



Federal Communications Commission
Washington, D.C. 20554

May 7, 2008

DA 08-1083

Ken D. Chafin
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La Crescenta, CA 91214

Leon J. Brown
1627 Fair Park Avenue
Los Angeles, CA 90014

Re: Petition for Rule Making filed October 10, 2007

Dear Mr. Chafin and Mr. Brown:

This is in response to the Petition for Rule Making that you filed on October 10, 2007, requesting that the Commission propose to expand the frequencies on which an amateur station operating as a repeater (repeater station) may operate.¹ Specifically, the Petition requests that the Commission amend Section 97.205(b) of the Commission's Rules² to allow repeater stations to transmit in the 145.5-145.8 MHz frequency segment of the 2 meter (m) amateur service band (144-148 MHz), in addition to the 2 m band frequency segments currently authorized for repeater station operation. For the reasons set forth below, we deny the Petition.

The Petition argues that additional spectrum is needed for repeater stations because some amateur repeater stations have begun using certain digital communication protocols, and "digital voice operation is incompatible with existing analog operations [because d]igital voice users are unable to determine if the desired frequency is in use by analog users and can inadvertently cause harmful interference to those users."³ It also argues that coordinating groups have been unable to separate analog and digital voice repeater operations to avoid harmful interference because the available repeater spectrum in the 2 m band is "fully occupied by existing analog users in most metropolitan areas."⁴

After consideration of your request, we conclude that the Petition does not present grounds for the Commission to propose to amend its rules. Repeater stations are authorized to transmit on any frequency in the 2 m band except the 144.0-144.5 MHz and 145.5-146.0 MHz frequency segments.⁵ These two

¹ See Petition for Rule Making (filed October 10, 2007) (Petition). An amateur repeater station is an amateur station that simultaneously retransmits the transmission of another amateur station on a different channel or channels. See 47 C.F.R. § 97.3(a)(39).

² 47 C.F.R. § 97.205(b).

³ Petition at 2-3.

⁴ *Id.* at 3. We note that both petitioners reside in the same metropolitan area, and that the Petition offers no information regarding other areas in support of this assertion.

⁵ See 47 C.F.R. § 97.205(b).

segments were excluded to minimize the possibility of harmful interference to other amateur service stations and operating activities, including “weak signal”⁶ operations.⁷ Allocating an additional three hundred kilohertz of the 2 m band to repeater operation would not be consistent with that concern. Rather, it would likely result in increased interference to non-repeater stations.⁸

Moreover, to the extent that the petition proposes a separate frequency segment for use by digital but not analog repeater stations,⁹ we note that when the Commission has previously addressed the issue of interference between amateur stations engaging in different operating activities, it has declined to revise the rules to limit a frequency segment to one emission type in order to prevent interference to the operating activities of other amateur radio service licensees.¹⁰ Rather, the Commission noted that interference between amateur stations is already addressed by Section 97.101(b) and (d) of the Commission’s Rules, which require amateur licensees to cooperate in selecting transmitting channels and in making the most effective use of amateur frequencies, provide that no amateur frequency will be assigned for the exclusive use of any station allocated to the Amateur Radio Service, and prohibit operators from willfully or maliciously interfering with or causing interference to any radio communication or signal.¹¹

⁶ Weak signal communications are primarily Morse code telegraphy and single sideband voice messages transmitted over very long distances. See Amendment of the Commission’s Rules Governing Part 97 of the Commission’s Rules Governing the Amateur Radio Services, *Report and Order*, WT Docket No. 04-140, 21 FCC Rcd 11643, 11655 n.94 (2006) (*Omnibus Report and Order*).

⁷ See *Deregulation of Part 97 of the Commission’s Rules to Simplify the Licensing and Operation of Complex Systems of Stations and Modify Repeater Subbands in the Amateur Radio Service*, *Report and Order*, Docket No. 21033, 66 F.C.C. 2d 207, 215 ¶ 6 (1977), *aff’d*, *Order*, 67 F.C.C. 2d 1107, 1113 ¶ 6 (1978).

⁸ The Petition suggests that the Commission’s subsequent decision to permit operation of auxiliary stations in the 145.5-145.8 MHz frequency segment because it would cause no more than “slight” interference to weak signal communications, see *Omnibus Report and Order*, 21 FCC Rcd at 11656 ¶ 23, demonstrates that repeater stations also should be permitted to operate in this frequency segment. See Petition at 5. We disagree. An auxiliary station is an amateur station, other than in a message forwarding system, that transmits communications point-to-point within a system of cooperating amateur stations. See 47 C.F.R. § 97.3(a)(7). These stations are typically used for a control link to remotely control another amateur station. See 47 C.F.R. § 97.213(a). These transmissions are usually brief and not frequent. Because auxiliary stations transmit point-to-point, they can be engineered to a specific path, thereby avoiding interference to stations that are not in the path. In contrast, repeater stations transmit point-to-multipoint over a large coverage area, and retransmit multiple stations’ communications signals, which ordinarily are of much greater duration than an auxiliary station’s control transmissions. Consequently, operation of repeater stations in the 145.5-145.8 MHz frequency segment would create much greater potential for interference to weak signal communications than operation of auxiliary stations.

⁹ See Petition at 3.

¹⁰ See Amendment of the Amateur Service Rules to Provide For Greater Use of Spread Spectrum Communication Technologies, *Report and Order*, WT Docket No. 97-12, 15 FCC Rcd 1481, 1491 ¶ 25 (1999) (*Spread Spectrum Report and Order*); see also Amendment of Parts 2 and 97 of the Commission’s Rules Governing the Amateur Service to Authorize Operation on Additional Frequency Bands in American Samoa, *Order*, 14 FCC Rcd 20595, 20607 ¶ 23 (WTB PSPWD 1999).

¹¹ See *Spread Spectrum Report and Order*, 15 FCC Rcd at 1491 ¶ 25 (citing 47 C.F.R. § 97.101(b), (d)).

Based on the record before us, we conclude that the petition has not set forth sufficient reasons for the Commission to propose to amend Section 97.205(b) to allow repeater stations to transmit in the 145.5-145.8 MHz frequency segment. Consequently, we deny the Petition.

Accordingly, IT IS ORDERED that, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), and Section 1.401(e) of the Commission's Rules, 47 C.F.R. § 1.401(e), the Petition for Rule Making filed on October 10, 2007 by Ken D. Chafin and Leon J. Brown IS DENIED.

This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131 and 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Scot Stone
Deputy Chief, Mobility Division
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