

January 07, 2021

In re Application of

Sierra Nevada Corporation
Tactical Communications Division
3139 Doc Bennett Road
Fayetteville, North Carolina 28306

To operate in the 2360-2390MHz Telemetry Band and
450MHz UHF Band in White Sands, New Mexico.

ATTN.: Microwave Branch

Sierra Nevada Corporation hereby requests Special Temporary Authority (STA) to operate within the 2360-2390MHz and 450MHz UHF telemetry bands pursuant to Section 21.25 of the Commission's Rules. Sierra Nevada Corporation requests that the Commission grant it temporary authority to operate on the frequency centered at 2380MHz with a 20MHz bandwidth from February 15, 2021 through April 15, 2021 with intermittent usage. Additionally, Sierra Nevada Corporation requests that the Commission grant it temporary authority to operate on the frequencies centered at 462.5625MHz, 462.5875MHz and 462.6125MHz with a 12.5KHz bandwidth from February 15, 2021 through April 15, 2021. As explained below, Sierra Nevada Corporation is filing an STA request to demonstrate high altitude to ground MESH network testing over White Sands, New Mexico and surrounding area. Sierra Nevada Corporation submits that there are extraordinary circumstances warranting a grant of the STA request.

Sierra Nevada Corporation seeks to conduct high altitude to ground MESH network and ground radio testing on an intermittent basis with testing not to exceed 16 hours near and around White Sands, New Mexico. Due to the extreme frequency congestion in the area, Sierra Nevada Corporation requests the use of these channels.

Sierra Nevada Corporation certifies that the operation of the requested channel for the purposes specified herein will not cause interference to any established stations.

Grant of the instant request for STA for the 450MHz and the 2.3GHz Bands would serve the public interest by enabling Sierra Nevada Corporation to conduct high altitude MESH networking tests over White Sands, New Mexico. Sierra Nevada Corporation is in the process of obtaining the consent of the relevant frequency coordinators for this project, including AFTRCC. AFTRCC has indicated its intent to forward the results of the coordination to the Commission.

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

Applicants Name: Sierra Nevada Corporation
Tactical Communications Division
Address: 3139 Doc Bennett Road
Fayetteville, North Carolina 28306

Dates of Operation: February 15, 2021 - April 15, 2021

Type and Manufacturer
Of Equipment: Silvus Technologies, Inc.
Streamcaster SC4480

Power Output: 8W

ERP: **25W**

Emission: 20M00D7W

Frequency: **2380.0MHz @25W AERIAL**

Area of Operation: 200km

Coordinates: N 32 52 14.38
W 106 29 27.87

Antenna Height: **UNMANNED STRATOLLITE @ OR BELOW 60000' AGL**

Antenna: H/V

Antenna Gain: **6dBi / 19dBi**

Type and Manufacturer
Of Equipment: Motorola HT1000

Power Output: 4W

ERP: **6W**

Emission: 12K5F3E

Frequency: **462.5625MHZ @ 6W TERRESTRIAL**
462.5875MHZ @ 6W TERRESTRIAL
462.6125MHZ @ 6W TERRESTRIAL

Area of Operation: 50km

Coordinates: N 32 52 14.38
W 106 29 27.87

Antenna Height: 6' AGL

Antenna: 2dB Vertical

Antenna Gain: 2dBi

Dates of Operation: February 15, 2021 - April 15, 2021
(Intermittent Usage during these days)

Sierra Nevada Corporation requests an STA to operate on the above-referenced frequency for a period not to exceed six months. No application for regular authorization will subsequently be filed.

Sierra Nevada Corporation 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, or E-mail winchworks@me.com.

Respectfully submitted,

By: John Winch
Frequency Coordinator

cc: Wayne Morris, AFTRCC
Richard Wyman, WSMR Spectrum Manager