

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

EXPERIMENTAL

(Nature of Service)

WH9XDN

(Call Sign)

XT MO

(Class of Station)

1083-EX-ST-2014

(File Number)

NAME S2 Corporation

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:

Demonstration of ability of a passive receiver to see RF frequency activity across a wide band

Station Locations

- (1) MOBILE: Bozeman, MT:field and parking lot next to office, within 0.2 km, centered around NL 45-39-18; WL 111-03-03

Frequency Information

MOBILE: Bozeman, MT:field and parking lot next to office, within 0.2 km, centered around NL 45-39-18; WL 111-03-03

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
410-608 MHz	MO	NON 16M0F0N	1.5 W (ERP)	2 %
614-834 MHz	MO	NON 16M0F0N	1.5 W (ERP)	2 %

This authorization effective December 18, 2014 and
will expire 3:00 A.M. EST May 18, 2015

**FEDERAL
COMMUNICATIONS
COMMISSION**



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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
851-894 MHz	MO	N0N 16M0F0N	1.5 W (ERP)	2 %
896-960 MHz	MO	N0N 16M0F0N	1.5 W (ERP)	2 %
1350-1380 MHz	MO	N0N 16M0F0N	1.5 W (ERP)	2 %
1626.5-1660 MHz	MO	N0N 16M0F0N	1.92 W (ERP)	2 %
1670-2000 MHz	MO	N0N 16M0F0N	1.93 W (ERP)	2 %
2000-2310 MHz	MO	N0N 16M0F0N	2.98 W (ERP)	2 %
2320-2345 MHz	MO	N0N 16M0F0N	2.98 W (ERP)	2 %
2390-2655 MHz	MO	N0N 16M0F0N	2.98 W (ERP)	2 %

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3650-4200 MHz	MO	N0N 16M0F0N	5.4 W (ERP)	2 %
4400-4990 MHz	MO	N0N 16M0F0N	6.1 W (ERP)	2 %
5250-5350 MHz	MO	N0N 16M0F0N	6.1 W (ERP)	2 %
5460-9000 MHz	MO	N0N 16M0F0N	6.1 W (ERP)	2 %
2.9-3.5 GHz	MO	N0N 16M0F0N	4.12 W (ERP)	2 %
9.2-10.68 GHz	MO	N0N 16M0F0N	6.1 W (ERP)	2 %
10.7-13.25 GHz	MO	N0N 16M0F0N	9.66 W (ERP)	1 %
13.4-15.35 GHz	MO	N0N 16M0F0N	9.66 W (ERP)	2 %

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
15.7-20 GHz	MO	N0N 16M0F0N	9.66 W (ERP)	2 %
20-22.21 GHz	MO	N0N 16M0F0N	2.4 W (ERP)	2 %
22.5-23.6 GHz	MO	N0N 16M0F0N	1.22 W (ERP)	2 %
24-26.5 GHz	MO	N0N 16M0F0N	386 mW (ERP)	2 %
26.5-30 GHz	MO	N0N	19 mW (ERP)	2 %

Special Conditions:

- (1) Operation in the 824-849 or 869-894 MHz band requires consent of local cellular licensee(s) to avoid interference.
- (2) S2 Corp must notch out the following frequency bands:
 - a. 608 - 614 MHz
 - b. 1525 - 1559 MHz
 - c. 2310 - 2320 MHz
 - d. 2345 - 2390 MHz
- (3) S2 Corp must secure consents from the AWS licensees prior to operation in 1710-1755 MHz, 1915-1920 MHz, 1995-2180 MHz.
- (4) S2 Corp must obtain consents from the EBS and BRS licensees prior to accessing 2500-2655 MHz.
- (5) S2 Corp must coordinate with the local SBE frequency coordinator and the Fixed Microwave Service licensees prior to operation in 410-834 MHz, 896-960 MHz, 2000-2650 MHz, 5460-9000 MHz, 9.2-10.68 GHz, 10.7-13.25 GHz, 15.7-20 GHz, 20-22.21 GHz, 22.5-23.6 GHz, 24-26.5 GHz and 26.5-30 GHz.

Special Conditions:

- (6) S2 Corp must maintain separation from the grandfathered earth stations as defined in Part 90, subpart Z, or coordinate an agreement with the grandfathered earth stations licensees prior to operation in 3650-3700 MHz and ensure that the operations will not cause harmful interference to any existing registered stations in the 3650-3700 MHz, and notify the registered users in the proposed area.
- (7) S2 Corp must notify Paging and General Aviation Air Ground licensees in 454-455 and 459-460 MHz, serving the test area.
- (8) S2 Corporation must notch out the following frequencies, +/- 20 MHz:
 - a. 7445 MHz
 - b. 7670 MHz
 - c. 7805 MHz
 - d. 8085 MHz
 - e. 8105 MHz
 - f. 8180 MHz
 - g. 8240 MHz
 - h. 8310 MHz