

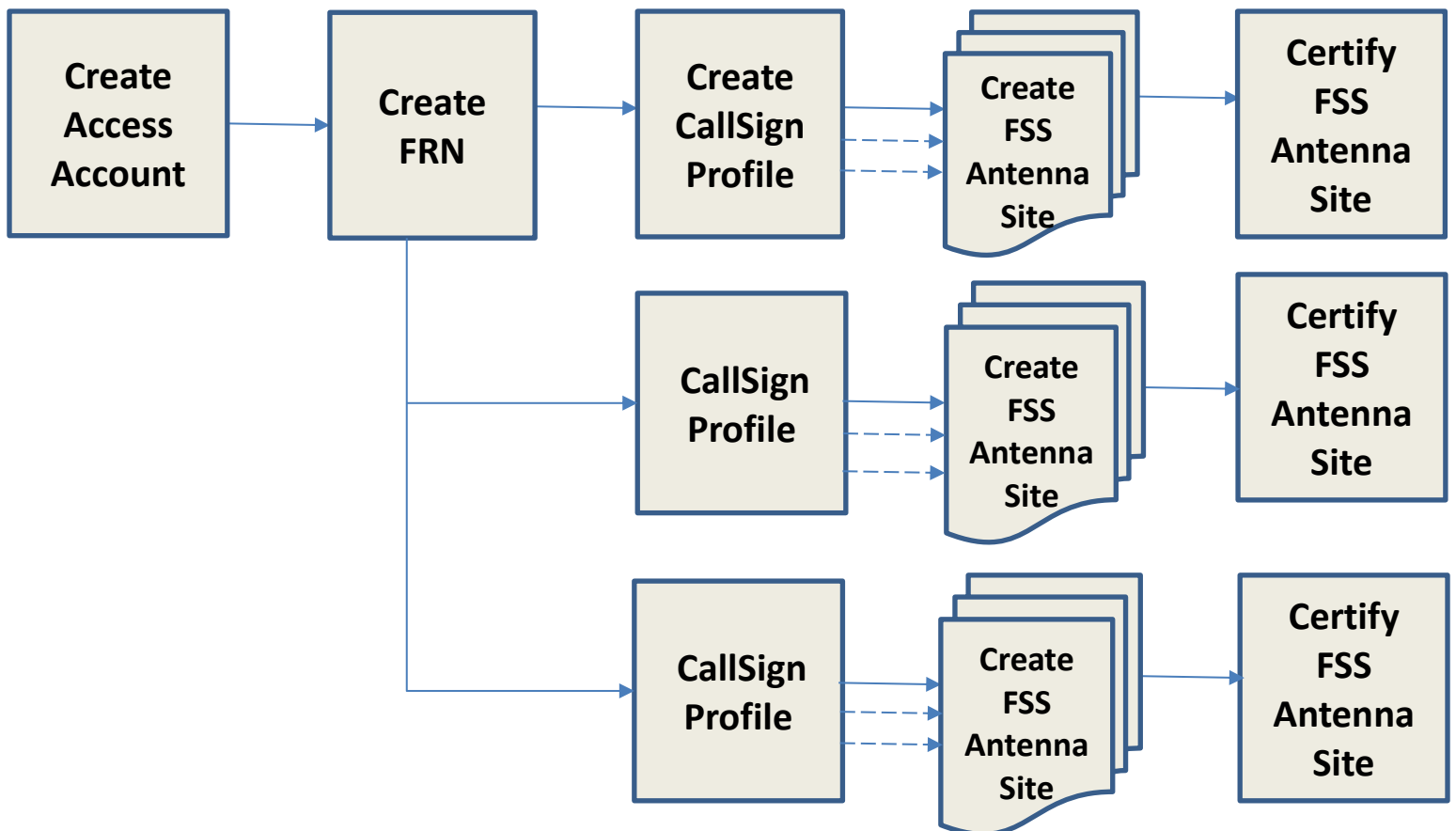
3.5 GHz FSS Antenna Registration System (ARS) Database

Antenna site registration process- (Production Version)

Pursuant to § 96.17, FSS earth stations operating in the 3600-3700 MHz and 3700-4200 MHz (TT&C only) are eligible for protection from CBRS operation if they are registered with the FSS ARS database and renew their registration annually. A Spectrum Access System (SAS) uses this information to protect FSS earth stations in accordance with FCC rules.

