

## Rummel, Jeffrey

---

**From:** National Radio Quiet Zone (NRQZ) <nrqz@nrao.edu>  
**Sent:** Thursday, April 6, 2023 1:15 PM  
**To:** National Radio Quiet Zone (NRQZ); Rummel, Jeffrey  
**Cc:** Sweeney, Dan C.; david.m.west@leidos.com; Electromagnetic Spectrum Management - ESM (esm@nsf.gov)  
**Subject:** NRQZ ID 230327B - Site Name 'Bridgewater (call sign WK2XEW)'- Letter of Concurrence  
**Attachments:** 230327B Letter of Concurrence.pdf

Dear Applicant and/or Frequency Coordinator:

Find attached a Letter of Concurrence (LOC) that fulfills the coordination requirements of the National Radio Quiet Zone (NRQZ) under [Federal Code 47CFR1.924 \(a\)](#) for quiet zones that "minimize possible impact on the operations of radio astronomy or other facilities that are highly sensitive to interference." 47CFR1.924 (a) "NRAO, NRRO. The requirements of this paragraph are intended to minimize possible interference at the National Radio Astronomy Observatory site located at Green Bank, Pocahontas County, West Virginia, and at the Naval Radio Research Observatory site at Sugar Grove, Pendleton County, West Virginia."

Please review all documentation upon receipt and advise the NRQZ office immediately of any errors or discrepancies.

Please read the attached documentation carefully for any special conditions of this concurrence.

The NRQZ Office requests that:

1. This Letter of Concurrence be attached to the FCC application.
2. The FCC application should indicate to the FCC that the assignment should be modified to include the current NRQZ ID in the supplementary details line (e.g. "SUP: NRQZ COORD COMPLETE 2023 APR 06/NRQZ ID 230327B").
3. The applicant provides the NRQZ Office ([nrqz@nrao.edu](mailto:nrqz@nrao.edu)) with notice of its official filing with the FCC per section 47CFR1.924 (a) (2).
4. The FCC should email the NSF Electromagnetic Spectrum Management Unit ([esm@nsf.gov](mailto:esm@nsf.gov)) when the supplemental details have been modified to include the NRQZ ID as this will facilitate faster approval of the application.

As a reminder, you will need to attach this document to your official filing with the FCC.

You shall provide notification of your ULS filing to the NRQZ office by supplying the file number and date.

If I can be of further assistance, or if there are any questions or concerns, please feel free to contact the NRQZ office at [nrqz@nrao.edu](mailto:nrqz@nrao.edu). Please address all emails to [nrqz@nrao.edu](mailto:nrqz@nrao.edu).

Attachment: Letter of Concurrence

Sincerest regards,

*Sheldon*

Sheldon Wasik  
NRQZ Administrator ([nrqz@nrao.edu](mailto:nrqz@nrao.edu))

Green Bank Observatory



## NATIONAL RADIO ASTRONOMY OBSERVATORY

POST OFFICE BOX 2  
GREEN BANK, WV 24944-0002  
NRQZ OFFICE TELEPHONE (304) 456-2107  
HTTP://WWW.GB.NRAO.EDU/

FAX (304) 456-2276  
NRQZ@NRAO.EDU

April 06, 2023  
Page 1 of 2  
NRQZ ID: 230327B

David M. West  
1398 Airport Road  
Bridgewater, VA 22812

Application Reason/Purpose	Prior coordination notification
File Number	230327B
Applicant Name	Leidos, Inc.
Call Sign	['WK2XEW']
FCC File No.	0082-EX-CM-2023
Site Name or Loc	['Bridgewater']
Previous NRAO Coordination No.	12968
Current NRAO Coordination No.	230327B-20, 230327B-19, 230327B-18, 230327B-17, 230327B-16, 230327B-15, 230327B-14, 230327B-13, 230327B-12, 230327B-11, 230327B-10, 230327B-09, 230327B-08, 230327B-07, 230327B-06, 230327B-05, 230327B-04, 230327B-03, 230327B-02, 230327B-01

Dear Applicant:

The National Radio Quiet Zone (NRQZ) has evaluated these facilities to determine the interference impact on our highly sensitive radio astronomy operations.

The NRQZ Office requests that:

1. This Letter of Concurrence be attached to the FCC application.
2. The FCC application should indicate to the FCC that the assignment should be modified to include the current NRQZ ID in the supplementary details line (e.g. "SUP: NRQZ COORD COMPLETE 2023 APR 06/NRQZ ID 230327B").
3. The applicant provides the NRQZ Office ([nrqz@nrao.edu](mailto:nrqz@nrao.edu)) with notice of its official filing with the FCC per section 47CFR1.924 (a) (2).
4. The FCC should email the NSF Electromagnetic Spectrum Management Unit ([esm@nsf.gov](mailto:esm@nsf.gov)) when the supplemental details have been modified to include the NRQZ ID as this will facilitate faster approval of the application.



## NATIONAL RADIO ASTRONOMY OBSERVATORY

POST OFFICE BOX 2  
GREEN BANK, WV 24944-0002  
NRQZ OFFICE TELEPHONE (304) 456-2107  
HTTP://WWW.GB.NRAO.EDU/

FAX (304) 456-2276  
NRQZ@NRAO.EDU

The National Radio Astronomy Observatory (NRAO) site located at Green Bank, Pocahontas County, WV, has no objection to this frequency assignment.

