FEDERAL COMMUNICATIONS COMMISSION

Information and Instructions

Approved by OMB
3060 – 0798
Est. Avg. Burden
Per Response:
1.25 hours

FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT OF 1974 AND THE PAPERWORK REDUCTION ACT OF 1995

We have estimated that each response to this collection of information will take on average 1.25 hours. Our estimate includes the time to read the instructions, look through existing records, gather and maintain required data, and actually complete and review the form or response. If you have any comments on this estimate, or on how we can improve the collection and reduce the burden it causes you, please write the Federal Communications Commission, AMD-PERM, Washington, DC 20554, Paperwork Reduction Project (3060-0798). We will also accept your comments via the Internet if you send them to jboley@fcc.gov. *Please do not send completed application forms to this address.*

You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection unless it displays a currently valid OMB control number with this notice. This collection has been assigned OMB control number 3060-0798.

The FCC is authorized under the Communications Act of 1934, as amended, to collect the personal information we request in this form. We will use the information you provide to determine whether approving this application is in the public interest. If we believe there may be a violation or potential violation of a statute, FCC regulation, rule or order, your application may be referred to the Federal, state, or local agency responsible for investigating, prosecuting, enforcing or implementing the statute, rule, regulation or order. In certain cases, the information in your application may be disclosed to the Department of Justice or a court or adjudicative body when (a) the FCC; or (b) any employee of the FCC; or (c) the United States Government, is a party to a proceeding before the body or has an interest in the proceeding.

As of December 3, 2001, all parties and entities doing business with the Commission must obtain a unique identifying number called the FCC Registration Number (FRN) and supply it when doing business with the Commission. Failure to provide the FRN may delay the processing of the application. This requirement is to facilitate compliance with the Debt Collection Improvement Act of 1996 (DCIA). The FRN can be obtained electronically through the FCC webpage at http://www.fcc.gov (click on Commission Registration System) or by manually submitting FCC Form 160. FCC Form 160 is available from the FCC's web site at http://www.fcc.gov/formpage.html, by calling the FCC's Forms Distribution Center 800-418-FORM (3676), or from fax-on-demand by dialing (202) 418-0177.

This notice is required by the Privacy Act of 1974, Public Law 93-579, December 31, 1974, 5 U.S.C. Section 552a(e)(3) and the Paperwork Reduction Act of 1995, Public Law 104-13, October 1, 1995, 44 U.S.C. 3507.

Overview

Purpose of Form

Form FCC 601 is a multi-purpose form. It is used to apply for an authorization to operate radio stations, amend pending applications, modify existing licenses, and perform a variety of other miscellaneous transactions in the Wireless Telecommunications Bureau (WTB) radio services. The WTB radio services that use this form include Public Mobile Services, Personal Communications Services, General Wireless Communications Services, Private Land Mobile Radio Services, Broadcast Auxiliary Services, Fixed Microwave Services, Maritime Services (excluding ships), and Aviation Services (excluding aircraft).

The purpose of this form is to collect data pertaining to the proposed request. This data is used by the FCC to determine whether the public interest would be served by a grant of the request.

Form FCC 601 replaces Forms FCC 313, 313R, 402, 402R, 405, 405A, 406, 415, 464, 464A, 489, 494, 503, 574, 574R, 600, 701, 703 and 1046 for all purposes.

Introduction

Form FCC 601 is a multi-part form comprising a main form and several optional schedules. Each application, amendment, modification, or other request must contain only one Main Form (pages 1 through 4) but may contain as few or as many of the optional schedules as necessary.

Main Form

The purpose of the Main Form is to obtain information sufficient to identify the filer, establish the filer's basic eligibility and qualifications, classify the filing, and determine the nature of the proposed service. The Main Form also contains the required certifications and signature block. The Main Form is required for every application filed on Form FCC 601, including Modification and Amendment. (Note: The FCC Registration Number must be completed on the Main Form for all purposes.)

Schedules

The purposes of the optional schedules are as follows:

Schedule A

The Schedule for Changes Affecting Multiple Call Signs or File Numbers is used to submit global changes to items on the FCC 601 Main Form that affect either multiple call signs or multiple file numbers.

Schedule B

The Schedule for Geographically Licensed Services is used to apply for the required license authorization when the applicant has been determined to be the winning bidder at the close of an FCC auction.

Schedule C

[Reserved for future use]

Schedule D

The Schedule for Station Locations and Antenna Structures is used to supply technical information for all transmit station locations (including Fixed, Mobile, Temporary Fixed, and 6.1 Meter Control Stations), and antenna structures for all services except Microwave. It is also used by auction winners that must file technical data for international coordination or for an environmental assessment. File as many schedules as necessary to describe station locations and antenna structures. This schedule is used in conjunction with Technical Data Schedules F, G, H, and J.

Schedule E

[Reserved for future use]

Schedule F

The Technical Data Schedule for the Cellular and Air-ground (Commercial Aviation) Radiotelephone Services (Part 22) is used for site-specific applications and amendments in the cellular and air-ground radiotelephone services. It is also used by auction winners that must file site-specific technical data for international coordination of a particular site. Schedule F is used to provide technical parameters of the facilities. This schedule is used in conjunction with Location Schedule D.

Schedule G

The Technical Data Schedule for the Maritime and Aviation Services (Parts 80 and 87) is used for site-specific applications and amendments in the maritime and aviation services. It is also used by auction winners that must file site-specific technical data for international coordination of a particular site. Schedule G is used to provide technical parameters of the facilities. This schedule is used in conjunction with Location Schedule D.

Schedule H

The Technical Data Schedule for the Private Land Mobile and Land Mobile Broadcast Auxiliary Radio Services (Parts 90 and 74) is used for site-specific applications and amendments in the private land and broadcast auxiliary radio services. It is also used by auction winners that must file site-specific technical data for international coordination of a particular site. Schedule H is used to provide technical parameters of the facilities. This schedule is used in conjunction with Location Schedule D.

Schedule I
The Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74) is used for site-specific applications and amendments in the Fixed Microwave and Microwave Broadcast Auxiliary Services. It is also used by auction winners that must file site-specific technical data for international coordination or for an environmental assessment of a particular site. Schedule I is used to provide microwave specific administrative data as well as all technical parameters of the facilities.

Schedule J
The Technical Data Schedule for the Paging, Rural, Air-ground, (General Aviation), and Offshore Radiotelephone Services (Part 22) is used for site-specific applications and amendments in the paging, rural, air-ground, and offshore radiotelephone services. It is also used by auction winners that must file site-specific technical data for international coordination of a particular site. Schedule J is used to provide technical parameters of the facilities. This schedule is used in conjunction with Location Schedule D.

Schedule K
The Schedule for Required Notifications for Wireless Services is used to notify the FCC that, within the required time period, coverage or construction requirements have been satisfied, or compliance with yearly station construction commitments for licensees with approved extended implementation plans has been met. It is also used in the paging radiotelephone services to notify the FCC of a request for regular authorization for facilities previously operating under developmental authority.

Schedule L
The Schedule for Waiver Requests for Extension of Time for Wireless Services is used to request a waiver of FCC rules for additional time to either satisfy coverage or construction requirements.

Schedules Required
If you are applying for initial authorization in a market-based service, you must file Schedule B in conjunction with your Main Form application.

If you are applying for a site-specific authorization in a market-based service to fulfill environmental assessment requirements, file along with your Main Form Application, Schedule I for Microwave Radio Services or Schedule D for all other radio services.

If you are applying for a site-specific authorization in a market-based service to fulfill international coordination requirements, file along with your Main Form Application, Schedule I for Microwave Radio Services or Schedule D and the appropriate technical data schedule for all other radio services.

If you are applying for authorization in a site licensed service, which requires you to report technical data, file along with your Main Form the technical data schedule appropriate to the service for which you are applying:

Service	ULS Form/Schedule Title
All Geographically Licensed Services (Initial Application)	FCC 601 Main Form - WTB Radio Service Authorization Schedule B - Schedule for Geographically Licensed Services
Geographically Licensed Service (Part 27 – Lower MHz (698-746 MHz Band) (WZ Radio Service)	FCC 601 Main Form – WTB Radio Service Authorization Schedule D – Schedule for Station Locations and Antenna Structures
Geographically Licensed Service (site-specific environmental assessment)	FCC 601 Main Form - WTB Radio Service Authorization Schedule I (Microwave Radio Services) Schedule D (all other Radio Services) - Schedule for Station Locations and Antenna Structures
Geographically Licensed Service (site-specific international coordination)	FCC 601 Main Form - WTB Radio Service Authorization Schedule I (Microwave Radio Services) Schedule D and appropriate technical data schedule as described below (all other Radio Services)
Cellular and Commercial Air-ground Services (Part 22)	FCC 601 Main Form - WTB Radio Service Authorization Schedule D - Schedule for Station Locations and Antenna Structures Schedule F - Technical Data Schedule for the Cellular and Air-ground (Commercial Aviation) Radiotelephone Services (Part 22)
Land Mobile - Part 22 Site-Specific Services or Part 90 Exclusive channels in the 929-930 MHz Band (GS Radio Service)	FCC 601 Main Form - WTB Radio Service Authorization Schedule D - Schedule for Station Locations and Antenna Structures Schedule H - Technical Data Schedule for the Private Land Mobile and Broadcast Auxiliary Land Mobile Radio Services (Parts 90 and 74) Schedule J - Technical Data Schedule for Paging, Rural, Air-ground (General Aviation), and Offshore Radiotelephone Services (Part 22)
Land Mobile - Part 90 Site-Specific Services	FCC 601 Main Form - WTB Radio Service Authorization Schedule D - Schedule for Station Locations and Antenna Structures Schedule H - Technical Data Schedule for the Private Land Mobile and Broadcast Auxiliary Land Mobile Radio Services (Parts 90 and 74)
Microwave - Part 101 Site-Specific Services	FCC 601 Main Form - WTB Radio Service Authorization Schedule I - Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Service	ULS Form/Schedule Title
Maritime Coast/Aviation Ground Services (Parts 80 and 87)	FCC 601 Main Form - WTB Radio Service Authorization Schedule D - Schedule for Station Locations and Antenna Structures Schedule G - Technical Data Schedule for the Maritime and Aviation Services (Parts 80 and 87)
Broadcast Auxiliary - Land Mobile (Part 74)	FCC 601 Main Form - WTB Radio Service Authorization Schedule D - Schedule for Station Locations and Antenna Structures Schedule H - Technical Data Schedule for the Private Land Mobile and Broadcast Auxiliary Land Mobile Radio Services (Parts 90 and 74)
Broadcast Auxiliary - Microwave (Part 74)	FCC 601 Main Form - WTB Radio Service Authorization Schedule I - Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Radio Services (Parts 101 and 74)
218-219 MHz Services (Part 95) (Individual CTS Reporting)	FCC 601 Main Form - WTB Radio Service Authorization Schedule D - Schedule for Station Locations and Antenna Structures
Notification of: Completion of Coverage Requirements Completion of Construction Requirements Compliance with yearly station construction commitments for licensees with approved extended implementation plans Developmental Paging Authorization to a Regular Authorization	FCC 601 Main Form - WTB Radio Service Authorization Schedule K - Schedule for Required Notifications for Wireless Services
Waiver Request for Extension of Time for: Completion of Coverage Requirements Completion of Construction Requirements	FCC 601 Main Form - WTB Radio Service Authorization Schedule L - Waiver Request for Extension of Time for Wireless Services

General Filing Instructions

Information Current and Complete

Information filed with the FCC must be kept current and complete. The applicant must notify the FCC regarding any substantial and significant changes in the information furnished in the application(s). See Section 1.65 of the Commission's rules.

Applicable Rules and Regulations

Applicants should obtain the relevant parts of the FCC's rules in 47 CFR. Copies of 47 CFR may be purchased from the Superintendent of Documents; Government Printing Office; Washington, DC 20402; (202) 512-1800. Refer also to the Government Printing Office's Website at http://www.access.gpo.gov. Some FCC rules require applicants to attach one or more exhibits to an application in addition to the information requested in the application form.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements may result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

Processing Fee and Filing Locations

A processing fee may be required with this form. To determine the required fee amount, refer to Subpart G of Part 1 of the Code of Federal Regulations (47 CFR Part 1, Subpart G) and the current Wireless Telecommunications Bureau Fee Filing Guide **or** FCC Form 1070M. FCC Form 1070M provides the fee information specifically for Form 601. For assistance with fees applicable to the radio services governed by the FCC's rules, call (202) 418-0220 or 888-CALLFCC (888-225-5322). The Fee Filing Guide and FCC Form 1070M can be downloaded from the FCC's Internet site @ http://www.fcc.gov/fees, or obtained by calling the FCC's Forms Distribution Center at (800) 418-FORM (3676) or from fax-on-demand by dialing (202) 418-0177.

Paper applications for purposes other than renewal (only) and requiring a fee must be submitted to Federal Communications Commission, Wireless Bureau Applications, P. O. Box 358130, Pittsburgh, PA, 15251-5130.

Paper applications for purpose of renewal (only) and requiring a fee must be submitted to Federal Communications Commission, Wireless Bureau Applications, P. O. Box 358245, Pittsburgh, PA, 15251-5245.

Non-feeable paper applications should be mailed to Federal Communications Commission, 1270 Fairfield Road, Gettysburg, PA 17325-7245. Hand-deliveries and messenger-deliveries should review most recent Public Notice for delivery to Federal Communications Commission. (If this application is filed as a result of an auction, please specify the Auction Number as indicated in your bidder's package or Public Notice.)

Packages
If filing manually, the Main Form and the applicable schedules should be submitted as one package, stapled in the upper left corner. The Main Form should be first with the schedules attached in alphabetical order. Applicants filing electronically should not submit paper copies.

Paper Copies
The number of paper copies of this application required to be filed is one original. Applicants filing electronically should not submit paper copies.

Exhibits
Each document required to be filed as an exhibit should be current as of the date of filing. Each page of every exhibit must be identified with the number or letter of the exhibit, the number of the page of the exhibit, and the total number of pages of the exhibit. If material is to be incorporated by reference, see the instruction on incorporation by reference. If interference studies are required by rule, attach these as an exhibit.

Incorporation by Reference
You may incorporate by reference documents, exhibits, or other lengthy showings already on file with the FCC only if the information previously filed is more than one 8½" by 11" page in length, and all information therein is current and accurate in all significant respects; the reference states specifically where the previously filed information can be found (*i.e.*, station call sign and application file number, title of proceeding, docket number and legal citations), including exhibit and page references. Use the relevant item number followed by 'A'. Items that call for numbers, or which can be answered 'Y' or 'N' or other short answers must be answered directly without reference to a previous filing.

Waiver Requests
Requests for waiver must contain as an exhibit a statement of reasons sufficient to justify a waiver. The required showing must be made for all rule waivers desired, identifying the specific rules or policies for which the waiver is requested. Refer to the Wireless Telecommunications Bureau Fee Filing Guide **or** FCC Form 1070M for fee requirements for waivers. For assistance with fees applicable to the radio services governed by the FCC's rules, call (202) 418-0220 or 888-CALLFCC (888-225-5322), or e-mail questions to FCCDMD@fcc.gov.

Frequency Coordination
Applications for certain station authorizations in Parts 80, 87, and 90 may be required to be initially submitted to a certified frequency coordinator for the radio service or frequency pool involved. Refer to the rules for your radio service for detailed information regarding frequency coordination. For frequency coordination fee information, contact the frequency coordinators for your radio service.

After the completion of frequency coordination, some radio services require the frequency coordinator to forward these applications to the FCC. Check with your frequency coordinator for applicability. All other applications shall be filed by the applicant at the correct address listed on the most current Fee Filing Guide **or** FCC Form 1070M. Applications should be filed at least sixty (60) days prior to the date upon which the radio facilities are required to be in operation.

For information regarding certified coordinators for your radio service, contact the Federal Communications Commission, 1270 Fairfield Road, Gettysburg, PA 17325-7245, call 888-CALLFCC (888-225-5322), or e-mail questions to FCCDMD@fcc.gov.

English to Metric Conversions
All heights and distances must be provided as metric values. The following English to Metric equivalents should be used to convert heights and distances, where necessary:

1 foot	=	0.3048 meters
1 mile	=	1.6093 kilometers
1 nautical mile	=	1.85 kilometers

For Assistance
For assistance with this application, contact the Federal Communications Commission, 1270 Fairfield Road, Gettysburg, PA 17325-7245, call 888-CALLFCC (888-225-5322), or e-mail questions to FCCDMD@fcc.gov.

Electronic Filers
Information about online filing of Form 601 is available from the Wireless Telecommunications website at *http://wireless.fcc.gov/uls/*.

Applicants filing electronically should follow procedures contained in online help files. For technical assistance with filing electronically, contact the Wireless Telecommunications Bureau Technical Support line, (202) 414-1250.

In instances where an applicant files electronically and needs to include an exhibit(s) with the application and cannot transmit that exhibit(s) to the FCC electronically, the applicant may mail exhibits to the following address:

Federal Communications Commission
Application Exhibit
1270 Fairfield Road
Gettysburg, PA 17325-7245

Hand-deliveries and messenger-deliveries should review most recent Public Notice for delivery to Federal Communications Commission.

Each exhibit should be clearly labeled with the applicant's name, the 10-digit file number assigned to the application at the time of submission, and the type of exhibit (*e.g.*, waiver request).

Instructions for FCC 601 Main Form

Radio Service Code

Item 1 Enter the Radio Service Code for which the applicant is applying by inserting the appropriate code from the list below:

Item 1a In some Services, you may modify your license to change Radio Service Codes (e.g., Microwave licensees may modify a Private Point-to-Point license to a Common Carrier Point-to-Point license: Radio Service Code 'MG' to Radio Service Code 'CF'). If you are applying for such a modification to your license enter the Radio Service Code of your current license in Item 1a. The Radio Service Code for which you are applying should be entered in Item 1.

Geographically Licensed Services

Cellular Radiotelephone	**CL**
General Wireless Communications Service (GWCS)	**GW**
218-219 MHz Service	**ZV**
Local Multipoint Distribution Service (LMDS)	**LD**
Location and Monitoring Service, Multilateration (LMS)	**LS**
Multiple Address System	**MS**
Paging and Radiotelephone, Market Area	
Part 22, 931 MHz Paging	**CZ**
Part 22, VHF/UHF Paging (Excluding 931 MHz)	**CP**
Part 90, 929-930 MHz Exclusive	**GC**
Personal Communications Service (PCS)	
Broadband	**CW**
Narrowband	**CN**
Public Safety 700 MHz Band – State License	**SL**
Public Coast, Market Area	**PC**
SMR, 806-821/851-866 MHz, Market Area	**YC**
SMR, 896-901/935-940 MHz, Market Area	**YD**
Wireless Communications Service (WCS)	**WS**
220 MHz, Market Area	**QA**
39 GHz, Market Area	**TN**
700 MHz Upper Band, including the Guard Bands	**WX**
700 MHz Lower Band	**WZ**

Site-Specific Land Mobile

Part 22 - Site-Specific

Air-ground	
Commercial (800 MHz)	**CA**
General (454 MHz)	**CG**
Offshore Radiotelephone	**CO**
Paging and Radiotelephone, Site-Specific	**CD**
Rural Radiotelephone	**CR**
BETRS	**CB**

Part 90 - Below 800 MHz

Industrial/Business Pool - Commercial, Conventional ..... **IK**
Industrial/Business Pool - Commercial, Trunked ..... **YK**
Industrial/Business Pool - Private, Conventional ..... **IG**
Industrial/Business Pool - Private, Trunked ..... **YG**
Land Mobile Radiolocation ..... **RS**
Public Safety Pool, Conventional ..... **PW**
Public Safety Pool, Trunked ..... **YW**
220 MHz, Phase I Nationwide Commercial 5-Channel ..... **NC**
220 MHz, Site-Specific
- Non-Nationwide Data ..... **QD**
- Non-Nationwide Other ..... **QO**
- Non-Nationwide Public Safety/Mutual Aid ..... **QM**
- Non-Nationwide, 5-Channel Trunked ..... **QT**

Part 90 - Above 800 MHz

Business
- 806-821/851-866 MHz, Conventional ..... **GB**
- 896-901/935-940 MHz, Conventional ..... **GU**
- 806-821/851-866 MHz, Trunked ..... **YB**
- 896-901/935-940 MHz, Trunked ..... **YU**

Industrial/Land Transportation
- 806-821/851-866 MHz, Conventional ..... **GO**
- 896-901/935-940 MHz, Conventional ..... **GI**
- 806-821/851-866 MHz, Trunked ..... **YO**
- 896-901/935-940 MHz, Trunked ..... **YI**

Land Mobile Radiolocation ..... **RS**
Location and Monitoring Service (LMS)
- 902-928 MHz Location Wideband (Grandfathered AVM) ..... **LW**
- 902-928 MHz Location Narrowband (Non-Multilateration) ..... **LN**

Paging
- 929-930 MHz, Site-Specific Channels ..... **GS**

Public Safety/Special Emergency
- 806-821/851-866 MHz, Conventional ..... **GP**
- 806-821/851-866 MHz, Trunked ..... **YP**

Public Safety, National Plan
- 821-824/866-869 MHz, Conventional ..... **GF**
- 821-824/866-869 MHz, Trunked ..... **YF**

SMR, Site-Specific
- 806-821/851-866 MHz, Conventional ..... **GX**
- 896-901/935-940 MHz, Conventional ..... **GR**
- 806-821/851-866 MHz, Trunked ..... **YX**
- 896-901/935-940 MHz, Trunked ..... **YS**

Site-Specific Microwave

Digital Electronic Message Service
- Common Carrier ..... **CE**
- Private ..... **PE**

Local Television Transmission ..... **CT**
Point-to-Point Microwave, Common Carrier ..... **CF**
Point-to-Point Microwave, Private
- Eligibility -- Aviation ..... **WA**
- Eligibility -- Industrial/Business ..... **MG**
- Eligibility -- Marine ..... **WM**
- Eligibility -- Public Safety ..... **MW**
- Eligibility -- Radiolocation ..... **WR**

Maritime Coast/Aviation Ground

Maritime
- Alaska Group ..... **MK**

Coastal Group ..... **MC**
Marine Auxiliary ..... **MA**
Marine Radiolocation Land ..... **MR**

Aviation
Aeronautical and Fixed ..... **AF**
Aviation Auxiliary Group ..... **AA**
Aviation Radionavigation ..... **AR**

Broadcast Auxiliary

Land Mobile
Broadcast Auxiliary -- Low Power ..... **LP**
Broadcast Auxiliary -- Remote Pickup ..... **RP**

Microwave
Aural Intercity Relay ..... **AI**
Aural Microwave Booster ..... **AB**
Aural Studio Transmitter Link ..... **AS**
TV Intercity Relay ..... **TI**
TV Microwave Booster ..... **TB**
TV Pickup ..... **TP**
TV Studio Transmitter Link ..... **TS**
TV Translator Relay ..... **TT**

Application Purpose

Item 2 Indicate the purpose for which the application is being filed by inserting the appropriate two-letter abbreviation from the following list. Only one purpose may be specified.

NE - New: To request a new license. This purpose should only be used for initial applications.

MD - Modification: To request a change in the conditions of any data (administrative and technical **OR** technical) for a license during the term of that license. This purpose is also used to apply for a site-specific authorization in a market-based service to fulfil environmental assessment requirements or international coordination requirements. Use Item 5 to provide the call sign of the affected station. All appropriate schedules must be completed and attached, and must accurately describe the data that has been modified. See applicable Commission rules.

Note: After a license is modified, the FCC will issue a new license and previous versions of the license will no longer be valid, regardless of the expiration date shown. License terms will not be extended as a result of an application for modification.

RM - Renewal/Modification: To renew an existing authorization, Special Temporary Authorization (STA), or developmental authorization and request a change in the conditions of that authorization. Use Item 5 to provide the call sign of the affected station. All appropriate schedules must be completed and attached, and must accurately describe the data that has been modified. (Specified renewal time frame, must be filed no later than expiration date of the authorization and no sooner than 90 days prior to expiration).

AM – Amendment: To amend a previously-filed, currently pending application. Use Item 4 to provide the file number of the application. All appropriate schedules must be completed and attached, and must accurately reflect the amendment's data. See applicable Commission rules. If the amendment affects multiple file numbers (administrative data only), complete and attach Schedule for Changes Affecting Multiple Call Signs or File Number, Form FCC 601, Schedule A.

NT - Required Notifications: To notify the FCC that, within the required time period, coverage or construction requirements have been satisfied or compliance with yearly station construction commitments for licensees with approved extended implementation plans have been met. This schedule can also be used to notify the FCC of a request in the Paging Radiotelephone Services for regular authorization for facilities previously operating under developmental authority. Also complete and attach Required Notifications for Wireless Services, Form FCC 601, Schedule K.

EX - Request for Extension of Time: To request additional time to satisfy coverage or construction requirements. Also complete and attach Request for Extension of Time for Wireless Services, Form FCC 601, Schedule L.

CO – Consolidate Call Signs: To consolidate multiple call signs into a single call sign, list existing call signs to be deleted on Schedule A, Schedule for Changes Affecting Multiple Call Signs or File Numbers. The call sign to be retained should be listed in Item 5 of the FCC 601 Main Form. If no call sign is provided in Item 5, a new one will be assigned, and you must complete the FCC 601 Main Form to provide administrative information about the new call sign. For stations in the Paging and Radiotelephone Service (CD), consolidation will result in all Locations, Antennas, and Frequencies being consolidated under a single call sign without modification (i.e., applicants should not submit Schedules D and F). For stations in the Part 90 radio services, applicants must include Schedules D and H describing the technical parameters of at least one, and no more than six locations to be authorized under the resulting call sign.

Simple Application Purpose & Requirements for Paper Submission on FCC 601

RO - Renewal Only: To renew an existing authorization or developmental authorization that has not expired and where no changes in the license conditions are being requested at the time of renewal. Refer to 47 CFR §1.949 for FCC rules on timely filings (Specified renewal time frame, must be filed no later than expiration date of the authorization and no sooner than 90 days prior to expiration). (To make any modifications to the administrative or technical data of the license, use the Renewal/Modification purpose.)

Mandatory items required for submission of 'RO' purpose are as follows:

Item 1) Radio Service Code
Item 2) Application Purpose
Item 5) Call Sign (if filing for multiple Call Signs, list additional call signs on Schedule A)
Items 10 through 24) Applicant Information
Items 38 & 39) Fee Status
Item 49) Aeronautical Advisory Station (Unicom) Certification
(For Aviation Services Only)
Items 51, 52 & 53) Signature and Date

Optional Items: Item 6) Requested Authorization Expiration Date MM/DD

DU - Duplicate License: To request a hardcopy duplicate of an existing license.

Mandatory items required for submission of 'DU' purpose are as follows:

Item 1) Radio Service Code
Item 2) Application Purpose
Item 5) Call Sign (if filing for multiple Call Signs, list additional call signs on Schedule A)
Items 10 through 24) Applicant Information
Items 38 & 39) Fee Status
Items 51, 52 & 53) Signature and Date

AU - (No Fee Required) Administrative Update: To request a change of administrative data on a license.

Mandatory items required for submission of 'AU' purpose are as follows:

Item 2) Application Purpose
Item 5) Call Sign (if filing for multiple Call Signs, list additional call signs on Schedule A)
Items 10 through 24) Applicant Information
Items 51, 52 & 53) Signature and Date

One or more of the following items may be corrected with this purpose:

Item 12) Licensee Name (without a change in ownership)
Item 13) Entity Name (without a change in ownership, control
or corporate structure)
Items 16 through 21) Mailing Address
Item 22) Telephone Number
Item 23) FAX Number
Item 24) E-Mail Address
Items 25 through 34) Contact Information
Control Point Information

NOTE: When updating control point information, only one call sign may be filed per Administrative Update application. Submit appropriate schedule along with the Main Form for specific radio service.

Main Form & Schedule F - Cellular & Commercial Air-Ground Services
Main Form & Schedule G - Maritime Coast/Aviation Ground Services
Main Form & Schedule H - Private Land Mobile & Land Mobile Broadcast Auxiliary Radio Services
Main Form & Schedule I - Fixed Microwave & Microwave Broadcast Auxiliary Services
Main Form & Schedule J - Paging, Rural, Air-Ground (General Aviation) and Offshore Radiotelephone Services

CA – (No Fee Required) Cancellation of License: To cancel an existing license. This action cancels all facilities operating under the call sign. To delete specific authorized facilities under a call sign, use the Modification purpose.

Mandatory items required for submission of 'CA' purpose are as follows:

Item 2) Application Purpose
Item 5) Call Sign (if filing for multiple Call Signs, list additional call signs on Schedule A)
Items 10 through 24) Applicant Information
Items 51, 52 & 53) Signature and Date

WD - (No Fee Required) Withdrawal of Application: To withdraw a previously-filed, currently pending application.

Mandatory items required for submission of 'WD' purpose are as follows:

Item 2) Application Purpose
Item 4) File Number (if filing for multiple File Numbers, list additional File Numbers on Schedule A)
Items 10 through 24) Applicant Information
Items 51, 52 & 53) Signature and Date

No fee is required for Governmental Entities. Send non-feeable packages to:

Federal Communications Commission
1270 Fairfield Road
Gettysburg, PA 17325-7245

Item 3a If the filing is a request for a Developmental License, Demonstration License or a Special Temporary Authorization (STA), enter 'D', 'M' or 'S', respectively. Otherwise, enter 'N' for Not Applicable.

The FCC may grant applications for Developmental Authority to construct and operate transmitters for the purpose of developing a new radio service or a new technology not regularly authorized under specific FCC rules, subject to the appropriate requirements governing Developmental authorizations contained in the FCC rules. Attach an exhibit(s) as required in the FCC rules.

Demonstration licenses are intended for use by licensees involved in the sale and/or marketing of radio equipment. Demonstration licenses may be used for purposes of demonstrating equipment to potential customers at trade shows or at other exhibitions, performing on site coverage studies for potential customers, or other uses as provided for in Subpart I of Part 2 of the Commission's rules. Demonstration licenses may not be used for the licensee's internal communications in its day to day business operations.

In emergencies or other urgent conditions requiring immediate or temporary use of facilities, request may be made for Special Temporary Authority (STA) to install and/or operate new or modified equipment, subject to the appropriate requirements governing Special Temporary Authorizations contained in the FCC rules. If item 3a is answered 'S', attach an exhibit including the following information: description of the nature of the extraordinary circumstance, equipment to be used, type of operation to be conducted, and an explanation of how the facilities will be used, times and dates of operation.

Note: To file an initial request for an STA, Developmental, or Demonstration License, applicants should select an application purpose of NE – New in Item 2 and then answer Items 3a and 3b as appropriate. STAs are granted for a maximum of 180 days. If another STA is needed, applicants may file by selecting application purpose RM – Renewal/Modification and supply the appropriate Call Sign in Item 5 or by selecting application purpose NE – New. The renewal/modification purpose is provided for the convenience of the applicant (the applicant will retain the same call sign if the STA request is granted). To

request a renewal of a Demonstration or Developmental License, applicants should select an application purpose of RO - Renewal Only or RM – Renewal/Modification and supply the appropriate Call Sign in Item 5.

Item 3b This question only applies to applications for Special Temporary Authority (STA). If you are requesting an STA due to an emergency or other urgent condition, enter 'Y' and attach an exhibit describing the nature of the emergency. Otherwise enter 'N'.

Per Rule §1.915, examples of emergencies are as follows: An emergency found by the Commission to involve danger to life or property or to be due to damaged equipment; a national emergency proclaimed by the President or declared by the Congress and during the continuance of any war in which the United States is engaged, when such action is necessary for the national defense or security or otherwise in furtherance of the war effort; or an emergency where the Commission finds that it would not be feasible to secure renewal applications from existing licensees or otherwise to follow normal licensing procedures.

Item 4 If the filing is an Amendment or Withdrawal of a previously-filed currently pending application, provide the file number of the original application. This information can be obtained by contacting the FCC at 888-CALLFCC (888-225-5322). If the Amendment or Withdrawal affects multiple file numbers, complete and attach Schedule for Changes Affecting Multiple Call Signs or File Numbers, Form FCC 601, Schedule A.

Item 5 The information requested in this item identifies the existing stations to which the filing is relevant. If the filing is a request for a Modification, Renewal Only, Renewal/Modification, Cancellation, Duplicate, or Administrative Update of an existing license, enter the call sign of the license. If the request affects multiple call signs, complete and attach Schedule for Changes Affecting Multiple Call Signs or File Numbers, Form FCC 601, Schedule A.

