

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

EXPERIMENTAL

(Nature of Service)

XT      FX

(Class of Station)

WP9XAL

(Call Sign)

1429-EX-ST-2019

(File Number)

NAME MITRE

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:**

The MITRE corporation seeks an FCC Special Temporary Authority to transmit data within the High Frequency (HF) band.

**Station Locations**

- (1) Fairbanks (Fairbanks North Star), AK - NL 65-07-30; WL 147-29-16
- (2) Anchorage (Anchorage), AK - NL 61-14-39; WL 149-48-41

**Frequency Information**

Fairbanks (Fairbanks North Star), AK - NL 65-07-30; WL 147-29-16

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 4210-4650 kHz | FX            |                     | 200 W (ERP)      | 0.001 %                   |
|               |               | 24K0D7D             |                  |                           |
|               |               | 24K0G7D             |                  |                           |
|               |               | 24K0G7E             |                  |                           |
|               |               | 3K00G1D             |                  |                           |
|               |               | 3K00G7E             |                  |                           |
|               |               | 3K00H8E             |                  |                           |
|               |               | 98K0D7D             |                  |                           |
|               |               | 98K0F7D             |                  |                           |
|               |               | 98K0F7E             |                  |                           |

This authorization effective August 28, 2019 and  
will expire 3:00 A.M. EST December 01, 2019

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

Fairbanks (Fairbanks North Star), AK - NL 65-07-30; WL 147-29-16

| Frequency     | Station Class | Emission Designator                                                                                                   | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-----------------------------------------------------------------------------------------------------------------------|------------------|---------------------------|
| 4210-4650 kHz | FX            | 98K0F7N<br>49K0G7E                                                                                                    | 200 W (ERP)      | 0.001 %                   |
| 4700-4995 kHz | FX            | 24K0D7D<br>24K0G7D<br>24K0G7E<br>3K00G1D<br>3K00G7E<br>3K00H8E<br>98K0D7D<br>98K0F7D<br>98K0F7E<br>98K0F7N<br>49K0G7E | 200 W (ERP)      | 0.001 %                   |
| 5005-5450 kHz | FX            | 3K00H8E<br>98K0D7D<br>98K0F7D<br>98K0F7E<br>98K0F7N<br>49K0G7E<br>24K0D7D<br>24K0G7D<br>24K0G7E<br>3K00G1D<br>3K00G7E | 200 W (ERP)      | 0.001 %                   |
| 5680-5900 kHz | FX            | 24K0D7D<br>24K0G7D<br>24K0G7E<br>3K00G1D                                                                              | 200 W (ERP)      | 0.001 %                   |

## Frequency Information

Fairbanks (Fairbanks North Star), AK - NL 65-07-30; WL 147-29-16

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 5680-5900 kHz | FX            | 3K00G7E             | 200 W (ERP)      | 0.001 %                   |
|               |               | 3K00H8E             |                  |                           |
|               |               | 98K0D7D             |                  |                           |
|               |               | 98K0F7D             |                  |                           |
|               |               | 98K0F7E             |                  |                           |
|               |               | 98K0F7N             |                  |                           |
|               |               | 49K0G7E             |                  |                           |
|               |               |                     |                  |                           |
| 6200-6210 kHz | FX            | 10K0D7D             | 200 W (ERP)      | 0.001 %                   |
|               |               | 10K0G7D             |                  |                           |
|               |               | 10K0G7E             |                  |                           |
|               |               | 3K00G1D             |                  |                           |
|               |               | 3K00G7E             |                  |                           |
|               |               | 3K00H8E             |                  |                           |
|               |               | 10K0D7D             |                  |                           |
|               |               | 10K0F7D             |                  |                           |
|               |               | 10K0F7E             |                  |                           |
|               |               | 10K0F7N             |                  |                           |
|               |               | 10K0G7E             |                  |                           |
|               |               |                     |                  |                           |
| 6320-6525 kHz | FX            | 98K0D7D             | 200 W (ERP)      | 0.001 %                   |
|               |               | 98K0F7D             |                  |                           |
|               |               | 98K0F7E             |                  |                           |
|               |               | 98K0F7N             |                  |                           |
|               |               | 49K0G7E             |                  |                           |
|               |               | 24K0D7D             |                  |                           |
|               |               | 24K0G7D             |                  |                           |
|               |               | 24K0G7E             |                  |                           |
|               |               | 3K00G1D             |                  |                           |
|               |               | 3K00G7E             |                  |                           |
|               |               | 3K00H8E             |                  |                           |

