

March 22, 2018

In re Application of

Keweenaw Research Center  
23620 Airpark BLVD  
Calumet, Michigan 49913

To Operate in the 1350-1390MHz Telemetry  
Band to analyze MANET / MIMO channelization in Calumet, Michigan.

ATTN.: Microwave Branch

Keweenaw Research Center hereby requests Special Temporary Authority (STA) to operate in the 1350-1390MHz Telemetry Band pursuant to Section 21.25 of the Commission's Rules. Keweenaw Research Center requests that the Commission grant it temporary authority to operate on the frequency centered on 1380MHz with a 20MHz bandwidth July 01, 2018 through December 31, 2018 with intermittent usage. As explained below, Keweenaw Research Center is filing an STA request to test and evaluate emerging microwave technology in a MIMO / MANET configuration at the Keweenaw Research Center in Calumet, Michigan. Keweenaw Research Center submits that there are extraordinary circumstances warranting a grant of the STA request.

Keweenaw Research Center is evaluating emerging MANET / MIMO microwave technologies with relation to propagation, data throughput, vehicle integration and impact to present documentation for application for governmental contracts. Due to the frequency congestion in the Calumet area, Keweenaw Research Center requests the use of channels in the 1350-1390MHz Telemetry Band.

Keweenaw Research Center certifies that the operation of the requested channels for the purposes specified herein will not cause interference to any established stations.

Grant of the instant request for STA in the 1.3GHz Band would serve the public interest by enabling Keweenaw Research Center to evaluate the required remote networking coverage for this experiment. The proposed service would enhance the experiment by providing on the spot networking from mobile locations that would not otherwise be available to the engineering team.

In accordance with Section 74.633 of the Commission's Rules, the following is provided:

Applicants Name:	Keweenaw Research Center
Address:	23620 Airpark BLVD. Calumet, Michigan 49913
Type and Manufacturer Of Equipment:	Silvus Technologies, Inc. StreamCaster SC4480 / SC4240
Power Output:	4W
ERP:	12W
Emission:	20M00D7W
Frequencies:	1380.0 MHz, 20M00D7W @12W

Area of Operation: 5 Kilometers  
Coordinates: N 47 10 14.02  
W 088 30 36.50  
Antenna Height: 25' AGL  
Antenna: Omni  
Antenna Gain: 4dBi  
Dates of Operation: July 01, 2018 – December 31, 2018  
(Intermittent usage during these days)

Keweenaw Research Center requests an STA to operate on the above-referenced frequencies for a period not to exceed 60 days. No application for regular authorization will subsequently be filed.

Keweenaw Research Center certifies that no party to the application is subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C § 853(a).

Should you have any questions regarding this matter, please contact, John Winch, by telephone 626 676 1470.

Respectfully submitted,

By: John Winch  
Frequency Coordinator