This document describes the step by step procedure for registration of any eligible FSS earth station seeking protection from CBRS operation.

The block diagram below illustrates the overall process of FSS earth station site registration and certification.



Create Access Account

- An applicant must create an account [User Name (email address), Password] with the Commission Registration System(CORES), using the URL below, prior to accessing the database for the first time:
 - <https://apps.fcc.gov/cores/userLogin.do>
 - Detailed instructions are available at:
https://apps.fcc.gov/cores/html/Register_New_Account.htm

Create FCC Registration Number (FRN)

- The applicant must also acquire a FCC Registration Number (FRN) or associate an existing FRN with its Username prior to creating an ARS account. The applicant cannot register an FSS earth station site unless a FRN is associated with the Username.
- Once the applicant is logged in to CORES, the following menu will display and the first time applicant should select “Register New FRN”. There are other options in the main menu if the FRN was previously created. applicants may use an existing FRN by selecting “Associate Username to FRN” and following is the instructions available at:
https://apps.fcc.gov/cores/html/Associate_Username_to_FRN.htm



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- Populate the fields as shown below to receive a new FRN. CORES assigns a new FRN once the required fields are successfully populated:

FRN Registration

Register a Domestic Entity			
Entity Type:	Federal Agency	Subtype:	Commission
Entity Name:*	<input type="text"/>		
If your organization has an Employer Identification Number or Taxpayer Identification Number , enter it here: <input type="text"/>			
If your organization does not have an Employer Identification Number , select a reason: <input type="text"/> ?			
Contact Information			
Organization:	<input type="text"/>	Position:*	<input type="text"/>
Salutation:	<input type="text"/>	First Name:	<input type="text"/>
Middle Initial:	<input type="text"/>	Last Name:	<input type="text"/>
Suffix:	<input type="text"/>		
Address Line 1:*	<input type="text"/>	Address Line 2:	<input type="text"/>
City:*	<input type="text"/>	State:*	ALABAMA
Zip Code:*	<input type="text"/> <input type="text"/>	Phone:*	<input type="text"/> <input type="text"/> <input type="text"/> ext. <input type="text"/>
Fax:	<input type="text"/> <input type="text"/> <input type="text"/>	Email:*	<input type="text"/>
<input type="button" value="SUBMIT"/> <input type="button" value="Go Back"/>			
Asterisks (*) indicate required fields.			
Revised: April 2005 Form 160 - Approved by OMB 3060-0917			

- The applicant must populate the following fields (shown with * in the picture above) in order to receive a new FRN:
 - Entity name
 - Employee Identification Number or Taxpayer Identification Number (if not exempted)
 - Applicant's position in the organization/Company
 - Applicant's contact information (address, phone number, email)
 - The other fields are optional.
- Once the required fields are populated click on 'Submit'
- CORES System will generate a new FRN and the user can see the list of FRNs created.

FRN	FRN Name	Date Created	Last Update	User Options
0266502285	CompanyA	10/24/2017	10/24/2017	Update/View FRN List Users
0266502293	CompanyB	10/24/2017	10/24/2017	Update/View FRN List Users
0266502301	CompanyC	10/24/2017	10/24/2017	Update/View FRN List Users
0266502509	Company D	11/13/2017	11/13/2017	Update/View FRN List Users
0266502533	Company F	12/04/2017	12/04/2017	Update/View FRN List Users

Create record in FSS ARS (Antenna Registration System)

- Once the FRN is created, the applicant should log in to the FSS ARS (Antenna Registration System) page using the following link to continue:
 - <https://www.fcc.gov/licensing-databases/fcc-user-login>
- Select 'FSS ARS' button.
- Use email address/password to get access to the database page.
- The connection between CORES and FSS ARS recognizes the user and displays all FRNs the user has previously created under "My FRN List".

