Reply to Correspondence, File No. 1809-EX-CN-2023

Attn: Mr. Nimesh Sangani

AURA Network Systems, Inc. ("AURA") files this reply to questions posed by staff in correspondence dated January 10, 2024, regarding the above referenced pending application. Staff's questions are shown in bold, followed by AURA's answers.

1) The confidentiality justification exhibit cannot remain confidential. You have marked every exhibit including the justification as confidential.

AURA has filed a revised version of the Request for Confidential Treatment that is publicly available, which no longer contains confidential information.

2) As a matter of policy, we will not withhold from public any information necessary for interference mitigation. This includes applicant name, contact info, location, frequency, emission, ERP and power.

AURA includes below non-confidential interference mitigation and waiver information that had been included in the confidential exhibit. Additional non-confidential information related to interference mitigation is contained in Form 442.

AURA proposes to begin testing in January 2024 and plans to complete testing in 12 months.[1] The radius of operations will be limited to 20 kilometers around a transmitter location at Springfield-Beckley Municipal Airport, which is located five miles south of Springfield, Ohio. AURA understands that use of the requested frequencies pursuant to an experimental authorization is limited to conducting its tests.[2] The tests will not involve contractual arrangements to the benefit of any third parties and no fees will be charged.

Frequencies and Operations

AURA currently holds nationwide licenses to operate in the 940.750-940.80 MHz and 901.7625-901.775 MHz bands.[3] AURA will utilize its own licensed 900 MHz frequencies and may require additional channels to conduct its tests. As part of these tests, AURA may need to utilize certain unused 900 frequencies – specifically, in the 929-931 MHz and 940-941 MHz ranges – in combination with its own.

AURA will operate the transmitters consistent the requirements under Part 22 of the Commission's rules and will recover all equipment used for testing.[4] As described

[1] *See* 47 C.F.R. § 5.71(a)(1).
[2] *See id.* at § 5.601.
[3] *See* Call Sign KNKV208, ULS File Nos. 0010219561 (granted June 7, 2023) and Call Sign WPRS386, ULS File No. 0010431475 (granted Apr. 11, 2023).
[4] 47 C.F.R. § 22 *et seq.*

below, AURA will ensure it does not cause any harmful interference and will coordinate with any impacted licensees in the relevant channels on which it may operate.

Transmitting Equipment and Antennas

At the Springfield-Beckley Municipal Airport transmit location, AURA will utilize no more than six transmitters built by Advanced Amplifiers.[5] The transmit antenna is being placed on an existing structure, which is an inactive Air Traffic Control tower at the Springfield-Beckley Municipal Airport. The antenna is not increasing the height of the structure; rather, it is replacing an antenna previously authorized by the FAA.[6]

Stop Buzzer

At all times during which the transmitter is in use, AURA will maintain a single point of control and stop buzzer capability. The stop buzzer contact will be capable of addressing interference concerns and resolving any harmful interference through any and all available means.

The stop buzzer contact information is:

Name: Michael Gagne, Chief Network Officer
Telephone: (240) 508-6220
E-mail: mgagne@auranetworksystems.com

Interference Protection and Deference to Licensed Users

AURA commits to ensuring that AURA's use of frequencies licensed to others, to the extent necessary, will only occur after AURA has determined that, at the time of testing, the frequencies are not in use by the licensee as described above. Prior to operating on these frequencies, AURA will conduct a spectrum analysis and drive tests to determine which channels are not in use. AURA will not operate on any channel on which there are any active emissions. In addition, AURA will coordinate with the appropriate 900 MHz licensee prior to testing. As a result, there will be little to no risk of harmful interference to other 900 MHz licensed operations.

Request for Waiver

AURA requests a waiver of the station identification requirements in Section 5.115 of the Commission's rules.[7] Grant of the requested waiver will serve the public interest by allowing AURA to determine the most effective combination of equipment and network parameters for the technologies being tested, which will be used to support advanced air mobility.

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[5] *See* https://www.advancedamplifiers.com/about.
[6] *See* https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=displayNRACase&locationID=46983&row=0.
[7] 47 C.F.R. § 5.115.

Justification for Selecting "Other" Under "Applicant Type"

Pursuant to the Form 442's instructions, AURA selected "Other" under "Applicant Type" because it is a limited liability company ("LLC").

3) The frequency request is for a Fixed transmitter on the ground located at a fixed site at a maximum of 6 Feet AGL as per form 442. The exhibit states a radius of operation of 20 km. There is some discrepancy. Please note the information listed in the Form 442 will be coordinated with Federal and non-fed agencies.

The antenna is being installed on an existing building and will not extend the height by greater than six meters. The existing building is approximately 33 meters AGL. The radius of operation from which we may operate from this building is 20 kilometers.

4) Are you conducting any airborne experiment using the 929-931 MHz and/or 940-941 MHz requested in this experimental? If so then enter that information in the Form 442. Provide the Maximum Flight Altitude in Feet.

No. AURA will not be conducting any airborne experiment using the frequencies requested in the application.

5) Will you be conducting counter-UAS applications such as Jamming, Electronic Attack, Spoofing, Directed Energy Attack under this experimental? (Yes/No)

No. URA will not be conducting counter-UAS applications under the requested authorization.