

This comment addresses the AM, SSB, DSB, and ISB modes.

Some examples of these modes are:

1. A3E (AM and “DSB suppressed carrier”)
2. J3E (SSB)
3. H3E (AM-equivalent mode using a carrier and one sideband)
4. B8E (ISB, two analog channels)
5. B9E (ISB, one analog and one digital channel, such as voice and SSTV or PSK31)

There are many more combinations of possible AM, SSB, and ISB that the examples above, but those are shown to define the general kinds of signals I wish to address. I am addressing mainly analog modes (voice, SSTV), but when it comes to bandwidth, it does not matter in what kind of manner the signal is modulated as long as no interference is caused.

At least one commenter has proposed to get rid of A3E. I am in favor of the keeping of A3E mode.

The ARRL does not address H3E mode. This mode is half the bandwidth of an AM signal, therefore the necessary bandwidth is $9\text{KHz} / 2 = 4.5\text{KHz}$.

I am opposed to eliminating the ISB modes as the ARRL petition proposes to do:

1. The ARRL presents no technical or engineering reason why the ISB mode should be eliminated, but appears to ask for this on a whim. Indeed, the ARRL proposes to eliminate ISB, but the ARRL not address DSB suppressed carrier, which is also seldom used and consumes the same bandwidth. This does not make sense because ISB can deliver twice as much intelligence as DSB. The ARRL advocates experimentation and progress. This is the reverse of what they propose with regards to ISB. ISB is a higher technology than DSB and yet they would dispose of it and leave us to DSB which is more difficult to demodulate.
2. I agree that ISB is seldom used, but it is a valuable mode since one sideband can be used for voice and the other for SSTV or narrow band data. Unless I am mistaken in my understanding of the rules, this is not forbidden.
3. There is a good technical reason to continue to permit ISB. When there is a difficulty with propagation, selective fading can be overcome by this mode to some degree, and does so without the encumbrance of a carrier. The ‘other’ sideband can also be turned off at the transmitter when not needed.
4. ISB is no wider than a standard A3E transmission (it is actually narrower than some of the old AM equipment) and there is no evidence that ISB causes hardship

or interference to anyone. There are quite a few Harris and other HF sets in use that are capable of this mode. The users of these sets have invested a lot of time and expertise in working with them, and should not be cut off merely because the mode is not used very much.

Let ISB stay on the phone bands with the AM and SSB.

For purposes of “necessary bandwidth”, I propose that the FCC keep things simple and treat ISB and DSB like AM.