

# VINTAGE RADIO

By JOHN HILL



## A look back at transistor radios

**About 35 years ago, I bought my very first transistor radio. It was a 7-transistor AWA with a black leatherette case. I wanted a tan leather model at the time but they were unavailable.**

Although many radio collectors do not look upon transistor radios as collectible, I beg to differ. I believe that some transistor radios are very collectible, particularly those early receivers made here in Australia back in the days when we still had a radio manufacturing industry.

Many transistor radios from the early 1960s era were not built along what might now be considered conventional lines. Those first generation transistor radios clearly showed the manufacturing techniques of their day in that they were often constructed

on a steel chassis with the metal-cased transistors mounted in rubber grommets.

They also used many normal size radio parts such as IF transformers, paper capacitors and air-dielectric tuning capacitors. And they used point-to-point wiring throughout.

Add to this the use of germanium transistors, a transformer coupled loudspeaker and battery only operation, and we surely have a collectible radio receiver that differs considerably from anything that is available today.

Of course, it wasn't long before the steel chassis was replaced with a printed wiring board and many of the components were greatly reduced in size. Some, like the output transformer, were eliminated from the circuit altogether.

### My early Kriesler

I recently acquired an early Kriesler transistor radio, a plastic-cased printed wiring board type that was in exceptionally good condition, apart from a millimetre thick layer of dust. It restored quite well.

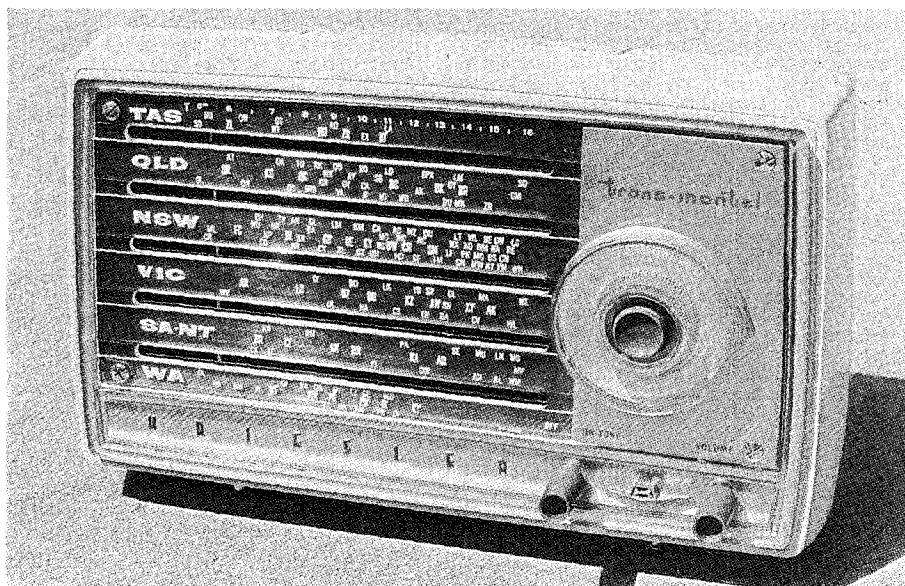
As I was cleaning up the old Kriesler, I thought that this could be the ideal introduction into radio collecting. The idea is to start with something that is cheap to buy and has minimum repair problems and expenses. If a new collector can gather together a few old transistor radios and get them going again, then it may provide the necessary incentive to move onto bigger and better things.

I know of one particular lad who collects transistor radios while his father collects valve radios. Between the two of them, they now have quite an interesting collection of old receivers.

