

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

EXPERIMENTAL

(Nature of Service)

WU9XHG

(Call Sign)

XT MO

(Class of Station)

1461-EX-ST-2022

(File Number)

NAME MRTC Motorsport Communications

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:

Testing of automobile racing communications system involving race teams and race vehicles.
Please see attached narrative.

Station Locations

- (1) MOBILE: ERX Motor Park, Elk River, Minnesota, within 5 km, centered around NL 45-21-50; WL 93-33-44
- (2) MOBILE: Glen Helen Raceway, San Bernardino, CA, within 5 km, centered around NL 34-11-08; WL 117-24-00
- (3) MOBILE: Wild Horse Pass Motorsports Park, Chandler, AZ, within 5 km, centered around NL 33-16-08; WL 111-58-01

Frequency Information

MOBILE: ERX Motor Park, Elk River, Minnesota, within 5 km, centered around NL 45-21-50; WL 93-33-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
157.725 MHz	MO	11K2F3E	5 W (ERP)	
157.9875 MHz	MO	11K2F3E	5 W (ERP)	

This authorization effective September 30, 2022 and will expire 3:00 A.M. EST November 14, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: ERX Motor Park, Elk River, Minnesota, within 5 km, centered around NL 45-21-50; WL 93-33-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
159.4625 MHz	MO	11K2F3E	5 W (ERP)	
159.6375 MHz	MO	11K2F3E	5 W (ERP)	
159.9125 MHz	MO	11K2F3E	5 W (ERP)	
160.175 MHz	MO	11K2F3E	5 W (ERP)	
162.325 MHz	MO	11K2F3E	5 W (ERP)	
162.5875 MHz	MO	11K2F3E	5 W (ERP)	
164.0625 MHz	MO	11K2F3E	5 W (ERP)	
164.2375 MHz	MO	11K2F3E	5 W (ERP)	
164.5125 MHz	MO	11K2F3E	5 W (ERP)	
164.775 MHz	MO	11K2F3E	5 W (ERP)	

Frequency Information

MOBILE: ERX Motor Park, Elk River, Minnesota, within 5 km, centered around NL 45-21-50; WL 93-33-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
170.6375 MHz	MO	11K2F3E	5 W (ERP)	
170.875 MHz	MO	11K2F3E	5 W (ERP)	
171.25 MHz	MO	11K2F3E	5 W (ERP)	
443.125 MHz	MO	11K2F3E	5 W (ERP)	
443.5 MHz	MO	11K2F3E	5 W (ERP)	
443.55 MHz	MO	16K5F2D	10 W (ERP)	
443.8 MHz	MO	16K5F2D	10 W (ERP)	
445.2 MHz	MO	11K2F3E	5 W (ERP)	
445.675 MHz	MO	11K2F3E	5 W (ERP)	
449.3125 MHz	MO	11K2F3E	5 W (ERP)	

Frequency Information

MOBILE: ERX Motor Park, Elk River, Minnesota, within 5 km, centered around NL 45-21-50; WL 93-33-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
449.4 MHz	MO	11K2F3E	5 W (ERP)	
449.475 MHz	MO	11K2F3E	5 W (ERP)	
451.4375 MHz	MO	11K2F3E	5 W (ERP)	
451.6875 MHz	MO	11K2F3E	5 W (ERP)	
451.9625 MHz	MO	11K2F3E	5 W (ERP)	
458.25 MHz	MO	11K2F3E 11K2F3E	5 W (ERP)	
458.85 MHz	MO	11K2F3E	5 W (ERP)	
458.9 MHz	MO	11K2F3E	5 W (ERP)	
459.5375 MHz	MO	11K2F3E	5 W (ERP)	
461.9625 MHz	MO	11K2F3E	5 W (ERP)	

Frequency Information

MOBILE: ERX Motor Park, Elk River, Minnesota, within 5 km, centered around NL 45-21-50; WL 93-33-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
469.5375 MHz	MO	11K2F3E	5 W (ERP)	

MOBILE: Glen Helen Raceway, San Bernardino, CA, within 5 km, centered around NL 34-11-08; WL 117-24-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
157.725 MHz	MO	11K2F3E	5 W (ERP)	
157.9875 MHz	MO	11K2F3E	5 W (ERP)	
159.4625 MHz	MO	11K2F3E	5 W (ERP)	
159.6375 MHz	MO	11K2F3E	5 W (ERP)	
159.9125 MHz	MO	11K2F3E	5 W (ERP)	
160.175 MHz	MO	11K2F3E	5 W (ERP)	
162.325 MHz	MO	11K2F3E	5 W (ERP)	
164.0625 MHz	MO	11K2F3E	5 W (ERP)	

