



User Manual for Web Frequency Coordination Request - Non-Federal Users For the

FAA- Spectrum Engineering Automation System (SEAS) Support for

Spectrum Assignment & Engineering Team (AJW-1910)

Contract No. DTFAWA17A-00053

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USER MANUAL FOR WEBFCR VERSION 1.2.7

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CHANGE HISTORY

Number	Date	Section Affected	Change Description / Purpose
1.0	05/14/2015	All	First Draft
1.1	09/01/2015	All	Changes for release 1.1.0
1.2	10/09/2015	All	Updated screenshots
1.3	02/03/2016	All	Changes made for WebFCR 1.1.1
1.4	02/16/2016	Disclaimer	Added screenshot for disclaimer page
1.5	04/22/2016	Cover page	Changes made to WebFCR 1.1.1.2
1.6	06/28/2016	All	Updates/screen shots changed to include all the changes in WebFCR 1.1.1.2
1.7	11/09/2016	All	Added section for status codes
1.8	02/06/2017	All	Change for release 1.1.2
1.9	04/12/2017	All	Revision of Release 1.1.2 content
1.10	08/22/2017	All	Change for release 1.1.3
1.11	10/27/2017	All	Reviewed the format and updated the content
1.12	11/15/2019	All	New/Changed Features in WebFCR 1.1.4
1.13	08/26/2020	Multiple	New/Changed Features in WebFCR 1.1.5
2.0	09/20/2021	All	New Features and change login page
2.1	01/10/2022	All	New Features and Logging Page change
2.2	05/02/2022	Cover & 1.6	New Feature- Okta authentication process
2.2.1	05/23/2022	Cover, All	Updated the version number and screenshots
2.2.2	05/24/2022	All	Final version for WebFCR 1.2.2 release
2.2.3	08/04/2022	All	Final version for WebFCR 1.2.3 release
2.2.4	09/29/2022	All	Final version for WebFCR 1.2.4 release
2.2.5	03/08/2023	All	Final version for WebFCR 1.2.4.1 release
2.3	08/25/2023	Cover & All	Final version for WebFCR 1.2.5 release
2.4	10/26/2023	Cover & 1.16	Final version for WebFCR 1.2.6 release
2.5	06/27/2024	Cover, 1.13 & 1.16	Final version for WebFCR 1.2.7 release





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1.1 Overview of WebFCR

The WebFCR Subsystem is designed to function primarily as a central point of entry for Frequency Coordination Requests (FCRs) from external users via the Internet for both Operational and Experimental requests. The subsystem will route FCRs to the corresponding FAA Staff POCs for further action. The first step requires the proponent to register for a WebFCR account on the system, and as soon as the account is activated the proponent can submit a coordination request. The subsystem's Wizard tool is structured to provide the following capabilities:

- o Request new frequency coordination
- Modification of existing frequency assignments which include relocation or update of an approved coordination request
- o Allow attachment of pdf files to frequency applications. Obtain status and updates of frequency requests in progress
- o Provide feedback and/or request additional information via the Inquiry feature
- o Renewal of the existing license, which applies only to the Experimental requests
- o For Operational Requests the proponent will work with the FCC to get it renewed
- o Dashboards to view the status and manage the submitted frequency requests

1.2 FCR Process Overview

A Frequency Coordination Request (FCR) that is submitted for civil (or military) aviation flight within the NAS is called "An Operational FCR" and it is usually associated with air traffic control operations at an airport. FAA Spectrum also supports FCRs for experimental or testing purposes. In these cases, the FCR is considered "An Experimental FCR". The general FCR process is:

- To request a frequency coordination for new operational assignments, or experimental assignments is to perform the pre-coordination with FAA (generally before submitting to the FCC for a license). Hence, the user should submit the frequency request via the WebFCR tool, selecting the 'New application request' tab, if the required frequency is in or impacts, the Aeronautical bands.
- O After the frequency has been reviewed and engineered by the FAA Spectrum engineering team, the proponent typically receives a concurrence or approval from FAA, in conjunction with a coordination number. The proponent is then required to submit to the FCC using the coordination number to validate FAA concurrence. FCC (Federal Communication Commission) will issue the final approval and formal license or authorization to transmit.
- For Modification of an Existing Record. For both Operational and Experimental scenarios: If the proponent is requesting a technical change to an existing assignment, such as new equipment, antenna height update, antenna relocation or transmit power





- and/or emissions changes, then the 'Modification to an Existing License' tab in the WebFCR tool should be employed to submit the request to FAA Spectrum for reengineering and concurrence.
- For Operational assignments, when a license renewal request is being submitted, and there
 are no technical changes as listed above, then submit to FAA Spectrum selection the
 "Renewal" option for coordination.

Note: For all Experimental assignments, license renewal requests both with and without technical changes, must be submitted to FAA Spectrum for coordination before requesting renewal from the FCC.

1.3 Supported Browsers

The following are the browsers that WebFCR supports currently:

- 1. Chrome 31.0 and above
- 2. Microsoft Edge
- 3. Safari 7.0 and above
- 4. Firefox 31.0 and above

1.4 Disclaimer

Please be advised that there are minimal process variations between assignment processing for Federal and Non-Federal agencies. Hence, the screens may be slightly different for Federal and Non-Federal users.

If you have any question, please contact WebFCR system administrator at

9-AWA-SpectrumCoordination@faa.gov.

1.5 Security Warning

When the WebFCR system is accessed, the system will display a security message as per FAA requirements. This is shown in the image below:





About WebFCR

Accept

You are accessing a U.S. Government authorized information system, which includes (1) this computer, (2) this computer network, (3) all computers connected to this network, (4) all devices and storage media attached to this network or to a computer on this network, and (5) all cloud servers and hosting environments supporting this information system. This information system is provided for U.S. Government-authorized use only.

Unauthorized or improper use of this system may result in disciplinary action, as well as civil and criminal penalties.

By logging in and using this information system, you understand and consent to the following:

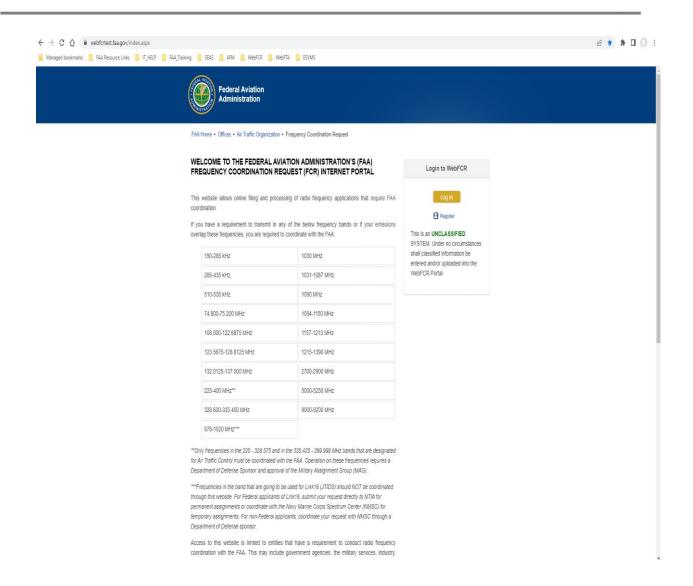
- You have no reasonable expectation of privacy regarding communications or data transiting or stored on this information system.
- At any time, and for any lawful Government purpose, communication between the user and this
 information system, data transiting to/from the system, or stored on this system is subject to
 monitoring, interception, and search.
- Any communications or data transiting or stored on this information system may be disclosed or used for any lawful Government purpose

Security message of the WebFCR application

The user needs to read and acknowledge the warning message by clicking the 'Accept' button on the top right corner. The system displays the WebFCR login page shown below:







WebFCR Application login page.

1.6 Log-In Process

1. Non-Federal or External Users

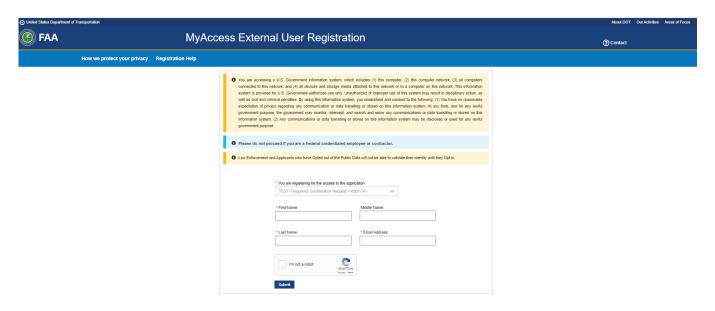
An "External User" is a person who is not eligible for a Federal Personal Identity Verification (PIV) credential and requires access via the Internet to WebFCR application. MyAccess Registration requires individuals to verify their identity by providing personal identifiable information (PII) such as a government issued ID or combination of other identifiable attributes such as last 4 digits, home address, and mobile number. Upon successful identity verification, external users will be prompted to complete account registration by establishing a password and a second factor authentication method such as a one-time password sent to a phone or an authentication app.





General Registration process:

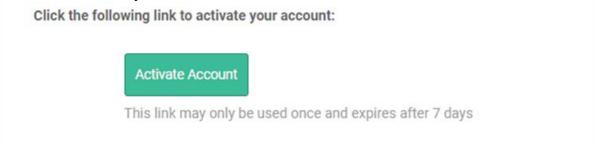
- Step 1: Using a Chrome or Edge browser, open URL: https://webfcr.faa.gov
- Step 2: The initial web page will be the U.S. Federal System 'Warning' page.
- Step 3: Review and accept via the "Accept" button on the right-hand corner of the banner page.
- Step 4: You will be presented with the WebFCR home page, at this point, please select and click
- on the 'Register' button, even though you have an active account.
- Step 5: You will then be directed to the Okta Registration page as seen below:



Okta Registration page

The Okta Registration Process:

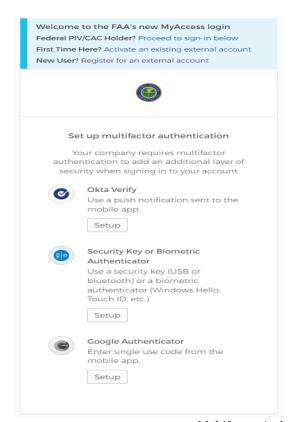
Step 6: The Okta registration process requests your name and personal email address, followed by a duplicate or dual entry of a password for the Okta account. Okta then verifies this data by sending an email to the given address for verification. The sent message will contain a button to activate and confirm your Okta account.



Followed by the account activation, the registration process requires the setup of a Multifactor Authentication (MFA) and displays the screen as seen below.







Multifactor Authentication (MFA) set-up page

Step 7: At this time it is recommended to use one of the following APP options available via App store/Apple store on the mobile phone:

- a) Google Authenticator
- b) Okta Verify

It is strongly suggested that you download one of these two options, as soon as practical before proceeding further. The instructions listed below are specific to the chosen authentication method.

Google Authenticator

Step 7.1: As noted, first download and Install the Google Authenticator on your phone.

MFA Step 7.1.1: The Okta registration email that has been sent (Step 6) would present a QR Code following the activation of the Okta account, and MFA request.

MFA Step 7.1.2: Open the Google Authenticator App.

MFA Step 7.1.3: Scan the QR code as requested by the authentication process.

MFA Step 7.1.4: The Google Authenticator produces numeric code(s) which should be entered onto your screen.

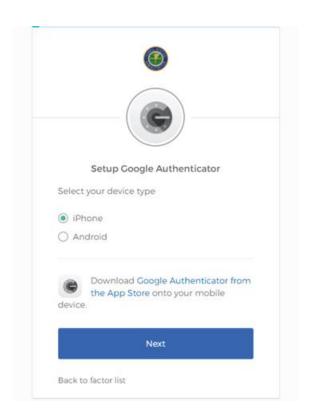
MFA Step 7.1.5: Enter the authenticator code on the screen to satisfy the validation and click on





Verify button.

MFA Step 7.1.6: Click on Finish button as seen below to complete the authentication process.

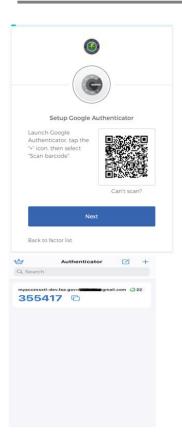


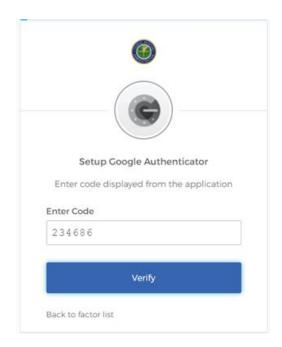


Google Authenticator Set-up pages-part 1





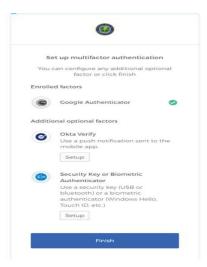




Google Authenticator Set-up pages- part 2







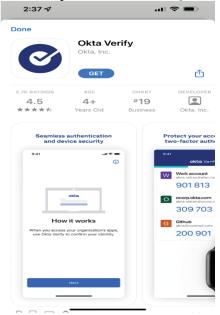
Complete Google Authentication page

Okta Verify App Authentication Process

Step 7.2: As noted, first download and Install the Okta Verify App on your mobile phone. MFA Step 7.2.1: The Okta registration email that has been sent (Step 6) would present a QR Code following the activation of the Okta account, and MFA request.

MFA Step 7.2.2: Open the Okta Authenticator App.

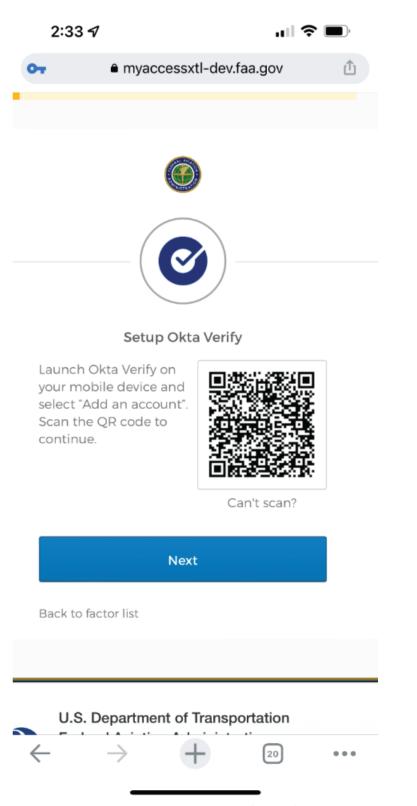
MFA Step 7.2.3: Scan the QR code as requested by the process.



Okte Verify App page – part 1







Okte Verify App page – part 2





MFA Step 7.2.4: The Okta Verify produces numeric code which should be entered onto your screen, to satisfy the validation and return you to the WebFCR application for full access.



Okte Verify App page – part 3

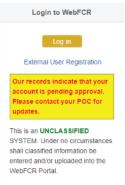


This website allows online filing and processing of radio frequency applications that require FAA coordination.

