

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

EXPERIMENTAL

(Nature of Service)

WN9XQF

(Call Sign)

XT FX

(Class of Station)

1641-EX-ST-2018

(File Number)

NAME Robinson Helicopter Company

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:

The purpose of this STA is to perform Low Level Swept Coupling (LLSC) testing on a Code of Federal Regulations Title 14, Part 27 helicopter in order to demonstrate compliance with

Station Locations

(1) Torrance (LOS ANGELES), CA - NL 33-47-50; WL 118-20-11

Frequency Information

Torrance (LOS ANGELES), CA - NL 33-47-50; WL 118-20-11

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
505-2173 kHz	FX	NON	15.2 W (ERP)	
2191-13360 kHz	FX	NON	15.2 W (ERP)	
13410-25550 kHz	FX	NON	15.2 W (ERP)	

This authorization effective November 26, 2018 and
will expire 3:00 A.M. EST April 16, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Torrance (LOS ANGELES), CA - NL 33-47-50; WL 118-20-11

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
25670-29999.99 kHz	FX	N0N	15.2 W (ERP)	
30-38 MHz	FX	N0N	15.2 W (ERP)	
38.25-73 MHz	FX	N0N	15.2 W (ERP)	
74.6-108 MHz	FX	N0N	15.2 W (ERP)	
138-225 MHz	FX	N0N	15.2 W (ERP)	
328.6-335.4 MHz	FX	N0N	15.2 W (ERP)	
403-406 MHz	FX	N0N	15.2 W (ERP)	
410-500 MHz	FX	N0N	15.2 W (ERP)	
500-608 MHz	FX	N0N	1.2 W (ERP)	
614-960 MHz	FX	N0N	1.2 W (ERP)	

Frequency Information

Torrance (LOS ANGELES), CA - NL 33-47-50; WL 118-20-11

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1427-1525 MHz	FX	N0N	1 W (ERP)	
1670-2020 MHz	FX	N0N	1 W (ERP)	
2025-2200 MHz	FX	N0N	1 W (ERP)	
2290-2320 MHz	FX	N0N	1 W (ERP)	
2345-2484 MHz	FX	N0N	1 W (ERP)	
2500-2690 MHz	FX	N0N	1 W (ERP)	
2700-3700 MHz	FX	N0N	1.2 W (ERP)	
4200-4990 MHz	FX	N0N	1.2 W (ERP)	
5000-6875 MHz	FX	N0N	1 W (ERP)	
7055-8025 MHz	FX	N0N	1 W (ERP)	

Frequency Information

Torrance (LOS ANGELES), CA - NL 33-47-50; WL 118-20-11

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8400-10680 MHz	FX	N0N	1 W (ERP)	
10700-10950 MHz	FX	N0N	1.2 W (ERP)	
12700-15350 MHz	FX	N0N	1.2 W (ERP)	
15400-17300 MHz	FX	N0N	1.2 W (ERP)	
17700-18000 MHz	FX	N0N	1.2 W (ERP)	

Special Conditions:

- (1) Licensee must prior coordinate testing with other authorized Band 14 operations. Failure to effectively coordinate shall result in FirstNet seeking immediate suspension of the experimental license by the FCC.
- (2) Operation in the 1695-1780 MHz, 1915-1920 MHz, 1995-2020 MHz or 2110-2200 MHz band requires consent of local Advanced Wireless Service (AWS) licensee(s) to avoid interference.
- (3) Licensee must accept interference from others operating in the band and must not cause interference to FirstNet operations or those approved to operate in Band 14 per license (i.e. AT&T testing or public safety entities authorized to operate on Band 14).
- (4) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (5) 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.
- (6) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at http://freq.sbe.org/pdf_files/coordinators.pdf to find the appropriate coordinator.
- (7) Licensee agrees that this license may be subject to further review by the FCC and possible re-coordination with FirstNet.

Special Conditions:

