

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
RADIO STATION CONSTRUCTION PERMIT
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

XR FX

(Class of Station)

WL2XBK

(Call Sign)

0474-EX-CN-2020

(File Number)

NAME University of Colorado

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(J) of the Commission's Rules

Station Locations

(1) Boulder (BOULDER), CO - NL 40-00-27; WL 105-15-44

Frequency Information

Boulder (BOULDER), CO - NL 40-00-27; WL 105-15-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2-25 MHz	FX	30K0P0N	10 W (ERP)	10 %

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) 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.
- (3) University of Colorado performs test measurements that will require transmitting low power pulses within a carrier frequency band spanning 2-25 MHz (excluding prohibited bands, e.g., standard frequency and timing signal).

This authorization effective June 22, 2020 and
will expire 3:00 A.M. EST July 01, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (4) University of Colorado must not operate in the following frequency bands:
- 5900KHz-6200KHz
 - 7200KHz-7450KHz
 - 9400KHz-9900KHz
 - 11600KHz-12100KHz
 - 13570KHz-13870KHz
 - 15100KHz-15800KHz
 - 17480KHz-17900KHz
 - 18900KHz-19020KHz
 - 21450KHz-21850KHz
 - 25670KHz-26100KHz,
- (5) University of Colorado must notch out the following bands in order to protect air traffic operations:
- 2850-3025 kHz,
 - 3400-3500 kHz,
 - 4650-4700 kHz,
 - 5450-5680 kHz,
 - 6525-6685 kHz,
 - 8815-8965 kHz,
 - 10005-10100 kHz,
 - 11275-11400 kHz,
 - 13260-13360 kHz,
 - 17900-17970 kHz,
 - 21924-22000 kHz.
- (6) The University of Colorado must notch out the following frequencies:
- (+/- 1.4 kHz) 2660.4 kHz, 2679.4 kHz, 2749.4 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, 4902 kHz, 4965 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, 6502.4 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, 10540 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, 14428.5 kHz, 14461 kHz, 15083.4 kHz, 15086.4 kHz, 15089.4 kHz, 15640.5 kHz, 16027.5 kHz, 16421.4 kHz, 16695 kHz, 16804.5 kHz, 17989.4 kHz, 17922.4 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

Special Conditions:

(7) The University of Colorado must notch out the following frequencies:

(+/- 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, 10354.5 kHz, 10378 kHz, 10675 kHz, 10759 kHz, 10788 kHz, 10929.5 kHz, 10935.5 kHz, 11024 kHz, 11045 kHz, 11157.5 kHz