

United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION

EXPERIMENTAL

(Nature of Service)

XD FX MO

(Class of Station)

WA8XDP

(Call Sign)

1323-EX-ST-2026

(File Number)

NAME Insitu

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:
Ground and Flight Test

Station Locations

- (1) Boardman (MORROW), OR - NL 45-44-54; WL 119-48-15
- (2) Pendleton (UMATILLA), OR - NL 45-41-21; WL 114-50-32; MOBILE: Pendleton, OR
UAS test range, 15000ft AGL, within 50 km, centered around NL 45-41-21; WL
114-50-32
- (3) Ballston (POLK), OR - NL 45-01-53; WL 123-18-59; MOBILE: Ballston, OR, 15000ft
AGL, within 10 km, centered around NL 45-01-53; WL 123-18-59
- (4) Bingen (KLICKITAT), WA - NL 45-42-23; WL 121-27-29; MOBILE: Bingen, WA, within 1
km, centered around NL 45-42-23; WL 121-27-29

Frequency Information

Boardman (MORROW), OR - NL 45-44-54; WL 119-48-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1090 MHz	FX	11M0M1D	500 W (ERP)	
1090 MHz	FX	19M0V1D	316 W (ERP)	

This authorization effective August 01, 2026 and
will expire 3:00 A.M. ET February 02, 2027

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Boardman (MORROW), OR - NL 45-44-54; WL 119-48-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1090 MHz	FX	8M00V1D	316 W (ERP)	
1090 MHz	FX	19M0V1D 8M00V1D	631 W (ERP)	
1090 MHz	FX	11M0M1D	998 W (ERP)	

Pendleton (UMATILLA), OR - NL 45-41-21; WL 114-50-32; MOBILE: Pendleton, OR UAS test range, 15000ft AGL, within 50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1090 MHz	FX	11M0M1D	500 W (ERP)	
1090 MHz	FX	19M0V1D 8M00V1D	316 W (ERP)	
1090 MHz	FX	19M0V1D 8M00V1D	631 W (ERP)	
1090 MHz	FX	11M0M1D	998 W (ERP)	

Frequency Information

Ballston (POLK), OR - NL 45-01-53; WL 123-18-59; MOBILE: Ballston, OR, 15000ft AGL, within 10 km, centered around NL 4

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1090 MHz	FX	11M0M1D	500 W (ERP)	
1090 MHz	FX	19M0V1D 8M00V1D	316 W (ERP)	
1090 MHz	FX	19M0V1D 8M00V1D	631 W (ERP)	
1090 MHz	FX	11M0M1D	998 W (ERP)	

Bingen (KLICKITAT), WA - NL 45-42-23; WL 121-27-29; MOBILE: Bingen, WA, within 1 km, centered around NL 45-42-23; W

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1090 MHz	FX	11M0M1D	500 W (ERP)	
1090 MHz	FX	19M0V1D 8M00V1D	316 W (ERP)	
1090 MHz	FX	19M0V1D 8M00V1D	631 W (ERP)	
1090 MHz	FX	11M0M1D	998 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) One or more frequency assignments were coordinated prior to authorization with FAA Headquarters, 800 Independence Avenue, S.W., Washington, DC 20591; Telephone: 202-267-8699.
- (3) Insitu adhere to the conditions when operating the following equipment:
 - a. RT-2087/ZPX AND ZPX-A
 - i. SUPPORTED BY AIMS CL 2016302 AND CL 2111003, FOR MODES 3/A, C, ADS-B OUT, AND S (ELS) ON SCAN EAGLE AND INTEGRATOR UAS
 - ii. SUPPORTS FLIGHT TESTING OF RT-2087/ZPX, PN UAV-1003850-001, SWV UAV-1005267-001, FWV UAV-1005268-001, AND RT-2087/ZPX-A, PN UAV-1005423-001, SWV UAV-1002393-005, AND FWV UAV-1002391-001
 - iii. MODES 3/A, C, AND S (ELS) AND ADS-B OUT
 - iv. SET 3/A CODE TO 1200 OR AS DICTATED BY ATC
 - v. OUTPUT POWER FROM THE BOX MUST NOT EXCEED 316W
 - vi. TESTING LIMITED TO RESTRICTED AREAS R-5701 AND R-5706
 - vii. SHALL FOLLOW RESTRICTIONS PLACED ON COMMAND AND CONTROL LINKS
 - viii. SHALL NOTIFY LOCAL ATC OF TRANSPONDER INTEGRATION TESTING AT LEAST ONE HOUR IN ADVANCE
 - ix. IF ANY OPERATIONS, INCLUDING LAUNCH AND RECOVERY, ARE OUTSIDE OF WARNING/RESTRICTED AREAS, THEN OPERATOR SHALL MAINTAIN 2-WAY COMMUNICATION WITH ATC, FLY UNDER A FLIGHT PLAN, AND POSSESS THE FAA CERTIFICATION OF WAIVER OR AUTHORIZATION (COA) AND FOLLOW ANY RESTRICTIONS WITHIN THE FAA COA
 - x. STOP BUZZER IS INSITU OPERATIONS ACTION CENTER 509-493-4691
 - b. XPC-TR-50
 - i. SUPPORTED BY AIMS CL 1329601, FOR MODES 3/A AND C ON SCAN EAGLE AND INTEGRATOR UAS
 - ii. SUPPORTS FLIGHT TEST OF SCAN EAGLE AND INTEGRATOR UAS WITH SAGETECH XPC-TR-50 TRANSPONDER, PN 240-000217-001
 - iii. MODES 3/A AND C ONLY
 - iv. SET 3/A CODE TO 1200 OR AS DICTATED BY ATC
 - v. OUTPUT POWER FROM THE BOX MUST NOT EXCEED 500W
 - vi. TESTING LIMITED TO RESTRICTED AREAS R-5701 AND R-5706
 - vii. SHALL FOLLOW RESTRICTIONS PLACED ON COMMAND AND CONTROL LINKS
 - viii. IF ANY OPERATIONS, INCLUDING LAUNCH AND RECOVERY, ARE OUTSIDE OF WARNING/RESTRICTED AREAS: SHALL MAINTAIN 2-WAY COMMUNICATION WITH ATC, FLY UNDER A FLIGHT PLAN, AND POSSESS THE FAA CERTIFICATION OF WAIVER OR AUTHORIZATION (COA) AND FOLLOW ANY RESTRICTIONS WITHIN THE FAA COA
 - ix. STOP BUZZER IS INSITU OPERATIONS ACTION CENTER AT 509-493-4691
- (4) 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.