

From: donotreply_from_webfcr@faa.gov
To: [Thorsheim \(US\), Joel D](#)
Cc: [Rod Murphy](#); [Lorena Carvajal](#); [Rod Murphy](#); [Surya CTR Kanchiraju](#); [Clifford CTR Vines](#); [Patrick CTR Bledzki](#)
Subject: FAA Concurrence of Record TRK 210188, Project: INSITU TILLAMOOK C-BAND C2 (5030-5040 MHZ)
Date: Wednesday, April 07, 2021 4:17:50 AM
Attachments: [TRK 210188 NG T210187 Card3 Approved.txt](#)
[NTIA-Card3-Descriptions.pdf](#)

Dear Joel Thorsheim,

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

TRK 210188 is assigned an FAA Coordination number NG T210187 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: OPERATIONS WILL BE SECONDARY TO OTHER UAS OPERATIONS USING RTCA COMPLIANT RADIOS.

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 10/4/2021; 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 T210187
Frequency	M5030.1625
City	TILLAMOOK
State	OR
Transmitter Radius	0059
Transmitter Latitude	452509.00N
Transmitter Longitude	1234852.00W
Receiver Latitude	452509.00N
Receiver Longitude	1234852.00W

Equipment Type	C,FRW P-501X005
Antenna Type	DIPOLE
Flight Level	100

Best regards,

FAA Spectrum Engineering Services

From: donotreply_from_webfcr@faa.gov
To: [Thorsheim \(US\), Joel D](#)
Cc: [Rod Murphy](#); [Lorena Carvajal](#); [Rod Murphy](#); [Surya CTR Kanchiraju](#); [Clifford CTR Vines](#); [Patrick CTR Bledzki](#)
Subject: FAA Concurrence of Record TRK 210189, Project: INSITU TILLAMOOK C-BAND C2 (5030-5040 MHZ)
Date: Wednesday, April 07, 2021 4:14:33 AM
Attachments: [TRK 210189 NG T210188 Card3 Approved.txt](#)
[NTIA-Card3-Descriptions.pdf](#)

Dear Joel Thorsheim,

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

TRK 210189 is assigned an FAA Coordination number NG T210188 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: OPERATIONS WILL BE SECONDARY TO OTHER UAS OPERATIONS USING RTCA COMPLIANT RADIOS.

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 10/4/2021; 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 T210188
Frequency	M5030.1625
City	TILLAMOOK
State	OR
Transmitter Radius	0001
Transmitter Latitude	452509.00N
Transmitter Longitude	1234852.00W
Receiver Latitude	452509.00N
Receiver Longitude	1234852.00W

Equipment Type	C,FRW P-501X005
Antenna Type	PARABOLIC
Flight Level	100

Best regards,

FAA Spectrum Engineering Services

From: donotreply_from_webfcr@faa.gov
To: [Thorsheim \(US\), Joel D](#)
Cc: [Rod Murphy](#); [Lorena Carvajal](#); [Rod Murphy](#); [Surya CTR Kanchiraju](#); [Clifford CTR Vines](#); [Patrick CTR Bledzki](#)
Subject: FAA Concurrence of Record TRK 210190, Project: INSITU TILLAMOOK C-BAND C2 (5030-5040 MHZ)
Date: Wednesday, April 07, 2021 4:17:43 AM
Attachments: [TRK 210190 NG T210189 Card3 Approved.txt](#)
[NTIA-Card3-Descriptions.pdf](#)

Dear Joel Thorsheim,

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

TRK 210190 is assigned an FAA Coordination number NG T210189 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: OPERATIONS WILL BE SECONDARY TO OTHER UAS OPERATIONS USING RTCA COMPLIANT RADIOS.

