

Spectrum Wars

C.M. Stanbury II takes a look at government agencies attitudes to radio band allocation.

WITH ALL THE recent controversy about pay and satellite TV, some issues important to sound broadcasting have been largely neglected. Up until about 1980 most of the band between 1615 and 1800 kHz was empty. It was mostly used by low powered Hi-Fix, mini-Fix and other similar radiolocation systems based on the Decca phase-comparison principle. A handful of cueing units for mobile broadcast facilities were licensed while frequencies just above 1610 kHz were (and continue to be) favorite spots for North American pirate broadcasters. The situation provided an unprecedented opportunity for expansion of the standard AM Broadcast Band and, according to a 1981 international treaty, broadcast stations in the Americas will shortly be assigned frequencies up to 1700 kHz.

One reason the CRTC, the FCC and other governing bodies require broadcast stations be licensed is that, supposedly, spectrum space is limited. Thus it follows that, if we value democratic principles such as freedom of speed and diversity in the arts, a prime objective of government regulatory agencies should be the clearing (when technically possible) and allocation of additional broadcast frequencies. Yet the CRTC, following the lead of the U.S. Federal Communications Commission, went ahead and allowed portable telephones to operate on these frequencies.

Although these units are flea-powered, many can be heard at least a half mile away. As monitored at our location (between two small neighboring southern Ontario towns) much of this band can now often be described as a jungle both day and evening. The channels assigned for portable phone use include 1670, 1700, 1730 and 1760 kHz. Higher and lower frequencies have been reported but not observed by the author. Certainly, if the CRTC and the FCC go ahead with the new broadcast allocations, there is going to be chaos between 1660 and 1700 kHz.

CRTC, Phone Home

Aside from the interference, thousands and thousands of phone users all over North America will no longer have even remotely secure facilities. This band is



readily tunable on many "shortwave" receivers - especially those of higher quality - and conversations go out over the air even when only the non-portable phone is in use unless the portable base transmitter is detached. A majority of base units do use narrow band FM but some actually employ standard amplitude modulation. And even tuning in on NBFM is not that big a problem for dedicated snoops. The emphasis is definitely on narrow; therefore it's only necessary to tune a little off the nominal frequency to listen in. One has to monitor more carefully and the range is reduced slightly when this approach is used. Nevertheless such portable phones should have been assigned to VHF or UHF frequencies.

Obscuring this band's future still further, the FCC has continued to make new assignments to services which should in

fact be moving to other frequencies. Most bizarre of these is the licensing of a Group W Satellite News Channel cueing unit on 1622 kHz in the Washington, D.C. area. Although power is reportedly less than 100 watts, it was heard a number of times last winter as far away as southern Ontario. I wonder how many of SNC's technical directors realise their behind-the-scenes instructions can be heard several hundred miles away?

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