If the filing is a request to Consolidate Call Signs, enter the call sign to be retained in this item and list the existing call signs to be deleted on Schedule A, Schedule for Changes Affecting Multiple Call Signs or File Numbers. If no call sign is provided in Item 5, a new one will be assigned, and you must complete the FCC 601 Main Form to provide administrative information about the new call sign.

Item 6 This item is optional. If the filing is a request for a New, Amendment, Renewal Only, or a Renewal/Modification, enter the requested authorization expiration date. Applicants may, if desired, request the month and day of license expiration. However, in no cases will licenses be granted for terms that exceed the license term as governed by the rules for each service.

Item 7 This question applies only to site-specific (other than Part 101 Microwave) and Cellular authorizations. If the filing is a request for a Modification, Renewal/Modification, or Amendment (of a currently pending New or Modification) of any site-specific authorization, or a New filing for a site-specific Land Mobile (Part 90) authorization, you must indicate whether the request is a "major" action as defined in Section 1.929 of the Commission's rules when read in conjunction with the applicable radio service rules found in Parts 22 and 90 of the Commission's rules. If the rules for your particular radio service do not define a coverage area, service area, or interference contour, enter 'N'. For your convenience, the full text of Section 1.929 is listed below:

Section 1.929 Classification of filings as major or minor.

Applications and amendments to applications for stations in the wireless radio services are classified as major or minor (See §1.947). Categories of major and minor filings are listed in §309 of the Communications Act of 1934.

(a) For all stations in all Wireless Radio Services, whether licensed geographically or on a site-specific basis, the following actions are classified as major:

(1) Application for initial authorization;
(2) Any substantial change in ownership or control, including requests for partitioning and disaggregation;
(3) Application for renewal of authorization;
(4) Application or amendment requesting authorization for a facility that would have a significant environmental effect, as defined by §§1.1301 through 1.1319 of the rules;
(5) Application or amendment requiring frequency coordination pursuant to the Commission's rules or international treaty or agreement;
(6) Application or amendment requesting to add a frequency or frequency block for which the applicant is not currently authorized, excluding removing a frequency.

(b) In the Cellular Radiotelephone Service:

(1) Request an authorization or an amendment to a pending application that would expand the cellular geographic service area (COSA) of an existing cellular system or, in the case of an amendment, as previously proposed in an application, except during the applicable five-year build-out period, if any;
(2) Request that a COSA boundary or portion of a COSA boundary be determined using an alternative method; or,
(3) Request an authorization for facilities that would produce a *de minimis* service area boundary extension into unserved area in an adjacent market.

(c) In addition to those changes listed in subparagraph (a) above, the following are major changes applicable to stations licensed to provide base-to-mobile, mobile-to-base, and mobile-to-mobile on a site-specific basis:

(1) In the Paging and Radiotelephone Service, Rural Radiotelephone Service and 800 MHz Specialized Mobile Radio Service (SMR), any change that would increase or expand the applicant's existing composite interference contour.

(2) In the 900 MHz SMR and 220 MHz Service, any change that would increase or expand the applicant's service area as defined in the rule parts governing the particular radio service.

(3) In the Paging and Radiotelephone Service, Rural Radiotelephone Service, Offshore Radiotelephone Service, and Specialized Mobile Radio Service:

(i) Request an authorization or an amendment to a pending application that would establish for the filer a new fixed transmission path;

(ii) Request an authorization or an amendment to a pending application for a fixed station (*i.e.,* control, repeater, central office, rural subscriber, or inter-office station) that would increase the effective radiated power, antenna height above average terrain in any azimuth, or relocate an existing transmitter;

(4) In the Private Land Mobile Radio Services (PLMRS):

(i) Change in frequency or modification of channel pairs;

(ii) Change in the type of emission;

(iii) Change in effective radiated power from that authorized;

(iv) Change in antenna height from that authorized;

(v) Change in the authorized location or number of base stations, fixed, control, or, for systems operating on non-exclusive assignments in the 470-512 MHz, 800 MHz or 900 MHz bands, a change in the number of mobile transmitters, or a change in the area of mobile operations from that authorized;

(vi) Change in the class of a land station, including changing from multiple licensed to cooperative use, and from shared to unshared use.

(d) In addition to those filings listed in paragraph (a) of this section, the following are major actions that apply to stations licensed to provide fixed point-to-point, point-to-multipoint, or multipoint-to-point, communications on a site-specific basis, or fixed or mobile communications on an area-specific basis under Part 101 of this chapter:

(1) Any change in transmit antenna location by more than 5 seconds in latitude or longitude for fixed point-to-point facilities (*e.g.,* a 5 second change in latitude, longitude, or both would be minor); any change in coordinates of the center of operation or increase in radius of a circular area of operation, or any expansion in any direction in the latitude or longitude limits of a rectangular area of operation, or any change in any other kind of area operation;

(2) Any increase in frequency tolerance;

(3) Any increase in bandwidth;

(4) Any change in emission type;

(5) Any increase in EIRP greater than 3 dB;

(6) Any increase in transmit antenna height (above mean sea level) more than 3 meters;

(7) Any increase in transmit antenna beamwidth;

(8) Any change in transmit antenna polarization;

(9) Any change in transmit antenna azimuth greater than 1 degree; or,

(10) Any change which together with all minor modifications or amendments since the last major modification or amendment produces a cumulative effect exceeding any of the above major criteria.

(e) In addition to those filings listed in paragraph (a) of this section, the following are major actions that apply to stations licensed to provide service in the Air-ground Radiotelephone Service:

(1) Request an authorization to relocate an existing General Aviation Ground station; or,

(2) Request the first authorization for a new Commercial Aviation ground station at a location other than those listed in §22.859 of this chapter.

(f) In addition to those changes listed in paragraph (a), the following are major changes that apply to stations licensed in the industrial radiopositioning stations for which frequencies are assigned on an exclusive basis, Maritime and Aviation services, except Maritime Public Coast VHF (CMRS), Ship and Aircraft stations:

(1) Any change in antenna azimuth;

(2) Any change in beamwidth;

(3) Any change in antenna location;

(4) Any change in emission type;

(5) Any increase in antenna height;

(6) Any increase in authorized power;

(7) Any increase in emission bandwidth;

(g) In addition to those changes listed in paragraph (a), any change requiring international coordination in the Maritime Public Coast VHF (CMRS) Service is major.

(h) This section pertains to Ship stations.

(i) This section pertains to Aircraft stations.

(j) This section pertains to Amateur licenses.

(k) Any change not specifically listed above as major is considered minor (see §1.947(b)). This includes but is not limited to:
(1) Any pro forma assignment or transfer of control;
(2) Any name change not involving change in ownership or control of the license;
(3) Any address and/or telephone number changes;
(4) Any changes in contact person;
(5) Pertains to ship station license;
(6) Any change to a site-specific license, except a PLMRS license under Part 90, or a license under Part 101, where the licensee's interference contours are not extended and co-channel separation criteria are met, except those modifications defined in paragraph (c)(2) of this section; or
(7) Any conversion of multiple site-specific licenses into a single wide-area license, except a PLMRS license under part 90 or a license under part 101 of this chapter, where there is no change in the licensee's composite interference contour or service area as defined in paragraph (c)(2) of this section.

Item 8a If the filing is a request for a waiver of the Commission's rules, enter 'Y' and attach an exhibit that lists the rule section(s) of the affected rules and explains the circumstances. Otherwise, enter 'N'.

Item 8b Waiver requests in certain wireless services are subject to filing fees based on the number of rules for which waiver is sought multiplied by the number of stations (call signs) affected by the waiver. If the waiver request involves a service where waivers are feeable, multiply the number of stations (call signs) by the number of rule sections. Consult the Wireless Telecommunications Bureau Fee Filing Guide or FCC Form 1070M for information on which services have feeable waivers and the required fee amounts.

Item 8c Some applications may include technical data which is outside the limits of the existing Rules but may have been granted previously by waiver, covered by a grandfathering provision in the Rules, or permissible because the requested facility is functionally integrated with an existing station. Applicants should check their present authorization or the specific Rules governing operation on the frequency (ies) requested to determine if entering 'Y' to this item is appropriate. Otherwise, enter 'N'.

Item 9 Enter 'Y' if attachments are being filed with this application. Otherwise, enter 'N'.

Applicant Information

Items 10 through 24 identify the applicant. If an authorization is granted, the information provided will become the licensee's name, address, and telephone number of record. The FCC will send the authorization and notice of all final dispositions of an application to this address.

Item 10 Enter the applicant's ten-digit FCC Registration Number (FRN) assigned by the Commission Registration System (CORES). The FRN is a unique entity identifier for everyone doing business with the Commission. The FRN can be obtained electronically through the FCC webpage at https://www.fcc.gov or by manually submitting FCC Form 160. FCC Form 160 is available for downloading from http://www.fcc.gov/formpage.html, by calling 800-418-FORM (3676) or from fax-on-demand by dialing (202) 418-0177.

Item 11 This item indicates the legal entity type of the applicant. Enter 'I' for Individual, 'U' for Unincorporated Association, 'T' for Trust, 'G' for Government Entity, 'J' for Joint Venture, 'C' for Corporation, 'L' for Limited Liability Corporation, 'P' for Partnership, or 'O' for Consortium.

Items 12-13 If Item 11 is 'I' (for Individual), enter the name of the person applying in Item 12. Otherwise, enter the name of the entity in Item 13.

Item 14 Applicants must identify a real party (parties) in interest if different from the applicant. If the applicant is also the real party in interest, leave this item blank. If a party other than the applicant is the real party in interest (*e.g.*, a parent or other controlling entity), enter that party's name in this item. If there is more than one real party in interest, attach an exhibit detailing all parties in interest.

The Real Party in Interest is defined as a person who "has an ownership interest, or will be in a position to actually or potentially control the operation of the station." Astroline Communications Company Limited Partner v. FCC, 857 F.2d 1556, 1564 (D.C. Cir. 1988); see *also* In Re Applications of Georgia Public Telecommunications Commission, et al., MM Docket No. 89-337, 7 FCC Rcd 7996 (rel. Dec. 9, 1992); In Re Applications of Madalina Broadcasting, et al., MM Docket No. 91-100, 8 FCC Rcd 6344 (rel. September 3, 1993).

Item 15 Enter the Taxpayer Identification Number for the Real Party in Interest. For individuals, enter the Social Security Number (SSN). For all other filers, enter the Employer Identification Number (EIN). This information will not be made available for public inspection.

Items 16-22 Enter the name, address, and telephone number of the person to whom the FCC should send correspondence. You may enter a post office box number in Item 17 or a street address in Item 18, or enter information for both items. Enter the city, state, and zip code in Items 19, 20, and 21, respectively. Refer to FCC 601 Main Form Instructions, Appendix II, for a list of valid state, jurisdiction, and area abbreviations. Enter a telephone number, including area code, in Item 22.

Items 23 and 24 Enter the applicant's fax number and e-mail address, if desired and available.

Failure to respond to FCC correspondence sent to the address of record may result in dismissal of an application, liability for forfeiture, or revocation of an authorization.

Contact Information

Items 25-34 These items identify the contact representative, if different from the applicant. This is usually the headquarters offices of a large company, the law firm or other representative of the applicant, or the person or company that prepared or submitted the application on behalf of the applicant. If there is a question about the application, an FCC representative will communicate with the applicant's contact representative.

If this section is used, a name (Item 25), entity name (Item 26), address (Items 27-31), and telephone number (Item 32) are required at a minimum. If the address items are completed, you may enter a post office box number in Item 27 or a street address in Item 28, or enter information for both items. Refer to FCC 601 Main Form Instructions, Appendix II, for a list of valid state, jurisdiction, and area abbreviations. Enter the contact's fax number (Item 33) and e-mail address (Item 34) if available and desired.

Regulatory Status

Item 35 This item identifies the type(s) of radio service offerings being provided and must be completed. Enter all types of radio service offerings that apply. Enter 'C' for Common Carrier, 'N' for Non-Common Carrier, 'P' for Private, internal communications or 'B' for Broadcast Services, and 'BM' for Band Manager. Use the Modification (MD) purpose in Item 2 to change or add radio service offerings. **NOTE: For Broadcast Auxiliary radio services, select 'P' for Private, internal communications. Do not select Broadcast Services.**

All entities that are telecommunications carriers should select common carrier on this form. The term 'telecommunications carrier' means any provider of telecommunications services, except that such term does not include aggregators of telecommunications services (the term 'aggregator' means any person that, in the ordinary course of its operations, makes telephones available to the public or to transient users of its premises, for interstate telephone calls using a provider of operator services). A telecommunications carrier shall be treated as a common carrier under the Communications Act and the Commission's rules (*i.e.*, as an entity which holds itself out for hire indiscriminately, in interstate or foreign communications by wire or radio, or in interstate or foreign radio transmission of energy, for the purpose of carrying transmissions provided by the customer), only to the extent that it is engaged in providing telecommunications services.

The term 'telecommunications service' means the offering of telecommunications (*i.e.*, the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received) for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.

Non-common carriers do not hold themselves out indiscriminately for hire as carriers of communications provided by the customer. A person engaged in radio broadcasting shall not, insofar as such person is so engaged, be deemed a common carrier. Thus, those entities meeting this definition would select non-common carrier for this item.

Private internal users are those entities that utilize telecommunications services purely for internal business purposes or public safety communications and not on a for hire or for profit basis. Such entities should select 'Private' for this item. **Broadcast Auxiliary should be included in this category and should select 'Private'.**

The term 'Broadcast Services' shall have the same meaning as that for "broadcasting" in §3(6) of the Communications Act of 1934, *i.e.,* the dissemination of radio communications intended to be received by the public, directly or by the intermediary of relay stations." 47 U.S.C. 153(6). Entities meeting this definition should select 'Broadcast Services' for this item. Broadcast Auxiliary applicants should not select this type of radio service offering.

The term 'Band Manager' is defined for the 746-747 MHz, 762-764 MHz, 776-777 MHz, and 792-794 MHz Guard Bands as a commercial licensee that functions solely as a spectrum broker by subdividing its licensed spectrum and making it available to system operators or directly to end users for fixed or mobile communications consistent with the Commission rules. A Band Manager in the 700 MHz Guard Bands (*i.e.,* a "Guard Band Manager") is directly responsible for any interference or misuse of its licensed frequencies arising from its use by such non-licensed entities. Entities meeting this definition should select 'Band Manager' for this item.

Type of Radio Service

Item 36 This item identifies all types of radio services for the applicant. Enter 'F' for Fixed, 'M' for Mobile, 'R' for Radiolocation, 'S' for Satellite, and 'B' for Broadcast Services. Enter all types of radio services, as applicable. Broadcast Auxiliary applicants should select Fixed or Mobile, not Broadcast Services. **Note: Broadcast Services is for the direct dissemination to the public.**

Item 37 Mark this item 'Y' if the applicant proposes to provide interconnected service to the public switched telephone network, as defined in the FCC rules. Otherwise, mark this item 'N'.

Fee Status

Items 38-39 These items allow the applicant to apply for exemption from FCC application fees and regulatory fees. See the WirelessTelecommunications Bureau Fee Filing Guide, FCC Form 1070M or call the Consumer and Governmental Affairs Bureau at 888-CALLFCC (225-5322) and select option #2.

Alien Ownership Questions

These items enable the FCC to determine whether an applicant is eligible under §310(a) and (b) of the Communications Act of 1934, as amended, to hold a station license. Applicants are required to answer these questions only if 1) they are filing Form 601 for one of the following purposes indicated in Item 2: New, Amendment, Modification, or Renewal/Modification; and 2) the answers have changed from those previously provided. If the answer is 'Yes', attach exhibit explaining circumstances. Applicants using Form 601 for any other purpose are not required to answer these questions.

Item 40 All applicants filing FCC Form 601 for one of the purposes indicated above must answer Item 40. The FCC cannot grant an authorization to a foreign government or the representative of a foreign government. Therefore, if the true and correct answer to Item 40 is 'Yes', the applicant is not eligible for a license and the FCC will dismiss the application, if filed, without further consideration.

Items 41-44 Only applicants to provide common carrier service must answer Items 41-44. The FCC cannot grant an authorization to provide common carrier service to any applicant for which the true and correct answer to any of Items 41, 42, or 43 is 'Yes.' The FCC will dismiss the application, if filed, without further consideration.

If the true and correct answer to Item 44 is 'Yes', the applicant must attach an exhibit explaining the circumstances. In the exhibit, the applicant must demonstrate how allowing the applicant to hold the requested license is consistent with the Commission's policies pursuant to §310(b)(4) of the Communications Act of 1934. In general, the Commission has indicated that there is a strong presumption that indirect foreign ownership of common carrier radio licensees by entities whose home markets are in countries that are members of the World Trade Organization (WTO) serves the public interest. If more than 25 percent of the ownership of an entity that controls a common carrier radio licensee is attributable to parties whose home markets are in non-WTO member countries, the Commission will evaluate whether those markets offer effective competitive opportunities to U.S. investors in the same service sector. See Rules and Policies on Foreign Participation in the U.S. Telecommunications Market, IB Docket No. 97-142, Report and Order and Order on Reconsideration, FCC 97-398, 12 FCC Rcd 23,891, ¶¶ 97-118, 131 (1997).

Basic Qualification Questions

Items 45-48 These items enable the FCC to determine whether an applicant is eligible under §310(a) and (b) of the Communications Act of 1934, as amended, to hold a station license. Applicants are required to answer these questions only if 1) they are filing FCC Form 601 for one of the following purposes indicated in Item 2: New, Amendment, Modification, or Renewal/Modification; and 2) the answers have changed from those previously provided. Applicants using FCC Form 601 for any other purpose are not required to answer these questions. If the applicant responds 'Yes' to any question, attach exhibit explaining circumstances unless applicant has previously provided a statement and explanation regarding the circumstances as an attachment to a prior application filed in ULS, and the facts and circumstances are unchanged, the applicant may refer to the previous application, by identifying the application file number and indicating the disposition of the prior application.

Aeronautical Advisory Station (Unicom) Certification

Item 49 This item certifies that the licensee has complied with 47 CFR 87.215(d). Failure to certify may result in dismissal of the application and forfeiture of any fees paid.

Race, Ethnicity, and Gender Questions (Optional)

Item 50 The information is optional and is requested for informational purposes only. Responses to this item will in no way affect processing of applications.

General Certification Statements

By signing this form, the applicant certifies that the statements listed in this section are true, complete, correct, and made in good faith.

Signature

Items 51-53 These items must be completed. To be acceptable for filing, applications and amendments must be signed in accordance with Part 1 of the FCC rules. The signor must be a person authorized to sign the application. Paper originals of applications must bear an original signature. On paper originals, neither rubber-stamped nor photocopied signatures are acceptable. For filers filing electronically via ULS, the electronic signature shall consist of the name of the applicant typed on the application as a signature.

Appendix I

General Guidelines on Coordination and Use of Radio Frequencies Above 30 MHz Between the United States and Canada

Note: The following table specifies general coordination criteria only for those frequency bands for which sole coordination authority resides with the FCC. Frequency bands that are shared with the Federal Government may have different coordination criteria than that listed herein and are coordinated by the Interdepartment Radio Advisory Committee (IRAC). Frequency bands not listed in the table are not coordinated by the FCC. See 47 C.F.R. § 2.106 for a table of frequency allocations.

Note: This information is based on treaties between the U.S. and Canada in effect July 1999 and is presented as general guidance only. Treaties are subject to change at any time. If you are unsure of the coordination criteria for a particular frequency band, contact the Commission for guidance.

Frequency (MHz)	Coordination Criteria
30.56 - 32.0	See Note 1.
33.0 - 34.0	See Note 1.
35.0 - 36.0	See Note 1.
37.0 - 38.0	See Note 1.
39.0 - 40.0	See Note 1.
42.0 - 46.6	See Note 1.
47.0 - 49.6	See Note 1.
72.0 - 73.0	See Note 1.
75.4 - 76.0	See Note 1.
121.975 - 123.075	Coordination not required.
123.075 - 123.575	Coordination not required.
128.825 - 132.025	See Note 12.
136.5 - 137.0	See Note 12.
150.8 - 156.2875	See Note 1.
156.2875-157.1625	Coordination not required.
157.1625-157.1875	See Note 1.
157.1875-157.4375	See Note 13.
157.4375-161.7875	See Note 1.
161.7875-162.0375	See Note 13.
162.0375 - 174.0	See Note 1.
450.0 - 454.665	See Note 1.
454.665 – 454.985	See Note 10.
454.985 - 459.665	See Note 1.
459.665 - 459.985	See Note 10.
459.985 - 470.0	See Note 1.
806.0 - 824.0	See Note 9.
824.0 - 849.0	See Note 8.
849.0 - 851.0	See Note 11.
851.0 - 869.0	See Note 9.
869.0 - 894.0	See Note 8.
894.0 - 896.0	See Note 11.
896.0 - 901.0	See Note 9.
901.0 - 901.350	Coordination not required. See Note 3.
901.350 - 901.750	Not licensed within 120 km of border. See Note 3.
901.750 - 901.850	Coordination not required. See Note 3.
901.850 - 901.900	Not licensed within 120 km of border. See Note 3.
901.900 - 901.950	Coordination not required. See Note 3.
901.950 - 902.0	Not licensed within 120 km of border. See Note 3.
928.0 - 928.25	See Note 1.
928.25 - 928.5	Coordination not required.
928.5 - 928.75	See Note 4.

Frequency (MHz)	Coordination Criteria
928.75 - 929.0	See Note 1.
929.0 - 930.0	Coordination not required. See Note 15.
930.0 - 930.4	Not licensed within 120 km of border. See Note 3.
930.4 - 930.8	Coordination not required. See Note 3.
930.8 - 931.0	Not licensed within 120 km of border. See Note 3.
931.0 - 932.0	See Note 5.
932.0 - 932.25	See Note 4.
932.25 - 932.5	Coordination not required.
932.5 - 935.0	See Note 6.
935.0 - 940.0	See Note 9.
940.0 - 940.350	Coordination not required. See Note 3.
940.350 - 940.750	Not licensed within 120 km of border. See Note 3.
940.750 - 941.0	Coordination not required. See Note 3.
941.0 - 941.25	See Note 4.
941.25 - 941.5	Coordination not required.
941.5 - 944.0	See Note 6.
944.0 - 952.0	See Note 2.
952.0 - 952.25	See Note 1.
952.25 - 952.5	Coordination not required.
952.5 - 952.75	See Note 4.
952.75 - 952.85	See Note 1.
952.85 - 960.0	See Note 2.
1535.0 - 1540.0	Coordination not required.
1850.0 - 1990.0	PCS - Coordination not required. See Note 7. Fixed systems - See Note 2.
1990.0 - 2200.0	See Note 2.
2450.0 - 2500.0	See Note 2.
2686.0 - 2690.0	See Note 2.
3700.0 - 4200.0	See Note 2.
5925.0 - 7125.0	See Note 2.
8400.0 - 8500.0	Coordination not required.
10550 - 10680	See Note 2.
10700 - 13250	See Note 2.
13250 - 13400	Coordination not required.
14000 - 15400	Coordination not required.
17700 - 23600	See Note 14.
24250 - 33400	Coordination not required.
36000 and above	Coordination not required.

Notes:

1. Coordination is required for stations North of Line A or East of Line C.
   Coordination is not required for stations operating with less than 5 watts effective radiated power (ERP), except for stations associated with Multiple Address Systems.
   Coordination is not required for 161.6 MHz.
2. Coordination is required for all stations located within 8 km (5 mi) of the Canadian border.
   Coordination in required for stations located within 56.3 km (35 mi) of the Canadian border when the antenna looks within a 200° sector towards the border. Although not required, the Commission will routinely coordinate stations operating with less than 5 watts effective radiated power (ERP). Coordination is not required for stations operating on a secondary basis with less than 5 watts Effective Radiated Power (ERP).
3. Separate channel sharing arrangements exist for the Toronto/Buffalo Region and the Detroit/Windsor Region. See "Canadian Interim Sharing Arrangement For Narrowband PCS", DA 94-1183, *Public Notice*, Oct. 21, 1994.
4. This band is not licensed on a primary basis North of Line A or East of Line C.
5. Coordination is required for stations within 120 km (75 mi) of the border when operating outside the geographical zones defined in 47 C.F.R. § 22.531.
6. Coordination is required for all stations located within 60 km (37.3 mi) of the Canadian border.
   Coordination is required for stations located within 120 km (75 mi) of the Canadian border when the antenna looks within a 200° sector towards the border.
7. See "US/Canada Interim Sharing Arrangement For 2 GHz Broadband PCS", DA 94-1289, *Public Notice,* Nov. 21, 1984.
8. Cellular Radio - Coordination not required. Expansion of systems near Canadian border is subject to mutual agreement by the Canadian service provider.
9. The U.S./Canada border area for these frequency bands is divided into eight geographical regions. See 47 C.F.R. § 90.619 for a definition of the eight regions and a list of which channels are allocated to the U.S. for each region.
10. Air-ground radiotelephone service stations must provide 1000 km (621 mi) distance separation to the nearest co-channel Canadian ground station. See 47 C.F.R. § 22.813.
11. Air-ground radiotelephone service stations located within 885 km (550 mi) of the border but beyond 8 km (5 mi) of any location listed in 47 C.F.R. § 22.859 must be coordinated.
12. Coordination criteria are based on frequency, location, and altitude.
13. VHF Maritime Public Correspondence - See 47 C.F.R. § 80.57 for the Canada/U.S.A. channeling arrangement.
14. Coordinate all stations operating within 56 km (35 mi) of the border.
15. Interim coordination agreement with Canada prohibits U.S. assignment of frequencies 929-929.5 MHz within 75 miles of border.

List of Counties/Boroughs, by State, Having Areas Within Various Canadian Coordination Zones

For use with Schedules D and I

X- County/Borough is completely within specified zone.

X P – County/Borough is partially within specified zone.

	North of Line A East of Line C	Within 120 km (75 mi) of Canadian Border	Within 56.3 km (35 mi) of Canadian Border
Alaska			
Haines Borough	X	X	X
Juneau Borough	X	X	X
Ketchikan Gateway	X	X	X P
North Slope	X P	X P	X P
Prince Of Wales outer Ketchikan	X	X P	X P
Sitka	X	X P	
Skagway-Hoonah-Angoon	X	X P	X P
Southeast Fairbanks	X P	X P	X P
Valdez-cordova	X P	X P	X P
Wrangell-petersburg	X	X P	X P
Yakutat	X	X P	X P
Yukon-koyukuk	X P	X P	X P
Idaho			
Bonner	X P	X P	X P
Boundary	X	X	X
Kootenai		X P	
Shoshone	X P	X P	
Indiana			
Allen	X P		
De Kalb	X P		
Steuben	X P		
Maine			
Androscoggin	X P	X P	
Aroostook	X	X	X
Cumberland		X P	
Franklin	X	X	X P
Hancock	X	X P	X P
Kennebec	X P	X P	
Oxford	X P	X P	X P
Penobscot	X P	X P	X P
Piscataquis	X	X	X P
Somerset	X	X P	X P
Waldo	X P	X P	
Washington	X	X	X P
Michigan			
Alcona	X	X	
Alger	X	X P	
Alpena	X	X	X P
Antrim	X P		
Arenac	X	X P	
Baraga	X		
Bay	X	X P	
Branch	X P		
Calhoun	X P		
Charlevoix	X	X P	
Cheboygan	X	X	X P
Chippewa	X	X	X
Clare	X P		
Clinton	X		
Michigan (cont'd)			
Crawford	X		
Delta	X		
Dickinson	X		
Eaton	X P		
Emmet	X	X	
Genesee	X	X	
Gladwin	X		
Gogebic	X		
Gratiot	X		
Hillsdale	X	X P	
Houghton	X	X P	
Huron	X	X	X P
Ingham	X	X P	
Ionia	X P		
Iosco	X	X P	
Iron	X		
Isabella	X P		
Jackson	X	X P	
Kalkaska	X P		
Keweenaw	X	X	X
Lapeer	X	X	X P
Leelanau	X P		
Lenawee	X	X	X P
Livingston	X	X	X P
Luce	X	X	X P
Mackinac	X	X	X P
Macomb	X	X	X
Marquette	X	X P	
Menominee	X P		
Midland	X		
Missaukee	X P		
Monroe	X	X	X P
Montcalm	X P		
Montmorency	X	X	
Oakland	X	X	X P
Ogemaw	X		
Ontonagon	X	X P	
Oscoda	X	X P	
Otsego	X	X P	
Presque Isle	X	X	X P
Roscommon	X		
Saginaw	X	X P	
Sanilac	X	X	X P
Schoolcraft	X	X P	
Shiawassee	X	X P	
St. Clair	X	X	X
Tuscola	X	X	
Washtenaw	X	X	X P
Wayne	X	X	X
Minnesota			
Beltrami	X P	X P	X P
Carlton	X P		
Minnesota (Cont'd)			
Cass		X P	
Clearwater	X P	X P	
Cook	X	X	X P
Itasca	X P	X P	
Kittson	X	X	X
Koochiching	X	X	X P
Lake	X	X P	X P
Lake Of The Woods	X	X	X P
Marshall	X	X	X P
Pennington	X P	X	
Polk	X P	X P	
Red Lake		X P	
Roseau	X	X	X
St. Louis	X P	X P	X P
Montana			
Blaine	X P	X P	X P
Chouteau	X P	X P	
Daniels	X	X	X
Flathead	X P	X P	X P
Glacier	X	X	X P
Hill	X	X	X P
Lake		X P	
Lewis And Clark		X P	
Liberty	X	X	X P
Lincoln	X	X P	X P
Mccone	X P	X P	
Phillips	X P	X P	X P
Pondera	X P	X	
Richland	X P	X P	
Roosevelt	X	X	X P
Sanders	X P	X P	
Sheridan	X	X	X P
Teton	X P	X P	
Toole	X	X	X P
Valley	X P	X P	X P
New Hampshire			
Carroll	X P	X P	
Coos	X P	X	X P
Grafton	X P	X P	
New York			
Allegany	X P	X P	
Cattaraugus	X P	X	X P
Cayuga	X P	X	X P
Chautauqua	X	X	X P
Clinton	X	X	X P
Cortland		X P	
Erie	X	X	X
Essex	X	X P	X P
Franklin	X	X	X P
Genesee	X	X	X P

X – County is completely within specified zone.

X P - County is partially within specified zone.