Frequency Information

MOBILE: Glen Helen Raceway, San Bernardino, CA, within 5 km, centered around NL 34-11-08; WL 117-24-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
164.2375 MHz	MO	11K2F3E	5 W (ERP)	
164.5125 MHz	MO	11K2F3E	5 W (ERP)	
164.775 MHz	MO	11K2F3E	5 W (ERP)	
170.6375 MHz	MO	11K2F3E	5 W (ERP)	
171.25 MHz	MO	11K2F3E	5 W (ERP)	
443.125 MHz	MO	11K2F3E	5 W (ERP)	
443.5 MHz	MO	11K2F3E	5 W (ERP)	
443.55 MHz	MO	16K5F2D	10 W (ERP)	
443.8 MHz	MO	16K5F2D	10 W (ERP)	
445.2 MHz	MO	11K2F3E	5 W (ERP)	

Frequency Information

MOBILE: Glen Helen Raceway, San Bernardino, CA, within 5 km, centered around NL 34-11-08; WL 117-24-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
445.675 MHz	MO	11K2F3E	5 W (ERP)	
449.3125 MHz	MO	11K2F3E	5 W (ERP)	
449.4 MHz	MO	11K2F3E	5 W (ERP)	
449.475 MHz	MO	11K2F3E	5 W (ERP)	
451.4375 MHz	MO	11K2F3E	5 W (ERP)	
451.6875 MHz	MO	11K2F3E	5 W (ERP)	
451.9625 MHz	MO	11K2F3E	5 W (ERP)	
458.25 MHz	MO	11K2F3E 11K2F3E	5 W (ERP)	
458.85 MHz	MO	11K2F3E	5 W (ERP)	
458.9 MHz	MO	11K2F3E	5 W (ERP)	

Frequency Information

MOBILE: Glen Helen Raceway, San Bernardino, CA, within 5 km, centered around NL 34-11-08; WL 117-24-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
459.5375 MHz	MO	11K2F3E	5 W (ERP)	
461.9625 MHz	MO	11K2F3E	5 W (ERP)	
469.5375 MHz	MO	11K2F3E	5 W (ERP)	

MOBILE: Wild Horse Pass Motorsports Park, Chandler, AZ, within 5 km, centered around NL 33-16-08; WL 111-58-01

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
157.725 MHz	MO	11K2F3E	5 W (ERP)	
157.9875 MHz	MO	11K2F3E	5 W (ERP)	
159.4625 MHz	MO	11K2F3E	5 W (ERP)	
159.6375 MHz	MO	11K2F3E	5 W (ERP)	
159.9125 MHz	MO	11K2F3E	5 W (ERP)	
160.175 MHz	MO	11K2F3E	5 W (ERP)	

Frequency Information

MOBILE: Wild Horse Pass Motorsports Park, Chandler, AZ, within 5 km, centered around NL 33-16-08; WL 111-58-01

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
162.325 MHz	MO	11K2F3E	5 W (ERP)	
162.5875 MHz	MO	11K2F3E	5 W (ERP)	
164.0625 MHz	MO	11K2F3E	5 W (ERP)	
164.2375 MHz	MO	11K2F3E	5 W (ERP)	
164.5125 MHz	MO	11K2F3E	5 W (ERP)	
164.775 MHz	MO	11K2F3E	5 W (ERP)	
170.6375 MHz	MO	11K2F3E	5 W (ERP)	
170.875 MHz	MO	11K2F3E	5 W (ERP)	
171.25 MHz	MO	11K2F3E	5 W (ERP)	
443.125 MHz	MO	11K2F3E	5 W (ERP)	

Frequency Information

MOBILE: Wild Horse Pass Motorsports Park, Chandler, AZ, within 5 km, centered around NL 33-16-08; WL 111-58-01

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
443.5 MHz	MO	11K2F3E	5 W (ERP)	
443.55 MHz	MO	16K5F2D	10 W (ERP)	
443.8 MHz	MO	16K5F2D	10 W (ERP)	
445.2 MHz	MO	11K2F3E	5 W (ERP)	
445.675 MHz	MO	11K2F3E	5 W (ERP)	
449.3125 MHz	MO	11K2F3E	5 W (ERP)	
449.4 MHz	MO	11K2F3E	5 W (ERP)	
449.475 MHz	MO	11K2F3E	5 W (ERP)	
451.4375 MHz	MO	11K2F3E	5 W (ERP)	
451.6875 MHz	MO	11K2F3E	5 W (ERP)	

