# Subpart F—Television Broadcast Auxiliary Stations

### § 74.600 Eligibility for license.

A license for a station in this subpart will be issued only to a television broadcast station, a Class A TV station, a television broadcast networkentity, a low power TV station, or a TV translator station.

[ 65 FR 30011, May 10, 2000]

# § 74.601 Classes of TV broadcast auxiliary stations.

- (a) TV pickup stations. A land mobile station used for the transmission of TV program material and related communications from scenes of events occurring at points removed from TV station studios to a TV broadcast, Class A TV or low power TV station or other purposes as authorized in §74.631.
- (b) TV STL station (studio-transmitter link). A fixed station used for the transmission of TV program material and related communications from the studio to the transmitter of a TV broadcast, Class A TV or low power TV station or other purposes as authorized in §74.631.
- (c) TV relay station. A fixed station used for transmission of TV program material and related communications for use by TV broadcast, Class A TV and low power TV stations or other purposes as authorized in §74.631.

- (d) TV translator relay station. A fixed station used for relaying programs and signals of TV broadcast or Class A TV stations to Class A TV, LPTV, TV translator, and to other communications facilities that the Commission may authorize or for other purposes as permitted by §74.631.
- (e) TV broadcast licensee. Licensees and permittees of TV broadcast, Class A TV and low power TV stations, unless specifically otherwise indicated.
- (f) TV microwave booster station. A fixed station in the TV broadcast auxiliary service that receives and amplifies signals of a TV pickup, TV STL, TV relay, or TV translator relay station and retransmits them on the same frequency.

[65 FR 30012, May 10, 2000]

## §74.602 Frequency assignment.

(a) The following frequencies are available for assignment to television pickup, television STL, television relay and television translator relay stations. The band segments 17,700-18,580 and 19,260-19,700 MHz are available for broadcast auxiliary stations as described in paragraph (g) of this section. The band segment 6425-6525 MHz is available for broadcast auxiliary stations as described in paragraph (i) of this section. Broadcast network-entities may also use the 1990-2110, 6425-6525 and 6875-7125 MHz bands for mobile television pickup only.

		Band D <sup>1</sup> GHz			
Band A MHz	Band B MHz	Group A ch	nannels	Group B ch	annels
		Designation	Channel bound- aries	Designation	Channel bound- aries
1990–2008		A01	12.700–12.725	B01	12.7125– 12.7375
2008–2025		A02	12.725–12.750	B02	12.7375-
2025–2042		A03	12.750–12.775	B03	12.7625 12.7625- 12.7875
2042–2059		A04	12.775–12.800	B04	12.7875-
2059–2076	6875–6900	A05	12.800–12.825	B05	12.8125 12.8125- 12.8375
2076–2093	6900–6925	A06	12.825–12.850	B06	12.8375- 12.8625
2093–2110	6925–6950	A07	12.850–12.875	B07	12.8625- 12.8875
2450-2467	6950–6975	A08	12.875–12.900	B08	12.8875-
2467–2483.5	6975–7000	A09	12.900–12.925	B09	12.9125 12.9125–
	7000–7025	A10	12.925–12.950	B10	12.9375 12.9375– 12.9625

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		Band D <sup>1</sup> GHz			
Band A MHz	Band B MHz	Group A channels		Group B channels	
		Designation	Channel bound- aries	Designation	Channel bound aries
	7025–7050	A11	12.950–12.975	B11	12.9625 12.987
	7050–7075	A12	12.975–13.000	B12	12.9875- 12.012
	7075–7100	A13	13.000–13.025	B13	13.0125- 13.037
	7100–7125	A14	13.025-13.050	B14	13.0375- 13.062
		A15	13.050–13.075	B15	13.0625- 13.087
		A16	13.075–13.100	B16	13.0875- 13.112
		A17	13.100–13.125	B17	13.1125- 13.137
		A18	13.125–13.150	B18 <sup>2</sup>	13.1375- 13.162
		A19 <sup>2</sup>	13.150–13.175	B19 <sup>2</sup>	13.1625- 13.1875
		A20 <sup>2</sup>	13.175–13.200	B20 <sup>2</sup>	13.1875- 13.212
		A21	13.200–13.225	B21	13.2125- 13.237
		A22	13.225-13.250		