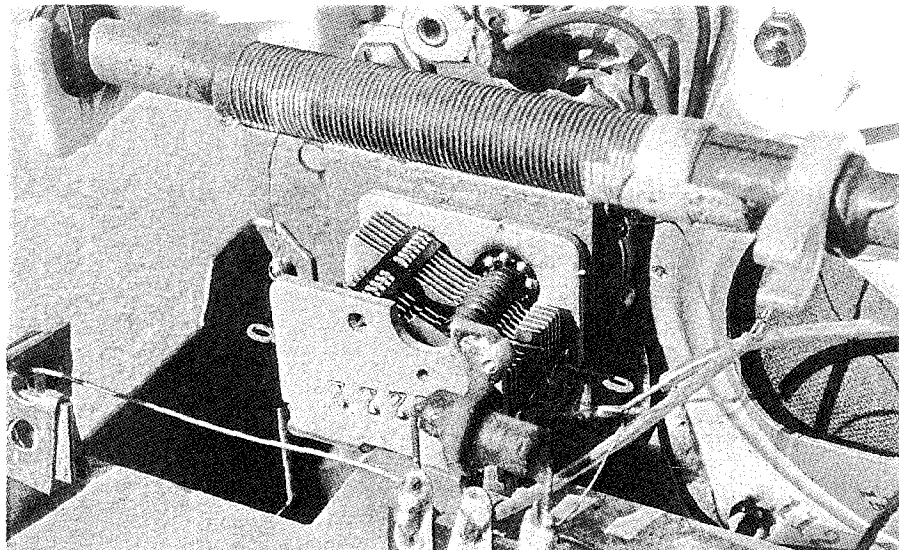
### Obsolete batteries

The most common problem with many early transistor radios is not that they no longer function but the special dry cell batteries used to power them are no longer available. In the past, several different battery types were made in a variety of shapes and sizes. All are no longer made with the exception of the very small 9V battery.

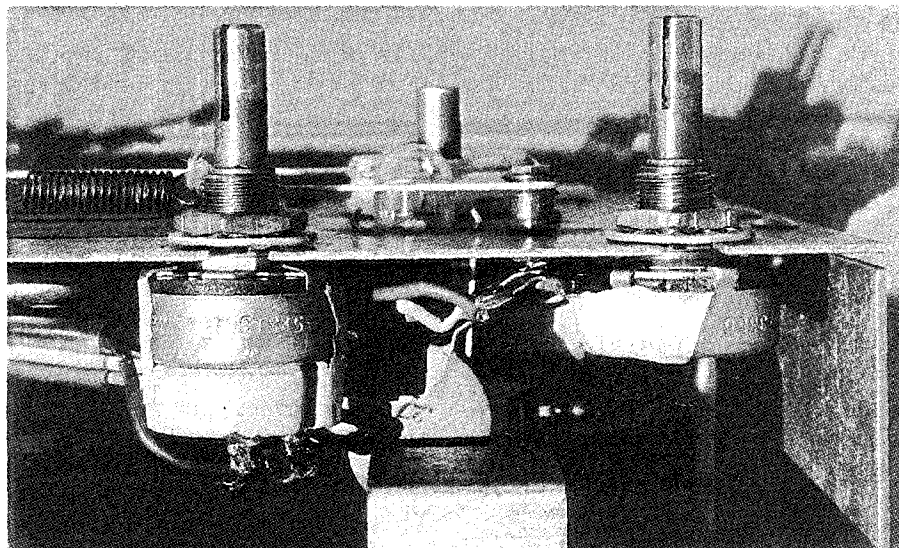
This battery problem isn't really a problem at all, as all of them can be replaced with an "AA" battery pack of the appropriate size (6, 9 or 12V), or



**This early Kriesler transistor radio is small mantel model which comes in a plastic case. It is a battery only model and has a large (4 x 6-inch) oval speaker which gives the set a good sound.**



The Kriesler radio uses quite large components, such as an air dielectric tuning capacitor. Later transistor radio receivers used much smaller components.



The volume and tone controls of the Kriesler are also full-sized components. Both were noisy and required cleaning.

with a standard 9V battery. While such a substitute may not have the capacity of the original battery, this can be overcome to a large extent by using heavy-duty alkaline cells.

If these are used, then the replacement battery will have a long and useful life – far in excess of what its size may indicate. What's more, alkaline cells are not expensive compared with the price of the original batteries used to power these radios. The price had risen to \$24 in some instances before production ceased.

Note that when switching to an AA pack, it is often necessary to change the battery connector to a 9V snap-on type. The old Kriesler that I acquired

was converted to an AA power supply and it worked immediately without any other repairs or modifications.

One good aspect of the Kriesler is the fact that it is built on a printed board and the components used are modern types (no paper capacitors) that should last forever – well almost. The electrolytic capacitors may eventually prove troublesome but they are all working OK at present, even after many years of inactivity.

As with most locally-made receivers, the Kriesler has its dial marked with station call signs. This isn't a great help these days, as many stations have changed their call sign and frequency, or moved to the FM band.

While on the subject of dials, the Kriesler is similar to many valve radio dial mechanisms in that there are pulleys and cords to work the dial pointer. What is different, however, is a little reduction gear box between the dial knob and the tuning capacitor. It is unlikely that you would find anything like that on a modern receiver.

One small problem with the Kriesler restoration was the fact that the tone and volume controls were noisy. This was remedied simply by cleaning the tracks and wiper arms with a cotton bud dipped in WD40.

A particularly good aspect of the Kriesler is that it uses a 4 x 6-inch oval loudspeaker which is equivalent to a 5-inch (125mm) round speaker. That is a considerably larger speaker than is usually used in battery-operated transistor radios and, as a result, the Kriesler has a fairly good sound.

