



# Antique Radio

## CABINET REFINISHING

By Marc Ellis

Last month, we completed the restoration of a Zenith Model 7S232 "shutter-dial" chassis that was begun in the August issue. I certainly enjoyed doing the work, and I hope that you all enjoyed reading about it. Unfortunately, the set's cabinet also requires quite a bit of attention. (And cabinet refinishing is my least favorite radio-restoration activity.) The radio was damaged in a small, but violent, gas-furnace explosion while it was possessed by its previous owner—which is the only reason he was willing to sell it!

Besides blowing out the speaker cone (which has since been repaired) and charring the grille cloth, the explosion also completely ruined the finish on the 7S232's cabinet. It looked as if it had been almost vaporized, exposing a rough, light-colored, wood surface. The wood seemed virtually grainless, suggesting that the grain had been a photographic one—as was common in sets of that era—and was lost along with the finish.

**Down to Basics.** That was discouraging, but obviously the only thing to do was to strip off the remains of the old

finish and reassess the situation. I hoped that, once cleaned up, the cabinet would take stain nicely so that a presentable replacement finish could be applied. Being grainless, it would lack the beauty of the old one. But it would at least be fresh and new, providing an attractive setting in which to install the restored chassis.

I used a methylene-chloride-based chemical stripper—the kind that applies as a heavy gel so that it will stick to the wood surface and do its work without dripping off. That stuff takes off old paint or varnish coatings as quickly as anything I know. And it's pretty nasty if you get it on your hands. It's not caustic like lye or acid, but will definitely sting, burn, and redden the skin.

I find it difficult to strip furniture while wearing gloves, so I try to work near a water tap. By rinsing my hands frequently, I can avoid most of the ill effects. It's also wise to use that type of stripper outside or in a well-ventilated area. While not noxious, the fumes are definitely not good for you—and can leave you with an unpleasant, hang-over-like feeling the next morning.

**Under the Sludge.** That type of chemical stripper turns the old finish to a kind of gummy sludge. The idea is to remove as much as possible with a broad putty knife, being careful not to scratch the wood surface as you work. The remains of the sludge are then mopped up with a cloth moistened in solvent—leaving behind a clean-as-a-whistle surface.

As soon as I began the first mop-up operation, I received a very pleasant surprise. A beautiful wood-grain pattern was being exposed; the grain was real after all! What had looked—prior to stripping—like an almost-bare grainless, wood surface was really a layer of old varnish, decomposed and whitened in some way by the effects of the explosion.

Working a little more enthusiastically, now, I quickly removed the rest of the old finish. Stripping may be a smelly, messy job, but it really doesn't take long to complete even for a large cabinet like this one.

I had noticed too late, by the way, that the recommended "mop-up" solvent for the particular stripper I was using was lacquer thinner. I didn't have any handy, but made do with mineral spirits instead. That worked fairly well, but tended to leave behind little grains of solid sludge. Those remaining grains were easily brushed off once the cabinet had dried, but I assume that they would have been dissolved and removed during mop-up had I used the correct solvent.

When I had finished, with the cabinet still damp from stripper and solvent, it looked almost as if I could apply the new finish without re-staining. But after overnight drying, the picture looked quite a bit different. The stripper had definitely removed quite a bit of the old stain, resulting in a pale, splotchy appearance. A new coat of stain would definitely be required, possibly with a preliminary bleach to even out the variations in color intensity. I'll report on my progress next month.

Several readers have written me interesting letters during the course of the Zenith restoration, and this seems like a good time to catch up with them. So let's open the mailbag!

**7S232 Clones.** One of the first communications I received was from John W. White, II, who says he has a Zenith 6S233 set that's very similar to my 7S232. The cabinet on his was warped, so he had to discard most of it. But he enjoys the set so much that he keeps the bare chassis on a bedside table for evening listening. John doesn't miss the cabinet too much, because he likes to



Shown here is the 7S232 now stripped of its finish. Much to my surprise and delight, the grain was not photographic, but really in the wood—just waiting to be brought out by an application of stain.



This is the preliminary stage in the construction of Dan Damrow's Crosley 50 replica. The fabricated parts for the coils and "book" condenser are in the foreground.



Compare the front of Dan's replica (left) with a similar shot of an actual Crosley 50 (right). Note the remarkable resemblance between the two!

watch the glow of the tubes at night.

Can anyone help John with a schematic for a "National Dobro Amplifier Model 6107A?" It was built by Webster Electric of Racine, WI and uses the following tubes: one 5Z3, two 2A3's, a 79, and a 56. He'd probably also be interested in a cabinet for his Zenith. Contact him at RD 3 Box 217, Claysville, PA 15323.

Frank De Stasi has another set very similar to mine, a Zenith 9S262. By a strange coincidence, his is also a bare chassis job. Like John, he doesn't allow the lack of a cabinet to keep him from enjoying the radio. But if you can supply a cabinet for Frank's set, write him at 769 Sybil Ave., San Leandro, CA 94577.

Frank enclosed a schematic of the set, which has a larger speaker than mine and a couple of extra tubes. Frank's set also boasts a motor tuning drive that allows him to go from one end of the dial to the other in seconds. And since the tuning dials on those radios are geared way down for good vernier action, I imagine that the motor drive comes in very handy.

Frank tells me that he purchased the 9S262 schematic, and many others, from Howard W. Sams & Co. Photofact Tech Services, PO Box 7092, Indianapolis, IN 46206. He reports that they can come up with schematics for many antique radios for a price of \$1.00 per copy and a \$2.50 handling charge (I assume the latter is a "per order" rather than "per copy" fee).

