

**NARRATIVE STATEMENT**

**A. Purpose of Operation and Need for Experimental License:**

Tarana Wireless Inc. respectfully requests experimental authority from the Federal Communications Commission ("FCC") to conduct research and development of new technologies for Gigabit wireless broadband access to the home in rural, suburban and urban areas. This research will supplement the activities it conducted earlier through its experimental licenses issued under call signs WI9XNO, WI9XPL and WI2XAF.

Specifically, Tarana Wireless proposes to test and demonstrate key functionalities of prototype equipment designed to improve Non-Line-of-Sight ("NLoS") reliability and spectral efficiency of wireless of broadband wireless access systems. It also seeks to test and evaluate the coverage, capacity, and reliability of multiple link operations on the same frequency channel. Tarana Wireless proposes to conduct these tests over a 12-month period at two locations (one at its premises in Santa Clara, CA, and another nearby) using prototype Base-Node ("BN") and remote node ("RN") radio equipment operating in the 3300-3550 MHz and 3700-3800 MHz bands.

Tarana Wireless does not propose to market, sell, or lease prototype equipment or services to end users. In addition, no fees will be charged to entities evaluating the equipment during these tests. After the experimentation ceases, Tarana Wireless will recall and recover all unauthorized devices.

**B. Location Information:**

| Location No. 1                                                                                                                                                                                                                                                                                                                                                                     | Location No. 2                                                                                                                                                                                                                                                                                                                                                                      |
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| Hub Location A: (Rooftop)<br>2953 Bunker Hill, Santa Clara, CA<br>Lat. Long.: 37-24-22.42 N; 121-58-48.74 W<br>Ground Elevation: 3 meters AMSL<br>Building/Antenna Structure Height: 20 meters AGL<br>Antenna Height to Tip: 23 meters AGL<br>Center of Radiation: 21 meters AGL<br><br>Remote Site:<br>Various temporary fixed locations within a 5 km radius of the hub location | Hub Location B: (Water-Tower)<br>557 Mariani Lane, San Jose, CA<br>Lat. Long.: 37-21-0.78 N; 121-53-26.58 W<br>Ground Elevation: 18 meters AMSL<br>Building/Antenna Structure Height: 34 meters AGL<br>Antenna Height to Tip: 26 meters AGL<br>Center of Radiation: 25 meters AGL<br><br>Remote Site:<br>Various temporary fixed locations within a 5 km radius of the hub location |

**C. Technical Specifications:**

**1. Frequencies Desired:**

Tarana Wireless requests an experimental license to operate in the 3300-3550 MHz and 3700-3800 MHz bands.

**2. Effective Radiated Power:**

| Model |            | BW  | Emission | EIRP | EIRP  | ERP  | ERP   |
|-------|------------|-----|----------|------|-------|------|-------|
|       |            | MHz |          | dBm  | W     | dBm  | W     |
| BN    | AA3-BN-XX  | 80  | 80M0D7D  | 55   | 316.2 | 52.8 | 190.5 |
| RN    | AA3-RNF-XX | 40  | 40M0D7D  | 46.4 | 43.7  | 44.2 | 26.3  |

**3. Equipment To Be Used**

Equipment Type: Prototype Equipment  
Manufacturer: Tarana Wireless Inc.  
Transmitter Model Nos.: At the Hub Sites: AA3-BN-XX  
At Remote Sites: AA3RNF-XX  
No. of Units: At each Hub Site: not more than 4  
At Remote Sites: Maximum of 100 located within the radius of coverage (up to 5 km)

**D. Contact Information:**

For questions about this application, please contact:

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In the unlikely event interference concerns should arise during the period of authorization for this license, please contact:

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