New York (Cont'd)

	North of Line A East of Line C	Within 120 km (75 mi) of Canadian Border	Within 56.3 km (35 mi) of Canadian Border
Hamilton	X P	X P	
Herkimer	X P	X P	
Jefferson	X	X	X P
Lewis	X	X	X P
Livingston	X	X	
Madison	X P	X P	
Monroe	X	X	X P
Niagara	X	X	X
Oneida	X P	X P	
Onondaga	X P	X	X P
Ontario	X	X	
Orleans	X	X	X
Oswego	X	X	X P
Schuyler		X	
Seneca	X P	X P	
St. Lawrence	X	X	X P
Steuben	X P	X P	
Tompkins		X P	
Warren	X P		
Washington	X P		
Wayne	X	X	X P
Wyoming	X	X	X P
Yates	X P	X P	

North Dakota

	North of Line A East of Line C	Within 120 km (75 mi) of Canadian Border	Within 56.3 km (35 mi) of Canadian Border
Benson	X P	X P	
Bottineau	X	X	X
Burke	X	X	X
Cavalier	X	X	X
Divide	X	X	X
Grand Forks	X P	X P	
Mchenry	X P	X P	X P
Mckenzie	X P	X P	
Mountrail	X P	X P	X P
Nelson	X P	X P	
Pembina	X	X	X
Pierce	X P	X P	X P
Ramsey	X P	X P	X P
Renville	X	X	X P
Rolette	X	X	X
Towner	X	X	X P
Walsh	X	X	X P
Ward	X P	X P	X P
Williams	X P	X	X P

Ohio

	North of Line A East of Line C	Within 120 km (75 mi) of Canadian Border	Within 56.3 km (35 mi) of Canadian Border
Ashland	X P	X P	
Ashtabula	X	X	X P
Crawford		X	
Cuyahoga	X	X	X P
Defiance	X	X P	
Erie	X	X	X
Fulton	X	X	
Geauga	X	X	X P
Hancock	X P	X P	
Hardin		X P	
Henry	X	X	
Holmes		X P	
Huron	X	X	X P
Lake	X	X	X P

Ohio (Cont'd)

	North of Line A East of Line C	Within 120 km (75 mi) of Canadian Border	Within 56.3 km (35 mi) of Canadian Border
Lorain	X	X	X P
Lucas	X	X	X P
Mahoning		X P	
Marion		X P	
Medina	XP	X	
Morrow		X P	
Ottawa	X	X	X
Paulding	X P		
Portage	X P	X P	
Putnam	X P	X P	
Richland		X P	
Sandusky	X	X	X P
Seneca	X	X	X P
Stark		X P	
Summit	X P	X	
Trumbull	X P	X P	
Wayne		X P	
Williams	X	X P	
Wood	X	X	X P
Wyandot		X P	

Pennsylvania

	North of Line A East of Line C	Within 120 km (75 mi) of Canadian Border	Within 56.3 km (35 mi) of Canadian Border
Crawford	X P	X	X P
Elk		X P	
Erie	X	X	X P
Forest		X P	
Mckean		X P	
Mercer		X P	
Potter		X P	
Venango		X P	
Warren	X P	X	

Vermont

	North of Line A East of Line C	Within 120 km (75 mi) of Canadian Border	Within 56.3 km (35 mi) of Canadian Border
Addison	X	X P	
Caledonia	X	X	X P
Chittenden	X	X	X P
Essex	X	X	X P
Franklin	X	X	X
Grand Isle	X	X	X
Lamoille	X	X	X P
Orange	X P	X P	
Orleans	X	X	X
Rutland	X P		
Washington	X	X	X P
Windsor	X P	X P	

Washington

	North of Line A East of Line C	Within 120 km (75 mi) of Canadian Border	Within 56.3 km (35 mi) of Canadian Border
Chelan	X P	X P	X P
Clallam	X	X	X P
Douglas	X P	X P	
Ferry	X P	X P	X P
Grant		X P	
Grays Harbor	X P	X P	
Island	X	X	X P
Jefferson	X	X	X P
King	X P	X P	
Kitsap	X P	X	
Lincoln		X P	
Mason	X P	X P	
Okanogan	X P	X	X P

Washington (Cont'd)

	North of Line A East of Line C	Within 120 km (75 mi) of Canadian Border	Within 56.3 km (35 mi) of Canadian Border
Pend Oreille	X	X	X P
Pierce		X P	
San Juan	X	X	X
Skagit	X	X	X P
Snohomish	X	X P	X
Spokane	X P	X P	
Stevens	X P	X P	X P
Whatcom	X	X	X

Wisconsin

	North of Line A East of Line C	Within 120 km (75 mi) of Canadian Border	Within 56.3 km (35 mi) of Canadian Border
Ashland	X P		
Bayfield	X P		
Douglas	X P		
Florence	X P		
Forest	X P		
Iron	X P		
Marinette	X P		
Vilas	X P		

Appendix II

STATE TABLE

Abbreviations for States, Jurisdictions, and Areas

AL	Alabama
AK	Alaska
AZ	Arizona
AR	Arkansas
CA	California
CO	Colorado
CT	Connecticut
DE	Delaware
DC	District of Columbia
FL	Florida
GA	Georgia
GM	Gulf of Mexico
HI	Hawaii
ID	Idaho
IL	Illinois
IN	Indiana
IA	Iowa
KS	Kansas
KY	Kentucky
LA	Louisiana
ME	Maine
MD	Maryland
MA	Massachusetts
MI	Michigan
MN	Minnesota
MS	Mississippi
MO	Missouri
MT	Montana
NE	Nebraska
NV	Nevada
NH	New Hampshire
NJ	New Jersey
NM	New Mexico
NY	New York
NC	North Carolina
ND	North Dakota
OH	Ohio
OK	Oklahoma
OR	Oregon
PA	Pennsylvania
RI	Rhode Island
SC	South Carolina
SD	South Dakota
TN	Tennessee
TX	Texas
UT	Utah
VT	Vermont
VA	Virginia
WA	Washington
WV	West Virginia
WI	Wisconsin
WY	Wyoming
AS	American Samoa
FM	Federated States of Micronesia
GU	Guam
MH	Marshall Islands
MP	Northern Mariana Islands
PW	Palau
PR	Puerto Rico
UM	U.S. Territories: (Baker Island, Howland Island, Jarvis Island, Johston Atoll, Kingman Reef, Midway Island, Navassa Island, Palmyra Atoll and Wake Island)
VI	Virgin Islands
AA	Armed Forces-Americas (excluding Canada)
AE	Armed Forces-(Europe, Middle East, Africa, Canada)
AP	Armed Forces-Pacific

FCC 601
Main Form

FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for public burden estimate

1) Radio Service Code:	1a) Existing Radio Service Code:

Application Purpose (Select only one) **( )**

2) **NE** - New **MD** - Modification **AM** - Amendment	**RO** - Renewal Only **RM** - Renewal/Modification **CA** - Cancellation of License	**CO** - Consolidate Call Signs **WD** - Withdrawal of Application **DU** - Duplicate License	**NT** - Required Notifications **EX** - Requests for Extension of Time **AU** - Administrative Update

3a) If this request is for a **D**evelopmental License, De**m**onstration License, or a **S**pecial Temporary Authorization (STA), enter the code and attach the required exhibit as described in the instructions. Otherwise enter '**N**' (Not Applicable).	( )**D M S N**/A
3b) If this request is for Special Temporary Authority due to an emergency situation, enter 'Y'; otherwise enter 'N'. Refer to Rule 1.915 for an explanation of situations considered to be an emergency.	( )**Y**es **N**o
4) If this request is for an Amendment or Withdrawal, enter the file number of the pending application currently on file with the FCC.	File Number
5) If this request is for a Modification, Renewal Only, Renewal/Modification, Cancellation of License, Consolidate Call Signs, Duplicate License, or Administrative Update, enter the call sign of the existing FCC license.	Call Sign
6) If this request is for a New, Amendment, Renewal Only, or Renewal/Modification, enter the requested authorization expiration date (this item is optional).	MM DD
7) Is this request "major" as defined in §1.929 of the Commission's rules when read in conjunction with the applicable radio service rules found in Parts 22 and 90 of the Commission's rules? (NOTE: This question only applies to certain site-specific applications. See the instructions for applicability and full text of §1.929).	( )**Y**es **N**o
8a) Does this filing request a Waiver of the Commission's rules? If 'Yes', attach an exhibit providing rule numbers and explaining circumstances.	( )**Y**es **N**o
8b) If a feeable waiver request is attached, multiply the number of stations (call signs) times the number of rule sections and enter the result.	
8c) Are the frequencies or parameters requested in this filing covered by grandfathered privileges, previously approved by waiver, or functionally integrated with an existing station?	( )**Y**es **N**o
9) **Are attachments being filed with this application?**	( )**Y**es **N**o

Applicant Information

10) FCC Registration Number (FRN):			
11) Applicant/Licensee is a(n): ( ) **I**ndividual **U**nincorporated Association **T**rust **G**overnment Entity **J**oint Venture **C**orporation **L**imited Liability Corporation **P**artnership C**o**nsortium			
12) First Name (if individual):	MI:	Last Name:	Suffix:
13) Entity Name (if other than individual):			
14) Name of Real Party in Interest of Applicant (If different from applicant):	15) Taxpayer Identification Number of Real Party in Interest:		

Applicant Information (continued)

16) Attention To:				
17) P.O. Box:	**And /Or**	18) Street Address**:**		
19) City:			20) State:	21) Zip:
22) Telephone Number:		23) FAX:		
24) E-Mail Address:				

Contact Information (If different from the applicant)

25) First Name:	MI:	Last Name:		Suffix:
26) Entity Name:				
27) P.O. Box:	**And /Or**	28) Street Address**:**		
29) City:			30) State:	31) Zip:
32) Telephone Number**:**		33) FAX:		
34) E-Mail Address:				

Regulatory Status

35) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply):

( )**C**ommon Carrier ( )**N**on-Common Carrier ( )**P**rivate, internal communications ( )**B**roadcast Services ( )**B**and **M**anager

Type of Radio Service

36) This filing is for authorization to provide the following type(s) of radio service (enter all that apply):

( )**F**ixed ( )**M**obile ( )**R**adiolocation ( )**S**atellite (sound) ( )**B**roadcast Services

37) Interconnected Service? ( )**Y**es **N**o

Fee Status

38) Is the applicant exempt from FCC application fees? ( )**Y**es **N**o

39) Is the applicant exempt from FCC regulatory fees? ( )**Y**es **N**o

Alien Ownership Questions (If any answer is 'Yes', attach exhibit explaining circumstances.)

40) Is the applicant a foreign government or the representative of any foreign government?	( )Yes No
41) Is the applicant an alien or the representative of an alien?	( )Yes No
42) Is the applicant a corporation organized under the laws of any foreign government?	( )Yes No
43) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	( )Yes No
44) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	( )Yes No

Basic Qualification Questions (If any answer is 'Yes', attach exhibit explaining circumstances.)

45) Has the applicant or any party to this application or amendment had any FCC station authorization, license, or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, construction permit denied by the Commission?	( )Yes No
46) Has the applicant or any party to this application or amendment, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court?	( )Yes No
47) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?	( )Yes No
48) Is the applicant or any party directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items?	( )Yes No

Aeronautical Advisory Station (Unicom) Certification

49) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

50) **Race, Ethnicity, and Gender of Applicant/Licensee (Optional)**:

Race:	American Indian or Alaska Native:	Asian:	Black or African-American:	Native Hawaiian or Other Pacific Islander:	White:
Ethnicity:	Hispanic or Latino:	Not Hispanic or Latino:			
Gender:	Female:	Male:			

General Certification Statements

1)	The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application.
2)	The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership, attribution, or spectrum cap rule.* *If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
3)	The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of this application, and are true, complete, correct, and made in good faith.
4)	The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
5)	The applicant certifies that it either (1) has a current Form 602 on file with the Commission, (2) is filing an updated Form 602 simultaneously with this application, or (3) is not required to file Form 602 under the Commission's rules.
6)	The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.

Signature

51) Typed or Printed Name of Party Authorized to Sign

First Name:	MI:	Last Name:	Suffix:
52) Title:			
Signature:			53) Date:

Failure To Sign This Application May Result In Dismissal Of The Application And Forfeiture Of Any Fees Paid.
Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.
WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18, §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FEDERAL COMMUNICATIONS COMMISSION

Approved by OMB
3060 – 0798
See 601 Main Form Instructions
for public burden estimate

Information and Instructions

Schedule for Changes Affecting Multiple Call Signs or File Numbers Form FCC 601

Schedule A
Instructions

Form FCC 601, Schedule A, is a supplementary schedule for use with the FCC Application for Wireless Telecommunications Bureau Radio Service Authorization, FCC 601 Main Form. Schedule A is not used with initial applications. Complete this schedule to submit global changes to items on the FCC 601 Main Form that affect multiple call signs or file numbers, depending on the Application Purpose entered for Item 2 of that form. Note the following:

> *Multiple File Numbers may be affected by these purposes:* Amendment or Withdrawal of Application
>
> *Multiple Call Signs may be affected by these purposes:* Renewal Only, Cancellation of License, Consolidate Call Signs, Duplicate License, or Administrative Update

Each Schedule A or groups of Schedule A filed with the FCC 601 Main Form must use the same purpose, and only one purpose can be specified per submission.

FCC 601
Schedule A

Schedule for Changes Affecting Multiple Call Signs or File Numbers

Approved by OMB
3060 - 0798
See 601 Main Form
for public burden estimate

Enter only multiple call signs or only multiple file numbers for the following Form FCC 601 Main Form purposes:

Amendment or Withdrawal of Application (File Numbers)

Renewal Only, Cancellation of License, Consolidate Call Signs, Duplicate License, or Administrative Update (Call Signs)

Note: Form FCC 601 Main Form allows the selection of only one purpose per submission.

Each Schedule A or groups of Schedule A filed with the FCC 601 Main Form must use the same purpose.

Call Sign or File Number	Call Sign or File Number	Call Sign or File Number	Call Sign or File Number

FEDERAL COMMUNICATIONS COMMISSION

Information and Instructions

Approved by OMB
3060 – 0798
See 601 Main Form Instructions
for public burden estimate

Schedule for Geographically Licensed Services

Form FCC 601, Schedule B, is a supplementary schedule for use with the FCC Application for Wireless Telecommunications Bureau Radio Service Authorization, FCC 601 Main Form. This schedule is used to apply for the required license authorization when the applicant has been determined to be the winning bidder at the close of an FCC auction. The FCC 601 Main Form must be filed in conjunction with this schedule.

Schedule B
Instructions

Market/Channel Block

Items 1 through 4 are to be completed with the market or markets that are licensed on a geographic licensing area or market basis (*e.g.*, Personal Communications Service) and have been won through an auction (in this case, multiple sites may be completed for each Schedule B).

Item 1 This item identifies the market(s) to which the filing pertains. Market designators are listed in FCC Public Notices or in the FCC rules.

Item 2 This item, in addition to the market designator, identifies the market to which the filing pertains. The market names are listed in FCC Public Notices or in the FCC rules.

Item This item identifies the spectrum, assigned in channel blocks, for the market area listed in Item 1.

Item 4 Complete this item only if the market area listed in Item 1 has been subdivided (in a partition and/or disaggregation).

Note: In some circumstances geographic area licensees must apply for a site-specific authorization when either (a) a site requires international coordination, or (b) a site will have an environmental impact or (c) a base or fixed station in the Lower 700 MHz WCS channels is operating in excess of 1 kW ERP.

(a) Sites requiring international coordination:

International coordination is generally needed when a site is located North of Line A or East of Line C. Appendix I in FCC Form 601 Main Form instructions contains a list of counties/boroughs, by state, having areas North of Line A and East of Line C. In these instances, licensees must file an application for modification using FCC Form 601 Main Form and Schedule I for microwave radio services or Schedule D and the appropriate technical data schedule for all other radio services.

(b) Sites having an environmental impact:

Sites having a significant environmental effect are defined in Section 1.1307 of the Commission's rules. In these instances, licensees must file an application for modification using FCC Form 601 Main Form and Schedule I for microwave radio services or Schedule D for all other radio services. Examples of facilities that may have a significant effect on the environment include:

An antenna structure located in a residential area (as defined by applicable zoning laws) that will utilize high intensity aviation obstruction lighting

A facility located in an officially designated wilderness area, wildlife preserve, or floodplain

A facility that affects a site significant in American history

A facility whose construction involves extensive changes in surface features

Facilities, operations, or transmitters that would cause human exposure to levels of radio frequency radiation in excess of the limits as detailed in §§ 1.1310 and 2.109 of the Commission's rules.

(c) Based or fixed stations in the Lower 700 MHz WCS channels operating in excess of 1 kW ERP:

Pursuant to Section 27.50(c)(5) of the Commission's rules, licensees authorized for the lower 700 MHz WCS channels that operate base or fixed stations in excess of 1 kW ERP must file an application for modification using FCC Form 601 Main Form and Schedule D. Licensees

must provide the coordinates of the facilities on Schedule D and provide as an exhibit the station's maximum ERP (watts), antenna height above ground (meters) and a depiction of the vertical antenna pattern. Licensees must provide the same technical parameters to all adjacent Part 27 licensees authorized to construct and operate a base or fixed station within 75 km of the location(s) indicated on Schedule D.

Item 5 For each market and channel block, please indicate whether you will be seeking a tribal lands bidding credit by checking the appropriate box.

> **Note:** The processing of each application requesting a tribal land bidding credit will be suspended for 90 days. This 90-day period provides the applicant time to secure the required certification(s) from the appropriate tribal government(s) and to amend the application in accordance with the Commission's rules.

Tribal Lands Information

Complete this section ONLY after you have received the required certification(s) from the tribal government(s).

The information provided in this section will enable the FCC to determine whether an applicant is eligible to receive a tribal land bidding credit and the amount of the bidding credit.

Item 6 Enter the market designator for those markets where a tribal lands bidding credit is being sought.

Item 7 Enter the assigned channel blocks for the market area listed in Item 6.

Item 8 Enter the names of the tribal lands for which a bidding credit is being sought. The term "tribal lands" shall mean "reservation" as defined by the Bureau of Indian Affairs. A reservation is any federally recognized Indian tribe's reservation, Pueblo, or Colony, including former reservations in Oklahoma, Alaska Native regions established pursuant to the Alaska Native Claims Settlement Act (85 Stat.688), and Indian allotments.

Item 9 Enter, in square kilometers, the area for each tribal land within the designated market.

Item 10 For each market, place an "x" next to the tribal lands where the required certification(s) has been received and bidding credit is sought. Attach the certification(s) as an exhibit and title it "Tribal Government Certification".

Item 11 On the first line for each market, enter the dollar amount of the tribal lands bidding credit as calculated in accordance with the Commission's rules.

Item 12 If requesting a waiver of the Commission's rules to obtain a tribal lands bidding credit higher than allowed under the rules, enter the additional dollar amount for each market, on the first line for that market, and attach an exhibit justifying the request. You must provide a certification from an independent auditor that the estimated costs set forth in the exhibit are reasonable.

Please note: your tribal lands bidding credit cannot exceed the applicable bidding credit cap as defined in the rules.

Certification Statements

By signing the FCC 601 Main Form, the applicant certifies that the statements listed in this section are true, complete, correct, and made in good faith.

FCC 601
Schedule B

Schedule for Geographically Licensed Services

Approved by OMB
3060 – 0798
See 601 Main Form Instructions
for public burden estimate

Market/Channel Block

1) Market Designator	2) Market Name	3) Channel Block	4) Sub-Market Designator	5) I Am Seeking A Tribal Lands Bidding Credit In This Market
				( ) Yes ( ) No
				( ) Yes ( ) No
				( ) Yes ( ) No
				( ) Yes ( ) No
				( ) Yes ( ) No

TRIBAL LANDS INFORMATION - Complete only when attaching the required certification(s) from the tribal government(s)

6) Market Designator	7) Channel Block	8) Name of Tribal Lands	9) Area, in square kms, of tribal lands contained within designated market	10) Indicate with an "x" those tribal lands where applicant has secured the required certification(s) from the tribal governments (attach certification(s))	11) The amount of bidding credit as defined by FCC Rules (by Market)	12) Additional amount of bidding credit requested (attach justification)

Certifications

For Applicants Claiming Eligibility as an Entrepreneur Under the General Rule

Applicant certifies that they are eligible to obtain the licenses for which they apply.

For Applicants Claiming Eligibility as a Publicly Traded Corporation

Applicant certifies that they are eligible to obtain the licenses for which they apply and that they comply with the definition of a Publicly Traded Corporation, as set out in the applicable FCC rules.

For Applicants Claiming Eligibility using a Control Group Structure

Applicant certifies that they are eligible to obtain the licenses for which they apply.
Applicant certifies that the applicant's sole control group member is a pre-existing entity, if applicable.

For Applicants Claiming Eligibility as a Very Small Business, Very Small Business Consortium, Small Business, or as a Small Business Consortium

Applicant certifies that they are eligible to obtain the licenses for which they apply.
Applicant certifies that the applicant's sole control group member is a pre-existing entity, if applicable.

For Applicants Claiming Eligibility as a Rural Telephone Company

Applicant certifies that they meet the definition of a Rural Telephone Company as set out in the applicable FCC rules, and must disclose all parties to agreement(s) to partition licenses won in this auction. See applicable FCC rules.

For Applicants Claiming Tribal Lands Bidding Credit

Applicant certifies that it will comply with the bidding credit buildout requirements and consult with the tribal government(s) regarding the siting of facilities and deployment of service on the tribal land(s) as set out in the applicable FCC rules.

FEDERAL COMMUNICATIONS COMMISSION

Approved by OMB
3060 - 0798
See 601 Main Form Instructions
for public burden estimate

Information and Instructions

Wireless Telecommunications Bureau Schedule for Station Locations and Antenna Structures

Form FCC 601, Schedule D, is a supplementary schedule for use with the FCC Application for Wireless Telecommunications Bureau Radio Service Authorization, FCC 601 Main Form. This schedule is used to supply technical information for fixed transmit station locations, including antenna structures and Mobile, Temporary Fixed, Itinerant, and 6.1 Meter Control Station Locations. It is also used by geographic licensees (all radio services, except microwave) to apply for a site-specific authorization to fulfill international coordination requirements, environmental assessment requirements or for reporting of cell transmitter stations (CTS) in the 218-219 MHz Service (when required by Part 95) or for reporting of base or fixed stations operating in excess of 1 kW ERP in the Lower 700 MHz WCS channels (when required by Part 27). File as many schedules as necessary to describe all station locations, including antenna structures, in your application. The FCC 601 Main Form must be filed in conjunction with this schedule. This schedule is used in conjunction with the following technical data schedules:

Note: When required, antenna structures must be registered using FCC Form 854. The use of this form to supply antenna structure information does not replace the requirement to register antenna structures on the FCC Form 854. For more information, see our web site at http://wireless.fcc.gov/antenna, call the Consumer & Governmental Affairs Bureau at 888-CALLFCC (888-225-5322), or e-mail questions to FCCDMD@fcc.gov.

FCC 601, Schedule F - Technical Data Schedule for the Cellular and Air-ground (Commercial Aviation) Radiotelephone Services (Part 22)

Note: Services that use Schedule F may only apply for fixed station locations.

FCC 601, Schedule G - Technical Data Schedule for the Maritime and Aviation Services (Parts 80 and 87)

FCC 601, Schedule H - Technical Data Schedule for the Private Land Mobile and Broadcast Auxiliary Land Mobile Radio Services (Parts 90 and 74)

Note: Part 90 Services that use Schedule H may only have a maximum of six fixed sites per call sign.

FCC 601, Schedule J - Technical Data Schedule for the Paging, Rural, Air-ground (General Aviation), and Offshore Radiotelephone Services (Part 22)

It is recommended that Schedule D be completed prior to completing any required technical data schedules.

Note: Some services have specific requirements and/or restrictions for some of the items on this schedule. Please refer to the instructions of the appropriate technical data schedule for service specific response requirements and restrictions.

Schedule D Instructions

This schedule must be completed when any station location is to be added, modified, or deleted. Use as many copies of Schedule D as necessary to provide information for all stations.

Adding a Fixed Station Location
If you are adding a new fixed station location, complete all required items for each fixed station location being added.

Note: If you are adding a 6.1 Meter (20 foot) Control Station in the 470-512 MHz band, 72-76 MHz band or adding a 6.1 Meter (20 foot) Control Station that requires greater than 5 watts output power/ERP for operations in regions North of Line 'A' or in Alaska East of Line 'C', complete all required items for the control station as if adding a fixed station location. Enter location description code as "FX" in Item 3.

Modifying a Fixed Station Location
If you are modifying a fixed station location, in addition to Items 1, 2, and 6 (provide the seven digit antenna structure registration number), complete only the items that have changed for each fixed station location. If the modification is to delete existing data, enter CLR (clear) in the appropriate field (manual filed forms only). If the modification involves technical data filed on one of accompanying FCC Technical Data Service Schedules F, G, H, or J, or involves the relocation of a fixed station, then Items 26 and 27 (if applicable) must also be completed.

Adding a Mobile, Temporary Fixed, Itinerant, or 6.1 Meter Control Station Location
If you are adding a new mobile station, temporary fixed station, itinerant station, or 6.1 meter control station, complete all required items for each station to be added.

> **Note:** If you are adding a 6.1 Meter (20 foot) Control Station in the 470-512 MHz band, 72-76 MHz band or adding a 6.1 Meter (20 foot) Control station that requires greater than 5 watts output power/ERP for operations in regions North of Line 'A' or in Alaska East of Line 'C', complete all required items for the control station as if adding a fixed station location. Enter location description code as "FX" in Item 3.

Modifying a Mobile, Temporary Fixed, Itinerant, or 6.1 Meter Control Station Location
If you are modifying a station, in addition to Items 1, and 2, complete only the items that have changed for each station. If the modification is to delete existing data, enter CLR (clear) in the appropriate field (manual filed forms only). If the modification involves technical data filed on one of accompanying FCC Technical Data Service Schedules G, H, or J, or involves the relocation of a control station, then Items 26 and 27 (if applicable) must also be completed.

Deleting a Station Location
If you are deleting a station location, only Items 1, 2, 7 and 8 are required, if applicable. If a station location is deleted, the frequency, emission, and all related technical data that is linked to that station location will automatically be deleted and will no longer be part of your authorization. Therefore, it is not necessary to complete the complementary technical data service schedule to delete frequency and emissions when a station location is deleted using this schedule. Station locations that are currently licensed under the call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested.

IMPORTANT ANTENNA STRUCTURE REGISTRATION INFORMATION: The Commission will evaluate your application for a fixed location based on the Antenna Structure Registration number you provide (if required). If you mistype your Antenna Structure Registration Number, or provide location data (latitude, longitude, elevation, and structure heights) that is inconsistent with the data found in the Commission's Antenna Structure Registration database, your application will be dismissed.

Inconsistent data is defined as follows:

1. Latitude and Longitude data provided on Schedule D differs from the data in the Antenna Structure Registration database by more than 1 second; or
2. The height or elevation reported on Schedule D is more than 0.5 meters (1.5. feet) greater than the data in the Antenna Structure Registration Database; or elevation is more than 3 meters (9.8 feet) less than the elevation listed in the Antenna Structure Registration Database.

IMPORTANT INFORMATION REGARDING LOCATION, ANTENNA, AND CONTROL POINT NUMBERS: To identify existing locations, antennas, or control points, you must use the location, antenna, and control point numbers assigned by the Universal Licensing System (ULS). These numbers may not be identical to the location, antenna, and control point numbers on your current authorization if that authorization was not issued by the Universal Licensing System. If you are unsure of the location, antenna, or control point number that corresponds to a particular location, antenna, or control point, you can query the ULS for the most up-to-date information regarding your authorization. To query the ULS license database for your call sign, point your web browser to http://wireless.fcc.gov/uls/ and click on the Search - Licenses. Alternatively, you may call 1-888-CALLFCC (888-225-5322) for assistance.

Item 1 This item must be completed. It indicates the action the applicant wants the FCC to take on the specified location. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Item 2 This item must be completed. If the station location has been previously licensed under this call sign by the FCC, enter its FCC-assigned location number (see Important Information Regarding Location, Antenna, and Control Point Numbers. For a new station location, assign a temporary code to represent the station location. The assigned code should begin with 'L' to indicate it is a location and end with a number to uniquely identify it (*e.g.*, L1, L2, L3, etc.). The FCC will assign an official number to the new station, which will appear on the Authorization.

Item 3 Enter the appropriate location description for the specified location. Valid location description codes are listed below:

FX - Fixed
MO - Mobile
IT - Itinerant
TF - Temporary Fixed
6.1 - 6.1 Meter Control Station

Item 4 Does not apply if Item 3 equals FX. For Mobile, Temporary Fixed, Itinerant, and 6.1 Meter Control Stations, enter the appropriate area of operation code using the table that follows. Additional Schedule D fields must be completed according to the area of operation code chosen. Refer to the table to determine which additional fields are required on Schedule D for the chosen area of operation code. Only one area of operation code may be selected for each location.

Note: If area of operation will cover multiple counties/boroughs/parishes, use area of operation code 'O' and in Item 24, specify all applicable counties/boroughs/parishes in and the state(s) the counties/boroughs/parishes are located in.

Area of Operation Codes and Required Data Values

Code Description	Additional Schedule D Data Elements Required for each Area of Operation Code	Item Numbers
A KMRA* around a Fixed location (option not available to Maritime or Aviation Services)	Fixed Location Number, Temporary Fixed or Mobile Radius	17, 18
P KMRA* around a Center point	Latitude, Longitude, City**, State, County/Borough/Parish**, Temporary Fixed or Mobile Radius	7, 8, 10, 11, 12, 18
R Rectangular Area of Operation	Latitude, Longitude, Maximum Latitude, Maximum Longitude	7, 8, 21, 22
N Nationwide including Hawaii Alaska & US Territories		
U Continental US		
C County/Borough/Parish Wide Area of Operation	State, County/Borough/Parish	11, 12
S Statewide Area of Operation	State	11
O Other	Description (should include State)	24
X Land Mobile Control Station Meeting the 6.1 Meter Rule	State, County/Borough/Parish	11, 12

*Kilometers Radius
** Complete as applicable - refer to instructions for applicability.

Item 5 This item is optional. Enter a location name that describes the location (up to 20 characters maximum).

Item 6 This item is required for fixed locations if the action requested in Item 1 is 'A' or 'M'. If antenna structure registration is required, enter the seven digit FCC Antenna Structure Registration Number (shown on the structure's registration, FCC Form 854R). Otherwise, enter N/A to indicate that FAA notification is not required.

Note: Effective 7/1/96 the Commission requires owners to register certain structures. When required, antenna structures must be registered using FCC Form 854. The use of this FCC Form 601 to supply antenna structure information does not replace the requirement to register antenna structures on the FCC Form 854. For more information, see our web site at http://wireless.fcc.gov/antenna/, call the Consumer and Governmental Affairs Bureau at 888-CALLFCC (888-225-5322), or e-mail questions to FCCDMD@fcc.gov.

Note: If, in accordance with 47 CFR § 17.14, Antenna Structure Registration is not required because the structure is shielded by existing structures or because it is fixed by its functional purpose, submit supporting documentation as an attachment to your application.

Items 7 and 8 For fixed locations, if you entered 'N/A'; in Item 6, you must enter the geographic coordinates (latitude and longitude) of the location. If you provided an Antenna Structure Registration Number in Item 6, then these items are optional (see Important Antenna Structure Registration Information on page 2 of these instructions). For all other locations enter the geographic coordinates as specified in the table in the instructions for Item 4:

If 'P' was entered in Item 4, enter the geographic coordinates of the center point;
If 'R' was entered in Item 4, enter the geographic coordinates of the southeast corner of the rectangular area or box. (See also Items 21 and 22 for the Northwest corner)

Enter the latitude using the format *DD-MM-SS*, where the degrees (*DD*) term can have a value in the range of 0 to 71, minutes (*MM*) can range from 0 to 59, and seconds (*SS*) can range from 0 to 59.9. If desired, seconds may be rounded to the nearest tenth of a second (in which case, use the format DD-MM-SS.S). In the right corner, specify the direction as either N for North or S for South.

Enter the longitude using the format *DDD-MM-SS*, where the degrees (*DDD*) term can have a value in the range of 64 to 180, minutes (*MM*) can range from 0 to 59, and seconds (*SS*) can range from 0 to 59.9. If desired, seconds may be rounded to the nearest tenth of a second (in which case, use the format DDD-MM-SS.S). In the right corner, specify the direction as either E for East or W for West.

All coordinates must be referenced to the North American Datum of 1983 (NAD83). This information can be determined in many ways, including a GPS receiver, a 7.5-minute topographical quadrangle map of the area, or you may consult the city or county/borough/parish surveyor in your area. Topographical maps may be purchased from the U.S. Geological Survey, Washington, DC 20242 or from its office in Denver, Colorado 80225.

Note: Location coordinates (latitude and longitude) for sites in the Continental United States, Puerto Rico, the U.S. Virgin Islands, Alaska, Hawaii, American Samoa, and Guam must be referenced to the North American Datum of 1983 (NAD83). Coordinates for sites in the Northern Mariana Islands, Wake Island, and Midway Island should be referenced to the applicable local datums. If the source from which you obtain the coordinates still utilizes an older datum (*i.e.*, NAD27, PRD40) you must convert to NAD83. Conversion routines are available through the internet at http://wireless.fcc.gov/uls/utilities/nadcon.html.

Items 9-12

Fixed Locations

If you answered 'N/A' in Item 6 for a Fixed Location, you must complete Items 9 through 12. If you provided an Antenna Registration Number in Item 6 for a Fixed Location, you must complete Item 12, County/Borough/Parish name.

Item 9 This item must be completed for the Fixed Location. Enter a complete description of the location such as street number and address or other geographic description such as direction and distance from a town or known landmark (i.e., RT 81, 5 km South of Fairview). P. O. Box numbers or geographical coordinates are not acceptable for this item.

Item 10 This item must be completed with the City in which the station is located.

Item 11 This item must be completed with the State code in which the station is located. Refer to FCC Form 601 Main Form Instructions, Appendix II, for a list of valid state, jurisdiction and area codes.

Item 12 This item must be completed with the County/Borough/Parish in which the station is located unless any of the following pertain to the Fixed Location:

a) The City entered in Item 10 is an Independent City that is not affiliated with a County/Borough/Parish (i.e., Baltimore, MD)
b) The State code entered in Item 11 does not have Counties/Boroughs/Parishes (i.e., Puerto Rico, Virgin Islands)
c) The State code entered in Item 11 is GM, Gulf of Mexico

NOTE: If the nearest City, County/Borough/Parish and State are located in a bordering County/Borough/Parish and/or State, enter a complete description of the location in Item 9 as shown in the example. Complete Item 10 if a City, Town or Village within the station's County/Borough/Parish is nearby, and complete Items 11 and 12 with the County/Borough/Parish and State in which the coordinates are actually located.