**Helping Hands.** John Fitzgerald (Middleton, WI) informed me that a copy of the 7S232's schematic can be found in Supreme Publications' *Most Often Needed 1926-1938 Radio Diagrams* on page 228. That useful book, as well as many of the other Supreme publications, is available as a reprint. Write ARS Enterprises, PO Box 997, Mercer Island, WA for a free catalogue. Here's another tip from John: He's found that

Omnitron Electronics, 770 Amsterdam Ave., New York, NY 10025 is a good source of hard-to-find tubes and other parts.

Keenan Whitley joins the growing group of people (see last month's column) who have written to say that the Zenith dial glass and dial belt that I was looking for could be obtained at Antique Electronic Supply, 688 W. First St., Tempe, AZ 85281. And he took the trouble to photocopy the entire A.E.S. catalogue for me.

Keenan went on to say that those with cabinet restoration problems might like to read *The Complete Manual of Wood Finishing* by Frederick Dighten. He says that it's an excellent book, and even contains a chapter on faking woodgrain finishes (in case you've lost a photographic one, as I suspected that I had before stripping my Zenith cabinet). It's published by Stein and Day, Scarborough House, Briarcliff Manor, NY 10510.



It's even more impressive to compare the rear view of the replica (top) to the actual set's (bottom). Except for the tube, Dan made every one of his parts from scratch.

Finally, Keenan suggested that I restore a really impossible set in the column, perhaps one with extensive lightning damage. Having just devoted several months worth of columns to a restoration, I'd like to deal with some other kinds of subjects for a while. But Keenan's suggestion did give me a terrific idea.

How about a contest where you readers submit photos and descriptions of your most messed-up radios? The one judged to be the best (worst, that is) would be restored in the column and then returned to the owner. Let me know what you think, but hold your entries. It will be several months before I'd consider doing that.

Mike Schulsinger (Springfield, OH) wrote to correct a boo-boo I made in the September column. I referred to the broadcast band dial of the 7S232 as covering a range of 55-170 kilohertz; the range is really 550-1700 kilohertz. Thanks for the correction, Mike!

**Waltons Reruns.** I finally received the 7S232 comment that I was hoping someone would send! It comes from Bill Morris (13901 Oakridge Dr., Carmel, IN 46032). Some years ago, I had seen a Zenith set that looked very much like mine used as a recurring prop in a TV situation comedy series. I wanted to mention it in the column, but couldn't quite remember the series name. Bill writes that the series was *The Waltons*, so keep an eye open for reruns in your area. You may be lucky enough to spot the Zenith, too.

Bill included quite a want list of sets and parts, and I'll see if I can fit them all in. Please contact him if you can help! He'd like to locate a Zenith Transoceanic Model 7G605 (1942 model); servicing information, an owner's manual, door assembly, and AM wave magnet for a Transoceanic Model 1000 (1957 model); Fisher 800B receiver; antenna coils for an Echo-phone EC-2; any Zenith shortwave receiver of the 1960's; and he wouldn't mind locating a 7S232, either!

**Criticism Accepted.** George Bidwell (La Jolla, CA) wrote to remind me that I still haven't discussed the reader comments received in response to the columns on the Crosley 50 (January and February 1988 issues). At the time, I postponed the discussion on that one-tube regenerative receiver; there was such a backlog of reader mail that the

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entire June and July 1988 columns had been devoted to it—and I still hadn't gotten to the Crosley material. Although they were interesting columns indeed, I felt that I should introduce more new material before discussing the remainder of the letters from the readers.

The Zenith restoration, just being concluded, was begun in August. A

couple of months into the restoration—just as I had begun to dissect the dial assembly to make the necessary repairs—George lost his patience. He accused me (writing tongue-in-cheek, I hope) of evading a good subject, the Crosley, in order to make a massive attack on a Zenith dial.

Well, George, I agree with you. The Crosley is a good subject, and the letters I've received about it (including your own long one) were very interesting indeed. And finally their time has

come! We'll get started right now, and present a few more of them next month, and go on into the following month if necessary.

**Wonderful Re-Creation.** I think the best way to get everyone back into a Crosley 50 mood is to show you the pictures Dan Damrow (Burbank, IL) sent me illustrating his incredible re-creation of that little set. And I'm also including matching photos of my own real Crosley 50 so that you can see just how faithful to the original this model is.

Every major component in the reproduction—with the exception of the vacuum tube—was built from scratch. That includes the "book-type" tuning condenser, with its hardwood leaves; the mica-and-bakelite bypass condensers; the grid leak; the tube socket (made of PVC pipe sprayed black); the "spiderweb" coils; and even the filament-control rheostat!

Dan likes building replicas because he feels that they have a clean, neat look that no 60-year-old set could ever attain. And when you realize that he retired after twenty-one years as an electronic technician for Argonne National Laboratories (the well-known atomic research facility), you'll understand that he has plenty of skills to support his hobby.

I've run pictures of Dan's sets in the column before. In fact, he was one of the first readers to respond to the column when I first began writing it a few years ago. And I hope I'll have the opportunity to show you more of his meticulous recreations in the future.

**So Long.** If you are one of the several people who wrote in response to the two Crosley articles, stay tuned for next month's column. I'll probably be quoting you then! In the meantime, keep those cards and letters coming. Your comments and ideas are always welcome. Write to Marc Ellis, *Antique Radios*, c/o **Popular Electronics**, 500-B Bi-County Blvd., Farmingdale, NY 11735.

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