

Federal Communications Commission

§ 15.703

TABLE 3B—CONSULTATION AREA COORDINATES FOR AERONAUTICAL RECEIVE STATIONS (1.7–30 MHz)—Continued

Locale	Latitude	Longitude
Houston, TX	29°36'35.8" N	95°16'54.8" W
Miami, FL	25°49'05" N	80°18'28" W

Note: Systems of coordinates conform to NAD 83.

Point of contact: U.S. Coast Guard Washington, DC 20593, Tel: (202) 267–HQ, Division of Spectrum Management 6036, Fax: (202) 267–4106, e-mail: CG–622, 2100 Second St., SW., Rm. 6611, jtaboada@comdt.uscg.mil.

TABLE 4—CONSULTATION AREA COORDINATES FOR LAND STATIONS, SET 1 (1.7–30 MHz)

Command name	Location	Latitude	Longitude
COMMSTA Boston	Maspee, MA	41°24'00" N	70°18'57" W
Camslant	Chesapeake, VA	36°33'59" N	76°15'23" W
COMMSTA Miami	Miami, FL	25°36'58" N	80°23'04" W
COMMSTA New Orleans	Belle Chasse, LA	29°52'40" N	89°54'46" W
Campac	Pt. Reyes Sta, CA	38°06'00" N	122°55'48" W
COMMSTA Honolulu	Wahiawa, HI	21°31'08" N	157°59'28" W
COMMSTA Kodiak	Kodiak, AK	57°04'26" N	152°28'20" W
Guam	Finagayan, GU	13°53'08" N	144°50'20" E

NOTE: Systems of coordinates conform to NAD 83.

Point of contact: COTHEN Technical Support Center, COTHEN Program Manager, Tel: (800) 829–6336.

TABLE 5—CONSULTATION AREA COORDINATES FOR LAND STATIONS, SET 2 (1.7–30 MHz)

Site name	Latitude	Longitude
Albuquerque, NM	35°05'02" N	105°34'23" W
Arecibo, PR	18°17'26" N	66°22'33" W
Atlanta, GA	32°33'06" N	84°23'35" W
Beaufort, SC	34°34'22" N	76°09'48" W
Cape Charles, VA	37°05'37" N	75°58'06" W
Cedar Rapids, IA	42°00'09" N	91°17'39" W
Denver, CO	39°15'45" N	103°34'23" W
Fort Myers, FL	81°31'20" N	26°20'01" W
Kansas City, MO	38°22'10" N	93°21'48" W
Las Vegas, NV	36°21'15" N	114°17'33" W
Lovelock, NV	40°03'07" N	118°18'56" W
Memphis, TN	34°21'57" N	90°02'43" W
Miami, FL	25°46'20" N	80°28'48" W
Morehead City, NC	34°34'50" N	78°13'59" W
Oklahoma City, OK	34°30'52" N	97°30'52" W
Orlando, FL	28°31'30" N	80°48'58" W
Reno, NV	38°31'12" N	119°14'37" W
Sarasota, FL	27°12'41" N	81°31'20" W
Wilmington, NC	34°29'24" N	78°04'31" W

NOTE: Systems of coordinates conform to NAD 83.

Point Of Contact: ROTH Deputy Program Manager, (540) 653–3624.

TABLE 6—CONSULTATION AREA COORDINATES FOR RADAR RECEIVER STATIONS (1.7–30 MHz)

Latitude/Longitude
18°01' N/66°30' W
28°05' N/98°43' W

TABLE 6—CONSULTATION AREA COORDINATES FOR RADAR RECEIVER STATIONS (1.7–30 MHz)—Continued

Latitude/Longitude
36°34' N/76°18' W

NOTE: Systems of coordinates conform to NAD 83.

[70 FR 1374, Jan. 7, 2005, as amended at 71 FR 49379, Aug. 23, 2006]

Subpart H—White Space Devices

SOURCE: 80 FR 73070, Nov. 23, 2015, unless otherwise noted.

§ 15.701 Scope.

This subpart sets forth the regulations for unlicensed white space devices. These devices are unlicensed intentional radiators that operate on available TV channels in the broadcast television frequency bands, the 600 MHz band (including the guard bands and duplex gap), and in 608–614 MHz (channel 37).

§ 15.703 Definitions.

(a) *600 MHz duplex gap*. An 11 megahertz frequency band that separates part 27 600 MHz service uplink and downlink frequencies, in accordance

with the terms and conditions established in GN Docket No. 12-268, pursuant to section 6403 of the Spectrum Act.

(b) *600 MHz guard bands.* Designated frequency bands that prevent interference between licensed services in the 600 MHz service band and either the television bands or channel 37, in accordance with the terms and conditions established in GN Docket No. 12-268, pursuant to section 6403 of the Spectrum Act.

(c) *600 MHz service band.* Frequencies that will be reallocated and assigned for 600 MHz band services pursuant to part 27, in accordance with the terms and conditions established in GN Docket No. 12-268, pursuant to section 6403 of the Spectrum Act.

NOTE TO PARAGRAPHS (a), (b) AND (c): The specific frequencies will be determined in light of further proceedings pursuant to GN Docket No. 12-268 and the rules will be updated accordingly pursuant to a future public notice.

(d) *Available channel.* A channel which is not being used by an authorized service and is acceptable for use by the device at its geographic location under the provisions of this subpart.

