

Frequently Asked Questions about the ARRL “Symbol Rate” petition, RM-11708

Q: Why did the ARRL think the petition to eliminate regulation by symbol rate was needed?

A: HF data emissions are now limited to symbol rates that are based on the long-obsolete technology of the early telephone modems. Regulation by symbol rate is not appropriate for present and future generations of digital data modes because it prohibits the use of some new, efficient modes but does not prevent the introduction of digital data modes that have much wider bandwidths than are now in use.

Q: The petition proposes to substitute a bandwidth limit of 2.8 kHz for the symbol rate limits – why 2.8 kHz and not some other figure?

A: It accommodates the digital data modes that are now in widespread use while limiting future development to the bandwidth of an SSB transceiver.

Q: Would the proposed revision have any effect on phone or image operation?

A: No. There is no proposal to revise any rule applicable to the phone and image subbands.

Q: Would the proposed revision have any effect on digital voice operation?

A: No. The FCC rules define digital voice as phone.

Q: Does the proposed revision permit wider use of automatically controlled digital stations?

A: No. Section 97.221 would remain unchanged.

Q: Does the proposal expand the frequencies on which unspecified digital codes may be used?

A: No, although an error in the original ARRL filing suggested otherwise. As soon as it was discovered, this was corrected through the filing of an erratum.

Q: Is the proposal a precursor to large-scale regulation by bandwidth?

A: No. The proposal is to regulate the bandwidth of a single type of emission (data) in order to narrowly and surgically eliminate an outdated limitation in the FCC rules which precludes radio amateurs from experimenting and contributing to the radio art as fully as they should. RM-11708 specifically does not propose to group emissions of similar bandwidth together.

Q. Did ARRL evaluate the potential for interference to RTTY, CW and narrow bandwidth data modes that could result from an increase in wider-bandwidth data stations?

A. Yes. Data emissions, both narrow and wide bandwidth, are permitted now throughout the data/RTTY sub-bands including the parts where CW operation takes place. Frequency selection is done on the basis of band planning, not FCC regulations. Nothing in the petition would change that except that data emissions using unreasonably large amounts of bandwidth would no longer be permitted. If there is an overall increase in data operation in the data/RTTY subbands as the result of eliminating the symbol rate limit, that outcome can and should be accommodated by band planning and cooperative sharing arrangements that hams have always been urged to use.

Q. Shouldn't 2.8 kilohertz bandwidth data emissions be restricted to the band segments where phone and image communications are permitted?

A. While some commenters have argued for that, it is far beyond the scope of the ARRL petition. It would require a complete reordering of the regulatory scheme for the HF bands which would be controversial, to say the least.

Posted February 19, 2014.

Questions and comments may be directed to ARRL CEO David Sumner, K1ZZ at dsumner@arrl.org