO		N0N	300W (ERP)
450.465 MHz		MO		2K00A3E	300W (ERP)
459.474 MHz		MO		N0N	300W (ERP)
459.474 MHz		MO		2K00A3E	300W (ERP)
468.664 MHz		MO		N0N	300W (ERP)
468.664 MHz		MO		2K00A3E	300W (ERP)
478.037 MHz		MO		N0N	300W (ERP)
478.037 MHz		MO		2K00A3E	300W (ERP)
487.598 MHz		MO		N0N	300W (ERP)
487.598 MHz		MO		2K00A3E	300W (ERP)
497.35 MHz	MO		N0N		300W (ERP)
497.35 MHz	MO		2K00A3E		300W (ERP)
507.297 MHz		MO		N0N	300W (ERP)
507.297 MHz		MO		2K00A3E	300W (ERP)
517.443 MHz		MO		N0N	300W (ERP)

517.443 MHz		MO	2K00A3E	300W (ERP)
527.792 MHz		MO	N0N	300W (ERP)
527.792 MHz		MO	2K00A3E	300W (ERP)
538.347 MHz		MO	N0N	300W (ERP)
538.347 MHz		MO	2K00A3E	300W (ERP)
549.114 MHz		MO	N0N	300W (ERP)
549.114 MHz		MO	2K00A3E	300W (ERP)
560.097 MHz		MO	N0N	300W (ERP)
560.097 MHz		MO	2K00A3E	300W (ERP)
571.298 MHz		MO	N0N	300W (ERP)
571.298 MHz		MO	2K00A3E	300W (ERP)
582.724 MHz		MO	N0N	300W (ERP)
582.724 MHz		MO	2K00A3E	300W (ERP)
594.379 MHz		MO	N0N	300W (ERP)
594.379 MHz		MO	2K00A3E	300W (ERP)
606.267 MHz		MO	N0N	300W (ERP)
606.267 MHz		MO	2K00A3E	300W (ERP)
618.392 MHz		MO	N0N	300W (ERP)
618.392 MHz		MO	2K00A3E	300W (ERP)
630.76 MHz	MO		N0N	300W (ERP)
630.76 MHz	MO		2K00A3E	300W (ERP)
643.375 MHz		MO	N0N	300W (ERP)
643.375 MHz		MO	2K00A3E	300W (ERP)
656.242 MHz		MO	N0N	300W (ERP)
656.242 MHz		MO	2K00A3E	300W (ERP)
669.367 MHz		MO	N0N	300W (ERP)
669.367 MHz		MO	2K00A3E	300W (ERP)
682.755 MHz		MO	N0N	300W (ERP)
682.755 MHz		MO	2K00A3E	300W (ERP)
696.41 MHz	MO		N0N	300W (ERP)
696.41 MHz	MO		2K00A3E	300W (ERP)
710.338 MHz		MO	N0N	300W (ERP)
710.338 MHz		MO	2K00A3E	300W (ERP)
724.545 MHz		MO	N0N	300W (ERP)

724.545 MHz		MO	2K00A3E	300W (ERP)
739.036 MHz		MO	N0N	300W (ERP)
739.036 MHz		MO	2K00A3E	300W (ERP)
753.816 MHz		MO	N0N	300W (ERP)
753.816 MHz		MO	2K00A3E	300W (ERP)
768.893 MHz		MO	N0N	300W (ERP)
768.893 MHz		MO	2K00A3E	300W (ERP)
784.27 MHz	MO		N0N	300W (ERP)
784.27 MHz	MO		2K00A3E	300W (ERP)
799.956 MHz		MO	N0N	300W (ERP)
799.956 MHz		MO	2K00A3E	300W (ERP)
815.955 MHz		MO	N0N	300W (ERP)
815.955 MHz		MO	2K00A3E	300W (ERP)
832.274 MHz		MO	N0N	300W (ERP)
832.274 MHz		MO	2K00A3E	300W (ERP)
848.92 MHz	MO		N0N	300W (ERP)
848.92 MHz	MO		2K00A3E	300W (ERP)
865.898 MHz		MO	N0N	300W (ERP)
865.898 MHz		MO	2K00A3E	300W (ERP)
883.216 MHz		MO	N0N	300W (ERP)
883.216 MHz		MO	2K00A3E	300W (ERP)
900.88 MHz	MO		N0N	300W (ERP)
900.88 MHz	MO		2K00A3E	300W (ERP)
918.898 MHz		MO	N0N	300W (ERP)
918.898 MHz		MO	2K00A3E	300W (ERP)
937.276 MHz		MO	N0N	300W (ERP)
937.276 MHz		MO	2K00A3E	300W (ERP)
956.021 MHz		MO	N0N	300W (ERP)
956.021 MHz		MO	2K00A3E	300W (ERP)
1428.246 MHz		MO	N0N	300W (ERP)
1428.246 MHz		MO	2K00A3E	300W (ERP)
1545.98 MHz		MO	N0N	300W (ERP)
1545.98 MHz		MO	2K00A3E	300W (ERP)
1576.899 MHz		MO	N0N	300W (ERP)

