

From: Joel Spark

To: Anthony Serafini

Date: November 07, 2013

Subject:

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Message:

We are simultaneously filing responses to these questions as an attachment to this application. For the complete version of these responses, please see that attachment, which includes more detailed responses as well as charts illustrating this information.

1. We will need a NOAA determination and approval for any operation of cameras aboard the cubesats.

On October 30, 2013, NOAA granted approval for the operation of the camera on board the ArduSat-2, which is scheduled to be launched December 8, 2013. See File No. NS-2013-L3 (Oct. 30, 2013), <http://www.nesdis.noaa.gov/CRSRA/licenseHome.html>. NOAA approval will be sought for each satellite that will fall under the experimental license and attached to the application when granted.

2. Please provide a tentative schedule of cubesat construction, launch integration dates and proposed launch dates and providers. Include the exact number of cubesats that you expect to launch.

NanoSatisfi intends to launch a total of 15 satellites into low-Earth orbit. (These 15 satellites do not include the 2 satellites that are separate from the market trial and that we have already launched under Special Temporary Authority. See Call Sign WG9XFC, File No. 0917-EX-ST-2012.) The first of the 15 cubesats planned for the experimental authorization is scheduled for launch December 8, 2013; the remaining cubesats will be launched opportunistically based on launch vehicle availability and capacity.

For more information regarding planned orbits, launch providers, and a tentative construction and launch schedule, please see the more detailed response that we are simultaneously filing as an attachment.

3. Please provide any Spacecap analysis data files that have been completed as in your previous license.

We are simultaneously emailing a SpaceCap analysis data file for the UHF frequencies (400-403 MHz) related to the first mission, the ArduSat-2 scheduled to launch on December 8, 2013. We will follow up in the very near future with the SpaceCap analysis data file for the S-Band frequencies (2.4-2.48 GHz) related to this same launch.

4. We encourage you to concurrently contact the FCC International Bureau directly to discuss any current testing and future plans for non-experimental service operation.

Discussions have been initiated with the FCC International Bureau with regard to NanoSatisfi's future plans for non-experimental service operation. All services contemplated by this application are purely experimental and are designed to test the technology and market demand for the services capable of being rendered. NanoSatisfi expressly acknowledges that it has no right or expectation of continued authorization following expiration of an experimental authorization.

5. During our October 31st meeting with Staff, Staff requested that we include information regarding the frequencies we will be passively monitoring to track nautical and aeronautical activity.

Both the ArduSat-2 and the ArduSat-2X will passively monitor Automatic Identification System ("AIS") signals at 161.975 MHz and 162.025 MHz for purposes of tracking nautical activity. Our satellites will not emit any signals at these frequencies. Moreover, no new equipment will be

required onboard subject vessels because vessels with gross tonnage of 300 tons or greater are required by international law to carry a functional AIS beacon transmitter on-board. See The International Convention for the Safety of Life at Sea, Dec. 2002 Amendments (Dec. 2002), available at <http://bit.ly/15vyqx5>.

Only the ArduSat-2X will passively monitor Automatic Dependent Surveillance Broadcast ("ADS-B") signals at 978 MHz and 1090 MHz for purposes of tracking aeronautical activity (the one ArduSat-2 will not have this capability). As with the nautical tracking function, our satellites will not emit any signals at these frequencies. Similarly, no new equipment will be required on board subject aircraft because certain aircraft already transmit ADS-B signals.

6. We are simultaneously amending our Form 442 to update our transmitting equipment information and our requested orbit altitude.

Originally, we inadvertently only listed 12, rather than 15, AstroDev Lithium UHF (400-403 MHz) transmitters (1 for each satellite), and we inadvertently omitted the AstroDev Beryllium S-Band (2.4-2.48 GHz) transmitter.

We are also updating our application to reflect that we are requesting orbits lower than 600 km. If and when the opportunity to place a satellite in orbit above 600 km arises, we will submit a new application with more specific information at that time.