

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

EXPERIMENTAL

(Nature of Service)

XT      FX

(Class of Station)

WG2XQK

(Call Sign)

0159-EX-ML-2015

(File Number)

NAME BNSF Railway Company

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(i) of the Commission's Rules

Station Locations

- (1) Kansas City (WYANDOTTE), KS - NL 39-05-18; WL 94-40-52
- (2) Alliance (BOX BUTTE), NE - NL 42-05-33; WL 102-52-38
- (3) Topeka (SHAWNEE), KS - NL 39-03-31; WL 95-39-29
- (4) Fort Worth, TX - NL 32-49-57; WL 97-18-58

Frequency Information

Kansas City (WYANDOTTE), KS - NL 39-05-18; WL 94-40-52

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 1575.42 MHz | FX            | 20M4W7D             | 20 pW (ERP)      |                           |

Alliance (BOX BUTTE), NE - NL 42-05-33; WL 102-52-38

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------|---------------|---------------------|------------------|---------------------------|
| 1575 MHz  | FX            | 20M4W7D             | 28.2 pW (ERP)    |                           |

This authorization effective November 20, 2015 and  
will expire 3:00 A.M. EST July 05, 2017

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

Topeka (SHAWNEE), KS - NL 39-03-31; WL 95-39-29

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------|---------------|---------------------|------------------|---------------------------|
| 1575 MHz  | FX            | 20M4W7D             | 28.8 pW (ERP)    |                           |

Fort Worth, TX - NL 32-49-57; WL 97-18-58

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------|---------------|---------------------|------------------|---------------------------|
| 1575 MHz  | FX            | 20M4W7D             | 13.2 pW (ERP)    |                           |

## 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) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (4) The designated point-of-contact to terminate transmissions if interference occurs is Jeffrey Gray 913-551-4640.
- (5) GPS users in the area of potential interference to GPS reception must be notified that GPS information may be impacted for periods of time.
- (6) BNSF Railway Company shall post signs on doors to the test area notifying that, "GPS re-radiator is in use and the GPS information you receive may be in error."
- (7) The test equipment shall only be used indoors and shall be under the control of BNSF Railway Company.
- (8) Operation is limited to activity for the purpose of testing radio navigation satellite service (RNSS) equipment and systems.
- (9) No EIRP greater than -140 dBm/24 MHz at 100 feet is used.