

# FCC License Exhibit 1 – Experimental Description

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From: KRATOS

To: FCC

Date: March 30, 2020 1245 PM

Subject: FCC File No. 0077-EX-CM-2020

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*The following frequency bands will all be used during testing as cosite interference issues are resolved.*

S-Band [2265, 2267, 2269, 2271, 2283, 2285, 2287, 2289 MHz] – These frequencies are used for the aircraft's command and control system. Specifically, these frequencies are used for the ground system to radiate commands to the aircraft.

C-Band [4420, 4422, 4424, 4426, 4428, 4430, 4800, 4810 MHz] – These frequencies are used for the aircraft's command and control system. Specifically, these frequencies are used for the aircraft to radiate telemetry to the ground system.

L-Band [1358.16, 1384.83, 1763.16, 1776.50, 1789.83, 1815.16, 1828.50, 1841.83 MHz] – These frequencies are used for the aircraft's command and control system. The system uses these frequencies for both uplink commands and downlinked telemetry.

## *Purpose of Testing.*

Kratos designs and manufactures high speed UAV systems to support DOD customers. Our products are used across different applications including aerial target applications, tactical assets, and as test beds to validate new payload technologies and/or tactical concepts of operations. The RF systems onboard our aircraft include navigation subsystems, command and control subsystems, Identification Friend or Foe subsystems, telemetry subsystems, and various payload subsystems.

During the development and production of these complex systems extensive testing must be conducted to ensure that the vehicles will operate as intended. The types of tests that we routinely conduct will validate that the system is electromagnetically compatible with itself, that it does not cause adverse interference to other supporting systems, and that the system meets all functional requirements. To ensure proper functionality these tests do require the system to radiate prior to being delivered to a customer or shipped out to support a demonstration/deployment.

## *What are the coordinates and the maximum height and radius of operation of the UAV?*

The coordinates for the location are NL 38-39-21, WL 121-23-31. The UAV will be located on the ground within the facility located at these coordinates. The UAV will be static and will not be moved once setup for testing.