If you have a requirement to transmit in any of the below frequency bands or if your emissions overlap these frequencies, you are required to coordinate with the FAA:

190-285 kHz	1030 MHz
285-435 kHz	1031-1087 MHz
510-535 kHz	1090 MHz
74.800-75.200 MHz	1094-1150 MHz
108.000-122.6875 MHz	1157-1213 MHz
123.5875-128.8125 MHz	1215-1390 MHz
132.0125-137.000 MHz	2700-2900 MHz
225-400 MHz**	5000-5250 MHz
328.600-335.400 MHz	9000-9200 MHz
978-1020 MHz***	

**Only frequencies in the 225 - 328.575 and in the 335.425 - 399.999 MHz bands that are designated for Air Traffic Control must be coordinated with the FAA. Operation on these frequencies requires a Department of Defense Sponsor and approval of the Military Assignment Group (MAG).

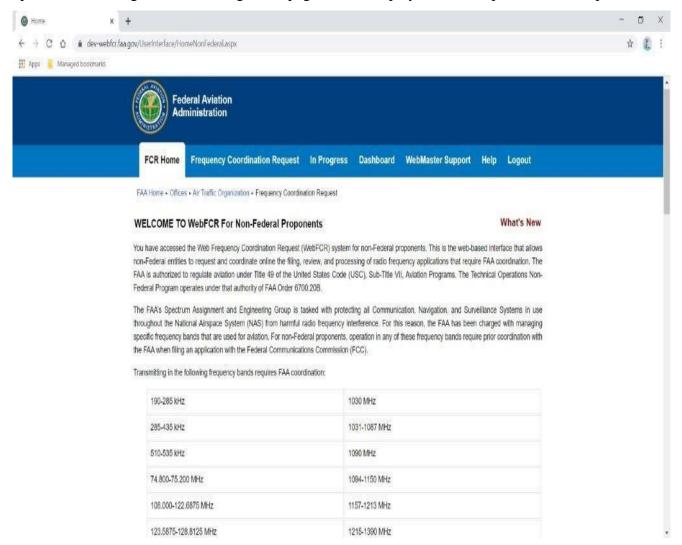






WebFCR Account Pre-Approval page

Upon successful login, the following home page will be displayed with the possible menu options.



WebFCR Application Home page.

2. Support

Please Note:

(a) In case the user, after creating the account with his or her email in WebFCR application, forgets the password, the 'Forgot Password' link will help to reset the password.







(b) In case the Multi-Function Authentication apps get de-activated and the user is unable to log into via Okta authentication, the user will need to contact the Okta Support using the Help link provided





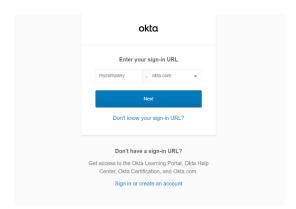








Create a case with Okta to resolve



1.7 FCR Home Page

FCR Home page provides information on the WebFCR Portal.

To access this page, click on "FCR Home" link.

The wizard home page provides links and information to review the aviation frequency bands that require prior coordination with the FAA before filing an application with the Federal Communications Commission (FCC). If the users request is not in these bands FAA coordination may not be required.







FAA Home * Offices * Air Traffic Organization * Frequency Coordination Request

WELCOME TO WebFCR For Non-Federal Proponents

What's New

You have accessed the Web Frequency Coordination Request (WebFCR) system for non-Federal proponents. This is the web-based interface that allows non-Federal entities to request and coordinate online the filing, review, and processing of radio frequency applications that require FAA coordination. The FAA is authorized to regulate aviation under Title 49 of the United States Code (USC), Sub-Title VII, Aviation Programs. The Technical Operations Non-Federal Program operates under that authority of FAA Order 6700.20B.

The FAA's Spectrum Assignment and Engineering Group is tasked with protecting all Communication, Navigation, and Surveillance Systems in use throughout the National Airspace System (NAS) from harmful radio frequency interference. For this reason, the FAA has been charged with managing specific frequency bands that are used for aviation. For non-Federal proponents, operation in any of these frequency bands require prior coordination with the FAA when filing an application with the Federal Communications Commission (FCC).

Transmitting in the following frequency bands requires FAA coordination:

190-285 kHz	1030 MHz	
285-435 kHz	1031-1087 MHz	
510-535 kHz	1090 MHz	
74.800-75.200 MHz	1094-1150 MHz	
108.000-122.6875 MHz	1157-1213 MHz	
123.5875-128.8125 MHz	1215-1390 MHz	
132.0125-137.000 MHz	2700-2900 MHz	
225-400 MHz**	5000-5250 MHz	
328.600-335.400 MHz	9000-9200 MHz	
978-1020 MHz***		

^{**}Only frequencies in the 225 - 328.575 and in the 335.425 - 399.999 MHz band that are designated for Air Traffic Control must be coordinated with the FAA. Operation on these frequencies requires a Department of Defense Sponsor and approval of the Military Assignment Group (MAG).

The primary purpose of operations in these frequency bands should be for aviation/air traffic control purposes. A Frequency Coordination Request (FCR) that is submitted for this purpose is called "An Operational FCR" and it is usually associated with air traffic control operations at an airport.

On a case by case basis and with a valid justification, the FAA may also support FCRs for experimental or testing purposes. In this case, the FCR is called "An Experimental FCR".

WebFCR landing page for Non Fed proponent

^{***}Frequencies in the band that are going to be used for Link16 (JTIDS) should NOT be coordinated through this website. Please coordinate your request with the Navy Marine Corps Spectrum Center(NMCS) through a Department of Defense sponsor.





FCR Home page provides the following information.

- 1. Contact information for any questions on the WebFCR Portal;
- 2. After hours contact information;
- 3. Lead time to process coordination requests;
- 4. Frequencies that requires FAA review and approval;
- 5. General information on WebFCR Portal;
- 6. You may also post any tool related questions through "WebMaster Support"

1.8 Dashboard Page



WebFCR Application Dashboard page.





- 1. The dashboard page can be accessed by clicking on the Dashboard menu.
- 2. This page displays a set of 10 submitted coordination requests at a time and provides the option to move to the next or previous set.
- 3. All the fields displayed can be sorted (Ascending and Descending).
- 4. The data can be exported to an excel format by clicking on the "Export to Excel" button.
- 5. To sort, click on the column name/headers.
- 6. If there are any attachments against the coordination request, they are indicated in the
 - a. First column with a paper clip $\ ^{\ }$
- 7. Click on paper clip icon to attach additional files (Refer Image A below).
- 8. Only PDF files less than 10 MB can be attached. Image A on the next page displays the screen to upload.
- 9. Existing attachments can be downloaded or deleted (Refer Image B below) displays the screen to download/delete attachments.
- 10. If inquiries need to be raised for a specific assignment, click on the question mark icon on the far right side of the grid. An inquiry window will open up to raise questions.

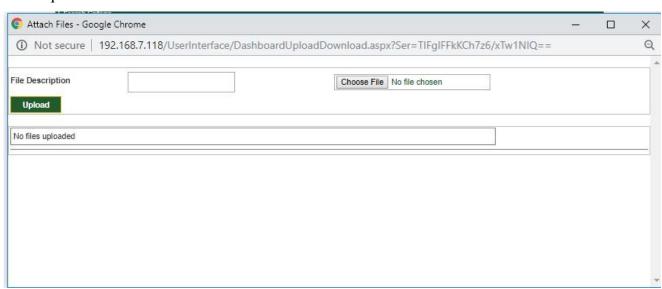


Image A – Upload Page.





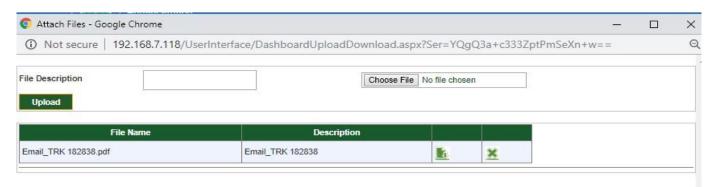
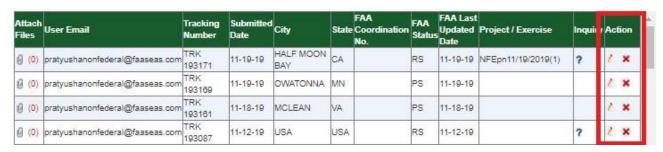


Image B – Upload Page to View/Delete.

11. An assignment record can be edited or deleted (Withdrawn) using the icons under the "Action" column.



Action Column to edit /delete assignments on Dashboard page.

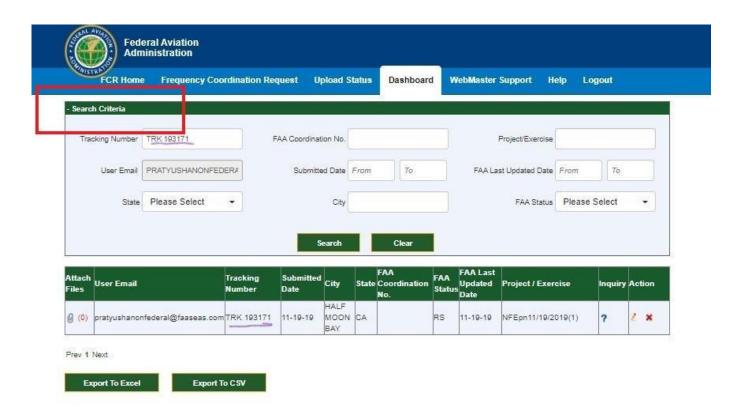
- 12. To edit an assignment record, click on the pencil icon.
- 13. To delete or withdraw an assignment record, click on the red X icon.
- 14. Assignment records in "Approved" or "Returned without Action" statuses cannot be edited or deleted.
- 15. Any user within the agency to which the originator of the assignment record belongs can edit an assignment record. However, only the originator of the assignment record will be able to delete an assignment record.
- 16. If the pencil icon is clicked, "Modification" page opens up populated with all of the information for the associated assignment record. Changes can be made as required and the assignment record can be submitted again.
- 17. FAA will be automatically notified if an assignment record is edited or deleted.





1.9 Dashboard Page Search Criteria

- 1. The Search Criteria can be access by clicking on the Dashboard menu.
- 2. By clicking on search criteria '+/- 'a drop down the window expands or minimize accordingly. User can search for a submitted request assignment by either typing Tracking Number, State, User email, FAA Coordinate No., Submitted data, City, Project exercise, FAA last updated data, FAA status.
- 3. After entering one required field for the submitted assignment, another row field will appear under the search criteria for this specific assignment.



Search Criteria on Dashboard page.

1.10 Dashboard Page Status Codes

The dashboard page displays different status codes based on the status of assignments. Below is a complete list of the abbreviations of the status codes used on dashboard page.





Status Code	Description
RS	Request Submitted
RA	Request Approved
RW	Request returned without action
AR	Awaiting Response
UR	Request Under Review
PS*	Submitted to PIM
PR*	Returned by PIM

Note: * This status applies only to the Assignment Coordination request for Operational





1.11 WebMaster Support

If there are any specific questions/comments, "WebMaster Support" screen may be used to post those to the System administrator.

This screen can be accessed through main menu □ WebMaster Support.

Please enter your feedback or any issues related to frequency coordination submission



WebMaster Support on Main menu.

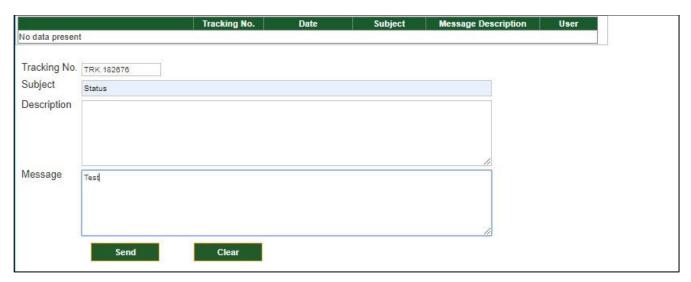
- 1. Provide a brief text as the Subject or Context of the Inquiry.
- 2. Use the Description box to provide details and hit "Send E-Mail" when done.

1.12 Inquiry Referencing a Specific Assignment

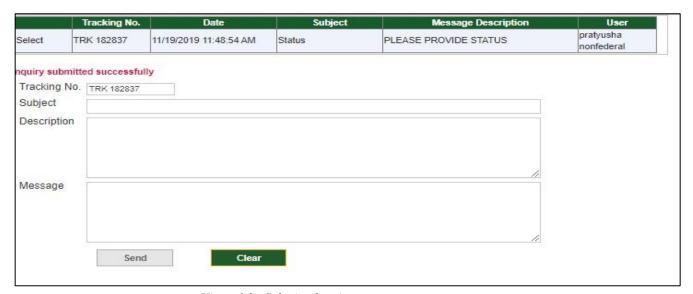
To check on the status or any other information related to a specific assignment, click on the question mark "?" icon in the dashboard page. Please click here to view instructions on the dashboard page.







View of the Assignment after clicking on Question Mark icon.



View of the Submitted assignment request.

- 1. Upon clicking on the question mark "?" icon on the dashboard page, screen as shown in the screen shot above opens up.
- 2. Serial number is defaulted.
- 3. Subject and message information can be typed in.
- 4. Upon hitting "Send," the message is sent to FAA personnel responsible for this assignment.
- 5. When the FAA Spectrum personnel respond back to the inquiry, an E-mail alert will be sent to the requestor.



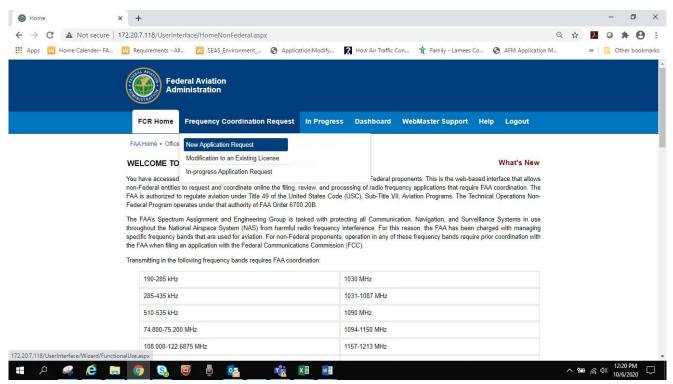


6. This page also serves as a message log and displays all the message communications between the requestor and the FAA Spectrum team.

1.13 WebFCR New Assignment Submission Using Wizard

To create a new coordination request, go to Frequency Coordination Request → New Application Request

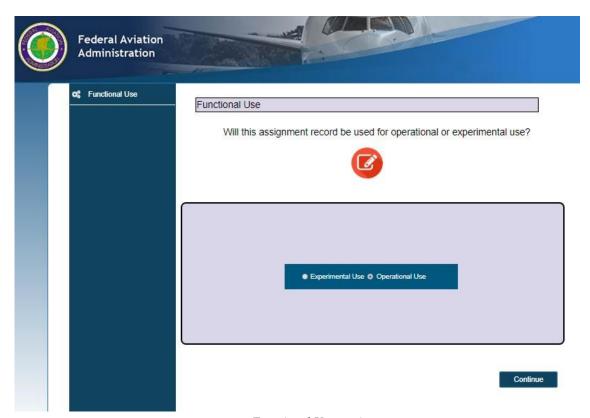
This branch of the WebFCR menu takes to user to the Data Entry Wizard to allow a structured user friendly series of questions and dropdown lists designed to easily develop the parameters, forms and data inputs for the users given coordination request.



