

## Information and Instructions

### Schedule for the Broadband Radio Service and Educational Broadband Service (Part 27)

Form FCC 601, Schedule E, is a supplementary schedule for use with the FCC Application for Radio Service Authorization: Wireless Telecommunications Bureau and/or Public Safety and Homeland Security Bureau, FCC 601 Main Form. This schedule is used to add, modify, or delete geographic service area channels and/or site-specific technical data. Site-specific technical data should be provided to fulfill international coordination requirements, environmental assessment requirements or quiet zone requirements. You must have a valid geographic license (call sign) in the Broadband Radio Service (BRS) or the Educational Broadband Radio Service (EBS) prior to filing site-based technical data.

### Schedule E Instructions

#### GEOGRAPHIC SERVICE AREA DATA

##### Transition Area (BTA Number)

Item 1 Enter the Basic Trading Area (BTA) Number for this filing. See 47 C.F.R. § 27.6.

##### Channel Plan/Channel Number Information

Item 2 This item indicates the action the filer wants the FCC to take on the specified channel plan and channel number. Enter 'A' for Add, 'M' for Modify, or 'D' for Delete.

Item 3 Enter 'O' for old channel plan or 'N' for new channel plan. See 47 C.F.R. § 27.5.

Item 4 Enter the channel number based on the channel plan entered in item 3. See 47 C.F.R. § 27.5.

#### SUPPLEMENT 1

#### SITE-SPECIFIC TECHNICAL DATA

To fulfill international coordination requirements, environmental assessment requirements or quiet zone requirements, you must file technical information for each fixed location, including the antenna structures and/or each hand/held mobile transmit location, or temporary fixed 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 E.

**IMPORTANT INFORMATION REGARDING LOCATION and ANTENNA NUMBERS:** To identify existing locations and antennas, you must use the location and antenna numbers assigned by the Universal Licensing System (ULS). These numbers may not be identical to the location and antenna numbers on your current authorization if that authorization was not issued by the Universal Licensing System. If you are unsure of the location and antenna number that corresponds to a particular location or antenna, 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 (877) 480-3201 (TTY 717-338-2824) for assistance.

#### 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 Items 1-11 for each antenna to be added. If you are modifying an existing antenna, in addition to Items 1, 2, and 3, complete only the items that have changed for the antenna. If you are deleting an antenna, only Items 1, 2, and 3 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 1 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 2 For each location, 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 above Important Information Regarding Location and Antenna Numbers). 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 3 If the antenna has been previously licensed under this call sign by the FCC, enter the antenna's FCC-assigned number (see above Important Information Regarding Location and Antenna Numbers). Otherwise, enter a temporary code to represent each antenna. The temporary 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 2) and antenna number (Item 3) are used to associate information in the Antenna Information Section with information in the Frequency Channel 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 Channel Information Section for that antenna, using the same location number/antenna number pair. Each antenna specified in the Frequency Channel Information Section must have corresponding data in the Antenna Information Section.

Item 4 Enter the name of the manufacturer of the transmitting antenna.

Item 5 Enter the model number of the transmitting antenna.

Item 6 Enter the height above ground level 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. In all cases, the height should not exceed the overall height of the structure with appurtenances.

Item 7 Enter the azimuth of the transmit antenna in degrees (rounded to one decimal place) clockwise from True North. For omni directional antennas, enter '360'.

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 major lobe in the horizontal plane. For omni directional antennas, enter '360'.

Item 9 Indicate transmitter antenna polarization with the following codes:

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)

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.

Item 10 Enter the gain of the transmitting antenna over an isotropic radiator in dBi, rounded to one decimal place.

Item 11 Specify the amount of nonstandard transmitter antenna beam tilt of the transmitter, if any, accurate to the nearest 1/10th of a degree; i.e., beam tilt in addition to that incorporated into the antenna design.

## **FREQUENCY INFORMATION**

This section must be completed only when frequencies are to be added, modified, or deleted for a specific location. If you are adding a new frequency, 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 Item 15. If you are modifying attributes of an existing frequency, in addition to Items 12 through 15, complete only the items that have changed

for the frequency. In order to modify an Emission Designator (Item 18), complete Items 12-15, specifying the appropriate location number, antenna number, and frequency listing **all** active emission designators now associated with the specified location, antenna, and frequency (complete as many rows as necessary, listing emission designators in Item 18). If you are deleting a frequency, only Items 12 through 15 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.

Item 12 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 13 Enter the corresponding location number, as entered in Item 2 of the Antenna Information Section of this Schedule.

Item 14 Enter the corresponding antenna number, as entered in Item 3 of the Antenna Information Section of this Schedule.

Items 15(a) and 15(b) Enter one frequency or one frequency band per line. Enter frequencies in MHz. 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 or frequency band.

To add frequencies on an antenna at a location, enter the specific frequency in the column labeled 'New' in item 15(a). If applying for a frequency band, show the lower and upper frequencies in the box labeled "New" in items 15(a) and (b).

To modify a frequency or frequency band on an antenna at a location, enter the existing frequency in the column labeled 'Existing' and enter the new frequency or frequency band in Items 15(a) and (b) labeled 'New'.

To modify a frequency on an antenna at a location, enter the existing frequency in the column labeled 'Existing' and enter the new frequency in the column labeled 'New'.

Item 16 Specify the associated visual carrier frequency offset, if any. Allowable offsets are "+" (plus), "-" (minus) and "0" (zero). Leave the offset box empty if no frequency offset is proposed.

Item 17 Enter the Effective Isotropic Radiated Power (EIRP), in dBm rounded to one decimal place, radiated off the transmitting antenna.

Item 18 Enter the transmitter emission designator, composed of its necessary bandwidth and emission type. (See Sections 2.201 and 2.202 for further information on emission and bandwidth designation.)

Item 19 For digital systems, digital modulation type is required.

**Schedule for the  
Broadband Radio Service and Educational Broadband Service  
(Part 27)**

**GEOGRAPHIC SERVICE AREA DATA**

**1) Transition Area (BTA Number)**

BTA Number
BTA Number
BTA Number
BTA Number

**Channel Plan/Channel Number Information**

2)Action (A/M/D)	3)Channel Plan (Old or New)	4)Channel Number

Supplement 1

SITE-SPECIFIC TECHNICAL DATA

Antenna Information

1) Action (A/ M/D)	2) Location Number	3) Antenna Number	4) Transmitter Antenna Manufacturer	5) Transmitter Antenna Model Number	6) Transmitter Antenna Center Line (meters- AGL)	7) Transmitter Antenna Azimuth (degrees)	8) Transmitter Antenna Beamwidth (degrees)	9) Transmitter Antenna Polarization	10) Transmitter Antenna Gain (dBi)	11) Transmitter Antenna BeamTilt (degrees)

Frequency Information

12) Action (A/M/D)	13) Location Number	14) Antenna Number	15a) Lower or Center Frequency (MHz)	15b) Upper Frequency (MHz)	16) Offset	17) EIRP (dBm)	18) Emission Designator s	19) Digital Modulation Type
			Existing (if mod)					
			New					
			Existing (if mod)					
			New					
			Existing (if mod)					
			New					
			Existing (if mod)					
			New					
			Existing (if mod)					
			New					
			Existing (if mod)					
			New					