Fixed Satellite Services - Antenna Site Registration

Hello Navid Golshahi,

Welcome to the FCC Fixed-Satellite Service (FSS) Earth Station Antenna Registration System. This application will allow you to maintain call sign information and register antenna sites for protection from interference from Citizen Band Radio Service (CBRS). After selecting an FRN below, you will be able to select or add a call sign. The call sign screen will allow you to maintain your antenna site information.

To get started, please select an FRN below:

My FRN List	Search
0266502285	
0266502293	
0266502301	
0266502509	
0266502533	
0266502723	

Create Call Sign Profile

- Click on the appropriate FRN and then select New Call Sign to create call sign profile. All FCC license holders should have Call Signs for their operational applications.

Home > FRN: 0266502533

Call Signs

No Call Signs exist for this FRN, click the Add New Call Sign button to add a new Call Sign

Call Sign Actions

New Call Sign

Back

Search

- Populate the fields for the Call Sign profile.

Home > FRN: 0266502533

[Click here to view the notice required by the Paperwork Reduction Act](#) Approved by OMB
3060 - 1211
Estimated time per response: Up to 2 hours

Licensee FRN: 0266502533

Call Sign

* Call Sign:

- The following fields for the Call Sign profile must be filled out:

- Call Sign
- Licensee Name
- Licensee Address
- Licensee City
- Licensee State
- Licensee Zip Code
- Licensee Phone
- Licensee E-mail
- POC First Name
- POC Last Name
- POC Address
- POC City
- POC State
- POC Zip Code
- POC Phone
- POC E-Mail

- Once the required data are populated click on 'Submit'. The following summary Call Sign page will be displayed:

Home > FRN: 0266502285

☰ Call Signs

Call Sign	Licensee Name	FRN	POC First Name	POC Middle Initial	POC Last Name	POC Suffix	POC Company	POC Phone
E555001	David Victor	0266502285	Updated		Smith			(443)-567-6587

- Click on the specific Call Sign number and then select 'View Call Sign' on the right side, as seen below:

Home > FRN: 0266502285

Call Sign	Licensee Name	FRN	POC First Name	POC Middle Initial	POC Last Name	POC Suffix	POC Company	POC Phone
E555001	David Victor	0266502285	Updated		Smith			(443)-567-6587

Call Sign Actions

New Call Sign

View Call Sign

Update Call Sign

- At this point, the Call Sign profile has been created.
- Select 'View Call Sign' option, and the following page will appear:

Home > FRN: 0266502285 > Call Sign: E555001

Licensee

David Victor

Address: 32 Bethesda Ave
Bethesda, MD, 32342

Phone: (301)-443-4352

E-Mail: DaveVictor12@YAHOO.COM

Point of Contact

George Smith

Address: 324 P Street
Betheda, MD, 32342

Phone: (443)-567-6587

E-Mail: Example@yahoo.com

Call Sign Actions

Re-Certify Multiple Sites

Deactivate All Sites

Update Call Sign

Back

Antenna Sites

Registration Number	Location Status	Latitude DMS	Longitude DMS	Pointing Azimuth	Pointing Elevation Angle	Lower Frequency	Tracking Telemetry Command	Certification Date
<p>Antenna Site Actions</p> <p>New Antenna Site</p>								

Create FSS Antenna Site

- Click on 'New Antenna Site' on the right side of the page and enter the data for the FSS earth station site. The page below is shown after the "New Antenna Site" is selected.

New Antenna Site

Start Date/Time UTC:

Related Registration:

* Antenna Gain (dBi):

* Lower Frequency (MHz):

* Upper Frequency (MHz):

* Pointing Azimuth (degrees):

* Pointing Elevation (degrees):

* GSO Satellite Longitude Decimal Degrees (+E,-W):

* Used for Tracking, Telemetry and Command:

Earth Station Latitude:

* Degrees: * Minutes: * Seconds: * Direction:

Earth Station Longitude:

* Degrees: * Minutes: * Seconds: * Direction:

Earth Station Latitude Decimal:

Earth Station Longitude Decimal:

* Earth Station Site Elevation (meters):

* Earth Station Antenna Height AGL (meters):

