

July 09, 2022

In re Application of

Hillsborough County Sheriff's Office
10136 Windhorst Road
Tampa, Florida 33619

To operate in the 2200-2290MHz and 4940-5300MHz Telemetry Band in Tampa, Florida.

ATTN.: Microwave Branch

The Hillsborough County Sheriff's Office hereby requests Special Temporary Authority (STA) to operate within the 2200-2290MHz and the 4940-5300MHz telemetry bands pursuant to Section 21.25 of the Commission's Rules. The Hillsborough County Sheriff's Office requests that the Commission grant it temporary authority to operate on the frequencies centered at 2220MHz with a 20MHz bandwidth and 4950MHz with a 20MHz bandwidth from September 01, 2022 through August 31, 2023 with intermittent usage. If the 2220MHz or the 4950MHz frequency range is unavailable, any two 20MHz channels within the 2200-2290MHz band or the 4940-5300MHz band will suffice. As explained below, the Hillsborough County Sheriff's Office is filing an STA request to experiment with new microwave technologies in a MIMO/MANET configuration. Hillsborough County Sheriff's Office submits that there are extraordinary circumstances warranting a grant of the STA request.

The Hillsborough County Sheriff's is experimenting with new microwave emission technologies as it relates to data coherency, propagation, data throughput, vehicle integration and impact. Due to the extreme frequency congestion in the Tampa area, Hillsborough County Sheriff's requests the use of these channels.

The Hillsborough County Sheriff's 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 for the 2.2GHz and 4.9GHz bands would serve the public interest by enabling the Hillsborough County Sheriff's Office to experiment with supporting ground and aviation assets with live video data while engaging in official Law Enforcement operations in real time. The proposed service would enable demonstration of Silvus Technologies, Inc. Streamcaster SC44K0/4400 transceivers in a MIMO / MANET array in a terrestrial exercise.

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

Applicants Name: Hillsborough County Sheriff's Office
Address: 10136 Windhorst Road
Tampa, Florida 33619

Type and Manufacturer Of Equipment: Silvus Technologies, Inc.
Streamcaster SC44K0/4400

Power Output: 20W

ERP: **80W TERRESTRIAL**

Emission: 20M00D7W

Frequency: 2220.0MHz, 20M00D7W @ 80W TERRESTRIAL
4950.0MHz, 20M00D7W @ 80W TERRESTRIAL

Area of Operation: 32Km

Coordinates: Hillsborough County Fire Station 13
N 28 04 31.55
W 082 34 14.37

Antenna Height: 49M AGL

Antenna: 12dBi Dual

Antenna Gain: 12dBi

Type and Manufacturer Of Equipment: Silvus Technologies, Inc.
Streamcaster SC44K0/4400

Power Output: 20W

ERP: **80W TERRESTRIAL**

Emission: 20M00D7W

Frequency: 2220.0MHZ, 20M00D7W @ 80W TERRESTRIAL
4950.0MHZ, 20M00D7W @ 80W TERRESTRIAL

Area of Operation: 32Km

Coordinates: Hillsborough County Sheriff's Office District IV
N 27 57 41.73
W 082 26 09.24

Antenna Height: 54M AGL

Antenna: 12dBi Dual

Antenna Gain: 12dBi

Type and Manufacturer Of Equipment: Silvus Technologies, Inc.
Streamcaster SC44K0/4400

Power Output: 20W

ERP: **80W TERRESTRIAL**

Emission: 20M00D7W

Frequency: 2220.0MHZ, 20M00D7W @ 80W TERRESTRIAL
4950.0MHZ, 20M00D7W @ 80W TERRESTRIAL

Area of Operation: 32Km

Coordinates: Hillsborough County Fire Station 26
N 28 02 50.77
W 082 11 20.04

Antenna Height: 54M AGL

Antenna: 12dBi Dual

Antenna Gain: 12dBi

Type and Manufacturer Of Equipment: Silvus Technologies, Inc.
Streamcaster SC44K0/4400

Power Output: 8W

ERP: **20W TERRESTRIAL**

Emission: 20M00D7W

Frequency: 2220.0MHZ, 20M00D7W @ 20W TERRESTRIAL
4950.0MHZ, 20M00D7W @ 20W TERRESTRIAL

Area of Operation: 32Km

Coordinates: N 28 01 40.64
W 082 30 35.67

Antenna Height: MOBILE COMMAND UNIT OPERATING WITHIN TOWER
RADIUS WITH 17M AGL MAST

Antenna: 9dBi Dual

Antenna Gain: 9dBi

Dates of Operation: July 01, 2022 – June 30, 2023.
(Intermittent Usage during these days)

Hillsborough County Sheriff's Office requests an STA to operate on the above-referenced frequency for a period not to exceed one year. No application for regular authorization will subsequently be filed.

Hillsborough County Sheriff's Office 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