EXHIBIT 1
DESCRIPTION OF PROPOSED TEST OPERATIONS

Pursuant to 47 C.F.R. § 25.120(b)(4), AST & Science, LLC ("AST SpaceMobile") requests a 30-day special temporary authorization ("STA"), commencing on July 16, 2026, or as soon as possible, to conduct test operations at 817-824 MHz (uplink) and 862-869 MHz (downlink), as proposed herein. Specifically, AST SpaceMobile seeks to operate its authorized non-geostationary orbit ("NGSO") constellation of in-orbit satellites, along with commercially available, off-the-shelf user devices,[1] for purposes of testing, evaluating, and demonstrating the network's broadband supplemental coverage from space ("SCS") capabilities in the 817-824 MHz and 862-869 MHz bands without harmful interference to other authorized services.

The proposed SCS test operations will be conducted on an unprotected, non-interference basis and in accordance with the technical specifications set forth in Exhibit 2 (Technical Parameters), as well as all other technical limits applicable to AST SpaceMobile's authorized adjacent-band SCS operations at 824-849 MHz (uplink) and 869-894 MHz (downlink). As the 817-824 MHz and 862-869 MHz bands are exclusively licensed to T-Mobile USA, Inc. and its subsidiaries (collectively, "T-Mobile") for enhanced specialized mobile radio service ("ESMR") nationwide,[2] and not allocated or licensed for other commercial or federal government use,[3] AST SpaceMobile's proposed SCS test operations in compliance with all technical limits applicable to its authorized adjacent-band SCS operations will ensure interference protection of any incumbent ESMR operations. Indeed, the Commission has found that AST SpaceMobile's authorized SCS operations, including in the immediately adjacent bands at 824-849 MHz and 869-894 MHz, will protect co- and adjacent-channel operations from harmful interference.[4]

AST SpaceMobile nonetheless will notify and coordinate, to the extent required, with any potentially affected licensed operations prior to commencing its proposed SCS test operations. In the unlikely event of harmful interference, AST SpaceMobile's "stop buzzer" point-of-contact, as specified in Exhibit 2, will maintain the capability to cease any interfering transmissions immediately.

Consequently, grant of the requested STA serves the public interest by facilitating potential access to additional spectrum and capacity to support and bolster deployment of new broadband direct-to-device connectivity to consumers nationwide without any harmful interference risks to incumbent services.

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[1] *See AST & Science, LLC,* Authorization and Order, DA 26-391 (SB/WTB/OET/PSHSB rel. Apr. 21, 2026) ("*AST NGSO Authorization*") (authorizing deployment of a 248-satellite NGSO system for SCS/direct-to-cell services).

[2] T-Mobile's ESMR licenses are proposed for assignment to subsidiaries of Grain Management, LLC. *See Wireless Telecommunications Bureau Accepts for Filing T-Mobile USA, Inc.'s and Grain Management, LLC's Assignment Applications and Seeks Comment on Waiver Requests,* Public Notice, DA 25-429 (rel. May 20, 2025).

[3] *See* 47 C.F.R. § 2.106.

[4] *See AST NGSO Authorization,* ¶ 11.

EXHIBIT 2
TECHNICAL PARAMETERS

Satellites (Downlink)	
Tx Frequencies	862-869 MHz
Max Antenna Gain	40 dBi
Max EIRP per Carrier	54.7 dBW
Max EIRP Density per Carrier	-14.4 dBW/4 kHz
User Devices (Uplink)	
Tx Frequencies	817-824 MHz
Max Antenna Gain	0 dBi
Max EIRP	-7 dBW
Area of Test Operations/ Satellite Coverage	CONUS
24/7 Stop Buzzer Point of Contact	SpaceMobile Network Operations Center 4200 Parliament Pl, Ste 500 Lanham, MD 20706 Phone: (800) 542-4939 Email: ast.noc@ast-science.com