- The applicant must provide the following data in order for their FSS earth station to be protected from CBRS operation in the 3550-3700 MHz band.
 - Start Date. The date when the FSS protection should be started. If this field is blank, the protection is expected to commence within 24 hours of the date/time that the registration record is created or updated.¹
 - Antenna Gain (dBi)
 - Lower and Upper Frequencies in MHz (Earth station Receive Frequency)
 - Earth Station Pointing Azimuth in degrees
 - Earth Station Elevation in degrees
 - GSO Satellite Longitude in decimal
 - Whether the earth station is being used for the Tracking, Telemetry and Command (TT&C)
 - Earth Station Latitude and Longitude
 - Earth Station Site Elevation (meters)
 - Earth Station Antenna Height Above the Ground Level (AGL in meters)
 - Earth Station antenna gain pattern should be provided as a document attachment

Certify FSS Antenna Site

- Once the data are populated click on 'Submit and Certify'. Without certification the registration file will not be saved.

¹ Before SAS Administrators are approved to provide commercial service and authorize CBSD spectrum requests, this field may be left blank because FSS sites will have no means to be protected until SAS and CBSDs are operable.

- The following window will display as part of antenna site certification. Fill out the name and title fields and click on the 'Certify' button.

Antenna Site Certification

The Applicant certifies that all statements made in this filing and in the exhibits, attachments, or documents incorporated by reference are material, are part of this filing, and are true, complete, correct, and made in good faith.

* First Name M.I. * Last Name Suffix * Title

Certify Cancel

- A new FSS earth station site record for protection is created and certified with a newly assigned unique Registration Number. Once you click on the 'Certify' button above, the window below will appear which displays the certified/active site. The registration for one antenna site is completed and the site location status is "Active". The applicant can create and register multiple antenna sites under one Call Sign.

Home > FRN: 0266502285 > Call Sign: E555001

Licensee

David Victor

Address: 32 Bethesda Ave
Bethesda, MD, 32342

Phone: (301)-443-4352

E-Mail: DaveVictor12@YAHOO.COM

Point of Contact

George Smith

Address: 324 P Street
Bethesda, MD, 32342

Phone: (443)-567-6587

E-Mail: Example@yahoo.com

Call Sign Actions

Re-Certify Multiple Sites

Deactivate All Sites

Update Call Sign

Back

Antenna Sites

Registration Number	Location Status	Latitude DMS	Longitude DMS	Pointing Azimuth	Pointing Elevation Angle	Lower Frequency	Tracking Telemetry Command	Certification Date
FSS0001164	Active	N33 47' 46.1"	W117 05' 15.1"	155.2	26.3	3,700	false	2018-01-31

Rows 1 - 1 of 1

Antenna Site Actions

New Antenna Site

Deactivate Antenna Site

Update/Re-Certify Antenna Site

View Antenna Site

Update Antenna Site Registration

Data Field Update, Deactivate / Activate, Recertify

- Using this page the applicant can update, deactivate, activate, and recertify the existing earth station site data. Every time an antenna site data field is updated, re-certification is required. The applicant can also deactivate the antenna site(s) for a period of time and reactivate/re-certify it at a later time.

- For an earth station site to be protected by the SAS, the registration should be active and certified within the current or previous calendar year. A deactivated (Inactive) registration is not expected to be protected by the SAS. The picture below shows a de-activated site. Sites with 'Inactive' status are not entitled to protection.

Home > FRN: 0266502285 > Call Sign: E555001

Licensee

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E-Mail: DaveVictor12@YAHOO.COM

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Call Sign Actions

Re-Certify Multiple Sites

Update Call Sign

Back

Antenna Sites

Registration Number	Location Status	Latitude DMS	Longitude DMS	Pointing Azimuth	Pointing Elevation Angle	Lower Frequency	Tracking Telemetry Command	Certification Date
FSS0001164	Inactive	N33 47' 46.1"	W117 05' 15.1"	155.2	26.3	3,700	false	2018-01-31

Rows 1 - 1 of 1

Antenna Site Actions

New Antenna Site

Deactivate Antenna Site

Update/Re-Certify Antenna Site

View Antenna Site

- For the site to be protected, it should be active and certified. The latest (most recent) certification date, however, should not be earlier than the previous calendar year (per §96.17(d)); a registration should be certified at least once per calendar year. Per §96.17(d), certifications are valid for the calendar year in which they are made, through the end (December 31) of the following calendar year. For example, in the active registration below with a certification date of 2/8/2018, the earth station should receive protection until 12/31/2019.

