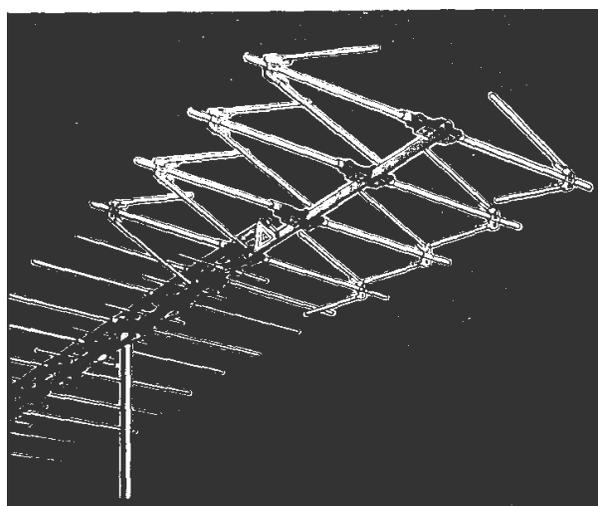
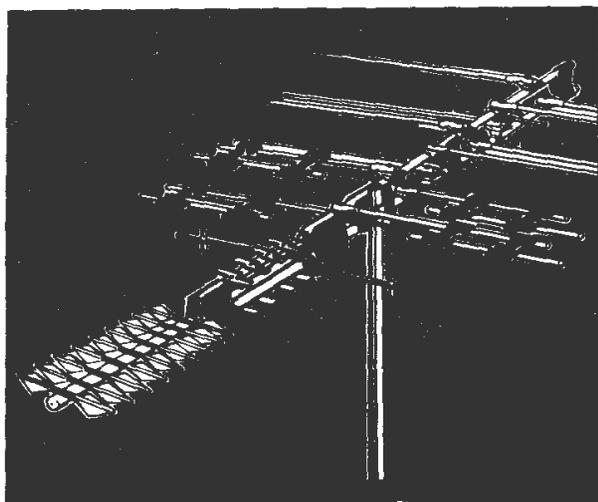


Channel Master **QUANTUM** vs. **CROSSFIRE**



One question that newcomers to TV DXing frequently ask more seasoned enthusiasts is about "the best" VHF TV antenna to use. Short of stacking separate high- and lowband antennas, you are obviously going to need one of those loop (17 feet or more) multi-element arrays. Since we're talking about what's considered "top-of-the-line," availability is often poor, price is high, and the antenna will be both bulky and heavy.

If you carefully compare spec sheets and catalog data, you can narrow it down to a few choices. WTFDA's TV STATION GUIDE is a good starting point, as it lists addresses of all the major antenna makers—and a few of the not-so-major ones, too. Then too, look at what veteran TV DXers like to use—most of them have spent years searching for the ideal single VHF antenna, and have definite opinions on what works the best for DXing.

You may soon find it narrowed down to a few choices. There's the Winegard CH-5200, the Jerrold VIP-307, the Channel Master 1110, and Channel Master's 3617B, an updated version of their old 3617, considered a classic by TV OX enthusiasts in the 1960's.

Each of these four models has strong points. In the first analysis, some have more shortcomings than others. The VIP-307, for instance, has what is supposed to be the highest measured forward gain at its peak highband channel—a whopping 12.9 dB, compared to a dipole. That doesn't make up for a poor performance on the lowband channels, according to several DXers. On the other hand, Winegard's CH-5200 excels on lowband channels, but does not have the edge on the Channel Master models at highband. Additionally, a few OXers have commented that they feel the Winegard construction is not quite adequate to take heavy weather.

Lately, it seems that the two Channel Master models have been competing with each other for OXers' attention, and that's where controversy can start. In fact, Channel Master points out important differences in their own literature, and they are the kind of differences a OXer should be aware of. What it seems to boil down to is this: the 36178 has better forward gain than the 1110, especially at lowband, where it can be needed for meteor scatter DXing, but is unnecessary for E-skip. But the Quantum 1110 has truly fantastic front-to-back ratio performance (CM claims as high as 35 dB, as opposed to 20 dB or less in the more classical long loq-yaqi Crossfire models). One veteran TV DXer even claims that the nulls on the 1110 look more like those on a UHF dish!

In the real world of TV DXing, what looks good on the spec sheet doesn't always give you the best results. If you decide to try a 36178, your forward gain will be about the best you can get with a single oh 2-13 antenna, but when the channel is loaded with CCI from several directions, the narrower beamwidth of the Quantum 1110 may be the only way to identify it.

-Bill Thompson December 1982 VHF-UHF Digest page 3