The Birth of Ham VHF FM - The 1960s History

Including some copies of the publications that helped get it started

By the mid-to-late 1950s a few hams were already beginning to convert crystal-controlled commercial FM gear for 6 and 2 Meter operation. By 1960 it was apparent that changes in FCC regulations were going to make much of the FM gear in use by commercial services obsolete. High-Band gear and items like this Low-Band Mobile Receiver were already showing up as surplus with a glut sure to follow. Unfortunately, when picking frequencies for new FM nets localities were choosing frequencies seemingly at random leaving the gear useless when traveling.

In the early 1960s several hams working for GE's Mobile Radio Department in Lynchburg, VA recognized the absurdity of this and set about to bring some standards to the frequency selection process. A national first-frequency of 146.94, with other channels spaced multiples of 60 KHz from it and a minus 600 KHz separation for the corresponding repeater input frequency were promoted for 2 Meters. 146.94 MHz was chosen because it was the highest 60 KHz channel that Technician Class hams could operate on at that time as well as being closest to the original 150+ MHz operating range of the commercial gear. Six Meter operation was already going strong in the mid-west on 52.525 MHz and it was promoted as a first 6 Meter channel.

The GE hams published mimeographed "FM Nets" and "FM News" to help spread the standards. Warren Middleton (SK), W4DYE (later W8CXD) - George Rose (SK), W4GCE - Seymour Paul, K4FSU and Tom McKee, K4ZAD were the most active in this effort.

Despite some WBFM activity as early as the mid-1950s (Chicago, Indiana, Syracuse and perhaps others) page 95 of the November 1961 QST has probably the first ARRL recognition of VHF Wide-Band FM via converted surplus commercial gear. But, despite our continued efforts and the ever-increasing VHF FM activity, the ARRL was mute for all of 1962 and part of 1963. However, by unanimous vote at the May 1963 ARRL Board meeting the Board directed the listing of 52.525 and 146.94 in each QST as Suggested Operating Frequencies for Wide Band FM. See the Board meeting minutes in the July 1963 QST, page 63. The first listing of the frequencies is on page 99 of the same issue.

As FM operation spread across the country 2 Meter repeaters appeared on many 60 KHz spaced channels, and soon others got involved in the standardization efforts which evolved into the VHF/UHF band-plans in use today.

Recently some copies of "FM Nets" and "FM News" were found and scanned. The early issues were composed on a typewriter and the later ones on a Teletype machine using punched tape to make typing-error corrections quick and to easily make the additional mimeograph masters needed for the larger circulation. Reproduction was by a labor intensive mimeograph process using trays of blue gel which would only produce a limited number of readable copies from the master. The blue print on many pages is quite faded and restoration efforts were not always as successful as one might desire, but here they are in PDF format. These documents may appear directly in your browser or as PDF downloads.

FM Nets was the first publication in 1960. The first issue is missing. Beginning with the third issue of FM Nets 52.525 MHz and 146.94 MHz were promoted as first FM frequencies to be activated in new locales. Most of the detailed net data has been omitted from these PDFs:

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Publication of FM News followed in 1962. Issue 4 is a superb remote-station and repeater dissertation by Warren, W4DYE-W8CXD.

FM_News_1 FM_News_2 FM_News_3 FM_News_4 FM_News_5

1961 promotional efforts also included a Why These Frequencies sheet, and two small handout sheets intended for distribution at club meetings and hamfests. One promoted FM, 52.525 MHz, 146.94 MHz, and the other urged FM users to contact ARRL to get the frequencies mentioned monthly in QST. As noted above, by mid-1963 these efforts were successful in getting the ARRL involved in the standardization of VHF-FM channels.

Hope you enjoyed this bit of Ham-Radio history.

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