

Weather radar operations requesting frequency authorization are needed for National Science Foundation (NSF) projects including:

NSF-2431455: COWNET: Mobile C-band radars and rapid-scan X-band radar for meteorological research

NSF-2431370: DOWNET: Mobile X-band radars for meteorological research

NSF-2617645: HBLOS Hurricane Boundary Layer studies with radar and surface instrumentation

NSF-2524109: BEST Tornado Boundary Layer studies with radar and surface instrumentation

Operation of the radars at the requested frequencies and locations is critical for the performance of these NSF awards.

The equipment is identical to a previously approved license:

File: 0442-EX-CN-2023

Call Sign: WN2XLF

The following answers are to questions which were asked during our previous application process:

- Operations are only requested at the requested frequencies.
- We do not operate anywhere near 6 GHz.
- Elevation pointing angles will be typical for meteorological operation. Usual scanning is from 1-degree above the ground through 60-degrees above the ground. We do not scan at 0-degrees (ground parallel).
- The antenna patterns are typical for weather radars, Gaussian 1.0-1.5 degree 3-dB beamwidths. Side lobes are below -20 dB.
- Stop Buzzer information in the event of interference:
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Our contact person in 2023 was: Leann Nguyen