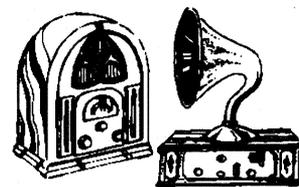


Vintage Radio

by PETER LANKSHEAR



Good advice: 'Caveat Emptor'

The Latin phrase in this month's column, which is written especially for newcomers to radio collecting, is the time-honoured reminder that it is a purchaser's responsibility to be on guard. I was prompted to write on this topic when recently I encountered an instance where an enthusiastic, but inexperienced, collector got a little out of his depth...

An acquaintance of mine, who is a relative novice to the hobby of vintage radio, has been impatient to obtain a 'cathedral' model radio and was delighted recently to have tracked down a classic example — a 1931 Atwater Kent model 80, rare enough in New Zealand and even rarer in Australia. It was not in working condition, but had been kept as an ornament. After much persistence, the reluctant owner, who incidentally, is not a collector, was persuaded to part with radio in exchange for a sizeable sum of money.

I was invited by the excited new owner to approve the purchase, but even at first glance, it was apparent that it was far from being in original condition. Immediately obvious was an extra control knob in the centre of the front panel and from even a cursory look at the chassis it was apparent that there were non-standard parts fitted.

Although it is unreasonable to expect absolutely mint condition, to justify being in the upper price bracket a receiver should be in good physical shape, and major components should be authentic. This is especially so in the case of equipment from manufacturers such as Atwater Kent, who used their own unique parts.

At this stage the question had to be asked as to what was expected of the radio. If it was for static display only, then it needed only to have the cabinet refurbished, leaving the chassis 'as is'. This is always an option, especially with very early equipment, but for a classic radio to have any real value, the

chassis should still be as original as possible. In this case, as it was hoped that eventually the receiver would be fully restored and operating, it was time for a critical look.

Modern IFT's

Comparison of the photograph of the chassis with that of a model 80 in original condition gives an idea of just how much modification there has been. Where there should be a single large circular IF transformer, there are two much more modern square IF cans, clearly labelled 'Sickles',

and the substitute aerial coil has a shortwave winding — implying bandswitching, which is an anachronism in a 1931 A.K. receiver, and of course is the reason for the extra control knob.

Of the original valve sockets, only those of the rectifier and power output stages remain. Notably absent is an Atwater Kent oddity, a type '27 oscillator valve mounted inside the oscillator coil and its open topped shield. Missing from the rear of the chassis are the name plate and the aerial trimmer capacitor with its knob. In fact, apart from two valve sockets and two remaining shield cans, practically the only original components remaining are the tuning capacitor and the power transformer which, incidentally, has tell-tale black deposits around its cover — a sure sign that a rewind will be required. That one item alone, with freight, would not leave much change from \$100.

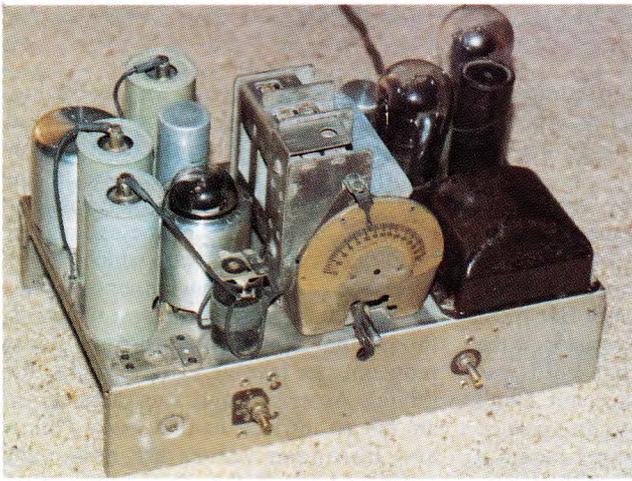
With the chassis upended, there is more evidence of vandalism. Amongst the collection of minor 'foreign' components there is, as anticipated, a relatively modern wavechange switch. At some stage there has been a wholesale gutting and 'modernisation', and to put it bluntly, in its present state, the chassis is of very little worth.

