Dr Michael Buehrer, 432 Durham Hall, 1145 Perry St., Blacksburg, VA 24061,

United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION

EXPERIMENTAL	WK9XFD
(Nature of Service)	(Call Sign)
XT MO	1579-EX-ST-2016
(Class of Station)	(File Number)

NAME Virginia Tech Electrical and Computer Engineering

This Special Temporary Authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This Special Temporary Authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control the Government of the United States conferred by Section 706 of the Communications Act of 1934.

Special Temporary Authority is hereby granted to operate the apparatus described below:

Purpose Of Operation:
To evaluate of the suitability of DSRC technology.

Station Locations

(1) MOBILE: Virginia Tech, Blacksburg, Virginia, within 30 km, centered around NL 37-13-51; WL 80-25-29

Frequency Information

MOBILE: Virginia Tech, Blacksburg, Virginia, within 30 km, centered around NL 37-13-51; WL 80-25-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5870 MHz	MO	10M0D7D 50M0G1N	160 W (ERP)	2 %
5880 MHz	MO	10M0D7D 50M0G1N	160 W (ERP)	2 %

This authorization effective November 15, 2016 and will expire 3:00 A.M. EST May 04, 2017

FEDERAL COMMUNICATIONS COMMISSION

Frequency Information

MOBILE: Virginia Tech, Blacksburg, Virginia, within 30 km, centered around NL 37-13-51; WL 80-25-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5890 MHz	MO		160 W (ERP)	2 %
		10M0D7D		
		50M0G1N		
5900 MHz	MO		160 W (ERP)	2 %
		10M0D7D		
		50M0G1N		
5910 MHz	MO		160 W (ERP)	2 %
		10M0D7D		
		50M0G1N		

Special Conditions:

(1) Licensee should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down.

(2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.

(3) The applicant must coordinate with the existing and future Fixed Microwave Service licensees in accordance with 47 CFR, Part 101.103(d) prior to accessing to 5910 MHz and 5900 MHz.

(4) Department of Transportation concurs but has some concerns with deploying such a high powered system in a band used for surface transportation. 160 watts is a lot of power in these bands and will likely cause significant issues with many of the safety aspects of DSRC for surface transportation. The requester should be cautioned that while research in the near term may be fine, long term use of this band at these power levels are unacceptable.

(5) The designated point-of-contact to terminate the systems if interference occurs is Carl Dietrich at (540) 231-2970 or (540) 231-2963.

Special Conditions:

(6) The USN Mid-Atlantic Area Frequency Coordinator must be notified at least 3 days prior to radiation.

USN-Mid-Atlantic Area Frequency Coordinator Naval Air Warfare Center Aircraft Division Code 5.2.2.2,
Unit 4, Bldg. 2118 Atlantic Test Ranges
23013 Cedar Point Road
Patuxent River, MD 20670-1883
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