

In my view, the optimal maximum bandwidths for frequencies below 29 MHz are 800 Hz at for the narrow-band segments (usually the lower frequencies in each band) and 8 kHz for the wide-band segments (usually the higher frequencies in each band). 800 Hz allows for CW, RTTY, PSK31, MFSK16 and other modes used for keyboard-to-keyboard communication and slow-speed image communication and file transfer. 8 kHz is consistent with limits in other countries (when they exist at all), allows existing AM stations to continue to operate and allows simultaneous voice/text/image communication using analog or digital modulation.

A small area (10-20 kHz) for automated stations must also be established in the wide-band segments of HF bands to allow for PACTOR-3 and similar protocols used for message forwarding as they are invaluable during emergencies where the normal communications infrastructure is compromised.

If the rule changes are to extend beyond 29 MHz, narrow-band segments consisting of the lower 300 kHz of each VHF band should be established allowing a maximum bandwidth of 8 kHz. This provides protection for the existing weak-signal segments. The wide-band segments should allow 200 kHz maximum bandwidth between 29 and 225 MHz. This allows for existing terrestrial FM voice and medium-speed data stations and existing 50-200 kHz wide FDM transmitters in orbit for the amateur satellite service.

Any bandwidth limits above 420 MHz must be 25 MHz or greater to accommodate existing stations using IEEE 802.xx data transmission and AM and FM TV. No band segmentation is required. In my opinion, no bandwidth limits are required above 420 MHz as long as emissions stay within the designated bands for the amateur radio service. Rules for SS and pulse emissions would remain unchanged.

The rule changes outlined above should solve problems more effectively than those currently in RM-11392 and decrease regulatory burdens in the future.

(2nd amendment to comments)