Alternatives

The new owner is philosophical and optimistic. A lot of money has already been spent for a receiver that is not playable (or even displayable). The cabinet has been given to a furniture restorer to refurbish and attempt to conceal the extra shaft hole. Restoration of the chassis,



This classic Atwater Kent model 80 in original condition is from the writer's own collection. Its attraction to an enthusiast is understandable but is the expense and effort as featured this month, justified?



Atwater Kent's nickel plated chassis have a very distinctive appearance and novel features. In several models, including the 80 shown here, to save space, the oscillator valve fits inside the oscillator coil. The valve can be seen here, projecting through the open topped shield to the left of the tuning capacitor.

while not absolutely impossible, would require a considerable degree of luck in finding parts, skill, facilities and time — and there remains the fact that extra holes have been drilled, some in conspicuous places.

Obtaining genuine replacement components of rare receivers can be a problem, because radios of this class are not often written off simply to provide spares. Even if authentic parts can be found, the owner feels that he will need a lot of assistance, as he hasn't sufficient experience to tackle the major restoration work required and even the most skilled restoration will not make it a mint specimen.

Realistically the chassis may be beyond salvaging, and a better approach would be to look for a substitute. Chassis sometimes become available when their cabinets are in such a poor state as to be beyond repair, or become insect-ridden and have to be destroyed.

My recommendation therefore to our enthusiast, is in the first instance to advertise for a chassis in better condition. If this is unsuccessful, as it could well be bearing in mind the rarity of the model, he might be better to cut his losses by selling the restored cabinet, although he would be left with only an expensive experience, rather than the cathedral radio he so much desires.

Important lessons

What lessons are there in this, and what precautions can inexperienced enthusiasts take to avoid similar experiences?

The best policy would be to seek the assistance of a seasoned and knowledgeable collector, and I would point out that it is a major function of vintage radio societies to provide this kind of help and advice. However, for inexperienced collectors on their own, here are some hints.

First, is the receiver what it is claimed to be? Confirming the date of manufacture of a receiver requires a lot of ex-

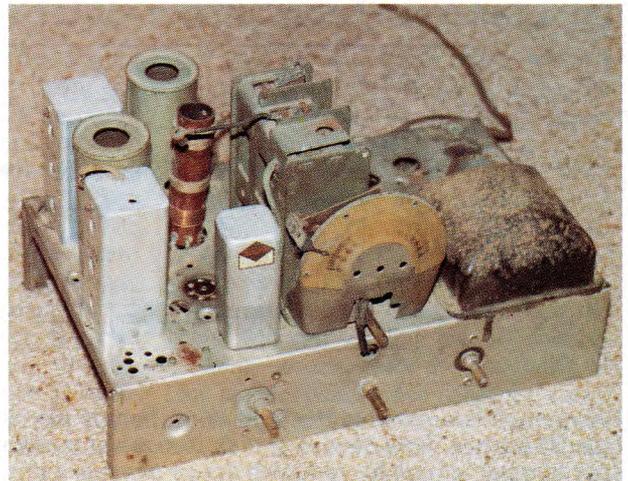
perience. Taking the word of the owner can be a very unreliable guide. Time can be well spent in studying old magazines, manuals and circuits, getting an idea of trends and patterns. Grasp all opportunities to look at collections and displays.

There are several reference books that are most helpful, and although they cannot cover every model ever made, they do provide invaluable background information and are of considerable assistance in identification. Some useful titles were listed in this column for July 1993.

Start with a close look at the cabinet. Its condition will not always reflect the state of the chassis, but if the finish is in good condition, and original, the chances are that the mechanical condition of the chassis will be reasonable. First off though, are the tuning knobs all there, do they match and are they original?

