

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION**

EXPERIMENTAL

(Nature of Service)

WR9XCH

(Call Sign)

XT FX

(Class of Station)

1509-EX-ST-2020

(File Number)

NAME The Johns Hopkins University Applied Physics Laboratory (JHU/APL)

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 SDR-based 5G UE and gNB using Eridan's MIRACLE Software Defined Radio (SDR)

Station Locations

- (1) Laurel (HOWARD), MD - NL 39-10-09; WL 76-53-31
- (2) Aberdeen (HARFORD), MD - NL 39-27-44; WL 76-11-31

Frequency Information

Laurel (HOWARD), MD - NL 39-10-09; WL 76-53-31

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
840 MHz	FX	5M00F7W	8 W (ERP)	0.01 %
885 MHz	FX	5M00F7W	8 W (ERP)	0.01 %
1902.5 MHz	FX	10M0F7W	8 W (ERP)	0.01 %

This authorization effective October 16, 2020 and
will expire 3:00 A.M. EST January 01, 2021

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Laurel (HOWARD), MD - NL 39-10-09; WL 76-53-31

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1982.5 MHz	FX	10M0F7W	8 W (ERP)	0.01 %

Aberdeen (HARFORD), MD - NL 39-27-44; WL 76-11-31

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
840 MHz	FX	5M00F7W	8 W (ERP)	0.01 %
885 MHz	FX	5M00F7W	8 W (ERP)	0.01 %
1902.5 MHz	FX	10M0F7W	8 W (ERP)	0.01 %
1982.5 MHz	FX	10M0F7W	8 W (ERP)	0.01 %

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) JHU/APL shall coordinate with the incumbent fixed microwave in each corresponding proposed venue prior to conducting the testing.
- (4) Prior to commencing any operations in the frequencies below, JHU/APL must obtain consent from the following within 50 miles of the contours of the testing area:

Cellular licensees (824-849 MHz/869-894 MHz)

Broadband PCS licensees (1850-1910 MHz/1930-1990 MHz)