Creating new request.







Functional Use section page.

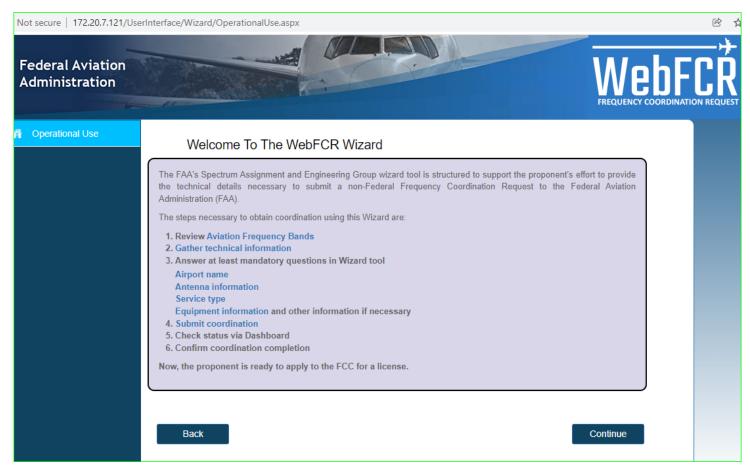
1.13.1 WebFCR New Assignment Submission Using Wizard- Operational

The user on the FCR wizard home page is recommended to gather technical information about the facility, including the surveyed transmitter antenna latitude and longitude, official airport name, manufacturer's data for transmitter, receiver and antenna equipment, and the proposed aviation service or service type that will be deployed via this request.

The user is provided links with definitions, additional explanation, and key fields with their relative importance and details being requested.







Operational Use Information WebFCR Wizard page.

FCR Wizard Home page next provides the following information about the submission of the request to the Program Implementation Manager (PIM) sometimes referred to as the non-Federal Program Liaisons.

The FCR application is submitted to the FAA Non-Federal Program Implementation Manager (PIM) who is assigned to review the general request, directly work with the proponent to provide advice, input and initiate the required processes within the FAA to evaluate and facilitate to proponent request. If FCR application changes or revisions are required, the PIM will be able to return the application to the proponent after submission, for the updates and re-submission.

After reviewing the information, click the 'Continue' button to initiate the request by going to Basic Information Page.

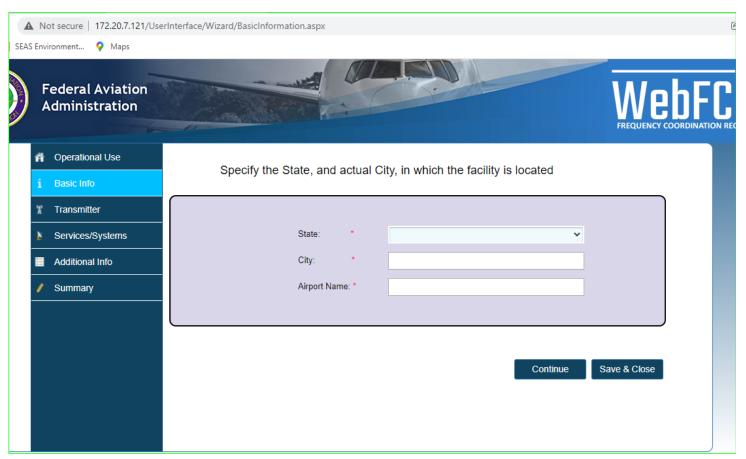
The next webpage asks for information about the facility location.

State, City and Airport Name are required fields.

Please enter State, City and Airport Name, and click Continue







View of the Basic Information section.

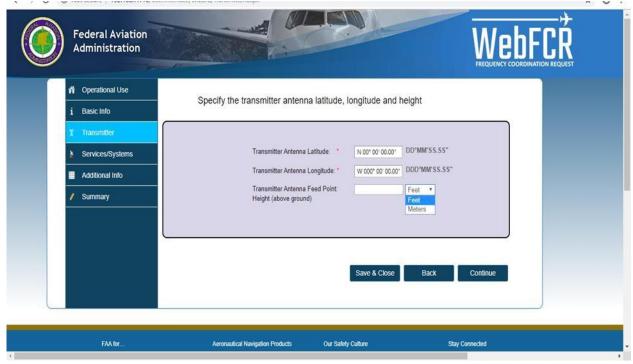
The user should note that, the wizard's left menu allows easy navigation to previous sections and allows the review of a summary of the request. To add technical parameters to any section of the request, it is recommended to navigate via the left menu. At many points throughout the process the user can save the partially completed request.

Another important note is, if the user quits and saves the incomplete application, and returns at a later time, the partially complete application shall be available in the WebFCR under the tab for "upload status page." Upon selection of the incomplete record from the "Upload Status page" the user shall be allowed to complete the application record.

The Transmitter webpage ask the user to specify the transmitter antenna latitude, longitude and antenna height, of which Transmitter Antenna Latitude and Longitude are mandatory fields. The antenna height can be entered in feet or meters, but will be maintained in the reports as feet above ground.







View of the Transmitter Section.

In the next page the specific Service and System Service Type is required.

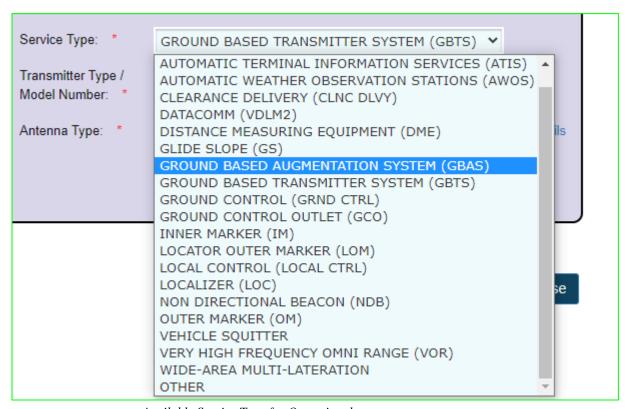
The FCR Wizard supports many aviation services, and allows the selection of the most likely commercially available productions systems, which might be commonly deployed. The Services available are:

- Automated Terminal Information System
- Automated Weather Observation System
- Clearance Delivery
- Distance Measuring Equipment
- Ground Based Augmentation System
- Ground Based Transmitter System
- Ground Control Outlet
- Ground Control
- Glide Slope
- Localizer
- Local Control
- Non Directional Beacon Outer marker
- Vehicle Squitter
- Very High Frequency Omni Range
- Wide-Area Multi-Lateration





- Inner Marker
- Outer Marker
- Others



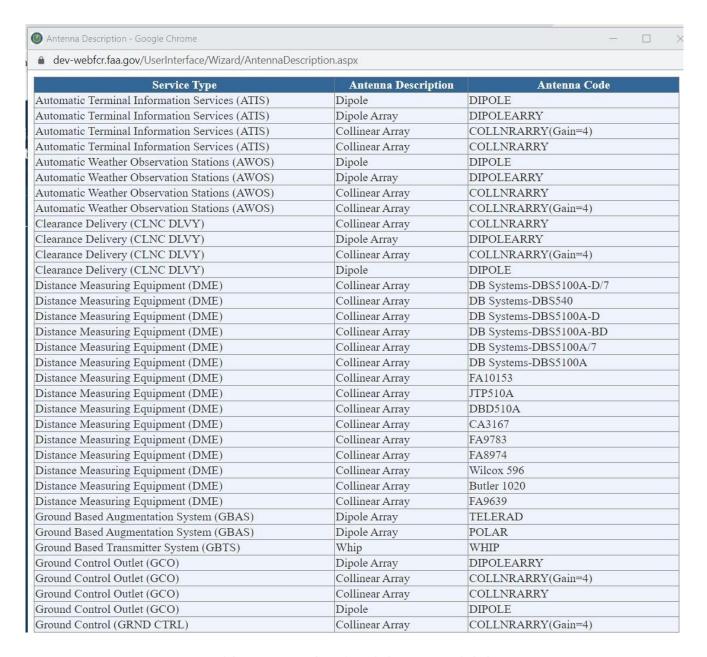
Available Service Type for Operational request

Enter your desired service type, equipment type and antenna type and other information as required then click Continue.





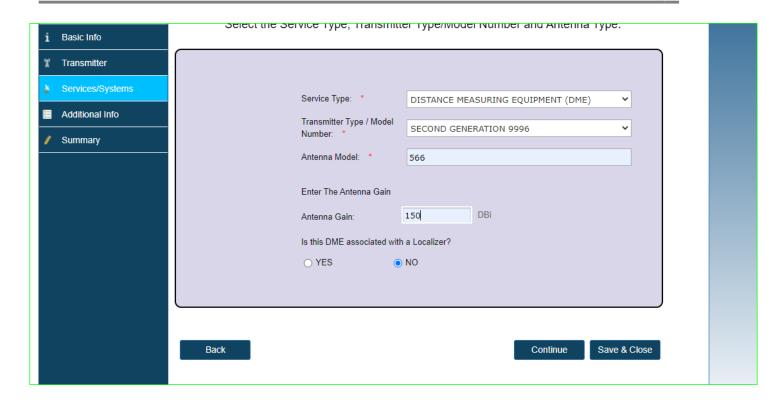
The description for various antenna types can be referred by clicking the "Details" link next to antenna type dropdown. It will open a pop up window with the antenna type description as below:



View of the Pop up Window after Clicking on Details link.







Service Type / Systems Section.

Please note that based upon the Service Type additional questions and parameters are required. For the DME, NAVAIDS oriented data is required as seen above where the antenna gain and associated runway are requested.

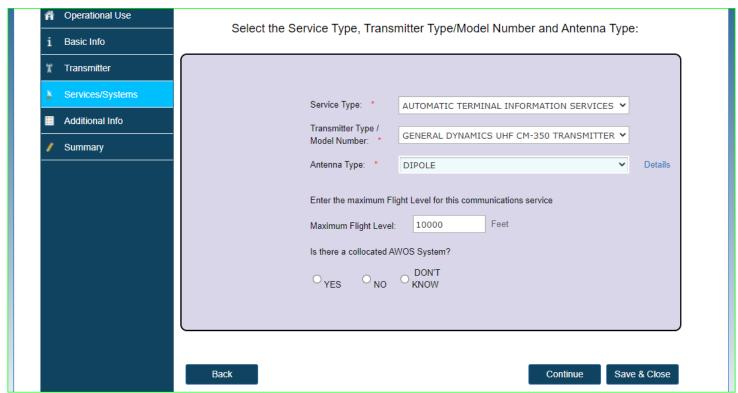
1.13.2 New FCR Request Showing Key Service Types Data Request

1.13.2.1 Service Type – AWOS/ATIS:

For submitting collocated AWOS/ATIS service type: Click New Application Request → Click Continue → Enter Basic information → Enter location information → Select Service Type AWOS shown below.







Services/ Systems section for ATIS Service type.

For AWOS and ATIS co-location of the facilities is requested, to support a search for the companion facility.

If the transmitter and receiver are not collocated the user need to provide the latitude, longitude, and if necessary the height for the receiver antenna.

If "Yes," then the transmitter coordinates and height will be considered for the receiver.

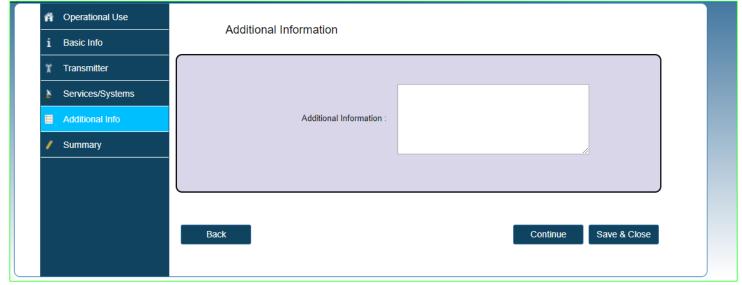
If "No," the receiver page is opened to enter the receiver information.







Receiver Info is required if not collocated with Transmitter.



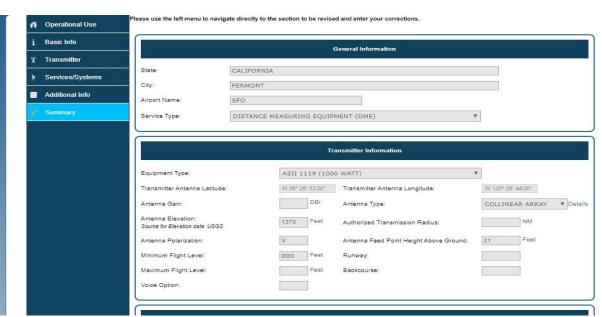
Additional Information section.

As shown, the search for an ATIS facility within one NMI (Nautical Mile) of entered coordinates is executed. If a facility identified, it is recorded as True in the additional information section in the next page (Additional Information). Any additional information regarding this coordination request can be entered in the additional information text field in this page along with colocation results. Click continue, summary page is displayed with all the entered field values and related lookup data.

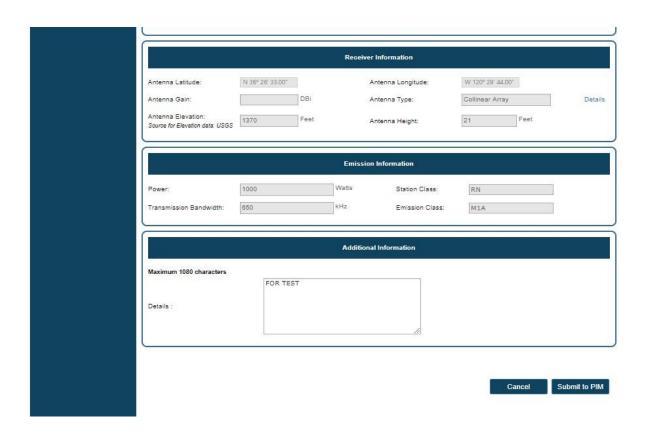
Note: Search for AWOS facility will be performed, similar to above process when the requested facility is ATIS.







View of the summary page before Submission.

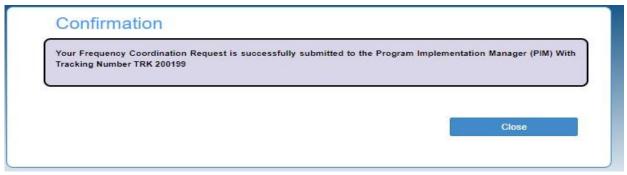


Summary page before Submission.





After reviewing the information, user can submit or cancel the request by using the appropriate buttons. Click 'Submit to PIM', and the coordination request will be submitted to PIM for approval.



Confirmation Message after Submission.

