

Exhibit 1 – Purpose of Special Temporary Request

Jacobs Technology, Inc. (“Jacobs”) hereby requests special temporary authority application for an experimental license to explore the viability of using novel applications, including IoT, to communicate with Spire Global satellite call sign **S2946**. Jacobs proposes to operate in the 2025-2100 MHz band, and seeks to commence testing by **February 1, 2024** for a period of up to six months.

The proposed emission designator will be 2M00G2D with a mean/peak (peak to average power ratio) of 10.9 dB, and a frequency tolerance of 3 ppm. (In other words, for a reference frequency of 2,110 MHz, the tolerance is a maximum of 6,330 Hz, or 3 Hz per MHz.)

The emission will consist of bursts up to 5 seconds long, and the modulating signal will be a custom-spread waveform. The maximum proposed bandwidth of the signal will be 2 MHz.

Jacobs acknowledges that all experimental operations conducted in the requested frequency band will be on a non-interference basis and will utilize its best efforts to avoid and mitigate any potential external interference. The stop buzzer contacts for this project are Jim Wasel, (301) 560-2731, james.wasel@jacobs.com and Wayne Nickols, (301) 560-2704, wayne.nickols@jacobs.com.

A diagram of the proposed setup follows.

Jacobs Technology, Inc.
Application for Experimental Radio Service (Earth Station)
Request for Special Temporary Authorization
January 2024



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