

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
RADIO STATION CONSTRUCTION PERMIT
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

XC MO

(Class of Station)

WE2XTJ

(Call Sign)

0100-EX-CM-2016

(File Number)

NAME Mustang Technology Group, L.P.

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(c) of the Commission's Rules

Station Locations

- (1) MOBILE: Howe, TX, within 5 km, centered around NL 33-25-34; WL 96-34-26
- (2) MOBILE: Lucas (COLLIN), TX, within 12 km, centered around NL 33-05-37; WL 96-33-35
- (3) MOBILE: Roanoke (DENTON), TX, within 1 km, centered around NL 33-01-34; WL 97-14-27
- (4) MOBILE: Muenster, TX, within 15 km, centered around NL 33-46-02; WL 97-19-15
- (5) MOBILE: Greenville, TX, within 15 km, centered around NL 33-15-45; WL 96-02-32
- (6) MOBILE: Goleta, CA, within 5 km, centered around NL 34-43-40; WL 120-09-30
- (7) MOBILE: Warren, MI, within 1 km, centered around NL 42-29-47; WL 83-02-33
- (8) MOBILE: Socorro, NM, within 15 km, centered around NL 34-03-36; WL 106-58-30
- (9) MOBILE: Harrison Township, MI, within 5 km, centered around NL 42-35-54; WL 82-50-39
- (10) MOBILE: Knollwood, TX, within 5 km, centered around NL 33-43-34; WL 96-40-33
- (11) MOBILE: Dorchester, TX, within 15 km, centered around NL 33-31-14; WL 96-42-16
- (12) MOBILE: Plano, TX, within 10 km, centered around NL 33-04-04; WL 96-41-09
- (13) MOBILE: Rosser, TX, within 15 km, centered around NL 32-23-31; WL 96-28-07
- (14) MOBILE: Watt, TX, within 15 km, centered around NL 31-39-16; WL 96-51-04
- (15) MOBILE: West Lafayette, IN, within 2 km, centered around NL 40-27-38; WL 86-50-11
- (16) MOBILE: Livermore CA, within 1 km, centered around NL 37-36-46; WL 121-32-39
- (17) MOBILE: Leesburg, VA, within 1 km, centered around NL 39-06-57; WL 77-31-18
- (18) MOBILE: Herndon, VA, within 1 km, centered around NL 38-57-47; WL 77-22-35

This authorization effective April 03, 2017 and
will expire 3:00 A.M. EST September 01, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Howe, TX, within 5 km, centered around NL 33-25-34; WL 96-34-26

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.6-5.638 GHz	MO	N0N	20 W (ERP)	
5.642-5.65 GHz	MO	N0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	
5.975 GHz	MO	50M0P0N	20 W (ERP)	

MOBILE: Lucas (COLLIN), TX, within 12 km, centered around NL 33-05-37; WL 96-33-35

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.6-5.606 GHz	MO	N0N	20 W (ERP)	
5.61-5.638 GHz	MO	N0N	20 W (ERP)	

Frequency Information

MOBILE: Lucas (COLLIN), TX, within 12 km, centered around NL 33-05-37; WL 96-33-35

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.642-5.65 GHz	MO	N0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	
5.975 GHz	MO	50M0P0N	20 W (ERP)	

MOBILE: Roanoke (DENTON), TX, within 1 km, centered around NL 33-01-34; WL 97-14-27

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.615-5.635 GHz	MO	N0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	
5.975 GHz	MO	50M0P0N	20 W (ERP)	

Frequency Information

MOBILE: Muenster, TX, within 15 km, centered around NL 33-46-02; WL 97-19-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.6-5.65 GHz	MO	N0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	
5.975 GHz	MO	50M0P0N	20 W (ERP)	

MOBILE: Greenville, TX, within 15 km, centered around NL 33-15-45; WL 96-02-32

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.6-5.65 GHz	MO	N0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	

Frequency Information

MOBILE: Greenville, TX, within 15 km, centered around NL 33-15-45; WL 96-02-32

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.975 GHz	MO	50M0P0N	20 W (ERP)	