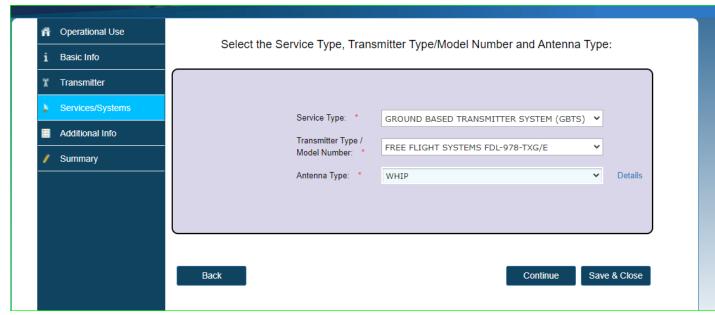




1.13.2.2 Service Type – CLNC DLVY/GBAS/GBTS/LOCAL CTRL/GRND CTRL:

For submitting communications facilities, such as service type CLNC DLVY/GBAS/LOCAL CTRL/GRND CTRL, the receiver information is required

Select Example: Screenshot for Ground Based Transmitter System (GBTS).



Service Type for Ground Based Transmitter System (GBTS)

1.13.2.3 Service Type – Glide Scope (GS):

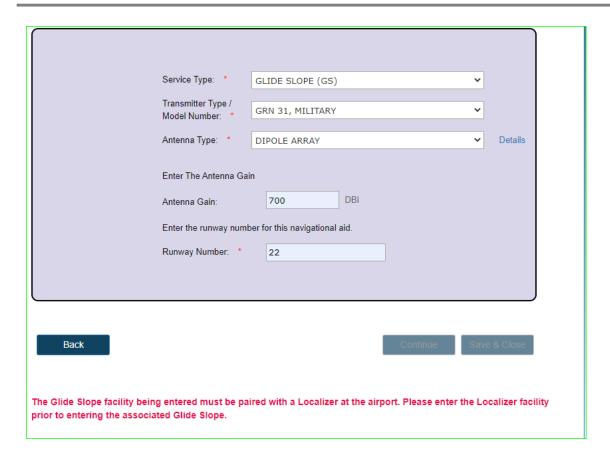
For submitting GS service type, a localizer facility is required.

The glideslope cannot be a standalone system. When the GS service type is selected, the system checks the data base for the associated localizer within a two (2) nautical mile radius. If not found, validation message will be displayed as shown below and the 'Continue' and 'Save and Close' buttons will be disabled so that user cannot proceed with the request. If one or more are found, the glideslope is associated with the localizer.

In your New Application Request \rightarrow Select Service Type \rightarrow Glide Slope.







Validation message for GS service type not associated with Localizer.

1.13.2.4 Service Type – LOC:

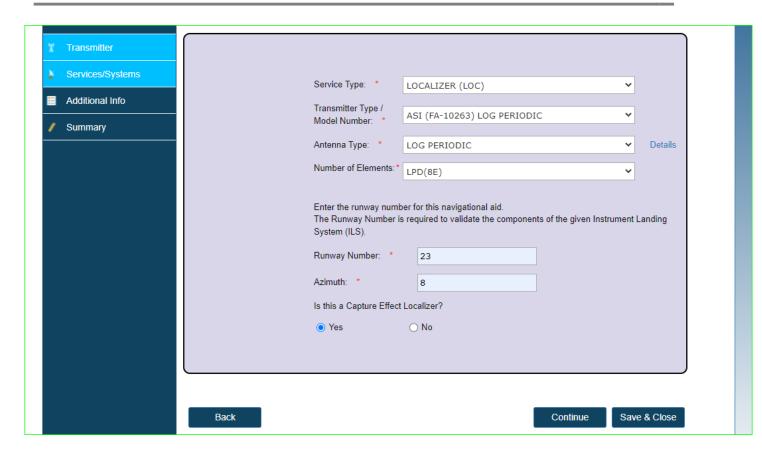
LOC service type has the transmission radius parameter.

For the New Application Request \rightarrow Select Service Type \rightarrow Localizer.

The runway associated with the localizer is required, in addition to the antenna azimuth of the localizer.



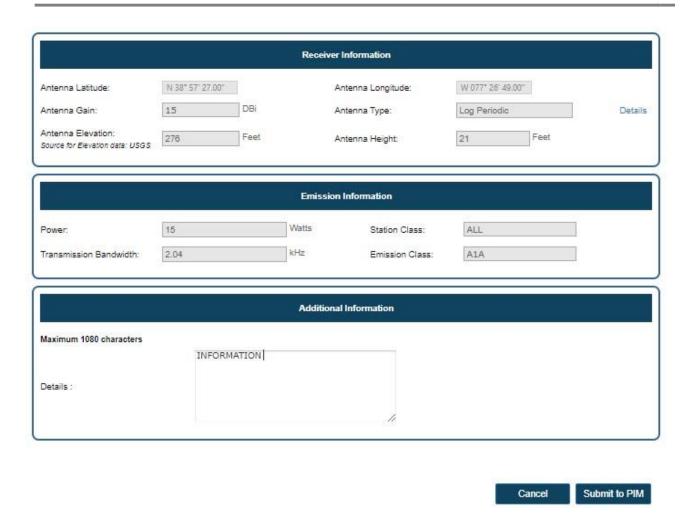




Services/Systems section for LOC service type.







Summary page before Submission.

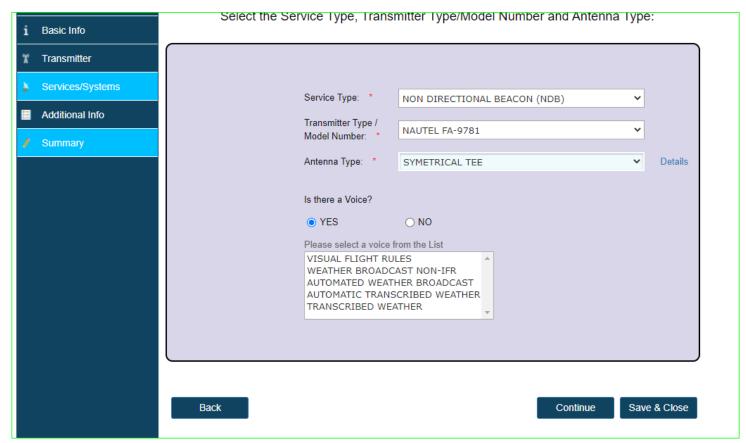
1.13.2.5 Service Type – VOR/NDB:

VOR/NDB service types have unique 'Voice' parameter associated with them. For VOR service type user can select up to two voices from the list and up to one for NDB service type. If no Voice is associated with the request the user can click 'No'.

Under the New Application Request -→Select Service Type → Non Directional Beacon.







NDB service type - 'Voice' selection

The Voice Options for a Non Directional Beacon (NDB) are:

Visual Flight Rules	Meaning NDB is for VFR Flight Only
Weather Broadcast non-IFR	Weather Data is meant for VFR Flight
Automated Weather Broadcast	Aviation Weather
Automatic Transcribed Weather	Aviation Weather
Transcribed Weather	Aviation Weather





Similarly, for the selection of Very High Frequency Omni Range (VOR), the system may support the transmission of the weather via a voice signal and the user will be presented the Voice Option question to define the system associated with the VOR voice weather information.



VOR Service Type (user can choose up to two voices).

The Voice Options for a Very High Frequency Omni Range (VOR) are:

RCO Voice	
AWOS Weather	
ATIS Information	
Transcribed Weather	
ASOS Weather	
Automated Weather	
Broadcast	

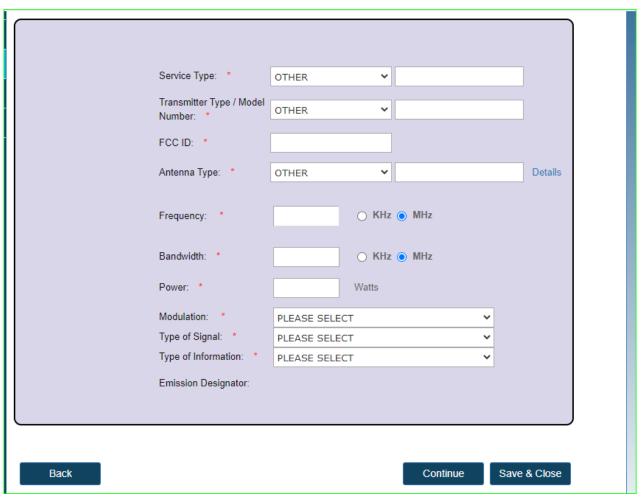




1.13.2.6 Other Service Type

If user needs to enter different service type other than listed in Service Type dropdown, they will be given an opportunity to enter their service type by choosing 'Other' from the dropdown. In this case, user should provide the following information.

•	Service Type	Antenna Type	• Power
•	Transmitter Type	 Frequency 	• Modulation
•	FCC ID	• Bandwidth	• Type of Information
•	Type of Signal		

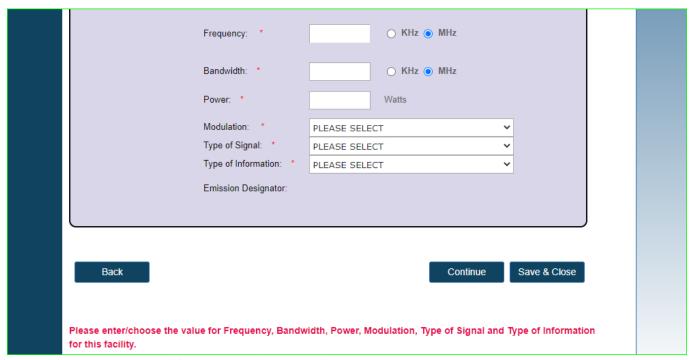


Service Type 'Other'





Emission designator field will be automatically calculated and populated based on the input user provided. Note that all the fields are mandatory in this page. Validation message will be fired for any blank fields or invalid request when user clicks 'Continue' button.



Validation message for incomplete request

1.13.2.7 Additional Information Entry

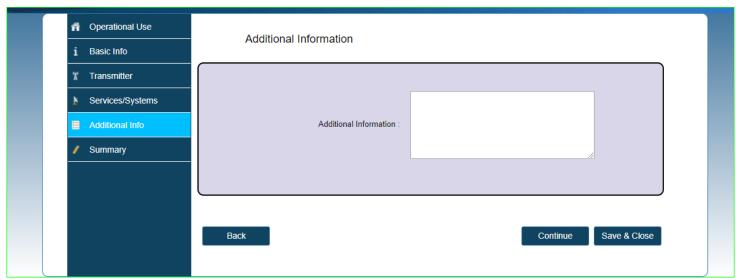
Following the "Services and Systems" entry is a free format text entry for additional information.

The purpose of this section is to capture any critical or informative data or comments about the

FCR request and/or facility which might be helpful to the analysis and engineering of the Frequency assignment by FAA Spectrum Engineering and Policy. Please enter this information in the Additional Information Box and/or if there are questions regarding the applicability of any of the information please discuss the situation with the PIM, prior to submittal.







View of the Additional Info. Section,

Once you click continue, the summary page will open with all entered values, lookup values from equipment, and reference tables.

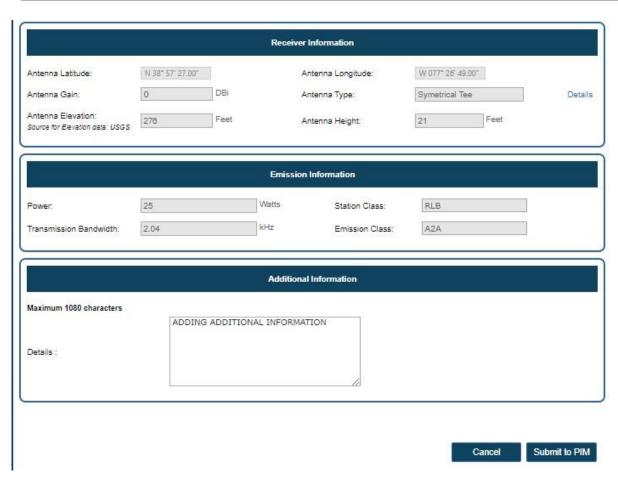
The FCR summary should be reviewed and validated against the official and formally documented information for your facility. Discrepancies should be discussed with the PIM and/or FAA Spectrum to ensure the accuracy of the frequency engineering.



Voice option in the summary page

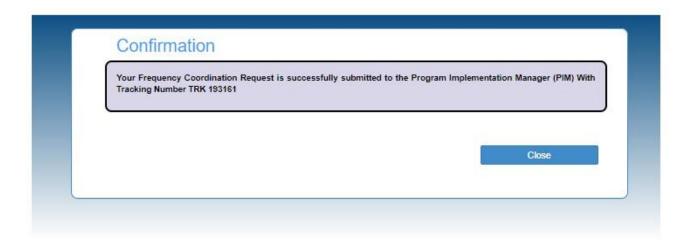






View of the summary page before Submission.

In order to submit the assignment for review, click submit to PIM. A confirmation page will be displayed with a tracking number, and the record will be submitted to the Program Implementation Manager for review.



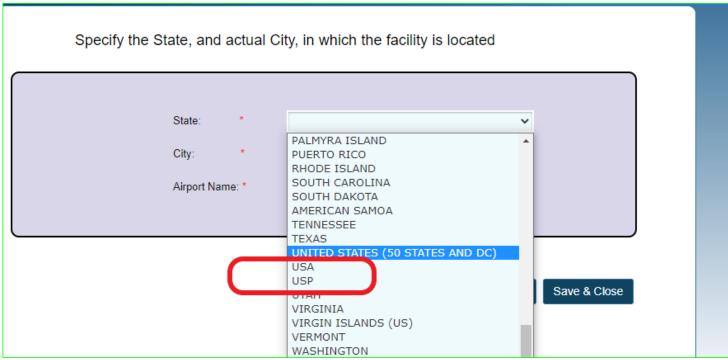




View of Confirmation message after Submission.

1.13.3 USA/USP Assignment Submission – Operational

The USA (United States of America) and USP (United States and Puerto Rico) requests are handled differently in WebFCR application. To start the new assignment/request submission process, click Continue button from the Home Page and go to Basic Information Page. Choose USA or USP from state's dropdown.



Basic Info. Section for USA/USP request..

State and City are required fields.

Airport Name is optional fields for USA/ USP requests.

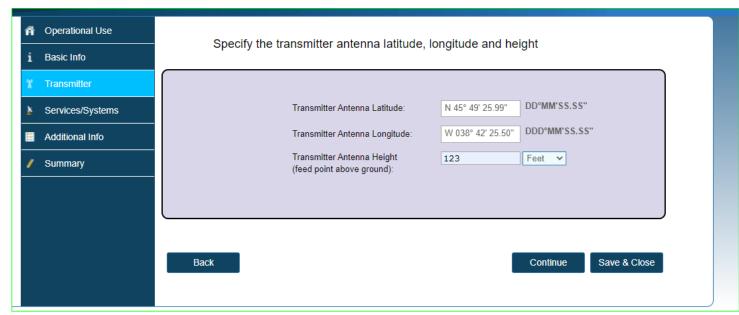
Enter at least State and City, and click Continue

For USA/ USP requests, providing Transmitter coordinates is optional.

The transmitter antenna latitude, longitude and antenna height is typical, but for USA-wide records, Transmitter Antenna Latitude and Longitude are not mandatory fields. The antenna height can be entered in feet or meters, but will be maintained in the reports as feet above ground level.







Transmitter section (USA/USP request).

