

Description of Experimental Program

In last year's 6 GHz Report & Order, the Commission designated additional spectrum for unlicensed operations, envisioning its use for "new innovative technologies and services that will advance the Commission's goal of making broadband connectivity available to all Americans, especially those in rural and underserved areas." Unlicensed Use of the 6 GHz Band, 35 FCC Rcd 3852, 3853 (2020). Through this application for an experimental license, 281 Communications Corporation Inc seeks to advance these goals by testing available equipment across the UNII-5 band for potential delivery of enhanced fixed wireless broadband services.

The experimental operations will involve field deployment and testing of Mimosa Network's 6 GHz radio technology on 7 towers at rural sites in Marble Falls, Texas. These operations will evaluate the greater throughput capabilities available in these bands using 80 MHz channels. The program will also use up to 200 remote units at customer locations.

281 Communications Corporation Inc data collection program will operate without causing harmful interference to incumbent users. 281 Communications Corporation Inc will work with any nearby licensed incumbents that it identifies, based on information provided in the FCC's databases, to ensure that its operations will avoid any harmful impact on such existing users.

Deployment Parameters

The current stage of the experimental trial proposes operation from two sites. Each location will deploy directional antennas which will transmit on the 5850 – 6400 MHz band. Specific parameters of proposed operation are detailed in the chart below:

Location 1 – Fairland

Coordinates 30.63751, -98.25941 Beam Width in Horizontal Plane 180° Orientation in Horizontal Plane 150° Beam Tilt 0°

Location 2 – Marble Falls

Coordinates 30.58276, -98.27387 Beam Width in Horizontal Plane 360° Orientation in Horizontal Plane 360° Beam Tilt 0°

Location 3 – Marble Falls

Coordinates 30.58276, -98.27387 Beam Width in Horizontal Plane 180° Orientation in Horizontal Plane 270° Beam Tilt 0°

Location 4 – Kingsland Wes

Coordinates 30.65993, -98.4447 Beam Width in Horizontal Plane 360° Orientation in Horizontal Plane 360° Beam Tilt 0°

Location 5 – Kingsland Ridgeway

Coordinates 30.66527, -98.47394 Beam Width in Horizontal Plane 360° Orientation in Horizontal Plane 360° Beam Tilt 0°

Location 6 – Kingsland Ridgeway

Coordinates 30.66527, -98.47394 Beam Width in Horizontal Plane 360° Orientation in Horizontal Plane 360° Beam Tilt 0°

Location 7 – Kingsland Ridgeway

Coordinates 30.66527, -98.47394 Beam Width in Horizontal Plane 65° Orientation in Horizontal Plane 42.5° Beam Tilt 0°

Location 8 – Kingsland Bloomquist

Coordinates 30.67798, -98.38494 Beam Width in Horizontal Plane 65° Orientation in

Horizontal Plane 42.5° Beam Tilt 0°

Location 9 – Kingsland Bloomquist

Coordinates 30.67798, -98.38494 Beam Width in Horizontal Plane 60° Orientation in

Horizontal Plane 40° Beam Tilt 0°

Location 10 – Kingsland Bloomquist

Coordinates 30.67798, -98.38494 Beam Width in Horizontal Plane 65° Orientation in

Horizontal Plane 42.5° Beam Tilt 0°

Location 8 – Ward Pole

Coordinates 30.66527, -98.47394 Beam Width in Horizontal Plane 305° Orientation in

Horizontal Plane 250° Beam Tilt 0°

Additionally, the trial will deploy up to 200 end users located with a 5-mile radius of the fixed locations, with maximum power of 250MW/4.0 W ERP.