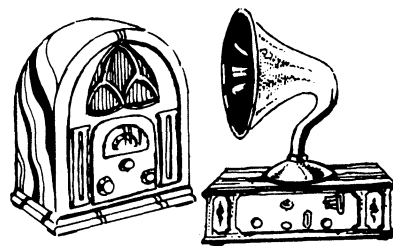


# Vintage Radio

by PETER LANKSHEAR



## Cabinet lacquering

Sooner or later the problem of cabinet refinishing has to be faced. Whilst retention of the original finish is to be preferred, some cabinets are in such a state that they just *have* to be stripped and repolished. Last month we dealt with the preparation of a 1940's mantel cabinet in readiness for relacquering.

I cannot overstress the importance of adequate preparation. Properly applied lacquer enhances the beauty of wooden cabinets – but by the same token, it mercilessly emphasises flaws such as scratches, roughness or stains. Once lacquering is commenced, correction of these problems is very difficult.

Make sure that in the removal of the old finish, dents and scratches and the subsequent sanding leave no room for criticism. If you have used a stripping paste, let the cabinet ventilate for a few days to allow the active gas to disperse. This gas permeates the wood and can do strange things to new lacquer!

There is a common misconception that many cabinets were French polished, but this was not normally so. The cost would have been prohibitive and anyway, French polish is extremely vulnerable to water and alcohol. French polishing requires shellac which is difficult to find today, but if you have some and can do this kind of polishing, the result is beautiful – although with a slightly orange tinge.

### Lacquer or polyurethane?

The traditional finish employed on radio cabinets was clear cellulose, which is closely related to celluloid and provides a deep lustrous and hard wearing finish. Aging tends to give it a greenish opaqueness, which can hide some of the figuring of the wood grain.

Sticklers for originality insist that only refinishing with cellulose is acceptable, but it cannot be brushed on. If you are adept at spraying, or know a good car painter who still works with traditional finishes, your problems are over. Most of us however, have to do things the

hard way, and settle for a finish that can be applied by hand.

Today the standard finish for wood is polyurethane. This is colourless, hard-wearing, is available in various grades, and can be applied by spray or brush. Some may argue that it is a 'synthetic', but so is cellulose anyway. Had polyurethane been available at the time, the old radio manufacturers would surely have used it for preference.

### The technique

Make sure that all blemishes have been removed, the cabinet can't be sanded any smoother, and that the co-

lour is right. If you have access to a spray gun and the skills, apply two or three coats of clear lacquer, sanding between applications, and the job will be done.

You may be able to achieve good results with an aerosol can of lacquer, but in my own experience, the delivery from these is too erratic and application too critical to be satisfactory.

For most of us brushing is the only method. The best finish is clear polyurethane, which, with care and patience, produces excellent results. There are various grades available, the easiest to apply being satin. This gives a dull sheen which many restorers consider to be most appropriate for old cabinets. More like the original finish in most cases, but requiring greater care in application, is gloss polyurethane.

All important is the correct equipment. *Never* use a brush that has been used previously for general painting. No matter how well cleaned, it will have little flecks of dried paint which will be all too obvious embedded in the lacquer. Purchase the best quality 25mm brush



**The final result. Not only are all of the blemishes gone, but the attractive figured wood grains are again bright. It can now take its place in the household or collection.**

with the longest bristles available.

Other items needed will be a litre of mineral turpentine and a couple of sheets of 400 grade waterproof carborundum paper, and, if you are going to use the high gloss lacquer, a can of 'Brasso' or similar metal polish.

Choose a well lit, dust free, warm place for applying the lacquer. These finishes have a remarkable attraction for lint and dust, and are easiest to apply at temperatures above 20°C.

The cabinet should be given a thorough dusting. Unfinished timber is very absorbent and traditionally, the pores were first filled with a sealer, which was often a preparation that was rubbed into the wood to choke up the pores. However, the polyurethane lacquer itself can be used as a sealer.

Never shake the tin of polyurethane. This will fill it with air bubbles which are likely to survive the brushing process and create pits in the surface. Gentle stirring is all that is necessary. Dip the brush no more than 1 centimetre into the lacquer and brush it on with long regular strokes.

There is an optimum thickness to apply. Too much and there will be 'runs'. Too thin and the surface will drag. Try and *flow* it on. A bit of practice should give you the feel of it. When completed, put the cabinet in a dust free area for at least 24 hours.

## Brush care essential

At this stage many handymen pop the brush into a tin of water and call it a day. This may be OK for house paint, but it is disastrous for brushes to be used on fine work. Despite the water, the polyurethane hardens and leaves particles to ruin later coats.