The Sugar Grove Research Station, the former Naval Radio Research Observatory (NRRO), located at Sugar Grove, Pendleton County, WV has no objections to this frequency assignment.

This letter constitutes coordination of assignment in the National Radio Quiet Zone as required by the FCC Rules and Regulations 47CFR1.924.

If I may be of assistance, please feel free to contact me.

Sincerest regards,

Sheldon Wasik  
NRQZ Program Administrator

cc: [nrqz@nrao.edu](mailto:nrqz@nrao.edu), [esm@nsf.gov](mailto:esm@nsf.gov), Sugar Grove Research Station Spectrum Management Group

Attachments: Site Specific Data

This concurrence remains valid provided the data contained within is consistent with the applicant's filing at the Commission. Any discrepancy in system parameters, such as geographical coordinates (Latitude, Longitude, AMSL), antenna height above ground level (AGL), antenna gains or directivity (orientation), channel (operating frequency or frequency bands), emission type, and power requires re-coordination. If the Commission has questions regarding the validity of this or any concurrence, please direct inquiries to [nrqz@nrao.edu](mailto:nrqz@nrao.edu) or 304-456-2107.

NRQZ ID	Site Name	Lat N NAD83	Lon W NAD83	MSL (m)	Max TX Pwr (W)	# TX per Sector	# TX per Facility	Freq Low (MHz)	Freq High (MHz)	Bandwidth (MHz)	Max Gain (dBi)	Antenna Model	AGL (m)	Az ° True	Mechanical-DT	Electrical-DT	Max eRPd of facility (W)	NRAO ERPd Limit (W)
230327 B-20	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	946.0	952.0	0.025	2.15	None	16 .2	276.1	None	None	20.0	7.4e+0 1
230327 B-19	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	946.0	952.0	0.016	2.15	None	16 .2	276.1	None	None	20.0	4.7e+0 1
230327 B-18	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	528.0	534.0	0.025	2.15	None	16 .2	276.1	None	None	20.0	4.1e+0 1
230327 B-17	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	528.0	534.0	0.016	2.15	None	16 .2	276.1	None	None	20.0	2.7e+0 1
230327 B-16	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	507.0	513.0	0.025	2.15	None	16 .2	276.1	None	None	20.0	4.0e+0 1

230327 B-15	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	507.0	513.0	0.016	2.15	None	16 .2	276.1	None	None	20.0	2.5e+0 1
230327 B-14	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	437.0	443.0	0.025	2.15	None	16 .2	276.1	None	None	20.0	3.4e+0 4
230327 B-13	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	437.0	443.0	0.016	2.15	None	16 .2	276.1	None	None	20.0	2.2e+0 4
230327 B-12	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	223.0	225.0	0.025	2.15	None	16 .2	276.1	None	None	20.0	1.8e+0 4
230327 B-11	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	223.0	225.0	0.016	2.15	None	16 .2	276.1	None	None	20.0	1.1e+0 4
230327 B-10	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	174.0	175.2	0.025	2.15	None	16 .2	276.1	None	None	20.0	1.4e+0 4
230327 B-09	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	174.0	175.2	0.016	2.15	None	16 .2	276.1	None	None	20.0	8.9e+0 3

230327 B-08	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	158.0	159.0	0.025	2.15	None	16 .2	276.1	None	None	20.0	1.3e+0 4
230327 B-07	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	158.0	159.0	0.016	2.15	None	16 .2	276.1	None	None	20.0	8.1e+0 3
230327 B-06	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	84.0	90.9	0.025	2.15	None	16 .2	276.1	None	None	20.0	7.0e+0 5
230327 B-05	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	84.0	90.9	0.016	2.15	None	16 .2	276.1	None	None	20.0	4.5e+0 5
230327 B-04	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	45.0	51.55	0.025	2.15	None	16 .2	276.1	None	None	20.0	3.9e+0 9
230327 B-03	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	45.0	51.55	0.016	2.15	None	16 .2	276.1	None	None	20.0	2.5e+0 9
230327 B-02	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	27.0	33.1	0.025	2.15	None	16 .2	276.1	None	None	20.0	2.6e+0 9

230327 B-01	Bridge water	38 21 44.0 00	-78 57 28.00 0	355 .0	20.0	1	1	27.0	33.1	0.016	2.15	None	16 .2	276.1	None	None	20.0	1.6e+0 9
----------------	-----------------	------------------------	-------------------------	-----------	------	---	---	------	------	-------	------	------	----------	-------	------	------	------	-------------

\*NRAO acknowledges the modifications of the license, as provided by the applicant:

- Modified centerpoint coordinates of: 38-21-44 N.Lat; 078-57-28 W.Long. – to reflect placement of the antenna on a building rooftop
- Reduced .2 km radius around the new centerpoint

Please reach out to the NRQZ Program Administrator ([nrqz@nrao.edu](mailto:nrqz@nrao.edu)) with any questions or concerns.