## **B. How to Use the FCC & FAA Databases**

The FCC provides information on licenses and antenna structures in two databases: the Universal Licensing System (ULS) and the Antenna Structure Registration (ASR). Searching for a license provides a lot of information, but the most useful for us are a point of contact and information on the frequencies and power levels.

## FCC: Universal Licensing System <a href="http://wireless2.fcc.gov/UlsApp/UlsSearch/searchLicense.jsp">http://wireless2.fcc.gov/UlsApp/UlsSearch/searchLicense.jsp</a>

**Step 1: Search.** You can search for a license with the name of the licensee, the call sign, or the FCC Registration Number (FRC). If you do not have this information, you might find the call sign and licensee name using AntennaSearch.com (see below), or you can search a number of different ways, including geographically – in a radius around a specific address or coordinates.

Communications Commission	E	CC Home   Search   Updates   E-Filing   Initiatives   For Consumers   Find People
Universal Licensing System		
FCC > WTE > ULS > Online Systems > License Search		FCC Site Map
License Search		2 HELP
The ULS License Search enables you to search for a wide range of licenses i combinations with the <u>Advanced Search</u> and search within services like Am	n the Universal Licensing System. The License Search here provides access to t ateur using service-specific criteria. Please be aware that some combinations of License Search By Call Sign V =	he most basic attributes of a license. You can also specify more attributes search criteria may result in a longer wait.
Advanced Search	Convice Creatific Connels	Specialized Search
Want to search for licenses of any radio service code based on combinations of general license attributes?	Want to search for licenses within a service using criteria relevant to that specific service?	Want to use customized criteria to search for a license within all relevant services?
Advanced License Search Indudes: • License Search Indudes: • Detes (Grant, Last Action, etc) • License State, ZiP, and Name • License State, ZiP, and Name • Radio Service Code • And more.	<ul> <li>Aircraft</li> <li>Amateur Vanity Call Signs, Operator Class, and more.</li> <li>Operator Class, COLEM, and more.</li> <li>GMRS</li> <li>Ship MMS1z, Ship Name, and more.</li> </ul>	<ul> <li>Market Based Search by auction number, marketa, channel block and more.</li> <li>Site Based Search by station class, frequency, Antenna Structure Registration (ASR) number, and more.</li> <li>Facility ID Bearch by Facility Identification Number for Broadcast Auxiliary Ucrease.</li> <li>Geographic Search by continates, county/state, address and frequency information.</li> <li>Buildiout Deadline Search by Eulidout Deadline information, auction, radio services, and more.</li> <li>Search by Lease information.</li> <li>Buildiout Deadline Search by Lease information.</li> <li>Buildiaut Reconfiguration Search Search by Lease information.</li> </ul>

Step 2: See Results – Click on the call sign/lease ID to go to the details.



**Step 3a: Details: Main Page** – This page contains: license expiration date, licensee name and contact, point of contact for the license itself, eligibility (*"applicant provides building and engineering services and will use radios to coordinate employees"*), radio service type, and regulatory status. The tabs at the top of the page provide more information. The Admin tab contains application information, the license itself, and other correspondence.

MAIN ADMIN					
Call Sign	WQCU741	Radio S	ervice	IG - Industrial/Business Pool, Conventional	
Status	Active	Auth Ty	pe	Regular	
Dates					
Grant	03/31/2015	Expirat	on	05/31/2025	
Effective	03/31/2015	Cancell	ation		
Control Points					
1	900 7th Street NW, Washington, DC P: (202)207-3916				
Licensee					
FRN	0013410576	Type		Corporation	
	()(iew Ownership Filing)	1,50			
Licensee					
International Brotherhood of	Electrical Workers	P:(202	430-9495		
900 7th Street NW		F:(202	289-5871		
ATTN Jason Reidenbach - Ch	ief Engineer	Eanone			
Contact		D (570	505 0004		
Federal License Management Fric 7 Wolfe		P:(570 F:(570	1505-3894 651-9032		
1784 E. 3rd Street Suite 269		E:supp	ort@federal-license.con	n	
Williamsport, PA 17701-386	2				
Land Mobile Data					
Extended Implementation (S	low.	Assoc.	all Signs		
Growth)					
Eligibility					
90.35A1 - Applicant provide	s building and engineering services and will use	radios to coordinate employees.			
Ownership and Oualificat	ions				
Padio Service Type	Mobile				
Radio Service Type Regulatory Status	Drivate Comm	Interconnected	No		
Alien Ownershin	Private Comm	Interconnected	NU		
Is the applicant a foreign nover	ment or the representative of any foreign governme	ıt?	No		
Is the applicant an alien or the r	epresentative of an alien?		10		
Is the applicant a corporation or	canized under the laws of any foreign government?				
Is the applicant a corporation of government or representative t	which more than one-fifth of the capital stock is own	ed of record or voted by aliens or their representatives s of a foreign country?	r by a foreign		
overment or representative thereof or by any corporation organized under the laws of a toreign country? s the applicant directly or introlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by the applicant directly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by					