Example:
9) (Street) Summit Mtn near Palo Verde, Imperial County, CA
10) (City) Palo Verde
11) (State) AZ
12) (County/Borough/Parish) La Paz

Area Locations

For area locations, respond to items 9-12 as specified in the table in the instructions for Item 4:

Item 9 This item is not applicable for area locations and should be left blank.

Item 10 If 'P' was entered in Item 4, enter the city or town name of the location in this item. This item is required only if Item 12 is blank.

Item 11 If 'P', 'C', 'S', or 'X' was entered in Item 4, enter the State of the location in this item (if 'X' was entered in Item 4, enter the State of the primary control station). Refer to FCC 601 Main Form Instructions, Appendix II, for a list of valid state, jurisdiction, and area codes.

Item 12 If 'C', 'P' or 'X' was entered in Item 4, enter the County/Borough/Parish of the location in this item.

This item is always required for area of operation code 'C'.

This item is required for area of operation code 'P' except when: (a) the City entered in Item 10 is an Independent City that is not affiliated with a County/Borough/Parish (*i.e.*, Baltimore, MD), (b) the State entered in Item 11 does not have counties/boroughs/parishes (*i.e.*, Puerto Rico, Virgin Islands), or (c) the State entered in Item 11 is 'GM' (Gulf of Mexico).

This item is required for area of operation code 'X' for Radio Service Codes IK or YK utilizing frequencies below 470 MHz except when: (a) the City entered in Item 10 is an Independent City that is not affiliated with a County/Borough/Parish (i.e., Baltimore, MD), (b) the State entered in Item 11 does not have counties/boroughs/parishes (i.e., Puerto Rico, Virgin Islands), or (c) the State entered in Item 11 is 'GM' (Gulf of Mexico).

Note: Items 13-16 only apply to Fixed Locations. If you answered 'N/A' in Item 6 for a Fixed Location, you must complete Items 13-16. If

you provided an Antenna Registration Number in Item 6 for a Fixed Location, Items 13-16 are optional. (See Important Antenna Structure Registration Information on Page 2 of Schedule D Instructions.)

Item 13 Enter the elevation above mean sea level (AMSL) of the ground at the antenna location. Enter this item in meters, rounded to the nearest tenth. Refer to letter 'a' in the antenna structure figure examples on page 6 of these instructions. This information can be determined in many ways, including a GPS receiver, 7.5 minute topographical quadrangle map of the area, or you may consult the city or county/borough/parish surveyor in your area. Topographical maps may be purchased from the U.S. Geological Survey, Washington, DC 20242 or from its office in Denver, Colorado 80225.

Item 14 Enter the height above ground level to the highest point of the **supporting structure only**. Enter this item in meters, rounded to the nearest tenth. For example, if the antenna structure consists of a building/tower combination, include any elevator shaft, flag pole, or penthouse in the **overall** support structure height, but not the antenna, tower, pole, or mast. If the antenna structure is a tower only, include the height of the tower but not the antenna. Refer to letter 'b' in the antenna structure figure examples on page 6 of these Instructions.

Item 15 Enter the overall height above ground level of the entire antenna structure to the highest point, including any appurtenances. Enter this item in meters, rounded to the nearest tenth. You must include antennas, dishes, obstruction lighting, etc. Refer to letter 'c' in the antenna structure figure examples on page 6 of these instructions.

Item 16 Enter the code for the type of structure on which the antenna is or will be mounted from the following valid structure types:

Code	Definition
B	Building with a side mounted antenna
BANT	Building with Antenna on Top
BMAST	Building with Mast/Antenna on Top
BPIPE	Building with Pipe/Antenna on Top
BPOLE	Building with Pole/Antenna on Top
BRIDG	Bridge
BTWR	Building with Tower/Antenna on Top
MAST	Self-Support Structure
NNTANN*	Antenna Tower Array
NTOWER**	Multiple Structures
PIPE	Any Type of Pipe
POLE	Any Type of Pole, used only to mount an antenna
RIG	Oil or Other Type of Rig
SIGN	Any Type of Sign or Billboard
SILO	Any Type of Silo
STACK	Smoke Stack
TANK	Any Type of Tank (Water, Gas, etc.)
TOWER	A Free Standing **or** Guyed Structure Used for Communications Purposes
TREE	When Used as a Support for an Antenna
UPOLE	Utility Pole/Tower Used to Provide Service (Electric, Telephone, etc.)

* Valid Tower Arrays. Code definition: The first NN indicates the number of towers in an array. The second NN is optional and indicates the position of that tower in the array (*e.g.,* 3TA2 would identify the second tower in a three-tower array).

** Valid Multiple Structures. Code Definition: The N indicates the number of structures where multiple antenna structures are present in a multiple structure (Ex.: 2TOWER, 3TANK, 6BANT, 7BMAST).

Item 17 If you entered Area of Operation code 'A' in Item 4, enter the location number of the corresponding fixed location.

Item 18 For Area of Operation codes 'A' or 'P', enter the radius of the area of operation. Enter in kilometers, rounded to the nearest tenth. Refer to CFR 47 for limitations.

Item 19 Applicable to Aviation Services (Part 87) only. Enter the three or four character code assigned to the airport (if applicable).

Item 20 This item only applies when Item 3 equals FX and Item 1 is 'A' or 'M'. If Commission's rules recognize Primary and Secondary protection in conjunction with other fixed site facilities in the service, enter 'P' if you wish primary protection for the site or 'S' if you wish no protection for the site. If Commission's rules do not recognize Primary and Secondary protection in conjunction with other fixed site facilities in the service, Item 20 can be left blank. Refer to the applicable Commission's rules for your service for more information on Primary and Secondary protection.

Items 21 and 22 These items must be completed for operations that are defined by a rectangular area or box coordinates (Area of Operation code in Item 4 = 'R'). Enter geographic coordinates (latitude and longitude) of the northwest corner of the rectangular area of box in Items 21 and 22. See Notes in Items 7 and 8 of these instructions for important information regarding coordinates.

Item 23 Respond to this Item only if Item 3 is MO, TF, IT or 6.1. Does not apply when Item 3 equals FX. This item helps the FCC to determine if it will initiate coordination procedures with the Government of Canada. If any part of the mobile location is in an area that requires frequency coordination with Canada and you intend to operate in this area, enter 'Y'. In the event the applicant needs to submit additional information regarding coordination of a channel assignment with the Government of Canada, this should be attached as an exhibit, which references Schedule D Item 23. If 'N' is entered, the FCC will not initiate coordination procedures with the Government of Canada and your area of operation will be excluded from these border areas. Appendix I in FCC Form 601 Main Form Instructions contains a list of counties/boroughs, by state, having areas within the various coordination zones and a list of which coordination zones apply for various frequency bands. (If the county/borough has an 'X' in the block then enter 'Y'. If the county/borough doesn't have an 'X' then enter 'N'. If the county/borough has an 'X' and a 'P', this indicates part of the county/borough requires frequency coordination with Canada, then enter 'Y' or 'N' depending on whether or not you intend on operating in the border area.)

Item 24 If the response to Item 4 was 'O', enter a description of the area of operation. P.O. Box numbers or geographic coordinates are not acceptable for Item 24. The use of 'Other' should only be used if the area of operation cannot be described by using codes A, P, R, C, S, N, or U. Area of operation provided as 'Other' may delay processing of the application.

Item 25 This item is applicable only if you are applying for an area of operation in services other than Land Mobile (public or private) or Broadcast Auxiliary Land Mobile Radio. Enter the number of units for each type listed: Hand Held, Mobile, Temporary Fixed, Aircraft, and Itinerant. For paging systems (Part 22), provide the number of subscribers (in mobiles) along with the number of temporary fixed transmitters.

Item 26 This item is required for compliance with the National Environmental Policy Act of 1969 (NEPA), as amended, 42 U.S.C. 4321-4335. See also Part 1, Subpart I of the FCC rules (47 CFR 1.1301 - 1.1319). This item must be answered, either 'Y' or 'N'.

Enter 'Y' if an FCC grant of this application will have a significant environmental effect. Section 1.1307 of the FCC rules lists categories of environmental effects for which applicants must file an environment assessment. Other wise enter 'N'. Examples of facilities that may have a significant effect on the environment include:

An antenna structure located in a residential area (as defined by applicable zoning laws) that will utilize high intensity aviation obstruction lighting

A facility located in an officially designated wilderness area, wildlife preserve, or floodplain

A facility that affects a site significant in American history

A facility whose construction involves extensive changes in surface features

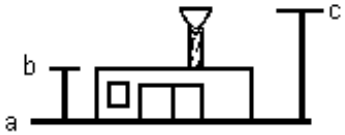
Facilities, operations, or transmitters that would cause human exposure to levels of radio frequency radiation in excess of the limits as detailed in § 1.1310 and 2.109 of the Commission's rules

Item 27 Applicants for stations located in one of the Quiet Zones listed below must notify the proper authority and indicate the date (mm/dd/yy) such notification was sent in Item 27.

1. National Radio Astronomy Observatory, Green Bank, Pocahontas County, West Virginia. The quiet zone is located within Virginia, West Virginia, and Garrett County, Maryland and bounded by N 39 degrees 15' 0.4" on the north, W 78 degrees 29' 59.0" on the east, N 37 degrees 30' 0.4" on the south, and W 80 degrees 29' 59.2" on the west. Contact the National Radio Astronomy Observatory, P.O. Box 2, Green Bank, West Virginia 24944.

2. Arecibo Observatory, Puerto Rico. The quiet zone consists of the islands of Puerto Rico, Desecheo, Mona, Vieques, and Culebra. Contact the Interference Office, Arecibo Observatory, HC 3 Box 53995, Arecibo, Puerto Rico 00612.

Antenna Structure Figure Examples:



FCC 601
Schedule D

Wireless Telecommunications Bureau Schedule for Station Locations and Antenna Structures

Approved by OMB
3060 - 0798
See 601 Main Form Instructions for public burden estimate

1) Action Requested: ( ) **A**dd **M**od **D**el		2) Location Number:	
3) Location Description:	4) Area of Operation Code:	5) Location Name:	
6) FCC Antenna Structure Registration # or N/A (FAA Notification not Required):			
7) Latitude (DD-MM-SS.S): **NAD83** ( ) N or S		8) Longitude (DDD-MM-SS.S): **NAD83** ( ) E or W	
9) Street Address, Name of Landing Area, or Other Location Description:			
10) City:	11) State:	12) County/Borough/Parish:	
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL Without Appurtenances (meters) ('b' in antenna structure example):	15) Overall Ht AGL With Appurtenances (meters) ('c' in antenna structure example):	
16) Support Structure Type:			
17) Location Number: (only for Area of Operation Code 'A')	18) Radius (km):	19) Airport Identifier:	20) Site Status:
21) Maximum Latitude (DD-MM-SS.S): **NAD83** **Use for rectangle only (Northwest corner)** ( ) N or S		22) Maximum Longitude (DDD-MM-SS.S): **NAD83** **Use for rectangle only (Northwest corner)** ( ) E or W	
23) Do you propose to operate in an area that requires frequency coordination with Canada? ( ) **Y**es **N**o			
24) Description: (only for Area of Operation Code 'O')			
25) Number of Units: ____Hand Held ____Mobile ____Temporary Fixed ___Aircraft ___Itinerant			
26) Would a Commission grant of Authorization for this location be an action which may have a significant environmental effect? See Section 1.1307 of 47 CFR. If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311. ( ) **Y**es **N**o			
27) If the proposed site is located in one of the quiet zones listed in Item 27 of the Instructions, provide the date (mm/dd/yy) the proper authority was notified: ___/___/___			

FEDERAL COMMUNICATIONS COMMISSION

Approved by OMB
3060 - 0798
See 601 Main Form Instructions
for public burden estimate

Information and Instructions

Technical Data Schedule for the Cellular and Air-ground (Commercial Aviation) Radiotelephone Services (Part 22)

Form FCC 601, Schedule F, is a supplementary schedule for use with the FCC Application for Wireless Telecommunications Bureau Radio Service Authorization, FCC 601 Main Form. This schedule is used to apply for an authorization to operate a radio station, amend a pending application, or modify an existing license in the Cellular Radiotelephone and Commercial Air-ground Radiotelephone Services. Additionally, this schedule is used by auction winners that must file site-specific technical data for international coordination or for an environmental assessment of a particular site. The FCC 601 Main Form must be filed in conjunction with this schedule.

You must file technical information for each location and antenna structure using FCC 601, Schedule D, Schedule for Station Locations and Antenna Structures. It is recommended that you complete Schedule D prior to completing Schedule F.

IMPORTANT INFORMATION REGARDING LOCATION, ANTENNA, AND CONTROL POINT NUMBERS: To identify existing locations, antennas, or control points, you must use the location, antenna, and control point numbers assigned by the Universal Licensing System (ULS). These numbers may not be identical to the location, antenna, and control point numbers on your current authorization if that authorization was not issued by the Universal Licensing System. If you are unsure of the location, antenna, or control point number that corresponds to a particular location, antenna, or control point, you can query the ULS for the most up-to-date information regarding your authorization. To query the ULS license database for your call sign, point your web browser to http://wireless.fcc.gov/uls/ and click on Search - Licenses. Alternatively, you may call 888-CALLFCC (888-225-5322) for assistance.

Schedule F
Instructions

Cellular Unserved Area Information

Item 1 If this is a New or Modification application for Cellular Radiotelephone Services, indicate whether the application is for a Phase I Cellular unserved area or a Phase II Cellular unserved area, as defined by 47 CFR Section 22.949. If the application is for a Phase I Cellular unserved area, complete Items 2 through 5 as applicable (one row only). If the application is for a Phase II Cellular unserved area, complete Items 2 through 5, as many rows as applicable. If this application is for a new license won in an FCC auction, do not file FCC 601 Schedule F. Instead, file Form FCC 601 Schedule B along with the FCC 601 Main Form.

Item 2 Enter the market(s) of the unserved area. If this application is for a Phase I cellular unserved area, list the market in which the unserved area is located. If this application is for Phase II Cellular unserved areas, list the markets contained within the proposed Service Area Boundaries. Market designators are listed in the FCC Public Notices. Only one Cellular Geographic Service Area (CGSA) may be listed on an application.

Item 3 Enter the market name of the market designator listed in Item 2.

Item 4 Enter the sub-market designator only if the market has been subdivided. Sub-market designators are listed in the FCC Public Notices.

Item 5 Enter the applicable channel block, either 'A' or 'B'.

Cellular System Identification Numbers (SIDs)
If the application request is for a new cellular license (or system), the FCC will provide a system identification number at the time of the license grant. Therefore, this section must be completed only when a request is made to add or delete system identification numbers. If this is a request for a new system identification number, rather than a request to use a system identification number presently assigned to another cellular system, complete item 6. If this is a request to add a system identification number presently assigned to another cellular system or delete a system identification number, complete items 7 and 8. System identification numbers that are currently licensed under this call sign by the FCC will continue to be shown on the authorization as is, unless a specific action is requested in this section.

Generate New System Identification Numbers
Item 6 If this is a request to generate new systems identification numbers (system identification numbers that are not presently assigned to another cellular system), enter the number (count) of new systems identification numbers requested. Also attach an exhibit explaining the circumstances and use of the requested system identification numbers.

Add/Delete System Identification Numbers
Item 7 This item indicates the action the filer wants the FCC to take in the database on the specified system identification number. Enter 'A' for Add, or 'D' for Delete.

Item 8 Enter the system identification number to be either added or deleted. If the system identification number to be added was originally assigned by the FCC to another cellular system, an attachment is required indicating concurrence of the licensee of the other system for use of the assigned system identification number. Refer to 47 CFR Section 22.941 for more information on system identification numbers.

Control Points

This section must be completed only when a control point is to be added, modified, or deleted. If you are adding a new control point, complete all items in this section for each control point to be added. If you are modifying an existing control point, in addition to Items 9 and 10, complete only the items that have changed for each control point. If you are deleting a control point, only Items 9 and 10 are required. Control Points that are currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this section.

Item 9 This item indicates the action the filer wants the FCC to take on the specified control point. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Item 10 If the control point has been previously licensed under this call sign by the FCC, enter its FCC-assigned control point number (see Important Information Regarding Location, Antenna, and Control Point Numbers on page 1 of these instructions). For a new control point, assign a temporary code to represent the control point. The assigned code should begin with C to indicate it is a control point and end with a number to uniquely identify it (*e.g.*, C1, C2, C3, etc.). The FCC will assign an official number to the new control point, which will appear on the Authorization.

Item 11 Enter the street address, city or town, county/borough/parish, and state of the control point. Refer to FCC 601 Main Form Instructions, Appendix II, for a list of valid state, jurisdiction, and area abbreviations.

Item 12 Enter the telephone number, including area code, where a person responsible for operation of the station or system could be reached.

Commercial Aviation Air-ground Technical Parameters (Antenna Data)

This section must be completed by Commercial Air-ground applicants when antennas are to be added, modified, or deleted. If you are adding new antennas, complete all items in this section for each antenna to be added. If you are modifying an existing antenna, in addition to Items 13, 15, and 16, complete only the items that have changed for each antenna. If you are deleting antennas, only Items 13, 15, and 16 are required. Technical parameters currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this section.

Item 13 This item indicates the action the filer wants the FCC to take on the specified antenna. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Item 14 Enter the channel block of the requested ground station (1-10). Refer to the Commission's rules for Commercial Aviation Air-ground Radiotelephone Services for more information on channel blocks and their assigned frequencies.

Item 15 For each antenna structure, enter its corresponding location number, as entered on Schedule D Item 2. If the location has been previously licensed under this call sign by the FCC, enter the FCC-assigned location number (see Important Information Regarding Location, Antenna, and Control Point Numbers on page 1 of these instructions). Otherwise, enter the code assigned on Schedule D to represent the location. Refer to the instructions for Schedule D for more information on assigning location numbers.

Item 16 If the antenna has been previously licensed with the Commission, enter the antenna's FCC-assigned number (see Important Information Regarding Location, Antenna, and Control Point Numbers on page 1 of these instructions). Otherwise, enter a temporary code to represent each antenna. The assigned code should begin with an A to indicate it is an antenna and end with a number to uniquely identify it (*e.g.*, A1, A2, A3, etc.). A single location can have multiple antennas. Antenna numbers need only be unique within each location. The FCC will assign an official number to the new antenna, which will appear on the Authorization.

Item 17 This item reports the actual height at which the antenna is mounted. Enter this item in meters, rounded to the nearest tenth.

Item 18 This item reports the maximum effective radiated power (ERP) of the facility in any direction on the specified channel. The value must be stated in watts.

Cellular Radial Data

This section must be completed by cellular applicants when adding a new location, modifying the radial data for an existing location, or amending the radial data proposed in a pending application. If you are adding a new location, complete all items in this section. If you are modifying existing radial data or amending a pending application, complete Items 19, 20, 21, and only those items that you are proposing to change. Radial data currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this section.

Applicants must propose one set of radial data for each antenna used at a location. If a sectorized antenna system (i.e. multiple antennas) is to be used, you may submit separate radial data for each of the antenna sectors, or alternatively submit one set of radial data representing the composite antenna pattern for the sector antennas. If separate antenna systems are used for the control channels and voice channels, submit the radial data for the antenna system that establishes the largest service area boundary (SAB).

Item 19 This item indicates the action the filer wants the FCC to take on the radial data of the specified antenna. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Item 20 For each antenna structure, enter its corresponding location number, as entered on Schedule D Item 2. If the location has been previously licensed under this call sign by the FCC, enter the FCC-assigned location number (see Important Information Regarding Location, Antenna, and Control Point Numbers on page 1 of these instructions). Otherwise, enter the code assigned on Schedule D to represent the location. Refer to the instructions for Schedule D for more information on assigning location numbers.

Item 21 If the antenna has been previously licensed with the Commission, enter the antenna's FCC-assigned number (see Important Information Regarding Location, Antenna, and Control Point Numbers on page 1 of these instructions). Otherwise, enter a temporary code to represent each antenna. The assigned code should begin with an A to indicate it is an antenna and end with a number to uniquely identify it (*e.g.*, A1, A2, A3, etc.). A single location can have multiple antennas. Antenna numbers need only be unique within each location. The FCC will assign an official number to the new antenna, which will appear on the Authorization. Sectorized antenna systems represented with a composite antenna pattern and single set of radial data, should be reported as a single antenna.

Item 22 If this location contributes to the CGSA, and you are requesting that the CGSA boundary be determined using an alternative method, enter 'Y'. Otherwise enter 'N'. If you respond Yes to this item, you must attach an exhibit explaining the circumstances

Item 23 This item reports the height of the antenna center of radiation above the average terrain elevation (AAT) along each of the eight cardinal radials. Enter this item in meters, rounded to the nearest tenth.

Item 24 This item reports, in watts, the effective radiated power (ERP) along each of the eight cardinal radial directions.

Item 25 This item reports the distance to the Cellular Geographic Service Area (CGSA) produced from the specified antenna. This item should only be reported for those radials that establish the CGSA boundary. Therefore, some azimuths may not have entries. Enter this item in kilometers rounded to the nearest tenth.

Certification

By signing the FCC 601 Main Form, Cellular applicants certify compliance with this item and 47 CFR § 22.913.

FCC 601
Schedule F

Technical Data Schedule for the Cellular and Air-ground (Commercial Aviation) Radiotelephone Services (Part 22)

Approved by OMB
3060 - 0798
See 601 Main Form Instructions
for public burden estimate

Cellular Unserved Area Information

1) Identify whether this is a New or Modification application for a Phase I unserved area or a Phase II unserved area as defined by 47 CFR Section 22.949(a). If so, complete Items 2 through 5, as applicable. ( )Phase I ( )Phase II

2) Market Designator	3) Market Name	4) Sub-Market Designator	5) Channel Block

Cellular System Identification Numbers

Generate New System Identification Numbers

6) If this a request to generate new system identification numbers, enter the number of new system identification numbers requested:_____
Also attach an exhibit explaining the circumstances and use of the requested system identification numbers.

Add/Delete System Identification Numbers

7) Action **A/D**	8) SID	7) Action **A/D**	8) SID

Control Points

9) Action **A/M/D**	10) Control Point Number	11) Location Street Address, City or Town, County/Borough/Parish, State	12) Telephone Number

Commercial Air-ground Technical Parameters (Antenna Data)

13) Action **A/M/D**	14) Channel Block	15) Location Number	16) Antenna Number	17) Height to Tip of Antenna AGL (meters)	18) Maximum ERP (watts)

Cellular Radial Data

19) Action: ( ) **A**dd **M**odify **D**elete	20) Location Number:	21) Antenna Number**:**
22) If this location contributes to the CGSA, are you requesting that the CGSA boundary be determined using an alternative method? If 'Yes', attach an exhibit explaining circumstances.		( )**Y**es **N**o

Azimuth (degrees from true north)	23) Antenna Height AAT (meters)	24) Transmitting ERP (watts)	25) Distance to CGSA (kilometers)
0°			
45°			
90°			
135°			
180°			
225°			
270°			
315°			

19) Action: ( ) **A**dd **M**odify **D**elete	20) Location Number:	21) Antenna Number**:**
22) If this location contributes to the CGSA, are you requesting that the CGSA boundary be determined using an alternative method? If 'Yes', attach an exhibit explaining circumstances.		( )**Y**es **N**o

Azimuth (degrees from true north)	23) Antenna Height AAT (meters)	24) Transmitting ERP (watts)	25) Distance to CGSA (kilometers)
0°			
45°			
90°			
135°			
180°			
225°			
270°			
315°			

I certify that (1) the maximum ERP for the proposed cellular base or repeater station will never exceed 500 Watts and (2) if the distance to the SAB as calculated in accordance with 47 CFR § 22.911 exceeds 79.1 km (45 miles) [Gulf of Mexico MSA] or 40.2 km (25 miles) [all other cellular markets], I have coordinated such use with the licensees of all affected cellular systems on the same channel block within 121 km (75 miles) and concurrence has been obtained from each licensee.

FEDERAL COMMUNICATIONS COMMISSION

Approved by OMB
3060 - 0798
See 601 Main Form Instructions
for public burden estimate

Information and Instructions

Technical Data Schedule for the Maritime and Aviation Services (Parts 80 and 87)

Form FCC 601, Schedule G, is a supplementary schedule for use with the FCC Application for Wireless Telecommunications Bureau Radio Service Authorization, FCC 601 Main Form. This schedule is used to apply for an authorization to operate a land station in the Maritime Service or a ground station in the Aviation Service, as defined in 47 CFR, Part 80 or Part 87, respectively. It is also used to amend a pending application or modify an existing license in these services. Additionally, this schedule is used by auction winners that must file site-specific technical data for international coordination or for an environmental assessment of a particular site. The FCC 601 Main Form must be filed in conjunction with this schedule.

You must file technical information for each fixed location, including the antenna structures and/or each hand held/mobile transmit location, temporary fixed station location, or itinerant station, using FCC 601, Schedule D, Schedule for Station Locations and Antenna Structures. It is recommended that you complete Schedule D prior to completing Schedule G.

The following instructions apply when filing Schedule D in tandem with this schedule:

Maritime coast and aviation ground stations may not submit an application that includes both fixed and mobile locations in the same application package (one application package being an FCC 601 Main Form and any associated schedules). Separate application packages must be submitted for fixed and mobile operations.

Schedule D Item 17 This item does not apply to Maritime Coast and Aviation Ground stations.

Schedule D Item 25 Each mobile location can contain only one occurrence of a unit type. For example, if a number of units are entered for 'Hand Held', then all other unit types should be blank. 'Hand Held', 'Mobile', and 'Temporary Fixed' unit types are applicable to any Maritime and Aviation service. 'Aircraft' and 'Itinerant' choices are only applicable to flight test stations.

IMPORTANT INFORMATION REGARDING LOCATION, ANTENNA, AND CONTROL POINT NUMBERS: To identify existing locations, antennas, or control points, you must use the location, antenna, and control point numbers assigned by the Universal Licensing System (ULS). These numbers may not be identical to the location, antenna, and control point numbers on your current authorization if that authorization was not issued by the Universal Licensing System. If you are unsure of the location, antenna, or control point number that corresponds to a particular location, antenna, or control point, you can query the ULS for the most up-to-date information regarding your authorization. To query the ULS license database for your call sign, point your web browser to http://wireless.fcc.gov/uls/ and click on Search - Licenses. Alternatively, you may call 888-CALLFCC (888-225-5322) for assistance.

Schedule G
Instructions

Station Class

Item 1 Enter the appropriate station class code from one of the following tables. There are separate tables for Maritime Service and Aviation Service Stations.

For **Maritime Service**, select the station class code from the following table:

MC Service

Marine Utility……FCU
Maritime Receiver Test……...MRT
Maritime Support-Testing and Training……FCA
Private Coast……FCL
Public Coast……..FC
Shore Radar Test……MSC
Shore Radiolocation Test……RLC

MK Service

Alaska Private .....APX
Alaska Public.....APC

MR Service

Shore Radionavigation .....MSR
Shore Radionavigation/RACON.....RLR

MA Service

Marine Operational Fixed.....MFX

Note: Where appropriate, follow each code with 1 for Hand Held/Mobile operations or 2 for Temporary operations.

For **Aviation Service**, select the station class code from the following tables:

AF Service

Aeronautical Advisory .....(Unicom) FAA
Aeronautical Enroute .....FA
Aeronautical Fixed.....AX
Aeronautical Multicom .....MFL
Aircraft (Flight Test Stations only).....FMA (must be followed by 1 for mobile operations)
Airport Control Tower.....FAC
Automatic Weather Observation.....FAB
Aviation Support Instructional.....FAS
Aviation Support Service.....FLU
Flight Information Services .....FIS
Flight Information Services with Hand Held/Mobile Operations ..FIS1
Flight Information Services for Temporary Operations FIS2
Flight Test.....FAT
Remote Communications Outlet.....RCO
Ground Communications Outlet.....GCO
Ramp Control.....RPC

AA Service

Aeronautical Search and Rescue.....SAR
Aeronautical Utility Mobile.....MOU
Operational Fixed.....AOX

AR Service

Aeronautical Marker Beacon .....RLA
Aeronautical Radio Beacon.....RLB
Differential Global Positioning System (GPS) .....DGP
ELT Test.....ELT
Glide Path (Slope).....RLG
Localizer.....RLL
Omnidirectional Radio Range.....RLO
Radar/Radar Test.....RLD
Radionavigation Land.....RNV
Radionavigation Land Test.....RLT

Note: Where appropriate, follow each code with 1 for Mobile operations, 2 for Temporary operations, or (for flight test stations only) 3 for Itinerant operations.

Item 2 This item must be answered 'Y' for Yes for the following station classes:

Aeronautical Advisory
Aeronautical Enroute/Fixed
Airport Control Tower Stations, Remote Communications Outlet, and Ground Communications Outlets

For all other station classes, leave this item blank.

Item 3 This item must be answered by all applicants for public coast and Alaska public fixed stations. Otherwise, leave this item blank.

Item 4 This item must be answered by applicants for Aeronautical Radionavigation stations (AR Service, if applicable). Provide the FAA assigned station identifier of the Aeronautical Radionavigation station, if known.

Item 5 This item must be answered by all applicants for Aeronautical Fixed stations (station class code = 'AX'). Provide the call sign of the Aeronautical Enroute station that is associated with the Aeronautical Fixed station for which you are applying. If the Aeronautical Enroute station application has not yet been granted, enter "P" in this item.

Control Points

This section must be completed only when a control point is to be added, modified, or deleted. If you are adding a new control point, complete all items in this section for each control point to be added. If you are modifying an existing control point, in addition to Items 6 and 7, complete only the items that have changed for each control point. If you are deleting a control point, only Items 6 and 7 are required. Control points that are currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this section.

Item 6 This item indicates the action the filer wants the FCC to take on the specified control point. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Item 7 Enter the FCC-assigned control point number (see Important Information Regarding Location, Antenna, and Control Point Numbers on page 1 of these instructions). For a new control point, assign a temporary code to represent the control point. The assigned code should begin with C to indicate it as a control point and end with a number to uniquely identify it (*e.g.*, C1, C2, C3, etc.). The FCC will assign an official number to the control point, which will appear on the Authorization.

Item 8 Enter the street address, city or town, county/borough/parish, and state of the control point. Refer to FCC 601 Main Form Instructions, Appendix II, for a list of valid state, jurisdiction, and area abbreviations.

Item 9 Enter the telephone number (including area code) where a person responsible for operation of the station or systems could be reached.

Antenna Information

This section must be completed only when antennas are to be added, modified, or deleted. If you are adding a new antenna, complete all items for each antenna to be added. If you are modifying an existing antenna, in addition to Items 10, 11, and 12, complete only the items for the antenna that have changed. If you are deleting an antenna, only Items 10, 11, and 12 are required. Antennas that are currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this section.

Item 10 This item indicates the action the filer wants the FCC to take on the specified antenna. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Item 11 For each antenna, enter its corresponding location number, as entered on Schedule D Item 2. If the location has been previously licensed under this call sign by the FCC, enter the FCC-assigned location number (see Important Information Regarding Location, Antenna, and Control Point Numbers on page 1 of these instructions). Otherwise, enter the code assigned on Schedule D to represent the location. Refer to the instructions for Schedule D for more information on assigning location numbers.

Item 12 If the antenna has been previously licensed under this call sign by the FCC, enter the antenna's FCC-assigned number (see Important Information Regarding Location, Antenna, and Control Point Numbers on page 1 of these instructions). Otherwise, enter a temporary code to represent each antenna. The assigned code should begin with an A to indicate it is an antenna and end with a number to uniquely identify it (e.g., A1, A2, A3, etc.) A single location can have multiple antennas. Antenna numbers need only be unique within each location. The FCC will assign the new antenna an official number, which will appear on the Authorization. If using hand held transmitters, consider all hand held transmitters at a given location to be one antenna.

Note: Location number (Item 11) and antenna number (Item 12) are used to associate information in the Antenna Information Section with information in the Frequency Information Section. To do this, enter the necessary information into the Antenna Information Section using the appropriate location number and antenna number. Then, enter the necessary information in the Frequency Information Section for that antenna, using the same location number/antenna number pair. Each antenna specified must have corresponding frequency information.

