uAvionix

Christian Ramsey <christian@uavionix.com>

FAA Concurrence of Record TRK 210464, Project: NFECR07/12/2021(1)

donotreply_from_webfcr@faa.gov <donotreply_from_webfcr@faa.gov> Wed, Aug 4, 2021 at 9:31 AM
To: christian@uavionix.com
Cc: Rodney.Murphy@faa.gov, Lorena.Carvajal@faa.gov, Surya.CTR.Kanchiraju@faa.gov, Clifford.CTR.Vines@faa.gov, patrick.ctr.bledzki@faa.gov

Dear christian@uavionix.com,

The FAA Spectrum Engineering Services has completed the review of your Frequency Coordination Request.

TRK 210464 is assigned an FAA Coordination number NG T210482 that indicates FAA's coordination that may or may not include operational limits/conditions as part of the requirement for FAA concurrence. The FAA Spectrum Engineering Services has provided the following comments:

COMMENTS: SUPPORT OF UAVIONIX TESTING OF C-BAND UAS C2 RADIOS FOR COMPLIANCE WITH RTCA DO-362A AND EVENTUAL TSO-C213A. TWO MAIN LOCATIONS FOR GRS (GRAND FORKS,ND AND ANGUS,MN) WITH SOME LIMITED GROUND MOBILITY UP TO 10 NMI.SIX CHANNELS (M5050.9475;M5051.1625;M5051.3375;M5051.5925;M5052.0225;M5052.4525) WILL BE USED BIRECTIONALLY TO SUPPORT THE TEST OPERATIONS.GRS ANTENNA IS STEERABLE WITH +/- 60 DEGREES OF 120 DEGREE AZIMUTH.

Please note that this concurrence does not constitute authority to transmit. Your authority to transmit must be obtained from the FCC.

Please provide this concurrence notice to the FCC as part of your frequency application, to demonstrate completion of the FAA coordination process. The FAA Coordination number is only valid until 1/31/2022; if you need an extension, please submit an inquiry via WebFCR .

The attached file contains a Card 3 format with all technical and operational parameters; operations are required to be contained within these parameters for the FAA's concurrence to remain valid. If any of these parameters change, the license to transmit shall be re-coordinated with the FAA and updated with the FCC. A document that explains each field of the Card 3 format in plain text is attached.

The following Revision Table outlines key parameters of this coordination:

Attribute	Record Parameter
Serial Number	NG T210482
Frequency	M5050.9475
City	ANGUS
State	MN
Transmitter Radius	0050
Transmitter Latitude	480205.34N
Transmitter Longitude	0965322.02W
Receiver Latitude	480205.34N
Receiver Longitude	0965322.02W
Antenna Type	DIPOLE

Flight Level	100

Best regards,

FAA Spectrum Engineering Services

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2 attachments

TRK 210464_NG T210482_Card3_Approved.txt
1K

NTIA-Card3-Descriptions.pdf
258K

uAvionix

Christian Ramsey <christian@uavionix.com>

FAA Concurrence of Record TRK 210465, Project: NFECR07/12/2021(1)

donotreply_from_webfcr@faa.gov <donotreply_from_webfcr@faa.gov> Wed, Aug 4, 2021 at 12:32 PM
To: christian@uavionix.com
Cc: Rodney.Murphy@faa.gov, Lorena.Carvajal@faa.gov, Surya.CTR.Kanchiraju@faa.gov, Clifford.CTR.Vines@faa.gov, patrick.ctr.bledzki@faa.gov

Dear christian@uavionix.com,

The FAA Spectrum Engineering Services has completed the review of your Frequency Coordination Request.

TRK 210465 is assigned an FAA Coordination number NG T210483 that indicates FAA's coordination that may or may not include operational limits/conditions as part of the requirement for FAA concurrence. The FAA Spectrum Engineering Services has provided the following comments:

COMMENTS: SUPPORT OF UAVIONIX TESTING OF C-BAND UAS C2 RADIOS FOR COMPLIANCE WITH RTCA DO-362A AND EVENTUAL TSO-C213A. TWO MAIN LOCATIONS FOR GRS (GRAND FORKS,ND AND ANGUS,MN) WITH SOME LIMITED GROUND MOBILITY UP TO 10 NMI.SIX CHANNELS (M5050.9475;M5051.1625;M5051.3375;M5051.5925;M5052.0225;M5052.4525) WILL BE USED BIRECTIONALLY TO SUPPORT THE TEST OPERATIONS.GRS ANTENNA IS STEERABLE WITH +/- 60 DEGREES OF 120 DEGREE AZIMUTH.