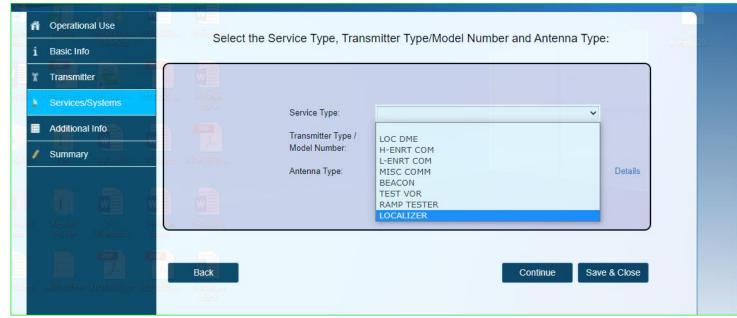
In the next page the specific Service and System Service Type is not required, Ramp Tester is used in Equipment Type field for test purpose.

The FCR Wizard supports many aviation services, and allows the selection of the most likely commercially available productions systems, which might be commonly deployed. The Services available for USA/ USP requests are:

- LOC DME
- H-ENTR COM
- L-ENTR COM
- MISC COMN
- BEACON
- TEST VOR
- RAMP TESTER
- LOCALIZER







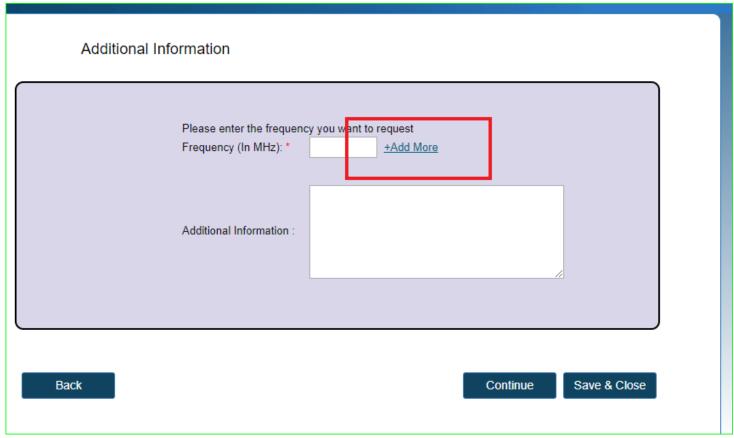
List of service type for USA/USP requests.

Click Continue → Additional information

In the next page the Frequency field is mandatory, to add more multiple frequencies click on "+ Add more"





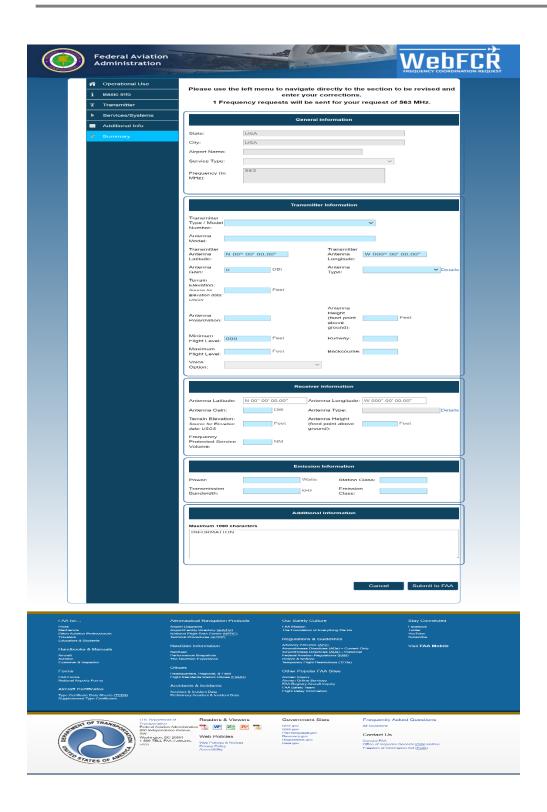


Additional Info page USA/USP requests.

Click Continue → Summary



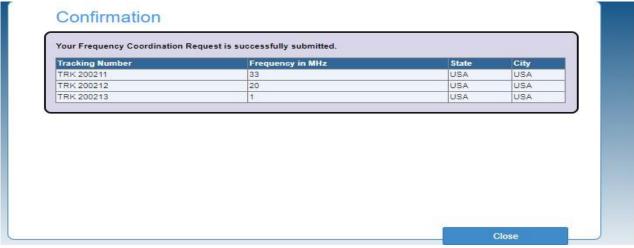








Click Submit to FAA → Confirmation



Confirmation message for USA/USP requests

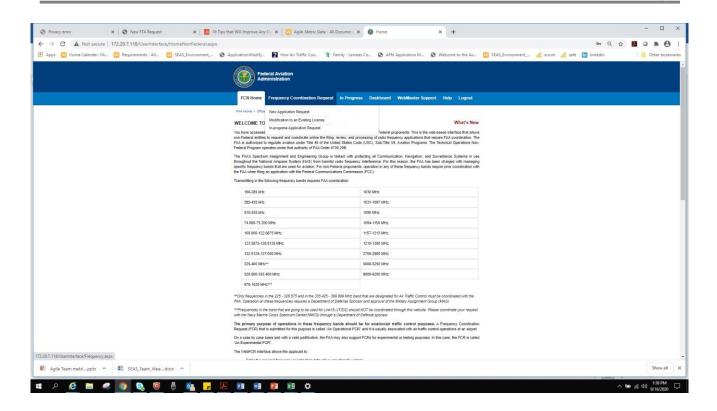
1.14 WebFCR Modification Assignment Submission – Operational

When a given FCC License, impacting the AAG bands, and was previously coordinated with the FAA and requires modification, this process can now be expedited via the WebFCR Wizard.

To submit an assignment for modification request, on the WebFCR main Menu, Click Frequency Coordination Request → Modification to an existing license







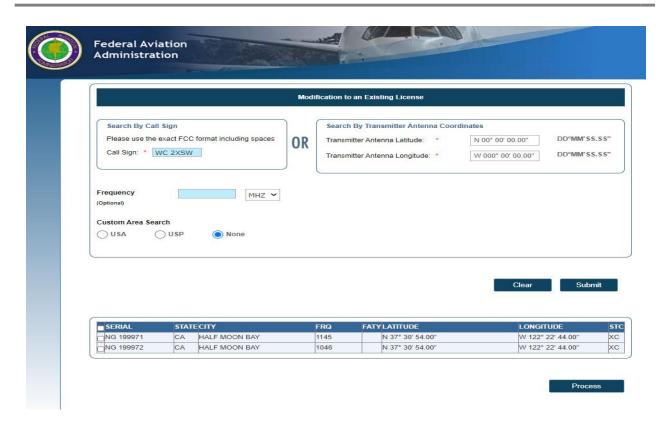
View of the WebFCR Frequency Modification request.

A search criteria page to perform a search for approved assignments is opened in a new tab on the user's browser. First, the user is asked to enter the call sign or a call sign with the frequency combination. The second option more reliable criteria is entering the transmitter latitude and longitude and/or transmitter latitude and longitude including the frequency combination to search for the record. Third option is Search by state, user can search for a record by selecting a state from a drop down list. When the requested search returns one unique assignment, the details of the assignment will be displayed in the FCR summary form. When the given search returns more than one assignment, the results will be displayed in the grid as shown in the screenshot below.

The user may then click to select his/her desired assignment to open the record for modification in the summary format. The selection could be single or multiple.



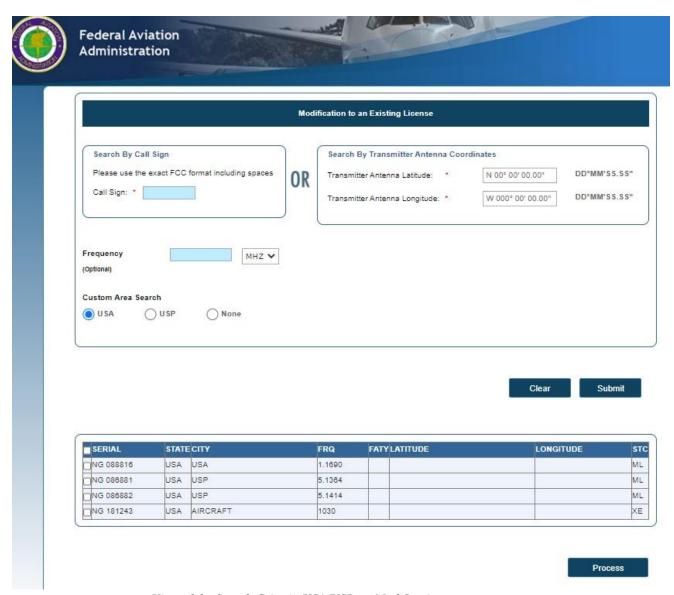




View of the Search Criteria on Modification request.





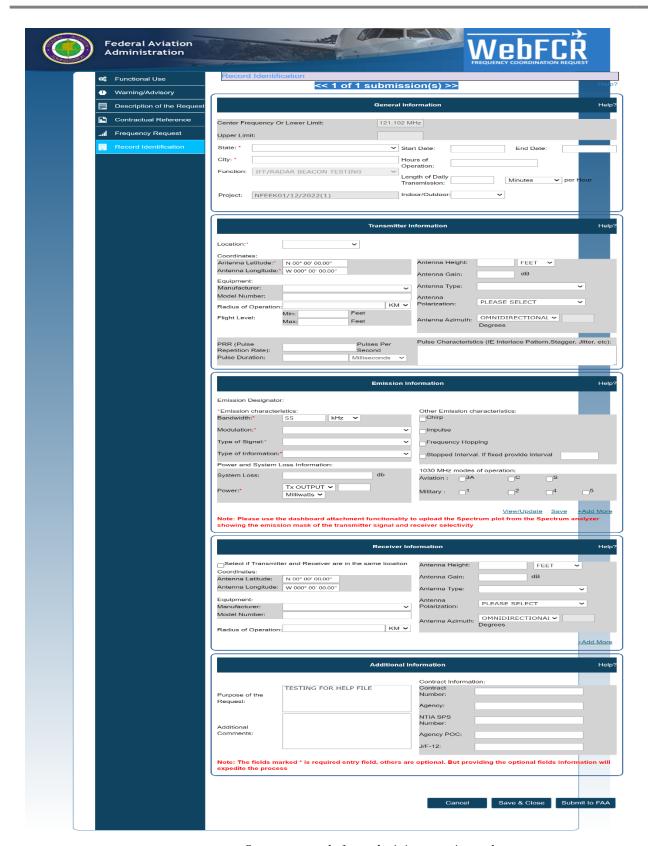


View of the Search Criteria USA/USP on Modification request.

Summary page with multiple record assignments results displayed. The user should accurately identify the target assignment for his renewal process and select accordingly.







Summary page before submitting experimental requests.





The user should review and update the required fields pursuant to the modification request. If the user wants to submit the assignment for PIM approval following update, click submit to PIM. A confirmation page will be displayed with tracking number. Also, the user wants to cancel the process, click cancel.



View of the confirmation message after submitting.

1.15 WebFCR Submitting In Progress Assignment – Operational and Experimental

Any FCR assignment request that are partially completed and saved and/or previously submitted/rejected by the PIM will be displayed in the users WebFCR In-Progress grid. Click Frequency Coordination Request → In-Progress Application Request to access the In Progress grid.







FAA Home + Offices + Air Traffic Organization + Frequency Coordination Request

In-progress Wizard Data

DATE UPLOADED	STATE	CITY	Status	UPDATE
12/9/2019 2:06:13 PM	CA	FERMONT	Operational	In-progress
12/9/2019 1:51:59 PM			Experimental	In-progress
11/20/2019 11:11:37 AM	VA	MCLEAN	Operational	In-progress
11/20/2019 11:09:18 AM			Experimental	In-progress
11/20/2019 11:07:13 AM	VA	MCLEAN	Operational	In-progress
11/19/2019 12:15:21 PM	VA	MCLEAN	Operational	In-progress
11/19/2019 9:21:35 AM			Experimental	In-progress
11/18/2019 2:14:36 PM	VA	MCLEAN	Operational	In-progress
11/18/2019 2:12:37 PM	VA	MCLEAN	Operational	In-progress
11/18/2019 10:08:25 AM	VA	MCLEAN	Operational	In-progress
11/18/2019 8:52:06 AM	VA	MCLEAN	Operational	In-progress
11/18/2019 8:30:13 AM	VA	MCLEAN	Operational	In-progress
11/12/2019 10:48:47 AM			Experimental	In-progress
11/12/2019 10:28:00 AM			Experimental	In-progress
11/12/2019 8:47:15 AM			Experimental	In-progress
11/11/2019 10:53:12 AM			Experimental	In-progress
11/11/2019 10:48:48 AM	DC	DC	Operational	In-progress
11/7/2019 11:31:26 AM			Experimental	In-progress
10/25/2019 11:51:32 AM			Experimental	In-progress
7/12/2018 7:51:14 PM			Experimental	In-progress
7/12/2018 7:47:19 PM			Experimental	In-progress

Delete Selected

View of the In Progress page.

The assignments under the "In-progress data" show the partially completed assignments. Click on the link "In-progress" to continue working on the assignment.





1.16 WebFCR Assignment Submission Using Wizard – Experimental

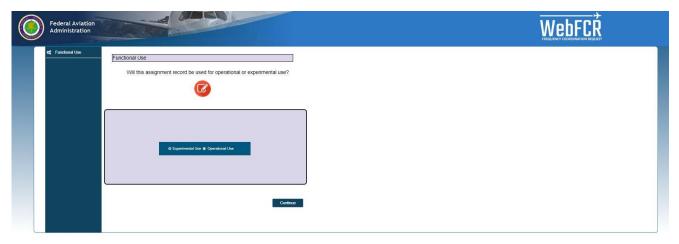
This tool is to supports **FCR** submission for experimental or testing purposes. When the proponent submits the request via the Wizard, it is routed to the appropriate POC based on the frequency (ies) requested. The FAA spectrum will require minimum 30 days to engineer the frequency, during the processing if there are any questions regarding the coordination request the FAA POC will send the inquiry via the WebFCR inquiry tool. The proponent will review the inquiry and respond to the request for further processing.

The following sections will walk the proponent through the new/relocation/update/renewal request submission process:

1.16.1 WebFCR New Assignment Submission Using Wizard –Experimental

Click Frequency Coordination Request → New Application Request. The Functional Use page should be displayed.

1.16.1.1 Functional Use



View of the Functional Use/Experimental.

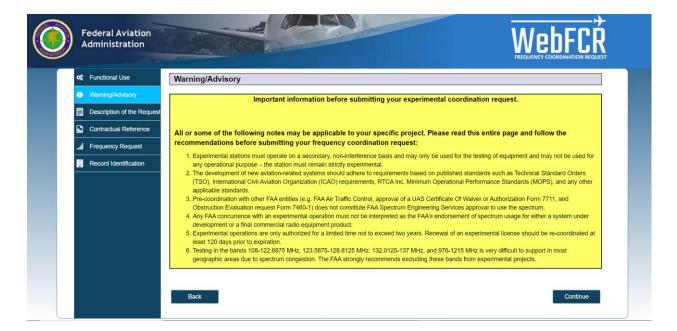
If this assignment record is being used for "Experimental" Select "Experimental Use" and click → Continue. The Warning/Advisory page should be displayed.