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 10/4/2021; 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 T210189
Frequency	M5035.2475
City	TILLAMOOK
State	OR
Transmitter Radius	0059
Transmitter Latitude	452509.00N
Transmitter Longitude	1234852.00W
Receiver Latitude	452509.00N
Receiver Longitude	1234852.00W

Equipment Type	C,FRW P-501X005
Antenna Type	DIPOLE
Flight Level	100

Best regards,

FAA Spectrum Engineering Services

From: donotreply_from_webfcr@faa.gov
To: [Thorsheim \(US\), Joel D](#)
Cc: [Rod Murphy](#); [Lorena Carvajal](#); [Rod Murphy](#); [Surya CTR Kanchiraju](#); [Clifford CTR Vines](#); [Patrick CTR Bledzki](#)
Subject: FAA Concurrence of Record TRK 210191, Project: INSITU TILLAMOOK C-BAND C2 (5030-5040 MHZ)
Date: Wednesday, April 07, 2021 4:20:23 AM
Attachments: [TRK 210191_NG T210190 Card3 Approved.txt](#)
[NTIA-Card3-Descriptions.pdf](#)

Dear Joel Thorsheim,

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

TRK 210191 is assigned an FAA Coordination number NG T210190 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: OPERATIONS WILL BE SECONDARY TO OTHER UAS OPERATIONS USING RTCA COMPLIANT RADIOS.

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 10/4/2021; 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 T210190
Frequency	M5035.2475
City	TILLAMOOK
State	OR
Transmitter Radius	0001
Transmitter Latitude	452509.00N
Transmitter Longitude	1234852.00W
Receiver Latitude	452509.00N
Receiver Longitude	1234852.00W

Equipment Type	C,FRW P-501X005
Antenna Type	PARABOLIC
Flight Level	100

Best regards,

FAA Spectrum Engineering Services

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To: [Thorsheim \(US\), Joel D](#)
Cc: [Rod Murphy](#); [Lorena Carvajal](#); [Rod Murphy](#); [Surya CTR Kanchiraju](#); [Clifford CTR Vines](#); [Patrick CTR Bledzki](#)
Subject: FAA Concurrence of Record TRK 210192, Project: INSITU TILLAMOOK C-BAND C2 (5030-5040 MHZ)
Date: Wednesday, April 07, 2021 4:23:43 AM
Attachments: [TRK 210192_NG T210191_Card3_Approved.txt](#)
[NTIA-Card3-Descriptions.pdf](#)

Dear Joel Thorsheim,

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

TRK 210192 is assigned an FAA Coordination number NG T210191 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: OPERATIONS WILL BE SECONDARY TO OTHER UAS OPERATIONS USING RTCA COMPLIANT RADIOS.

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 10/4/2021; 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 T210191
Frequency	M5038.9045
City	TILLAMOOK
State	OR
Transmitter Radius	0059
Transmitter Latitude	452509.00N
Transmitter Longitude	1234852.00W
Receiver Latitude	452509.00N
Receiver Longitude	1234852.00W

Equipment Type	C,FRW P-501X005
Antenna Type	DIPOLE
Flight Level	100

Best regards,

FAA Spectrum Engineering Services

From: donotreply_from_webfcr@faa.gov
To: [Thorsheim \(US\), Joel D](#)
Cc: [Rod Murphy](#); [Lorena Carvajal](#); [Rod Murphy](#); [Surya CTR Kanchiraju](#); [Clifford CTR Vines](#); [Patrick CTR Bledzki](#)
Subject: FAA Concurrence of Record TRK 210193, Project: INSITU TILLAMOOK C-BAND C2 (5030-5040 MHZ)
Date: Wednesday, April 07, 2021 4:23:34 AM
Attachments: [TRK 210193 NG T210192 Card3 Approved.txt](#)
[NTIA-Card3-Descriptions.pdf](#)

Dear Joel Thorsheim,

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

TRK 210193 is assigned an FAA Coordination number NG T210192 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: OPERATIONS WILL BE SECONDARY TO OTHER UAS OPERATIONS USING RTCA COMPLIANT RADIOS.

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 10/4/2021; 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 T210192
Frequency	M5038.9045
City	TILLAMOOK
State	OR
Transmitter Radius	0001
Transmitter Latitude	452509.00N
Transmitter Longitude	1234852.00W
Receiver Latitude	452509.00N
Receiver Longitude	1234852.00W

Equipment Type	C,FRW P-501X005
Antenna Type	PARABOLIC
Flight Level	100

Best regards,

FAA Spectrum Engineering Services