

Report of the Ad-Hoc Part 97 Committee

2010 Annual Meeting

ARRL Board of Directors

At Minute 32 of the 2008 Second Meeting the Board adopted the following motion:

32. On motion of Mr. Bodson, seconded by Mr. Norton, it was VOTED that the ARRL Board of Directors establishes an ad hoc study committee to review Part 97 of the rules governing the Amateur Radio Service to ascertain what rule change(s) would be beneficial to promote wideband digital modes while at the same time minimizing potential interference to narrowband modes.

An ad-hoc committee, consisting of the President, Vice Presidents and General Counsel, was subsequently appointed by the President and met once, just prior to the March, 2009 Executive Committee meeting in Denver, to address the Board's directive in the motion.

The promotion of wideband digital modes in the Amateur Radio Service (tempered by the absolute need to protect incumbent analog narrowband operations, particularly at HF), has been a topic of great debate for many years, and one that the ARRL has tried to address throughout the years with varied success. While wideband analog modes, such as AM, are currently used by radio amateurs, any mention of a wideband digital mode, specifically in the HF region, generates concern almost to the point of mass hysteria. The primary force behind this concern is the unknown impact on existing communication modes, both narrow band digital and narrow and wide band analog modes used by radio amateurs. It is further complicated by our limited spectrum resources, particularly in the 1.8 to 30 MHz region and by shared use of the higher bands with government operations.

Most recently, ARRL petitioned the FCC to change the Part 97 rules to regulate the modes used by amateurs by necessary bandwidth rather than emission designator. The purpose of that filing was specifically to encourage experimentation with digital modes, while protecting incumbent analog operations. There is not now a great deal of wideband digital operation. That effort was not successful, however, and frankly it is not clear, although commendable in its own right, why the board has chosen to once again address the accommodation of wide band digital modes through regulatory means.

Nevertheless, the committee researched the rules in an attempt to identify possible solutions as per the motion.. Rather than provide one recommendation to submit to the Board, the committee concluded the best approach would be to provide the Board with a number of options that could be considered, should the Board decide to take further action. Those options, in no particular order of priority, are:

1. **Do not change the Part 97 rules but rather promote wide band digital modes in the UHF/Microwave spectrum.**

The common place of immediate thought for wide band digital modes is in the amateur HF bands. The amount of allocated spectrum in this region is small and narrowband analog Amateur use is high, thus complicating expanded use and experimentation. On the other hand, the amount of spectrum available to the Amateur Radio Service at UHF and above provides practically a free range for activity. In fact, radio Amateurs have a primary allocation from 2390-2400 MHz that is literally begging for this sort of activity, and is in jeopardy as the result of insufficient band loading.

ARRL has attempted to promote similar activity in the region before, most recently with its High Speed Multi-Media (HSMM) Working Group. That working group got off to a great start but sadly lost its focus, felt it should dictate policy to the ARRL Board and spent its last days trying to convince the board of their desire to obtain a waiver to utilize the 10 meter band for its work. The unfortunate outcome was that the good work that began in developing high speed digital systems in the UHF/Microwave region died.

The motion that directed this study did not confine our review to HF, therefore option 1 is that reasonable accommodation currently exists in the Part 97 rules, and amateur equipment is available, to allow significant experimentation and expansion of wide band digital modes on higher frequencies without impact to narrow band or weak signal activity and ARRL should aggressively promote such in this region.

2. ***Modify 97.305 and 97.307 to accommodate other emission types.***

One of the limiting factors to the enhancement of wide band digital modes, particularly at HF, is confusion over emission designators and whether they apply to a “new” or expanded digital mode. This has historically caused problems in properly defining a new wide band digital mode and how it can fit into an existing emission designation. Providing some form of relief or expansion to these designators may facilitate increased experimentation and use in the amateur bands. Please note, however that this does not necessarily accomplish the second part of the Board’s concern, which is the protection of narrowband analog operation.

3. ***Revisit “Regulation by Bandwidth”***

This must remain an option for the board to consider anytime it wants to consider promoting not just wide band digital modes, but existing and future modes as well. It eliminates the confusion that exists with emission designators and if tailored properly will protect narrow band users.

These options are the full range of approaches that the committee could conceptualize to enhance wide band digital modes. Option #1 is best suited to protecting incumbent narrowband analog operation. Option #3 is perceived by at least a vocal minority of amateurs to jeopardize incumbent narrowband operations. If Option #3 is selected, the Board is urged to develop a strategy to address this perception.

Overall, should the board choose to proceed further with this concept at the present time, it is recommended they select the best possible option and select an appropriate committee to pursue that specific route.