

Putting the Heathkit Mohawk on the 12 Meter Band

by

Glen E. Zook, K9STH

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I recently obtained a Heathkit Mohawk receiver to complete my "original Heath twins" station (Apache, Mohawk, SB-10, and Warrior). Although the receiver was in fairly good condition, there were a few problems. This receiver had been originally owned by a university radio club station (the name of the university shall remain anonymous to protect the guilty!). First of all, it was dead! Not a sound came from the speaker. Turning the receiver on its side, it was obvious that someone had been trying to repair the audio output section. Frankly, I think my 2-year old granddaughter could do a better job of soldering!

After getting that straightened out, I went looking for the original problem. Believe it or not, the standby / receive switch had gone bad. That was easy to replace. However, in the person's (or persons') zeal to get the receiver going again, the main dial drum had been broken. Not cracked, two large "chunks" were completely missing. Fortunately, these "chunks" were on opposite sides of the drum.

Now, there are just not that many Mohawk dial drums out there these days. So, I resorted to scanning each band on my computer. Then, I printed out each band. Next, I used a light box to trace the calibration onto another piece of paper. The step that followed was to rescan this hand-created drawing and add the actual frequencies using Adobe PhotoShop.

After completing each band, they were printed out and then "cut and pasted" onto another piece of paper and "rescanned". This would be my "master" for producing an "overlay" for a new dial. Fortunately, a "tail piece" for a sink drain is the correct diameter for the dial drum. A trip to the local home improvement center produced a suitable length for less than 2 dollars.

While I was involved in the new dial, it suddenly struck me that just maybe I could include one, or more, of the WARC bands. But, how to do it? I thought and I thought. Could I easily modify one of the less used bands? Or, build a simple converter? Yes, it was definitely possible.

Lets see. How about the converter band? With the Heath XC-6 converter it covers 6 meters. With the XC-2 converter it covers 2 meters. Just what would it take to cover 12 meters? I thought about even making a new dial position for this band, but since I had already made the dial I decided against it. Therefore, I decided to make a converter just for the 12 meter band that would use the same calibration as the 6 and 2 meter bands. I would just have to mentally convert the frequency readings. The 12 meter band covers 24.890 MHz to 24.990 MHz. Therefore, 52.890 MHz (or 146.890 MHz) would equal 24.890 MHz. Thus, 52.990 MHz (or 146.990 MHz) would equal 24.990 MHz.

Not that hard to remember!

In addition, being that I am a firm believer in the principles of the "conservation of my finances and my energy" (read "cheap and lazy"), I just had to keep the costs to a minimum. Thus, I finally came up with the following circuit.

(Antenna) -----(Receiver)

Fooled you, didn't I!

The converter band on the Heath Mohawk receiver already covers the 22 MHz to 26 MHz band. This, of course, includes the 24.890 MHz to 24.990 MHz band. All you have to do is to put the bandswitch in the converter position and you automatically have a 12 meter receiver!

Now, I know that no one likes an educated donkey. However, how many of you Mohawk receiver owners even thought of using the converter band on 12 meters? Not that many, huh! I thought so!