

## **Volunteer Kitting – A New Experience – Part 1**

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In the Winter edition of T5W I mentioned that I was a kitter for Four State QRP Group, 4SQRP, ([www.4sqrp.com](http://www.4sqrp.com)) which technically is not a club. As the name implies, the members are more of a following “of having fun with QRP.” They also fund and organize an annual conference in Branson, Mo called OzarkCon.

Partial funding for OzarkCon is the result of the selling volunteer designed kits which appeal to builders and operators. Currently nine different kits are available from their website.

This article will give a little more detail than the previous article about the kitting process. There is some necessary duplication of content to make this article flow. The goal is to give a word picture of what kitters go through to bring you a bubble envelope of building joy.

Each 4SQRP kit has a volunteer kitter. Sometimes the actual kitting could be a kitting party with several people involved. Even so, there is one person who will handle receiving parts, packaging, and follow through with received orders.

The volunteer kitter receives thousands of components and hardware is received direct from the electronic parts distributors. One of my kits, Stand Alone Variable Crystal Oscillator (SAVXO) contains about 40 components. My other kit, QRP Power/SWR Meter (QRPOMETER) has over 80 components, plus hardware. Parts are usually ordered for 100 kits.

The 4SQRP buyer orders the components that are shipped directly to the kitter in various configurations: reels, strips, loose in plastic bags. PCBs arrive direct from China. A reel of .01uf caps with the kit requiring 5, that's 500 caps on a reel. requiring snipping the reel into

100 groups of 5. I might have a dozen reels on which to repeat this process. If the component is shipped loose, parts are counted as bags are filled.

Somewhere along the process, an inventory of parts is made so each kit will contain the necessary parts! I have made the mistake of failing to inventory the parts as I received them, only to discover later that a component or two was back ordered.

The QRPOMETER (QRPO) has static sensitive ICs, so all transistors and ICs are placed in a foil wrap which requires special preparation. Cutting strips of foil, dumping parts on a metal cookie sheet or large sheet of foil, grouping and gently wrapping them, ending up with 100 foil packs.

After all the preparation has been completed, it's time to fill containers, mini-parts bins (which are actually food saver containers from Wally World), and place them orderly on a table.

The kitting of components depends on not being distracted while stuffing the poly bags. It is easy to skip a parts bin or drop a component in an adjacent bin. It requires establishing a process or routine so this does not happen. Missing parts is an inconvenience to the kit builder and the kitter.

In the case of the SAVXO, I place all components in snack baggie. I heat seal the components in the lower half and place the PCB in the upper half. The kitting is completed and placed into bubble envelope for shipping.

For the QRPO, components are placed by type into plastic poly bags and heat sealed in levels. For example: first level, 1W resistors; next, multi number of the same value; next remaining values, etc. Hardware goes into a separate poly bag.

For the the QRPO, two plastic poly bags contain all the components and hardware. The next step is to place two PCBs and a panel meter in a bubble envelope. Once I have 100 envelopes, I add the component bags and seal the envelopes for shipping.

Stamps are bought in advanced based on the weight of the package. The cost of the stamp is determined by obtaining the average weight and calculating the postage. It is too much of a hassle to weigh individual packages at a counter. If I have 5 or less kits to mail, I will take them to my mailbox. Otherwise, I take them to the post office.

Kits are ordered from countries other than the USA, like Germany, UK, Japan, Australia, France, etc. Packages going overseas and to Canada require filling out a customs form which can be done online. The form is printed and taped to the package and mailed from my mail box or dropped off at the post office...no standing in line.

The follow up article in the next T5W will contain some of the experiences that I have had with builders asking for help! It will also contain some troubleshooting experiences.