**Step 3b: Details: Locations Page.** The location tab shows the address of the antenna or the range of operation. You can click each location for information on the height of the building, the height to the tip of the antenna, and more.

Industrial/Busines	ss Pool, Conventional Li Summary Refine Search 🕞 Retu	icense - WQCU741 - International Brotherhood of Electrical Workers m to Results. 👜 Printable Page 👔 Reference Copy 💠 Map License			
	MAIN ADMIN	LOCATIONS FREQUENCIES			
Call	Sign	WQCU741	Radio Service	IG - Industrial/Business Pool, Co	onventional
2 To 10 Lo	otal Locations ocations per Summary Pag	je		A	Locations Displayed:   <u>Fixed</u>   <u>Mobile</u>   <u>Itinerant</u>   <u>Temp Fixed</u>   <u>6.1m</u>
SC	= Special Condition	= Termination Pending			
Loca	ation	Transmitter Address /Area of Operation	L	atitude, Longitude	Status
<u>1 - F</u>	Fixed	900 7th Street NW Washington, DC	3	8-54-05.2 N, 077-01-33.5 W	
<u>2 - 1</u>	Mobile	14.0 km radius around centerpoint	3	8-54-05.2 N, 077-01-33.5 W	
<b>2 T</b> o 10 Lo	otal Locations ocations per Summary Pag	je		AI	Locations Displayed:   Fixed   Mobile   Itinerant   Temp Fixed   5.1m

**Step 3c: Details: Frequencies Page.** This page shows the type of device/station class, the number of units of each device, the Output Power and Maximum ERP (effective radiated power) for each frequency (in MHz). This example shows a Mobile Relay (FB2) at location 1, and 25 Mobile (MO) units at the other three frequencies.

ncies Summary	License - WQCU741	- International Brother	hood of Electrical Wor	kers				
arch <b>Q</b> Refine Search [	Return to Results	Printable Page	Reference Copy 🔶 !	lap License				
MAIN ADM		FREQUENCIES						
Call Sign	wo	QCU741			Radio Service	IG - Industrial/Business Pool, Conventional		
4 Frequencies for all loc 20 Frequencies per Sum	ations mary Page				Filter Frequencies By Location: All Locations <b>v</b> GO			
(sc) = Special Condition	TP = Termination Per	nding				Define View: General   Build	out   COSER   Emi	ission I
Frequency	Loc#	Ant#	Freq ID	Station Class	Units	Paging Rec.	Output Power	Maxii EF
Frequency 000461.52500000	Loc# 2	Ant# 1	Freq ID 3	Station Class MO	Units	Paging Rec. 25	Output Power 4.000	Maxir ER 4
Frequency 000461.52500000 000461.60000000	Loc# 2 2	Ant# 1 1	Freq ID 3 2	Station Class           MO           MO	Units	Paging Rec. 25 25	Output Power 4.000 4.000	Maxir ER 4
Frequency 000461.52500000 000461.60000000 000463.60000000	Loc# 2 2 1	Ant# 1 1 1	Freq ID 3 2 1	Station Class           MO           MO           FB2	Units	Paging Rec. 25 25 1	Output           Power           4.000           4.000           25.000	Maxi EF 4 4

Federal databases also allow us to search for more information on antenna structures/towers. A tower may have multiple transmitting antennas on it, each of which may have different licenses and different owners. However, it may provide additional contact information, and details on location. The Federal Aviation Administration (FAA) *may* also provide information on the frequencies and power levels of devices on the structure.

