

NARRATIVE STATEMENT
(Amended 10/06/2015)

Pursuant to Section 5.3(e) of the Commission’s rules, 47 C.F.R. §§ 5.3(e) (2014), the Laufer Wind Group LLC (“LWG”) hereby respectfully requests a license with the radio station code “XE” (*i.e.*, for Experimental Export) so that it may operate on a limited, periodic basis as described below on 1030 MHz for the purpose of evaluating the functionality of equipment to be exported and operated outside the United States that will facilitate the use of radar activated obstruction lighting systems with traffic collisions avoidance systems (“TCAS”). Grant of this request would complement the research and development LWG is conducting under its existing experimental authority issued under call sign WF2XVD.

The following information is provided in support of this application:

A. Purpose of Operation and Need for License:

The Laufer Wind Group LLC is a wind energy consulting and engineering firm specializing in new technology evaluations and development. It is headquartered in Bedford, New Hampshire, and conducts research at a location near Rocky Flats, Colorado. LWG is currently developing the Aircraft Detection Sight Solution (“ADSS”) to address the competing needs of the wind energy and aviation industries. In particular, the ADSS is designed to balance Federal Aviation Administration (“FAA”) lighting requirements with the nuisance light concerns of local communities, one of the main impediments to wind energy development in the United States.

LWG now seeks to evaluate the performance and compatibility of ADSS equipment it is designing for use outside the United States with TCAS equipment typically found on aircraft. Although, the ADSS relies on its primary radar to detect the presence of aircraft, the company is interested in examining the feasibility of supplementing the primary radar with the information available from TCAS equipment. Specifically, LWG seeks to determine whether the interrogation functionality of TCAS equipment may be incorporated into the ADSS to collect range, bearing and other information about aircraft near a wind farm to enhance the capability, performance and reliability of the ADSS system.

Because LWG is a relatively small company with limited resources, it cannot practicably and economically conduct such tests at locations outside the United States. Thus, the company seeks FCC authority to operate and evaluate equipment for export at one of the company’s U.S. locations.

B. Location of Proposed Operations:

LWG proposes to deploy test equipment at the following location:

Location	Coordinates (NAD83)
Up to 4 temporarily fixed base stations within a 3 km radius of National Renewable Energy Laboratory Rocky Flats, CO	39°54'35.2" North Latitude 105°13'33.7" West Longitude

C. Technical Specifications:

1. Frequencies Desired

LWG requests authorization to operate on 1030 MHz. The tests will be conducted using channels with bandwidths of 6 to 12 MHz within that band, as described in Section C.3 below.

2. Effective Radiated Power

All operations will be conducted consistent with Part 5 and Subpart Q of Part 87 of the FCC Rules, 47 C.F.R. Parts 5, 87 (2014). For example, all power levels will comply with the limits set forth in those rules. As noted below, the equipment will operate with a duty cycle of .0002% or less and at a peak effective radiated power (“ERP”) level 40 Watts or less. Moreover, LWG will limit the power, area of operation, and transmitting times to the minimum necessary to evaluate the system.

3. Modulation and Emissions

The primary emission designators for the proposed operations are 6M80K2D and 12M0M1D. Other emission modes may be utilized, but in no event will the emissions extend beyond the frequency bandwidth requested.

4. Antenna Information

The antennas will be located outdoors at temporarily fixed locations identified in Section B. No antennas will be mounted in a fashion that will require approval under FAA or FCC rules and regulations.

5. Equipment To Be Used

LWG proposes to conduct its tests with up to four (4) temporarily fixed devices installed within a radius of approximately 3 km from the coordinates specified in Section B above. In accordance with Section 87.155 of the FCC’s rules, 47 C.F.R. § 80.145 (2014), the company will use certified equipment in connection with its tests. For example, it currently proposes to deploy devices certified by Avidyne Corporation under FCC I.D. No. RZYTAS6XX-A, but LWG may use other authorized equipment as needed.

D. Protection Against Interference:

LWG recognizes that the operation of any equipment under experimental authority must not cause harmful interference to authorized facilities, including the facilities of other experimental licensees in this band. Accordingly, it will coordinate with any licensees, as required by FCC rules, before commencing operations and will limit the power, area of operation, and transmitting times to the minimum necessary to evaluate the system. The company's proposal has also been discussed with representatives from the FAA, and the response is attached for your reference. In addition, LWG will provide advance notification to, and coordinate its activities with, FAA personnel before commencing any operation. In that regard, the company has designated Eric Laufer, whose contact information is provided below, to act as the "stop buzzer" for this experimentation. Moreover, should interference occur, LWG will take immediate steps to resolve such interference, including if necessary arranging for the discontinuance of its operations.

