

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

EXPERIMENTAL

(Nature of Service)

XT FX

(Class of Station)

WQ9XKZ

(Call Sign)

0697-EX-ST-2020

(File Number)

NAME Applied Research Associates

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:

Perform RF field mapping experiments in an outdoor environment to characterize the uniformity and levels of the EM fields emitted from our CWI antenna system. Please see attached

Station Locations

(1) White Sand M.R. (DONA ANA), NM - NL 32-20-44; WL 106-27-01

Frequency Information

White Sand M.R. (DONA ANA), NM - NL 32-20-44; WL 106-27-01

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
0.1-1000 MHz	FX	1K00N0N	632 W (ERP)	0.001 %

Special Conditions:

- (1) Licensee is required to coordinate operations with existing microwave users in the area to avoid interference.
- (2) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at https://www.sbe.org/sections/freq_local.php to find the appropriate coordinator.

This authorization effective August 01, 2020 and
will expire 3:00 A.M. EST February 02, 2021

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (3) 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.

Special Conditions:

(4) Applied Research Associates must notch out the following discrete frequencies:

a. (+/- 1.2 kHz) 240.6 MHz, 242.65 MHz

b. (+/- 1.4 kHz) 2183.4 kHz, 2187.5 kHz, 2660.4 kHz, 2679.4 kHz, 2749.4 kHz, 3024.4 kHz, 3054.4 kHz, 3057.4 kHz, 3120.4 kHz, 3123.4 kHz, 4126.4 kHz, 4177.5 kHz, 4207.5 kHz, 4572.5 kHz, 4576.4 kHz, 4731.4 kHz, 4734.4 kHz, 4821 kHz, 5108 kHz, 5681.4 kHz, 5694.4 kHz, 5697.4 kHz, 5700.4 kHz, 5885 kHz, 5943.5 kHz, 6216.4 kHz, 6268 kHz, 6312 kHz, 6502 kHz, 6517.4 kHz, 6710.4 kHz, 6743.4 kHz, 7419.5 kHz, 7630.5 kHz, 7669.5 kHz, 7736 kHz, 7743 kHz, 7747 kHz, 7775 kHz, 7793 kHz, 7821 kHz, 8292.4 kHz, 8414.5 kHz, 8765.4 kHz, 8981.4 kHz, 8984.4 kHz, 9035.4 kHz, 9038.4 kHz, 10774 kHz, 10810 kHz, 10891 kHz, 10918 kHz, 11197.4 kHz, 11200.4 kHz, 11203.4 kHz, 12081.5 kHz, 12291.4 kHz, 12520 kHz, 12577 kHz, 13219.4 kHz, 13222.4 kHz, 13434 kHz, 13493 kHz, 13496 kHz, 14428 kHz, 14461 kHz, 15640.5 kHz, 16027.5 kHz, 16421.4 kHz, 16695 kHz, 16804.5 kHz, 17922.4 kHz, 17989.4 kHz, 18186.5 kHz, 20137 kHz, 20247.5 kHz, 20330 kHz, 20843 kHz, 20882.5 kHz, 20985 kHz, 23074 kHz, 23077 kHz, 23091 kHz, 23094 kHz, 23840.5 kHz, 24228.5 kHz, 24793.5 kHz, 26582.5 kHz, 26640.5 kHz, 27590.5 kHz

c. (+/- 1.5 kHz) 5107 kHz, 5108.5 kHz, 5110 kHz, 5215.5 kHz, 5217 kHz, 5221.5 kHz, 5223 kHz, 5224.5 kHz, 5264.5 kHz, 5266 kHz, 5267.5 kHz, 5270.5 kHz, 5272 kHz, 5418 kHz, 5419.5 kHz, 5421 kHz, 5931 kHz, 5934 kHz, 5941 kHz, 5942.5 kHz, 5944 kHz, 6961 kHz, 7439 kHz, 7577 kHz, 7617 kHz, 7626 kHz, 7754.5 kHz, 7845 kHz, 7884 kHz, 7909 kHz, 8459 kHz, 8503.9 kHz, 8682 kHz, 9110 kHz, 9169 kHz, 9291 kHz, 9332 kHz, 10297.5 kHz, 10338.5 kHz, 10354.4 kHz, 10378 kHz, 10675 kHz, 10759 kHz, 10788 kHz, 10929.5 kHz, 10935.5 kHz, 11024 kHz, 11045 kHz, 11157.5 kHz