### The HMV Capri

I recently collected an HMV "Capri" transistor radio which is a small, almost pocket-size, receiver with six transistors. Once again, it is Australian-made and although it has a plastic cabinet, it fits into a neat leather carrying case.

The Capri was designed to take an Eveready 2662 battery which is about twice as long as a standard 9V battery and has a single snap connector at each end.

Receivers of this size are too small to accommodate AA holders and the only alternative is to alter the battery connectors so that the radio will take a standard 9V battery. Although the replacement battery is considerably smaller than the original, if a heavy duty alkaline battery is used it will possibly outlast the original.

A few pieces of foam plastic will prevent the smaller battery from rattling around inside the case.

As previously stated, many of these old transistor radios are often in quite good working order and the only reason they have been discarded is because the batteries needed to run them are no longer available. Substitute those batteries and you have a working receiver once again.

### The 13-transistor Hitachi

Perhaps one of the better transistor radios in my collection would be a 5-band, 13-transistor model KH-1325 Hitachi. Once again, it is a relatively



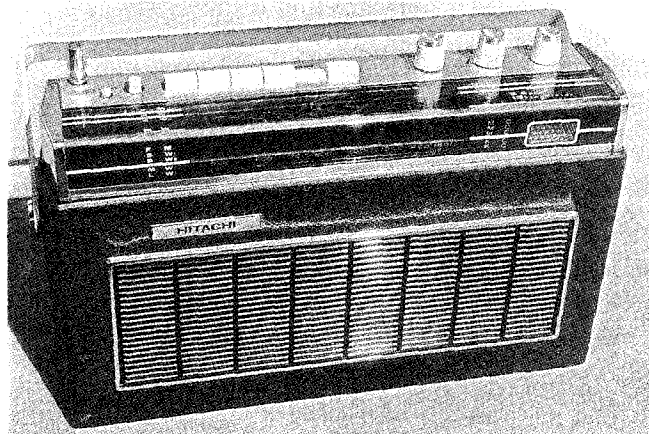
This photo shows two of the now unobtainable 9V batteries which were used in old transistor radio receivers. Also shown is a 9V AA battery holder (left). While the AA setup may be considerably smaller in capacity, alkaline cells will give reasonable battery life.

early transistor radio. I have had this receiver for 15 years and it was secondhand when I inherited it.

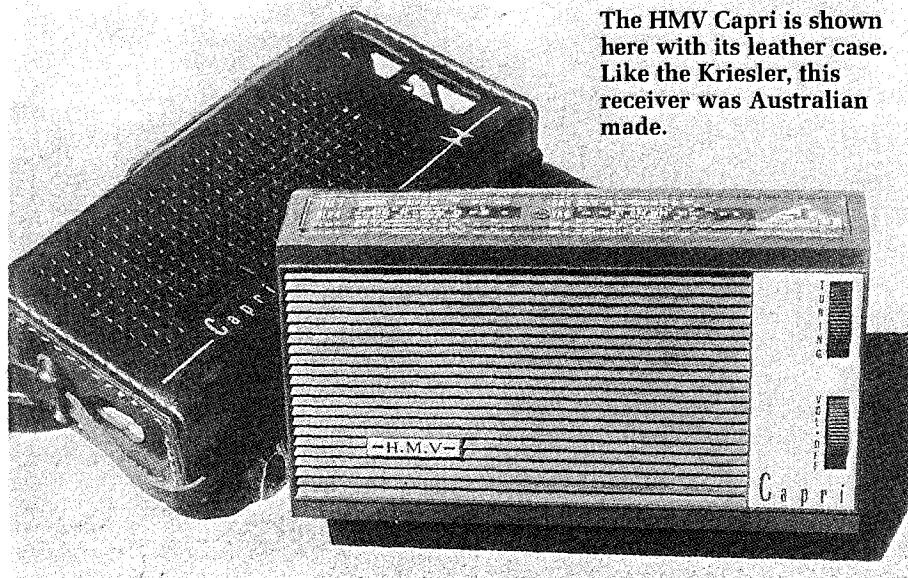
The Hitachi was a very up-market radio in its day and is capable of world wide reception. Its two shortwave bands cover a 6-18MHz frequency range. It also boasts FM, MW and LW reception and band selection is by pushbuttons.

In addition, the Hitachi has a dial light, a tuning light and a loudspeaker of generous proportions. In short, it is a very good receiver.

One big advantage with the Hitachi



Considered up-market in its day, the Hitachi KH-1325 is a 4-band Japanese receiver. Most collectors are not particularly interested in collecting transistor radios but attitudes are slowly changing.