Item 13 Enter the ratio (decibels) of the power required at the input of a loss-free reference antenna to the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power-flux density at the same distance. This information should be available from the specification sheet included with the antenna at the time of purchase.

Item 14 Enter the angle in the horizontal plane of the transmitting antenna main lobe measured clockwise with respect to True North in degrees, or enter '360' to indicate that the transmitting antenna is omni-directional.

Item 15 Enter the actual height from the ground to the tip of the antenna. Enter this item in meters, rounded to the nearest tenth.

Item 16 Enter the approximate attenuation, including any padding, to the nearest tenth of a dB, between the point at which the power output of the transmitter is measured for type-acceptance/notification approval and the input to the antenna. If this value is less than 1 dB, leave this item blank. For power splits, the power reduction for a particular path will be considered the loss.

Item 17 Enter the Half Power Beamwidth (Aeronautical Enroute HF and Public Coast HF stations only).

Item 18 Enter the Receive Zone (Aeronautical Enroute HF and Public Coast HF stations only).

Frequency Information

This section must be completed only when frequencies are to be added, modified, or deleted. If you are adding new frequencies, complete all items for each frequency to be added. If you are modifying a frequency (*i.e.*, changing from one operating frequency to a different operating frequency), enter the existing and new frequencies in the appropriate boxes in Item 22. If you are modifying existing attributes of frequencies, complete all items for each frequency to be modified. In order to modify an Emission Designator (Item 26), complete Items 19 - 22, specifying the appropriate location number, antenna number, and frequency, and list **all** active emission designators now associated with the specified location, antenna, and frequency (complete as many rows as necessary, listing emission designators in Item 26). If you are deleting frequencies, only Items 19 through 22 are required. Frequencies that are currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this section.

Note: If station class FAC (for Airport Control Tower) was entered in Item 1, complete Items 19, 20, 21, 22b, 22c, 23, 24, and 26 on page 4 of this schedule. All station classes except FAC complete Items 19, 20, 21, 22a, 23, 24, 25, and 26 on page 3 of this schedule. For multiple frequency lines, repeat the location number/antenna number combination for each frequency. For example:

Location	Antenna	Frequency	Location	Antenna	Frequency (MHz)
F1	A1	XXXXX.XXXX	F1	A2	BBBBB.BBBB
F1	A1	YYYYY.YYYY	F2	A1	CCCCC.CCCC
F1	A2	AAAAA.AAAA	F2	A1	DDDDD.DDDD

Item 19 This item indicates the action the filer wants the FCC to take on the specified antenna. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Item 20 For each antenna structure, enter its corresponding location number, as entered in Item 11 of the Antenna Information Section of this schedule.

Item 21 For each antenna, enter its corresponding antenna number, as entered in Item 12 of the Antenna Information Section of this schedule.

Item 22a **(All station classes except Airport Control Tower/FAC)** To add frequencies on an antenna at a location, enter the specific frequencies in Megahertz (MHz) in the row labeled 'New' of the column labeled 'Lower' for each location and antenna on which the frequency is to be located. The requested frequencies must be available in the Commission's rules governing the radio service in which you are seeking eligibility. If applying for a single-sideband frequency, show carrier frequency only. If applying for a frequency band, show the lower and upper frequencies in the row labeled 'New' of appropriate columns for each location and antenna on which the frequency is to be located. Use a separate line for each frequency or frequency band. For Aviation Ground Radionavigation (Navaids), Automatic Weather Observation/Automatic Surface Observation, Remote Communication Outlet, Ground Communications Outlet, or Ramp Control stations: if frequency is not known, you may leave Item 22a blank. Items 23, 24, and 26 **must** be completed.

If multiple frequencies are being added to one location, complete as many lines as necessary, repeating the location number in Item 20 and the antenna number in Item 21 for each frequency added. A separate line needs to be completed for each frequency if there are multiple emissions, multiple antenna tips, etc. To do this, complete as many lines for each frequency as necessary, repeating the location number in Item 20, the antenna number in Item 21, the frequency in the column labeled 'New" of Item 22a, and the remaining technical information for each frequency line, as appropriate.

To modify a frequency or frequency band on an antenna at a location, you must complete Items 19-21 and enter the existing frequency or frequency band in the frequency row of Item 22a labeled 'Existing' and enter the new frequency or frequency band in the frequency row of Item 22a labeled 'New'.

Item 22b **(Station Class Airport Control Tower/FAC only)** To add frequencies on an antenna at a location; enter the specific frequencies in Megahertz (MHz), if known in the column labeled 'New" of Item 22b. The requested frequencies must be available in the Commission's rules governing the radio service in which you are seeking eligibility. Use a separate line for each frequency.

If multiple frequencies are being added to one location, complete as many lines as necessary, repeating the location number in Item 20 and the antenna number in Item 21 for each frequency added. A separate line needs to be completed for each frequency if there are multiple emissions, multiple antenna tips, etc. To do this, complete as many lines as for each frequency as necessary, repeating the location number in Item 20, the antenna number in Item 21, the frequency in the column labeled 'New' of Item 22b, and the remaining technical information for each frequency line, as appropriate.

To modify a frequency on an antenna at a location, you must complete Items 19-21 and enter the existing frequency in the column of Item 22b labeled 'Existing' and enter the new frequency in the frequency column of Item 22b labeled 'New'.

Item 22c **(Station Class FAC only)** Enter one of the following frequency type codes for each requested frequency:

- **L** Local Control
- **G** Ground Control
- **E** Emergency (121.5 MHz) - List this frequency **only** if you wish to transmit on the frequency 121.5 MHz. Do not list the frequency if you intend to **monitor only**. If you wish to be exempt from the monitoring requirement, you must submit your exemption request as an attachment to this form.
- **O** Other - Use this code for ATIS (Automatic Terminal Information Service) and any other frequency not defined above.

If a Local Control, Ground Control, or Other frequency has not yet been reserved by FAA, you may leave Item 22b blank. However, you must complete a line for each requested frequency (Items 19, 20, 21, 22c, 23, 24, 25, 26).

Item 23 Enter the maximum transmitter output power in watts.

Item 24 Enter the Proposed Hours of Operation (Public Coast, Public Fixed, and Airport Control Tower stations only).

Item 25 Enter the Operational Altitude (Aeronautical Enroute VHF stations only).

Item 26 Enter the emission designator for each station. The new ITU (International Telecommunications Union) emission designators may be used in place of the old designators. The following are samples of the corresponding new ITU designators for the most commonly used emission designators.

Note: These are samples only and do not necessarily represent an emission for which you should apply.

	Old	**New**
Frequency modulated (FM) voice	16F3	16K0F3E
Frequency modulated (FM) voice	13.6F3	13K6F3E
Frequency modulated digitized voice	20F3Y	20K0F1E
Frequency modulated digitized non-voice	20F9Y	20K0F1D
Amplitude modulated single sideband voice	2.8A3J	2K80J3E
Amplitude modulated (AM) voice	6A3	6K00A3E

FAA Coordination Information

Item 27 This item must be completed if the filer has specified any of the following station classes in Item 1 and is requesting a new or modified station license:

Aviation Support (121.950 MHz only)
Airport Control Tower
Radionavigation Land (all Navigational Aids)
Radionavigation Land Test (RLT)
AWOS/ASOS (Automatic Weather Observation/Automatic Surface Observation)
Remote Communications Outlet
Ground Communications Outlet
Ramp Control

Enter the FAA regional office to where the notification was sent and the date that the FAA was notified. The Federal Aviation Administration (FAA) must be notified that this application in is being submitted. Notification to the FAA must be made prior to filing of this application. Applications submitted without the required FAA notification will be returned to the applicant without action.

Certifications

Indicate the certifications that pertain to the type of station for which this application is being filed. By signing the Main Form filed in conjunction with this schedule, the applicant certifies that the statements listed in this section are true, complete, correct, and made in good faith.

International Registration Information

As a signatory party to international treaty agreements, the FCC performs certain actions regarding the use of radio. The technical details of your station parameters may be reported to the International Telecommunications Union, Geneva, Switzerland, and to countries that border on or in close proximity to the United States. This information along with data reported by other nations will be used to protect reported stations and aid in resolution of interference disputes between licensees in different countries.

Certain marine coast stations, because of their geographic location, would be best protected by provision of additional information. Specifically, this includes any proposed station which is located in the region north of Line 'A', or in the State of Alaska east of Line 'C'. Refer to the Commission's rules for a detailed explanation of Lines A and C. Appendix I in FCC Form 601 Main Form Instructions contains a list of counties/boroughs, by state, having areas North of Line A and East of Line C.

Unless advised to the contrary, the FCC will make certain assumptions which reflect the typical fixed or temporary fixed VHF marine coast station. Carefully review the list below with respect to your particular situation. If you believe that these assumptions would leave your station insufficiently protected, provide the actual station parameters in Schedule G, Items 32 through 35, using Items 28 through 31 to identify the locations, antennas, and frequencies. If you do not provide the actual data and an interference problem arises involving another country's station, your station will be protected only to the limit of the FCC's assumptions.

The following station parameters will be assumed unless otherwise stated:

Item 32 **Antenna Azimuth of Main Lobe.** The FCC will report each fixed or temporary fixed VHF marine coast station as having an omnidirectional (360) azimuth.

Item 33 **Beamwidth.** Where an omnidirectional antenna is assumed, beamwidth has no relevance, and therefore, no assumed value will be used.

Item 34 **Antenna Polarization.** All stations will be reported as having antennas with vertical polarization.

Item 35 **Antenna Gain.** The antenna gain for all fixed and temporary fixed VHF marine coast stations will be assumed to be 6 dB.

FCC 601
Schedule G

Technical Data Schedule for the Maritime and Aviation Services (Parts 80 and 87)

Approved by OMB
3060 - 0798
See 601 Main Form Instructions for public burden estimate

1) Station Class:	
2) For Ground only, will the service of the station be available to any aircraft desiring to use it?	( )Yes No
3) For Coast only, will this station be open to Public Correspondence?	( )Yes No
4) For Aeronautical Radionavigation stations only, provide the Station Identifier (if you have one):	
5) For Aeronautical Fixed stations only, provide the call sign of the associated Aeronautical Enroute Station:	

Control Point(s) (Other than at the transmitter)

6) Action **A/M/D**	7) Control Point Number	8) Location Street Address, City or Town, County/Borough/Parish, State	9) Telephone Number

Antenna Information

10) Action **A/M/D**	11) Location Number	12) Antenna Number	13) Antenna Gain (dBi)	14) Azimuth of Major Lobe ° East of True North (if directional antenna used)	15) Antenna Ht to Tip (meters)	16) Transmission Line Loss	17) Half Power Beamwidth (degrees)	18) Receive Zone

Frequency Information

A) All Station Classes complete except: Airport Control Tower/FAC (See Frequency Information part B).

19) Action **A/M/D**	20) Location Number	21) Antenna Number	22a) Frequency (MHz) Lower	Upper (if band)	23) Maximum Power Output (watts)	24) Proposed Hours of Operation	25) Operational Altitude	26) Emission Designator
			Existing (if mod)					
			New					
			Existing (if mod)					
			New					
			Existing (if mod)					
			New					
			Existing (if mod)					
			New					
			Existing (if mod)					
			New					
			Existing (if mod)					
			New					
			Existing (if mod)					
			New					
			Existing (if mod)					
			New					
			Existing (if mod)					
			New					
			Existing (if mod)					
			New					
			Existing (if mod)					
			New					

FAA Coordination Information

27) Applicants for a new or modified Aviation Support (121.950 MHz), Control Tower, RCO, Radionavigation Land, Radionavigation Land Test, or AWOS/ASOS must provide the following information:

FAA Regional Office Notified: _____

Date Notified: _____

B) Complete only if requested frequencies are for Airport Control Tower/FAC Station Class

19) Action **A/M/D**	20) Location Number	21) Antenna Number	22b) Frequency (MHz)		22c) Frequency Type **L/G/E/O**	23) Maximum Power Output (watts)	24) Proposed Hours of Operation	26) Emission Designator
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				

FAA Coordination Information

27) Applicants for a new or modified Aviation Support (121.950 MHz), Control Tower, RCO, Radionavigation Land, Radionavigation Land Test, or AWOS/ASOS must provide the following information:

FAA Regional Office Notified: _____

Date Notified: _____

International Registration Information - Additional Technical Information

28) Action **A/M/D**	29) Location Number	30) Antenna Number	31) Frequency (MHz)	32) Azimuth (degrees)	33) Beamwidth (degrees)	34) Polarization	35) Gain (dBi)

Certifications

Private Coast station and Marine Utility station certification. Check all that apply.

I certify that I am:

( ) Seeking authorization in an area having a recognized frequency coordinating committee (Southern California Marine Radio Council, North Pacific Marine Radio Council) and the committee has endorsed the use of the frequency(ies) and location(s) requested.

( ) Regularly engaged in the operation, docking, direction, construction, repair, servicing or management of one or more commercial transport vessels or U.S., state or local government vessels; or, responsible for the operation, control, maintenance, or development of a harbor, port, or waterway used by commercial transport vessels; or responsible for the operation of bridges, structures, or other installations that are part of, or directly related to, a harbor, port, or waterway when the operation of such facilities requires radio communications with vessels for safety or navigation.

( ) Engaged in furnishing a ship arrival and departure service; or, a corporation furnishing a nonprofit radio communication service to its parent corporation, a subsidiary of the parent, or its own subsidiary, where the party to be served is eligible for a private coast or marine utility station license; or, a nonprofit corporation or association organized to furnish a maritime mobile service solely to persons who operate one or more commercial transport vessels.

( ) A person controlling public mooring facilities; or, a yacht club with moorage facilities.

( ) A person servicing or supplying vessels other than commercial transport vessels; or, a nonprofit organization providing noncommercial communications to vessels other than commercial transport vessels.

Operational Fixed station certification.

( ) I certify that I am the licensee of a coast or ground station and no other suitable telecommunications facilities are available to satisfy coast or ground station requirements.

Maritime Support station certification.

( ) I certify that I intend to use this authorization to train personnel associated with the maritime service, or to test, demonstrate, or maintain ship or coast radio equipment.

Aeronautical Fixed station certification.

( ) I certify that I am the licensee of an associated aeronautical enroute station and that adequate land line facilities are not available to fulfill this communications need.

Aeronautical Advisory station (Unicom) certification.

( ) I certify that the station will be located on the property of the airport to be served and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

Aeronautical Search and Rescue station certification.

( ) I certify that I am a governmental entity or private organization chartered to perform aeronautical search and rescue functions.

Flight Test station certification. Check all that apply.

I certify that I am:

( ) Applying for UHF frequencies and request use of them in support of a contract with the U.S. Government.

( ) A manufacturer of aircraft or major aircraft components.

( ) A parent corporation or its subsidiary if either corporation is a manufacturer of aircraft or major aircraft components.

( ) An educational institution or person primarily engaged in the design, development, modification, and flight test evaluation of aircraft or major aircraft components.

Aviation support station certification. Check all that apply.

I certify that I am:

( ) The operator of a flight school.

( ) An operator of lighter than air aircraft.

( ) Engaged in soaring or free ballooning.

( ) The operator of an airport or aviation service organization located on an airport.

Radiodetermination station certification. Check all that apply.

( ) The FAA is not prepared to render the service for which I am applying.

( ) I am engaged in the development, manufacture, or maintenance of aircraft radionavigation equipment.

( ) I intend to establish the proposed facility at an airport for the use of the public.

( ) I am engaged in the testing, manufacture, or design of ELTs or I train personnel in the operation and location of ELTs.

Civil Air Patrol station certification.

( ) I certify that I represent Wings or the Headquarters of the Civil Air Patrol.

Aeronautical Enroute/122.825 or 122.875 MHz Certification.

( ) I certify that this station will provide communications only to aircraft with a maximum capacity of up to 56 passengers or carrying up to 18,000 lbs. of cargo.

Aeronautical Utility Mobile certification. Check all that apply.

( ) I certify that I have a need to routinely operate a ground vehicle on the airport movement area.

( ) I certify that I am the airport owner or operator, or a state of local governmental agency; or I have obtained permission from the airport owner/operator to operate a vehicle on the airport movement area.

( ) I certify that I have obtained an agreement from the Air Traffic Manager of the airport control tower that approves the requested use of the local control (tower) or RCO frequency.

FEDERAL COMMUNICATIONS COMMISSION

Approved by OMB
3060 - 0798
See 601 Main Form Instructions
for public burden estimate

Information and Instructions

Technical Data Schedule for the Private Land Mobile and Land Mobile Broadcast Auxiliary Radio Services (Parts 90 and 74)

FCC Form 601, Schedule H, is a supplementary schedule for use with the FCC Application for Wireless Telecommunications Bureau Radio Service Authorization, FCC 601 Main Form. This schedule is used to apply for an authorization to operate a radio station in the Private Land Mobile and Land Mobile Broadcast Auxiliary Radio Services, as defined in 47 CFR, Parts 90 and 74. It is also used to amend a pending application or modify an existing license in these services. Additionally, this schedule is used by auction winners that must file site-specific technical data for international coordination or for an environmental assessment of a particular site. The FCC 601 Main Form must be filed in conjunction with this schedule.

You must file technical information for each fixed location, including the antenna structures and/or each hand held/mobile transmit location, temporary fixed station location, itinerant station, or 6.1 meter control station location using FCC 601, Schedule D, Schedule for Station Locations and Antenna Structures. It is recommended that you complete Schedule D prior to completing Schedule H.

IMPORTANT INFORMATION REGARDING LOCATION, ANTENNA, AND CONTROL POINT NUMBERS: To identify existing locations, antennas, or control points, you must use the location, antenna, and control point numbers assigned by the Universal Licensing System (ULS). These numbers may not be identical to the location, antenna, and control point numbers on your current authorization if that authorization was not issued by the Universal Licensing System. If you are unsure of the location, antenna, or control point number that corresponds to a particular location, antenna, or control point, you can query the ULS for the most up-to-date information regarding your authorization. To query the ULS license database for your call sign, point your web browser to http://wireless.fcc.gov/uls/ and click on Search - Licenses. Alternatively, you may call 888-CALLFCC (888-225-5322) for assistance.

Schedule H
Instructions

Eligibility

Item 1 Enter the number and paragraph of the FCC Rule Section that describes the eligibility for the radio service you specified in Item 1 of the FCC 601 Main Form.

Item 2 Provide a statement that clearly indicates your qualifications for the chosen service. This statement should include:

(1) A general description of your business or activity;
(2) A description of how the radio will be employed in this activity;
(3) Any other information you believe will aid in a determination of your eligibility for the service requested.

Frequency Coordinator Information

Items 3-6 These items will be completed by the appropriate certified frequency coordinators for those applicants who are required to comply with the frequency coordination requirements. Broadcast Auxiliary Applicants who have notified their local frequency coordination committee should enter the name of the frequency coordinator, telephone number, including area code, of the person contacted, and date coordinated (Item 3 may be left blank).

Item 7 Enter 'Y' if this application has been successfully coordinated. Otherwise enter 'No'.

Extended Implementation (Slow Growth)

Item 8 If you are applying for an extended implementation period in which to construct and place a system in operation or requesting a modification to an existing extended implementation schedule, enter 'Y'. Otherwise enter 'N'. If you answer 'Y' to this question, you must submit an exhibit containing a justification for the extended implementation and a detailed implementation plan. Check applicable FCC rules for eligibility for extended implementation plans (*e.g.*, 47 CFR §§ 90.155(b) and 90.629).

Note: To modify an authorization with a regular construction period to one with an extended implementation period, you should file FCC 601 Main Form with the purpose of MD - Modification and, enter 'Y' for Item 8 of FCC 601 Schedule H, and attach supporting documentation. Do not file FCC 601 Schedule L - Waiver Request for Extension of Time for Wireless Services to request an extended implementation period.

Associated Call Signs

Item 9 List any call signs that are part of the system and licensed separately.

Broadcast Auxiliary Only

Items 10-14 apply only to the Land Mobile Broadcast Auxiliary Radio Services, LP and RP.

If there is an associated Broadcast Parent station, Items 10 through 12 must be completed. If there is more than one Parent station, select one for the purpose of filing this application. Actions taken on the Broadcast Parent station identified in Item 10 will similarly affect the Broadcast Auxiliary Station (i.e., renewal, assignment of authorization, cancellation, etc.).

Item 10 If there is an associated Broadcast Parent station, enter the Facility Identification Number. This identification number is typically a 5 digit number assigned by the FCC's Media Bureau. This is **not** the Call Sign of the Parent station.

Item 11 Enter the Radio Service Code of the Broadcast Parent station. The Parent Station Radio Service Code must be AM, FM or TV.

Item 12 Enter the City and State of the Parent Station's principal community.

Items 13-14 If there is no associated Broadcast parent station, enter the appropriate code for the applicant and the State of primary operation.

B - Broadcast Network Entity
C - Television Cable Operator
M - Motion Picture Producer
T - Television Producer

Control Points

This section must be completed for a primary control point. If you are adding a new control point, complete all items in this section for each control point to be added. If you are modifying a control point, in addition to Items 15 and 16, complete only the items that have changed for each control point. If you are deleting a control point, only Items 15 and 16 are required. Control points that are currently licensed under this call sign by the FCC will continue to be shown on the authorization as is, unless a specific action is requested in this section.

Item 15 This item indicates the action the filer wants the FCC to take on the specified control point. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Item 16 Enter the FCC-assigned control point number (see Important Information Regarding Location, Antenna, and Control Point Numbers on page 1 of these instructions). For a new control point, assign a temporary code to represent the control point. The assigned code should begin with C to indicate it as a control point and end with a number to uniquely identify it (*e.g.*, C1, C2, C3, etc.). The FCC will assign an official number to the new control point, which will appear on the Authorization and in the ULS database.

Item 17 Enter the street address, city or town, county/borough/parish, and state of the control point. Refer to FCC Main Form Instructions, Appendix II, for a list of valid state, jurisdiction, and area codes.

Item 18 Enter the telephone number (including area code) where a person responsible for operation of the control point could be reached.

Antenna Information

This section is for fixed stations (Schedule D Item 3 = FX) and must be completed only when antenna information is to be added, modified, or deleted. If you are adding a new antenna, complete Items 19-23 for each antenna to be added. If you are modifying an existing antenna, in addition to Items 19, 20, and 21, complete only the items that have changed for the antenna. If you are deleting an antenna, only Items 19, 20, and 21 are required. Antennas that are currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this section. All stations proposing to operate on frequencies below 27.5 MHz **MUST** complete Items 19-27 if the filing is for a new Authorization. Failure to do so will result in the return of your application without further action. Land Mobile stations located near international borders that seek protection from interference should also complete Items 24-27 if you believe that the assumptions listed would leave your station insufficiently protected. If so, provide the actual data on which interference protection should be based. If you do not provide the actual data and an interference problem arises involving another country's station, your station will be protected only to the limit of the FCC's assumptions. This is especially important for stations proposed to be operated in any of the counties/boroughs listed in Appendix I of the FCC 601 Main Form instructions.

Item 19 This item indicates the action the filer wants the FCC to take on the specified antenna. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Item 20 For each antenna, enter its corresponding location number, as entered on Schedule D Item 2. If the location has been previously licensed under this call sign by the FCC, enter the FCC-assigned location number (see Important Information Regarding Location, Antenna, and Control Point Numbers on page 1 of these instructions). Otherwise, enter the code assigned on Schedule D to represent the location. Refer to the instructions for Schedule D for more information on assigning location numbers.

Item 21 If the antenna has been previously licensed under this call sign by the FCC, enter the antenna's FCC-assigned number (see Important Information Regarding Location, Antenna, and Control Point Numbers on page 1 of these instructions). Otherwise, enter a temporary code to represent each antenna. The assigned code should begin with an A to indicate it is an antenna and end with a number to uniquely identify it (*e.g.,* A1, A2 and A3). A single location can have multiple antennas. Antenna numbers need only be unique within each location. The FCC will assign an official number to the new antenna, which will appear on the Authorization and in the ULS database.

> **Note:** Location number (Item 20) and antenna number (Item 21) are used to associate information in the Antenna Information Section with information in the Frequency Information Section. To do this, enter the necessary technical information into the Antenna Information Section using the appropriate location number and antenna number. Then, enter the necessary technical information in Frequency Information Section for that antenna, using the same location number/antenna number pair. Each antenna specified in the Frequency Information Section must have corresponding data in the Antenna Information Section.

Item 22 This is not required for Land Mobile Broadcast Auxiliary Radio Services. For operations in 150-174 MHz, 220-222 MHz, 450-512 MHz, 851-869 MHz and 935-940 MHz, enter the height of the antenna above ground elevation for the average terrain. Enter this item in meters, rounded to the nearest tenth. See the applicable rules for instructions for computing the height above average terrain for the antenna. Applicants applying on frequencies not mentioned in this paragraph may omit this item.

Item 23 Enter the overall height above ground of the highest part of your antenna (antenna structure plus the height of the antenna, if top mounted; the total height to the tip of the antenna, if side-mounted). Enter this item in meters, rounded to the nearest tenth.

Item 24 Enter the angle in the horizontal plane of the transmitting antenna main lobe measured clockwise with respect to True North (degrees) or enter '360' to indicate the transmitting antenna is omni-directional.

Item 25 For directional antennas, enter the total angle (degrees) measured horizontally in a plane containing the direction of maximum radiation within which the power radiated in any direction does not fall more than 3 dB below the power radiated in the direction of maximum radiation. For omnidirectional antennas, enter '360.0'. This information should be available from the specification sheet included with the antenna at time of purchase.

Item 26 Enter one of the following code letters to represent the polarization of the transmitting antenna:

E – Elliptical
F – 45 degrees
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 (provide a description in an attachment)

Item 27 Enter the ratio (decibels) of the power required at the input of a loss-free reference antenna to the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power flux-density at the same distance. This information should be available from the specification sheet included with the antenna at time of purchase.

Unless advised to the contrary, the FCC will make certain assumptions which reflect the typical station in these services. Carefully review the list below with respect to your particular situation. If you believe that these assumptions would leave your station insufficiently protected, provide the correct data in the Antenna Section. If you do not provide the actual data and an interference problem arises involving another country's station, your station will be protected only to the limit of the FCC's assumptions.

The following station parameters will be assumed by the FCC unless otherwise stated:

Item 24 - **Antenna Azimuth of Main Lobe.** The FCC will report each base or mobile relay station as having an omnidirectional (360^0) azimuth. It will also be assumed that each control station associated with a mobile relay station has a directional antenna with its azimuth of maximum radiation directed toward the mobile relay station.

Item 25 - **Beamwidth.** Where an omnidirectional antenna is assumed, beamwidth has no relevance, and therefore, no assumed value will be used. For control stations, 20 percent will be assumed.

Item 26 - **Antenna Polarization.** All stations will be reported as having antennas with vertical polarization.

Item 27 - **Antenna Gain.** The antenna gain for all stations will be assumed to be 6 dB.

Receiver Information. All stations specified on the same application form are assumed to be communicating with each other as a system. Receivers will be assumed to operate at the same location as the transmitter. In other words, it is assumed that the receiver site for a mobile station transmission is the location of the associated base station. The receiver site for a base station transmission is assumed to be the area of operation of the associated mobile stations. For a control station transmission, it is assumed that the location of the associated mobile relay station is the location of the receiver.

As a signatory party to international treaty agreements, the FCC performs certain actions regarding the use of radio. The technical details of your station parameters may be reported to the International Telecommunications Union, Geneva, Switzerland, and to countries which border on or in close proximity to the United States. This information along with data reported by other nations will be used to protect reported stations and aid in resolution of interference disputes between licensees in different countries.

Certain stations, because of their geographic location, would be best protected by provision of additional information. Specifically, this includes any proposed station which is located in the region north of Line 'A', or in the State of Alaska east of Line 'C'. Refer to the Commission's rules for a detailed explanation of Lines A and C. Appendix I in FCC Form 601 Main Form Instructions contains a list of counties/boroughs, by state, having areas North of Line A and East of Line C. If the desired station is to operate in the 806-821/851-866, 821-824/866-869, 896-901/935-940 MHz bands, please consult the applicable rules for available frequencies and use near the United States/Canada/Mexico borders.

Note: If you are adding a 6.1 Meter (20 foot) Control Station criteria that requires greater than 5 watts output power/ERP for operations in regions North of Line 'A' or in Alaska East of Line 'C', on Form 601 Schedule D, complete all required items for the control station as if adding a fixed station location.

Frequency Information

This section must be completed only when frequencies are to be added, modified, or deleted. If you are adding a new frequency, complete all items for each frequency to be added. If you are modifying a frequency (*i.e.*, changing from one operating frequency to a different operating frequency), enter the existing and new frequencies in the appropriate boxes in Item 31. If you are modifying attributes of an existing frequency, in addition to Items 28 through 32, complete only the items that have changed for the frequency. In order to modify an Emission Designator (Item 37), complete Items 28-32, specifying the appropriate location number, antenna number, frequency, and station class code, and list **all** active emission designators now associated with the specified location, antenna, frequency, and station class (complete as many rows as necessary, listing emission designators in Item 37). If you are deleting a frequency, only Items 28 through 31 are required. Deleting a frequency will delete all station classes for that frequency. To delete a station class from a frequency, complete Items 28-32. Frequencies and station classes that are currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this section.

Enter frequency information for each antenna specified in the Antenna Information Section. For multiple frequency lines, repeat the location number/antenna number combination for each frequency. For example:

Location	Antenna	Frequency (MHz)
L1	A1	XXX.XXXX
L1	A1	YYY.YYYY
L1	A1	ZZZ.ZZZZ
L1	A2	AAA.AAAA
L1	A2	BBBBB.BBBB
L2	A1	CCCCC.CCCC
L2	A1	DDDDD.DDDD

(Note: Frequency bands should be shown in same block, for example 806 – 821, (carrier/assigned) 2326 – 2327.4.)

Item 28 This item indicates the action the filer wants the FCC to take on the specified antenna. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Item 29 For each antenna, enter its corresponding location number, as entered in Item 20 of the Antenna Information Section of this Schedule.

Item 30 For each antenna, enter its corresponding antenna number, as entered in Item 21 of the Antenna Information Section of this Schedule.

Item 31 To add frequencies on an antenna at a location, enter the specific frequencies in Megahertz in the column labeled 'New'. The requested frequencies must be available in the Commission's rules governing the radio service in which you are seeking eligibility. Use a separate line for each frequency (the exceptions being that 800 MHz SMR mobile and control stations are now designated by frequency range 806-821 and 900 MHz SMR mobile and control stations are now designated by frequency range 896-901). Low Power Broadcast Auxiliary applicants should refer to Rule Section 74.802 for a complete and accurate listing of the acceptable frequency ranges.

To modify a frequency on an antenna at a location, you must complete Items 28-30 and enter the existing frequency in the column labeled 'Existing' and enter the new frequency in the column labeled 'New'.

Item 32 Enter the appropriate station class code from the following table. Definitions for most of these items are listed in the Commission's rules.

Note: Where appropriate, follow each code with 'T' for Temporary, 'I' for Itinerant, 'S' for Standby, 'C' for Interconnect, 'J' for Temporary Interconnect, 'K' for Standby Interconnect, or 'L' for Itinerant Interconnect. For example, FBT means Temporary Base. (NOTE: MO, MO3, MO6, MO7, MO8 & FXO use the alpha character "O").

Base	FB
Mobile Relay	FB2
Community Repeater	FB4
Private Carrier (Profit)	FB6
Private Carrier (Nonprofit)	FB7
Centralized Trunked Relay	FB8
Control	FX1*
Mobile	MO
Mobile/Vehicular Repeater	MO3
Private Carrier Mobile Operation (Profit)	MO6
Private Carrier Mobile Operation (Non-profit)	MO7
Centralized Trunked Mobile	MO8
Operational Fixed	FXO
Fixed Relay	FX2
Fixed	FX**
Radiolocation Land	LR
Radiolocation Weather Radar	WDX
Radiolocation Mobile	MR
Secondary Fixed Signaling	FX3

*Station associated with a mobile relay that employs the same frequency as the associated mobile station for control purposes.

**Station operating on frequencies available for fixed use for control purposes in accordance with applicable rules.

Item 33 Enter the number of actual transmitting units at each station.

Normally, only one transmitter (base, mobile relay, etc.) is associated with station classes that indicate operation at a permanent/fixed location. Therefore, for these station classes, the number 1 should usually be entered. However, if more than one transmitter is placed at the same location, then enter the appropriate number.

