

75A-1 Cabinet and Speaker

Over a year ago, a “new” Collins 75A-1 was acquired as a replacement for the 75A-1 s/n 4 that was “traded off” during the mid-1970s when you almost had to pay for someone’s gasoline to “haul off” the equipment. Now s/n 4 had been acquired in 1966 and was basically a “basket case”. However, with a little work that receiver was again operational.

This “new” 75A-1 came without a cabinet and, of course, in bad need of restoration. The restoration was, again, no problem. The antenna input coil had basically been destroyed, a couple of switches needed replaced, and, of course, all of the bathtub capacitors and paper type capacitors needed replacing as well.

There is one thing about the 75A-1 that was overlooked by Collins and that is the need for a crystal calibrator. All of the other “A” Line receivers do have provisions for a calibrator but there is none in the 75A-1. Since the OFF – FIL ON – B+ switch needed replacement, it was decided to replace this switch with a 4-position rotary and to add control of a crystal calibrator. This is just like the switch in the 75A-4. Now this 4th position is not marked on the front panel, but it is easy to remember that the unmarked position turns on the home-brew crystal calibrator now installed in the receiver.

The missing cabinet was thought to be no problem since a spare “A” Line receiver cabinet was available. This cabinet fits not only the “A” Line receivers but also the 51J- series and R-388 series. Unfortunately, having a spare cabinet did absolutely nothing for the 75A-1 because the 75A-1 requires a cabinet almost 1 inch deeper than all the rest of the receivers. After trying, for about a year, to find a 75A-1 cabinet, one just was not available. Therefore, it was decided to actually build a cabinet!

It would have been “nice” to have all the metal-working machinery available, like a shear and a box brake, to make a cabinet from metal. Unfortunately, these items were definitely not available so it was decided to make a cabinet from wood. While “at it”, it was also decided to make a speaker cabinet that at least remotely resembled the Collins speaker originally sold for use with the 75A-1.

“1 X 2” lumber, which is now .75 inch by 1.5 inches was used to form the basic frame of the 75A-1 cabinet and half-inch thick plywood for the base of the receiver cabinet and for the sides, top, and bottom of the speaker cabinet. Wood screws were used to hold everything together and a lot of “L” brackets used as well. For the top, back, and sides of the 75A-1 cabinet, “hardboard” (Masonite) was chosen. The particular hardboard chosen had a smooth side and a rough side. The texture of the rough side was not that far from resembling the finish on the “regular” “A” Line cabinets. So, the rough side was put on the outside of the cabinet.

Rather than attempt to cut an opening in the top of the cabinet, it was decided to put the whole lid on hinges. This allows full access to the receiver when the lid is lifted.

The speaker cabinet is basically the same size as the original Collins speaker. “1 X 2” lumber was placed on the inside of the plywood to form the front of the speaker to resemble the original speaker. There is room for a 10 inch diameter speaker in the cabinet and when one arrives from being ordered, it will be installed. For the meantime, an 8 inch speaker is installed.

After completion, both the cabinet and the speaker cabinet were painted with St. James gray paint. Black cloth was put across the front opening of the speaker cabinet.

The completed project doesn’t look bad. Of course, the cabinet and speaker are not “Collins”. However, considering the alternative (no cabinet), this alternative works out very well.

Following are photos of the various stages of this project.



Basic Frame, viewed from the front



Basic Frame, viewed from the rear



Cabinet with "hardboard" installed, viewed from front



Cabinet with "hardboard" installed, viewed from back



Basic Speaker, viewed from front



Basic Speaker, viewed from back



Speaker after prime and "crackle" applied



Speaker after painting and grill cloth installed



75A-1 and speaker on main console at K9STH