Screamin' Fast Broadband and Great Sounding ePhone Service

March 7, 2014

Via Electronic Comment Filing System
Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Subject: **Expression of Interest in Rural Broadband Experimental Projects**
WC Docket No. 10-90

Dear Ms. Dortch:

AireBeam (FRN: 0021370093), a rural Arizona Wireless Internet Service and VOIP Telephony provider, submits this expression of interest to participate in the FCC's rural broadband experiments project.

AireBeam is a family-owned company, free of debt except for limited financing for service trucks. AireBeam's network head ends are located in Casa Grande (Pinal County) and Buckeye (Maricopa County), AZ. These head ends are connected to the Internet at the IO Data Center in Phoenix, AZ via a 10 gig Fiber Wave circuit, a backup 1 gig fiber point-to-point circuit between Casa Grande and Phoenix and two 1 gig fiber circuits between Buckeye and Phoenix.

AireBeam's networks cover approximately 5,000 square miles of Pinal and Maricopa Counties. We operate an FCC-licensed Gigabit backbone that is approximately 120 miles long over 10 hops. Today, we provide the following services via fixed wireless broadband:

1) Residential broadband Internet access services, with connection speeds ranging from 1mbps to 15mbps download and 0.5mbps to 8mbps upload, depending upon the consumer's subscribed service speed;
2) Commercial broadband Internet access services, with connection speeds from 3mbps to 1gigabit/second download and 1.5mbps to 1 gigabit/second upload; and
3) Residential and commercial VOIP Telephony Services.

AireBeam is in its tenth year of operation, has 12 employees, has approximately 4,900 customers, and had FY 2013 revenues of $1.82M.

Census Tract Locations

AireBeam has reviewed the FCC's preliminary list of "potentially suitable" locations for the rural broadband experiments (http://transition.fcc.gov/bureaus/wcb/ExperimentEligibleLocationsPN020514.csv, last visited March 7, 2014). AireBeam anticipates that it may seek funding in eligible areas within Census tracts in and around Pinal and Maricopa counties in Arizona. This preliminary determination may be revised upon the FCC's release of the final list of Eligible Census Blocks for funding under the program.

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Gigabit Hybrid Fiber to the Home (FTTH) Project Goal

AireBeam's proposed project is to deploy FTTH service to eligible service areas. The FTTH plant that services these areas would be connected to our Headend by FCC-licensed multi-Gigabit Microwave links (hence Hybrid FTTH). Communities within these areas range in size, and nearby communities with less population density also could be connected wirelessly (fed from the fiber in the nearby communities) with soon-to-market 802.11AC fixed wireless Access Points and Stations, which are expected to deliver 100-500mbps connections.

Project Overview

AireBeam has commissioned a fiber manufacturer to design the Fiber to the Home GPON plant layout, including all fiber runs, pedestals and hand holes, and splitters. This design is expected to be completed by the end of March 2014. We intend to break ground by the end of 2014. The Fiber plant will cover approximately 10,000 lots passed, and AireBeam's construction department will perform the construction. Community anchor institutions are expected to include schools, a library and a clinic.

AireBeam understand that Century Link DSL may be available in portions of the relevant census tracts certain of these areas, but in other areas, the copper plant (first buried in the 1950s) has become unusable. Accordingly, in certain areas within these census tracts, broadband service is unavailable that meets FCC criteria. AireBeam intends to fund the labor cost of this project (estimated at approximately 1/3 of the total project cost) itself. AireBeam is seeking construction and operating funding assistance to help it defray the remaining projected construction material and CPE costs. This funding can be provided either as a lump sum or as monthly payments.

Summary

In the western United States where parcels are large, few and far between and subdivisions of homes are isolated miles from the nearest high capacity Internet source, providing Fiber to the Home can be economically accomplished ONLY if high capacity (multiple gigabit) microwave circuits link the Fiber to the Home head-ends to the Internet source.

AireBeam has invested hundreds of thousands of dollars to build a network covering 5,000 square miles of rural southern Arizona. That network consists of more than 75 towers or antenna sites and a 120 mile gigabit backbone running FCC-licensed Exalt ExploreAir radios. In 2014, we will begin deploying 1.25gigabit FDX microwave links to distribution towers off our gigabit licensed backbone. We are uniquely positioned to implement this hybrid microwave/fiber FTTH deployment. We will be able to gather real statistics about as built implementation costs, take rate, revenue and profitability.

AireBeam is family owned and operated. We scrutinize every dollar that we spend, making sure that we spend it in such a way as to maximize the return. Our real implementation costs will be significantly less than other companies because we do the work entirely ourselves. We subcontract very little work, only if we need a short-term skill that that we can purchase less expensively than training and equipping our employees.

We are accountable and responsible and, if AireBeam is awarded funding in this Rural Broadband Experiment, we will provide one of the most cost-effective implementations possible.

Sincerely,

Gregory A. Friedman, Owner and Managing Member
FibAire Communications, LLC d/b/a AireBeam