(e) *Contact verification signal.* An encoded signal broadcast by a fixed or Mode II device for reception by Mode I devices to which the fixed or Mode II device has provided a list of available channels for operation. Such signal is for the purpose of establishing that the Mode I device is still within the reception range of the fixed or Mode II device for purposes of validating the list of available channels used by the Mode I device and shall be encoded to ensure that the signal originates from the device that provided the list of available channels. A Mode I device may respond only to a contact verification signal from the fixed or Mode II device that provided the list of available channels on which it operates. A fixed or Mode II device shall provide the information needed by a Mode I device to decode the contact verification signal at the same time it provides the list of available channels.

(f) *Fixed device.* A white space device that transmits and/or receives radiocommunication signals at a specified fixed location. A fixed device may

select channels for operation from a list of available channels provided by a white space database, and initiate and operate a network by sending enabling signals to one or more fixed devices and/or personal/portable devices. Fixed devices may provide to a Mode I personal/portable device a list of available channels on which the Mode I device may operate, including channels on which the Mode I device but not the fixed device may operate.

(g) *Geo-location capability.* The capability of a white space device to determine its geographic coordinates and geo-location uncertainty. This capability is used with a white space database approved by the FCC to determine the availability of spectrum at a white space device's location.

(h) *Less congested area.* Geographic areas where at least half of the TV channels for the bands that will continue to be allocated and assigned only for broadcast service are unused for broadcast and other protected services and available for white space device use. Less congested areas in the UHF TV band are also considered to be less congested areas in the 600 MHz service band.

(i) *Mode I personal/portable device.* A personal/portable white space device that does not use an internal geo-location capability and access to a white space database to obtain a list of available channels. A Mode I device must obtain a list of available channels on which it may operate from either a fixed white space device or Mode II personal/portable white space device. A Mode I device may not initiate a network of fixed and/or personal/portable white space devices nor may it provide a list of available channels to another Mode I device for operation by such device.

(j) *Mode II personal/portable device.* A personal/portable device that uses an internal geo-location capability and access to a white space database, either through a direct connection to the Internet or through an indirect connection to the Internet by way of fixed device or another Mode II device, to obtain a list of available channels. A Mode II device may select a channel itself and initiate and operate as part of a network of white space devices,

transmitting to and receiving from one or more fixed devices or personal/portable devices. A Mode II personal/portable device may provide its list of available channels to a Mode I personal/portable device for operation on by the Mode I device.

(k) *Network initiation.* The process by which a fixed or Mode II white space device sends control signals to one or more fixed white space devices or personal/portable white space devices and allows them to begin communications.

(l) *Operating channel.* An available channel used by a white space device for transmission and/or reception.

(m) *Personal/portable device.* A white space device that transmits and/or receives radiocommunication signals on available channels at unspecified locations that may change.

(n) *Receive site.* The location where the signal of a full service television station is received for rebroadcast by a television translator or low power TV station, including a Class A TV station, or for distribution by a Multiple Video Program Distributor (MVPD) as defined in 47 U.S.C. 602(13).

(o) *Sensing only device.* A personal/portable white space device that uses spectrum sensing to determine a list of available channels. Sensing only devices may transmit on any available channels in the frequency bands 512–608 MHz (TV channels 21–36) and 614–698 MHz (TV channels 38–51).

(p) *Spectrum Act.* Title VI of the Middle Class Tax Relief and Job Creation Act of 2012 (Pub. L. 112–96).

(q) *Spectrum sensing.* A process whereby a white space device monitors a television channel to detect whether the channel is occupied by a radio signal or signals from authorized services.

(r) *Television bands.* The portions of the broadcast television frequency bands at 54–72 MHz (TV channels 2–4), 76–88 MHz (TV channels 5–6), 174–216 MHz (TV channels 7–13), 470–608 MHz (channels 14–36) and 614–698 MHz (channels 38–51) that will be allocated and assigned to broadcast television licensees consistent with the outcome of the auction conducted pursuant to *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Report and Order, GN Docket No. 12–268 (FCC 14–50) (rel. June 2, 2014).

Channels 2–13 are in the VHF band, and channel 14–51 are in the UHF band.

(s) *White space database.* A database system approved by the Commission that maintains records on authorized services and provides lists of available channels to white space devices and unlicensed wireless microphone users.

§ 15.705 Cross reference.

(a) The provisions of subparts A, B, and C of this part apply to white space devices, except where specific provisions are contained in this subpart.

(b) The requirements of this subpart apply only to the radio transmitter contained in the white space device. Other aspects of the operation of a white space device may be subject to requirements contained elsewhere in this chapter. In particular, a white space device that includes a receiver that tunes within the frequency range specified in § 15.101(b) and contains digital circuitry not directly associated with the radio transmitter is also subject to the requirements for unintentional radiators in subpart B.

§ 15.706 Information to the user.

(a) In addition to the labeling requirements contained in § 15.19, the instructions furnished to the user of a white space device shall include the following statement, placed in a prominent location in the text of the manual:

This equipment has been tested and found to comply with the rules for white space devices, pursuant to part 15 of the FCC rules. These rules are designed to provide reasonable protection against harmful interference. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- (1) Reorient or relocate the receiving antenna.
- (2) Increase the separation between the equipment and receiver.
- (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.