

Fixing 40 Meters

As anyone knows who has ever listened to the 40-meter band at night, the upper two-thirds of the band contains broadcasting stations. What are they doing there, in what ought to be a ham band?

As are most stories having to do with international frequency allocations, it's a long one. We may as well begin with the Washington International Radiotelegraph Conference of 1927, the first such conference after the opening of the short waves. At the time the majority of the world's radio amateurs were in the United States, and the backing that they enjoyed from their government was in sharp contrast to the situation in much of the rest of the world. In Chapter 18 of *Two Hundred Meters and Down*, the definitive history of the early years of Amateur Radio, Clinton B. DeSoto recounts in detail how a 300-kHz allocation, 7000-7300 kHz, was won for amateurs worldwide and was successfully defended at the Madrid Conference in 1932.

While amateurs in the Americas have managed to hang onto those 300 kilohertz ever since, we have not been as fortunate in the rest of the world. Our losses there have reduced the utility of the band in this hemisphere as well. The problems began at the Cairo Conference in 1938. Reflecting the rising tensions in Europe and an increasing desire to disseminate propaganda, the Fascist government of Italy proposed reallocating parts of the amateur bands at 7 and 14 MHz for broadcasting. There was enough support for the Italian proposals that the best deal our defenders could make was for shared use of 7200-7300 kHz by amateurs and broadcasting, with broadcasting permitted only outside the Americas.

There were hopes that after World War II the band would be put back into rightful order, but they were dashed by the Cold War. Indeed, the situation became worse at a series of Atlantic City Conferences in 1947. There, the broadcasting band outside the Americas was extended down to 7100 kHz, with 7150-7300 kHz exclusively for broadcasting and 7100-7150 kHz shared between amateurs and broadcasting (the arrangement in a few countries was more generous to amateurs).

At Geneva in 1959, the present allocations table for 7100-7300 kHz – broadcasting in Regions 1 and 3, amateur in Region 2 – was adopted. Twenty years later at WARC-79, despite a US proposal for a worldwide amateur allocation of 6950-7250 kHz, amateurs in Region 2 almost lost our access to 7100-7300 kHz; it took the unanimous support of the countries in the region just to maintain the *status quo*. Our disappointment was assuaged somewhat by the gains we achieved elsewhere in the HF spectrum.

The next international conference to deal with the band was held in Torremolinos, Spain, in 1992. There, the US proposed a worldwide amateur allocation of 6900-7200 kHz as one of a package of proposals for expanded broadcasting bands. In the end, there was insufficient support for broadcasting expansion below 10 MHz to free up the spectrum required for such a realignment. The best that could be accomplished at Torremolinos was the adop-

tion of a recommendation that the alignment of the amateur allocations around 7 MHz be placed on the agenda of a future conference.

Which brings us to Istanbul and WRC-2000. As reported beginning on page 51 this month, WRC-2000 recommended that 7-MHz realignment—“harmonization” was a term often used—be placed on the agenda of WRC-2003. The ITU Council will determine the final agenda, but at this point it is best to assume that the Council will accept this recommendation and to plan accordingly.

The objective of the International Amateur Radio Union (IARU) is unequivocal: “The amateur service seeks an exclusive, worldwide allocation in the vicinity of 7 MHz of no less than 300 kHz.” When the allocation was first made in 1927, amateur stations worldwide numbered in the tens of thousands. Now they number in the millions. Broadcasters are fond of speaking of their unfulfilled requirements for spectrum between 4 and 10 MHz, but in this frequency range the amateur service has access *only* to the 40-meter band. The band is essential for disaster communications in the daytime over paths of 300 to 1,000 km and frequently is the only band available for intercontinental communication at night. Fitting the wide and growing variety of amateur uses into the 100 kHz that is clear of broadcasting interference defies rational band planning.

On the other hand, the other HF services are not acknowledging any reduction in their own spectrum requirements. The maritime service has made a major commitment to satellite communication but has not volunteered to vacate HF. Military and disaster relief organizations continue to rely on HF fixed and mobile allocations. The aeronautical service is moving toward greater use of HF for data communication. HF broadcasters are hoping to compete with satellites and the Internet by leapfrogging from the noise and distortion of double-sideband AM to a brave new digital world, and doubtless will argue that they will need more spectrum to accomplish the transition.

Thus, the final gavel at WRC-2000 in Istanbul did not simply mark the end of an important four-week conference. It also marked the beginning of preparations for an even more important one, three years hence. Lest we forget, 40 meters is not the only major agenda item we face at WRC-2003. Among others, we have to defend against Little LEOs and deal with proposals to rewrite Article S25, the section of the Radio Regulations that deals specifically with the amateur and amateur-satellite services.

Achieving the best possible outcome for Amateur Radio at WRC-2003 will require a sustained, coordinated, worldwide effort. It is exactly the sort of mission for which the IARU was created 75 years ago. It is also a perfect example of why the ARRL established the Fund for the Defense of Amateur Radio Frequencies to support spectrum defense, domestically and internationally. Your ARRL membership and your contributions to the Fund are essential elements to our success. —David Sumner, K1ZZ