## Frequency Information

Fairbanks (Fairbanks North Star), AK - NL 65-07-30; WL 147-29-16

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 6685-7300 kHz | FX            |                     | 200 W (ERP)      | 0.001 %                   |
|               |               | 24K0D7D             |                  |                           |
|               |               | 24K0G7D             |                  |                           |
|               |               | 24K0G7E             |                  |                           |
|               |               | 3K00G1D             |                  |                           |
|               |               | 3K00G7E             |                  |                           |
|               |               | 3K00H8E             |                  |                           |
|               |               | 98K0D7D             |                  |                           |
|               |               | 98K0F7D             |                  |                           |
|               |               | 98K0F7E             |                  |                           |
|               |               | 98K0F7N             |                  |                           |
|               |               | 49K0G7E             |                  |                           |
| 7400-8250 kHz | FX            |                     | 200 W (ERP)      | 0.001 %                   |
|               |               | 3K00H8E             |                  |                           |
|               |               | 98K0D7D             |                  |                           |
|               |               | 98K0F7D             |                  |                           |
|               |               | 98K0F7E             |                  |                           |
|               |               | 98K0F7N             |                  |                           |
|               |               | 49K0G7E             |                  |                           |
|               |               | 24K0D7D             |                  |                           |
|               |               | 24K0G7D             |                  |                           |
|               |               | 24K0G7E             |                  |                           |
|               |               | 3K00G1D             |                  |                           |
|               |               | 3K00G7E             |                  |                           |
| 8970-9400 kHz | FX            |                     | 200 W (ERP)      | 0.001 %                   |
|               |               | 24K0D7D             |                  |                           |
|               |               | 24K0G7D             |                  |                           |
|               |               | 24K0G7E             |                  |                           |
|               |               | 3K00G1D             |                  |                           |
|               |               | 3K00G7E             |                  |                           |
|               |               | 3K00H8E             |                  |                           |
|               |               | 98K0D7D             |                  |                           |
|               |               | 98K0F7D             |                  |                           |
|               |               | 98K0F7E             |                  |                           |

## Frequency Information

Fairbanks (Fairbanks North Star), AK - NL 65-07-30; WL 147-29-16

| Frequency       | Station Class | Emission Designator                                                                                                   | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|-----------------------------------------------------------------------------------------------------------------------|------------------|---------------------------|
| 8970-9400 kHz   | FX            | 98K0F7N<br>49K0G7E                                                                                                    | 200 W (ERP)      | 0.001 %                   |
| 9900-9995 kHz   | FX            | 49K0G7E<br>95K0F7N<br>95K0F7E<br>95K0F7D<br>95K0D7D<br>3K00H8E<br>3K00G7E<br>3K00G1D<br>24K0G7E<br>24K0G7D<br>24K0D7D | 200 W (ERP)      | 0.001 %                   |
| 10101-11275 kHz | FX            | 24K0D7D<br>24K0G7D<br>24K0G7E<br>3K00G1D<br>3K00G7E<br>3K00H8E<br>98K0D7D<br>98K0F7D<br>98K0F7E<br>98K0F7N<br>49K0G7E | 200 W (ERP)      | 0.001 %                   |
| 11400-11600 kHz | FX            | 98K0D7D<br>98K0F7D<br>98K0F7E<br>98K0F7N                                                                              | 200 W (ERP)      | 0.001 %                   |

## Frequency Information

Fairbanks (Fairbanks North Star), AK - NL 65-07-30; WL 147-29-16

| Frequency       | Station Class | Emission Designator                                                                                                   | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|-----------------------------------------------------------------------------------------------------------------------|------------------|---------------------------|
| 11400-11600 kHz | FX            | 49K0G7E<br>3K00G7E<br>3K00H8E<br>24K0D7D<br>24K0G7D<br>24K0G7E<br>3K00G1D                                             | 200 W (ERP)      | 0.001 %                   |
| 12100-12200 kHz | FX            | 24K0D7D<br>24K0G7D<br>24K0G7E<br>3K00G1D<br>3K00G7E<br>3K00H8E<br>98K0D7D<br>98K0F7D<br>98K0F7E<br>98K0F7N<br>49K0G7E | 200 W (ERP)      | 0.001 %                   |
| 13500-13570 kHz | FX            | 24K0D7D<br>24K0G7D<br>24K0G7E<br>3K00G1D<br>3K00G7E<br>3K00H8E<br>70K0D7D<br>70K0F7D<br>70K0F7E<br>70K0F7N<br>49K0G7E | 200 W (ERP)      | 0.001 %                   |

