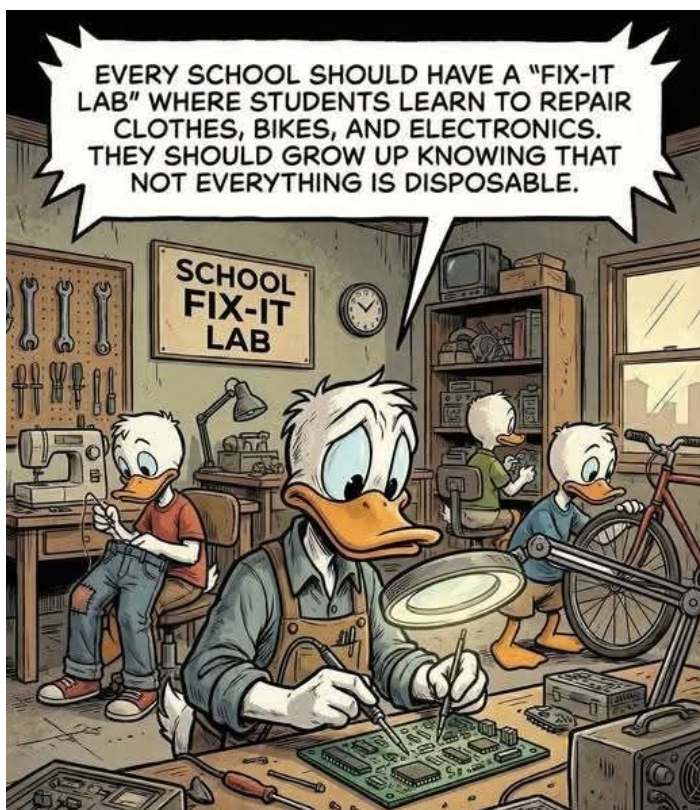


Editorial – Repair, replace, consequences



The alternatives to getting your stuff fixed are either living with it in the damaged state or tossing it. If the damage is cosmetic (scratch, dent, bend), we can often continue operating in spite of the blemish. But when the problem affects actual operation, we need to decide whether to fix the device or junk it. In today's disposable world, it's become too easy to simply discard a highly advanced piece of ham gear, especially if its replacement costs very little.

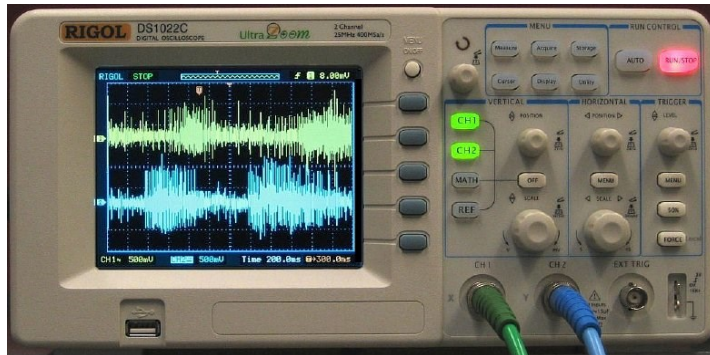
In spite of our knowledge and experience, many of us simply don't have the right equipment to help us diagnose problems. This issue explores a variety of [test instruments](#) that might help you troubleshoot a problem with an electronic circuit or other radio feature. Still, the more involved and technical the problem, the more costly the instrumentation you need to locate the trouble, and the more technical skill and education is required to even know how to use them.

Some hams are very skilled at using an oscilloscope, for example, but to understand what they're seeing and what they *should expect to see* in a particular powered circuit might require some extensive training. Furthermore, today's electronics are not the discrete components of yesteryear, but are often advanced consolidations of numerous micro-electronics built into integrated circuits that are inexpensive yet



difficult to troubleshoot. The solution in those cases is typically to replace the problem chip.

This repair approach is not unique to amateur radio, but is typical of repairs made to appliances, homes, and vehicles. For example, if an auto mechanic discovers that an electric window assembly has a broken wire inside, instead of fixing the 62¢ wire, he chooses to replace the entire \$450 assembly, which requires less skill and a little less of his time, and therefore labor. The immediate cost to the vehicle owner is that of the assembly, but the societal cost is the investment in the “replacement” mentality.



When something suddenly stops working, it's easy for many of us to throw up our hands and replace the piece of gear. Sometimes, however, a little troubleshooting on your part can go a long way, and maybe save you a little cash on Amazon. If your transceiver stops working, is it really damaged, or did you simply forget to connect your coax? Maybe you accidentally bumped and pressed the VOX button by mistake. This month's [cover story](#) discusses some things that you might be able to repair on your own without a lot of skill or knowledge.

Anything to add? Email editor@utaharc.org