<sup>&</sup>lt;sup>1</sup>For fixed stations using Band D Channels, applicants are encouraged to use alternate A and B channels such that adjacent R.F. carriers are spaced 12.5 MHz. As example, a fixed station, relaying several channels, would use A01, B01, A02, B02, A03,

(1) Frequencies shown above between 2450 and 2500 MHz in Band A are allocated to accommodate the incidental radiations of industrial, scientific, and medical (ISM) equipment, and stations operating therein must accept any interference that may be caused by the operation of such equipment. Frequencies between 2450 and 2500 MHz are also shared with other communication services and exclusive channel assignments will not be made, nor is the channeling shown above necessarily that which will be employed by such other services.

(2) In the band 2483.5-2500 MHz, no applications for new stations or modification to existing stations to increase the number of transmitters will be accepted. Existing licensees as of July 25, 1985, and licensees whose initial applications were filed on or before July 25, 1985, are grandfathered and their operations are on a co-primary basis with the mobile-satellite and radiodetermination-satellite services, and in the segment 2495-2500 MHz, their operations are also on a co-primary basis with part 27 fixed and mobile except aeronautical mobile service operations.

(3)(i) After January 7, 2004, stations may adhere to the channel plan specified in paragraph (a) of this section, or the following channel plan in Band A:

Channel A1r-2025.5-2037.5 MHz Channel A2r-2037.5-2049.5 MHz Channel A3r-2049.5-2061.5 MHz Channel A4-2061.5-2073.5 MHz Channel A5r-2073.5-2085.5 MHz Channel A6r-2085.5-2097.5 MHz Channel A7r-2097.5-2109.5 MHz

(ii) Stations adhering to the channel plan specified in paragraph (a)(3)(i) of this section may also use the following 40 data return link (DRL) channels to facilitate their operations in the 2025.5-2109.5 MHz band:

R.F. carriers are spaced 12.5 Mrr.2. As examipre, a increasing station, relaying section and 13.15–13.20 GHz is reserved for television pickup and CARS pickup stations inside a 50 km radius of the 100 television markets delineated in §76.51 of this chapter. Outside a 50 km radius of the 100 television markets delineated in §76.51 of this chapter, television pickup stations, CARS stations and NGSO FSS gateway earth stations shall operate on a primary coequal basis. The band 13.20–13.2125 GHz is reserved for television pickup stations on a primary basis and CARS pickup stations on a secondary basis inside a 50 km radius of the 100 television markets delineated in §76.51 of this chapter. Outside a 50 km radius of the 100 markets delineated in §76.51 of this chapter, television pickup stations and NGSO FSS gateway earth stations shall operate on a co-primary basis, CARS stations shall operate on a secondary basis. Fixed television auxiliary stations licensed pursuant to applications accepted for filling before September 1, 1979, may continue operation on channels in the 13.15–13.25 GHz band, subject to periodic license renewals. NGSO FSS gateway uplink transmissions in the 13.15–13.2125 GHz segment shall be limited to a maximum EIRP of 3.2 dBW towards 0 degrees on the radio horizon. These provisions shall not apply to GSO FSS operations in the 12.75–13.25 GHz band. not apply to GSO FSS operations in the 12.75-13.25 GHz band.

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Lower hand DRL channels

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2025.000-2025.025~\mathrm{MHz}
2025.025-2025.050 \text{ MHz}
2025.050-2025.075~\mathrm{MHz}
2025.075 – 2025.100 \mathrm{\ MHz}
2025.100-2025.125~\mathrm{MHz}
2025.125-2025.150~\mathrm{MHz}
2025.150-2025.175 \text{ MHz}
2025.175 – 2025.200 \mathrm{\ MHz}
2025.200-2025.225 \text{ MHz}
2025.225-2025.250 \mathrm{\ MHz}
2025.250-2025.275 MHz
2025.275-2025.300~\mathrm{MHz}
2025.300-2025.325~\mathrm{MHz}
2025.325-2025.350 \text{ MHz}
2025.350-2025.375~\mathrm{MHz}
2025.375-2025.400 \text{ MHz}
2025.400-2025.425~\mathrm{MHz}
2025.425-2025.450 \text{ MHz}
2025.450-2025.475~\mathrm{MHz}
2025.475 – 2025.500~\mathrm{MHz}
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Upper band DRL channels