## Frequency Information

Fairbanks (Fairbanks North Star), AK - NL 65-07-30; WL 147-29-16

| Frequency       | Station Class | Emission Designator                                                                                                   | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|-----------------------------------------------------------------------------------------------------------------------|------------------|---------------------------|
| 13870-14990 kHz | FX            | 24K0D7D<br>24K0G7D<br>24K0G7E<br>3K00G1D<br>3K00G7E<br>3K00H8E<br>98K0D7D<br>98K0F7D<br>98K0F7E<br>98K0F7N<br>49K0G7E | 200 W (ERP)      | 0.001 %                   |
| 15010-15100 kHz | FX            | 90K0F7D<br>90K0F7E<br>90K0F7N<br>49K0G7E<br>3K00G1D<br>3K00G7E<br>3K00H8E<br>90K0D7D<br>24K0D7D<br>24K0G7D<br>24K0G7E | 200 W (ERP)      | 0.001 %                   |
| 15800-16000 kHz | FX            | 24K0D7D<br>24K0G7D<br>24K0G7E<br>3K00G1D<br>3K00G7E<br>3K00H8E<br>98K0D7D<br>98K0F7D<br>98K0F7E                       | 200 W (ERP)      | 0.001 %                   |

## Frequency Information

Fairbanks (Fairbanks North Star), AK - NL 65-07-30; WL 147-29-16

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 15800-16000 kHz | FX            | 98K0F7N<br>49K0G7E  | 200 W (ERP)      | 0.001 %                   |

Anchorage (Anchorage), AK - NL 61-14-39; WL 149-48-41

| Frequency     | Station Class | Emission Designator                                                                                                   | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-----------------------------------------------------------------------------------------------------------------------|------------------|---------------------------|
| 4210-4650 kHz | FX            | 24K0D7D<br>24K0G7D<br>24K0G7E<br>3K00G1D<br>3K00G7E<br>3K00H8E<br>98K0D7D<br>98K0F7D<br>98K0F7E<br>98K0F7N<br>49K0G7E | 200 W (ERP)      | 0.001 %                   |
| 4700-4995 kHz | FX            | 24K0D7D<br>24K0G7D<br>24K0G7E<br>3K00G1D<br>3K00G7E<br>3K00H8E<br>98K0D7D<br>98K0F7D<br>98K0F7E<br>98K0F7N<br>49K0G7E | 200 W (ERP)      | 0.001 %                   |



## Frequency Information

Anchorage (Anchorage), AK - NL 61-14-39; WL 149-48-41

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 5005-5450 kHz | FX            |                     | 200 W (ERP)      | 0.001 %                   |
|               |               | 49K0G7E             |                  |                           |
|               |               | 98K0F7N             |                  |                           |
|               |               | 98K0F7E             |                  |                           |
|               |               | 98K0F7D             |                  |                           |
|               |               | 98K0D7D             |                  |                           |
|               |               | 3K00H8E             |                  |                           |
|               |               | 3K00G7E             |                  |                           |
|               |               | 3K00G1D             |                  |                           |
|               |               | 24K0G7E             |                  |                           |
|               |               | 24K0G7D             |                  |                           |
|               |               | 24K0D7D             |                  |                           |
|               |               |                     |                  |                           |
| 5680-5900 kHz | FX            |                     | 200 W (ERP)      | 0.001 %                   |
|               |               | 24K0D7D             |                  |                           |
|               |               | 24K0G7D             |                  |                           |
|               |               | 24K0G7E             |                  |                           |
|               |               | 3K00G1D             |                  |                           |
|               |               | 3K00G7E             |                  |                           |
|               |               | 3K00H8E             |                  |                           |
|               |               | 98K0D7D             |                  |                           |
|               |               | 98K0F7D             |                  |                           |
|               |               | 98K0F7E             |                  |                           |
|               |               | 98K0F7N             |                  |                           |
|               |               | 49K0G7E             |                  |                           |
|               |               |                     |                  |                           |
| 6200-6210 kHz | FX            |                     | 200 W (ERP)      | 0.001 %                   |
|               |               | 10K0D7D             |                  |                           |
|               |               | 10K0G7D             |                  |                           |
|               |               | 10K0G7E             |                  |                           |
|               |               | 3K00G1D             |                  |                           |
|               |               | 3K00G7E             |                  |                           |
|               |               | 3K00H8E             |                  |                           |
|               |               | 10K0D7D             |                  |                           |
|               |               | 10K0F7D             |                  |                           |
|               |               | 10K0F7E             |                  |                           |