Frequency Information

MOBILE: Wild Horse Pass Motorsports Park, Chandler, AZ, within 5 km, centered around NL 33-16-08; WL 111-58-01

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
451.9625 MHz	MO	11K2F3E	5 W (ERP)	
458.25 MHz	MO	11K2F3E 11K2F3E	5 W (ERP)	
458.85 MHz	MO	11K2F3E	5 W (ERP)	
458.9 MHz	MO	11K2F3E	5 W (ERP)	
459.5375 MHz	MO	11K2F3E	5 W (ERP)	
461.9625 MHz	MO	11K2F3E	5 W (ERP)	
469.5375 MHz	MO	11K2F3E	5 W (ERP)	

Special Conditions:

- (1) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at <http://sbe.org/resources/frequency-coordination/> to find the appropriate coordinator.
- (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) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.

Special Conditions:

- (4) Prior to commencing any operations in the 156.0125-162.0375 MHz frequency band, experimental licensee must notify licensee of Iridium Constellation LLC (Call sign: S2110. Ms. Maureen C McLaughlin, Phone Number: : 703-287-7518 E-Mail: maureen.mclaughlin@iridium.com) or Name: Jennifer Hindin, Phone Number: 202-719-4975 E-Mail: jhindin@wileyrein.com). The notice must include the name and contact information of the stop buzzer personnel that will be available to cease operations in the event of reported interference. The notification should include the testing parameters (specific location(s), antenna gain(s), antenna height(s), antenna orientation, EIRP, EIRP density) and day and times of each test.
- (5) Prior to commencing any operations in the 161-163 MHz frequency band, experimental licensee must notify licensee of ORBCOMM License Corp. (Call signs: E940534, S2103. Mr. Walter H. Sonnenfeldt, Phone Number: 585-461-3018, E-Mail: sonnenfeldt.walter@orbcomm.com). The notice must include the name and contact information of the stop buzzer personnel that will be available to cease operations in the event of reported interference. The notification should include the testing parameters (specific location(s), antenna gain(s), antenna height(s), antenna orientation, EIRP, EIRP density) and day and times of each test.
- (6) Prior to commencing any operations in the frequencies below, the licensee must obtain consent from the following within 50 miles of the contours of the testing area:
Mobile Service licensees in 454 MHz/459 MHz
General Aviation Air-Ground Service in 454 MHz/459 MHz
- (7) Notch the following frequency bands at all locations:
 - a. 171.1375 MHz (+/- 5.5 kHz)
- (8) Notch the following frequency bands at the San Bernardino, CA location:
 - a. 162.5875 MHz (+/- 4 kHz)
 - b. 170.875 MHz (+/- 4 kHz)
- (9) Notch the following frequency bands at the Chandler, AZ location:
 - a. 163.0375 MHz (+/- 12.5 kHz)
 - b. 163.125 MHz (+/- 12.5 kHz)
 - c. 163.125 MHz (+/- 12.5 kHz)
 - d. 163.125 MHz (+/- 12.5 kHz)
 - e. 164.475 MHz (+/- 12.5 kHz)
 - f. 164.525 MHz (+/- 12.5 kHz)
 - g. 165.6 MHz (+/- 12.5 kHz)
 - h. 166.225 MHz (+/- 12.5 kHz)
 - i. 166.2375 MHz (+/- 12.5 kHz)
 - j. 168.6125 MHz (+/- 12.5 kHz)
 - k. 169.4 MHz (+/- 12.5 kHz)
 - l. 169.4 MHz (+/- 12.5 kHz)
 - m. 169.4 MHz (+/- 12.5 kHz)
 - n. 169.4 MHz (+/- 12.5 kHz)
 - o. 169.4 MHz (+/- 12.5 kHz)
 - p. 169.4 MHz (+/- 12.5 kHz)
 - q. 169.7125 MHz (+/- 12.5 kHz)
 - r. 169.8 MHz (+/- 12.5 kHz)
 - s. 170.025 MHz (+/- 12.5 kHz)
 - t. 170.1 MHz (+/- 12.5 kHz)
 - u. 170.3625 MHz (+/- 12.5 kHz)

Special Conditions:

- (10) Operation on Public Safety Pool (Part 90.20) is prohibited.
- (11) The designated point-of-contact to terminate transmissions if interference occurs is Chris Imlay at (301) 351-3795.
- (12) All of the experimental devices will be under control of MRTC Motorsport Communications and they will be retrieved by MRTC Motorsport Communications from the participants upon completion of the experiment.