Please note that this concurrence does not constitute authority to transmit. Your authority to transmit must be obtained from the FCC.

Please provide this concurrence notice to the FCC as part of your frequency application, to demonstrate completion of the FAA coordination process. The FAA Coordination number is only valid until 1/31/2022; if you need an extension, please submit an inquiry via WebFCR .

The attached file contains a Card 3 format with all technical and operational parameters; operations are required to be contained within these parameters for the FAA's concurrence to remain valid. If any of these parameters change, the license to transmit shall be re-coordinated with the FAA and updated with the FCC. A document that explains each field of the Card 3 format in plain text is attached.

The following Revision Table outlines key parameters of this coordination:

Attribute	Record Parameter
Serial Number	NG T210483
Frequency	M5051.1625
City	ANGUS
State	MN
Transmitter Radius	0050
Transmitter Latitude	480205.34N
Transmitter Longitude	0965322.02W
Receiver Latitude	480205.34N
Receiver Longitude	0965322.02W
Antenna Type	DIPOLE

Flight Level	100

Best regards,

FAA Spectrum Engineering Services

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2 attachments

TRK 210465_NG T210483_Card3_Approved.txt
1K

NTIA-Card3-Descriptions.pdf
258K

uAvionix

Christian Ramsey <christian@uavionix.com>

FAA Concurrence of Record TRK 210466, Project: NFECR07/12/2021(1)

donotreply_from_webfcr@faa.gov <donotreply_from_webfcr@faa.gov> Wed, Aug 4, 2021 at 12:45 PM
To: christian@uavionix.com
Cc: Rodney.Murphy@faa.gov, Lorena.Carvajal@faa.gov, Surya.CTR.Kanchiraju@faa.gov, Clifford.CTR.Vines@faa.gov, patrick.ctr.bledzki@faa.gov

Dear christian@uavionix.com,

The FAA Spectrum Engineering Services has completed the review of your Frequency Coordination Request.

TRK 210466 is assigned an FAA Coordination number NG T210484 that indicates FAA's coordination that may or may not include operational limits/conditions as part of the requirement for FAA concurrence. The FAA Spectrum Engineering Services has provided the following comments:

COMMENTS: SUPPORT OF UAVIONIX TESTING OF C-BAND UAS C2 RADIOS FOR COMPLIANCE WITH RTCA DO-362A AND EVENTUAL TSO-C213A. TWO MAIN LOCATIONS FOR GRS (GRAND FORKS,ND AND ANGUS,MN) WITH SOME LIMITED GROUND MOBILITY UP TO 10 NMI.SIX CHANNELS (M5050.9475;M5051.1625;M5051.3375;M5051.5925;M5052.0225;M5052.4525) WILL BE USED BIRECTIONALLY TO SUPPORT THE TEST OPERATIONS.GRS ANTENNA IS STEERABLE WITH +/- 60 DEGREES OF 120 DEGREE AZIMUTH.

Please note that this concurrence does not constitute authority to transmit. Your authority to transmit must be obtained from the FCC.

Please provide this concurrence notice to the FCC as part of your frequency application, to demonstrate completion of the FAA coordination process. The FAA Coordination number is only valid until 1/31/2022; if you need an extension, please submit an inquiry via WebFCR .

The attached file contains a Card 3 format with all technical and operational parameters; operations are required to be contained within these parameters for the FAA's concurrence to remain valid. If any of these parameters change, the license to transmit shall be re-coordinated with the FAA and updated with the FCC. A document that explains each field of the Card 3 format in plain text is attached.

