

From: David Wagreich

To: Anthony Serafini

Date: May 15, 2015

Subject: Request for Info - File # 0854-EX-PL-2014

Message:

Reply to Correspondence FCC OET Experimental License Application
Regarding Astraeus Aerial – letter from Anthony Serafini

This reply to correspondence is with regard to reference number 27257. This pertains to an application for Experimental License by Astraeus Aerial, LLC to operate an unmanned aerial vehicle in accordance with Federal Aviation Administration (“FAA”) Grant of Exemption in regulatory docket No. FAA?2014?0352, Exemption No. 11062, dated September 25, 2014. This reply pertains to the FCC request to coordinate the use of certain frequencies with the FAA and obtain their NGT coordination number. (On 4/16/2015 Astraeus requested a 45-day extension in which to reply).

Astraeus through its technical consultant* has had informal communications with Rodney Murphy of the Federal Aviation Administration, Spectrum Engineering Services, Alternate FAA FAS Representative for FM Fixed/Mobile, Satellite, Misc. Bands. He indicated that the FAA cannot support UAS operations in the bands as requested. Therefore, NGT coordination numbers from the FAA will not be forthcoming.

By this correspondence, Astraeus Aerial requests an amendment to its original proposal to eliminate specific action frequencies from the (47 C.F.R. Part 5) experimental license application and to change the power levels requested on a couple of the action frequencies. It is noted that some of the frequency / power / emission combinations requested by Astraeus are already approved by the FCC for use without a license under Part 15 of the rules. Therefore they are removed from this application as redundant and unnecessary.

The changes proposed in this amendment address the 3 bands of frequencies addressed by the FCC. There are two frequencies remaining in the bands (1258 MHz and 1280 MHz) requested herein at reduced power levels commonly used under Part 97 of the rules and therefore permitted by the FAA. This eliminates the need for NGT coordination numbers from the FAA.

To be accurate and simple, this amendment lists below the entire list of requested action frequencies with their class, power, emission information and modulation data in the same format of the original application 0854-EX-PL-2014.

Frequency	Station Class	Power/ERP	Mean Peak	Frequency Tolerance	Emission Designator	Modulating Signal
2.40168960-2.4016890 GHz	MO	200.000 mW 200.000 mW	P	20.00000000%		
Frequency	Station Class	Power/ERP	Mean Peak	Frequency Tolerance	Emission Designator	Modulating Signal
2.40168960-2.46988800 GHz	MO	100.000 mW 100.000 mW	P	20.00000000%		
Frequency	Station Class	Power/ERP	Mean Peak	Frequency Tolerance	Emission Designator	Modulating Signal
430.00000000-450.00000000 MHz	MO	600.000 mW 600.000 mW	P	20.00000000%	20K0F8W	GFSK FHSS

Frequency 430.00000000- 450.00000000 MHz	Station Class MO	Power/ERP 600.000 mW 600.000 mW	Mean Peak P	Frequency Tolerance 20.00000000%	Emission Designator 20K0F8W	Modulating Signal GFSK FHSS
Frequency 431.00000000- 433.00000000 MHz	Station Class MO	Power/ERP 600.000 mW 600.000 mW	Mean Peak P	Frequency Tolerance 20.00000000%	Emission Designator 20K0F3W	Modulating Signal GFSK FHSS
Frequency 431.00000000- 433.00000000 MHz	Station Class MO	Power/ERP 600.000 mW 600.000 mW	Mean Peak P	Frequency Tolerance 20.00000000%	Emission Designator 20K0F3W	Modulating Signal GFSK FHSS
Frequency 433.00000000- 435.00000000 MHz	Station Class MO	Power/ERP 600.000 mW 600.000 mW	Mean Peak P	Frequency Tolerance 20.00000000%	Emission Designator 20K0F3W	Modulating Signal GFSK FHSS
Frequency 435.00000000- 437.00000000 MHz	Station Class MO	Power/ERP 600.000 mW 600.000 mW	Mean Peak P	Frequency Tolerance 20.00000000%	Emission Designator 20K0F3D	Modulating Signal GFSK
Frequency 1255.00000000- 1261.00000000 MHz	Station Class MO	Power/ERP 400.000 mW	Mean Peak M	Frequency Tolerance 20.00000000%	Emission Designator	Modulating Signal
Frequency 1277.00000000- 1283.00000000 MHz	Station Class MO	Power/ERP 400.000 mW	Mean Peak M	Frequency Tolerance 20.00000000%	Emission Designator	Modulating Signal

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