

NRQZ Coordination
Granted Experimental STA - WU9XEF – File No. 1204-EX-ST-2022

Site 1 – Ground-Based – Bridgewater, VA

See attached letter reflecting “no objection to this frequency assignment” and “coordination of assignment in the National Radio Quiet Zone as required by the FCC Rules and Regulations 47CFR1.924”:

- NRQZ requests that FCC note the current NRQZ ID in the supplementary details line (e.g. “SUP: NRQZ COORD COMPLETE 2022 AUG 12/NRQZ ID 220727A”).
- NRQZ requests that FCC email the NSF Electromagnetic Spectrum Management Unit (esm@nsf.gov) when the supplemental details have been modified to include the NRQZ ID.

Site 3 – Airborne – Bridgewater, VA

See attached letter reflecting that “coordination is not required per NTIA Manual section 8.3.9.”

Rummel, Jeffrey

From: National Radio Quiet Zone (NRQZ) <nrqz@nrao.edu>
Sent: Friday, August 12, 2022 4:19 PM
To: Rummel, Jeffrey
Cc: Electromagnetic Spectrum Management - ESM (esm@nsf.gov); National Radio Quiet Zone (NRQZ)
Subject: NRQZ ID 220727A - Site Name 'Bridgewater, VA-1,3'- Letter of Concurrence and Coordination not Needed
Attachments: 220727A Letter of Concurrence - Site Bridgewater VA1.pdf; 220727A Coordination Not Required - Site Bridgewater VA3.pdf

Dear Applicant and/or Frequency Coordinator:

Find attached a Letter of Concurrence (LOC) and coordination recognition 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 2022 AUG 12/NRQZ ID 220727A").
3. The applicant provides the NRQZ Office (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) 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. Please address all emails to nrqz@nrao.edu.

Attachment: Letter of Concurrence, Coordination Not Required Letter

Sincerest regards,

Sheldon

Sheldon Wasik
NRQZ Administrator (nrqz@nrao.edu)

Green Bank Observatory
155 Observatory Road
PO Box 2
Green Bank, WV 24944-0002
(O) 304-456-2107

NRQZ info: <http://greenbankobservatory.org/visit/national-radio-quiet-zone/>

Green Bank Site info: <http://greenbankobservatory.org/>

Covid-19 Operations & Closures <https://greenbankobservatory.org/statement-about-covid-19/>



NATIONAL RADIO ASTRONOMY OBSERVATORY

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

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

August 12, 2022
Page 1 of 2
NRQZ ID: 220727A

David M. West
1398 Airport Road
Bridgewater, VA 22812

Application Reason/Purpose	Prior coordination notification
File Number	220727A
Applicant Name	Leidos, Inc.
Call Sign	['0']
Site Name or Loc	['Bridgewater, VA-1']
Previous NRAO Coordination No.	
Current NRAO Coordination No.	220727A-09, 220727A-08, 220727A-07, 220727A-06, 220727A-05, 220727A-04, 220727A-03, 220727A-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 2022 AUG 12/NRQZ ID 220727A").
3. The applicant provides the NRQZ Office (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) when the supplemental details have been modified to include the NRQZ ID as this will facilitate faster approval of the application.



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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, 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 or 304-456-2107.

NROZ 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)
220727 A-09	Bridge water, VA-1	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	304.3	304.3	0.025	2.15	0	15 .2 4	276.1	0	0	40.0	8.4e+0 3
220727 A-08	Bridge water, VA-1	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	251.3	251.3	0.025	2.15	0	15 .2 4	276.1	0	0	40.0	5.2e+0 3
220727 A-07	Bridge water, VA-1	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	226.3	226.3	0.025	2.15	0	15 .2 4	276.1	0	0	40.0	3.9e+0 3
220727 A-06	Bridge water, VA-1	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	123.5 5	123.5 5	0.025	2.15	0	15 .2 4	276.1	0	0	40.0	9.9e+0 3
220727 A-05	Bridge water, VA-1	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	123.3 5	123.3 5	0.025	2.15	0	15 .2 4	276.1	0	0	40.0	9.9e+0 3

220727 A-04	Bridge water, VA-1	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	122.7	122.7	0.025	2.15	0	15 .2 4	276.1	0	0	40.0	9.8e+0 3
220727 A-03	Bridge water, VA-1	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	76.0	76.0	0.025	2.15	0	15 .2 4	276.1	0	0	40.0	6.3e+0 5
220727 A-01	Bridge water, VA-1	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	72.0	72.0	0.025	2.15	0	15 .2 4	276.1	0	0	40.0	6.0e+0 5



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NRQZ ID: 220727A

David M. West
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Application Reason/Purpose	Prior coordination notification
File Number	220727A
Applicant Name	Leidos, Inc.
Call Sign	['0']
Site Name or Loc	['Bridgewater, VA-3']
Previous NRAO Coordination No.	
Current NRAO Coordination No.	220727A-18, 220727A-17, 220727A-16, 220727A-15, 220727A-14, 220727A-13, 220727A-12, 220727A-10

Dear Applicant:

The National Radio Quiet Zone (NRQZ) has reviewed these facilities and determined coordination is not required per NTIA Manual section 8.3.9. The NRQZ Office is in communication with the applicant in regards to any voluntary coordination.

The NRQZ Office requests that:

1. The applicant modify their frequency proposal in SSXI to include the current NRQZ ID in the supplementary details line (e.g. "SUP: NRQZ COORD NOT REQ 2022 AUG 12/NRQZ ID 220727A").
2. The applicant should email the NSF Electromagnetic Spectrum Management Unit (esm@nsf.gov) when the supplemental details have been modified to include the NRQZ ID, as this will facilitate faster approval of the application.



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Sincerest regards,

Sheldon Wasik
NRQZ Program Administrator

cc: nrqz@nrao.edu, esm@nsf.gov, Sugar Grove Research Station Spectrum Management Group

This Letter remains valid provided the data contained within is consistent with the applicant's filing. 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 there are any questions regarding the validity of this or any concurrence, please direct inquiries to nrqz@nrao.edu or 304-456-2107.

NROZ 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)
220727 A-18	Bridge water, VA-3	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	304.3	304.3	0.025	2.15	0	12 49 7. 0	276.1	0	0	40.0	2.2e- 04
220727 A-17	Bridge water, VA-3	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	251.3	251.3	0.025	2.15	0	12 49 7. 0	276.1	0	0	40.0	2.2e- 04
220727 A-16	Bridge water, VA-3	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	226.3	226.3	0.025	2.15	0	12 49 7. 0	276.1	0	0	40.0	2.2e- 04
220727 A-15	Bridge water, VA-3	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	123.5 5	123.5 5	0.025	2.15	0	12 49 7. 0	276.1	0	0	40.0	2.2e- 04
220727 A-14	Bridge water, VA-3	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	123.3 5	123.3 5	0.025	2.15	0	12 49 7. 0	276.1	0	0	40.0	2.2e- 04

220727 A-13	Bridge water, VA-3	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	122.7	122.7	0.025	2.15	0	12 49 7. 0	276.1	0	0	40.0	2.2e- 04
220727 A-12	Bridge water, VA-3	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	76.0	76.0	0.025	2.15	0	12 49 7. 0	276.1	0	0	40.0	2.2e- 02
220727 A-10	Bridge water, VA-3	38 21 44.0 00	-78 57 28.00 0	363 .0	40.0	1	1	72.0	72.0	0.025	2.15	0	12 49 7. 0	276.1	0	0	40.0	2.2e- 02

*Note: Analysis was conducted as if max altitude was constant.