An RF Patch Panel for Transceiver and Antenna Interfacing
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I recently built a cable hanger for my work area using 1-1/2" x 1-1/2" x 1/16"aluminum right-angle stock (about $8 for 4-feet from my local home improvement store). As I had about three feet remaining after completion of that project, I looked for other applications for the remaining aluminum stock. As I do a lot of experimenting from HF-440 MHz, I use a number of radios (with their associated RF outputs) to cover this frequency range. It occurred to me that an RF interface panel would really clean things up for me, as well as make access to the multiple RF interfaces very convenient. Photo A shows a portion of my set-up, and Photo B shows a close-up of the interface panel. I used UHF feed-thru panel connectors (RF Connection UG-363/TEF) for HF- through 6-meters, and N feed-thru panel connectors (RF Connection UG-30/IMP) for 144-, 220-, and 440-MHz. Besides the RF interfaces, I also added a 1/4" stereo jack (Mouser 502-12B) for connecting various HF, VHF and UHF PowerMaster couplers, and test jacks (Mouser 530-105-0802-1 & 530-105-0803-1) for measuring the coupler detected voltages. I also added an in-line voltage/current meter (AstroFlight 101QRP Whattmeter) and a PowerPole DC interface (Connex Electronics 1462G1 clamp and red/black PP-30-KIT).

