

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

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

ORDER

Adopted: August 30, 2021

Released: August 30, 2021

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

1. *Introduction.* We have before us a request filed by the American Radio Relay League (ARRL) for a temporary waiver to permit amateur data transmissions at a higher symbol rate than currently is permitted by section 97.307(f) of the Commission's rules, in order to facilitate hurricane relief communications within the United States and its territories.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 as follows 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. ARRL seeks this waiver for those licensed radio amateurs who are directly involved with hurricane relief via High Frequency Amateur Radio using PACTOR and VARA modems in communications within the United States and its territories relative to impending Hurricane Ida.⁵ ARRL states that Section 97.307(f) of the Commission's Rules prevents the use of certain protocols capable of higher data rate emissions in the High Frequency (HF) bands and many Amateur stations active in emergency communications preparedness are capable of using. They also point out that the past FCC temporary waivers have allowed such protocols in similar events including Hurricane Laura, Hurricane Maria, Typhoon relief communications in Hawaii, and Hurricane Dorian.

¹ E-mail from David Siddall, on behalf of the ARRL to Thomas Derenge and Roger Noel, FCC (August 27, 2021 17:44 EDT, amended August 29, 2021 19:28 EDT) (Waiver Request); *see* 47 CFR § 97.307(f).

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 C.F.R. § 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 C.F.R. §§ 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* Waiver Request.

4. ARRL's request also states that trained amateur radio operators with communications equipment are actively preparing to assist radio amateurs involved with the Amateur Radio Emergency Service (ARES) working with federal, state and local emergency management officials to assist with disaster relief communications related to the arrival on the Gulf Coast of Hurricane Ida.⁶ This equipment includes radio modems that are capable of the higher data rates that are not currently permitted in the rules, yet are critical to sending hurricane relief communications including lists of needed and distributed supplies.

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.⁷ We conclude that ARRL's request should be granted.

6. ARRL stands ready to assist the area impacted by Hurricane Ida to conduct disaster relief communications.⁸ While certain radio modems with higher data capabilities are downward-compatible with slower speed versions of modems operating under similar protocols, ARRL asserts that the higher data rates offered by the newer protocols are critical to sending hurricane relief communications.⁹

7. We conclude that granting the requested waiver is in the public interest. Hurricane Ida has caused significant damage, including disruption to electricity and communications services.¹⁰ Thus, to accommodate amateur radio operators assisting in the recovery efforts, we grant the ARRL's waiver request for the period of 60 days from the date of this *Order*. The waiver is limited to amateur radio operators in the United States and its territories using publicly documented data protocols that are compatible with FCC rules, with the exception of the data rate limit waived here, for those directly involved with HF hurricane relief communications.

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 on August 27, 2021, IS GRANTED as set forth above.

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

Thomas Derenge
Deputy Chief, Mobility Division
Wireless Telecommunications Bureau

⁶ See Waiver Request.

⁷ 47 CFR §§ 1.925(b)(3).

⁸ See Waiver Request.

⁹ See *id.*

¹⁰ See FEMA, President Joseph R. Biden, Jr. Approves Emergency Declaration for Mississippi (Aug. 28, 2021), <https://www.fema.gov/press-release/20210829/president-joseph-r-biden-jr-approves-emergency-declaration-mississippi> (last visited Aug. 30, 2021) and FEMA, President Joseph R. Biden, Jr. Approves Major Disaster Declaration for Louisiana (Aug. 30, 2021), <https://www.fema.gov/press-release/20210830/president-joseph-r-biden-jr-approves-major-disaster-declaration-louisiana> (last visited Aug. 30, 2021).