

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

EXPERIMENTAL

(Nature of Service)

WI9XZE

(Call Sign)

XT FX MO

(Class of Station)

0829-EX-ST-2015

(File Number)

NAME Google Inc.

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:

STA will enable testing of radios in a way that is likely to contribute to the development, extension, expansion, or utilization of the radio art.

Station Locations

- (1) MOBILE: Spaceport America, NM: Airborne, Max Altitude 25,000 ft., within 25 km, centered around NL 32-59-25; WL 106-58-11
- (2) Spaceport America (SIERRA), NM - NL 32-59-39; WL 106-58-29
- (3) Spaceport America (SIERRA), NM - NL 32-56-27; WL 106-55-15
- (4) Spaceport America (SIERRA), NM - NL 32-59-39; WL 106-58-29
- (5) Madras (JEFFERSON), OR - NL 44-51-32; WL 121-10-49
- (6) Spaceport America (SIERRA), NM - NL 32-59-39; WL 106-58-29
- (7) Madras (JEFFERSON), OR - NL 44-51-32; WL 121-10-49
- (8) MOBILE: Spaceport America, NM: Airborne, Max Altitude 25,000 ft., within 70 km, centered around NL 32-59-25; WL 106-58-11
- (9) MOBILE: Madras, OR: Airborne, Max Altitude 25,000 ft., within 100 km, centered around NL 44-45-37; WL 121-16-06
- (10) MOBILE: Pescadero, CA: Airborne, Max Altitude 25,000 ft., within 10 km, centered around NL 37-15-18; WL 122-22-53
- (11) Spaceport America (SIERRA), NM - NL 32-59-39; WL 106-58-29
- (12) Spaceport America (SIERRA), NM - NL 32-56-27; WL 106-55-15
- (13) Madras (JEFFERSON), OR - NL 44-51-32; WL 121-10-49
- (14) Warm Springs (JEFFERSON), OR - NL 44-46-15; WL 121-15-49
- (15) Warm Springs Reservation (JEFFERSON), OR - NL 44-50-23; WL 121-14-01
- (16) Pescadero (SAN MATEO), CA - NL 37-15-18; WL 122-22-53

This authorization effective September 02, 2015 and
will expire 3:00 A.M. EST March 02, 2016

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Spaceport America, NM: Airborne, Max Altitude 25,000 ft., within 25 km, centered around NL 32-59-25; WL 106-58-11

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2568-2590 MHz	MO	20M0A2D	4 W (Output Power)	
2620-2640 MHz	MO	20M0A2D	4 W (Output Power)	

Spaceport America (SIERRA), NM - NL 32-59-39; WL 106-58-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2550-2570 MHz	FX	20M0A2D	0.25 W (Output Power)	
2568-2590 MHz	FX	20M0A2D	0.25 W (Output Power)	

Spaceport America (SIERRA), NM - NL 32-56-27; WL 106-55-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2550-2570 MHz	FX	20M0A2D	0.25 W (Output Power)	
2568-2590 MHz	FX	20M0A2D	0.25 W (Output Power)	

Frequency Information

Spaceport America (SIERRA), NM - NL 32-59-39; WL 106-58-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5775-5825 MHz	FX	10H0N0N	0.1 W (Output Power)	

Madras (JEFFERSON), OR - NL 44-51-32; WL 121-10-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5775-5825 MHz	FX	10H0N0N	0.1 W (Output Power)	

Spaceport America (SIERRA), NM - NL 32-59-39; WL 106-58-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
24199.88-24200.12 MHz	FX	10H0N0N	0.1 W (Output Power)	

Madras (JEFFERSON), OR - NL 44-51-32; WL 121-10-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
24199.88-24200.12 MHz	FX	10H0N0N	0.1 W (Output Power)	

Frequency Information

MOBILE: Spaceport America, NM: Airborne, Max Altitude 25,000 ft., within 70 km, centered around NL 32-59-25; WL 106-58-11

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
72000-74000 MHz	MO	2G00G2D	0.5 W (Output Power)	

MOBILE: Madras, OR: Airborne, Max Altitude 25,000 ft., within 100 km, centered around NL 44-45-37; WL 121-16-06

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
72000-74000 MHz	MO	2G00G2D	0.5 W (Output Power)	

MOBILE: Pescadero, CA: Airborne, Max Altitude 25,000 ft., within 10 km, centered around NL 37-15-18; WL 122-22-53

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
72000-74000 MHz	MO	2G00G2D	0.5 W (Output Power)	

Spaceport America (SIERRA), NM - NL 32-59-39; WL 106-58-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
82000-84000 MHz	FX	2G00G2D	0.5 W (Output Power)	

Frequency Information

Spaceport America (SIERRA), NM - NL 32-56-27; WL 106-55-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
82000-84000 MHz	FX	2G00G2D	0.5 W (Output Power)	

Madras (JEFFERSON), OR - NL 44-51-32; WL 121-10-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
82000-84000 MHz	FX	2G00G2D	0.5 W (Output Power)	

Warm Springs (JEFFERSON), OR - NL 44-46-15; WL 121-15-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
82000-84000 MHz	FX	2G00G2D	0.5 W (Output Power)	

Warm Springs Reservation (JEFFERSON), OR - NL 44-50-23; WL 121-14-01

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
82000-84000 MHz	FX	2G00G2D	0.5 W (Output Power)	

Frequency Information

Pescadero (SAN MATEO), CA - NL 37-15-18; WL 122-22-53

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
82000-84000 MHz	FX	2G00G2D	0.5 W (Output Power)	

Special Conditions:

- (1) Operation requires consent of affected Educational Broadband Service/Broadband Radio Service (EBS/BRS) licensees.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) Google must coordinate with the existing 71-76 GHz and 81-86 GHz users prior to operation in 72000-74000 MHz and 82000-84000 MHz bands.
- (4) Google in association with Spaceport America, must schedule their operations as a White Sands Missile Range (WSMR) Range Mission, through the WSMR/Spaceport America liaison, Conrad Rodriguez, 575-678-2076 (O) or 575-993-0996 (C) to mitigate interference risk to DoD operations at (WSMR) and to maintain situational awareness.
- (5) Prior to conducting the test, Google must coordinate with the Federal Aviation Administration (FAA), Mr. Rodney Murphy, 202-267-9501, Rodney.murphy@faa.gov.