uAvionix

Christian Ramsey <christian@uavionix.com>

FAA Concurrence of Record TRK 210525, Project: NFECR07/12/2021(2)

donotreply_from_webfcr@faa.gov <donotreply_from_webfcr@faa.gov> Wed, Aug 4, 2021 at 9:30 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 210525 is assigned an FAA Coordination number NG T210543 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 T210543
Frequency	M5050.9475
City	ANGUS
State	MN
Transmitter Radius	0050
Transmitter Latitude	480205.34N
Transmitter Longitude	0965322.02W
Antenna Height	0030
Receiver Latitude	480205.34N
Receiver Longitude	0965322.02W

Antenna Type	PHASEDARRY

Best regards,

FAA Spectrum Engineering Services

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2 attachments

TRK 210525_NG T210543_Card3_Approved.txt
1K

NTIA-Card3-Descriptions.pdf
258K

Christian Ramsey <christian@uavionix.com>

FAA Concurrence of Record TRK 210526, Project: NFECR07/12/2021(2)

donotreply_from_webfcr@faa.gov <donotreply_from_webfcr@faa.gov> Wed, Aug 4, 2021 at 12:33 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 210526 is assigned an FAA Coordination number NG T210544 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 T210544
Frequency	M5051.1625
City	ANGUS
State	MN
Transmitter Radius	0050
Transmitter Latitude	480205.34N
Transmitter Longitude	0965322.02W
Antenna Height	0030
Receiver Latitude	480205.34N
Receiver Longitude	0965322.02W

Antenna Type	PHASEDARRY

Best regards,

FAA Spectrum Engineering Services

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2 attachments

TRK 210526_NG T210544_Card3_Approved.txt
1K

NTIA-Card3-Descriptions.pdf
258K

uAvionix

Christian Ramsey <christian@uavionix.com>

FAA Concurrence of Record TRK 210527, Project: NFECR07/12/2021(2)

donotreply_from_webfcr@faa.gov <donotreply_from_webfcr@faa.gov> Wed, Aug 4, 2021 at 12:46 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 210527 is assigned an FAA Coordination number NG T210545 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 T210545
Frequency	M5051.3375
City	ANGUS
State	MN
Transmitter Radius	0050
Transmitter Latitude	480205.34N
Transmitter Longitude	0965322.02W
Antenna Height	0030
Receiver Latitude	480205.34N
Receiver Longitude	0965322.02W

Antenna Type	PHASEDARRY

Best regards,

FAA Spectrum Engineering Services

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2 attachments

TRK 210527_NG T210545_Card3_Approved.txt
1K

NTIA-Card3-Descriptions.pdf
258K

uAvionix

Christian Ramsey <christian@uavionix.com>

FAA Concurrence of Record TRK 210528, Project: NFECR07/12/2021(2)

donotreply_from_webfcr@faa.gov <donotreply_from_webfcr@faa.gov> Wed, Aug 4, 2021 at 12:55 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 210528 is assigned an FAA Coordination number NG T210546 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 T210546
Frequency	M5051.5925
City	ANGUS
State	MN
Transmitter Radius	0050
Transmitter Latitude	480205.34N
Transmitter Longitude	0965322.02W
Antenna Height	0030
Receiver Latitude	480205.34N
Receiver Longitude	0965322.02W

Antenna Type	PHASEDARRY

Best regards,

FAA Spectrum Engineering Services

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2 attachments

TRK 210528_NG T210546_Card3_Approved.txt
1K

NTIA-Card3-Descriptions.pdf
258K

uAvionix

Christian Ramsey <christian@uavionix.com>

FAA Concurrence of Record TRK 210529, Project: NFECR07/12/2021(2)

donotreply_from_webfcr@faa.gov <donotreply_from_webfcr@faa.gov> Wed, Aug 4, 2021 at 1:03 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 210529 is assigned an FAA Coordination number NG T210547 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 T210547
Frequency	M5052.0225
City	ANGUS
State	MN
Transmitter Radius	0050
Transmitter Latitude	480205.34N
Transmitter Longitude	0965322.02W
Antenna Height	0030
Receiver Latitude	480205.34N
Receiver Longitude	0965322.02W

Antenna Type	PHASEDARRY

Best regards,

FAA Spectrum Engineering Services

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2 attachments

TRK 210529_NG T210547_Card3_Approved.txt
1K

NTIA-Card3-Descriptions.pdf
258K

uAvionix

Christian Ramsey <christian@uavionix.com>

FAA Concurrence of Record TRK 210530, Project: NFECR07/12/2021(2)

donotreply_from_webfcr@faa.gov <donotreply_from_webfcr@faa.gov> Wed, Aug 4, 2021 at 1:14 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 210530 is assigned an FAA Coordination number NG T210548 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 T210548
Frequency	M5052.4525
City	ANGUS
State	MN
Transmitter Radius	0050
Transmitter Latitude	480205.34N
Transmitter Longitude	0965322.02W
Antenna Height	0030
Receiver Latitude	480205.34N
Receiver Longitude	0965322.02W

Antenna Type	PHASEDARRY

Best regards,

FAA Spectrum Engineering Services

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2 attachments

TRK 210530_NG T210548_Card3_Approved.txt
1K

NTIA-Card3-Descriptions.pdf
258K