1.16.1.2 Warning/Advisory

The page provides the information regarding the pre-requisite necessary for the frequency coordination submission.



View of the Warning Advisory page.

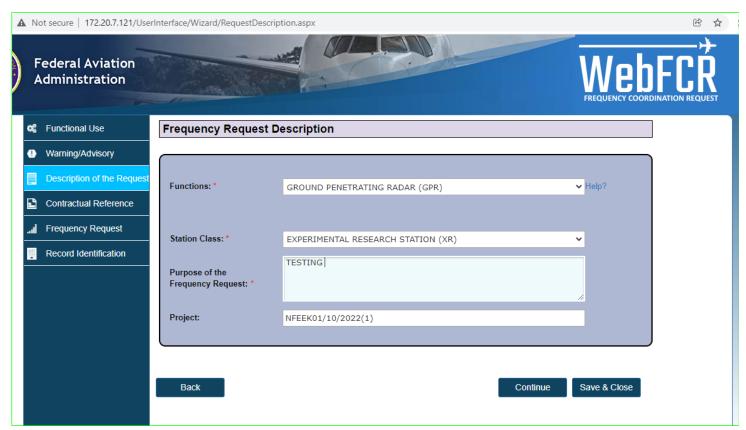
The proponent clicks the continue button, the Request Description Page should be displayed.

1.16.1.3 Request Description

In the Request Description Page, please select the Functions, Station Class, Purpose of the Request and Project Name. Click continue.







View of Description of the Request section.

Functions: Defines the function of the frequency is going to be used for testing.

Data Type: Drop down Selection Mandatory: Yes

The following options will be presented to the user for selection:

- Ground Penetrating Radar (GPR)
- Synthetic Aperture Radar (SAR)
- Radiolocation
- Antenna Testing
- Simulators
- Unmanned Airborne Systems (UAS)
- Airborne Telemetry
- Radar-based experimental system
- High Intensity Radiation Fields (HIRF)/Personal Electronic Devices(PEDS)
- New radio system development
- IFF/Radar Beacon testing





Other

Other: when the functions drop down does not have the expected one the proponent is looking for, the proponent should select other. When the "Other" option is selected in Functions drop down, the Other textbox is displayed and mandatory

Other:	

Station Class: Station class codes describe the purpose for which a particular station is

used. Data Type: Drop down Selection Mandatory: Yes

Listed below are the station class and their definition:

- Experimental Contract Developmental Station XC: An experimental station used for the evaluation or testing under federal government contract of electronics equipment or systems in a design or development stage. (used normally by non-Federal services).
- Experimental Developmental Station XD: An experimental station used for evaluation or testing of electronics equipment or systems in a design or development stage.
- Experimental Export Station XE: An experimental station intended for export and used for the evaluation or testing of electronics equipment or systems in the design or development stage. (used normally by non-Federal services).
- Experimental Composite Station XM: An experimental station used in experimental operations of a complex nature not readily specified or used in an operation which is a composite of two or more of the established experimental categories.
- Experimental Research Station XR: An experimental station used in basic studies concerning scientific investigation looking toward the improvement of the art of radio communications.
- Experimental Testing Station XT: An experimental station used for the evaluation or testing of electronics equipment or systems, including site selection and transmission path surveys, which have been developed for operational use.

Purpose of the request: This field is used to describe the reason for requesting the frequency.

Data Type: Text

Data Length: Up to 250 characters

Project: This name will be associated with the proponent's request submitted. If there are multiple frequency request submitted at a time, then the project name will aid the proponent to specify the group of submission being referenced by the project name when communicating to the FAA Spectrum POC. This field is editable and the user can customize the project name if needed. The project name is generally defaulted to the format- NFE – (meaning Non-Fed





Experimental), First Name Initial, Last Name Initial, Date (N) (Todays Date) with sequence number for count of submissions today. An Example for User John Doe is: NFEJD10052017(2).

The system reference placeholder for the project default format is:

"NFEUserFirstNameInitialLastNameInitialDate".

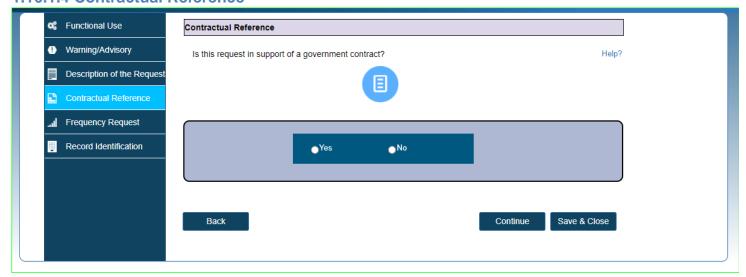
If there are multiple submissions by the proponent on the same day, the system reference placeholder for the project default format will continue as:

NFEUserFirstNameInitialLastNameInitialDate(n)

Note: Functions, Station Class and Purpose of the Request are *Required entry fields.

When the proponent clicks the continue button, the Contractual Reference Page should be displayed.

1.16.1.4 Contractual Reference



Contractual Reference section.

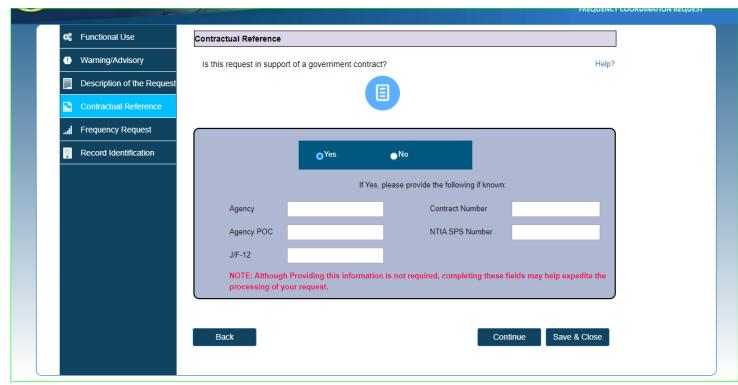
In the Contractual Reference Page, the following question will be presented to the user 'Is this request in support of an existing government contract?'

If the user selects 'No' then the contractual information fields will not be displayed. The user can select 'Yes' if they would like to change their option, otherwise the user clicks 'Continue' button to navigate to the frequency request page.

If the user selects 'Yes' then the contractual information fields will be displayed. The user is encouraged to enter all of the information fields, if the data is known. Following this entry, click the continue button to proceed to the frequency request page.







View of the Contractual Reference section when selecting "Yes".

Agency: The agency name for the contract

Data Type: Text

Agency POC: The Contracting Officer (CO/COR) for the contract

Data Type: Text

Contract Number: The Contract number for the contract

Data Type: Text

NTIA SPS Number: Spectrum Planning Sub- Committee (Certification number). This number is typically available and/or can be provided by the Spectrum POC for your agency

Data Type: Text

J/F-12(Spectrum Joint Frequency Equipment Allocation Process): This military equipment reference information is used primarily for frequency coordination request in support of joint U.S military and/or U.S. allied military systems for exercises and testing. The Spectrum POC for your agency will typically be in a position to provide this information

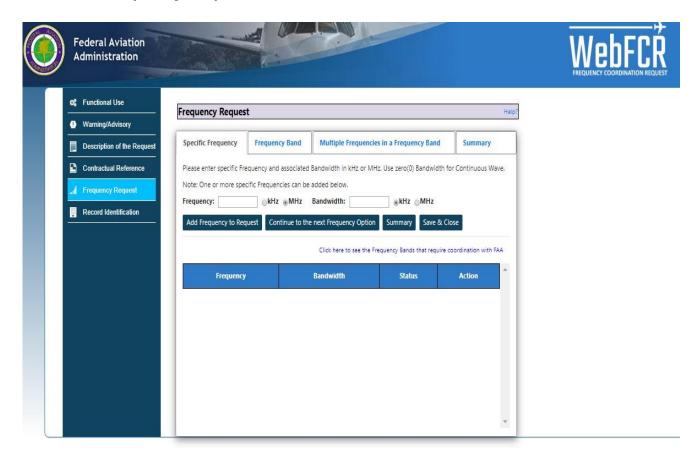
Data Type: Text

The proponent clicks the continue button, the **Frequency Request Page** should be displayed.





1.16.1.5 Frequency Request



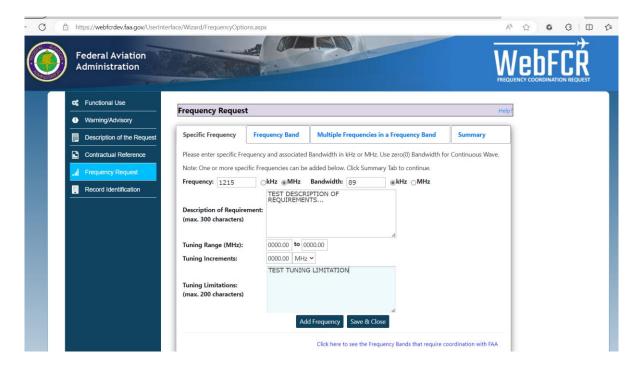
View of the Frequency Request section.

Additional enhancements for the 3 special Radar Bands 1215-1390, 2700-2900, and 9000-9200 MHz have been added. These fields only appear when any of the frequency (s) within the 3 special radar bands is selected. The values entered will be displayed in the Record Identification page, and once submitted to FAA, will be added to the Comments and SUP lines in WebAFM as applicable. Below are the screenshots of additional fields for Specific Frequency, Frequency Band, and Multiple Frequencies in a Frequency band option on the Frequency Request page for the 3 radar bands:

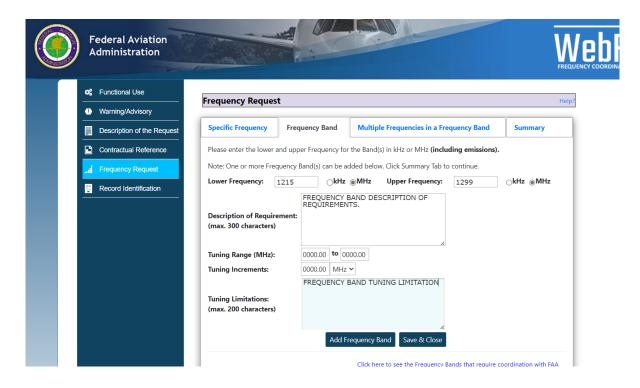




Specific Frequency Tab



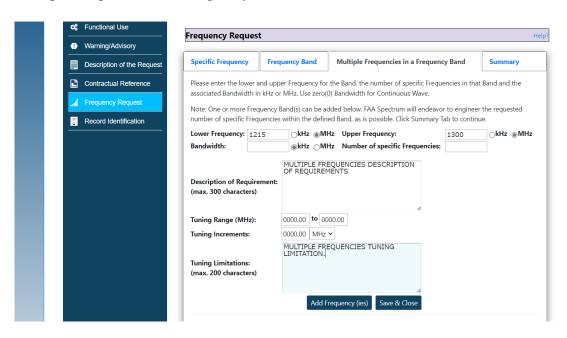
Frequency Band Tab







Multiple Frequencies in a Frequency Band Tab



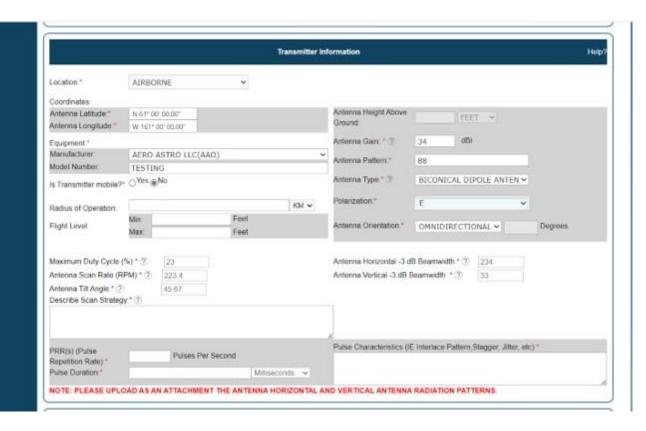
Frequency option pages for option 1, option 2, and option 3

Some additional new fields have been included in the Transmitter Information and Emission Information sections on the Record Identification page as show in the screenshots below:





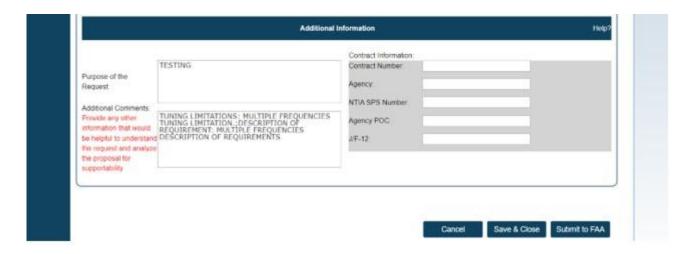
Additional fields/text or text boxes only for the 3 special radar bands are identified with Blue *







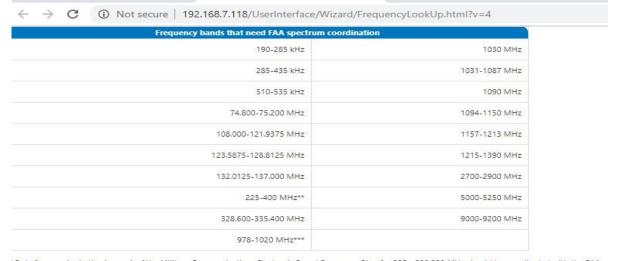




Record Identification Page with changes in different sections

In the Frequency Request Page, the following options are presented to the user to facilitate the entry of the frequencies for FAA Spectrum Coordination:

Note: The proponent should first review carefully the list of aviation frequencies bands listed, against the frequencies or bands being requested including the stated bandwidth to accurately determine the FAA Spectrum coordination impact and overlap. This list can be viewed by clicking the link "Click here to see the Frequency Bands that require coordination with FAA".



Only frequencies in the Annex A of the Military Communications Electronic Board Frequency Plan for 225 - 399.999 MHz should be coordinated with the FAA.

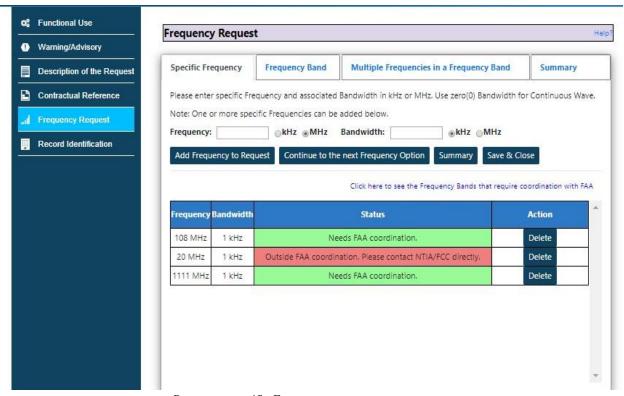
There are three (3) potential ways to structure a frequency request based on the given requirement:

Frequencies in the band that are going to be used for Link16 should be coordinated with FCC directly.





