

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)
)
AMERICAN RADIO RELAY LEAGUE, INC.)
)
Emergency Request for a Temporary Waiver of)
Section 97.307(f) of the Commission's Rules)

ORDER

Adopted: September 5, 2019

Released: September 6, 2019

By the Deputy Chief, Mobility Division, Wireless Telecommunications Bureau:

1. *Introduction.* We have before us a request from the American Radio Relay League, Inc. (ARRL), for a temporary waiver section 97.307(f) of the Commission's rules, in order to facilitate hurricane relief communications relating to Hurricane Dorian.¹ For the reasons set forth below, we grant the waiver request.

2. *Background.* Section 97.307(f) limits the symbol rate (also known as the baud rate) – the rate at which the carrier waveform amplitude, frequency, and/or phase is varied to transmit information² – for high frequency (HF) amateur radioteletype (RTTY)/data transmissions to 300 bauds for frequencies below 28 MHz (except the 60 meter band), and 1200 bauds in the 10 meter (28-29.7 MHz) band.³ The digital code used to encode the signal being transmitted must be one of the codes specified in section 97.309(a) of the Commission's rules, but an amateur station transmitting a RTTY or data emission using one of the specified digital codes may use any technique whose technical characteristics have been publicly documented, such as CLOVER, G-TOR, or PACTOR.⁴

3. In 2016, in response to an ARRL petition for rulemaking, the Commission proposed to remove the symbol rate limitations, which it tentatively concluded had become unnecessary due to advances in modulation techniques and no longer served a useful purpose.⁵ That proceeding is currently pending.

¹ E-mail from Dan Henderson, Regulatory Information Manager, ARRL to Scot Stone, FCC (Sept. 1, 2019 8:24 EDT) (Waiver Request); e-mail from Dan Henderson, Regulatory Information Manager, ARRL to Scot Stone, FCC (Sept. 5, 2019 10:55 EDT) (Waiver Extension Request); *see also* 47 CFR § 97.307(f). Because the request was received over the holiday weekend, the Mobility Division on September 1, 2019, granted a temporary waiver through September 6, 2019, by email. *See* e-mail from Scot Stone, FCC to Dan Henderson, Regulatory Information Manager, ARRL (Sept. 1, 2019 11:45 EDT). ARRL originally sought a 30-day waiver, but subsequently requested a shorter period in the Waiver Extension Request.

² *Amendment of Part 97 of the Commission's Amateur Radio Service Rules to Permit Greater Flexibility in Data Communications*, Notice of Proposed Rulemaking, 31 FCC Rcd 8485, 8485, para. 1 (2016) (*Baud Rate NPRM*).

³ 47 CFR § 97.307(f)(3), (4). In the 60 meter (5.3305-5.4064 MHz) band, there is no maximum symbol rate, but bandwidth is limited to 2.8 kilohertz for data and 60 hertz for RTTY. *See* 47 CFR § 97.307(f)(14).

⁴ 47 CFR §§ 97.307(f)(3), (4), 97.309(a)(4). CLOVER, G-TOR, and PACTOR are different techniques used to increase the efficiency of digital communications. *Baud Rate NPRM*, 31 FCC Rcd at 8486, n.18.

⁵ *See Baud Rate NPRM*, 31 FCC Rcd at 8458, para. 8.

4. ARRL states that it is shipping PACTOR radio modems to the southeastern United States for use in connection with Hurricane Dorian disaster relief communications.⁶ It requests a waiver of section 97.307(f) to permit higher speed data transmissions in order to facilitate more effective communications. In particular, it seeks a waiver to permit transmissions using PACTOR 4 that exceed the current symbol rate limitations.⁷ The request is made by ARRL to enable licensed radio amateurs who are directly involved with HF hurricane relief communications to better serve the affected areas.⁸

5. *Discussion.* To obtain a waiver of the Commission's rules, a petitioner must demonstrate either that (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the present case, and that a grant of the waiver would be in the public interest; or (ii) in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.⁹ We conclude that ARRL's request should be granted.¹⁰

6. ARRL has already dispatched communications equipment to conduct disaster relief communications.¹¹ While PACTOR 4 modems are downward-compatible with slower speed versions of PACTOR, ARRL asserts that the higher data rates offered by PACTOR 4 emissions are critical to sending hurricane relief communications.¹²

7. We conclude that granting the requested waiver is in the public interest. Hurricane Dorian has caused (and is likely to continue to cause) substantial damage in the southeast United States, and communications services will be disrupted.¹³ Thus, to accommodate amateur radio operators assisting in the recovery efforts, we grant ARRL's waiver request until September 13, 2019. The waiver is limited to amateur radio operators using PACTOR 4 emissions in the continental United States who are directly involved with HF hurricane relief communications. Grant of this waiver is without prejudice to the resolution of the pending rulemaking proceeding.

8. 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 1.925 of the Commission's rules, 47 CFR § 1.925, the Emergency Request for a Temporary Waiver of Section 97.307(f) of the Commission's Rules filed by the American Radio Relay League, Inc. on September 1, 2019 (as amended on September 5, 2019), IS GRANTED as set forth above.

⁶ See Waiver Request.

⁷ See *id.* PACTOR 4 has a symbol rate of 1800 bauds. *Baud Rate NPRM*, 31 FCC Rcd at 8486, para. 6.

⁸ See Waiver Request.

⁹ 47 CFR § 1.925(b)(3).

¹⁰ We granted similar requests in 2017 and 2018 with respect to hurricane relief communications for Hurricanes Maria and Florence, respectively. See *American Radio Relay League*, Order, 32 FCC Rcd 7428 (WTB MD 2017); *American Radio Relay League*, Order, 33 FCC Rcd 8758 (WTB MD 2018).

¹¹ See Waiver Request.

¹² See *id.*

¹³ See, e.g., FCC Chairman Pai Issues Update on Hurricane Dorian Preparation Efforts (Sept. 2, 2019), <https://www.fcc.gov/document/chairman-pai-issues-update-hurricane-dorian-preparation-efforts>; see also *Public Safety & Homeland Security Bureau Extends the Disaster Information Reporting System for Hurricane Dorian*, Public Notice, DA 19-876 (PSHSB Sept. 4, 2019).

9. This action is taken under delegated authority pursuant to sections 0.131 and 0.331 of the Commission's rules, 47 CFR §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Scot Stone
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