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

Applicant: Globalstar, Inc.
Form 442 File Number: 0179-EX-CN-2021

The objective of the Globalstar Form 442 Experimental License request is to support communications for the CesiumAstro, Inc. (CesiumAstro) CM-1 CubeSat mission. The objectives of the CM-1 project are presented in the Experimental License Application submitted by CesiumAstro for the CM-1 CubeSat mission, FCC File 1038-EX-CN-2020.

Background:

This request is related to FCC File 1038-EX-CN-2020, filed by CesiumAstro.

In its request, CesiumAstro sought authority to operate two NSL EyeStar-S3 (FCC-approved licensed Globalstar STX-3 transmitter module, FCCID L2V-STX3) and two Globalstar NSL EyeStar-D2 (FCC-approved licensed Globalstar GSP-1720, FCCID J9CGSSDVM) transceivers. These transceivers are integrated into the CM-1 CubeSats which will be launched into low-earth orbit. Data collected by the CM-1 CubeSat will be transmitted by the Globalstar modules 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:

- receive transmissions from, and transmit to the licensed transceiver modules and to relay the data to the mission operations center

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

As described in the CM-1 Technical Description (FCC File 1038-EX-CN-2020), the CM-1 is expected to be in operation for 60 months. CesiumAstro will notify the FCC of the dates of actual operation, once those dates have been established.

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