

RESTORATION TOPICS

A New Cabinet and New Life for an Old Zenith Royal 750

BY DON WATSON

WEB EDITION

Sometimes we pass up the purchase of a radio because of the poor condition of the cabinet. In this article, Don Watson shows us how such a radio can be salvaged. His cabinet building and restoration techniques are applicable to many a cabinet restoration project. (Editor)

While at a flea market, my wife wandered off and found this Zenith transistor radio, a Royal 750, circa 1959, in need of a home. She wrapped it up and put it under the Christmas tree for my next restoration project. The set had a cowhide case and a classic grille made of diecast anodized aluminum. These grilles have not been made for many, many years and have been replaced by cheap plastic — just another reason to preserve this set.

I no longer have a photo of the set in its original state, but Figure 1, from Sams Photofact Picture Guide, Vol. 6, pg. 294, shows what it should have looked like.

The cowhide case was in very poor condition, but the radio had a lot of potential. It did work, but the volume was quite low. After I had changed the



Figure 1. A photo of a Zenith Royal 750 from Sams Photofact Picture Guide, Vol. 6, pg. 294.



Figure 2. The Zenith Royal 750 in its new wood cabinet. The grille, a classic of its day, is made of diecast anodized aluminum.

electrolytic capacitors, the radio sounded like new. I checked the alignment and found it to be spot-on, even after all these years.

Zenith radios were always known for their good sound and quality construction. This 8-transistor set features planetary drive tuning, a tuned RF stage, and a rather large audio output transformer driving a 4" speaker. I replaced the battery case with a 9-volt wall wart, since the set won't be used for portable operation.

BUILDING A NEW WOOD CASE

I decided to build a new wooden cabinet for this deserving radio, but I didn't want it to look as if I had put it in a cigar box. I had been successful building cathedral-style speaker cabinets in the past and decided to apply this technique to a new case, but with some degree of style. Figure 2 shows the result — the Zenith Royal 750 in its new wooden cabinet.

I like to use a 1/8" birch plywood that is meant for this application. The plywood can be obtained at woodworking or hardwood stores, but is not found at home centers. It was first necessary to build the frame for wrapping the wood around. I cut the plywood blank oversized and left it to soak in water for about four hours, weighted down and not allowed to float. The next step required extra hands to perform the bending process.

I clamped the plywood at one end, and then used a heat gun set on high as the steam generator. At this

point, the wood cannot be allowed to dry out, so that is where the extra hands come in. While I applied heat and some pressure, my wife was spraying both sides of the plywood to keep it wet. This is done very slowly, and you can feel the wood yield to the pressure as heat is applied. No glue was used to make sure there was no damage to the plywood.

Then I applied carpenter's yellow glue to the frame and wrapped the plywood around it. This takes about every clamp you can find. Be sure to use scrap wood blocks between the clamp and the wood to avoid dimples in the wood. (Figure 3 shows Don hard at work in the gluing and clamping process.)

I used only glue and no metal fasteners, and the plywood was allowed to dry overnight with the help of a fan. Figure 4 shows the plywood wrapped around the frame and clamped for overnight drying. Figure 5 shows another clamping setup.

The birch plywood takes stain very well, but you can also use a hardwood veneer like oak, walnut, or mahogany applied with contact cement. These veneers can be applied to other restoration projects for that like-new appearance.

For the finish, I like to use MinWax satin polyurethane in a spray can. Don't get discouraged after the first finish coat, since it doesn't always look great. Sand the first coat using a 400-grit sandpaper called "Between Coats." Wipe off the dust using a tack cloth and repeat the process three or four more times to build a professional looking finish. I prefer the satin or semigloss to a high-gloss finish. You can look at other pieces of furniture to get an idea of what look is best for your application.

These grand old radios will never be produced again and deserve your restoration efforts. Nothing seems to sound like that new/old wood radio.

Don Watson, a retired communications repair technician, has been collecting radios since the 1950s. He received his Amateur license at age 16 and has been an Extra Class Ham operator, K9DDO, since 1961. His hobby is restoring electronics and cabinetry.



Figure 3. A radio repairman hard at work — Don Watson labors at the gluing and clamping phase of building a cabinet for his Zenith Royal 750.



Figure 4. The wet plywood wrapped around the frame and clamped, ready to dry overnight and become the new cabinet.



Figure 5. Another photo of Don's clamp work.