

HF Band Plans and the ARRL's "Big IF"

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The ARRL's HF Band Planning Committee released a draft in early February of its proposals for realigning both FCC allocations on 80 meters and informal band plan changes on most other HF bands (see details of the plan on page 9). The proposal is really intended to address three separate issues, as well as three pending rule-making proposals the League has filed with the FCC, at least one of which is nearly ready to start collecting Social Security. The committee provided a two-week comment period, which will be expired by the time you read this, but we'll ignore the calendar and comment anyway.

We are generally supportive of two elements of the band plan proposal, have questions about the third and have to wonder if the whole thing is premature, unless part of its intent is to push the FCC to finally take action on the three proposals on which it is based. Those proposals are RM-11708, the so-called baud rate proposal, on which the Commission has been sitting for seven years; RM-11759, which proposes a realignment of the CW / phone segments of 80/75 meters to allow more space for digital modes — awaiting FCC action for four years; and the much more recent RM-11828 — filed one year ago this month — proposing a significant expansion of Technician privileges on HF.

The League's band plan proposals are based on two somewhat shaky assumptions in this regard: 1) that the FCC will actually begin moving on these proposals soon by issuing Notices of Proposed Rulemaking (or perhaps grouping them into a single NPRM, following the committee's lead here); and 2) that the FCC will adopt the proposals essentially unchanged after going through the rule-making process. It is very rare that the Commission does that. In light of these assumptions and the uncertainty of their outcome, this entire exercise may be premature, but then again, the committee needs to start somewhere so it can hit the ground running with a final proposal once the FCC does take action (if the FCC does take action).

Timing questions aside, the proposal aims to address several distinct, although occasionally overlapping areas of concern: 1) the need for HF spectrum on which hams may experiment with wide-band digital modes; 2) incompatibility between certain digital modes and resultant interference when they are packed too closely together; 3) expanded frequencies for automatically-controlled digital stations, or ACDS, another term for Winlink over-the-air email; and 4) a desire to encourage more Technician Class licensees — who now make up more than half of the U.S. amateur population — to upgrade to General or Extra by offering them meaningful voice and data privileges on portions of several HF bands.

We'll start with the last one ... We enthusiastically support the so-called "Technician Enhancement" proposal. There is nothing better for creating excitement about DXing and other great benefits of HF hamming than providing a taste of it in a meaningful way. And that means a variety of mode privileges, not just CW. Yes, Techs and Novices have voice and data privileges on parts of 10 meters, but we're at the very bottom of a weak sunspot cycle and all indications so far are that the next cycle will be very similar to the one that's ending. That means 10 meters isn't likely to be a hot DX band except maybe around the peak of Cycle 25, in roughly five or six years.

Thirty years ago, Novice Enhancement breathed new life into the HF bands, the amateur radio industry and the ham community overall. Another such boost is needed now, and this proposal will provide it, by offering Technicians not only data privileges on 80, 40, and 15 meters but voice privileges at the top ends of those bands as well. Face it, outside of contest weekends and the FT8 segments, most of the HF bands are pretty quiet right now. Giving access to another 388,000 already-licensed hams to operate phone and data modes such as FT8 will only be good for amateur radio.

The success of FT8 for DXing during the sunspot doldrums proves that digital modes are now permanent fixtures on the HF ham bands. Once limited to VHF and UHF because of wide bandwidths, new narrow-band digital modes have made a huge impact on the HF bands. But hams are supposed to be experimenters and one of the negatives of such modes as FT8 is that they only permit pre-programmed information exchanges and aren't suitable for ragchewing or other activities, such as exchanging photos. Hams are still experimenters and the focus of much experimentation today is on the digital modes. There is a need for designated space within our HF bands to experiment with wider-bandwidth modes that may be capable of transmitting more information or exchanging information more quickly. We don't know what will result but we need to provide space for finding out. Since many digital modes are not compatible with each other, setting aside specific subbands for them in a voluntary band plan is a reasonable approach. Unfortunately, creating enough space for this work on 80 meters will require reallocating half of the current 100-kHz-wide exclusive Extra phone subband. While we never like to see anyone lose any privileges on any band, 50 kHz of Extra-only phone space is still much more than is currently available on most other HF bands. This seems like a reasonable compromise and we support this part of the proposal as well.

Finally, we have the question of ACDS, automatically-controlled digital stations, and we still have as many questions about this facet of ham activity as we have in the past. Two main areas of concern about ACDS are their interference potential when simply starting to transmit at a designated time on a set frequency without knowing if there is already activity there, and questions about message content. The League committee addresses the first issue, by recommending the use of CW IDs for easy station identification as well as implementing a "listen-before-transmitting" protocol to reduce interference potential. Both of these would go a long way toward resolving the first concern. The second is more challenging, and perhaps not within the purview of a band planning committee. There have been — and continue to be — significant concerns that the Winlink radio email system (which is really what ACDS is all about) in many cases is used by sailors to conduct everyday email communications, including business communications, in an effort to avoid the high cost of satellite-based email. This is a problem from two perspectives: 1) As we all know, using amateur radio for business communications is illegal, and 2) international rules specifically prohibit the use of amateur radio as a way to avoid commercial communication services.

Why is significantly more spectrum space needed to accommodate these questionable transmissions? To what extent will the use of Winlink for communications of dubious legality expand once additional frequencies are made available for ACDS? To what extent will that crowd out other uses of our shared frequencies (ACDS stations are not frequency-agile)? And why is the ARRL so invested in expanding the use of ACDS on the HF bands? This last question is one we first asked seven years ago when RM-11708 was filed, and one we are still asking now. What is the benefit to ARRL and/or the broader amateur community? We're not sure there is one or that significant expansion of ACDS band segments is justified. That really is our only quibble here and, again, it is beyond the purview of the band planning committee, which is simply working with the proposals already before the FCC for consideration.

Other than wishing that more time was provided for the amateur community to comment on these proposals, we believe they represent a good start and hope that they help spur the FCC into finally moving on the three proposals wrapped up inside the draft band plans. Using this as a base, final modifications following FCC action should be able to be implemented quickly.