

Delmarva Broadband Services, LLC
File No: 0174-EX-CR-2026
Call Sign: WJ2XXS

APPLICATION FOR RENEWAL OF EXPERIMENTAL LICENSE

Delmarva Broadband Services, LLC (“Delmarva”) respectfully requests the renewal of its experimental license (Call Sign WJ2XXS) for an additional two-year term to continue its program of experimentation as originally described at length in the “Experimental Report” Exhibit to the FCC File Number 0720-EX-CR-2022.

1. Purpose of Experiment and Public Interest Showing

The purpose of Delmarva’s experimental program is to advance the radio art by developing, validating, and refining technical methods for short-burst data transmissions while protecting incumbent and co-channel operations through conservative operating parameters and interference-avoidance techniques. Delmarva does not provide third-party services and does not seek market trial authority.

2. Experimental Update and Current Operating Parameters

Delmarva is operating at **60 watts** average transmitted power and intends to further reduce operations to **15 watts** average power. This operational approach is substantially below the maximum power levels authorized in the existing grant (which includes authorization up to **6000 watts PEP**), and reflects Delmarva’s continued effort to minimize interference risk while collecting meaningful experimental data.

3. Summary of Operations and Results to Date

During the current license term Delmarva has continued to evaluate system performance and operational safeguards in representative environments, with emphasis on coexistence behavior and interference prevention. Key technical approaches used and evaluated include: (i) conservative operating constraints (including duty-cycle reductions), (ii) monitoring and operational controls to promptly cease transmissions if interference is suspected or reported, and (iii) channel-access / spectrum-sharing methods consistent with established coordination principles (including approaches aligned with ITU-R F.1778 concepts for channel access and exclusion windows).

4. Station Identification

Delmarva transmits the station identification as required by Section 5.115.

5. Stop Buzzer

In case of suspected interference, Delmarva Operations can be reached by telephone at (302) 409-0116, or by email at delmarvabroadband@gmail.com. The Operations staff is available at all times during the operation of the experiment, and can cease the transmissions immediately if interference occurs.

6. Need for Renewal and Ionospheric Cycle Considerations

Delmarva requests renewal to complete and document the next phase of experimentation, including additional validation of interference-avoidance safeguards and system behavior across materially different ionospheric conditions. HF propagation and interference potential can vary substantially over time due to changes in the ionosphere associated with the solar/ionospheric cycle. A two-year renewal period will allow Delmarva to collect comparable datasets across changing conditions and finalize a technically supported record of performance and coexistence behavior at conservative power levels (including the planned reduction to 15 watts average power).

7. Path to Regularization

Delmarva’s longer-term objective is to translate experimental learnings into a compliant operational model suitable for regular service authorization pathways. During the requested renewal term Delmarva plans to develop (i) a more formal technical record of coexistence behavior and operational safeguards, (ii) practical recommendations for coordination/notification processes where appropriate, and (iii) a roadmap for transitioning from experimental testing to an authorization approach consistent with the Commission’s rules and policies.

For the foregoing reasons, Delmarva respectfully requests that the Commission grant this renewal for an additional two-year term.