

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

EXPERIMENTAL

(Nature of Service)

WH9XDN

(Call Sign)

XT MO

(Class of Station)

1033-EX-ST-2013

(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 & to transmit RF to calibrate receiver system and demonstrate RF sensitivity at a distance.

Station Locations

- (1) MOBILE: Howe, ID: Idaho National Labs prop on service road Road T3, within 1 km, centered around NL 43-36-41; WL 112-55-12
- (2) MOBILE: Montevue, ID: Along Idaho 28 in Jefferson and Butte County, within 13 km, centered around NL 43-54-54; WL 112-36-46

Frequency Information

MOBILE: Howe, ID: Idaho National Labs prop on service road Road T3, within 1 km, centered around NL 43-36-41; WL 112-55-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
410-834 MHz	MO	N0N 16M0F0N	1.5 W (ERP)	2 %
851-894 MHz	MO	N0N 16M0F0N	1.5 W (ERP)	2 %

This authorization effective December 16, 2013 and
will expire 3:00 A.M. EST December 21, 2013

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Howe, ID: Idaho National Labs prop on service road Road T3, within 1 km, centered around NL 43-36-41; WL 112-55-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
896-960 MHz	MO	N0N 16M0F0N	1.5 W (ERP)	2 %
1350-1380 MHz	MO	N0N 16M0F0N	1.5 W (ERP)	2 %
1525-1559 MHz	MO	N0N 16M0F0N	1.92 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 %
2000-2655 MHz	MO	N0N 16M0F0N	2.98 W (ERP)	2 %
3650-4200 MHz	MO	N0N 16M0F0N	5.4 W (ERP)	2 %
4400-4990 MHz	MO	N0N 16M0F0N	6.1 W (ERP)	2 %

Frequency Information

MOBILE: Howe, ID: Idaho National Labs prop on service road Road T3, within 1 km, centered around NL 43-36-41; WL 112-55-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
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 %
15.7-20 GHz	MO	N0N 16M0F0N	9.66 W (ERP)	2 %
20-22.21 GHz	MO	N0N 16M0F0N	2.4 W (ERP)	2 %

Frequency Information

MOBILE: Howe, ID: Idaho National Labs prop on service road Road T3, within 1 km, centered around NL 43-36-41; WL 112-55-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
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 %

MOBILE: Montevieu, ID: Along Idaho 28 in Jefferson and Butte County, within 13 km, centered around NL 43-54-54; WL 112-36-46

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
410-834 MHz	MO	N0N 16M0F0N	1.5 W (ERP)	2 %
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 %

Frequency Information

MOBILE: Montevideo, ID: Along Idaho 28 in Jefferson and Butte County, within 13 km, centered around NL 43-54-54; WL 112-36-46

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1525-1559 MHz	MO	N0N 16M0F0N	1.92 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 %
2000-2655 MHz	MO	N0N 16M0F0N	2.98 W (ERP)	2 %
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 %

Frequency Information

MOBILE: Montevideo, ID: Along Idaho 28 in Jefferson and Butte County, within 13 km, centered around NL 43-54-54; WL 112-36-46

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
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 %
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 %

Frequency Information

MOBILE: Montevideo, ID: Along Idaho 28 in Jefferson and Butte County, within 13 km, centered around NL 43-54-54; WL 112-36-46

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
26.5-30 GHz	MO	NON	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 frequencies and/or frequency bands:
 - a. 406 thru 406.1 MHz
 - b. 608 thru 614 MHz
 - c. 410.0000 MHz +/- 8 kHz
 - d. 411.0125 MHz +/- 8 kHz
 - e. 412.3000 MHz +/- 6 kHz
 - f. 412.3750 MHz +/- 6 kHz
 - g. 416.2000 MHz +/- 6 kHz
 - h. 417.2250 MHz +/- 6 kHz
 - i. 417.4500 MHz +/- 6 kHz
 - j. 417.4875 MHz +/- 6 kHz
 - k. 419.9250 MHz +/- 6 kHz
 - l. 7795 MHz +/- 5 MHz
 - m. 7845 MHz +/- 5 MHz
 - n. 7885 MHz +/- 5 MHz
 - o. 7965 MHz +/- 5 MHz
 - p. 8035 MHz +/- 5 MHz
 - q. 8055 MHz +/- 5 MHz
 - r. 8155 MHz +/- 5 MHz
 - s. 8245 MHz +/- 5 MHz
 - t. 8265 MHz +/- 5 MHz
 - u. 8325 MHz +/- 5 MHz
 - v. 8415 MHz +/- 5 MHz
- (3) S2 Corp must ensure that there are no transmissions in the 1559 thru 1610 MHz and 1215 thru 1240 MHz bands and must adjust the emissions accordingly.
- (4) S2 Corp must secure consents from the AWS licensees prior to operation in 1710-1755 MHz, 1915-1920 MHz, 1995-2180 MHz.
- (5) S2 Corp must obtain consents from the EBS and BRS licensees prior to accessing 2500-2655 MHz.
- (6) 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:

- (7) 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.
- (8) S2 Corp must notify Paging and General Aviation Air Ground licensees in 454-455 and 459-460 MHz, serving the test area.