1576.899 MHz	MO	2K00A3E	300W (ERP)
1608.437 MHz	MO	N0N	300W (ERP)
1608.437 MHz	MO	2K00A3E	300W (ERP)
1640.606 MHz	MO	N0N	300W (ERP)
1640.606 MHz	MO	2K00A3E	300W (ERP)
1673.418 MHz	MO	N0N	300W (ERP)
1673.418 MHz	MO	2K00A3E	300W (ERP)
1706.886 MHz	MO	N0N	300W (ERP)
1706.886 MHz	MO	2K00A3E	300W (ERP)
1741.024 MHz	MO	N0N	300W (ERP)
1741.024 MHz	MO	2K00A3E	300W (ERP)
1775.845 MHz	MO	N0N	300W (ERP)
1775.845 MHz	MO	2K00A3E	300W (ERP)
1811.362 MHz	MO	N0N	300W (ERP)
1811.362 MHz	MO	2K00A3E	300W (ERP)
1847.589 MHz	MO	N0N	300W (ERP)
1847.589 MHz	MO	2K00A3E	300W (ERP)
1884.541 MHz	MO	N0N	300W (ERP)
1884.541 MHz	MO	2K00A3E	300W (ERP)
1922.231 MHz	MO	N0N	300W (ERP)
1922.231 MHz	MO	2K00A3E	300W (ERP)
1960.676 MHz	MO	N0N	300W (ERP)
1960.676 MHz	MO	2K00A3E	300W (ERP)
1999.89 MHz	MO	N0N	300W (ERP)
1999.89 MHz	MO	2K00A3E	300W (ERP)
2039.887 MHz	MO	N0N	300W (ERP)
2039.887 MHz	MO	2K00A3E	300W (ERP)
2080.685 MHz	MO	N0N	300W (ERP)
2080.685 MHz	MO	2K00A3E	300W (ERP)
2122.299 MHz	MO	N0N	300W (ERP)
2122.299 MHz	MO	2K00A3E	300W (ERP)
2164.745 MHz	MO	N0N	300W (ERP)
2164.745 MHz	MO	2K00A3E	300W (ERP)
2208.04 MHz	MO	N0N	300W (ERP)

2208.04 MHz		MO	2K00A3E	300W (ERP)
2252.2 MHz	MO		N0N	300W (ERP)
2252.2 MHz	MO		2K00A3E	300W (ERP)
2297.244 MHz		MO	N0N	300W (ERP)
2297.244 MHz		MO	2K00A3E	300W (ERP)
2343.189 MHz		MO	N0N	300W (ERP)
2343.189 MHz		MO	2K00A3E	300W (ERP)
2390.053 MHz		MO	N0N	300W (ERP)
2390.053 MHz		MO	2K00A3E	300W (ERP)
2437.854 MHz		MO	N0N	300W (ERP)
2437.854 MHz		MO	2K00A3E	300W (ERP)
2486.611 MHz		MO	N0N	300W (ERP)
2486.611 MHz		MO	2K00A3E	300W (ERP)