- (8) Licensee POC shall submit a "Stop Buzzer" contact to FirstNet at peter.tomczak@firstnet.gov upon authorization issuance with "kill switch" authority; license POC agrees to immediately cease operations on Band 14 if notified of any interference concerns until any issues are resolved.
- (9) Robinson Helicopter Company must not operate in the 2200 – 2290 MHz band. Robinson Helicopter Company should be aware that the band 2200-2290 MHz is allocated for federal operations and is a highly congested band. Non-federal use is on a case-by-case basis. Robinson Helicopter Company should have no expectations of automatic approval in this band in future submissions.
- (10) Robinson Helicopter Company must notch out and not interfere with the following discrete frequencies (+/- 12.5 kHz):
27.575 MHz, 27.585 MHz, 36.3700 MHz, 46.770 MHz, 162.775 MHz, 162.9625 MHz, 163.100 MHz, 164.325 MHz, 164.3625 MHz, 164.500 MHz, 164.800 MHz, 164.825 MHz, 164.875 MHz, 164.9375 MHz, 165.075 MHz, 165.725 MHz, 166.500 MHz, 166.5625 MHz, 166.6625 MHz, 166.9875 MHz, 167.1125 MHz, 167.300 MHz, 167.700 MHz, 168.0250 MHz, 168.125 MHz, 168.200 MHz, 168.2375 MHz, 168.2625 MHz, 168.350 MHz, 168.3875 MHz, 168.4875 MHz, 168.625 MHz, 168.650 MHz, 168.6625 MHz, 168.675 MHz, 168.6875 MHz, 168.725 MHz, 168.750 MHz, 168.775 MHz, 168.8375 MHz, 169.125 MHz, 169.175 MHz, 169.950 MHz, 170.4625 MHz, 170.475 MHz, 170.750 MHz, 171.1375 MHz, 171.425 MHz, 171.475 MHz, 171.500 MHz, 171.550 MHz, 171.7875 MHz, 172.225 MHz, 172.350 MHz, 172.375 MHz, 172.400 MHz, 172.5125 MHz, 173.050 MHz, 173.7625 MHz, 173.775 MHz, 173.800 MHz, 410.075 MHz, 410.275 MHz, 410.300 MHz, 410.9125 MHz, 411.1875 MHz, 411.375 MHz, 411.6625 MHz, 411.775 MHz, 412.2875 MHz, 412.5375 MHz, 412.825 MHz, 412.9875 MHz, 413.0125 MHz, 413.0375 MHz, 413.050 MHz, 413.0625 MHz, 413.1125 MHz, 413.450 MHz, 413.5875 MHz, 413.6375 MHz, 413.7875 MHz, 413.8375 MHz, 413.925 MHz, 414.2875 MHz, 414.700 MHz, 414.7875 MHz, 415.0125 MHz, 415.200 MHz, 415.275 MHz, 415.525 MHz, 415.6625 MHz, 415.9125 MHz, 416.000 MHz, 416.9125 MHz, 417.050 MHz, 417.296875 MHz, 417.3875 MHz, 417.6250 MHz, 417.6625 MHz, 417.9125 MHz, 418.525 MHz, 418.834375 MHz, 419.275 MHz, 419.750 MHz, and 419.9125 MHz.
- (11) Robinson Helicopter Company notch out and not interfere with the following bands:
2.850 – 3.025 MHz, 3.4 – 3.5 MHz, 4.65 – 4.7 MHz, 5.45 – 5.68 MHz, 6.525 – 6.685 MHz, 8.815 – 8.965 MHz, 10.005 – 10.1 MHz, 11.275 – 11.4 MHz, 13.26 – 13.36 MHz, 17.9 – 17.97 MHz, 21.924 – 22 MHz, 74.6 – 75.4 MHz, 169.2 – 169.4 MHz, 172.8 – 173 MHz, 328.6 – 335.4 MHz, 1559 – 1610 MHz, 2700 – 2900 MHz, 5030 – 5150 MHz, 9000 – 9200 MHz.
- (12) Obtain consents from the Educational Broadband Service and the Broadband Radio Service licensees prior to operation in 2496-2690 MHz range.
- (13) Maintain operation separation from the grandfathered earth stations as defined in Part 90, Subpart Z, or coordinate an agreement with the grandfathered earth station licensees prior to operation in 3650-3700 MHz band.

Special Conditions:

- (14) Consult the ULS database to ensure that the operation will not cause harmful interference to any existing registered stations in the 3650-3700 MHz band, and notify the registered users in the proposed geographic area prior to operation in this band.
- (15) Robinson Helicopter Company notch out and not interfere with the following bands:
5900 – 6200 KHz, 7200 – 7300 KHz, 7300 – 7400 KHz, 7400 – 7450 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.
- (16) Robinson Helicopter Company shall obtain consent of the following within 50 miles of the test area:
Paging Service licensees in 454 MHz/459 MHz
General Aviation Air-Ground Service in 454 MHz/459 MHz
All 700 MHz licensees (698-758 MHz; 775-788 MHz)
All Cellular licensees (824-849 MHz/869-894 MHz)
Commercial Air-Ground licensee (849-851 MHz/894-896 MHz)
SMR licensees (806-821 MHz/851-866 MHz)
SMR licensees (896-901 MHz/935-940 MHz)
Narrowband PCS licensees (901-902 MHz)
Location & Monitoring Service licensees (902-928 MHz)
1392-1395 MHz/1432-1435 MHz Band licensees
All Broadband PCS licensee (1850-1910 MHz/1930-1990 MHz)
- (17) Stop Buzzer point of contacts are Dale Taft at (310) 529-0508 x229 and Pete Riedl (310) 539-0508 x 152.