➤ Option #1: The proponent may use the option to 'Request a specific frequency(s)' if the specific frequencies are defined for the coordination. Then enter the specific frequency in the text box with the units as KHZ or MHZ. If there are multiple frequencies to request, then the proponent should click the "Add Frequency to Request" option to enter the subsequent frequencies. Following, the user is presented the list of the entered requested frequencies with the option to delete, if necessary.

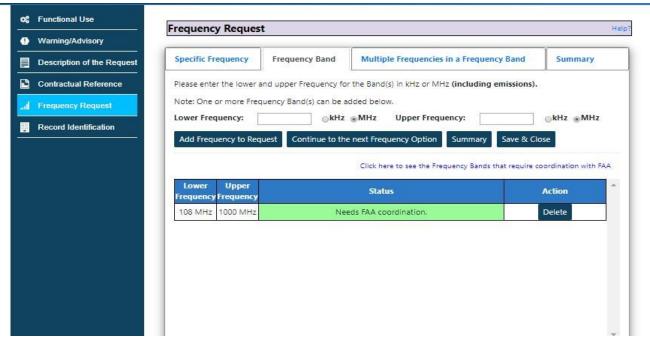


Request a specific Frequency.

➤ Option #2: The proponent may use this second option of 'Frequency band', if the experimental system requires a frequency range. For this option, enter the starting point of the frequency range in the 'Lower Band' field in KHZ or MHZ. The ending range in the 'Upper Band' field in KHZ or MHZ. If there are multiple frequency bands in the request, then the proponent should click the "Add Frequency to Request" option to enter the multiple ranges. Similarly, the user will be presented the list of the entered requested ranges with a delete option as above.





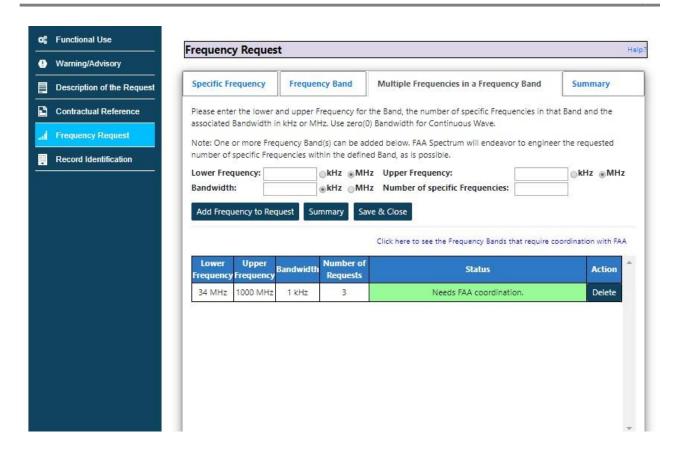


Request a frequency band.

➤ Option #3: The proponent may use the third option of 'Multiple Frequencies in a Frequency Band' to be engineered by the FAA when the general frequency range or frequency band is defined. This option is when the specific frequency is not defined, but can be specified within a proposed range of frequencies of defined band. Enter the starting of the frequency range in the 'Lower Band' field in KHZ or MHZ, the ending range in the 'Upper Band' field in KHZ or MHZ and the number of frequencies to be engineered in the defined range for the experimental device. If the location, emissions and other transmitter characteristics and receiver information are different by assigned frequency, then each request has to be submitted separately.







Request multiple frequencies.

Note: Multiple frequencies can be requested by clicking the <u>Add Frequency to Request</u> and the selected frequencies will be displayed in the table 'Frequency Selected'. Each frequency selected will have a delete button next to it, for the proponent to cancel the requested frequency.

Please provide any additional information to clarify: This text field is presented to the proponent to enter any notes and details that will help FAA Spectrum in engineering the frequencies.

The proponent clicks the continue button, the **Record Identification** Page should be displayed.

1.16.1.6 Record Identification

Note: If the proponent enters multiples for the specific frequencies or frequency bands (**Option #1 or #2**), multiple records will be created, hence, the record identification page will be displayed multiple times, presenting a record identification page for each frequency or band requested. In this mode, the proponent is allowed to update the fields as necessary for each request. After confirmation by the proponent, a tracking number will be generated for each request and each will be submitted to the FAA Spectrum for further processing.





If the proponent request requires a number of frequencies, "Pursuant to FAA engineering" (**Option #3**), then the record identification page will be displayed only one time and will again allow the user update the fields for the request. After confirmation by the proponent, the tracking number will be generated based on the number of frequencies entered by the proponent. The request will be submitted to the FAA Spectrum for further processing. All the parameters selected for the group will be applied to each of the individual requests.

The status of the request can be viewed in the dashboard, refer to section <u>1.6 Dashboard</u>, for specifics on accessing dashboard information

The record identification page will be the summary page of the information entered by the proponent for description of the request, contractual reference and frequency request page

The page is divided into four sections: **General Information**; **Transmitter Information**, **Emitter Information** and **Receiver Information**.

1.16.1.6.1 General Information

The **Generation Information section** has the following fields:

- **Center Frequency or Lower Limit:** The frequency selected in the option 1 or lower band entered in Option 2 or 3 in the frequency request page is populated.
- **Upper limit:** The frequency upper band entered in Option 2 or 3 in the frequency request page is populated.
- **State:** Select the state in which the site of the transmitting station is located.
- **City:** Enter the name of the city or other geographical subdivision in which the site of the transmitting antenna is physically located.
- **Function:** The value will be populated that was selected in the "Request Description Page."
- **Project:** The value will be populated that was selected in the "Request Description Page."
- **Start Date:** The start date for the frequency requested to be used temporary frequency request, this can be selected using a date picker. It cannot be selected less than the current system date.
- **End Date:** The end date for the frequency requested to be used for a temporary frequency request, this can be selected using a date picker.

For temporary frequency request the end date is mandatory.

Hours of Operation: Denotes the time frame, when the frequency will be used and should be entered in the format M-F/9AM -5 PM.





Length of Daily Transmission: Indicates the duration the frequency will be used for transmission, select the unit as Seconds, minutes or Hours and enter the number in the text field.

Indoor/Outdoor: Select Indoor or Outdoor to indicate where the location of the antenna will be used for transmission.

1.16.1.6.2 Transmitter Information

The **Transmitter Information section** has the following fields:

1. *Location: Drop down: The proponent selects the Airborne/Ground/Both to indicate the location of the transmitter values: Airborne; Ground; Both.

Note: The Location selection is mandatory.

When the proponent selects "both," the record identification page will be displayed twice; once for the airborne request and once for the ground request. The record identification page should first display the Airborne parameters (Antenna Height field should be disabled) notifying the user that the data input request is for Airborne and then clear the data to display the Ground parameters (flight level and Antenna Height field should be displayed) with a heading asking the user to input the Ground related information. The coordination will be considered as two records. The label above the Location field will indicate which type of location is requested to be entered by the user.

2. *Coordinates:

Antenna Latitude: Proponent inserts two characters each for the degrees, minutes, and seconds of the latitude of the site named in the transmitter antenna location

Antenna Longitude: Proponent inserts in degrees (3 characters), minutes (2 characters) and seconds (2 characters), the longitude of the site named in the transmitter antenna location. Note: The coordinates entry is mandatory

3. **Radius of Operation**: Enter the radius of operation from a given geographical location actions,

Data Type: Text field:

Units Drop down box: values: KM (Kilometer); NMI (Nautical Miles)

4. **Equipment**:

Manufacturer: Select the Manufacturer of the antenna for which you are requesting the frequency coordination from the manufacturer drop down. If the Manufacturer that you are looking for is not available, then select the Other Option. In the textbox "**Other**" enter the name of the Manufacturer and in the "please justify" textbox enter the justification.

Model Number: Enter the model number of the Antenna in the Model

Number. Data Type: Text field





5. Flight Level:

Min: Minimum altitude

Max: Maximum altitude *Data Type:*

Text field Unit: Feet

6. **PRR** (**Pulse Repetition Rate**): Enter the pulse repetition rate for the application. If for an assignment using a secondary radar on the frequency 1030 MHz or for pulsed radars operating in the bands 1215-1400, 2700-2900, and 9000-9200 MHz, for example.

(The pulse repetition rate is typical for 1030M and pulsed assignments, particularly those in the radar bands).

Data Type: Text Field; Enter multiple values with the '/' delimiter, the range should be

entered like 1-20

Units: pulses per second Examples: 320.1.3K

Note: If the value is above 999 PPS and in thousands at 1000 PPS and above, it is required

to add the letter K at the end of the numeric value

7. **Pulse Duration:** Value indicates the characteristic pulse duration(s) of the equipment.

Data Type: Text field; Enter multiple values with the '/' delimiter, the range should be entered like 1-20

Unit drop down values – micro seconds and milli seconds

- 8. Pulse Characteristics (IE Interlace Pattern, Stagger, Jitter, etc.): *Data Type*: Text field (max character limit is 500)
- 9. **Antenna Height**: Feed point Above ground:

Data Type: Text field;

Units drop down values: meters; feet

10. Antenna Gain:

Data Type: Text field;

Unit: dB

11. Antenna Type:

Data Type: Dropdown box





12. **Antenna Polarization**: Transmitter antenna polarization. **Data Type**: Drop down box Select one of the following values based on the antenna type:

D-Rotating

E-Elliptical

H- Horizontal

J--Linear

L--Left Hand Circular

R--Right Hand Circular

S--Horizontal and Vertical

T--Right and Left Hand Circular

V--Vertical

X--Other

Note: Mandatory for transmitting earth or terrestrial stations (including experimental stations) employing Earth station techniques; or for transmitting Space or Terrestrial stations (including experimental stations) using space station techniques.

13. Antenna Azimuth: Transmitter Antenna Orientation

Data Type: Text field;

Units drop down values: degrees or omnidirectional

Note: Mandatory to provide the value only if the antenna is steerable or directional. If the

antenna is omnidirectional or rotating it is not required.

1.16.1.6.3 Emission Information

Emission characteristics:

1. *Bandwidth: Necessary bandwidth

Data Type: Text Field; Units: HZ; KHZ; MHZ

2. *Modulation: Indicates the type of modulation of the main carrier

Data Type: drop down box

A	Double-sideband	Amplitude Modulated
В	Independent sidebands	
C	Vestigial sideband	
Н	Single-sideband, full carrier	
J	Single-sideband, suppressed carrier	
R	Single-sideband, reduced or variable level	
F	carrierFrequency modulation	Angle Modulated
G	Phase modulation	





D	Emission in which the main carrier is	Amplitude and Angle
P	amplitudeSequence of unmodulated pulses	Pulse
	modulated and angle-modulated	
K	Modulated in amplitude	
L	Modulated in width	
M	Modulated in position	
Q	angle-modulated during the period of the	Frequency or Phase
V	pulseA combination of the foregoing or	
	produced	
W	by other meansCases not covered above, in	Combination
	which an	
X	emisCases not otherwise covered.ion	Explained in Supplementary Details (SUP)
	consists of the main carrier	
N	Emission of an unmodulated carrier.	

3. *Type of Signal: Indicates the details of the signal

Data Type: drop down box

Symbol	Type of Emission	
0	No modulating signal.	
1	A single channel containing quantized or digital signals without the use of a modulating subcarrier. (This excludes time-division multiplex.)	
2	A single channel containing a quantized or a digital signal with the use of modulating subcarrier.	
3	A single channel containing an analogue signal.	
7	Two or more channels containing quantized or digital signals.	
8	Two or more channels containing analogue signals.	
9	A composite system with one or more channels containing quantized or digital signals, together with one or more channels containing analogue signals.	
X	Cases not otherwise covered. Explained in Supplementary Details (SUP)	

4. *Type of Information: Indicates the type of information to be transmitted *Data Type:* drop down box

Symbol	Type of Emission
N	No information transmitted.
A	Telegraphyfor aural reception.
В	Telegraphyfor automatic reception.
С	Facsimile.





D	Data transmission, telemetry, telecomm and; (the symbol D indicates that data, telemetry, or	
	telecomm and information is being transmitted individually or, that any combination of the	
	three are being transmitted simultaneously. If any combination is being transmitted	
	simultaneously, one of the multichannel symbols, 7, 8, or 9, must be used for the second	
	symbol.)	
E	Telephony (including sound broadcasting).	
F	Television (video).	
W	Combination of the above. (Use only for multi-channel systems having the capability of transmitting all information simultaneously).	
X	Cases not otherwise covered. Explained in Supplementary Details (SUP)	

5. System Loss:

Data Type: Text field

Units: dB

6. *Power: This field is for the transmitter output power NORMALLY supplied to the antenna transmission line. The power can be entered as output or ERP (ERP stands for effective radiated power)

First Drop down values will be Transmitter output and ERP: Select the type

Data Type Text Field: Enter the output power or ERP

TX Output Units: Dropdown box: values: Milliwatts; watts; KWatts; MWatts

ERP Units: Dropdown box: values: dBm;dBW

Note: The following conversions are performed by the tool, this is for informational purpose and there is no action from the proponent end.

When the power is selected output there will be no conversion applied. If the power is entered in ERP, the following calculation will be performed

ERP power in dBm or dbW – system loss +gain

The value obtained from above formula will be converted to watts using the following conversion

If ERP was entered in dbm

Power in w = 10((P(dBm)-30)/10)

If ERP was entered in dbW

Power in
$$W = 10^{\frac{\text{Power in dBW}}{10}}$$

7. Other Emission characteristics:





Chirp: Checkbox format Impulse: Checkbox format

Frequency Hopping: Checkbox format

Stepped Interval. If Fixed provide interval: Text field

Note: The value is required only if

8. 1030 MHZ modes of operation:

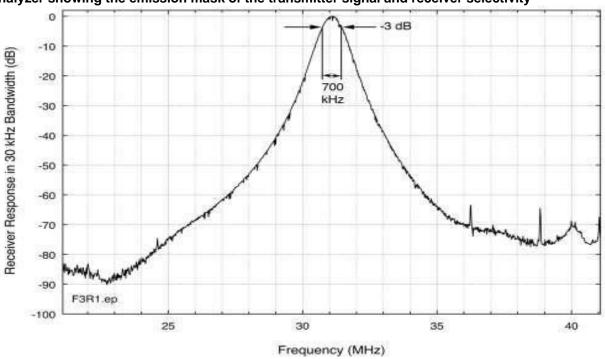
Checkboxes for each option:

Aviation: 3A; C; S **Military**: 1; 2; 4;5

Multiple values can be selected.