## FCC: Antenna Structure Registration http://wireless2.fcc.gov/UlsApp/AsrSearch/asrRegistrationSearch.jsp

The FCC defines an antenna structure as "a structure that is constructed or used to transmit radio energy, or that is constructed or used for the primary purpose of supporting antennas to transmit and/or receive radio energy, and any antennas and other appurtenances mounted thereon." The owner must register the structure if the structure requires notice of proposed construction to the FAA. Owners may also voluntarily register the structures. Antenna Structure Registration numbers are assigned and must be displayed near the base or perimeter fence, unless it is a historic landmark. The FCC provides a database of antenna structure registrations.

**Step 1: Search.** You can search with the registration number, the FAA study number, coordinates, or location.

Communications Communications	FCC Home   Search   Updates   E-Filing   Initiatives   For Consumers   Fin
Intenna Structure Registration	
ECC > <u>WTB</u> > <u>ASR</u> > <u>Online Systems</u> > ASR Search	500
Registration Search	Advanced search
Search for a Registration	Search by Tower Location
By Owner Name	Coordinate Search
By Registation Number By FAA Study Number By Owner Name	Latitude • • • • • • • • • • • • • • • • • • •
By File Number By Owner Tinfequies ZIP) By FCC ID	Radius Kilometers • Submit Reset
By Owner FRN State of Structure:	Based on NAD83 ( <u>convert from NAD27</u> )
Select a State	Location of Structure
Owner ZIP Code:	City State Select a State
he ASR Registration Search enables you to search for a wide range of licenses in the Antenna Structure Registration system. The Search for a Registration" enables you to search on basic elements of a registration including registration number. EAA study number	County(s) Select a state to view counties
Search for a neglistration of endors you to search on basic enternances of enginerations including registration including registrating registrating registration	rer,
	ZIP Code Submit Reset
	$\odot$ all matches $\bigcirc$ exact matches only
	Narrow Your Search
	Overall Height Above Ground
	Any height     Exact     Range     to     Meters •

**Step 2: Results.** The results are displayed on one page. You can find information on the location, the structure (e.g. Building with Tower), height of structure, and contact information. The page also contains actions taken (e.g. Administrative Action Received) and automated letters, such as the Authorization letter.

ASR Regist	ration Search ration 1206471 arch 🕞 Return to Results 🛱 Printable F	Page 🚯 Reference Copy 🔥 Map Registration							
	Registration Detail								
	Reg Number	1206471	Status	Granted					
	File Number	A0366530	Constructed						
	EMI	No	Dismantled						
	NEPA	No							
	Antenna Structure								
	Structure Type	BTWR - Building with Tower							
	Location (in NAD83 Coordinates - C	onvert to NAD27)							
	Lat/Long	38-53-39.4 N 077-01-00.9 W	Address	300 Indiana Aven, N. W.					
	City, State	Washington , DC							
	Zip	20001	County	Washington					
	Center of AM Array		Position of Tower in Array						
	Heights (meters)								
	Elevation of Site Above Mean Sea Lev	el	Overall Height Above Ground (AGL)						
	12.2		51.2						
	Overall Height Above Mean Sea Level		Overall Height Above Ground w/o App	purtenances					
	63.4		45.7						
	Painting and Lighting Specificati	ons							
	None								
	FAA Notification								
	FAA Study	89-AEA-1303-OE	FAA Issue Date	08/22/1989					
	Owner & Contact Information								
	FRN	0002088631	Owner Entity Type						
	Owner		7.11						
	District of Columbia, Metropolitan Po 310 McMillan Drive, N.W. Washington , DC 20001-1032	lice Department	P: (202)671-2872 F: E: sherwin.bigelow@dc.gov						
	Contact								
	Bigelow , Sherwin D		P: (202)671-2872						
	310 McMillan Drive, NW Washington , DC 20001-1032		F: E: sherwin.bigelow@dc.gov						

## **Federal Aviation Administration**

Any construction or alteration exceeding 200 ft. above ground level needs to be filed with the Federal Aviation Administration for an Obstruction Evaluation/Airport Airspace Analysis (OE/AAA). The study determines if the structure will interfere with flight paths and if it requires particular painting/lighting.

