

include a UHF/VHF diplexer (center) for a dual-band antenna and an RF sampler for SWR measurement. The parts for each enclosure were cut from a single piece of #20 AWG step flashing using ordinary tin snips and bent into shape using a small ball peen hammer, wooden block, a 4 inch vise and pliers. A light coat of clear Krylon preserves the shine of the finished enclosures.

I have had no mechanical difficulties or electrical problems using this method for several years. Give this method a try and you will have a rugged, good-looking and functional enclosure that will last for many years. — 73, *Steve VanSickle, WB2HPR, 3010 Tibbits Ave, Troy, NY 12180, wb2hpr@arrl.net*

KEYLESS CHUCK ADAPTER

◇ I'm not a regular tool guy but I do have a battery powered drill with a 3/8 inch chuck, which I find handy for crafts work. My drill uses a "Jacobs Keyless Chuck," which depends upon a friction fit to hold a bit. Often when working on some hard material, the bit will get stuck in the material and, when I pull the drill away, the bit stays in the material. It takes a pair of good pliers to remove it.

So I was surprised to learn that Jacobs also manufactures keyed chucks that can be installed on the drill's keyless chuck. My Jacobs keyed chuck is a Model 30247 Multi-Craft chuck and should be available in any well equipped tool store.

The replacement chucks attach to the drill using a single machine screw, which you'll find deep within the biting edges of the chuck. It took me a few minutes to realize that the screw has a left-hand thread; meaning that when loosening the screw, it must be turned clockwise. The replacement chuck comes with sufficient information to permit it to be attached to your drill. — 73, *Arthur McAlister, KD6SF, 7570 Dartmouth Ave, Rancho Cucamonga, CA 91730-1534*

"AMPLIFIER"

◇ I wanted to find a nice enclosure for my 3CX1200A7 amplifier and power supply that would have a clean look. Traditional rack enclosures are massive, ugly and expensive. I discovered that a standard legal sized file cabinet can be purchased for just over \$100 at local office supply houses and on the used market for considerably less. A legal sized file cabinet makes an attractive, inexpensive and practical enclosure for amplifiers and power supplies.

A file cabinet has the advantage of slide out drawers that allow your electronics to be serviced in place or easily removed (see Figure 3). You can optionally lock the drawers for safety reasons.

The back of the cabinet can be cut to allow easy access to cables (that may have to be unplugged in order to slide out the equipment.) Cooling can be accomplished from



Figure 3 — The amplifier mounted in a drawer of the legal "amplifier" cabinet.

the back of the cabinet. I used a push-pull set of fans to keep the amplifier cool. You can also exhaust hot air through a grill on top of the cabinet.

I added an overlay layer of 14 gauge aluminum plate for front panel strength but it might not be needed in your application. The bottom drawer houses a heavy power supply. [Tipping hazard: In using this method be sure there is enough weight in the lower drawers to stabilize the cabinet or bolt it to the floor. — Ed.] The power supply is built on a piece of 3/4 inch plywood and lowered into place. This is a must because the metal is too thin to support heavy transformers.

I still have two drawers left for future expansion or for storage of manuals, logs or QSLs. — 73, *Jack Morgan, KF6T, 2040 Pheasant Hill Ln, Auburn, CA 95602-9673, kf6t@arrl.net*

NEATER PROJECT WEATHERPROOFING

◇ Hams often use common hardware-store silicone sealant (RTV) to weatherproof their radio projects. It's waterproof, durable but very messy. An easy way to keep it from being lumpy and ugly on your projects is to thin it before application.

A 50-50 mix of the sealant with turpentine, paint thinner or lighter fluid works well. Squeeze a tube of sealant into a pint glass jar with a good lid, add the solvent and stir thoroughly. You now have a thick "paint" that applies easily with a brush, stays in place, covers well and flows out nicely. I use it for many projects, for example, to weatherproof and hold the turns of a home-brew 40 meter coaxial trap.

The only shortcoming is that the cure time is much longer for the thinned sealant — a day or so. But once exposed to the air the sealant becomes weatherproof in a couple of hours. Just let it finish curing and harden

further in service. In the jar the mixture remains liquid and won't cure. And by the way, you can get the sealant off your fingers and the paint brush with turpentine as well. — 73, *John E. Portune, W6NBC, 1095 W McCoy Ln Spc 99, Santa Maria, CA 93455-1105, w6nbc@arrl.net*

HANDY CONTINUITY TESTER

◇ Many of the problems the "handyman-ham" encounters around the home, shack, boat or

automobile fall into the category of "Is there continuity?" Sure, one can pull out the multimeter and switch to the resistance mode to check the continuity of a circuit but a meter may not work in an awkward location. A garden variety code practice oscillator, such as described in many *QST* articles, offers a very useful alternative. Simply replace the connection to the key with a couple of tinned leads and use the tone from the oscillator as an indication of circuit continuity.

Quite often in transceiver hookups, we find that we have to either determine or verify the connections between a multicircuit plug or socket and the wires from the cable connected to it. Using the code practice oscillator to determine continuity is particularly valuable in this application because you do not have to be looking at a meter (or light) when attempting to also hold the wires on to the two ends of the circuit. You can keep your eyes on the connections and just listen for the tone from the oscillator as you search out the relationship between the socket pins and the wires. Of course, always check that the power is off when doing continuity checking. — 73, *Ed Sack, W3NRG, 1780 Avenida Del Mundo Unit 40, Coronado, CA 92118-3002, esack@pacbell.net*

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