

**EXHIBIT A – PROPOSED EXPERIMENT & JUSTIFICATION FOR STA**

AST & Science, LLC (“Applicant” or “AST SpaceMobile”), pursuant to Section 5.61 of the Federal Communications Commission’s (“FCC’s” or “Commission’s”) Rules, 47 C.F.R. § 5.61, hereby requests Special Temporary Authority (“STA”) to conduct additional experiments with its non-geostationary orbit (“NGSO”) satellite, the BlueWalker 3 (“BW3”) following recent business developments.<sup>1</sup> AST SpaceMobile seeks STA for a period of 6 months beginning not later than March 24, 2024. Consistent with the standards set forth in Part 5 of the Commission’s Rules, AST SpaceMobile outlines below its need for the requested STA and how experimentation conducted under the STA will advance the radio art.

Consistent with the Commission’s Rules, “good cause” exists to support grant of the requested STA.<sup>2</sup> Specifically, STA is needed to further evaluate commercial “off-the-shelf” cellular handsets during different operational scenarios on the following frequencies for which AST SpaceMobile has obtained consent:<sup>3</sup>

- 788-798 MHz spectrum licensed to the First Responder Network Authority (“FirstNet”) under Call Sign WQQE234 in and around Hana, HI and Midland, TX;<sup>4</sup>
- 835-845 MHz spectrum licensed to AT&T under Call Sign KNKA671 in and around Midland, TX; and
- 825-835 MHz spectrum licensed to AT&T under Call Sign KNKN246 in and around Hana, HI.

---

<sup>1</sup> 47 C.F.R. § 5.61(a)(1).

<sup>2</sup> *See id.*

<sup>3</sup> *See* Letter from David Pollard, AT&T Services, LLC, to Christopher Ivory, AST & Science, LLC (May 30, 2023) regarding AST & Science LLC Experimental License Consent Letter (“AT&T/FirstNet Consent”) (set forth in Exhibit C). AST SpaceMobile intends to operate under this STA pursuant to the same terms set forth in the AT&T/FirstNet Consent.

<sup>4</sup> This spectrum is licensed to FirstNet on a nationwide basis and the FirstNet wireless network is operated by AT&T. AT&T is authorized to consent to testing on behalf of FirstNet, and its consent to testing in these frequencies is included in AT&T/FirstNet Consent.

<sup>5</sup> *See* AST & Science, LLC, *Petition for Declaratory Ruling*, Call Sign S3065, ICFS File No. SAT-PDR-20200413-00034. *See also* ICFS File Nos. SAT-APL-20200727-00088, SAT-APL-20201028-00126, and SAT-APL-20230717-00172.

Grant of this application will serve the public interest by allowing AST SpaceMobile to continue refining its SCS Direct-to-Device (“D2D”) technology ahead of its planned commercial launch. As the Commission has recognized, D2D technology has the potential to close coverage gaps in hard-to-reach areas and support first responders in emergency and disaster response nationwide.<sup>6</sup> AST SpaceMobile is actively working to help achieve these goals by optimizing the BW3 to inform the eventual commencement of its D2D services.

Grant of this experimental STA will not adversely impact any authorized user of radiofrequency spectrum because testing will only occur on frequencies already licensed to AT&T and FirstNet. AT&T has given AST SpaceMobile express consent for this testing on behalf of itself and FirstNet. The instant testing will also continue using mobile handsets under the same conditions set forth in AST SpaceMobile’s existing experimental grant.<sup>7</sup> For these reasons, AST SpaceMobile’s test program should not affect other authorized spectrum users.<sup>8</sup>

AST SpaceMobile continues to conduct testing under its conventional experimental authority in respect of the BW3 and all other information set forth in exhibits filed in File Nos. 1059-EX-CN-2020, as last amended on September 1, 2021, 0208-EX-CM-2022, and 0130-EX-CR-2023 remains the same.<sup>9</sup> Questions should be directed to Timothy Bransford at [timothy.bransford@morganlewis.com](mailto:timothy.bransford@morganlewis.com) or 202.373.6140.

---

<sup>6</sup> See *Single Network Future Supplemental Coverage from Space; Space Innovation*, Notice of Proposed Rulemaking, FCC 23-22, GN Docket No. 23-65, IB Docket No. 22- 271, at ¶ 1 (Mar. 17, 2023).

<sup>7</sup> See File No. 0130-EX-CR-2023 (Call Sign WL2XRE).

<sup>8</sup> AST SpaceMobile acknowledges that experimental radiofrequency testing occurs on a sufferance basis and has provided contact information for personnel with kill switch authority in Exhibit B. AST SpaceMobile will take appropriate action to initiate immediate shut down upon request from the Commission.

<sup>9</sup> AST SpaceMobile has previously received STA to test on spectrum licensed to AT&T and FirstNet. See File No. 1678-EX-ST-2023.