

## CHARLIE'S WHISTLE

By

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Invariably, when Charlie attends a club meeting, meets his friends for coffee, cruises through a flea market with his dealer friend Mike or simply listens to a local repeater while driving around the valley, he can't help but hear the locals talking about what's popular in their blog world. Since the first of the year, a few locals from around DX Hill have traveled to at least one of the conventions in Orlando, Dayton or Dallas. At all these events, the major manufacturers have introduced their latest line of HF radios including some that are very high end indeed. In fact, these units have succeeded in very effectively teasing the curiosity of many of us, which of course was the intent of the manufacturers.

Never the less, some hams with serious bank balances have rationalized their way into buying one or in a few cases, two or more of these gleaming rocket ships that can leap tall buildings in a single bound. Other fearless buyers with plastic have bravely run up their card accounts into five figure balances. Without exception, they have studied the manufacturers' claims of their product's multiple roofing filters, hundred of memories, computer ready controls and interfaces, real time visual display of all signals on the band, automatic operations and their ability to do everything but work a new entity for you while you shower and dress for work. One even has an output power level of up to 600 watts, comparable to that of a linear amp. By the way, does anyone reading this know if DXers knew how to work anyone through strong adjacent channel interference before roofing filters were introduced? Was it impossible to do or simply require operating skill? What is a roofing filter anyway? More on roofing filters later in this story.....

As anyone knowing him might expect, Charlie didn't get caught up in the considerable hype and pages of claims being touted by the dealers. Back in the dark ages, post World War II when Charlie was starting out in ham radio, the wartime military trained operators who were coming home in great numbers and setting up their stations told young Charlie that he must train his brain how to selectively listen to wanted CW signals and disregard unwanted signals. He must not expect the radio to do the work for him. That's why early professional and top military operators would often monitor their assigned watch channels with as much receiver bandwidth as they could handle so they wouldn't miss any calls that were close to but slightly away from their frequency. They had trained their brains to listen only to certain signals out of the dozen or so that were transmitting. The best of them could mentally switch between the different signals, effectively copying all of them without moving the tuning knob or even lifting a finger. It was beautiful to watch.

Today, when newer contest operators are on a crowded band, their natural impulse is to tighten up their filter bandwidth. This may get them through a difficult QSO, but almost always at the price of a few lost contacts with stations calling you a few hertz off frequency. Skirt selectivity is so sharp in the new 500 and 250 cycle filters that another station calling nearby would be unheard. The better operator will run with filters set as wide as he or she can stand and train their ears to do much of the filtering work. They learn to manage RF gain and AGC so that they don't miss a single caller. Yes, it's difficult to do, especially to someone who has become accustomed to eliminating static with signal processing, adjacent signals with roofing filters and preamplifiers to simply make everything louder. Could it be that the many 30 and 40 year old operators of today have attended too many rock concerts and permanently damaged their hearing with the 100+ db of so called "music" being blasted into their ears for hours when they were teens and 20 year olds? Recently, the rumor running around the country stated that well known

top contest and DX operator Fred Laun, K3ZO had finally purchased a filter for his HF radio. Fred has a pair of the most effective ears in ham radio. But aging catches up with everyone, even top ops like Fred and our mentor, Charlie and accommodations must be made.

In the last few years, much has been made of the roofing filter. This device is not anything new. As long as we have had receivers with multiple IF stages, we have had a first IF stage. Many medium to high end receivers for decades have had some sort of crystal or mechanical filtering device that was intended to keep unwanted signals out of the signal path of the receiver. Charlie is sorry to break the news to our new hams that “roofing filters” are not the latest invention of the brain trust that supplies new innovations to Dayton. There’s little to debate the fact that a skilled operator with average equipment in the shack will outperform top notch equipment being operated by an average operator who is still trying to figure out how to use the radio’s many features.

Of course, in either example, a good antenna is a required item of equipment and its importance cannot be overstated. There is no single item that can deliver more improvement for the dollar than the antenna system.

The idea of having a first IF stage filter has been around since the 50s when radio greats Art Collins, Bob Drake, Bill Halligan and others capitalized on the leaps made in the previous decade when they developed equipment for the military. Many receivers from that era still perform beautifully today. There’s no substitute for using the best. But, Charlie will be quick to tell you that “the best” radio doesn’t have to have a five figure price tag. Those of us who are still around will be keeping score and will see how many FTDX-9000s or IC-7800s stand the test of time and are still considered top radios fifty years from now as the Collins 75A-4 is today.