For transmitters associated with station classes that indicate mobile operation, enter the total number of mobile units. The total number of mobile units is normally the sum of vehicular, portable, aircraft, and marine units that will be placed in operation at the time of grant plus the units for which purchase orders have been signed and will be in use prior to the end of the station's construction period. Some exceptions are provided for in the rules, which should be noted.

Note: Paging receivers should not be counted as mobile units. These receivers should be listed separately in Item 34.

Item 34 Enter the number of paging receivers in this system.

Item 35 For operations using the emissions NON, A1A, A2D, A3E, A9W, F1B, F2D, F3E, and F9W -- enter the mean RF output power (watts) normally supplied by the transmitter to the antenna feedline. Enter Output Power for transmitter when operating with single sideband (A3J or new J3E) emission; enter the peak envelope power (watts). (See the applicable rules.)

Note: The power entered should be the minimum required for satisfactory operations.

Item 36 This information is required for operations above 10 MHz from applicants requesting new station authorizations and for modifications as described in the applicable rules.

Enter the Effective Radiated Power (ERP). The ERP is the transmitted output power times the net gain of the antenna system. This is the gain of the antenna minus the transmission losses, which include losses attributable to the transmission line, duplexers, cavity filters, and isolators. The actual formula is:

ERP (watts) equals Power (watts) times Antilog of (net gain in dB divided by 10)

Item 37 Enter the emission designator for each station. Normally, land mobile operations are intended to provide voice communications. The new ITU (International Telecommunications Union) emission designators **must** be used in place of the old designators. The following provides samples of the corresponding new ITU designators for the most commonly used emission designators. These are samples only and do not necessarily represent an emission for which you should apply.

	Old	**New**
Frequency modulated (FM) voice	20F3	20K0F3E
Frequency modulated (FM) voice	13.6F3	13K6F3E
Frequency modulated digitized voice	20F3Y	20K0F1E
Frequency modulated digitized non-voice	20F9Y	20K0F1D
Amplitude modulated single sideband voice	3A3J	3K00J3E
Amplitude modulated (AM) voice	8A3	8K00A3E
Frequency modulated voice (12.5 KHz channel)		11K3F3E

FCC 601
Schedule H

Technical Data Schedule for the Private Land Mobile and Land Mobile Broadcast Auxiliary Radio Services (Parts 90 and 74)

Approved by OMB
3060 - 0798
See 601 Main Form instructions for public burden estimate

Eligibility

1) Rule Section:	2) Describe Activity:

Frequency Coordinator Information (if not self-coordinated)

3) Frequency Coordination Number	4) Name of Frequency Coordinator	5) Telephone Number	6) Coordination Date

7) Has this application been successfully coordinated? ( )**Y**es/**N**o

Extended Implementation (Slow Growth)

8) Are you requesting a new or modified extended implementation plan? ( )**Y**es/**N**o
If 'Yes', attach an exhibit with a justification and a proposed station construction schedule.

Associated Call Signs (Attach additional sheets if required)

9)				

Broadcast Auxiliary Only

If there is an associated Parent Station, complete Items 10-12.	10) Facility Id of Parent Station:	11) Radio Service of Parent Station:	12) City and State of Parent Station Principal Community:

13) If there is no associated parent station, this applicant is a: ( )
Broadcast Network Entity Television **C**able Operator **M**otion Picture Producer **T**elevision Producer

14) State of Primary Operation:

Control Point(s) (Other than at the transmitter) (Attach additional sheets if required)

15) Action A/M/D	16) Control Point Number	17) Location Street Address, City or Town, County/Borough/Parish, State	18) Telephone Number

Antenna Information

19) Action ( ) A/M/D	20) Location Number	21) Antenna Number	22) AAT (meters)	23) Antenna Ht. (meters)	24) Azimuth (degrees)	25) Beamwidth (degrees)	26) Polarization	27) Gain (dB)

Frequency Information

28) Action ( ) A/M/D	29) Location Number	30) Antenna Number	31) Frequency (MHz)		32) Station Class	33) No. of Units	34) No. of Paging Receivers	35) Output Power (watts)	36) ERP (watts)	37) Emission Designators
			Existing (if mod)	New						
			Existing (if mod)	New						
			Existing (if mod)	New						
			Existing (if mod)	New						
			Existing (if mod)	New						
			Existing (if mod)	New						
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			Existing (if mod)	New						

FEDERAL COMMUNICATIONS COMMISSION

Approved by OMB
3060 - 0798
See 601 Main Form Instructions
for public burden estimate

Information and Instructions

Instructions for Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Form FCC 601, Schedule I, is a supplementary schedule for use with the FCC Application for Wireless Telecommunications Bureau Radio Service Authorization, FCC 601 Main Form. This schedule is used to apply for an authorization to operate a radio station in the Fixed Microwave and Microwave Broadcast Auxiliary Services, as defined in 47 CFR, Parts 101 and 74. It is also used to amend a pending application or modify an existing license in these services. Additionally, this schedule is used by auction winners that must file site-specific technical data for international coordination, for an environmental assessment of a particular site or for operation that would affect a radio quiet zone. The FCC 601 Main Form must be filed in conjunction with this schedule.

All site and technical information, whether pertaining to a fixed location or an area location, is filed on Schedule I. Do not file FCC 601, Schedule D - Schedule for Station Locations and Antenna Structures in conjunction with Schedule I.

IMPORTANT INFORMATION REGARDING LOCATIONS, PATHS, or PASSIVE REPEATER NUMBERS: To identify existing locations, paths, or passive repeater numbers, you must use the location, path, or passive repeater numbers assigned by the Universal Licensing System (ULS). These numbers may not be identical to the numbers on your current authorization if that authorization was not issued by the Universal Licensing System. If you are unsure of the location, path, or passive repeater number that corresponds to a particular location, path, or passive repeater, you can query the ULS for the most up-to-date information regarding your authorization. To query the ULS license database for your call sign, point your web browser to http://wireless.fcc.gov/uls/ and click on Search - Licenses. Alternatively, you may call 888-CALLFCC (888-225-5322) for assistance.

Note: The transmit location will always be assigned Location Number 1.

IMPORTANT ANTENNA STRUCTURE REGISTRATION INFORMATION: The Commission will evaluate your application for a fixed location based on the Antenna Structure Registration number you provide (if required). If you mistype your Antenna Structure Registration Number, or provide location data (latitude, longitude, elevation, structure heights) that is inconsistent with the data found in the Commission's Antenna Structure Registration database, your application will be dismissed.

Inconsistent data is defined as follows:

1. Latitude and Longitude data provided on Schedule I, Supplement 1, differs from the data in the Antenna Structure Registration database by more than 1 second; or
2. The height or elevation reported on Schedule I is more than 0.5 meters (1.5 feet) greater than the data in the Antenna Structure Registration Database; or elevation is more than 3 meters (9.8 feet) less than the elevation listed in the Antenna Structure Registration Database.

Schedule I
Instructions

Schedule I must be submitted for every Fixed Microwave and Microwave Broadcast Auxiliary application (Parts 101 and 74) filed for a purpose of New (NE), Modification (MD), Renew/Modification (RM) and Amendment (AM).

Administrative Information

Item 1 If this application is being filed as part of a pack, either simultaneously with the pack or as a late addition to the pack, enter 'Y'. Otherwise enter 'N'.

> **Note:** A pack is a set of applications requesting a system or subsystem of microwave links which are related to the extent that they cannot or must not operate independently and so must all have the same grant date and construction deadline. All applications intended to be part of a pack should be filed together with the other applications in the pack, on the same day (the initial filing date of the pack). Applications that are part of a pack may also be filed singly, as a late addition to the pack.
>
> In order to incorporate new paper-filed applications into a new pack, all the paper-filed applications for the new pack must be filed together on the same day; it is recommended that they also be filed in the same envelope.

Item 2 Complete this item only if the answer to Item 1 is 'Y'. If this application is being filed on the initial filing date of the pack and the Pack Registration Number has already been obtained on-line, or this application is being filed as a late addition to the pack, the Pack Registration Number must be entered in Item 2a. Otherwise, *(i.e.*, if this application is being filed on the initial filing date of the pack and the Pack Registration Number has not been obtained on-line), enter in Item 2b a descriptive and unique pack name, not exceeding 50 characters, which the FCC will use to relate this application to other applications filed for the pack on the same day. The FCC will assign a new Pack Registration Number to the pack.

> **Note:** It is recommended that a Pack Registration Number be obtained on-line prior to the initial filing of the pack, and entered in Item 2a, to facilitate pack identification and aggregation, and to avoid confusion.

Item 3 Enter the type of operation code. Select only one code per application. A separate license is needed for each type of operation. Valid types of operation codes are:

F - Permanent Fixed Point to Point
M - Multiple Address System (MAS)
T - Temporary Fixed/Mobile
D - Digital Electronic Message Service (DEMS)
18 - 18 GHz Low Power *(See Section 101.147(r)(10) for definition of Low Power (EIRP less than 1watt))*
31 - 31 GHz Systems
38 - 38 GHz Systems

Item 4 Enter the station class code that identifies the transmitter class. Refer to Table 1, located on page 16 of these instructions. The station class codes are as follows:

Fixed ..... FXO
Temporary Fixed FX5
Mobile ..... MO
Mobile & Temporary Fixed MO5

Item 5 For Digital Electronic Message Services (DEMS) only: Enter the Standard Metropolitan Statistical Area (SMSA) for the license.

Item 6 This question must be answered if filing an application for a NEW station, a Modification, a Renewal/Modification, or an Amendment to a pending application. Enter 'Y' if you are filing:

a. An application for a New Station authorization;
b. An application for a Major Modification of an existing authorization;
c. An application for a Renewal and Major Modification of an existing authorization;
d. An application for Major Amendment of any of the above;
e. An application for Minor Modification or Minor Amendment when this application, along with all other minor Modification or amendment requests filed since you applied for a new authorization, or since the last Major action was granted by the Commission, produces a cumulative effect that would equal or exceed the criteria for a Major filing.

Otherwise, enter 'N' if the cumulative effect would be considered a Minor filing.

See Rule Section 1.929 for specific details on Classification of filings as Major or Minor. For your convenience, you will find Rule Section 1.929 listed on Pages 12 and 13 of the FCC Form 601 Main Form Instructions.

Item 7 Enter 'Y' if frequency coordination has been completed for this application. Otherwise enter 'N'.

Frequency Coordinator Information

This section must be completed if the station is not self-coordinated.

Item 8 Enter the frequency coordination number issued by the frequency coordinator for this application.

Item 9 Enter the name of the frequency coordinator.

Item 10 Enter the telephone number (including area code) of the frequency coordinator.

Item 11 Enter the month, day and year on which frequency coordination was completed.

Broadcast Auxiliary Only

This item applies to Microwave Broadcast Auxiliary Stations only. Complete either Item 12 or Item 13.

If there is an associated Broadcast Parent station, all parts of Item 12 must be completed. If there is more than one Parent station, select one for the purpose of filing this application. Actions taken on the Broadcast Parent station entered in Item 12 will similarly affect the Broadcast Auxiliary Station (i.e., renewal, assignment of authorization, cancellation, etc.).

Item 12a If there is an associated Broadcast Parent station, enter the **Facility Identification Number.** This is typically a 5 digit number assigned by the FCC's Media Bureau. This is **not** the Call Sign of the Parent station.

Item 12b Enter the Radio Service Code of the Broadcast Parent station. The type of traffic, TV or Aural, indicated by the Radio Service of the Parent station must be consistent with that indicated by the Radio Service Code of the Broadcast Auxiliary station requested under this application:

> If filing for Broadcast Auxiliary Radio Service Code of TB, TI, TS, TT, or TP, the Parent station Radio Service Code must be TV or TX.
>
> If filing for a Broadcast Auxiliary Radio Service Code of AB, AI, or AS, the Parent station Radio Service Code must be AM, FM or FX.

Item 12c Enter the City and State of the Parent station's principal community.

Item 13 If there is no associated Parent station, certify that the applicant is a Broadcast Network Entity and enter the State of primary operation. By signing the FCC 601 Main Form filed in conjunction with this Schedule, the applicant certifies that the statement listed in Item 13 is true, complete, correct, and made in good faith. Note that a Broadcast Network Entity must have entered TV Pick-up, radio service code 'TP', in Item 1 of the FCC 601 Main Form.

Control Point (Technical Point of Contact)

Fixed Microwave and Microwave Broadcast Auxiliary Services authorize only one control point per license. Therefore, this section must be completed only when a control point is to be added or modified. If you are adding a new control point (for a new license only), complete all items in this section. If you are modifying an existing control point, in addition to Item 14, complete only the items that have changed for the control point. The control point that is currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this section.

Item 14 This item indicates the action the filer wants the FCC to take on the specified control point. Enter 'A' for Add or 'M' for Modify.

Item 15 Enter the street address, city or town, county/borough/parish, and state of the control point. Refer to FCC 601 Main Form Instructions, Appendix II, for a list of valid state, jurisdiction, and area abbreviations.

Item 16 Enter the telephone number, including area code, where a person responsible for operation of the station or system can be reached.

Instructions for Schedule I Supplement 1 - Location Data

This Supplement must be completed only when a location (transmitter, receiver, or passive repeater) is to be added, modified, or deleted. Each Supplement 1 describes one location. If you have more than one location, submit an additional Supplement 1 for each. If you are adding a new location, complete a Supplement 1 for each location to be added. If you are modifying an existing location, in addition to Items 1, 2, 6 (FCC Antenna Structure Registration), and 22 (NEPA), complete only the items that have changed for each location. If you are deleting a location, complete only Items 1 and 2. Locations that are currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this Supplement.

> **Note:** Supplement 1 describes one location only. To add, modify, or delete technical data associated with a location, you must file Supplement 2 (Path Data), Supplement 3 (Passive Repeaters), and/or Supplement 4 (Frequency Data) along with Supplement 1.

For purposes of these instructions and the use of this Supplement 1, permanent fixed point-to-point stations, Multiple Address System (MAS) stations that are not mobile-only or auctioned, and Digital Electronic Message Service (DEMS) stations, are considered to have fixed transmit locations. Mobile-only Multiple Address System (MAS) (non-auctioned) stations, temporary fixed, 18 GHz Low Power stations, and 31.0-31.3 GHz and 38.6-40.0 GHz (non-auction, area operation) stations are considered to have area transmit locations.

A summary of Types of Operation Codes/Station Classes/Transmit Location Types/Path Codes is provided in Table 1, located on page 16 of these instructions.

IMPORTANT INFORMATION REGARDING LOCATIONS: Receiver and Passive Repeater location information may only be specified for Permanent Fixed Point-to-Point systems. For all other types of operation, you may only specify location information for the transmitter. Additionally, you must check Table 1 on page 16 of these instructions to determine if the station for which you are applying should be associated with a fixed location (station class = FXO in Item 4 of Schedule I) or an area location; enter data accordingly.

> **Note:** For MAS and DEMS stations associated with a fixed location, the area in which you may locate remote and user stations is defined in the FCC rules (see 47 CFR § 101.105) and is not collected on this form. Additionally, for these stations, the transmitter location information entered in Items 7-12 should correspond to the center of the station's operating area, the site elevation entered in Item 13 should correspond to the elevation at the coordinates entered in Items 7-8, and the antenna structure height data entered in Items 14-15 must be equal to or greater than the value entered for antenna height in Item 7 of Supplement 2.

> **Note:** For Receiver locations, you must complete Items 1, 2, 3, 5, 7, 8, and 13.

> **Note:** For Passive Repeater locations, you must complete Items 1, 2, 3, 5, 6-8, 13-16, and 22.

<u>Item 1</u> Enter the code indicating the action requested.

To add a new location, enter 'A'. If the new location you are adding is a fixed transmit location, also complete Items 2, 3, 5 through 16, 22, and 23. If the new location you are adding is an area location, also complete Items 2 through 5, 7, 8, 10 through 12, and 17 through 23.

> **Note:** Part 101 Microwave Services and Part 74 Broadcast Auxiliary Microwave Services only authorize one transmit location per license. Therefore, a transmit location may only be added if the purpose of FCC 601 Main Form is 'New'.

To modify existing location data, enter 'M'. If the existing transmit location is a fixed transmit location, complete Items 2 (Location Number), 6 (FCC Antenna Structure Registration), 22 (NEPA), 23 (Quiet Zone - if required), and only those of Items 7 through 16 that are being modified (enter the new data only). If the existing transmit location is an area location, complete Item 2 and only those Items 7, 8, 10 through 12, and 17 through 23 that are being modified (enter the new data only).

To delete an existing location, enter 'D' and complete Item 2.

> **Note:** Deleting a receiver location will also delete all paths associated with that location.

Item 2 This item must be completed. If the station location has been previously licensed under this call sign by the FCC, enter its FCC-assigned location number (see Important Information Regarding Location and Path Numbers on page 1 of these instructions). For a new location, assign a temporary code to represent the station location. The assigned code should begin with 'L' to indicate it is a location and end with a number to uniquely identify it (*e.g.*, L1, L2, L3, etc.). The FCC will assign an official number to the new station, which will appear on the Authorization.

Note: The transmitter location must always be assigned location 1 (L1).

Item 3 Enter the appropriate location description for the specified location. Valid location descriptions are listed below:

Transmit
Receiver
Passive Repeater

Item 4 For area transmit locations only, enter the appropriate area of operation code using the table below. Additional mobile location fields must be completed according to the area of operation code chosen. Refer to the table to determine which additional fields are required for the chosen area of operation code.

Note: If area operation will cover multiple counties, use area of operation code 'O' and specify all applicable counties in Item 21.

Area of Operation Codes and Required Data Values

Code Description	Additional Supplement 1 Data Elements Required for each Area of Operation Code	Item Numbers
P KMRA around a centerpoint (circular area of operation)	Temporary Fixed or Mobile Radius, Latitude, Longitude, City*, State**, County/Borough/Parish**, Canadian Coordination area, NEPA, Quiet Zone	7, 8, 10, 11, 12, 17, 20, 22, 23
R Rectangular Area of Operation	Latitude, Longitude, Maximum Latitude, Maximum Longitude, Canadian Coordination area, NEPA, Quiet Zone	7, 8, 18, 19, 20, 22, 23
N Nationwide including Hawaii Alaska & US Territories	Canadian Coordination, NEPA, Quiet Zone	20, 22, 23
U Continental US	Canadian Coordination, NEPA, Quiet Zone	20, 22, 23
C County/Borough/Parish Wide Area of Operation	State, County/Borough/Parish, Canadian Coordination, NEPA, Quiet Zone	11, 12, 20, 22, 23
S Statewide Area of Operation	State, Canadian Coordination, NEPA, Quiet Zone	11, 20, 22, 23
O Other - Narrative	Description, Canadian Coordination, NEPA, Quiet Zone	20, 21, 22, 23

*Kilometers Radius
** Complete as applicable - refer to instructions for applicability

Item 5 This item is required. Enter the location or station name. If a new station is proposed, give it a name that relates to its location (up to 20 characters). For example, the name of a city, statistical area, town, or prominent geographical feature may be used. If necessary, abbreviate the name, without punctuation (*e.g.*, Bald Mtn).

Item 6 This item is required for fixed transmit and passive repeater locations if the action requested in Item 1 is 'A' or 'M'. If antenna structure registration is required, enter the seven digit FCC Antenna Structure Registration Number (shown on the structure's registration, FCC Form 854R). Otherwise, enter 'N/A' to indicate that FAA notification is not required.

Note: Effective 7/1/96 the Commission requires owners to register certain structures. When required, antenna structures must be registered using FCC Form 854. The use of this FCC Form 601 to supply antenna structure information does not replace the requirement to register antenna structures on the FCC Form 854. For more information, see our web site at http://wireless.fcc.gov/antenna/, call Consumer and Governmental Affairs Bureau at 888-CALLFCC (888-225-5322), or e-mail questions to FCCDMD@fcc.gov.

Note: If, in accordance with 47 CFR § 17.14, Antenna Structure Registration is not required because the structure is shielded by existing structures or because it is fixed by its functional purpose, submit supporting documentation as a "Tower attachment" to your application.

Note: For a Multiple MAS Master or DEMS Nodal station, if the only fixed sub-type of operation codes (see Table 1 at the end of this schedule) to be used at the station are MAS Multiple Two-Way Master-Remote, MAS Multiple One-Way Outbound Master, or DEMS Multiple Two-Way Nodal-User, because there is no antenna structure at the coordinates specified in Items 7 and 8, no antenna registration is required. In item 6, enter 'N/A'.

Items 7 and 8 These items are required for all receiver locations, and are required for all transmit and passive repeater locations if 'N/A' was entered in Item 6. Enter the geographic coordinates (latitude and longitude) of the location. If you provided an Antenna Structure

Registration Number in Item 6 for a transmit or passive repeater location, then these items are optional (see Important Antenna Structure Registration Information on Page 1 of Schedule I Instructions). For area locations, enter the geographic coordinates as specified in the table in the instructions for Item 4:

If 'P' was entered in Item 4, enter the geographic coordinates of the center point;
If 'R' was entered in Item 4, enter the geographic coordinates of the southeast corner of the rectangular area or box. (See also Items 18 and 19 for the Northwest corner)

Enter the latitude using the format *DD-MM-SS.S*, where the degrees (*DD*) term can have a value in the range of 0 to 90, minutes (*MM*) can range from 0 to 59, and seconds (*SS.S*) can range from 0 to 59.9. In the lower right corner, specify the direction as either N for North or S for South.

Enter the longitude using the format *DDD-MM-SS.S*, where the degrees (*DDD*) term can have a value in the range of 0 to 180, minutes (*MM*) can range from 0 to 59, and seconds (*SS.S*) can range from 0 to 59.9. In the lower right corner, specify the direction as either E for East or W for West.

All coordinates must be referenced to the North American Datum of 1983 (NAD83). This information can be determined in many ways, including a GPS receiver, a 7.5 minute topographical quadrangle map of the area, or you may consult the city or county/borough/parish surveyor in your area. Topographical maps may be purchased from the U.S. Geological Survey, Washington, DC 20242 or from its office in Denver, Colorado 80225.

Note: Location coordinates (latitude and longitude) for sites in the Continental United States, Puerto Rico, the U.S. Virgin Islands, Alaska, Hawaii, American Samoa, and Guam must be referenced to the North American Datum of 1983 (NAD83). Coordinates for sites in the Northern Mariana Islands, Wake Island, and Midway Island should be referenced to the applicable local datums. If the source from which you obtain the coordinates still utilizes an older datum (*i.e.*, NAD27, PRD40) you must convert to NAD83. Conversion routines are available through the internet at http://wireless.fcc.gov/uls/utilities/nadcon.html.

Items 9-12

Fixed Locations

If you answered N/A in Item 6 for a Transmit Location, you must complete Items 9 through 12. If you provided an Antenna Registration Number in Item 6 for a Transmit Location, you must complete Item 12, County/Borough/Parish name. If the Location is a Receiver or Passive Repeater, Items 9 through 12 are not required to be completed.

Item 9 This item must be completed for the Transmit Location. Enter a complete description of the transmit location such as street number and address or other geographic description such as direction and distance from a town or known landmark (i.e., Rt 81, 5 km South of Fairview). P. O. Box Numbers or geographical coordinates are not acceptable for this item.

NOTE: For a Multiple MAS Master or DEMS Nodal station, if the only fixed sub-type of operation codes (see Table 1 at the end of this Schedule) to be used at the station are MAS Multiple Two-Way Master-Remote, MAS Multiple One-Way Outbound Master, or DEMS Multiple Two-Way Nodal-User, because there is no antenna structure at the coordinates specified in Items 7 and 8, enter 'Various Locations' in Item 9.

Item 10 This item must be completed with the City in which the Transmitter is located.

Item 11 This item must be completed with the State code in which the Transmitter is located. Refer to FCC Form 601 Main Form Instructions, Appendix II, for a list of valid state, jurisdiction and area codes.

Item 12 This item must be completed with the County/Borough/Parish in which the Transmitter is located unless any of the following pertain to the Transmit Station location:

a) the city entered in Item 10 is an Independent City that is not affiliated with a County/Borough/Parish (i.e., Baltimore, MD)
b) the State code entered in Item 11 does not have Counties/Boroughs/Parishes (i.e., Puerto Rico, Virgin Islands)
c) the State code entered in Item 11 is GM, Gulf of Mexico

NOTE: If the nearest City, County/Borough/Parish and State are located in a bordering county/borough/parish and/or state, enter a complete description of the location in Item 9 as shown in this example. Complete Item 10 if a City, Town or Village within the Transmitter's County/Borough/Parish is nearby and complete Items 11 and 12 with the County/Borough/Parish and State in which the coordinates are actually located.

Example:
9) (Street) Summit Mtn near Palo Verde, Imperial County, CA
10)(City)
11)(State) AZ
12)(County/Borough/Parish) La Paz

Area Locations

For area locations, respond to Items 9-12 as specified in the table in the instructions for Item 4:

Item 9 This item is not applicable for area locations and should be left blank.

Item 10 If 'P' was entered in Item 4, enter the city or town name of the location in this item. This item is required only if Item 12 is blank.

Item 11 If 'P', 'C', or 'S' was entered in Item 4, enter the State of the location in this item. Refer to FCC 601 Main Form Instructions, Appendix II, for a list of valid state, jurisdiction, and area codes.

Item 12 If 'P' or 'C' was entered in Item 4, enter the County/Borough/Parish of the location in this item. This item is always required for area of operation code 'C'. This item is also required for area of operation code 'P' except when: (a) the city entered in Item 10 is an Independent City that is not affiliated with a County/Borough/Parish (*i.e.*, Baltimore, MD), (b) the State entered in Item 11 does not have counties/boroughs/parishes (*i.e.*, Puerto Rico, Virgin Islands), or (c) the State entered in Item 11 is 'GM' (Gulf of Mexico).

> **Note:** Items 13-16 only apply to Fixed Locations. If you answered 'N/A' in Item 6 for a Transmit or Passive Repeater Location, you must complete Items 13-16. If you provided an Antenna Registration Number in Item 6 for a Transmit or Passive Repeater Location, Items 13-16 are optional (see Important Antenna Structure Registration Information on page 1 of Schedule I instructions). If the Location is a Receiver, Item 13 must be completed. Items 14-16 are not required.

Item 13 Enter the elevation above mean sea level (AMSL) of the ground at the antenna location. Enter this item in meters, rounded to the nearest tenth. Refer to letter 'a' in the antenna structure figure examples on page 9 of these instructions. This information can be determined in many ways, including a GPS receiver, 7.5 minute topographical quadrangle map of the area, or you may consult the city or county/borough/parish surveyor in your area. Topographical maps may be purchased from the U.S. Geological Survey, Washington, DC 20242 or from its office in Denver, Colorado 80225.

> **NOTE:** For a Multiple MAS Master or DEMS Nodal station, if the only fixed sub-type of operation codes (see Table 1 at the end of this Schedule) to be used at the station are MAS Multiple Two-Way Master-Remote, MAS Multiple One-Way Outbound Master, or DEMS Multiple Two-Way Nodal-User, because there is no antenna structure at the coordinates specified in Items 7 and 8, enter '0' (the single digit zero) in Item 13.

Item 14 Enter the height above ground level to the highest point of the **supporting structure only**. Enter this item in meters, rounded to the nearest tenth. For example, if the antenna structure consists of a building/tower combination, include any elevator shaft, flagpole, or penthouse in the **overall** support structure height, but not the antenna, tower, pole, or mast. If the antenna structure is a tower only, include the height of the tower but not the antenna. Refer to letter 'b' in the antenna structure figure examples on page 9 of these instructions.

> **NOTE:** For a Multiple MAS Master or DEMS Nodal station, if the only fixed sub-type of operation codes (see Table 1 at the end of this Schedule) to be used at the station are MAS Multiple Two-Way Master-Remote, MAS Multiple One-Way Outbound Master, or DEMS Multiple Two-Way Nodal-User, because there is no antenna structure at the coordinates specified in Items 7 and 8, enter '6.1' in Item 14.

Item 15 Enter the overall height above ground level of the entire antenna structure to the highest point, including any appurtenances. Enter this item in meters, rounded to the nearest tenth. You must include antennas, dishes, obstruction lighting, etc. Refer to letter 'c' in the antenna structure figure examples on page 9 of these instructions.

> **NOTE:** For a Multiple MAS Master or DEMS Nodal station, if the only fixed sub-type of operation codes (see Table 1 at the end of this Schedule) to be used at the station are MAS Multiple Two-Way Master-Remote, MAS Multiple One-Way Outbound Master, or DEMS Multiple Two-Way Nodal-User, because there is no antenna structure at the coordinates specified in Items 7 and 8, enter '6.1' in Item 15.

Item 16 Enter the code for the type of structure on which the antenna is or will be mounted from the following valid structure types:

Code	Definition
B	Building with a side mounted antenna
BANT	Building with Antenna on Top
BMAST	Building with Mast/Antenna on Top
BPIPE	Building with Pipe/Antenna on Top
BPOLE	Building with Pole/Antenna on Top
BRIDG	Bridge
BTWR	Building with Tower/Antenna on Top
MAST	Self-Support Structure
N/A	Not Applicable***
NNTANN*	Antenna Tower Array
NTOWER**	Multiple Structures
PIPE	Any Type of Pipe
POLE	Any Type of Pole, used only to mount an antenna
RIG	Oil or Other Type of Rig
SIGN	Any Type of Sign or Billboard
SILO	Any Type of Silo
STACK	Smoke Stack
TANK	Any Type of Tank (Water, Gas, etc.)
TOWER	A Free Standing **or** Guyed Structure Used for Communications Purposes
TREE	When Used as a Support for an Antenna
UPOLE	Utility Pole/Tower Used to Provide Service (Electric, Telephone, etc.)

* Valid Tower Arrays. Code definition: The first NN indicates the number of towers in an array. The second NN is optional and indicates the position of that tower in the array (*e.g.,* 3TA2 would identify the second tower in a three-tower array).

** Valid Multiple Structures. Code Definition: The N indicates the number of structures where multiple antenna structures are present in a multiple structure (Ex.: 2TOWER, 3TANK, 6BANT, 7BMAST).

*** Not Applicable Structure Type: This code is only valid to describe the antenna support structure at a location associated with the following types MAS and DEMS stations:

MAS Multiple Two-way Master-Remote
MAS Multiple One-way Outbound Master
DEMS Multiple Two-way Nodal-User

Item 17 For Area of Operation code 'P', enter the radius of the area of operation. Enter in kilometers, rounded to the nearest tenth.

Note: For MAS Mobile Master (mobile-only), indicated by type of operation Multiple Address System on Schedule I Item 3 and sub-type of operation Mobile Master in Item 4a of Supplement 2 - enter 40.5.

For 18 GHz Low Power, indicated by on Schedule I Item 3 - enter 28.0.

Items 18 and 19 These items must be completed for area operations that are defined by a rectangular area or box coordinates (Area of Operation code in Item 4 = 'R'). Enter geographic coordinates (latitude and longitude) of the northwest corner of the rectangular area of box in Items 18 and 19. See Notes in Items 7 and 8 of these instructions for important information regarding coordinates.

Item 20 Respond to this Item only if you are applying for an area location. This item helps the FCC to determine if it will initiate coordination procedures with the Government of Canada. If any part of the area location is in an area that requires frequency coordination with Canada and you intend to operate in this area, enter 'Y'. In the event the applicant needs to submit additional information regarding coordination of a channel assignment with the Government of Canada, this should be attached as an exhibit which references Schedule I, Supplement 1, Item 20. If 'N' is entered, the FCC will not initiate coordination procedures with the Government of Canada and your area of operation will be excluded from these border areas. Appendix I in FCC Form 601 Main Form Instructions contains a list of counties/boroughs, by state, having areas within the various coordination zones and a list of which coordination zones apply for various frequency bands.

Item 21 If the response to Item 4 was ‘O’, enter a description of the area of operation. P.O. Box numbers or geographic coordinates are not acceptable for Item 21. The use of Other should only be used if the area of operation cannot be described by using codes P, R, C, S, N, or U. Area of operation provided as 'Other' may delay processing of the application.

Item 22 This item is required for compliance with the National Environmental Policy Act of 1969 (NEPA), as amended, 42 U.S.C. 4321-4335. See also Part 1, Subpart I of the FCC rules (47 CFR §§ 1.1301 - 1.1319).