Notwithstanding the precautions it will take, LWG does not expect harmful interference to occur. First, LWG does not propose to operate transponders (*e.g.*, transmitting on 1090 MHz) as part of these tests. Thus, aircraft with TCAS capabilities and ground based secondary surveillance radar ("SSR") systems would not receive replies that could interfere with TCAS or SSR operations. Second, LWG would limit the scope and duration of any operations. Specifically, it proposes to operate only periodically at each requested location for only a few minutes every 30 to 60 minutes during typical business hours, and such tests would occur fewer than 10 times at each location during the term of its license. Thus, LWG's total transmissions from any location would be limited to less than approximately 175 minutes per year, or less than 0.0002% of any license term year. Nevertheless, LWG is amenable to the issuance of experimental authority that modify its proposed operations should the Commission staff or interested parties request such action. The company also understands that the FCC may specify these limitations or other conditions on its authorization.

E. Restrictions on Operation:

LWG is not seeking authority to perform a market study under this experimental license or to assess any fees or charges in connection with the operation or use of the equipment during these tests. As noted above, the company seeks to evaluate the performance and acceptability of ADSS equipment it is designing for use outside the United States. Thus, none of the equipment is being offered for sale or lease, or sold or leased, for use in the United States. Moreover, the participants in these tests will be principals or employees of the company, and they will be advised that: (a) the operations are being conducted under an experimental authority issued to Laufer Wind Group LLC, (b) the company is responsible for the experimental activities, (c) all operations are being conducted on a non-interference basis, and (d) after the test is completed, the company will retrieve and recover all devices that do not comply with FCC regulations. LWG understands that the FCC may specify these as well as other conditions on its authorization.

F. Public Interest Statement:

LWG submits that grant of an Experimental Export ("XE") license as requested is in the public interest, convenience, and necessity. Such action will allow LWG to expand its evaluation of prototype equipment for use outside the United States and enhance the company's efforts to design and develop a solution to address the competing needs of the wind energy industry, the aviation industry, and local communities.

G. Contact Information:

For questions about this application, please contact FCC Counsel to the Laufer Wind Group LLC:

David E. Hilliard
Kurt E. DeSoto
Wiley Rein LLP
1776 K Street, N.W.
Washington, DC 20006
Telephone: (202) 719-7000
Facsimile: (202) 719-7207
dhilliard@wileyrein.com
kdesoto@wileyrein.com

In the unlikely event interference concerns should arise, please contact Mr. Laufer at the address below. Mr. Laufer will also serve as the designated point-of-contact (“stop buzzer”) to terminate transmissions if interference occurs:

Eric Laufer, President
Laufer Wind Group LLC
270 Lafayette St., Suite 1402
New York, NY 10012
Telephone: (212) 792-3912
Facsimile: (866) 381-5291
elaufer@lauferwindgroup.com

Email

Subject: FW: Discussion with Laufer - Transponder Study

From: ian.atkins@faa.gov [ian.atkins@faa.gov]

Sent: Friday, October 02, 2015 3:04 PM

To: Nebbia, Karl

Cc: rodney.murphy@faa.gov; donald.nellis@faa.gov; timothy.j.pawlowitz@faa.gov; robert.frazier@faa.gov; james.motley@faa.gov; Mark.R.Gallant@faa.gov

Subject: FW: Discussion with Laufer - Transponder Study

Karl

Thank you for contacting Jim Patterson.

Based on his evaluation we are favorable for testing at Rocky Flatts CO. Bedford NH is a congested area for 1030/1090 and testing there will be far more difficult and would need considerable engineering and possible mitigations.

I have copied the HQ and field Spectrum staff on this decision so we can get this test for export moving. We are not indicating any acceptance or recommendation by the FAA of the method or the product just that the test will not impact NAS operations at the CO location adversely.

Thank you again for your time and patience.

V/R

Ian Atkins

Director

Spectrum Engineering and Policy

Federal Aviation Administration

Washington

202 267 7531

Cell 202 497 7809