Instead, spend a couple of minutes cleaning the brush thoroughly. Put a quarter cup or so of the turpentine into a container and then work the lacquer out of the brush. Change the turpentine and repeat a couple of times. Now you will appreciate avoiding getting the lacquer into the roots of the bristles, by using only the tip of the brush.

When the brush is really clean, work up a good lather into the bristles with a cake of soap. If they feel at all sticky, more cleaning with turpentine is needed. When you are satisfied that the brush is really free of lacquer and turpentine, rinse it well in warm water and hang it up to dry. Treated this way, a brush will last a long time.

Don't expect too much of the sealer coat. Much of it will have soaked into the wood and the surface will be rough.



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Allow 24 hours for hardening and then carefully sand it smooth with a worn piece of sandpaper. A second coat can now be applied and, again, clean the brush thoroughly. When this coat has hardened, you will have a fair idea of how the cabinet will finally look. However, there are likely to be brush marks, pits and dust specks. Carefully rub down with wet 400 grade waterproof paper until there is an overall even matt finish. Now very carefully apply a third coat. If your preparation has been

meticulous and you have chosen a satin lacquer, the result should be a first class finish which will require no further attention.

## Polishing

Gloss finishes are less tolerant of imperfections, brush marks and specks, but we can use one of the traditional finishing techniques of cutting the surface down to a smooth finish and polishing with fine pumice powder. Pumice is an aerated form of volcanic glass which, when crushed, produces extremely fine and sharp particles.

The metal polish 'Brasso' is a convenient and readily available form of pumice powder. Rub down the third coat of lacquer with 400 grade waterproof paper and be prepared if necessary to apply a fourth coat, again rubbing down to a fine flawless surface. As final polishing with pumice requires the surface to be thoroughly hardened, put the cabinet in a warm place for a week or so for complete curing and to drive off residual solvents.

When the cabinet is ready, fold some soft cotton cloth into a pad, shake the container of Brasso thoroughly and sprinkle some of the contents onto the cabinet. Some vigorous rubbing will bring up the gloss in a surprisingly short time. The resulting finish does not have an extreme glass-like glitter, which can look unnaturally bright, but a very convincing and hardwearing shine. Carefully remove all traces of polish as any residue will leave white deposits.

This method of using a metal polish also works wonders with original finishes that are still sound. The cutting ac-

## Vintage Radio Societies in Australia and NZ

If you're interested in joining a vintage radio society or club, here are those we know about at present:

Historical Radio Society of Australia  
c/- Rex Wales,  
24 Park Lanes, Mt. Waverley, Vic. 3149

Early Wireless & Sound Society of Aust.  
c/- John Murt, PO Box 623, Lane Cove NSW 2066

Vintage Wireless & Gramophone Club of WA,  
c/- Barry Jenkins, 8 Philip Street, East Fremantle, WA 6158

New Zealand Vintage Radio Society,  
c/- Bryan Marsh, 20 Rimu Road, Mangare Bridge, Auckland

Club secretaries please note: If you would like your organisation's name and address given in future listings, please send the details to the Editor. We plan to update this listing on a regular basis.

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tion removes surface deposits and small scratches and will often restore a cabinet that would otherwise need refinishing.

## The speaker cloth

The remaining major part of the project is the speaker grill cloth, which should be reglued in position behind the grille with a careful application of PVA glue.

Unless you are very fortunate, the original cloth will be damaged, faded, or at the least in need of laundering, which is frequently a failure anyway. Renewal has generally to be faced and it is unfortunate that the traditional cotton and rayon materials are no longer made. However, alternatives are available.

Speaker grill cloth has several requirements. It must be reasonably loosely woven so that there is minimal impedance to sound, but not so loose as to be seen through. The weave should also be elastic, so that in service it retains its tension. This requirement renders a lot of fabrics unsatisfactory. Finally, the colour and pattern must be appropriate. If you have ever seen a dignified cabinet resplendent with a bright floral replacement grill cloth you will know what I mean!

Cabinets of the 1940's generally had brown fabrics, with either mild geometric patterning or no patterning at all.

Some of the modern plastic fabrics for hifi systems can be effective. The cabinet in the illustration has been fitted with a dark brown cloth of this type. Many of these modern materials have a useful 'heat shrink' feature.

Fit the cloth, making sure that any pattern lines up with the opening. Don't be too concerned about tautness. When the glue is dry, carefully direct a portable electric heater at the cloth, which will readily shrink to size with a good tight finish.

It now remains to reassemble the cabinet, and replace the speaker and the chassis. One final problem though – as like as not, there will be one or more of the original knobs missing. Most manufacturers had their own distinctive style and it is worth while putting a fair degree of effort into locating a correct replacement. This is where membership of a society can pay dividends by using the buy, swap and sell columns in the newsletters and magazines.