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2109.500-2109.525 MHz
2109 525-2109 550 MHz
2109 550-2109 575 MHz
2109 575-2109 600 MHz
2109 600-2109 625 MHz
2109 625-2109 650 MHz
2109.650-2109.675 MHz
2109 675-2109 700 MHz
2109.700-2109.725 MHz
2109.725-2109.750 MHz
2109.750-2109.775 MHz
2109.775-2109.800 MHz
2109.800-2109.825 MHz
2109 825-2109 850 MHz
2109.850-2109.875 MHz
2109.875-2109.900 MHz
2109.900-2109.925 MHz
2109.925-2109.950 MHz
2109.950-2109.975~\mathrm{MHz}
2109.975-2110.000 \text{ MHz}
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- (iii) Broadcast Auxiliary Service, Cable Television Remote Pickup Service, and Local Television Transmission Service licensees will be required to use the Band A channel plan in paragraph (a)(3)(i) of this section after completion of relocation by an Emerging Technologies licensee in accordance with §74.690 or §78.40. Licensees declining relocation may continue to use their existing channel plan but must discontinue use of the 1990-2025 MHz band when they indicate to an Emerging Technologies licensee, acting pursuant to §74.690 or §78.40 of this chapter, that they decline to be relocated.
  - (4) [Reserved]
- (b) Subject to the conditions of paragraph (a) of this section, frequency assignments will normally be made as re-

- quested, provided that the frequency selection provisions of §74.604 have been followed and that the frequency requested will cause no interference to existing users in the area. The Commission reserves the right to assign frequencies other than those requested if, in its opinion, such action is warranted
- (c) Fixed link stations will be authorized to operate on one channel only.
- (d) Cable Television Relay Service stations may be assigned channels in Band D between 12,700 and 13,200 MHz subject to the condition that no harmful interference is caused to TV STL and TV relay stations authorized at the time of such grants. Similarly, new TV STL and TV relay stations must not cause harmful interference to cable television relay stations authorized at the time of such grants. The use of channels between 12,700 and 13,200 MHz by TV pickup stations is subject to the condition that no harmful interference is caused to Cable Television Relay Service stations, TV STL and TV relay stations, except as provided for in §74.602(a) Note 2. Band D channels are also shared with certain Private Operational Fixed Stations, see §74.638.
- (e) Communication common carriers in the Local Television Transmission Service (Part 101) may be assigned frequencies available to television broadcast station licensees and broadcast network entities for the purpose of providing service to television broadcast stations and broadcast network entities, respectively.
- (f) TV auxiliary stations licensed to low power TV stations and translator relay stations will be assigned on a secondary basis, *i.e.*, subject to the condition that no harmful interference is caused to other TV auxiliary stations assigned to TV broadcast stations, or to cable television relay service stations (CARS) operating between 12,700 and 13,200 MHz. Auxiliary stations licensed to low power TV stations and translator relay stations must accept any interference caused by stations having primary use of TV auxiliary frequencies.
- (g) The following frequencies are available for assignment to television

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STL, television relay stations and television translator relay stations. Stations operating on frequencies in the sub-bands 18.3-18.58 GHz and 19.26-19.3 GHz that were licensed or had applications pending before the Commission as of September 18, 1998 may continue those operations on a shared co-primary basis with other services under parts 21, 25, 78, and 101 of this chapter. Such stations, however, are subject to relocation by licensees in the fixed-satellite service. Such relocation is subject to the provisions of §§ 101.85 through 101.97 of this chapter. No new applications for new licenses will be accepted in the 19.26-19.3 GHz band after June 8, 2000, and no new applications for new licenses will be accepted in the 18.3-18.58 GHz band after November 19, 2002. The provisions of §74.604 do not apply to the use of these frequencies. Licensees may use either a two-way link or one or both frequencies of a frequency pair for a one-way link and shall coordinate proposed operations pursuant to procedures required in §101.103(d) of this chapter.