The following Revision Table outlines key parameters of this coordination:

Attribute	Record Parameter
Serial Number	NG T210484
Frequency	M5051.3375
City	ANGUS
State	MN
Transmitter Radius	0050
Transmitter Latitude	480205.34N
Transmitter Longitude	0965322.02W
Receiver Latitude	480205.34N
Receiver Longitude	0965322.02W
Antenna Type	DIPOLE

Flight Level	100

Best regards,

FAA Spectrum Engineering Services

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2 attachments

TRK 210466_NG T210484_Card3_Approved.txt
1K

NTIA-Card3-Descriptions.pdf
258K

uAvionix

Christian Ramsey <christian@uavionix.com>

FAA Concurrence of Record TRK 210467, Project: NFECR07/12/2021(1)

donotreply_from_webfcr@faa.gov <donotreply_from_webfcr@faa.gov> Wed, Aug 4, 2021 at 12:51 PM
To: christian@uavionix.com
Cc: Rodney.Murphy@faa.gov, Lorena.Carvajal@faa.gov, Surya.CTR.Kanchiraju@faa.gov, Clifford.CTR.Vines@faa.gov, patrick.ctr.bledzki@faa.gov

Dear christian@uavionix.com,

The FAA Spectrum Engineering Services has completed the review of your Frequency Coordination Request.

TRK 210467 is assigned an FAA Coordination number NG T210485 that indicates FAA's coordination that may or may not include operational limits/conditions as part of the requirement for FAA concurrence. The FAA Spectrum Engineering Services has provided the following comments:

COMMENTS: SUPPORT OF UAVIONIX TESTING OF C-BAND UAS C2 RADIOS FOR COMPLIANCE WITH RTCA DO-362A AND EVENTUAL TSO-C213A. TWO MAIN LOCATIONS FOR GRS (GRAND FORKS,ND AND ANGUS,MN) WITH SOME LIMITED GROUND MOBILITY UP TO 10 NMI.SIX CHANNELS (M5050.9475;M5051.1625;M5051.3375;M5051.5925;M5052.0225;M5052.4525) WILL BE USED BIRECTIONALLY TO SUPPORT THE TEST OPERATIONS.GRS ANTENNA IS STEERABLE WITH +/- 60 DEGREES OF 120 DEGREE AZIMUTH.

Please note that this concurrence does not constitute authority to transmit. Your authority to transmit must be obtained from the FCC.

Please provide this concurrence notice to the FCC as part of your frequency application, to demonstrate completion of the FAA coordination process. The FAA Coordination number is only valid until 1/31/2022; if you need an extension, please submit an inquiry via WebFCR .

The attached file contains a Card 3 format with all technical and operational parameters; operations are required to be contained within these parameters for the FAA's concurrence to remain valid. If any of these parameters change, the license to transmit shall be re-coordinated with the FAA and updated with the FCC. A document that explains each field of the Card 3 format in plain text is attached.

The following Revision Table outlines key parameters of this coordination:

Attribute	Record Parameter
Serial Number	NG T210485
Frequency	M5051.5925
City	ANGUS
State	MN
Transmitter Radius	0050
Transmitter Latitude	480205.34N
Transmitter Longitude	0965322.02W
Receiver Latitude	480205.34N
Receiver Longitude	0965322.02W
Antenna Type	DIPOLE

Flight Level	100

Best regards,

FAA Spectrum Engineering Services

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2 attachments

TRK 210467_NG T210485_Card3_Approved.txt
1K

NTIA-Card3-Descriptions.pdf
258K

uAvionix

Christian Ramsey <christian@uavionix.com>

FAA Concurrence of Record TRK 210468, Project: NFECR07/12/2021(1)

donotreply_from_webfcr@faa.gov <donotreply_from_webfcr@faa.gov> Wed, Aug 4, 2021 at 12:59 PM
To: christian@uavionix.com
Cc: Rodney.Murphy@faa.gov, Lorena.Carvajal@faa.gov, Surya.CTR.Kanchiraju@faa.gov, Clifford.CTR.Vines@faa.gov, patrick.ctr.bledzki@faa.gov

Dear christian@uavionix.com,

The FAA Spectrum Engineering Services has completed the review of your Frequency Coordination Request.

TRK 210468 is assigned an FAA Coordination number NG T210486 that indicates FAA's coordination that may or may not include operational limits/conditions as part of the requirement for FAA concurrence. The FAA Spectrum Engineering Services has provided the following comments:

COMMENTS: SUPPORT OF UAVIONIX TESTING OF C-BAND UAS C2 RADIOS FOR COMPLIANCE WITH RTCA DO-362A AND EVENTUAL TSO-C213A. TWO MAIN LOCATIONS FOR GRS (GRAND FORKS,ND AND ANGUS,MN) WITH SOME LIMITED GROUND MOBILITY UP TO 10 NMI.SIX CHANNELS (M5050.9475;M5051.1625;M5051.3375;M5051.5925;M5052.0225;M5052.4525) WILL BE USED BIRECTIONALLY TO SUPPORT THE TEST OPERATIONS.GRS ANTENNA IS STEERABLE WITH +/- 60 DEGREES OF 120 DEGREE AZIMUTH.

