

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, Community Internet Providers 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 34 towers at rural sites in Texas. These operations will evaluate the greater throughput capabilities available in these bands using 80 MHz channels. The program will also use up to 750 remote units at customer locations.

Community Internet Provider's data collection program will operate without causing harmful interference to incumbent users. Community Internet Providers 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 – “2710”	
Coordinates	33.078916,-96.267244
Beam Width in Horizontal Plane	70° x 4 alternating panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -0°
Antenna Gain:	14 db
Location 2 – “BHP1”	
Coordinates	32.994136,-96.250164
Beam Width in Horizontal Plane	65°
Orientation in Horizontal Plane	270°
Beam Tilt	Installed antenna tilt Ex: -7°
Antenna Gain:	16 db
Location 3 – “Bridle Trails”	
Coordinates	33.056612,-96.285463
Beam Width in Horizontal Plane	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db
Location 4 – “Brown”	
Coordinates	33.022851,-96.160669
Beam Width in Horizontal Plane	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db
Location 5 – “Caddo Basin”	
Coordinates	33.099627,-96.273987
Beam Width in Horizontal Plane	65° x 5 alternating panels
Orientation in Horizontal Plane	0°,70°,90°,120°,180°
Beam Tilt	Installed antenna tilt Ex: -7°
Antenna Gain:	16 db
Location 6 – “Caddo Fork”	
Coordinates	33.09143,-96.255293
Beam Width in Horizontal Plane	65° x 3 overlapping panels
Orientation in Horizontal Plane	136°, 136°, 136°
Beam Tilt	Installed antenna tilt Ex: -7°
Antenna Gain:	16 db
Location 7 – “Cole”	
Coordinates	33.061346,-96.269549
Beam Width in Horizontal Plane	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db

Location 8 – “Fox Prairie”	
Coordinates	33.104900,-96.226322
Beam Width in Horizontal Plane 1	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane 1	0°,90°,180°,270°
Beam Tilt 1	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db
Beam Width in Horizontal Plane 2	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane 2	30°,225°
Beam Tilt 2	Installed antenna tilt Ex: -7°
Antenna Gain:	16 db
Location 9 – “H548”	
Coordinates	32.887316, -96.335829
Beam Width in Horizontal Plane	65° x 4 alternating panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -7°
Antenna Gain:	16 db
Location 10 – “HAHA”	
Coordinates	33.065040,-96.435657
Beam Width in Horizontal Plane	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db
Location 11 – “Hillview A”	
Coordinates	32.981643,-96.243868
Beam Width in Horizontal Plane	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db
Location 12 – “Hillview B”	
Coordinates	32.982731,-96.238814
Beam Width in Horizontal Plane	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db
Location 13 – “Hensen”	
Coordinates	33.046032,-96.254343
Beam Width in Horizontal Plane	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db
Location 14 – “Hurricane Creek”	
Coordinates	33.367723,-96.593563
Beam Width in Horizontal Plane	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db
Location 15 – “Harvest Hill”	

Coordinates	32.96350,-96.25058
Beam Width in Horizontal Plane	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db
Location 16 – “Kelly Ranch”	
Coordinates	33.063101,-96.256908
Beam Width in Horizontal Plane 1	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane 1	0°,90°,180°,270°
Beam Tilt 1	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db
Beam Width in Horizontal Plane 2	65°
Orientation in Horizontal Plane 2	300°
Beam Tilt 2	Installed antenna tilt Ex: -7°
Antenna Gain:	16 db
Location 17 – “Meadows”	
Coordinates	32.96298,-96.23725
Beam Width in Horizontal Plane	65° x 2 panels
Orientation in Horizontal Plane	45°,135°
Beam Tilt	Installed antenna tilt Ex: -7°
Antenna Gain:	16 db
Location 18 – “Nevada Lakes”	
Coordinates	33.052579,-96.384701
Beam Width in Horizontal Plane	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db
Location 19 – “Oak Bend”	
Coordinates	33.039864,-96.379727
Beam Width in Horizontal Plane 1	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane 1	0°,90°,180°,270°
Beam Tilt 1	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db
Beam Width in Horizontal Plane 2	180°
Orientation in Horizontal Plane 2	291°
Beam Tilt 2	Installed antenna tilt Ex: -7°
Antenna Gain:	16 db
Location 20 – “St. Francis Trinity 1”	
Coordinates	32.613764,-97.457866
Beam Width in Horizontal Plane	70° x 4 alternating panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: 0°
Antenna Gain:	14 db
Location 21 – “St. Francis Trinity 2”	
Coordinates	32.614450,-97.458532
Beam Width in Horizontal Plane	70° x 4 alternating panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: 0°
Antenna Gain:	14 db

Location 22 – “St. Francis Trinity 3”	
Coordinates	32.614112,-97.455319
Beam Width in Horizontal Plane	70° x 4 alternating panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: 0°
Antenna Gain:	14 db
Location 23 – “St. Francis Paperclip”	
Coordinates	32.609834,-97.454127
Beam Width in Horizontal Plane	65° x 2 panels
Orientation in Horizontal Plane	343°,268°
Beam Tilt	Installed antenna tilt Ex: -7°
Antenna Gain:	16 db
Location 24 – “St. Francis Shop”	
Coordinates	32.615012,-97.454555
Beam Width in Horizontal Plane	65° x 1 panels
Orientation in Horizontal Plane	225°
Beam Tilt	Installed antenna tilt Ex: -7°
Antenna Gain:	16 db
Location 25 – “Southfork A”	
Coordinates	32.999268,-96.258599
Beam Width in Horizontal Plane	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db
Location 26 – “Southfork B”	
Coordinates	33.008032,-96.260373
Beam Width in Horizontal Plane	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db
Location 27 – “Tucumcari”	
Coordinates	32.946121,-96.219576
Beam Width in Horizontal Plane	65° x 4 alternating panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -7°
Antenna Gain:	16 db
Location 28 – “Urban Crossing”	
Coordinates	33.363529,-96.587948
Beam Width in Horizontal Plane	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db
Location 29 – “Williams Estates”	
Coordinates	33.045641,-96.382011
Beam Width in Horizontal Plane	65° x 1 panels
Orientation in Horizontal Plane	211°
Beam Tilt	Installed antenna tilt Ex: -7°

Antenna Gain:	16 db
Location 30 – “Morgan Lakes 1”	
Coordinates	33.336510,-96.765397
Beam Width in Horizontal Plane	70° x 4 alternating panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -0°
Antenna Gain:	14 db
Location 31 – “Morgan Lakes 2”	
Coordinates	33.341848,-96.767607
Beam Width in Horizontal Plane	70° x 4 alternating panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -0°
Antenna Gain:	14 db
Location 32 – “Morgan Lakes 3”	
Coordinates	33.339595, -96.762905
Beam Width in Horizontal Plane	70° x 4 alternating panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -0°
Antenna Gain:	14 db
Location 33 – “Morgan Lakes 4”	
Coordinates	33.340618,-96.765994
Beam Width in Horizontal Plane	70° x 4 alternating panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -0°
Antenna Gain:	14 db
Location 34 – “Dayberry”	
Coordinates	33.116475,-96.215944
Beam Width in Horizontal Plane	180° x 4 alternating overlapping panels
Orientation in Horizontal Plane	0°,90°,180°,270°
Beam Tilt	Installed antenna tilt Ex: -2°
Antenna Gain:	18 db

Additionally, the trial will deploy up to 750 end users located with a #-mile radius of the fixed locations, with maximum power of 250MW/4.0 W ERP.