

July 26, 2018

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  
9210-9810MHz Band in Sioux Falls, South Dakota.

ATTN.: Microwave Branch

Sierra Nevada Corporation hereby requests Special Temporary Authority (STA) to operate within the 2360-2390MHz and 9210-9810MHz 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 September 10, 2018 through October 10, 2018 with intermittent usage. Additionally, Sierra Nevada Corporation requests that the Commission grant it temporary authority to operate on the frequency centered at 9510MHz with a 600MHz bandwidth from September 01, 2018 through October 05, 2018. As explained below, Sierra Nevada Corporation is filing an STA request to demonstrate high altitude MESH networking and wide area surveillance for the United States Southern Command (USSOUTHCOM) originating over Baltic, South Dakota and concluding in Central Illinois. Sierra Nevada Corporation submits that there are extraordinary circumstances warranting a grant of the STA request.

The United States Southern Command (USSOUTHCOM) has contracted Sierra Nevada Corporation to conduct high altitude MESH networking and wide area surveillance tests within a flight plan (attached below) over South Dakota. 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 2.3GHz and 9GHz Bands would serve the public interest by enabling Sierra Nevada Corporation to conduct high altitude MESH networking tests over South Dakota to provide a persistent surveillance system to locate and deter narcotic trafficking and homeland security threats. 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

Type and Manufacturer  
Of Equipment: Silvus Technologies, Inc.  
Streamcaster SC4200

Power Output: 4W

ERP: **8W**

Emission: 20M00D7W

Frequency: 2380.0MHz @8W AERIAL

Type and Manufacturer  
Of Equipment: Artemis Networks LLC  
XBand SlimSAR

Power Output: 10W

ERP: **100W**

Emission: 647MQ3N

Frequency: 9510.0MHz @100W AERIAL

Area of Operation: 400km along flight plan

Coordinates: N 43 42 01.51  
W 096 42 28.20

Antenna Height: **UNMANNED STRATOLLITE @ OR BELOW 65000' AGL**

Antenna: 6dB Omni

Antenna Gain: 6dBi

Dates of Operation: September 10, 2018 –October 10, 2018  
(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](mailto:winchworks@me.com).

Respectfully submitted,

By: John Winch  
Frequency Coordinator

cc: Wayne Morris, AFTRCC

Flight plan attached below.

Projected flight plan