## Frequency Information

Anchorage (Anchorage), AK - NL 61-14-39; WL 149-48-41

| Frequency     | Station Class | Emission Designator                                                                                                   | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-----------------------------------------------------------------------------------------------------------------------|------------------|---------------------------|
| 6200-6210 kHz | FX            | 10K0F7N<br>10K0G7E                                                                                                    | 200 W (ERP)      | 0.001 %                   |
| 6320-6525 kHz | FX            | 24K0D7D<br>24K0G7D<br>24K0G7E<br>3K00G1D<br>3K00G7E<br>3K00H8E<br>98K0D7D<br>98K0F7D<br>98K0F7E<br>98K0F7N<br>49K0G7E | 200 W (ERP)      | 0.001 %                   |
| 6685-7300 kHz | FX            | 24K0D7D<br>24K0G7D<br>24K0G7E<br>3K00G1D<br>3K00G7E<br>3K00H8E<br>98K0D7D<br>98K0F7D<br>98K0F7E<br>98K0F7N<br>49K0G7E | 200 W (ERP)      | 0.001 %                   |
| 7400-8250 kHz | FX            | 24K0G7E<br>24K0G7D<br>24K0D7D<br>98K0F7E                                                                              | 200 W (ERP)      | 0.001 %                   |

## Frequency Information

Anchorage (Anchorage), AK - NL 61-14-39; WL 149-48-41

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 7400-8250 kHz | FX            | 98K0F7D             | 200 W (ERP)      | 0.001 %                   |
|               |               | 98K0D7D             |                  |                           |
|               |               | 3K00H8E             |                  |                           |
|               |               | 3K00G7E             |                  |                           |
|               |               | 3K00G1D             |                  |                           |
|               |               | 49K0G7E             |                  |                           |
|               |               | 98K0F7N             |                  |                           |
|               |               |                     |                  |                           |
| 8970-9400 kHz | FX            | 24K0D7D             | 200 W (ERP)      | 0.001 %                   |
|               |               | 24K0G7D             |                  |                           |
|               |               | 24K0G7E             |                  |                           |
|               |               | 3K00G1D             |                  |                           |
|               |               | 3K00G7E             |                  |                           |
|               |               | 3K00H8E             |                  |                           |
|               |               | 98K0D7D             |                  |                           |
|               |               | 98K0F7D             |                  |                           |
|               |               | 98K0F7E             |                  |                           |
|               |               | 98K0F7N             |                  |                           |
|               |               | 49K0G7E             |                  |                           |
| 9900-9995 kHz | FX            | 49K0G7E             | 200 W (ERP)      | 0.001 %                   |
|               |               | 95K0F7N             |                  |                           |
|               |               | 95K0F7E             |                  |                           |
|               |               | 95K0F7D             |                  |                           |
|               |               | 95K0D7D             |                  |                           |
|               |               | 3K00H8E             |                  |                           |
|               |               | 3K00G7E             |                  |                           |
|               |               | 3K00G1D             |                  |                           |
|               |               | 24K0G7E             |                  |                           |
|               |               | 24K0G7D             |                  |                           |
|               |               | 24K0D7D             |                  |                           |