(1) 2 MHz maximum authorized bandwidth channel:

Transmit (receive) (MHz)	Receive (transmit) (MHz)
18141.0	n/a

(2) 6 MHz maximum authorized bandwidth channels:

Transmit (receive) (MHz)	Receive (transmit) (MHz)
216 MHz Separation	
18145.0	n/a
18151.0	18367.0
18157.0	18373.0
18163.0	18379.0
18169.0	18385.0
18175.0	18391.0
18181.0	18397.0
18187.0	18403.0
18193.0	18409.0
18199.0	18415.0
18205.0	18421.0
18211.0	18427.0
18217.0	18433.0
18223.0	18439.0
18229.0	18445.0
18235.0	18451.0
18241.0	18457.0
18247.0	18463.0
18253.0	18469.0
18259.0	18475.0
18265.0	18481.0
18271.0	18487.0

Transmit (receive) (MHz)	Receive (transmit) (MHz)
18277.0	18493.0
18283.0	18499.0
18289.0	18505.0
18295.0	18511.0
18301.0	18517.0
18307.0	18523.0
18313.0	18529.0
18319.0	18535.0
18325.0	18541.0
18331.0	18547.0
18337.0	18553.0
18343.0	18559.0
18349.0	18565.0
18355.0	18571.0
18361.0	18577.0

(3) 10 MHz maximum authorized bandwidth channels:

	Transmit (receive) (MHz)	Receive (transmit) (MHz)
	1560 MHz Separation	
17705.0		19265.0
17715.0		19275.0
17725.0		19285.0
17735.0		19295.0
17745.0		19305.0
17755.0		19315.0
17765.0		19325.0
17775.0		19335.0
17785.0		19345.0
17795.0		19355.0
17805.0		19365.0
17815.0		19375.0
17825.0		19385.0
17835.0		19395.0
17845.0		19405.0
17855.0		19415.0
17865.0		19425.0
17875.0		19435.0
		19445.0
17895.0		19455.0
17905.0		19465.0
		19475.0
		19485.0
		19495.0
		19505.0
		19515.0
		19525.0
		19535.0
		19545.0
		19555.0
		19565.0
		19575.0
		19585.0
		19595.0
		19605.0
		19615.0
		19615.0
		19625.0
		19635.0
		19645.0
		19665.0
		19675.0
		19685.0
18135.0		19695.0

(4) 20 MHz maximum authorized bandwidth channels:

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Transmit (receive) (MHz)	Receive (transmit) (MHz)
1560 MHz Separation	
17710.0	19270.0
17730.0	19290.0
17750.0	19310.0
17770.0	19330.0
17790.0	19350.0
17810.0	19370.0
17830.0	19390.0
17850.0	19410.0
17870.0	19430.0
17890.0	19450.0
17910.0	19470.0
17930.0	19490.0
17950.0	19510.0
17970.0	19530.0
17990.0	19550.0
18010.0	19570.0
18030.0	19590.0
18050.0	19610.0
18070.0	19630.0
18090.0	19650.0
18110.0	19670.0
18130.0	19690.0

(5) 40 MHz maximum authorized bandwidth channels:

Transmit (receive) (MHz)	Receive (transmit) (MHz)
1560 MHz Separation	•
17720.0	19280.0
17760.0	19320.0
17800.0	19360.0
17840.0	19400.0
17880.0	19440.0
17920.0	19480.0
17960.0	19520.0
18000.0	19560.0
18040.0	19600.0
18080.0	19640.0
18120.0	19680.0

(6) 80 MHz maximum authorized bandwidth channels:

Transmit (receive) (MHz)	Receive (transmit) (MHz)
1560 MHz Separation	
17740.0	19300.0
17820.0	19380.0
17900.0	19460.0
17980.0	19540.0
18060.0	19620.0

(h) TV STL, TV relay stations, and TV translator relay stations may be authorized to operate fixed point-to-point service on the UHF TV channels 14-69 on a secondary basis and subject to the provisions of subpart G of this part:

- (1) Applications for authorization in accordance with this paragraph must comply with the following technical limits or be accompanied by an engineering analysis demonstrating why these limits must be exceeded:
- (i) Maximum EIRP is limited to 35 dBW:
- (ii) Transmitting antenna beamwidth is limited to 25 degrees (measured at the 3 dB points); and
  - (iii) Vertical polarization is used.
- (2) These stations must not interfere with and must accept interference from current and future full-power UHF-TV stations, LPTV stations, and translator stations. They will also be secondary to land mobile stations in areas where land mobile sharing is currently permitted.
- (3) TV STL and TV relay stations licensed for operation on UHF TV channels 52–69 based on applications filed before April 16, 2003, may continue to operate under the terms of their current authorizations until the end of transition to digital television in their market (DTV Transition), as set forth in §§ 73.622 through 73.625 of this chapter. Applications for TV STL and TV relay stations operating on UHF TV channels 52–69 will not be accepted for filing on or after April 16, 2003.
- (4) TV translator relay stations licensed for operation on UHF TV channels 52-59 based on applications filed before the end of DTV transition may continue to operate under the terms of their current authorizations indefinitely. TV translator relay stations licensed for operation on UHF TV channels 60-69 based on applications filed before the end of DTV transition may continue to operate under the terms of their current authorizations until the end of DTV Transition. Applications for TV translator relay stations operating on UHF TV channels 52-69 will not be accepted for filing on or after the end of DTV Transition.
- (i) 6425 to 6525 MHz—Mobile Only. Paired and un-paired operations permitted. Use of this spectrum for direct delivery of video programs to the general public or multi-channel cable distribution is not permitted. This band is co-equally shared with mobile stations licensed pursuant to parts 78 and 101 of

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this chapter. The following channel plans apply.

(1) 1 MHz maximum authorized bandwidth channels.

Transmit (or receive MHz)	Receive (or transmit) (MHz)
6425.5	6475.5
6450.5	6500.5

(2) 8 MHz maximum authorized bandwidth channels.

Transmit (or receive MHz)	Receive (or transmit) (MHz)
6430.0	6480.0
6438.0 6446.0	6488.0 6596.0
6455.0	6505.0
6463.0	6513.0
6471.0	6521.0

(3) 25 MHz maximum authorized bandwidth channels.

Transmit (or receive MHz)	Receive (or transmit (MHz)
6437.5	6487.5
6462.5	6512.5

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082; 47 U.S.C. 154, 155, 303)

[28 FR 13718, Dec. 14, 1963]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §74.602, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

#### §74.603 Sound channels.

(a) The frequencies listed in §74.602(a) may be used for the simultaneous transmission of the picture and sound portions of TV broadcast programs and for cue and order circuits, either by means of multiplexing or by the use of a separate transmitter within the same channel. When multiplexing of a TV STL station is contemplated, consideration should be given to the requirements of §73.687 of this Chapter regarding the overall system performance requirements. Applications for new TV pickup, TV STL, TV relay and TV translator relay stations shall clearly indicate the nature of any mutliplexing proposed. Multiplexing equipment may be installed on licensed equipment without authority of the FCC, provided the installation of such apparatus on a TV STL station shall not result in degradation of the overall system performance of the TV broadcast station below that permitted by §73.687 of this chapter.

- (b) [Reserved]
- (c) Aural STL or intercity relay stations licensed as of July 10, 1970, to operate in the frequency band 942–947 MHz, may continue to so operate pending a decision as to their disposition through a future rule making proceeding.
- (d) Remote pickup broadcast stations may be used in conjunction with television pickup stations for the transmission of the aural portion of television programs or events that occur outside a television studio and for the transmission of cues, orders, and other related communications necessary thereto. The rules governing remote pickup broadcast stations are contained in Subpart D of this part.

[28 FR 13718, Dec. 14, 1963, as amended at 47 FR 55936, Dec. 14, 1982; 48 FR 24385, June 1, 1983; 68 FR 12769, Mar. 17, 2003]

## § 74.604 Interference avoidance.

- (a) [Reserved]
- (b) Where two or more licensees are assigned a common channel for TV pickup, TV STL, or TV relay purposes in the same area and simultaneous operation is contemplated, they shall take such steps as may be necessary to avoid mutual interference, including consultation with the local coordination committee, if one exists. If a mutual agreement to this effect cannot be reached, the Commission must be notified and it will take such action as may be necessary, including time sharing arrangements, to assure an equitable distribution of available frequencies.
- (c) For those interference disputes brought to the Commission for resolution, TV broadcast auxiliary channels will have the following priority for purposes of interference protection:
- (1) All fixed links for full service broadcast stations and cable systems.
- (2) TV and CARS pickup stations.
- (3) Fixed or mobile stations serving translator or low power TV stations.
- (4) Backup facilities; TV pickup stations used outside a licensee's local service area.
- (5) Any transmission, pursuant to §74.631(f), that does not involve the delivery of program material to a licensee's associated TV broadcast station.