

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

EXPERIMENTAL

(Nature of Service)

XT MO

(Class of Station)

WO9XJE

(Call Sign)

0703-EX-ST-2019

(File Number)

NAME 4D Tech Solutions, Inc.

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:

Testing is designed to provide verification and validation testing of direction finding capabilities to determine line of bearing at known frequency, power and distance.

Station Locations

- (1) MOBILE: Blossom Point Research Facility, Welcome, MD, within 20 km, centered around NL 38-24-58; WL 77-06-18
- (2) MOBILE: Morgantown, West Virginia, within 274 km, centered around NL 39-39-02; WL 79-56-16

Frequency Information

MOBILE: Blossom Point Research Facility, Welcome, MD, within 20 km, centered around NL 38-24-58; WL 77-06-18

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2-30 MHz	MO	6K00A3E 3K00J3E 3K00A1A	20 W (ERP)	2 %
2-30 MHz	MO	3K00J3E 6K00A3E	20 W (ERP)	2 %

This authorization effective May 23, 2019 and
will expire 3:00 A.M. EST September 26, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

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MOBILE: Morgantown, West Virginia, within 274 km, centered around NL 39-39-02; WL 79-56-16

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2-14 MHz	MO	3K00A1A 6K00A3E 3K00J3E	20 W (ERP)	2 %

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 local Society of Broadcast Engineers frequency coordinator prior to operation in 25.67-26.48 MHz band.

Special Conditions:

- (4) The applicant must exclude the following frequencies:
- 2495-2505 kHz
 - 2850-3025 kHz
 - 3400-3500 kHz
 - 4650-4700 kHz
 - 4995-5005 kHz
 - 5450-5680 kHz
 - 6525-6685 kHz
 - 8815-8965 kHz
 - 9995-10100 kHz
 - 11275-11400 kHz
 - 13260-13360 kHz
 - 14990-15010 kHz
 - 17900-17970 kHz
 - 19990-20010 kHz
 - 21924-22000 kHz
 - 24990-25010 kHz
- (5) The applicant is not permitted to operate in the following HF Broadcasting bands:
- 5900-6200 kHz
 - 7300-7400 kHz
 - 9400-9900 kHz
 - 11600-12100 kHz
 - 13570-13870 kHz
 - 15100-15800 kHz
 - 17480-17900 kHz
 - 18900-19020 kHz
 - 21450-21850 kHz
 - 25670-26100 kHz
- (6) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (7) The stop buzzer contact for this project is Walter Waybright at 301-394-1220, Email: walter.l.waybright.ctr@mail.mil
- (8) The authorized station must be in compliance with environmental requirement set forth in Section 1.1307 of the Commission's Rules.
- (9) The authorized station must be in compliance with the Federal Aviation Administration (FAA) requirements as set forth in Section 17.4 of the Commission's Rules.
- (10) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (11) Operations are on a non-interference basis (NIB) and shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station and it shall cease transmission(s) immediately upon notice of such interference and notify the FCC in writing.

Special Conditions:

- (12) 4D Tech Solutions, Inc. must notch out the following frequencies (+/- 3 kHz): 4.4675 MHz, 7.4905 MHz, 13.8415 MHz.
- (13) 4D Tech Solutions, Inc. must not operate in the 13.36 - 13.41 MHz or the 25.55 - 25.67 MHz bands in order to protect the Radio Astronomy services.