

January 22, 2020

In re Application of

Xwing
292 Ivy Street, Suite A
San Francisco, CA 94102

To operate in the 4400-5100MHz Telemetry Bands in Northern California.

ATTN.: Microwave Branch

Xwing hereby requests Special Temporary Authority (STA) to operate within the 4400-5100MHz telemetry band pursuant to Section 21.25 of the Commission's Rules. Xwing requests that the Commission grant it temporary authority to operate on the frequencies centered at 4410MHz, 4540MHz, 4840MHz and 4940MHz with an 8MHz bandwidth from February 20, 2020 through August 20, 2020 with intermittent usage. As explained below, Xwing is filing an STA request to experiment with telemetry for an unmanned autonomous aircraft project. Xwing submits that there are extraordinary circumstances warranting a grant of the STA request.

Xwing is experimenting with hardware and software to support an unmanned autonomous aircraft project. Due to the extreme frequency congestion in Northern California, Xwing requests the use of these channels.

Xwing 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 4.4GHz band would serve the public interest by enabling Xwing to experiment with hardware and software solutions to support unmanned autonomous aircraft flight. The proposed service would enable demonstration of Thales Group UTMA transceiver in an aerial exercise.

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

Applicants Name: Xwing
Address: 292 Ivy Street, Suite A
San Francisco, CA 94102

Type and Manufacturer Thales Group
Of Equipment: μ TMA 6000

Power Output: 3W

ERP: **12W AERIAL**

Emission: 8M00D7W

Frequency: **4410.0MHz, 8M00D7W @ 12W AERIAL**
4540.0MHz, 8M00D7W @ 12W AERIAL
4840.0MHz, 8M00D7W @ 12W AERIAL
4940.0MHz, 8M00D7W @ 12W AERIAL

Area of Operation: 30Km

Coordinates: N 38 00 16.11
W 121 48 15.51

Antenna Height: **UNMANNED AIRCRAFT @ OR BELOW 10000' AGL**

Antenna: 5dBi Vertical **AERIAL**
9dBi Vertical TERRESTRIAL

Antenna Gain: 5dBi, 9dBi

Dates of Operation: February 20, 2020 – August 20, 2020
(Intermittent Usage during these days)

Xwing 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.

Xwing 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