Look carefully at the cabinet finish. A popular but misguided trick is to 'freshen it up' by slapping some polyurethane over the original nitrocellulose lacquer. This 'toffee apple' treatment is obvious in a good light, and can only be remedied with a complete refinishing. A few scratches and bruises are inevitable, but

It is obvious that this Model 80 chassis has been considerably modified, with the removal of many of the unique Atwater Kent components. There is also an extra shaft belonging to an added wavechange switch, requiring a fourth hole to be drilled in the front of the cabinet. Note the warning sign of overheating, in a run of burnt wax between the right hand shaft and the transformer cover.



look out for missing patches of veneer, structural damage and glue failure. Water damage can cause veneer to disintegrate and bubble. Very early console sets were often on legs, and these may have at some time been shortened.

Insect holes can be an unsightly problem. Borer eggs are usually laid in a hidden area of bare wood, including the entrances to old holes, but the adult beetle can emerge through a visible polished surface. A few holes can be coped with, but look carefully at the edges of plywood for heavy infestation, which could spell real trouble with the cabinet eventually disintegrating.

A warning; borer may still be active, and ready to colonise other cabinets. So as a precaution upon acquisition, the interior of a cabinet should always be treated promptly with a methyl chloride solution or similar borer treatment.

Problem holes

Man-made holes added to cabinets are often a greater problem, as they are bigger. Extension speaker and pickup sockets and switches were popular additions to the sides of cabinets, and are difficult to disguise. Worse are holes made for additional control shafts, as in the case of our Atwater Kent. To make matters worse, these are usually in the front of the cabinet, and require very skilled workmanship if they are to be completely disguised.

A very visible modification popular during the late 1930's was the 'updating' of receivers by the fitting of magic eye tuning indicators. This entailed cutting large holes in a most visible part of the cabinet. Sticklers for accuracy will say that such additions should be removed, but often repairs are so difficult that this modification has to be lived with — although it could well have an adverse effect on the value of the receiver.

These comments have applied to

common between the mid 1930's and early 1940's. Octal valves were used increasingly after about 1936, and miniature valves will be found only in post World War II receivers.

The chassis may be authentic, but what about its condition? Apart from its unsightly appearance, extensive rust can be a clue to potential problems. Patches of corrosion can be from rodent deposits, whereas general rust indicates that the radio has been stored in a damp environment and that various components may have suffered. This can vary from soggy speaker cones to corroded coil windings.

Screwheads

Important clues suggesting substitutions or modifications can come from the presence of screws. It was standard practice to rivet valve sockets and small components to the chassis. Be on the lookout therefore for screw heads — especially if unplated, the wrong size, or very shiny. At the same time, empty holes in a chassis may indicate removal of parts.

A very common modification is substitution of the power transformer. Apart from the obvious appearance problem created, unless the voltage rating of the substitute is correct, operating voltages can be very different.

Recently I encountered a set where the power transformer replacement plus the use of silicon diodes meant that the actual high tension was 350 volts instead of the correct 225 volts. This sort of treatment does nothing to enhance the longevity of valves and components. In many respects, it is better to have an original burnt-out transformer than a substitute that is working, for the original can be rewound to provide the correct operating voltages and appearance.

Dials are very visible and there are a number of things to watch for. Older scales were not protected by glass and strangely enough, often were printed with water-soluble ink, making them very difficult to clean. Glass scales may be chipped or broken. The tuning knob should turn freely, without slipping, and the pointer should move correspondingly and smoothly.

Later sets will have cord driven dials, which commonly need restringing. Dials from the 1930's were often driven on the rim of a large diameter disc. Be alert for wear on the edge of disk and pulley, causing the drive to slip.

I hope that these hints will be of help in avoiding some of the problems which may be encountered when buying an old

receiver. It takes only a short while to carry out the checks, but they are essential if mistakes are to be avoided.

Finally, don't be put off by the horror stories. Most transactions are much more successful than the one I have described, and end with satisfaction for all concerned. ♦