

FCC License Exhibit 1 – Experimental Description

From: KRATOS Unmanned Aerial Systems

To: FCC

Date: March 25, 2020

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

Message:

1. *Please select the frequency bands that you intend to use during testing and remove the ones you don't need.*

Kratos Response:

S-Band [2365, 2367, 2369, 2371, 2373, 2375, 2377, 2379 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 [4500, 4502, 4504, 4506, 4508, 4510, 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 [1371.5, 1443.16, 1496.5, 1509.833, 1763.1670, 1815.16, 1828.5, 1841.833 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.

2. *In great details, please explain the purpose of your testing and furthermore using a UAV.*

Kratos Response:

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.

3. *What is the maximum height of the UAV.*

Kratos Response:

The UAV will be located on the ground within the facility and is less than 10 feet in height.