Licensee

David Victor

Address: 32 Bethesda Ave
Bethesda, MD, 32342

Phone: (301)-443-4352

E-Mail: DaveVictor12@YAHOO.COM

Point of Contact

George Smith

Address: 324 P Street
Bethesda, MD, 32342

Phone: (443)-567-6587

E-Mail: Example@yahoo.com

Call Sign Actions

Re-Certify Multiple Sites

Deactivate All Sites

Update Call Sign

Back

Antenna Sites

Registration Number	Location Status	Latitude DMS	Longitude DMS	Pointing Azimuth	Pointing Elevation Angle	Lower Frequency	Tracking Telemetry Command	Certification Date
FSS0001164	Active	N33 47' 46.1"	W117 05' 15.1"	155.2	26.3	3,700	false	2018-02-08

Rows 1 - 1 of 1

Antenna Site Actions

New Antenna Site

Search

Antenna Configuration Changes²

- When a FSS antenna configuration change is planned for an active and certified FSS earth station site, SASs will protect the “current” configuration (e.g., pointing azimuth and elevation angle of the earth station antenna) based on the most current (certified) registration record for that antenna site. To make change in antenna site configuration to be protected, a new registration record needs to be created and certified for the new configuration, with an optional “Start Date / Time” to indicate when the protection of the new configuration is to commence (e.g. new pointing azimuth and elevation angle).
- The registration records are stand-alone records. The licensee should "Deactivate" the previous registration record after protection is no longer required for the original configuration.
- The “Start Date / Time” field is an optional field which is expected to be used to indicate when the protection for this registration record is expected to take effect. If this field is blank, SAS protection is expected to commence within 24 hours of the date/time that the registration record is created or updated.
- Changes made to the data fields of a registration record are applied immediately in the database, upon the completion of the certification of the record.

² The "Related Registration" field is an optional field that was originally intended to point to a registration record that would be replaced by a new registration record. The “Related Registration” field is not expected to be used, but it may have future use, to be determined.

- When changes to site registration records are made, the previous (old) entries are not displayed or presented through the API. However, the FSS ARS application platform keeps a history of changes made for the purposes of auditing and system management.
- Logic checks between data fields in the ARS are expected to be performed by external systems (e.g., SAS, FCC auditing of the data integrity of site registrations, etc.)
 - In general, the FSS ARS database will verify that data fields are syntactically correct and within valid ranges, but will not perform more complex validation between fields and records.
 - Ensuring data integrity is a shared responsibility among the creators, and consumers, of the data in the database.
 - This approach should enable extensibility and reuse of the ARS database, with perhaps new added features in the future, to be applicable to other spectrum bands other than 3.5 GHz.
 - If it is discovered that certified records contain semantic error(s), such problems should be resolved immediately with the FSS licensee, and if necessary, escalated to FCC support staff to facilitate prompt resolution.
- Changes to data fields can be made before and after the “Start Date / Time”.
- It is expected that the FSS community and the SAS community, will develop “best practices” and standard operating procedures that will not be mandated by the FCC.
- To meet Part 96 protection requirements, when all of the following conditions are met, SASs are expected to provide protection to FSS earth station sites registered in the ARS database:
 - The Location Status is “Active”
 - The Certification Date is within the current or previous calendar year.
 - The “Start Date / Time” or certification date (if Start Date/Time is blank) is before the current date / time.

CUSTOMER SUPPORT

- Customers with questions regarding filing registrations may contact the FCC Licensing Support via the web at <https://www.fcc.gov/wireless/available-support-services>, or by telephone at 1-877-480-3201 (select option #2). The support hours of operation are 8 a.m. to 6 p.m. EST, Monday through Friday (except Federal holidays)