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

Applicant: Form 442 File Number:

Globalstar, Inc. 0230-EX-CN-2021

The objective of the Globalstar Form 442 Experimental License request is to support communications for the MIT, Lincoln Labs (MIT-LL) AMS-1 CubeSat mission. The objectives of the AMS-1 project are presented in the Experimental License Application submitted by MIT-LL for the AMS-1 CubeSat mission, FCC File 0982-EX-CN-2020.

Background:

This request is related to FCC File 0982-EX-CN-2020, filed by MIT-LL.

In its request, MIT-LL sought authority to operate one Globalstar STX-3 (FCC-approved licensed Globalstar STX-3 transmitter module, FCCID L2V-STX3) transceiver. This transceiver is integrated into the AMS-1 CubeSat which will be launched into low-earth orbit. Data collected by the AMS-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 the licensed transceiver module and relay the data to the AMS-1 mission operations center

The only change from Globalstar's currently licensed operations is that the Globalstar constellation will be communicating with the FCC-approved terminal located on a space station rather than communicating with this terminal 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 AMS-1 Experimental License Application (FCC File 0982-EX-CN-2020), the AMS-1 is expected to be in operation for 12 months. MIT-LL will notify the FCC of the dates of actual operation once those dates have been established.

MIT, Lincoln Labs Contact for Stop-Buzzer:

Rebecca Keenan MIT Lincoln Laboratory Group 99 – Integrated Systems and Concepts Office: 781-981-5044 Cell: 781-482-4827 Email: <u>Rebecca.Keenan@ll.mit.edu</u>

Globalstar Contact Person:

David Weinreich Manager, Spectrum and Regulatory Engineering Phone: 301-651-4552 E-Mail: david.weinreich@globalstar.com