

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

Applicant: Globalstar, Inc.
Form 442 File Number: 0782-EX-CN-2022

The objective of the Globalstar Form 442 Experimental License request is to support communications for the NearSpace Launch Inc. S4 CROSSOVER mission. The objectives of the S4 CROSSOVER project are presented in the Spectrum Authorization request for the S4 CROSSOVER CubeSat mission.

- FCC File 0709-EX-CN-2022

Background:

This request is related to the spectrum authorization filing 0709-EX-CN-2022 for S4 CROSSOVER mission.

In its request, NearSpace Launch Inc. sought authority to continue to operate a Globalstar STX3 (FCCID L2V-STX3) transmitter in space orbit. This transmitter is integrated into the S4 CROSSOVER experiment which is currently in low-earth orbit attached to an Astra second stage launch vehicle. Data collected by the S4 CROSSOVER is 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:

- receive transmissions from the licensed transceiver module and relay the data to the S4 CROSSOVER mission operations center.

The only change from Globalstar's currently licensed operations is that the Globalstar constellation will be communicating with an 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 S4 CROSSOVER filing, 0709-EX-CN-2022, the S4 CROSSOVER CubeSat is currently operating under STA 1952-EX-ST-2021, and is currently supported by Globalstar companion license 1955-EX-ST-2021. This request for a new license is being made because the operating time will be longer than originally expected.

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