Rummel, Jeffrey

From:	National Radio Quiet Zone (NRQZ) <nrqz@nrao.edu></nrqz@nrao.edu>
Sent:	Thursday, March 2, 2023 11:27 AM
То:	National Radio Quiet Zone (NRQZ); Rummel, Jeffrey
Cc:	Quay, Noah B.; Electromagnetic Spectrum Management - ESM (esm@nsf.gov)
Subject:	RE: Request for NRQZ Consent/No Objection to Bridgewater VA Operations - Leidos -
	Pending File No. 0243-EX-CN-2023 {External}
Attachments:	230222C Letter of Concurrence - Site Bridgewater VA3 - Coordination not Req.pdf;
	230222C Letter of Concurrence - Site Bridgewater VA1.pdf

RE: Letter of Concurrence and Letter indicating No Coordination Required – NRQZ ID 220222C – FCC filing 0243-EX-CN-2023 – Site Bridgewater VA 1/3

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.
- 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 MAR 02/NRQZ ID 230222C").
- 3. The applicant provides the NRQZ Office (<u>nrqz@nrao.edu</u>) 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 (<u>esm@nsf.gov</u>) 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 <u>nrqz@nrao.edu</u>. Please address all emails to <u>nrqz@nrao.edu</u>.

Attachment: Letter of Concurrence

Sincerest regards,

Sheldon

Sheldon Wasik NRQZ Administrator (<u>nrqz@nrao.edu</u>)

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

NRQZ info: <u>http://greenbankobservatory.org/visit/national-radio-quiet-zone/</u> Green Bank Site info: <u>http://greenbankobservatory.org/</u> Covid-19 Operations & Closures https://greenbankobservatory.org/statement-about-covid-19/

From: National Radio Quiet Zone (NRQZ)
Sent: Wednesday, February 22, 2023 1:18 PM
To: 'Rummel, Jeffrey' <jeffrey.rummel@afslaw.com>; National Radio Quiet Zone (NRQZ) <nrqz@nrao.edu>
Cc: Quay, Noah B. <NOAH.B.QUAY@leidos.com>
Subject: RE: Request for NRQZ Consent/No Objection to Bridgewater VA Operations - Leidos - Pending File No. 0243-EX-CN-2023 {External}

Good Afternoon Jeff,

Apologies for the delayed response, but thank you for sending this over in the organized and well explained case. Providing all these details will help us move this along as quick as possible. I have assigned this:

NRQZ ID 23022C for Site Bridgewater VA 0243-EX-CN-2023

I understand the confirmation/coordination paperwork you are seeking, and will work towards that. Please let me know if you have any questions.

Thanks, Sheldon Wasik NRQZ Program Administrator

From: Rummel, Jeffrey <<u>jeffrey.rummel@afslaw.com</u>>
Sent: Monday, February 20, 2023 11:22 AM
To: National Radio Quiet Zone (NRQZ) <<u>nrqz@nrao.edu</u>>
Cc: Quay, Noah B. <<u>NOAH.B.QUAY@leidos.com</u>>
Subject: Request for NRQZ Consent/No Objection to Bridgewater VA Operations - Leidos - Pending File No. 0243-EX-CN2023 {External}

Sheldon:

Good afternoon.

This is to request NRQZ consent/no objection with respect to the Bridgewater, VA operations specified in Leidos' pending experimental license application under File No. 0243-EX-CN-2023.

In connection with this request, please note the following:



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

March 02, 2023 Page 1 of 2 NRQZ ID: 230222C

David M. West 1398 Airport Road Bridgewater, VA 22812

Application Reason/Purpose File Number	Prior coordination notification 230222C
Applicant Name	Leidos, Inc.
Call Sign	['WU9XEF']
Site Name or Loc	['Bridgewater, VA-1']
Previous NRAO Coordination No.	
Current NRAO Coordination No.	230222C-09, 230222C-08, 230222C-07, 230222C-06, 230222C-05, 230222C-04, 230222C-03, 230222C-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.
- 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 MAR 02/NRQZ ID 230222C").
- 3. The applicant provides the NRQZ Office (<u>nrqz@nrao.edu</u>) 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 (<u>esm@nsf.gov</u>) when the supplemental details have been modified to include the NRQZ ID as this will facilitate faster approval of the application.



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,

- N

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 <u>nrgz@nrao.edu</u> or 304-456-2107.

The National Radio Astronomy Observatory is a Facility of the National Science Foundation Operated Under Cooperative Agreement by Associated Universities, Inc.

NRQZ ID	Site Name	Lat N NAD83	Lon W NAD83	(m) NSN	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)
230222 C-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
230222 C-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
230222 C-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
230222 C-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
230222 C-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

230222 C-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
230222 C-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
230222 C-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



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

March 02, 2023 Page 1 of 2 NRQZ ID: 230222C

David M. West 1398 Airport Road Bridgewater, VA 22812

Application Reason/Purpose File Number	Prior coordination notification 230222C
Applicant Name	
Call Sign	['WU9XEF']
Site Name or Loc	['Bridgewater, VA-1', 'Bridgewater, VA-3']
Previous NRAO Coordination No.	
Current NRAO Coordination No.	230222C-18, 230222C-17, 230222C-16, 230222C-15, 230222C-14, 230222C-13, 230222C-12, 230222C-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 requests that:

- 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 2023 MAR 02/NRQZ ID 230222C").
- The applicant should email the NSF Electromagnetic Spectrum Management Unit (<u>esm@nsf.gov</u>) when the supplemental details have been modified to include the NRQZ ID, as this will facilitate faster approval of the application.



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

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

Sincerest regards,

Sheldon Wasik NRQZ Program Administrator

cc: <u>nrqz@nrao.edu</u>, <u>esm@nsf.gov</u>, 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 recoordination. If there are any questions regarding the validity of this or any concurrence, please direct inquiries to <a href="https://www.nrg.gov/nrg

The National Radio Astronomy Observatory is a Facility of the National Science Foundation Operated Under Cooperative Agreement by Associated Universities, Inc.

NRQZ ID	Site Name	Lat N NAD83	Lon W NAD83	(m) NSL	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)
230222 C-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
230222 C-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
230222 C-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
230222 C-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
230222 C-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

230222 C-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
230222 C-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
230222 C-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. NRQZ acknowledges the movement from the 74.6 MHz frequency assignment to protect the allocated RA band.