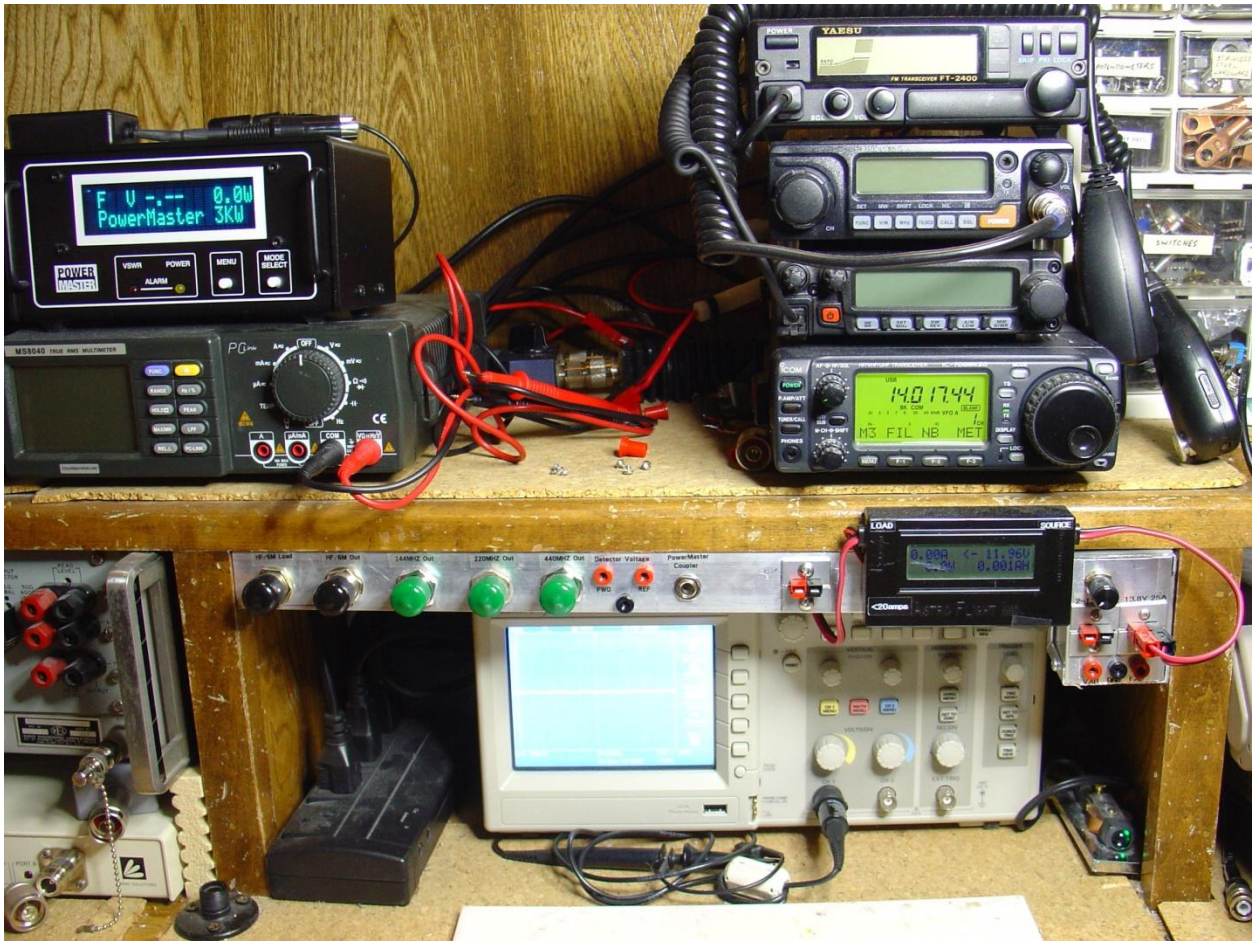

Photo A: Authors test set-up

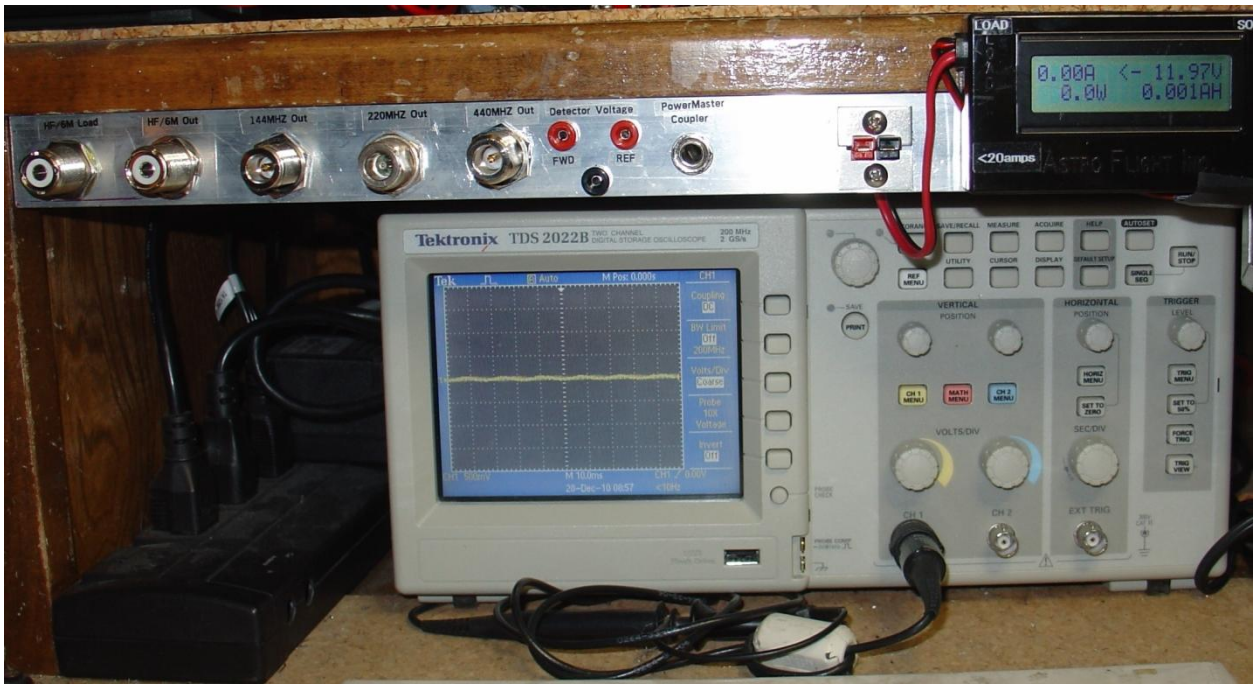

Photo B: Closer view of the interface panel

This interface panel has made my RF measuring and experimenting processes much more convenient. And while I built this for my experimental lab bench, a very similar interface panel could be built as a patch panel for interfacing multiple transceivers and antenna feeds.