> OE/AAA https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchArchivesForm

**Step 1: Search.** You can search the archived cases by study number (found on the FCC ASR details or antennasearch.com), or by city and state, which then can be sorted by latitude & longitude.

Federal Av Administra	iation tion		« OE/AAA
Obstruction Evaluation Version 2015.4.2	Search Archived Cases		faa.gov Tools: 💾 Print this page
Home	Searches - Desk Reference Guide V_	2014.2.0	
FAA OE/AAA Offices		<ul> <li>Search the entire archive of OE/AAA cases</li> </ul>	
View Determined Cases		Enter/select any combination of fields to construct a desired query.	
View Interim Cases		<ul> <li>Note: the system returns a maximum of 2000 records.</li> </ul>	
View Proposed Cases			
View Supplemental Notices (Form 7460-2)		Year:         V         ASN:         2003         V         ACE V         - 1209         - 0E	
View Circularized Cases	ר	FAA Region: FCC Number:	
Search Archives		City: Status: All V	
Decordered Architere	_	State: 7460-2 Filed: V	
Download Correspondence Circle Search for Cases	-	Search Reset	

**Step 2: Results.** The one-page results page has the determination letter, sponsor information, latitude/longitude/location, structure height, as well as the frequencies/power levels that may be present on the tower. Frequencies are given by range (low to high) and the power level listed is the effective radiated power (ERP). Not all the information will always be provided. There may be additional information in the "Description of proposal" in the bottom left section of the results.

Overview							
Study (ASN): 2003-ACE-1209-OE	Received Date:	06/03/2003					
Prior Study: 2002-ACE-1380-OE	Entered Date:	06/03/2003					
Status: Determined	Completion Date:	06/16/2003					
Letters: Determination 🔂	Expiration Date:						
Supplemental Form 7460-2: Please login to add a Supplemental Form 7460-2.							
Sponsor Information	Sponsor's Repre	esentative Information					
Sponsor: AMERICAN TOWER (#93068)	Representative:						
Attention Of: LOTTIE THOMPSON	Attention Of:						
Address: 1101 PERIMETER DRIVE, SUITE 225	Address:						
Address2:	Address2:						
City: SCHAUMBURG	City:						
State: IL	State:						
Postal Code: 60173	Postal Code:						
Country: US	Country:						
Phone: (847)240-1508	Phone:						
Fax:	Fax:						
Construction Info	Structure Summ	nary					
Notice Of: ALTER	Structure Type: /	Antenna Tower					
Duration: PERM (Months: 0 Days: 0)	Structure Name:	Structure Name:					
Work Schedule:	FCC Number: 1	1218883					
Date Built:		CC ASK REgistration					
Structure Details	Height and Elev	ation					
Latitude (NAD 83): 38° 43' 14.58" N				Propose	DNE DNE	DET	
Longitude (NAD 83): 90° 14° 28.68" W	Site Elevation:			47	9		
Horizontal Datum: NAD 83	Structure Height:			12	2 0	122	
Survey Accuracy: 2C	Total Height (AMS	SL):		60	479	601	
Marking/Lighting: None						_	
Other Description:	Frequencies						
Name:	Low Freq	High Freq	Unit	ERP	Unit		
City: JENNINGS	806	824	MHz	500	W		
State: MO	824	849	MHz	500	W		
Nearest County: St. Louis	851	866	MH2	500	W		
Nearest Airport: 74MO	869	894	MHz	500	W		
Distance to Structure: 12732.39 feet	896	901	MHz	500	W		
On Airport: No	1850	1910	MHz	1640	W		
Direction to Structure: 39.29°	1930	1990	MHz	1640	w		
Description of Location:	2305	2310	MHz	2000	W		
Description of Proposal:	2345	2360	MHz	2000	W		
Previous	k to Search Next						

The databases provide useful information such as contact information, but are not all-encompassing. For example, the ULS does not capture the exact locations of many cellular towers because the licensees (Verizon, etc.) get their licenses for geographic areas and are not required to notify the FCC of the specific locations. Additionally, devices on federal buildings are outside of the FCC jurisdiction and the FAA only contains information on structures over 200 feet or higher (from the ground level to the top of the device). Some are devices may be designed to be 199.9 feet instead.

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