MOBILE: Goleta, CA, within 5 km, centered around NL 34-43-40; WL 120-09-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.6-5.65 GHz	MO	N0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	

MOBILE: Warren, MI, within 1 km, centered around NL 42-29-47; WL 83-02-33

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.6-5.65 GHz	MO	N0N	20 W (ERP)	

Frequency Information

MOBILE: Warren, MI, within 1 km, centered around NL 42-29-47; WL 83-02-33

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	

MOBILE: Socorro, NM, within 15 km, centered around NL 34-03-36; WL 106-58-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.6-5.65 GHz	MO	N0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	

MOBILE: Harrison Township, MI, within 5 km, centered around NL 42-35-54; WL 82-50-39

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	

Frequency Information

MOBILE: Harrison Township, MI, within 5 km, centered around NL 42-35-54; WL 82-50-39

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.6-5.65 GHz	MO	N0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	

MOBILE: Knollwood, TX, within 5 km, centered around NL 33-43-34; WL 96-40-33

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.6-5.65 GHz	MO	N0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	

Frequency Information

MOBILE: Dorchester, TX, within 15 km, centered around NL 33-31-14; WL 96-42-16

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.6-5.65 GHz	MO	N0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	

MOBILE: Plano, TX, within 10 km, centered around NL 33-04-04; WL 96-41-09

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.6-5.606 GHz	MO	N0N	20 W (ERP)	
5.61-5.638 GHz	MO	N0N	20 W (ERP)	
5.642-5.65 GHz	MO	N0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	

Frequency Information

MOBILE: Plano, TX, within 10 km, centered around NL 33-04-04; WL 96-41-09

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.85-5.9 GHz	MO	N0N	20 W (ERP)	
5.975 GHz	MO	50M0P0N	20 W (ERP)	

MOBILE: Rosser, TX, within 15 km, centered around NL 32-23-31; WL 96-28-07

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.6-5.65 GHz	MO	N0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	

MOBILE: Watt, TX, within 15 km, centered around NL 31-39-16; WL 96-51-04

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	

Frequency Information

MOBILE: Watt, TX, within 15 km, centered around NL 31-39-16; WL 96-51-04

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.6-5.65 GHz	MO	N0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	

MOBILE: West Lafayette, IN, within 2 km, centered around NL 40-27-38; WL 86-50-11

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.6-5.638 GHz	MO	N0N	20 W (ERP)	
5.642-5.65 GHz	MO	N0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	
5.975 GHz	MO	50M0P0N	20 W (ERP)	

Frequency Information

MOBILE: Livermore CA, within 1 km, centered around NL 37-36-46; WL 121-32-39

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	
5.975 GHz	MO	50M0P0N	20 W (ERP)	

MOBILE: Leesburg, VA, within 1 km, centered around NL 39-06-57; WL 77-31-18

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	
5.975 GHz	MO	50M0P0N	20 W (ERP)	

Frequency Information

MOBILE: Herndon, VA, within 1 km, centered around NL 38-57-47; WL 77-22-35

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.525 GHz	MO	50M0P0N	20 W (ERP)	
5.7-5.8 GHz	MO	50M0P0N	20 W (ERP)	
5.85-5.9 GHz	MO	N0N	20 W (ERP)	
5.975 GHz	MO	50M0P0N	20 W (ERP)	

Special Conditions:

- (1) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (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.
- (4) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by the US Army contract numbers: W911QX-05-D-0007, W15P7T-10-D-A804, W909MY-12-D-0007, and W15QKN-10-9-0001. The use of this radio station in any other manner or for any other purpose will constitute a violation of the privileges herein authorized. Except as subsequently authorized by the Commission, this radio station shall not be operated after the expiration date of the contract designated in the related application and enumerated above.
- (5) All operations in Goleta, CA are subject to prior coordination with Western Area Frequency Coordinator (WFAC). Phone: (760) 939-6948.
- (6) The designated point-of-contact to terminate transmissions if interference occurs is Mr. David Tolman at (972) 396-4470.
- (7) No transmission permitted in 5.600-5.650 GHz band towards Dallas TX.