Josh Snook, 940 S 2000 W STE 140, Springville, UT 84663,

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

| EXPERIMENTAL | WQ9XLL |
|---|---|
| (Nature of Service) | (Call Sign) |
| XT MO | 0691-EX-ST-2020 |
| (Class of Station) | (File Number) |

NAME IMSAR LLC

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:
Short term demonstration of radar capabilities

Station Locations

(1) MOBILE: Elk City, OK. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 35-24-45; WL 99-24-21
(2) MOBILE: Oklahoma City, OK. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 35-27-59; WL 97-31-03
(3) MOBILE: Tonkawa, OK. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 36-40-38; WL 97-18-40
(4) MOBILE: Oceanside, CA. On aircraft at altitudes of 15000' - 23000' MSL, within 20 km, centered around NL 33-12-31; WL 117-23-34
(5) MOBILE: Hattiesburg, MS. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 31-19-45; WL 89-17-28
(6) MOBILE: Columbus, GA. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 32-21-12; WL 84-57-20
(7) MOBILE: Tampa, FL. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 27-56-59; WL 82-27-36
(8) MOBILE: Fayetteville, NC. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 35-08-23; WL 79-00-32
(9) MOBILE: Wilmington, NC. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 34-12-30; WL 77-53-15
(10) MOBILE: Jacksonville, NC. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 34-37-25; WL 77-24-01

This authorization effective June 01, 2020 and
will expire 3:00 A.M. EST December 02, 2020

**FEDERAL COMMUNICATIONS COMMISSION**

## Frequency Information

MOBILE: Elk City, OK. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 35-24-45; WL 99-24-21

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---|---|---|---|---|
| 16.2-17.7 GHz | MO | 1G50F0N | 11350 W (ERP) | |

MOBILE: Oklahoma City, OK. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 35-27-59; WL 97-31-03

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---|---|---|---|---|
| 16.2-17.7 GHz | MO | 1G50F0N | 11350 W (ERP) | |

MOBILE: Tonkawa, OK. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 36-40-38; WL 97-18-40

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---|---|---|---|---|
| 16.2-17.7 GHz | MO | 1G50F0N | 11350 W (ERP) | |

MOBILE: Oceanside, CA. On aircraft at altitudes of 15000' - 23000' MSL, within 20 km, centered around NL 33-12-31; WL 117-23-34

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---|---|---|---|---|
| 16.2-17.7 GHz | MO | 1G50F0N | 11350 W (ERP) | |

## Frequency Information

MOBILE: Hattiesburg, MS. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 31-19-45; WL 89-17-28

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---|---|---|---|---|
| 16.2-17.7 GHz | MO | 1G50F0N | 11350 W (ERP) | |

MOBILE: Columbus, GA. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 32-21-12; WL 84-57-20

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---|---|---|---|---|
| 16.2-17.7 GHz | MO | 1G50F0N | 11350 W (ERP) | |

MOBILE: Tampa, FL. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 27-56-59; WL 82-27-36

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---|---|---|---|---|
| 16.2-17.7 GHz | MO | 1G50F0N | 11350 W (ERP) | |

MOBILE: Fayetteville, NC. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 35-08-23; WL 79-00-32

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---|---|---|---|---|
| 16.2-17.7 GHz | MO | 1G50F0N | 11350 W (ERP) | |

## Frequency Information

MOBILE: Wilmington, NC. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 34-12-30; WL 77-53-15

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---|---|---|---|---|
| 16.2-17.7 GHz | MO | 1G50F0N | 11350 W (ERP) | |

MOBILE: Jacksonville, NC. On aircraft at altitudes of 15000' - 23000' MSL, within 30 km, centered around NL 34-37-25; WL 77-24-01

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---|---|---|---|---|
| 16.2-17.7 GHz | MO | 1G50F0N | 11350 W (ERP) | |

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) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.

(4) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.

(5) Stop buzzer: Josh Snook
Phone: 801-798-8440
Email: josh.snook@imsar.com

Special Conditions:

(6) Prior to commencing any operations in the 17.3-17.7 GHz band frequency band, IMSAR LLC must notify the earth station licensees listed below of its test dates and provide a stop buzzer in case of interference:

Call Sign: E980285 File Number: SES-MOD-20190626-00845
Call Sign: E990159 File Number: SES-MOD-20171012-01145
Call Sign: E090068 File Number: SES-LIC-20090407-00432
Call Sign: E090069 File Number: SES-MOD-20171012-01155
Call Sign: E010129 File Number: SES-MOD-20171012-01153
Call Sign: E160062 File Number: SES-MOD-20171012-01144
Call Sign: E970336 File Number: SES-MFS-20121128-01044
Call Sign: E170090 File Number: SES-LIC-20170407-00375
Call Sign: E150138 File Number: SES-LIC-20151113-00843
Call Sign: E170103 File Number: SES-LIC-20170428-00485
Call Sign: E930229 File Number: SES-MOD-20180905-02506
Call Sign: E010112 File Number: SES-MFS-20190719-00928

(7) Further requests for extension of the authority granted herein must be filed on Form 442, "Application for New or Modified Radio Station Authorization under Part 5 of FCC Rules - Experimental Radio Service." Future STA requests to extend this authorization will not be considered.