Please note that this concurrence does not constitute authority to transmit. Your authority to transmit must be obtained from the FCC.

Please provide this concurrence notice to the FCC as part of your frequency application, to demonstrate completion of the FAA coordination process. The FAA Coordination number is only valid until 1/31/2022; if you need an extension, please submit an inquiry via WebFCR .

The attached file contains a Card 3 format with all technical and operational parameters; operations are required to be contained within these parameters for the FAA's concurrence to remain valid. If any of these parameters change, the license to transmit shall be re-coordinated with the FAA and updated with the FCC. A document that explains each field of the Card 3 format in plain text is attached.

The following Revision Table outlines key parameters of this coordination:

Attribute	Record Parameter
Serial Number	NG T210486
Frequency	M5052.0225
City	ANGUS
State	MN
Transmitter Radius	0050
Transmitter Latitude	480205.34N
Transmitter Longitude	0965322.02W
Receiver Latitude	480205.34N
Receiver Longitude	0965322.02W
Antenna Type	DIPOLE

Flight Level	100

Best regards,

FAA Spectrum Engineering Services

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2 attachments

TRK 210468_NG T210486_Card3_Approved.txt
1K

NTIA-Card3-Descriptions.pdf
258K

uAvionix

Christian Ramsey <christian@uavionix.com>

FAA Concurrence of Record TRK 210469, Project: NFECR07/12/2021(1)

donotreply_from_webfcr@faa.gov <donotreply_from_webfcr@faa.gov> Wed, Aug 4, 2021 at 1:10 PM
To: christian@uavionix.com
Cc: Rodney.Murphy@faa.gov, Lorena.Carvajal@faa.gov, Surya.CTR.Kanchiraju@faa.gov, Clifford.CTR.Vines@faa.gov, patrick.ctr.bledzki@faa.gov

Dear christian@uavionix.com,

The FAA Spectrum Engineering Services has completed the review of your Frequency Coordination Request.

TRK 210469 is assigned an FAA Coordination number NG T210487 that indicates FAA's coordination that may or may not include operational limits/conditions as part of the requirement for FAA concurrence. The FAA Spectrum Engineering Services has provided the following comments:

COMMENTS: SUPPORT OF UAVIONIX TESTING OF C-BAND UAS C2 RADIOS FOR COMPLIANCE WITH RTCA DO-362A AND EVENTUAL TSO-C213A. TWO MAIN LOCATIONS FOR GRS (GRAND FORKS,ND AND ANGUS,MN) WITH SOME LIMITED GROUND MOBILITY UP TO 10 NMI.SIX CHANNELS (M5050.9475;M5051.1625;M5051.3375;M5051.5925;M5052.0225;M5052.4525) WILL BE USED BIRECTIONALLY TO SUPPORT THE TEST OPERATIONS.GRS ANTENNA IS STEERABLE WITH +/- 60 DEGREES OF 120 DEGREE AZIMUTH.

Please note that this concurrence does not constitute authority to transmit. Your authority to transmit must be obtained from the FCC.

Please provide this concurrence notice to the FCC as part of your frequency application, to demonstrate completion of the FAA coordination process. The FAA Coordination number is only valid until 1/31/2022; if you need an extension, please submit an inquiry via WebFCR .

The attached file contains a Card 3 format with all technical and operational parameters; operations are required to be contained within these parameters for the FAA's concurrence to remain valid. If any of these parameters change, the license to transmit shall be re-coordinated with the FAA and updated with the FCC. A document that explains each field of the Card 3 format in plain text is attached.

The following Revision Table outlines key parameters of this coordination:

Attribute	Record Parameter
Serial Number	NG T210487
Frequency	M5052.4525
City	ANGUS
State	MN
Transmitter Radius	0050
Transmitter Latitude	480205.34N
Transmitter Longitude	0965322.02W
Receiver Latitude	480205.34N
Receiver Longitude	0965322.02W
Antenna Type	DIPOLE

Flight Level	100

Best regards,

FAA Spectrum Engineering Services

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2 attachments

TRK 210469_NG T210487_Card3_Approved.txt
1K

NTIA-Card3-Descriptions.pdf
258K