There should be a <u>+ Add More</u> hyperlink provided below this section

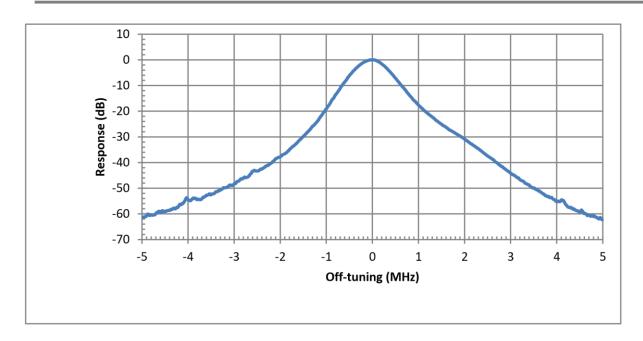
Note: Please use the <u>dashboard attachment</u> functionality to upload the Spectrum plot from the Spectrum analyzer showing the emission mask of the transmitter signal and receiver selectivity



Transmitter spectrum plot from a spectrum analyzer showing the spectrum mask







Spectrum Plot of the IF Receiver Selectivity/Independent Frequency Rejection (IFR)

1.16.1.6.4 Receiver Information

The following option should be provided with a checkbox to the user below these fields: Select if Transmitter and Receiver are in the same location (Checkbox). If the Transmitter and Receiver are located in the same location, when the proponent select this checkbox then the transmitter information will be copied to the receiver. If the receiver and transmitter are not located in the same location, the selection of the checkbox is not required and the parameters for the receiver should be entered by the proponent

If the Transmitter and Receiver are not located in the same location, then the proponent will not select the checkbox and enter the receiver information 1. Coordinates: Antenna Latitude:

Antenna Longitude:

- 2. (Default Format) Degrees, Minutes, Seconds with 2 digit decimals; [indicate options] [provide tool tips]
- 3. Equipment: Manufacturer: Dropdown box; values refer to Manufacturer table
 - i. Model Number: Text Field
 - ii. Other: [Display this statement "Please contact NTIA to get the equipment approved"]
- 4. Radius of Operation: Text field unit Dropdown box values: KM or Nautical miles
- 5. Antenna Height: Above ground: Text field unit Dropdown box values: Meters or Feet
- 6. Antenna Gain text field unit dB
- 7. Antenna Type: Dropdown box (If the antenna type is an array, then the gain should not be populated and the proponent will enter the value).





- 8. Antenna Polarization Dropdown box
- 9. Antenna Azimuth: text field; units drop down values: degrees or omnidirectional.

There should be a "+Add more" hyperlink provided below this text field.

1.16.1.6.5 Additional Information

- 1. Purpose of the Request; Text field; populated from the Request Description page.
- 2. Additional comments: Text field (max character limit is 1080). The field will be prepopulated information if the proponent enters in the 'Please provide additional information to clarify' should be prepopulated and the field should be editable.
- 3. Contract Information: auto populated if the user entered details in the Contractual Reference page.
- 4. Contract Number: Text field; auto populated if the user entered details in the Contractual Reference page.
- 5. Agency: Text field; auto populated if the user entered details in the Contractual Reference page.
- 6. NTIA SPS Number: Text field; auto populated if the user entered details in the Contractual Reference page.
- 7. Agency POC: Text field; auto populated if the user entered details in the Contractual Reference page.
- 8. J/F-12: Text field; auto populated if the user entered details in the Contractual Reference page.

Click the submit button and the request form gets submitted to FAA Spectrum. An email notification will be sent to the proponent with the tracking number. The proponent should allow 30 days from the day of submission for FAA Spectrum Engineering to process the record.

If you have reached 30 days and did not receive any communications, the proponent may use the inquiry feature available in the tool to communicate to the FAA Spectrum POC.

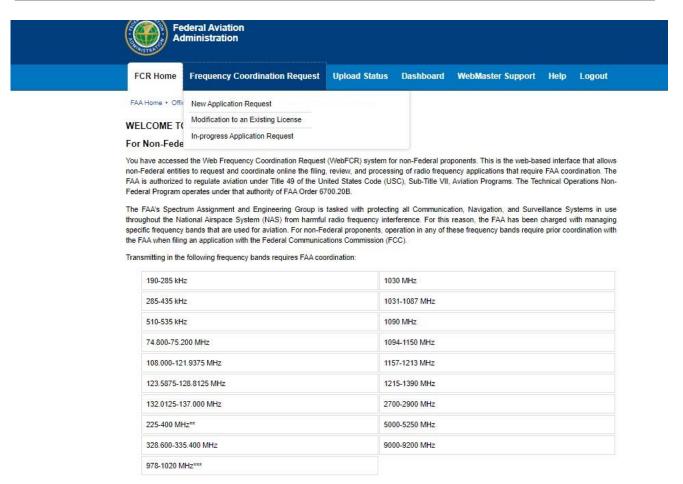
1.16.2 WebFCR Renewal/Modification Assignment Submission – Experimental

When a given FCC License, which impacts the AAG bands, and was previously coordinated with the FAA is subsequently scheduled for renewal/modification, this process can now be expedited via the WebFCR Wizard.

To submit an assignment for renewal/modification request, on the WebFCR main Menu, click "Frequency Coordination Request" → "Modification to an existing license."







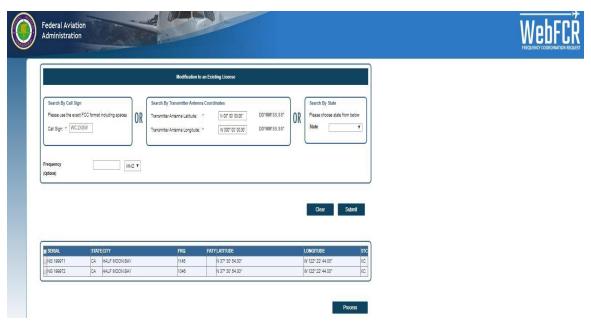
Home Page -Modification to existing License.

The search criteria page to perform a search for approved assignments will open in a new tab on the user's browser. The user is asked to enter the call sign or a call sign with the frequency combination. The third, more reliable entry criteria would be entering the Transmitter Latitude and Longitude and/or Transmitter Latitude and Longitude including the Frequency combination to search for the record. When the requested search returns one unique assignment, the details of the assignment will be displayed in the FCR record summary form. When the given search returns more than one assignment, the results will be displayed in the grid as shown in the screenshot below.

The user may then click to select his desired assignment to open the record for renewal in the record summary format. The user should accurately identify the target assignment for his/her renewal process and select accordingly.







Modification to existing License.

The user can select single assignment or multiple by selecting the checkbox next to the assignments and clicks the process button. Each will be processed in order. The following record identification page will display the details of the assignment.

For renewal request without NO modifications, the proponent should click the "Submit to FAA Spectrum" button. If the proponent would like to submit modifications to the request, the technical changes and updates would be made in the form; and click the "Submit to FAA Spectrum" for processing.

A confirmation page will be displayed with tracking number. Also, the user wants to cancel the process, click "Cancel."

1.17 Program Implementation Manager (PIM)

The Program Implementation Manager (PIM), sometimes referred to as the Non-Federal Program Liaisons, and/or Non-Federal Coordinators, have access within WebFCR to review via a Service Area focused dashboard to see all new assignments submitted by the proponent(s) for their given service area. The PIM typically is NOT involved in the license renewal process. After login, the Service Area PIM user is displayed the PIM Home page which has information for the PIM summarizing the FCR review process and suggested support which may be applicable. The general objective of this interim PIM validation process is to allow the PIM to confirm from the Proponent the given criteria and basis for his FCR application and to provide a determination that FAA intends to proceed with the new facility as a project. In addition, the PIM is to initiate the key FAA process steps required to support the proponent's FCR request pursuant to FAA requirements.





1.17.1 PIM Support Areas

- 1) "Review the submitted data on the basic frequency coordination summary and confirm the validity of the application and next steps.
- 2) "Confirm the latitude and longitude of the transmitter antenna as indeed official survey data, and that the antenna height is the distance from the ground to the antenna feed point.
- 3) "For new facilities, coordinate with NFDC to obtain the FAA Identification Code for the transmitter facility and add it to the application.
- 4) Review the purpose, related data and parameters are generally sufficient for Spectrum to proceed with engineering the frequency assignment.
- 5) Upon agreement with the proponent, send the application to FAA Spectrum to schedule the engineering of the Frequency Coordination Request (FCR).



FAA Home . Offices . Air Traffic Organization . Frequency Coordination Request

Welcome To The WebFCR Non-Federal Program Implementation Manager (PIM) Tool

What's New

The FAA's Spectrum Assignment and Engineering Group (Spectrum) has structured this Tool to support the PIM in the review and validation of non-experimental Frequency Coordination Requests (FCR) filled by non-Federal proponents.

The PIM's review and validation process includes the following:

- · For new facilities, verify that the FCR application is valid for the location and aeronautical service requested.
- For new facilities, coordinate with the National Flight Data Center group to obtain the FAA Identification Code for the new facility. Include this
 information in the FCR application before submitting it to Spectrum.
- For new facilities and relocation of existing facilities, verify that the latitude and longitude of the transmitter antenna in the FCR application is actual surveyed data.
- . For all applications, verify that the antenna height in the FCR application is the actual distance from the ground to the antenna feed-point.
- . For renewal request, verify that the existing Federal Communications Commission (FCC) license is still valid.

Note that for renewal requests, a coordination is only necessary if there is a technical change in the application, such as new equipment, revised latitude/longitude, etc.

Once the review and validation process is completed, the PIM submits the FCR application to Spectrum.

For reference, the frequency bands that require prior coordination with the FAA before filing an application with the FCC are detailed on the WebFCR Login page.

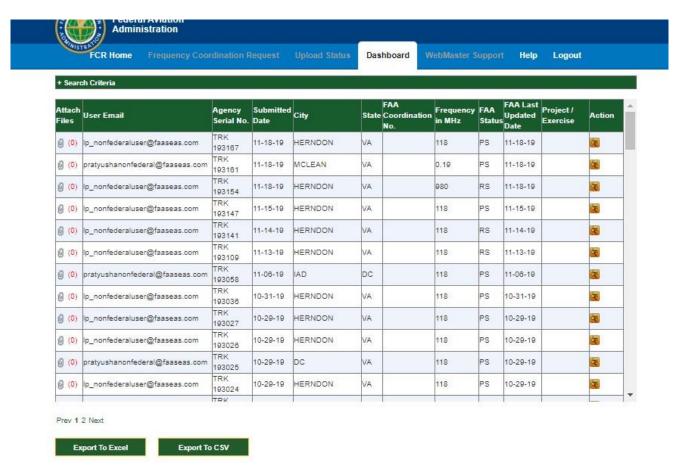
WebFCR home page for PIM user.





Following the summary PIM Home page, the primary action Tab available is the FCR Dashboard. Upon Clicking on the Dashboard tab, the user is displayed a view the proponent(s) assignments submitted for the respective service area.

The Dashboard displays all submitted assignments from both new and renewal application request. Also, those assignments which may have been previously returned to a proponent for revision are displayed.



View of the Dashboard page for PIM user.

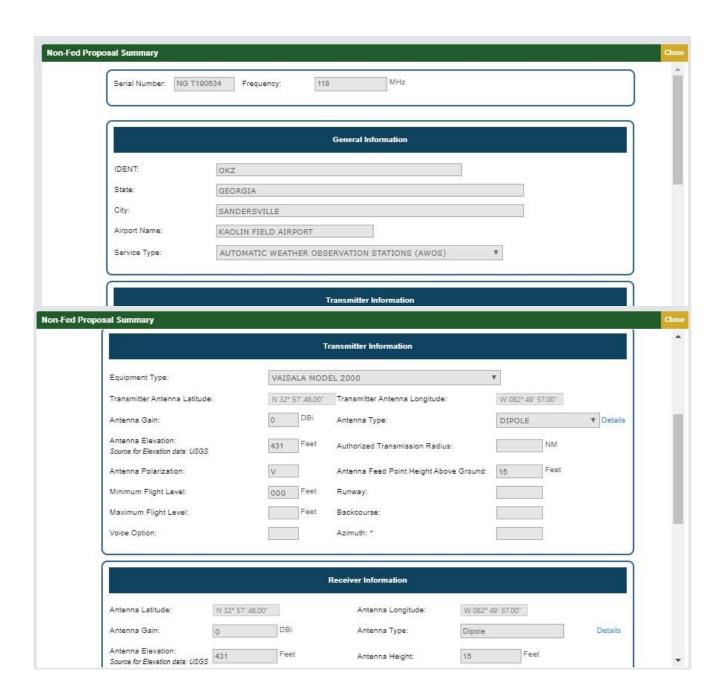
On the PIM Dashboard the FAA Status Codes are:

FAA Status	Description PS
Submitted	Proponent
PR	Returned to Proponent
RN	Region New (FAA Spectrum)

The Action button, allows the PIM user to review and approve/reject an assignment. A summary window is opened which displays the given assignment information. PIM can only process only the assignments with FAA status as PS. Those with FAA Status PR have been returned to the proponent for revision and re-submission.

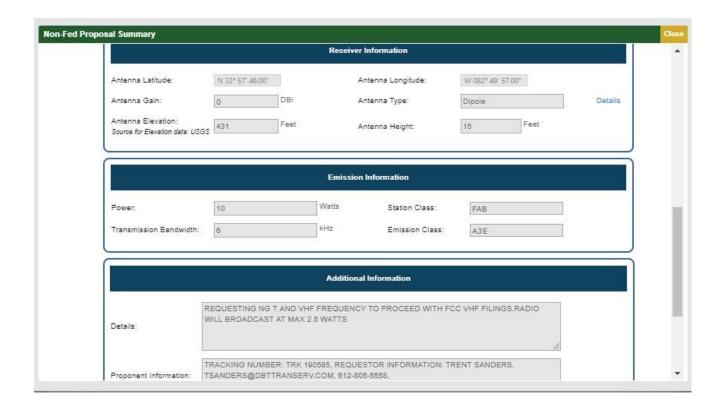












View of the summary for assignment information.

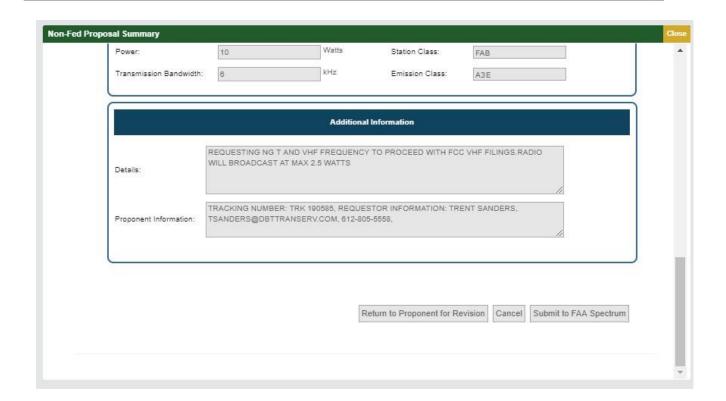
As outlined earlier, the PIM is encouraged to communicate with the proponent, to review the submitted FCR request and to provide the support and clarifications which may be required by the proponent.

Following the review and support is provided, the PIM can concur with the FCR request by clicking on the "Submit to FAA Spectrum" Button.

To return the assignment to proponent for any revision or update, upon clicking Return to Proponent for Revision and a text box will open, allowing the PIM user to enter the reason for return/update and then click "Return to Proponent for Revision" again. Once returned, the FAA status of the assignment will be updated to PR.







Non Fed proposal summary before submitting to FAA.

For proponent new FCR request which obtain FAA concurrence as a project, the PIM typically works with FAA NFDC to request the FAA Facility Identification Code or IDENT.

Upon approval of the FCR request, the PIM user is requested to enter the FAA NFDC IDENT prior to selecting the 'Submit to FAA Spectrum' function. Once approved, the FAA status of the assignment will be updated to RN. The cancel button may be used to close this window.