d. (+/- 3 kHz) 121.5 MHz, 122.9 MHz, 123.1 MHz, 243 MHz, 282.8 MHz, 303.25 MHz, 326.15 MHz, 379.05 MHz

e. (+/- 5.5 kHz) 149.2 MHz, 150.7 MHz, 155.805 MHz, 179.9875 MHz, 411.8125 MHz, 415.0875 MHz

f. (+/- 6 kHz) 1610 MHz

g. (+/- 8 kHz) 156.525 MHz, 156.6 MHz, 156.75 MHz, 156.8 MHz

h. (+/- 12.5 kHz) 100.000 kHz, 121.500 MHz, 122.850 MHz, 122.900 MHz, 122.925 MHz, 123.100 MHz, 156.300 MHz, 156.525 MHz, 156.650 MHz, 156.800 MHz, 161.975 MHz, 162.025 MHz, 162.1625 MHz, 162.2375 MHz, 162.9625 MHz, 163.0375 MHz, 164.125 MHz, 164.1375 MHz, 164.250 MHz, 164.3625 MHz, 164.800 MHz, 164.825 MHz, 165.175 MHz, 166.275 MHz, 166.3125 MHz, 166.375 MHz, 166.5625 MHz, 166.6375 MHz, 166.6625 MHz, 166.825 MHz, 167.550 MHz, 167.600 MHz, 167.700 MHz, 168.025 MHz, 168.175 MHz, 168.225 MHz, 168.325 MHz, 168.6125 MHz, 168.625 MHz, 168.6625 MHz, 168.675 MHz, 168.725 MHz, 168.7375 MHz, 168.750 MHz, 168.775 MHz, 169.125 MHz, 169.175 MHz, 169.625 MHz, 169.7125 MHz, 169.800 MHz, 170.000 MHz, 170.050 MHz, 170.500 MHz, 170.550 MHz, 171.750 MHz, 171.7875 MHz, 172.275 MHz, 172.450 MHz, 172.475 MHz, 172.5125 MHz, 172.5250 MHz, 172.5875 MHz, 172.7250 MHz, 172.775 MHz, 173.175 MHz, 173.775 MHz, 173.825 MHz, 282.800 MHz, 406.125 MHz, 406.475 MHz, 408.875 MHz, 411.875 MHz, 415.475 MHz, 417.875 MHz

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- (5) Applied Research Associates must notch out the following bands:
- a. 190 - 285 kHz, 285 - 435 kHz, 510 - 535 kHz, 2.495 - 2.505 MHz, 2.850 - 3.025 MHz, 3.4 - 3.5 MHz, 4.65 - 4.7 MHz, 4.995 - 5.005 MHz, 5.45 - 5.68 MHz, 6.525 - 6.685 MHz, 8.815 - 8.965 MHz, 9.995 - 10.100 MHz, 11.275 - 11.4 MHz, 13.26 - 13.36 MHz, 14.99 - 15.01 MHz, 17.9 - 17.97 MHz, 19.99 - 20.01 MHz, 21.924 - 22.0 MHz, 24.99 - 25.01 MHz, 73 - 74.6 MHz, 74.8 - 75.2 MHz, 108 - 121.9375 MHz, 123.5875 - 128.8125 MHz, 132.0125 - 137.000 MHz, 328.6 - 335.4 MHz, 383 - 386 MHz, 400 - 402 MHz, 410 - 420 MHz, 436 - 441 MHz, 445 - 450.025 MHz, 608 - 614 MHz, 974 - 1000 MHz
- (6) Applied Research Associates must coordinate with the Naval Surface Warfare Center Detachment Spectrum Manager, Mr. Rogelio Ramirez, (W-575-678-6122, C-575-616-9062).
- (7) Applied Research Associates must schedule operations as a WSMR Range Mission, through the WSMR Range Sponsor. Final authority to radiate is contingent upon successful scheduling and de-confliction of both airspace and spectrum with other area operations.
- (8) Applied Research Associates, Inc. must notch out the FirstNet Band 14 frequencies.
- (9) Applied Research Associates, Inc. must notch out the following bands:
- 137-138 MHz, 148-150.05 MHz, 156.0125-163 MHz, 400.15-403 MHz, and 449.75-450.25 MHz