Enter 'Y' if an FCC grant of this application will have a significant environmental effect. Section 1.1307 of the FCC rules lists categories of environmental effects for which applicants must file an environmental assessment. Otherwise enter 'N'. Examples of facilities that may have a significant effect on the environment include:

An antenna structure located in a residential area (as defined by applicable zoning laws) that will utilize high intensity aviation obstruction lighting

A facility located in an officially designated wilderness area, wildlife preserve, or floodplain

A facility that affects a site significant in American history

A facility whose construction involves extensive changes in surface features

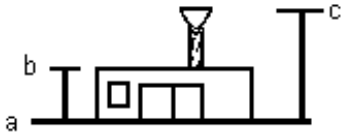
Facilities, operations, or transmitters that would cause human exposure to levels of radio frequency radiation in excess of the limits as detailed in § 1.1310 and 2.109 of the Commission’s rules.

Item 23 Applicants for stations located in one of the Quiet Zones listed below must notify the proper authority and indicate the date such notification was sent in Item 23.

1. National Radio Astronomy Observatory, Green Bank, Pocahontas County, West Virginia. The quiet zone is located within Virginia, West Virginia, and Garrett County, Maryland and bounded by 39 degrees 15' N on the north, 78 degrees 30' W on the east, 37 degrees 30' N on the south, and 80 degrees 30; W on the west. Contact the National Radio Astronomy Observatory, P.O. Box 2, Green Bank, West Virginia 24944.

2. Arecibo Observatory, Puerto Rico. The quiet zone consists of the islands of Puerto Rico, Desecheo, Mona, Vieques, and Culebra. Contact the Interference Office, Arecibo Observatory, HC 3 Box 53995, Arecibo, Puerto Rico 00612.

Antenna Structure Figure Examples:



Instructions for Schedule I Supplement 2 - Path Data

This Supplement must be completed only when a transmission path is to be added, modified, or deleted. For purposes of filing this application, a 'path' is defined as the transmitting antennas (along with their height, orientation, and polarization); the final receiver (if present) and any associated passive repeaters. File as many copies of Supplement 4 (Frequency Data) as necessary to describe all transmitters and frequencies associated with each transmission path. Transmission paths are linked on Supplement 2 and Supplement 4 by Item 2, path number, located respectively on each supplement (see Important Information Regarding Location and Path Numbers on page 1 of Schedule I instructions).

A Supplement 2 must be completed for each transmission path added, modified, or deleted. If you are adding a new transmission path, complete a Supplement 2 for each transmission path to be added, and a Supplement 4 (Frequency Data) for all transmitters and frequencies on the new path. If you are modifying a transmission path, in addition to Items 1 through 3, complete only the items that have changed for each transmission path. If you are deleting a transmission path, only Items 1 through 3 are required. Transmission paths that are currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this Supplement.

> **Note:** If a path is deleted, the transmitter and frequency data that is linked to the path will automatically be deleted and will no longer be part of your authorization.

Refer to Table 2 on pages 17 & 18 of Schedule I instructions for assistance in filling out Supplements 2 and 4. Table 2 indicates the fields and their values that are applicable for various path types. For Permanent Fixed Point-to-Point paths, enter the actual value used for each item on Supplement 2, or leave blank if not applicable.

Transmit Location

This section identifies the transmit location and path number of the transmission paths. Transmit location information is entered on Supplement 1 of Schedule I. Path information is entered in the remaining sections of Supplement 2.

Item 1 Enter the transmit location name as entered in Item 5 of Supplement 1.

Item 2 Enter the path number. If the path has been previously licensed under this call sign by the Commission, enter its FCC-assigned path number (see Important Information Regarding Location and Path Numbers on page 1 of Schedule I instructions). If you are adding a new path to the transmit location as part of this filing, assign a code to represent the path. Number each new path consecutively, beginning each assigned path number with 'P' to indicate it is a path and end with a number to uniquely identify it (*e.g.*, P1, P2, P3, etc.). A single transmitter can have multiple paths. Path numbers need only be unique for each transmitting antenna and final receiver (if present). The FCC will assign an official number to the new path, which will appear on the Authorization.

Item 3 This item indicates the action the applicant wants the FCC to take on the path specified in Item 2. Enter only one action per copy of Supplement 2. Enter 'A' to Add a New Path, 'M' to Modify an Existing Path, or 'D' to Delete an Existing Path.

If 'A' is entered, complete all remaining items on this supplement (Items 4 through 32). Also complete as many copies of Supplement 4 (Frequency Data) as necessary to describe all transmitters and frequencies associated with the new path. If 'M' is entered, in addition to completing Items 1 through 3, complete only those Items of 4 through 32 that are being modified (enter new data only). If the modification also affects transmitters or frequencies, also complete as many copies of Supplement 4 as necessary to describe the transmitter or frequency modifications (enter new data only). Modification of a path will affect all parameters of that path. If 'D' is entered, only complete Items 1 through 3. Deletion of a path will delete the entire path, including all frequencies.

> **Note:** To add one path and modify another, complete two Supplement 2 forms.

Item 4a This item is to be completed for MAS (Multiple Address System) and DEMS (Digital Electronic Message Service) stations only, as entered in Item 3 on main Schedule I. This item further classifies various MAS and DEMS operations. Enter the sub-type of operation codes for the path. Enter only one sub-type of operation code for each path.

> Fixed Two-way MAS Master-Remote or DEMS Nodal-User
> Normal fixed MAS master-remote or DEMS nodal-user two-way operation, with single fixed master/nodal, located at the coordinates stated in Items 7 and 8 of Supplement 1, transmitting to four or more MAS remotes or any number of DEMS users, and remotes/users transmitting back to master/nodal. Two of Supplement 2 must be filed for this sub-type, one for the master/nodal-to-remotes/user path, and one for the remotes/user-to-master/nodal path.
>
> Fixed One-way Outbound MAS Master
> A fixed MAS master, located at the coordinates stated in Items 7 and 8 of Supplement 1, transmitting to four or more receive-only remotes. Only one Supplement 2 must be filed for this sub-type for the master-to-remote path.

Fixed One-way Inbound MAS Master
Four or more remotes transmitting to a receive-only fixed master, located at the coordinates stated in Items 7 and 8 of Supplement 1. Only one Supplement 2 must be filed for this sub-type for the remote-to-user path.

Multiple Two-way MAS Master-Remote or DEMS Nodal-User (DEMS only permitted under waiver)
Multiple MAS masters or DEMS nodals at unspecified locations within an area around the coordinates stated in Items 7 and 8 of Supplement 1, transmitting to at least four multiple receive-only MAS remotes or any number of DEMS users and remotes/users transmitting back to multiple masters/nodals. Two of Supplement 2 must be filed for this sub-type, one for the master/nodal-to-remote/user path, and one for the remote/user-to-master/nodal path.

Multiple One-way Outbound MAS Master
Multiple MAS masters at unspecified locations within an area around the coordinates stated in Items 7 and 8 of Supplement 1. Only one Supplement 2 must be filed for this sub-type for the master-to-remote path.

Mobile MAS Master (Mobile-only)
Mobile master(s) at unspecified locations within an area described in items 7, 8, and 17 of Supplement 1. A path code should not be filed for this subtype (see Note in Item 4b).

Mobile MAS Master (Non-Mobile-only)
Mobile master(s) added to the authorization of an existing MAS station and associated with the fixed location of that existing MAS station. A path code should not be filed for this subtype (see the Note in Item 4b).

Notes: For MAS, sub-types of operation Fixed Two-way MAS Master-Remote, Fixed One-way Outbound MAS Master, and Fixed One-way Inbound MAS Master, each must be licensed separately from each other. Do not enter these sub-types of operation together on the same license. Multiple Two-way MAS Master-Remote, Multiple One-way Outbound MAS Master, and Mobile MAS Master sub-types of operation may be licensed by themselves or in conjunction with any valid MAS sub-type of operation code. A Mobile MAS Master Sub-type can only be used in conjunction with other sub-types if they operate on the same frequency.

For DEMS, Fixed Two-way DEMS Nodal-User or Multiple Two-way DEMS Nodal-User sub-types of operation may be licensed either by themselves or in combination with each other.

Item 4b Enter the path code (only one for each path) for the MAS/DEMS type of operation. See Table 1 on page 16 of Schedule I instructions for a list of path codes.

Note: Path codes are not collected for the following types of operation, as their path codes are predefined and shown within the parentheses: Permanent Fixed Point to Point (PP), Temporary Fixed/Mobile (MM), Multiple Address System Mobile Only (MM), 18 GHz Low Power (MM), 31 GHz (MM), 38 GHz (MM).

Transmit Antenna

Items 5 and 6 Enter the name of the manufacturer and model number of the transmit antenna.

Item 7 Enter the height above ground to the center of the final radiating element. Enter this item in meters, rounded to the nearest tenth. For a parabolic dish antenna, this is the height to the center of the dish. For a periscope antenna system, this is the height to the center of the reflector. In all cases, the height should not exceed the overall height of the structure with appurtenances.

Item 8 Enter the beamwidth (degrees, rounded to one decimal place) of the transmitting antenna. That is, enter the angular distance between the half power points of the antenna's main lobe in the horizontal plane. For omnidirectional antennas, enter '360'.

Item 9 Enter the gain of the transmitting antenna over an isotropic radiator in dBi, rounded to one decimal place.

Items 10-12 If a diversity antenna is used, complete Items 10 through 12 with the antenna height above ground level, beamwidth, and gain for the diversity antenna. See instructions for Items 7 through 9.

Item 13 For fixed stations only, enter the elevation angle of the antenna (rounded to the nearest degree), measured in degrees from the horizontal up to the center line of radiation of the antenna. If the antenna tilts down (depression angle), indicate with a minus sign.

Item 14 Indicate polarization with the following codes:

V – Vertical
H – Horizontal
R – Right-hand circular
L – Left-hand circular
S - Variable

For linear polarization other than horizontal or vertical, the polarization should be stated in degrees measured from the vertical, with angles between 1 and +89 degrees denoting the outgoing electric field vector displacement in the clockwise direction, and angles between -1 and -89 degrees denoting the outgoing electric field vector displacement in the counterclockwise direction. For a periscope antenna system, enter the expected polarization of the signal radiated off the reflector.

Item 15 Enter the azimuth, clockwise from True North (degrees, rounded to one decimal place), from the station to the receive site or to the first passive repeater, if any, on this transmission path.

For omnidirectional antennas, enter '360'. For a directional antenna without a fixed azimuth -- as with temporary, mobile, Multiple Address Remote, or Digital Electronic Message stations -- enter 999.

Item 16 Enter the height and width of the periscope reflector, if used. Enter this item in meters, rounded to the nearest tenth.

Item 17 Enter the separation distance between the transmit antenna and the periscope reflector, if used. Enter this item in meters, rounded to the nearest tenth.

Item 18 If the final receiver is located outside of the United States, enter the name of the country and attach an exhibit explaining the circumstances.

Item 19 If this path includes a passive repeater, enter 'Y'. Supplement 3 requests information about passive repeaters. If none, enter 'N'.

Item 20 If the application proposes installation or reorientation of a transmitting antenna that operates with a frequency in the 5925-6875 MHZ band and is aimed within 2 degrees of the geostationary satellite orbit, enter 'Y' and submit, as an exhibit, a justification for waiver. Otherwise, enter 'N'.

Final Receiver

Item 21 Enter the receiver location name as entered in Supplement 1, Item 5 of this application for the station at the far end of the transmission path. For a receive only station, enter a name that relates to its location. For example, the name of a city, town, or geographic feature may be used.

Items 22 and 23 Enter the name of the manufacturer and model number of the receiving antenna.

Item 24 Enter the call sign of the station at the far end of the transmission path. This is the station that will receive the transmissions of this path on the frequencies entered in Item 4 and 5 of Supplement 4. For a receive-only station or a new station, leave this item blank.

Item 25 Enter the height above ground level to the center of the receiving antenna. Enter this item in meters, rounded to the nearest tenth. For a parabolic dish antenna, this is the height to the center of the dish. For a periscope antenna system, this is the height to the center of its reflector.

Item 26 Enter the beamwidth (degrees, rounded to one decimal place) of the receiving antenna. That is, enter the angular distance between the half power points of the antenna's major lobe in the horizontal plane. For omnidirectional antennas, enter '360'.

Item 27 Enter the gain of the receiving antenna over an isotropic radiator in dBi, rounded to one decimal place.

Item 28 Enter the height above ground level to the center of the diversity receiving antenna. Enter this item in meters, rounded to the nearest tenth. For a parabolic dish antenna, this is the height to the center of the dish. For a periscope antenna system, this is the height to the center of its reflector.

Item 29 Enter the beamwidth (degrees, rounded to one decimal place) of the diversity receiving antenna. That is, enter the angular distance between the half power points of the antenna's major lobe in the horizontal plane. For omnidirectional antennas, enter '360'.

Item 30 Enter the gain of the diversity receiving antenna over an isotropic radiator in dBi, rounded to one decimal place.

Item 31 Enter the height and width of the receiving periscope reflector, if used. Enter this item in meters, rounded to the nearest tenth.

Item 32 Enter the separation distance between the receive antenna and the periscope reflector, if used. Enter this item in meters, rounded to the nearest tenth.

Instructions for Schedule I Supplement 3 - Passive Repeaters (PR)

This Supplement must be completed only when a passive repeater is to be added, modified, or deleted. Each transmission path may have one or more passive repeaters. Each Supplement 3 describes one passive repeater. If you have more than one passive repeater, submit an additional Supplement 3 for each. If you are adding a new passive repeater, complete a Supplement 3 for each passive repeater to be added. If you are modifying an existing passive repeater, in addition to Items 1 through 5, complete only the items that have changed for each passive repeater. If you are deleting a passive repeater, only Items 1 through 5 are required. Passive repeaters that are currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this Supplement.

Transmit Location

This section identifies the transmit location and path numbers on which the passive repeater is located. Transmit location information is entered on Supplement 1 of Schedule I. Path information is entered on Supplement 2 of Schedule I.

Item 1 Enter the transmit location name as entered in Item 5 of Supplement 1.

Item 2 Enter the path number on which the passive repeater is located, as entered on Supplement 2, Item 2.

Item 3 This item indicates the action the applicant wants the FCC to take on the specified passive repeater. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Enter only one action per copy of Supplement 3. To add one passive repeater and modify another, complete two Supplement 3 forms. At least one Supplement 2, Path Data, must be filed if you add or modify a passive repeater. Deletion of a path (Supplement 2) will delete the entire path, including all passive repeaters on that path.

Passive Repeater Information

Item 4 If the passive repeater has been previously licensed under this call sign by the FCC, enter its FCC-assigned passive repeater identification number (see Important Information Regarding Location and Path Numbers on page 1 of Schedule I instructions).

Item 5 The passive repeater sequence number is used to identify the sequence of passive repeaters on a specific path (see Important Information Regarding Location and Path Numbers on page 1 of Schedule I instructions). Passive Repeater Sequence #1 would receive the signal from the transmitter and Passive Repeater Sequence #2 would receive the signal from Passive Repeater Sequence #1, and so forth. For a new passive repeater, or to reassign the sequence number of an existing passive repeater, enter the new passive repeater sequence number.

> **Note:** If a passive repeater sequence is reassigned, a Supplement 3 must be completed and attached for every passive repeater on the path that is being assigned a new passive repeater sequence number.

Item 6 Enter the passive repeater location name as entered on Supplement 1, Item 5.

Items 7 and 8 Enter the name of the manufacturer and model number of the passive repeater antenna.

Item 9 Enter the height above ground level to the center of the reflector or back-to-back dishes. Enter this item in meters, rounded to the nearest tenth.

Items 10 and 11 For back-to-back dishes, enter the gain of the receiving (RX) and transmitting (TX) antennas, over an isotropic radiator in dBi, rounded to one decimal place.

Item 12 Enter the height and width of the periscope reflector, if used. Enter this item in meters, rounded to the nearest tenth.

Item 13 Indicate polarization with the following codes:

V - Vertical
H - Horizontal
R - Right-hand circular
L - Left-hand circular
S - Variable

For linear polarization other than horizontal or vertical, the polarization should be stated in degrees measured from the vertical, with angles between 0 and +89 degrees denoting the outgoing electric field vector displacement in the clockwise direction, and angles between 0 and -89 degrees denoting the outgoing electric field vector displacement in the counterclockwise direction. For a periscope antenna system, enter the expected polarization of the signal radiated off the reflector.

Item 14 Enter the azimuth, clockwise from True North (degrees, rounded to one decimal place), from this passive repeater to the receive site or to the next passive repeater, if any, on this transmission path.

Instructions for Schedule I Supplement 4 - Frequency Data

If the application purpose indicated on the FCC 601 Main Form is New, file as many Supplement 4's (Frequency Data) as necessary to describe all transmitters and frequencies associated with each transmission path represented by a Supplement 2 (Path Data). Frequency data for each transmission path must be listed on a separate Supplement 4 (refer to the instructions on Supplement 2 for information about entering and assigning paths and path numbers).

If the application purpose indicated on the FCC 601 Main Form is Amendment, Modification, or Renewal/Modification, complete as many Supplement 4's (Frequency Data) as necessary to describe all frequency data being amended, added, modified, or deleted. Transmitters and frequency data for each transmission path must be listed on a separate Supplement 4. If the proposed amendment or modification does not affect any transmitter or frequency data, it is not necessary to complete Supplement 4. Similarly, if the proposed amendment or modification changes transmitter or frequency data but does not affect any transmit path data, it is not necessary to complete Supplement 2.

> **Note:** Deletion of a path using Supplement 2 (Path Data) will delete the entire path, including all the transmitters and frequencies on that path. Modification of a path using Supplement 2 (Path Data) will affect all transmitters and frequencies associated with that path.

Refer to Table 2 on pages 17 & 18 of these instructions for assistance in filling out Supplement 4. Table 2 indicates the fields and their values that are applicable for various path types.

Transmitter Location Information

This section identifies the transmit location and path for the listed transmitters and frequency data. Transmit location information is entered on Supplement 1 of Schedule I. Path data information is entered on Supplement 2 of Schedule I.

Item 1 Enter the transmit location name as entered in Item 5 of Supplement 1.

Item 2 Enter the path number, as entered in Item 2 of the corresponding Supplement 2 (Path Data). Paths are defined in the instructions for Supplement 2. Refer to those instructions for information about entering and assigning path numbers.

Frequency Information

This section must be completed only when frequencies or transmitters are to be added, modified, or deleted. If you are adding new frequencies, complete all items in this section for each frequency to be added. If you are modifying a frequency (*i.e.*, changing from one operating frequency to a different operating frequency), enter the existing and new frequencies in the appropriate boxes in Items 4 and 5. If you are modifying attributes of existing frequencies, in addition to Items 3, 4, and 5 (if applicable), complete only the items that have changed for each listed frequency. If you are deleting a frequency, only Items 3, 4, and 5 (if applicable) are required. Frequencies that are currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this section.

Item 3 This item indicates the action the applicant wants the FCC to take on the specified frequency(ies). Enter ‘A’ for Add, ‘M’ for Modify, or ‘D’ for Delete.

Items 4 and 5 Enter one frequency or one frequency band per line (*e.g.*, 952.00625 or 1990-2110, as listed in the rules). Enter frequencies in MHz. To request more than 4 frequencies or frequency bands on a given path, file multiple copies of Supplement 4.

To add frequencies on a path, enter the specific frequencies in Megahertz (MHz) in the box labeled ‘New’ in Item 4. If applying for a frequency band, show the lower and upper frequencies in the box labeled ‘New’ in Items 4 and 5.

To modify a frequency or frequency band on a path, enter the existing frequency or frequency band in Items 4 and 5 labeled ‘Existing’ and enter the new frequency or frequency band in Items 4 and 5 labeled ‘New’.

> **Note:** For Subfrequency operation of a Multiple Address System (MAS) (as entered in Item 3 on Schedule I), enter only the assignable center frequency of the 12.5 kHz or 25.0 kHz MAS channel requested, and explain the details of subfrequency use on a supplemental showing. For multiple contiguous 6 MHz channels in the 18142-18580 MHz band, enter the frequency band spanning from 3 MHz below the center frequency of the lowest assignable channel to 3 MHz above the center frequency of the highest assignable channel of each contiguous band of channels (e.g., if all 73 channels are desired, enter 18142-18580).

Note: For Broadcast Auxiliary applications, specify the requested channel by its center frequency for single channel operation or specify the specific frequency bands for band-wide operation. (For example, an application for an STL station operating in the 6875-7125 MHz band should list 6887.5 MHz for the first channel, while a TV Pickup could list 6875-7125 if requesting authority for all 10 channels.)

Item 6 Enter the tolerance or frequency stability (in percent) of the transmitter under the conditions in which it will be operated. Normally, this is the same as the type accepted/notification value.

Item 7 Enter the Effective Isotropic Radiated Power (EIRP), in dBm rounded to one decimal place, radiated off the transmitting antenna. For a periscope antenna system, this is the anticipated EIRP radiated off its reflector. If Automatic Transmitter Power Control transmitters are used, specify the maximum EIRP. Do not enter the coordinated or nominal transmit power.

Item 8 Enter the full emission designator of the transmitter, composed of its necessary bandwidth and emission type. (See Sections 2.201 and 2.202 for further information on emission and bandwidth designation.)

> **Note:** In order to modify an Emission Designator (Item 8), and its associated Baseband Digital Rate (Item 9) and Digital Modulation Type (Item 10), complete Items 3, 4, and if necessary, 5. Provide **all** existing and all new emission designators that will be in use for the frequency shown in Items 4 and 5, for which you intend to be licensed. If necessary, also provide the associated baseband digital rate and type for each emission designator. Do not provide emission designators that are no longer to be used. Emission designators not listed will be deleted from the listed frequency.
>
> **Note:** For Subfrequency operation of a Multiple Address System (MAS) (as entered in Item 3 on Schedule I), enter an assignable channel emission designator comprising the full assignable channel bandwidth and the subfrequency emission type, and an additional emission designator for each emission actually used on subfrequencies within the assignable channel (e.g., for a 1K20D1D emission operating on a subfrequency of an assignable 12.5 kHz MAS channel, enter 12K5D1D and 1K20D1D), and explain the details of subfrequency use on a supplemental showing. For multiple contiguous 6 MHz channels in the 18142-18580 MHz band, enter all emission designators to be used on any of the 6 MHz channels in the band, regardless of specific frequency/emission block plans.

Item 9 For digital systems, enter the baseband digital rate in kbps (kilobits per second).

Item 10 For digital systems, enter the digital modulation type.

Item 11 Enter the transmitter manufacturer.

Item 12 Enter the transmitter model number.

Item 13 Automatic Transmitter Power Control (ATPC) is a feature that automatically adjusts transmitter output power based on path fading detected at the far-end receivers. Enter ‘Y’ or ‘N’ to indicate use of ATPC.

Table 1 - Type of Operation Codes/Station Classes/Transmit Location Types/Path Codes

Type of Operation Code	Station Class	Transmit Location Type	Sub-Type of Operation	Description	Path Type	Path Code	Radio Services*
F	FXO	Fixed	N/A	Permanent Fixed Point-to-Point	N/A	PP	OFS, CF, BAF
M	FXO	Fixed	FT	Fixed Two-way Master-Remote	Master to Remote	MR	OFS
					Remote to Master	RM	OFS
M	FXO	Fixed	FO	Fixed One-way Outbound Master	Master to Remote	MR	OFS
M	FXO	Fixed	FI	Fixed One-way Inbound Master	Remote to Master	RM	OFS
M	MO	Area	MM	Mobile (mobile-only)	Mobile	MM	OFS
M	FXO	Fixed	MM	Mobile Master (with other MAS types)	Mobile	MM	OFS
M	FXO	Fixed	MT	Multiple Two-way Master-Remote	Master to Remote	MR	OFS
					Remote to Master	RM	OFS
M	FXO	Fixed	MO	Multiple One-way Outbound Master	Master to Remote	MR	OFS
D	FXO	Fixed	FD	Fixed Two-way Nodal-User	Nodal to User	NU	CE, PE
					User to Nodal	UN	CE, PE
D	FXO	Fixed	MD	Multiple Two-way Nodal-User	Nodal to User	NU	CE, PE
					User to Nodal	UN	CE, PE
T	FX5	Area	N/A	Temporary Fixed	N/A	MM	OFS, CF, CT, TP
T	MO	Area	N/A	Mobile	N/A	MM	OFS, CF, CT, TP
T	MO5	Area	N/A	Temporary Fixed/Mobile	N/A	MM	OFS, CF, CT, TP
18	FXO	Area	N/A	18 GHz Low Power	N/A	MM	OFS
31	FXO	Area	N/A	31 GHZ	N/A	MM	OFS
38	FXO	Area	N/A	38 GHz	N/A	MM	OFS, CF

*Radio Service
OFS = MW, MG, WR, WA, WM
BAF = TS, TI, TB, TT, AS, AI, AB

Table 2 - Path Codes

* = Required items
- = Optional items, based on your particular system

SUPPLEMENT AND ITEM	PATH CODE		
Supplement 2 - Path Data	**MR or NU**	**RM or UN**	**MM**
5) Antenna Manufacturer*	Enter the Actual Value: except paths for MAS or DEMS Sub-Type of Operation Multiple Two-way Master-Remote/Nodal-User and Multiple One-way Outbound Master, enter the Typical Value	Enter the Typical Value	Enter the Typical Value
6) Antenna Model Number*	Enter the Actual Value: except paths for MAS or DEMS Sub-Type of Operation Multiple Two-way Master-Remote/Nodal-User and Multiple One-way Outbound Master, enter the Typical Value	Enter the Typical Value	Enter the Typical Value
7) Height to Center of Antenna*	Enter the Actual Value: except paths for MAS or DEMS Sub-Type of Operation Multiple Two-way Master-Remote/Nodal-User and Multiple One-way Outbound Master, enter 6.1 meters	Enter 6.1 meters	Enter 6.1 meters
8) Beamwidth*	360 degrees	Enter the Typical Value	Enter the Typical Value
9) Antenna Gain*	Enter the Actual Value	Enter the Typical Value	Enter the Typical Value
10) Diversity Antenna Height	N/A	N/A	N/A
11) Diversity Beamwidth	N/A	N/A	N/A
12) Diversity Antenna Gain	N/A	N/A	N/A
13) Elevation (Tilt) Angle	N/A	N/A	N/A
14) Polarization*	Enter the Actual Value	Enter the Actual Value	Enter the Actual Value
15) Azimuth*	Enter 360 degrees	Enter 999: except if beamwidth = 360 degrees, then azimuth = 360 degrees	Enter 999: except if beamwidth = 360 degrees, then azimuth = 360 degrees
16) Periscope Dimensions-Hgt/Width	N/A	N/A	N/A
17) Periscope Separation	N/A	N/A	N/A
18) Is final receiver located outside US?	-	-	-
19) Passive Repeater on Path?	N/A	N/A	N/A
20) Geostationary ARC?	N/A	N/A	N/A
21) Receiver Location Name	N/A	N/A	N/A
22) Receiver Antenna Manufacturer*	Enter the Typical Value	Enter the Actual Value: except paths for MAS or DEMS Sub-Type of Operation Multiple Two-way Master-Remote/Nodal-User, enter the Typical Value	Enter the Typical Value
23) Receiver Antenna Model Number*	Enter the Typical Value	Enter the Actual Value: except paths for MAS or DEMS Sub-Type of Operation Multiple Two-way Master-Remote/Nodal-User, enter the Typical Value	Enter the Typical Value
24) Receiver Call Sign	N/A	N/A	N/A

Table 2 - Path Codes (continued)

SUPPLEMENT AND ITEM	PATH CODE		
Supplement 2 - Path Data	**MR or NU**	**RM or UN**	**MM**
25) Height to Center of Rx Antenna*	Enter 6.1 meters	Enter the Actual Value: except paths for MAS or DEMS Sub-Type of Operation Multiple Two-way Master-Remote/Nodal-User, enter 6.1 meters	Enter 6.1 meters
26) Rx Antenna Beamwidth*	Enter the Typical Value	Enter 360 degrees	Enter the Typical Value
27) Rx Antenna Gain*	Enter the Typical Value	Enter the Actual Value	Enter the Typical Value
28) Diversity Rx Antenna Height	N/A	N/A	N/A
29) Diversity Rx Antenna Beamwidth	N/A	N/A	N/A
30) Diversity Rx Antenna Gain	N/A	N/A	N/A
31) RX Periscope Dimensions	N/A	N/A	N/A
32) RX Periscope Separation	N/A	N/A	N/A

Supplement 4 - Frequency Data	**MR or NU**	**RM or UN**	**MM**
6) Tolerance*	Enter the Actual Value	Enter the Actual Value	Enter Highest Used Value
7) EIRP	Enter Highest Used Value	Enter Highest Used Value	Enter Highest Used Value
8) Emission Designator*	Enter the Actual Value	Enter the Actual Value	Enter Highest Used Value[1]
11) Transmitter Manufacturer*	Enter the Actual Value: except paths for MAS or DEMS Sub-Type of Operation Multiple Two-way Master-Remote/Nodal-User and Multiple One-way Outbound Master, enter the Typical Value	Enter the Typical Value	Enter the Typical Value
12) Transmitter Model Number*	Enter the Actual Value: except Multiple Two-way Master-Remote, enter the Typical Value	Enter the Typical Value	Enter the Typical Value
13) Automatic Tx Power Control	Enter the Actual Value	Enter the Actual Value	Enter the Actual Value

[1] For Emission Designators for Type of Operation MAS and Sup-Type Mobile Master, those with the widest bandwidths and most general emission types are the highest used values; for band-wide requests, do not enter more than 4 such emission designators to satisfy this requirement.

