Request for STA

1. Introduction

Pursuant to 47 C.F.R. § 5.61, by this application, ATC TRS I, LLC ("ATC") seeks Federal Communications Commission ("FCC or "Commission") grant of Special Temporary Authority ("STA") for 180 days to allow the use of an AirSpan radio identified as AirVelocity 1901 ("AirVelocity 1901") as part of an experimental project on which ATC is collaborating with Amazon Web Services ("AWS"). This project is designed to test, totally within the confines of an indoor commercial mall in Las Vegas, Nevada, the performance of a private 5G wireless network, with the ultimate objective of deployment of hybrid public/private 5G wireless networks. Relevant technical specifications of the AirVelocity 1901 are shown in the body of this application. An STA is needed because the AirVelocity 1901, although it is nearing the end of its development phase, has yet to be certified under 47 C.F.R. Part 2 Subpart J. Specifically, grant of this request would allow ATC to accelerate 5G deployment efforts both through regular testing of the equipment at the mall and through testing during an upcoming event with substantial industry impact: AWS re:Invent beginning on November 28, 2022.

2. Purpose of the Operation

ATC plans to conduct this experiment within the Miracle Mile Shops indoor mall located at 3663 South Las Vegas Boulevard ("Miracle Mile"). The project's purpose is to facilitate the transition to 5G of wireless communications services provided to businesses and shoppers within the mall. An illustrative practical application of this testing of the private 5G network would be the activation and control of robotic in-store cleaners within mall stores after hours.

The AirVelocity 1901 has been designed and built by well-established equipment manufacturer Airspan, based in Boca Raton, Florida (***https://www.airspan.com/***) to be compatible with indoor 5G wireless communications. Existing radios currently deployed at Miracle Mile are compatible with private indoor 3G and 4G DAS and Wi-Fi networks, but not 5G. During this experimental testing, fourteen 5G-compatible indoor AirVelocity 1901 radios would be deployed at different locations within Miracle Mile.

3. Interference Mitigation

For multiple reasons, grant of this request would pose no material risk of harmful interference, including to CBRS incumbents, Priority Access License holders, or General Authorized Access ("GAA") users.

- All testing will be conducted by experienced ATC/AWS/Airspan personnel within a controlled environment, namely an indoor mall where no other users of CBRS spectrum currently operate, that eliminates interference concerns. There will be no outdoor testing.
- The AirVelocity 1901 operates within FCC Part 96 specifications for a Class A CBSD.
- The Airspan radios will access CBRS spectrum pursuant to the rules and procedures of GAA, through Federated Wireless, an FCC-approved Spectrum Access System ("SAS") operator.

- In the entirely remote event harmful interference occurs, ATC/AWS will have dedicated personnel and procedures in place, including designated ATC contact Paul Choiseul, to ensure immediate cessation of STA operations unless and until any interference issue is resolved. A network monitoring system will be deployed, alongside the radios. If a problem is detected, ATC NOC will be alerted allowing the radios to be remotely disabled.
- The strong credentials of the parties behind this request, ATC, AWS, and Airspan, as well as their demonstrable commitment to equipment and service quality and FCC rule compliance, are well known to the Commission.

4. Conclusion

Grant of this request would provide manifest public interest benefits. The Commission has identified the facilitation of the development of 5G networks as a top national priority. This project clearly serves that objective, as it designed to speed the deployment of new and innovative technology that will in turn accelerate the roll out of private 5G networks and the ultimate deployment of hybrid private/public wireless 5G networks.

Furthermore, prompt grant of this request will allow not only for immediate beginning of regular testing, but also adequate time for testing the performance of the network at Miracle Mile well ahead of AWS re:Invent, a premier global learning conference hosted annually by AWS for the global cloud computing community, scheduled this year to begin on November 28, 2022 in Las Vegas (***https://reinvent.awsevents.com/faqs/***). Demonstrations and reports of the results of that testing at these events hold the promise of allowing 5G benefits to cascade to a larger community at the earliest possible time.

For all the reasons set forth herein, grant of this request for an STA for 180 days is respectfully requested.