

January 24, 2020

RE: Skydio, Inc.

FCC ID: 2ATQRSBEC1V1

IC: 25280-SBEC1V1

ATCB024863

After a review of the submitted information, I have a few comments regarding the above referenced Application. Depending on your responses, please note that there may be additional questions.

Regarding the Test Set- Up Photos:

- a. A small (metallic?) fan is on the test stand with the EUT – please clarify why it is needed.
- b. Given the numerous spurious radiated emission levels that are within a dB or two of the limit, please clarify if/how you determined that the fan on the test stand did not affect the radiated emission measurements.
- c. A USB cable was attached to the EUT during the testing (as referenced in section 4.1.1 of the test reports). The original filing indicated that the USB port on the Beacon was used either to charge the battery or to pair it for the first time with a specific drone. Is it being used here to enable test modes? Will the Beacon ever transmit during normal operation when the USB cable is attached to another device, of any sort, e.g., a pc or other (power) charging source? Please clarify.
- d. Given the numerous spurious radiated emission levels that are within a dB or two of the limit, if the EUT will not be connected to the USB cable during normal operation, please clarify if/how you determined that the USB cable attached to the EUT did not affect the radiated emission measurements.

Responses:

Regarding the Test Set- Up Photos:

- a. The Fan is listed in equipment list, it is needed because when the EUT was set up to continuously transmit on one band it would overheat, the fan was added to keep the device from overheating.
- b. We did an initial worst case setup test and did a test with and without the fan and found that it did not cause any noticeable increase in maximized points of data, the only increase was to the noise floor at the lower (around 30MHz) frequencies.
- c. The device was tested with USB C cable connected to a remote laptop to enable the test mode on the device. The Beacon will never transmit during

normal operation when the USB C Cable is attached to a power source or a PC, as it will go into charging mode instead of active operation when it has been turned on.

- d. The device was tested with a USB-C cable for the worst-case setup and was found to have either no noticeable increase in the worst case emissions or have the worst case emissions become worse, the worse emissions were found on the 30MHz to 1GHz range. There was no betterment of the worst case emissions at any point when the USB C cable was attached and there was a betterment of signal when the USB C cable was not attached.