FCC 601
Schedule I

Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB
3060 - 0798
See 601 Main Form Instructions for public burden estimate

Administrative Information

1) Is this application being filed as part of a pack?		( )**Y**es/**N**o
2a) If the answer to Item 1 is 'Yes', enter the pack identification number (required if the pack identification number has already been assigned by the FCC):		
2b) Pack Name:		
3) Type of Operation (refer to instructions) Check One Only: ( )Permanent Fixed Point to Point ( )18 GHz Low Power ( )Multiple Address System (MAS) ( )31 GHz ( )Temporary Fixed/Mobile ( )38 GHz ( )Digital Electronic Message Service (DEMS)	4) Station Class:	5) DEMS only: SMSA:
6) If this request is for a Modification, Renewal/Modification, or Amendment of a currently pending application, does it, along with all minor Modification or Amendment requests filed since you applied for a new authorization or since the last major action was granted by the Commission, produce a cumulative effect that would equal or exceed the criteria for a major filing?		( )**Y**es/**N**o
7) Has frequency coordination been completed for this application?		( )**Y**es/**N**o

Frequency Coordinator Information

Complete Items 8 through 11 if not self-coordinated

8) Frequency Coordination Number	9) Name of Frequency Coordinator	10) Telephone Number	11) Coordination Date

Broadcast Auxiliary Only

If there is an associated Parent Station, provide:	12a) Facility Id of Parent Station:	12b) Radio Service of Parent Station:	12c) City and State of Parent Station Principal Community:

If there is no associated parent station, applicant certifies that it is a Broadcast Network Entity and completes Item 13.	13) State of Primary Operation:

Control Point (Technical Point of Contact)

14) Action **A/M**	15) Location Street Address, City or Town, County/Borough/Parish, State	16) Telephone Number

FCC 601
Schedule I
Supplement 1

Location Data

1) Action Requested: ( ) **A**dd **M**od **D**el		2) Location Number**:**
3) Location Description**:**	4) Area of Operation Code**:**	5) Location Name**:**
6) FCC Antenna Structure Registration # or N/A (FAA Notification not Required):		
7) Latitude (DD-MM-SS.S): **NAD83** ( ) N or S		8) Longitude (DDD-MM-SS.S)**:** **NAD83** ( ) E or W
9) Street Address, Name of Landing Area, or Other Location Description:		
10) City:	11) State**:**	12) County/Borough/Parish:
13) Elevation of Site AMSL (meters) ('a' in antenna structure example)**:**	14) Overall Ht AGL Without Appurtenances (meters) ('b' in antenna structure example)**:**	15) Overall Ht AGL With Appurtenances (meters) ('c' in antenna structure example)**:**
16) Support Structure Type:		
17) Radius (km)**:**		
18) Maximum Latitude (DD-MM-SS.S): **NAD83** **Use for rectangle only (Northwest corner)** ( ) N or S		19) Maximum Longitude (DDD-MM-SS.S)**:** **NAD83** **Use for rectangle only (Northwest corner)** ( ) E or W
20) Do you propose to operate in an area that requires frequency coordination with Canada? ( ) **Y**es **N**o		
21) Description: (only for Area of Operation Code 'O')		
22) Would Commission grant of Authorization for this location be an action which may have a significant environmental effect? See Section 1.1307 of 47 CFR. If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311. ( ) **Y**es **N**o		
23) If the proposed site is located in one of the quiet zones listed in Item 23 of the Instructions, provide the date the proper authority was notified (mm/dd/yy):		

FCC Form 601
Schedule I
Supplement 2 **Path Data**

Transmit Location

1) Transmit location name:	2) Path number:
3) Action Requested: ( ) **A**dd New Path **M**odify Existing Path **D**elete Existing Path	
4a) For MAS or DEMS only, MAS or DEMS Sub-Type of Operation (Enter only one per path): **MAS or DEMS** ( )Fixed Two-way Master-Remote/Nodal-User ( )Multiple Two-way Master-Remote/Nodal-User **MAS ONLY** ( )Fixed One-way Outbound Master ( )Multiple One-way Outbound Master ( )Fixed One-way Inbound Master ( )Mobile Master	4b) Path code (Enter only one per path): **MAS** ( ) Master to Remote ( ) Remote to Master **DEMS** ( )Nodal to User ( )User to Nodal

Transmit Antenna

5) Antenna Manufacturer:	6) Antenna Model Number:	
7) Height to Center of Antenna AGL (meters):	8) Beamwidth (degrees):	9) Antenna Gain (dBi):
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwidth (degrees):	12) Diversity Antenna Gain (dBi):
13) Elevation (Tilt) Angle (degrees):	14) Polarization:	15) Azimuth to RX Location or Passive Repeater (degrees):
16) Periscope Reflector Dimensions (meters): Height: Width:	17) Periscope Reflector Separation (meters):	
18) If the final receiver is located outside of the United States, enter the country in the space provided and attach an exhibit explaining circumstances.		
19) Does this path include passive repeater? ( )**Y**es **N**o		
20) Does this filing add or modify emanations in the 5925-6875 MHz band pointed within 2 degrees of the Geostationary Satellite Arc? *If 'Yes', attach waiver request explaining circumstances. ( )**Y**es **N**o		

Final Receiver

21) Receiver Location Name:		
22) Receiver antenna manufacturer:	23) Receiver antenna model number:	
24) Receiver Call Sign:		
25) Height to Center of RX Antenna AGL (meters):	26) RX Antenna Beamwidth (degrees):	27) RX Antenna Gain (dBi):
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Antenna Beamwidth (degrees):	30) Diversity RX Antenna Gain (dBi):
31) RX Periscope Reflector Dimensions (meters): Height: Width:	32) RX Periscope Reflector Separation (meters):	

FCC Form 601
Schedule I
Supplement 3

Passive Repeaters (PR)

Transmit Location

1) Transmit Location Name:	2) Path Number:

3) Action Requested: ( ) **A**dd New Passive Repeater **M**odify Existing Passive Repeater **D**elete Existing Passive Repeater

Passive Repeater Information

4) Passive Repeater Id: ( )		5) Passive Repeater Sequence Number: ( )
6) Passive Repeater Location Name:		
7) Passive Repeater Antenna Manufacturer:		8) Passive Repeater Antenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX Dish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization:	14) Azimuth to RX Location or Next Passive Repeater:

FCC Form 601
Schedule I
Supplement 4

Frequency Data

Transmitter Location Information

1) Transmit Location Name:	2) Path Number:

Frequency Information

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
	Existing (if mod)						
	New						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			

3) Action A/M/D	4) Lower or Center Frequency (MHz)	5) Upper Frequency (MHz)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
	Existing (if mod)						
	New						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			

3) Action A/M/D	4) Lower or Center Frequency (MHz)	5) Upper Frequency (MHz)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
	Existing (if mod)						
	New						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			

3) Action A/M/D	4) Lower or Center Frequency (MHz)	5) Upper Frequency (MHz)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
	Existing (if mod)						
	New						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			

FEDERAL COMMUNICATIONS COMMISSION

Approved by OMB
3060 - 0798
See 601 Main Form Instructions
for public burden estimate

Information and Instructions

Technical Data Schedule for the Paging, Rural, Air-ground (General Aviation), and Offshore Radiotelephone Services (Part 22)

Form FCC 601, Schedule J, is a supplementary schedule for use with the FCC Application for Wireless Telecommunications Bureau Radio Service Authorization, FCC 601 Main Form. This schedule is used to apply for an authorization to operate a radio station in the Paging, Rural, Air-ground (General Aviation), and Offshore Radiotelephone Services, as defined in 47 CFR, Part 22. It is also used to amend a pending application or modify an existing license in these services. Additionally, this schedule is used by auction winners that must file site-specific technical data for international coordination or for an environmental assessment of a particular site. The FCC 601 Main Form must be filed in conjunction with this schedule.

You must file technical information for each fixed location, including the antenna structures and/or each mobile transmit location or each temporary fixed station location using FCC 601, Schedule D, Schedule for Station Locations and Antenna Structures. Mobile and temporary fixed station locations only apply to Rural Radio (CR), Offshore (CO), and BETRS (CB) radio services. It is recommended that you complete Schedule D prior to completing Schedule J.

IMPORTANT INFORMATION REGARDING LOCATION, ANTENNA, AND CONTROL POINT NUMBERS: To identify existing locations, antennas, or control points, you must use the location, antenna, and control point numbers assigned by the Universal Licensing System (ULS). These numbers may not be identical to the location, antenna, and control point numbers on your current authorization if that authorization was not issued by the Universal Licensing System. If you are unsure of the location, antenna, or control point number that corresponds to a particular location, antenna, or control point, you can query the ULS for the most up-to-date information regarding your authorization. To query the ULS license database for your call sign, point your web browser to http://wireless.fcc.gov/uls/ and click on Search - Licenses. Alternatively, you may call 888-CALLFCC (888-225-5322) for assistance.

Schedule J
Instructions

Control Points

This section must be completed only when a control point is to be added, modified, or deleted. If you are adding a new control point, complete all items in this section for each control point to be added. If you are modifying an existing control point, in addition to Items 1 and 2, complete only the items that have changed for the control point. If you are deleting a control point, only Items 1 and 2 are required. Control points that are currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this section.

Item 1 This item indicates the action the filer wants the FCC to take on the specified control point. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Item 2 If the control point has been previously licensed under this call sign to the applicant by the FCC, enter its FCC-assigned control point number (see Important Information Regarding Location, Antenna, and Control Point Numbers on page 1 of these instructions). For a new control point, assign a temporary code to represent the control point. The assigned code should begin with C to indicate it is a control point and end with a number to uniquely identify it (*e.g.*, C1, C2, C3, etc.). The FCC will assign an official number to the new control point, which will appear on the Authorization.

Item 3 Enter the street address, city or town, county/borough/parish, and state of the control point. Refer to FCC 601 Main Form Instructions, Appendix II, for a list of valid state, jurisdiction, and area abbreviations.

Item 4 Enter the telephone number, including area code, where a person responsible for operation of the station or systems can be reached.

Antenna Information

This section must be completed only when antenna information is to be added, modified, or deleted. If you are adding a new antenna, complete all items for each antenna to be added. If you are modifying an existing antenna, in addition to Items 5, 6, and 7, complete only the items that have changed for the antenna. If you are deleting an antenna, only Items 5, 6, and 7 are required. Antennas that are currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this section.

Item 5 This item indicates the action the filer wants the FCC to take on the specified antenna. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Item 6 For each antenna, enter its corresponding location number, as entered on Schedule D Item 2. If the location has been previously licensed under this call sign by the FCC, enter the FCC-assigned location number (see Important Information Regarding Location, Antenna, and Control Point Numbers on page 1 of these instructions). Otherwise, enter the code assigned on Schedule D to represent the location. Refer to the instructions for Schedule D for more information on assigning location numbers.

Item 7 If the antenna has been previously licensed under this call sign by the FCC, enter the antenna's FCC-assigned number (see Important Information Regarding Location, Antenna, and Control Point Numbers on page 1 of these instructions). Otherwise, enter a temporary code to represent each antenna. The assigned code should begin with an A to indicate it is an antenna and end with a number to uniquely identify it (*e.g.,* A1, A2 and A3). A single location can have multiple antennas. Antenna numbers need only be unique within each location. The FCC will assign an official number to the new antenna, which will appear on the Authorization.

Note: Location number (Item 6) and antenna number (Item 7) are used to associate information in the Antenna Information Section with information in the following sections: Frequency Information, Radial Data for Antennas, and Points of Communication for Transmitters. To do this, enter the necessary technical information into the Antenna Information Section using the appropriate location number and antenna number. Then, enter the necessary technical information in each of the related sections for that antenna, using the same location number/antenna number pair. Each antenna specified in the Frequency Information, Radial Data for Antennas, and Points of Communication for Transmitters Sections must have corresponding data in the Antenna Information Section.

Item 8 Enter the actual height above ground level to the tip of the antenna. Enter this item in meters, rounded to the nearest tenth.

Item 9 Enter the average radiation center height above average terrain (AAT) of the eight cardinal radials. Enter this item in meters, rounded to the nearest tenth. See the rules for your radio service for instructions on calculating AAT.

Item 10 Enter the beamwidth of the main lobe of a directional antenna used with a fixed station. Complete this item for fixed stations only. Enter '360' for an omni-directional antenna.

Item 11 Enter the ratio (decibels) of the power required at the input of loss-free reference antenna to the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power-flux density at the same distance. This information should be available from the specification sheet included with the antenna at the time of purchase.

Item 12 Enter the angle in the horizontal plane of the transmitting antenna main lobe measured clockwise with respect to True North in degrees, or enter '360' to indicate that the transmitting antenna is omni-directional.

Frequency Information

This section must be completed only when frequencies are to be added, modified, or deleted. If you are adding a new frequency, complete all items for each frequency to be added. If you are modifying a frequency (*i.e.*, changing from one operating frequency to a different operating frequency), enter the existing and new frequencies in the appropriate boxes in Item 16. If you are modifying attributes of an existing frequency, in addition to Items 13 and 14, complete only the items that have changed for the frequency. If you are deleting a frequency, only Items 13 through 17 are required. Frequencies that are currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this section.

Enter frequency information for each antenna specified in the Antenna Information Section. For multiple frequency lines, repeat the location number/antenna number combination for each frequency. For example:

Location	Antenna	Frequency (MHz)
F1	A1	XXX.XXXX
F1	A1	YYY.YYYY
F1	A1	ZZZ.ZZZZ
F1	A2	AAA.AAAA
F1	A2	BBBBB.BBBB
F2	A1	CCCCC.CCCC
F2	A1	DDDDD.DDDD

Item 13 This item indicates the action the filer wants the FCC to take on the specified antenna. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Item 14 For each antenna, enter its corresponding location number, as entered in Item 6 of the Antenna Information Section of this Schedule.

Item 15 For each antenna, enter its corresponding antenna number, as entered in Item 7 of the Antenna Information Section of this Schedule.

Note: Each location number (Item 14) and antenna number (Item 15) pair specified in the Frequency Information Section must have corresponding data in the Antenna Information Section.

Item 16 To add frequencies on an antenna at a location, enter in the column labeled 'New', the specific center frequencies in Megahertz (MHz), of the channels on which the transmitters are proposed to operate.

To modify a frequency on an antenna at a location, you must complete Items 13-15 and enter the existing center frequency in the column labeled 'Existing' and enter the proposed new center frequency in the column labeled 'New'.

Item 17 Enter the appropriate station class code from the following table. Definitions for most of these items are listed in the Commission's rules.

Air-ground Signaling	FBSI
Auxiliary Test	FXTS
Base	FBBS
Central Office	FXCO
Control	FXCT
Dispatch	FXDI
Fixed Relay	FXRX
Fixed Subscriber	FXSB
Ground	FBGS
Inter-Office	FXIO
Mobile Subscriber	MLSB
Repeater	FXRP
Standby	FBST
Temporary Fixed	FX5

Item 18 This item reports the maximum effective radiated power (ERP) in any direction on the specified channel. The answer must be stated in watts.

Item 19 Enter the actual transmitter output power in watts.

Item 20 Complete this item only if the filing requests authority to use an emission type that is not already authorized in the FCC rules for use by all stations in the pertinent radio service.

Radial Data for Antennas

This section must be completed only when radial data for antennas is to be added, modified, or deleted. If you are adding new radial data, complete all items for each radial data block to be added. If you are modifying existing radial data, complete all items for the radial data block to be modified. If you are deleting radial data, only Items 21 through 24 are required. Radial data that is currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this section.

Item 21 Indicate the action the filer wants the FCC on the radial data of the specified antenna. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Items 22-24 Enter the location number, antenna number, and channel center frequency, as specified in the Antenna Information and Frequency Information Sections.

> **Note:** Each location number, antenna number, and channel center frequency specified in the Radial Data for Antennas Section must have corresponding data in the Antenna Information and Frequency Information Sections.

Item 25 Enter the height of the antenna center of radiation above the average terrain elevation (RCHAAT) along each of the eight cardinal radials. Enter this item in meters, rounded to the nearest tenth.

Item 26 Enter the effective radiated power (ERP) for each of the eight cardinal radials. See the Commission's rules for your radio service for instructions on calculating RCHAAT.

Points of Communication for Transmitters

These items describe fixed points of communication for: (1) stations in the Rural Radiotelephone Services serving individually licensed subscribers; (2) point to point transmitters; and (3) point-to-multipoint transmitters operating on channels that are assigned only to stations that communicate with four or more points. These items should not be completed by filers for any other purpose. In the Rural Radiotelephone Services (radio service code CR) only those stations operating under station class code FXCT (fixed control station) may complete this section.

This section must be completed only when points of communication are to be added, modified, or deleted. If you are adding new points of communication, complete all items for each point of communication to be added. If you are modifying existing points of communication, complete all items for the point of communication to be modified. If you are deleting points of communication, only Items 27 through 30 are required. Points of communication that are currently licensed under this call sign by the FCC will continue to be shown on the Authorization as is, unless a specific action is requested in this section.

Item 27 This item indicates the action the filer wants the FCC to take on the specified point of communication. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Item 28 Enter the corresponding transmit location number, as entered in Item 14 of this schedule.

Item 29 Enter the corresponding transmitting antenna number, as entered in Item 15 of this schedule.

Item 30 Enter the corresponding transmitting channel center frequency, as entered in Item 16 of this schedule.

Item 31 Enter the name of the city or town of the point of communication.

Item 32 Enter the state of the point of communication. Refer to FCC 601 Main Form Instructions, Appendix II, for a list of valid state, jurisdiction, and area abbreviations.

Item 33 Enter in Megahertz (MHz), the center frequencies of the point of communication.

Items 34 and 35 Enter the geographic coordinates of the location, referenced to the North American Datum of 1983 (NAD83). This information can be determined in many ways, including a GPS receiver, a 7.5 minute topographical quadrangle map of the area, or you may consult the city or county/borough/parish surveyor in your area. Topographical maps may be purchased from the U.S. Geological Survey, Washington, DC 20242 or from its office in Denver, Colorado 80225.

Note: Location coordinates (latitude and longitude) for sites in the Continental United States, Puerto Rico, the U.S. Virgin Islands, Alaska, Hawaii, American Samoa, and Guam must be referenced to the North American Datum of 1983 (NAD83). Coordinates for sites in the Northern Mariana Islands, Wake Island, and Midway Island should be referenced to the applicable local datums. If the source from which you obtain the coordinates still utilizes an older datum (*i.e.*, NAD27, PRD40) you must convert to NAD83. Conversion routines are available through the internet at http://wireless.fcc.gov/uls/utilities/nadcon.html.

Enter the latitude using the format *DD-MM-SS*, where the degrees (*DD*) term can have a value in the range of 0 to 90, minutes (*MM*) can range from 0 to 59, and seconds (*SS*) can range from 0 to 59.9. If desired, seconds may be expressed to the nearest tenth of a second (in which case, use the format DD-MM-SS.S). In the lower right corner, specify the direction as either N for North or S for South.

Enter the longitude using the format *DDD-MM-SS*, where the degrees (*DDD*) term can have a value in the range of 0 to 180, minutes (*MM*) can range from 0 to 59, and seconds (*SS*) can range from 0 to 59.9. If desired, seconds may be expressed to the nearest tenth of a second (in which case, use the format DDD-MM-SS.S). In the lower right corner, specify the direction as either E for East or W for West.

Item 36 Enter the subscriber call sign of the point of communication.

FCC 601
Schedule J

Technical Data Schedule for the Paging, Rural, Air-ground (General Aviation), and Offshore Radiotelephone Services (Part 22)

Approved by OMB
3060 - 0798
See 601 Main Form Instructions
for public burden estimate

Control Points

1) Action **A/M/D**	2) Control Point Number	3) Location Street Address, City or Town, County/Borough/Parish, State	4) Telephone Number

Antenna Information

5) Action **A/M/D**	6) Location Number	7) Antenna Number	8) Height to Tip AGL (meters)	9) Height of Center of Radiation AAT (meters)	10) Beamwidth of Main Lobe (degrees)	11) Gain (dB)	12) Azimuth (degrees)

Frequency Information

13) Action **A/M/D**	14) Location Number	15) Antenna Number	16) Channel Center Frequency (MHz)		17) Station Class	18) Maximum Transmitting ERP (watts)	19) Transmitter Output Power (watts)	20) Nonstandard Emission Designator
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				
			Existing (if mod)	New				

Radial Data for Antennas

					0°	45°	90°	135°	180°	225°	270°	315°
21) Action **A/M/D**	22) Location Number	23) Antenna Number	24) Frequency (MHz)	25) RCHAAT (meters)								
				26) ERP (watts)								

					0°	45°	90°	135°	180°	225°	270°	315°
21) Action **A/M/D**	22) Location Number	23) Antenna Number	24) Frequency (MHz)	25) RCHAAT (meters)								
				26) ERP (watts)								

					0°	45°	90°	135°	180°	225°	270°	315°
21) Action **A/M/D**	22) Location Number	23) Antenna Number	24) Frequency (MHz)	25) RCHAAT (meters)								
				26) ERP (watts)								

					0°	45°	90°	135°	180°	225°	270°	315°
21) Action **A/M/D**	22) Location Number	23) Antenna Number	24) Frequency (MHz)	25) RCHAAT (meters)								
				26) ERP (watts)								

					0°	45°	90°	135°	180°	225°	270°	315°
21) Action **A/M/D**	22) Location Number	23) Antenna Number	24) Frequency (MHz)	25) RCHAAT (meters)								
				26) ERP (watts)								

Points of Communication for Transmitters

27) Action **A/M/D**	28) Location Number	29) Antenna Number	30) Frequency	31) City or Town	32) State	33) Channel Center Frequency (MHz)	34) North Latitude (DD-MM-SS-D**)**	35) West Longitude (DDD-MM-SS-D**)**	36) Subscriber Call Sign

FEDERAL COMMUNICATIONS COMMISSION

Information and Instructions

Approved by OMB
3060 – 0798
See 601 Main Form Instructions
for public burden estimate

Schedule for Required Notifications for Wireless Services

Form FCC 601, Schedule K, is a supplementary schedule for use with the FCC Application for Wireless Telecommunications Bureau Radio Service Authorization, FCC 601 Main Form. The FCC 601 Main Form must be filed in conjunction with this schedule. Complete this schedule to notify the FCC that, within the required time period:

- Either buildout/coverage or construction requirements have been satisfied;
- Compliance with yearly station construction commitments for licensees with approved extended implementation plans has been met;
- To request a regular authorization for paging facilities currently operating under developmental authority.

Item 1 – Purpose

Enter the one-letter abbreviation that indicates the purpose for which the application is being filed (1, 2, 3, 4, T, S, D, G, or H).

Note: Only one Notification purpose code may be selected per FCC 601 Main Form/Schedule K filing.

Note: Cellular Radiotelephone Services (CL) should use the Construction Requirements portion of this schedule.

Satisfaction of Buildout/Coverage Requirements (Market-based services and State License Radio Service (SL) only)

Purpose Codes 1, 2, 3, 4 or T - Choose from these purpose codes if this notification is for satisfaction of buildout/coverage requirements. Typically, buildout/coverage requirements apply when a specific portion of a geographic area and a specific portion of the population contained within that geographic area must be provided service by a specific date. Not all radio services use all buildout/coverage requirements. Refer to the Commission's rules for more information on buildout/coverage requirements and how they may apply to your service.

Enter one of the following Notification Purpose Codes in Item 1:

Enter '1' if 1st buildout/coverage requirement has been satisfied.

Enter '2' if 2nd buildout/coverage requirement has been satisfied.

Enter '3' if 3rd buildout/coverage requirement has been satisfied.

Enter '4' if 4th buildout/coverage requirement has been satisfied.

Enter 'T' if the tribal lands buildout/coverage requirement has been satisfied. A 'T' in this field indicates that the requirement has been met for all tribal lands in the market for which bidding credit was awarded.

Note: In instances where both the first and the second buildout/coverage requirements have been satisfied at the time when the first notification requirement is due, use the highest level purpose of submission code to file the Required Notification. For example: If the first coverage deadline is March 1, 2001 and the second is March 1, 2006 and you met your 2006 coverage requirements by March 1, 2001, use the purpose of submission code '2' and submit the require documentation. You do not need a separate application for each coverage deadline.

Satisfaction of Construction Requirements (Site-licensed services only)

Purpose Code 'S'- Choose this purpose code if this notification is for satisfaction of construction requirements. Typically, construction requirements apply when specific authorized components of a license must be constructed and service commenced by a specific date. Refer to the Commission's rules for more information on construction requirements and how they may apply to your service.

Request for Regular Authorization for Facilities Previously Operating under Developmental Authority

Purpose Code 'D'- Choose this purpose code if this is a notification to request regular authorization for paging facilities previously operating under developmental authority.

Note: This is for Paging Services only.

Extended Implementation (Slow Growth)

Purpose Codes 'G' or 'H' – Choose from one of these purpose codes if this is a notification of compliance with station construction commitments for Land Mobile licensees with approved extended implementation plans. Refer to 47 CFR §§ 90.629 and 90.155 for more information on Extended Implementation.

Enter purpose code 'G' in Item 1 for yearly notification compliance.

Enter purpose code 'H' in Item 1 for final notification compliance.

Note: This is for Land Mobile Radio Services only.

Item 2 - Call Signs/Locations or Paths/Frequencies

IMPORTANT INFORMATION REGARDING LOCATION AND PATH NUMBERS: To identify existing locations or paths, you must use the location and path numbers assigned by the Universal Licensing System (ULS). These numbers may not be identical to the location and path numbers on your current authorization if that authorization was not issued by the Universal Licensing System. If you are unsure of the location or path number that corresponds to a particular location or path, you can query the ULS for the most up-to-date information regarding your authorization. To query the ULS license database for your call sign, point your web browser to http://wireless.fcc.gov/uls/ and click on Search - Licenses. Alternatively, you may call 888-CALLFCC (888-225-5322) for assistance.

For notification of buildout/coverage requirements (purpose codes 1, 2, 3, 4 or T), only complete Item 2a.

For notification of construction requirements (purpose code 'S'), complete Items 2a through 2f, as required. Only complete those items necessary to describe what has been constructed. For example, to notify of construction of a location under a call sign, only complete Items 2a and 2b.

For notification of a request for regular paging authorization for facilities previously operating under developmental authority (purpose code 'D'), only complete those items necessary to describe what has been constructed. For example, to notify of construction of a site under a call sign, only complete Items 2a and 2b.

For notification of compliance with yearly station construction commitments for licensees with approved extended implementation plans (purpose code 'G'), only complete Item 2a.

For notification of compliance for final station construction commitments for licensees with approved extended implementation plans (purpose code 'H'), complete Item 2, as applicable.

Item 2a In this item, list the call signs. Call signs are located on FCC Authorizations.

Item 2b In this item list the location numbers where construction requirements have been satisfied. Location numbers are listed on FCC Authorizations and are used in the following radio services: Aviation Ground, Maritime Coast, Cellular, Land Mobile, and Paging Services.

Item 2c In this item list the path numbers where construction requirements have been satisfied. Path numbers are located on FCC Authorizations and are only used in the Microwave Radio Services.

Items 2d and 2e In this item list the frequencies, in Megahertz (MHz), where construction requirements have been satisfied. Enter the center (assigned) frequency, or the lower frequency of a frequency band, in Item 2d. If applicable, enter the upper frequency of a frequency band in Item 2e. Authorized frequencies are located on FCC Authorizations.

Item 2f In this item list number of operational mobiles. This item only applies to Land Mobile Radio Services operating in the 470 - 512 MHz band and non-SMR conventional systems operating above 800 MHz only.

FCC 601
Schedule K

Schedule for Required Notifications for Wireless Services

Approved by OMB
3060 – 0798
See 601 Main Form Instructions
For public burden estimate

1) Purpose

The purpose of this submission: Enter one purpose only - **1**, **2**, **3**, **4**, **T**, **S**, **D**, **G** or **H** ( ) *See below and refer to instructions*.

Satisfaction of Buildout/Coverage Requirements (Market-based services and State License Radio Service (SL) only)

1 1st buildout/coverage requirements for the referenced system have been met. (List call signs in 2a)

2 2nd buildout/coverage requirements for the referenced system have been met. (List call signs in 2a)

3 3rd buildout/coverage requirements for the referenced system have been met. (List call signs in 2a)

4 4th buildout/coverage requirements for the referenced system have been met. (List call signs in 2a)

T Tribal lands buildout/coverage requirements for the referenced system have been met. (List call signs in 2a)

Satisfaction of Construction Requirements (Site-licensed services only)

S Construction requirements for the referenced parameters have been met. (List, as applicable, call signs, locations or paths, frequencies and mobile units in Item 2.)

Request for Regular Authorization for Facilities Operating under Developmental Authority (Paging services only)

D Notification to request regular authorization for facilities previously operating under developmental authority. (List, as applicable, call signs, locations and frequencies in Item 2.)

Extended Implementation (Slow Growth) (Land Mobile Services only)

G Notification of compliance with yearly station construction commitments for licensees with approved extended implementation plans. (List call signs in Item 2a.)

H Final notification that construction requirements have been met for the referenced system with approved extended implementation plan. (List, as applicable, call signs, locations, frequencies and mobile units in Item 2.)

2) Call Signs/Locations or Paths/Frequencies

2a) Call Sign	2b) Location Number	2c) Path Number (Microwave only)	2d) Center (Assigned) or Lower Frequency (MHz)	2e) Upper Frequency (MHz)	2f) Number of Operational Mobiles (see instructions)

FEDERAL COMMUNICATIONS COMMISSION

Approved by OMB
3060 - 0798
See 601 Main Form Instructions
for public burden estimate

Information and Instructions

Schedule for
Waiver Request for Extension of Time for Wireless Services

Form FCC 601, Schedule L, is a supplementary schedule for use with the FCC Application for Wireless Telecommunications Bureau Radio Service Authorization, FCC 601 Main Form. Complete this schedule to request a waiver of FCC rules for additional time to satisfy buildout/coverage or construction requirements. The FCC 601 Main Form must be filed in conjunction with this schedule.

Note: Requests for a waiver fee must accompany waiver of FCC rules for additional time to construct and place a station in operation (if applicable).

Item 1 - Purpose

Enter the one-letter abbreviation that indicates the purpose for which the application is being filed (1, 2, 3, 4, T or S).

Note: Only one Extension of Time Request purpose code may be selected per FCC 601 Main Form/Schedule L filing.

Note: Cellular Radiotelephone Services (CL) should use the Construction Requirements portion of this schedule.

Buildout/Coverage Requirements (Market-based services and State License Radio Service (SL) only)

Purpose code 1, 2, 3, 4 or T- Choose one of these codes if this is a request for an extension of time to complete buildout/coverage requirements. Typically, buildout/coverage requirements apply when a specific portion of a geographic area and a specific portion of the population contained within that geographic area must be provided service by a specific date. Not all radio services use all buildout/coverage requirements. Refer to the Commission's rules for more information on buildout/coverage requirements and how they may apply to your service.

Enter one of the following Extension Request Purpose Codes in Item 1:

Enter '1' if an extension is being requested for 1st buildout/coverage requirements.

Enter '2' if an extension is being requested for 2nd buildout/coverage requirements.

Enter '3' if an extension is being requested for 3rd buildout/coverage requirements.

Enter '4' if an extension is being requested for 4th buildout/coverage requirements.

Enter 'T' if an extension is being requested for the tribal lands buildout/coverage requirements. A 'T' in this field indicates that the extension request is for all tribal lands in the market for which a bidding credit was awarded.

Construction Requirements (Site-licensed services only)

Note: Do not use FCC 601 Schedule L to request an extended implementation period for Private Land Mobile Radio Services. To modify a license for an extended implementation period file FCC 601 Main Form with the purpose of MD - Modification and, enter 'Y' for Item 8 of FCC 601 Schedule H, and attach supporting documentation.

Purpose code 'S'- Choose this purpose code if this is a request for an extension of time to complete construction requirements. Typically, construction requirements apply when specific authorized components of a license must be constructed and service commenced by a specific date. Refer to the Commission's rules for more information on construction requirements and how they may apply to your service.

Enter 'S' in Item 1 to request an extension to meet construction requirements for a site-licensed service. An extension of time may be requested for the entire license or specific portions of the license.

Item 2 - Buildout/Coverage/Construction Requirements

Enter the new buildout/coverage/construction expiration date you are requesting in Item 2. You must also attach an exhibit describing the circumstances and justification for the waiver request.

Item 3 - Call Signs/Locations or Paths/Frequencies

IMPORTANT INFORMATION REGARDING LOCATION AND PATH NUMBERS: To identify existing locations or paths, you must use the location or path numbers assigned by the Universal Licensing System (ULS). These numbers may not be identical to the location or path numbers on your current authorization if that authorization was not issued by the Universal Licensing System. If you are unsure of the location or path number that corresponds to a particular location or path, you can query the ULS for the most up-to-date information regarding your authorization. To query the ULS license database for your call sign, point your web browser to http://wireless.fcc.gov/uls/ and click on Search - Licenses. Alternatively, you may call 888-CALLFCC (888-225-5322) for assistance.

To request an extension of time to meet buildout/coverage requirements (purpose codes 1,2,3,4 or T), complete only Item 3a.

To request an extension of time to meet construction requirements (purpose code S), complete Items 3a through 3e, as required. Only complete those items necessary to describe the extension of time requested. For example, to request an extension of time to construct a location under a call sign, only complete Items 3a and 3b.

Item 3a In this item list the call signs where an extension of time to meet buildout/coverage or construction requirements has been requested. Call signs are located on FCC Authorizations.

Item 3b In this item list the location numbers where an extension of time to meet construction requirements has been requested. Location numbers are listed on FCC Authorizations and are used in the following radio services: Aviation Ground, Maritime Coast, Cellular, Land Mobile, and Paging Services.

Item 3c In this item list the path numbers where an extension of time to meet construction requirements has been requested. Path numbers are located on FCC Authorizations and are only used in the Microwave Radio Services.

Items 3d and 3e In this item list the frequencies, in Megahertz (MHz), where an extension of time to meet construction requirements has been requested. Enter the center (assigned) frequency, or the lower frequency of a frequency band, in Item 3d. If applicable, enter the upper frequency of a frequency band in Item 3e. Authorized frequencies are located on FCC Authorizations.

FCC 601
Schedule L

Schedule for Waiver
Request for Extension of Time for Wireless Services

Approved by OMB
3060 - 0798
See 601 Main Form Instructions
for public burden estimate

1) Purpose

The purpose of this submission: Enter one purpose only - **1**, **2**, **3**, **4**, **T**, or **S** ( ) *See below and refer to instructions*.

Buildout/Coverage Requirements (Market-based services and State License Radio Service (SL) only)

1 Extension of Time to meet 1st buildout/coverage requirements. (List call signs in 3a)

2 Extension of Time to meet 2nd buildout/coverage requirements. (List call signs in 3a)

3 Extension of Time to meet 3rd buildout/coverage requirements. (List call signs in 3a)

4 Extension of Time to meet 4th buildout/coverage requirements. (List call signs in 3a)

T Extension of Time to meet tribal lands buildout/coverage requirements. (List call signs in 3a)

Construction Requirements (Site-licensed services only)

S Extension of Time to meet construction requirements (List, as applicable, call signs, locations or paths, and frequencies in Item 3.)

2) New Buildout/Coverage/Construction Expiration Date

Enter date (mm/dd/yy) requested: Attach exhibit describing circumstances/justification.

3) Call Signs/Locations or Paths/Frequencies

3a) Call Sign	3b) Location Number	3c) Path Number (Microwave only)	3d) Center (Assigned) or Lower Frequency (MHz)	3e) Upper Frequency (MHz)