Form 442 Question 6: Description of Research Project (FCC STA Experimental License Request)

Applicant: Globalstar, Inc.
Form 442 File Number: 0482-EX-CN-2019

The objective of the Globalstar Request for Special Temporary Authority is to support communications for the Hawaii Space Flight Laboratory Neutron-1 CubeSat mission. The objectives of the Neutron-1 project are presented in the Experimental License Application submitted by Neutron-1 for the Neutron-1 CubeSat mission, FCC File 0281-EX-CN-2019.

Background:

This request is related to FCC File 0281-EX-CN-2019, filed by Hawaii Space Flight Laboratories, for the Neutron-1 CubeSat mission.

In its request, Hawaii SFL sought authority to operate a LinkStar STX-3 (FCCID 2ANKS-LINKSTAR-STX3) and a Globalstar GSP-1720 transceiver module (FCCID: J9CGSSDVM). These transceivers are integrated into the Neutron-1 CubeSat which will be launched into low-earth orbit. Data collected by the Neutron-1 CubeSat will be transmitted by the Globalstar module and relayed to the mission operations center by means of the Globalstar system constellation and the associated Globalstar ground infrastructure.

In this Experimental License request, Globalstar seeks authority, in connection with the aforementioned CubeSat mission, to:

1. receive transmissions from the licensed transmitter modules and to relay the data to the mission operations center
2. transmit information to the CubeSat

The only change from Globalstar's currently licensed operations is that the Globalstar constellation will be sending/receiving transmissions to/from the FCC-approved terminals located on a space station rather than communicating with these terminals from their usual Earth-based locations. Globalstar's license does not cover space-to-space operation, thus requiring this Experimental License request.

It is anticipated that the Neutron-1 CubeSat mission will be in orbit for approximately 24 months. The Hawaii SFL Neutron-1 Mission Office will notify the FCC of the dates of actual operation, once those dates have been established.

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