## Frequency Information

Anchorage (Anchorage), AK - NL 61-14-39; WL 149-48-41

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 10101-11275 kHz | FX            | 24K0D7D             | 200 W (ERP)      | 0.001 %                   |
|                 |               | 24K0G7D             |                  |                           |
|                 |               | 24K0G7E             |                  |                           |
|                 |               | 3K00G1D             |                  |                           |
|                 |               | 3K00G7E             |                  |                           |
|                 |               | 3K00H8E             |                  |                           |
|                 |               | 98K0D7D             |                  |                           |
|                 |               | 98K0F7D             |                  |                           |
|                 |               | 98K0F7E             |                  |                           |
|                 |               | 98K0F7N             |                  |                           |
|                 |               | 49K0G7E             |                  |                           |
|                 |               |                     |                  |                           |
| 11400-11600 kHz | FX            | 24K0D7D             | 200 W (ERP)      | 0.001 %                   |
|                 |               | 24K0G7D             |                  |                           |
|                 |               | 24K0G7E             |                  |                           |
|                 |               | 3K00G1D             |                  |                           |
|                 |               | 3K00G7E             |                  |                           |
|                 |               | 3K00H8E             |                  |                           |
|                 |               | 98K0D7D             |                  |                           |
|                 |               | 98K0F7D             |                  |                           |
|                 |               | 98K0F7E             |                  |                           |
|                 |               | 98K0F7N             |                  |                           |
|                 |               | 49K0G7E             |                  |                           |
|                 |               |                     |                  |                           |
| 12100-12200 kHz | FX            | 24K0G7D             | 200 W (ERP)      | 0.001 %                   |
|                 |               | 24K0D7D             |                  |                           |
|                 |               | 49K0G7E             |                  |                           |
|                 |               | 98K0F7N             |                  |                           |
|                 |               | 98K0F7E             |                  |                           |
|                 |               | 98K0F7D             |                  |                           |
|                 |               | 98K0D7D             |                  |                           |
|                 |               | 3K00H8E             |                  |                           |
|                 |               | 3K00G7E             |                  |                           |

## Frequency Information

Anchorage (Anchorage), AK - NL 61-14-39; WL 149-48-41

| Frequency       | Station Class | Emission Designator                                                                                                   | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|-----------------------------------------------------------------------------------------------------------------------|------------------|---------------------------|
| 12100-12200 kHz | FX            | 3K00G1D<br>24K0G7E                                                                                                    | 200 W (ERP)      | 0.001 %                   |
| 13500-13570 kHz | FX            | 24K0D7D<br>24K0G7D<br>24K0G7E<br>3K00G1D<br>3K00G7E<br>3K00H8E<br>70K0D7D<br>70K0F7D<br>70K0F7E<br>70K0F7N<br>49K0G7E | 200 W (ERP)      | 0.001 %                   |
| 13870-14990 kHz | FX            | 49K0G7E<br>98K0F7N<br>98K0F7E<br>98K0F7D<br>98K0D7D<br>3K00H8E<br>3K00G7E<br>3K00G1D<br>24K0G7E<br>24K0G7D<br>24K0D7D | 200 W (ERP)      | 0.001 %                   |
| 15010-15100 kHz | FX            | 24K0D7D<br>24K0G7D<br>24K0G7E<br>3K00G1D                                                                              | 200 W (ERP)      | 0.001 %                   |

## Frequency Information

Anchorage (Anchorage), AK - NL 61-14-39; WL 149-48-41

| Frequency       | Station Class | Emission Designator                                                                                                   | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|-----------------------------------------------------------------------------------------------------------------------|------------------|---------------------------|
| 15010-15100 kHz | FX            | 3K00G7E<br>3K00H8E<br>90K0D7D<br>90K0F7D<br>90K0F7E<br>90K0F7N<br>49K0G7E                                             | 200 W (ERP)      | 0.001 %                   |
| 15800-16000 kHz | FX            | 49K0G7E<br>98K0F7N<br>98K0F7E<br>98K0F7D<br>98K0D7D<br>3K00H8E<br>3K00G7E<br>3K00G1D<br>24K0G7E<br>24K0G7D<br>24K0D7D | 200 W (ERP)      | 0.001 %                   |

## Special Conditions:

- (1) 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.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) Operation is not permitted in the following bands:  
5450-5680 kHz  
5900-6200 kHz  
6525-6685 kHz  
7300-7400 kHz  
9400-9900 kHz  
11600-12100 kHz  
13570-13870 kHz  
15100-15800 kHz