

COOPERATION ON THE FUTURE OF THE 600-METER BAND

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Two groups are interested in preserving the 600-meter band (495 - 510 kHz) that was formerly used for maritime telegraphic communication. The "Amateur" community would like to see the 600-meter band become an amateur band. The "Maritime" community would like the band to remain silent except for use by the historical maritime CW stations (HMS). Of course, it isn't quite this simple and a number of us have interests in both areas. The start of the new year seems to be a good time to suggest we all think about cooperating and working together to preserve this historic piece of spectrum.

First here are some basic facts:

(1) The 600-meter band *was* for a century an extremely important maritime-communication band. However, the SOLAS treaty and subsequent creation of the GMDSS ensured the demise of maritime communication on 500 kHz. 600 meters has since become virtually abandoned for real maritime communication and is now used only for occasional special-event transmissions by organizations such as the Maritime Radio Historical Society (MRHS).

(2) There is *no* chance that real maritime communication at 500 kHz will be revived. The equipment costs 100 to 1000 times as much as UHF equipment, and trained operators would be needed.

(3) The spectrum at 500-kHz is very valuable and has many potential uses, including DGPS, traffic-information service, broadcasting, homeland security, and NAVTEX. None of these potential users will tolerate sharing the band with historical maritime stations.

(4) Occasional use by historical stations is not going to hold the band against commercial pressures and other national interests.

(5) No regulatory agency - national or international - is going to allocate useful frequencies for "silence." Our FCC would no doubt like to find a way to auction it off! I expect that in one or two more WRC cycles, we will see a reallocation.

(6) In the USA, 435 - 495 kHz has been claimed by the USCG for their new HA DGPS. The bands from 190 to 285 kHz and 325 to 435 kHz are being used by aeronautical NDBs. The band from 285 to 325 is filled with marine DGPS beacons. Thus the only MF range that can potentially be reallocated to amateurs are 495 - 505 kHz internationally plus 505 - 510 kHz in Region II.

Now I think all of us - both maritime and amateur groups - can agree that we do not want to see DGPS, broadcasting, TIS, or NAVTEX in the 600-meter band. Most all of us would like to see CW and historical maritime communication able to continue in this band. With this in mind, it makes sense for the amateur and marine factions to become partners in preserving the band against other interests.

Amateurs will get at most a secondary allocation at 600 meters. That means when special-event maritime transmissions are underway, amateurs will have to stay out of the way. As a practical matter, most of us will be trying to listen for the special-event transmissions instead of operating.

Once there is an amateur allocation at 600 meters, the ARRL, RSGB, WIA, and other national amateur organizations will police the band against interlopers and protect it against other would-be users. This will be to the advantage of both the maritime and amateur groups. The combined resources of the amateur organizations (ARRL, RSGB, WIA, RAC, etc.) far exceeds that of the maritime community (e.g., MRHS). Thus making an ally of the amateurs should give the maritime community clout that it would otherwise not have.

The presence of amateurs in this band will ensure that CW will be heard into the foreseeable future. No other service will use CW. I doubt there will be a lot of commercial ham rigs capable of operating in this band, so I do not see it becoming crowded like some of the HF bands.

There will, of course, need be some sort of a band plan for amateur use. Exactly what will depend upon how much spectrum we could get. As a minimum, a band plan will need to provide for the possibility of marine operation at 500 kHz and to separate amateur beacons, CW, and digital transmissions. It may make sense to leave 499 - 501 for the historical maritime stations, or perhaps it could be also be used for amateur calling, emergency comms, and bulletins, much as its original use.

Amateur use of a small band like 600 meters will have to be limited to CW, PSK-31, and other narrowband modulations, which can easily be kept out of the way of maritime communications. However, it may be possible to arrange for some other types of transmissions on a special-event basis. For example, during annual "maritime or Fessenden days," MCW and AM could be allowed.

The most important reasons for amateurs to be able to use 600 meters is to provide reliable regional communications in an emergency. To this end, it should be able to arrange permission for "cross-service" communication with the historical maritime stations, resulting in a larger and more effective emergency-comms capability. This capability will be a much more important reason to retain a frequency allocation at 500 kHz than are either the occasional historical operations or ordinary amateur operations.

Future operations of maritime-historical-radio organizations such as MRHS requires a continuing source of new members, as there will be no more maritime radio officers trained in the use CW. Shared use of the 600-meter band with amateurs will be an effective way of interesting amateurs in maritime-radio history. These amateurs will help expand the historical organizations in the near future and ensure their continuance in the more distant future.

The maritime community may agree that amateurs would be better than the other would-be users, but prefer to wait until there is a real threat from one of the other would-be users. This is a risky approach. If we wait until some commercial or government entity develops an interest in this frequency band, it is going to be difficult or impossible to stop them.

We can work together to preserve this historic frequency band - or we can squabble among ourselves and loose it to another service that neither of us likes. My hope in writing this is that everyone involved can see the need for cooperation and the mutual benefit in sharing the band. When it comes time for the ARRL to file a petition for amateur access, my hope is that MRHS and others in the maritime faction will file supporting briefs so that together we can preserve this historic piece of the spectrum.