The HMV Capri is shown here with its leather case. Like the Kriesler, this receiver was Australian made.

is that it uses 5 D-size cells for its power source. These will keep the set operating for quite some time.

Comparing the 13-transistor Hitachi to the 6-transistor HMV Capri clearly shows the superiority of the former. The Hitachi will pull in stations that the HMV can only raise to a whisper. It's the old story of getting what you pay for and in this case the two receivers are worlds apart.

### Radio-cassette players

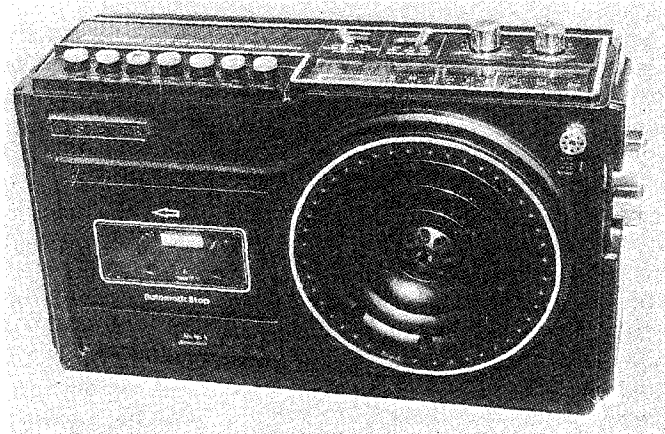
Perhaps it's also time that some of the early cassette radios became collectible? I have, for example, a small Japanese "Silver" which has 3-band reception plus a built-in cassette player. At a guess, it must be getting close to 20 years old and is again

working well after receiving a major overhaul.

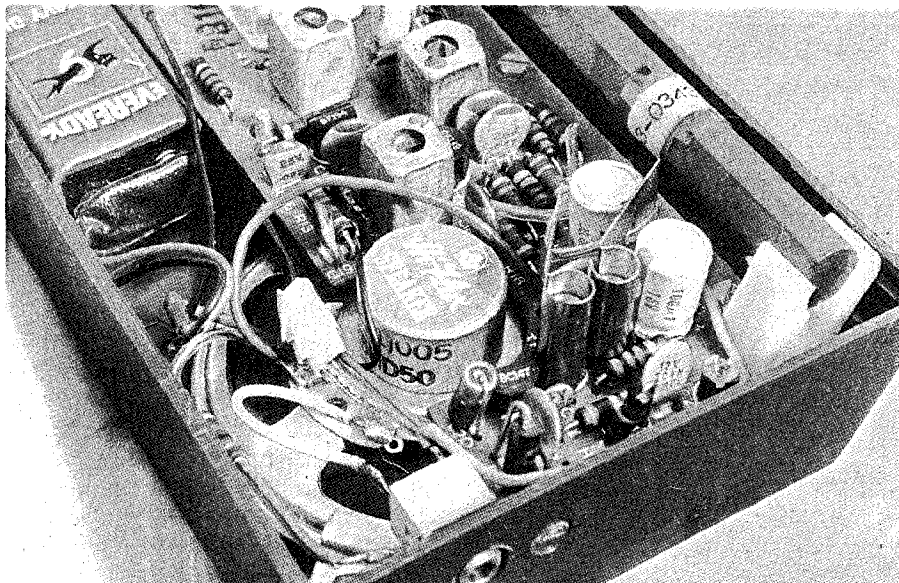
The repairs were mainly to the cassette player which required a new electric motor and some work on a worn tape head. This work on the tape head was done using a fine file and emery cloth. While such an operation may sound a bit severe, it was a completely successful repair and cured the distorted sound problem caused by a deeply grooved playing head.

How long before the head wears through is anyone's guess but it's working OK at the moment!

My Sony Walkman® may not be old enough to be declared a rare collectible just yet but it will, in time, be just that. With its FM/AM stereo recep-



It will not be long before some of the early model radio cassette players become suitable for collecting. This Silver model radio-cassette player is close to 20 years old and is still working well.



This view inside the HMV Capri clearly shows the extent of the miniaturisation that had taken place since the Kriesler radio was made. Note the substitute 9V battery and the extra space provided for the longer original battery.



Getting together a collection of Walkman® radios may sound a bit extreme today but it may only be a matter of time. However, will these wonders of the plastic age have collector appeal and what are the chances of servicing them 50 years from now?

tion, it certainly differs from most other Walkmans. When I bought it, it was the only pocket-sized radio that featured AM stereo.

We don't hear much about AM stereo any more do we? Maybe it's a bit like high definition TV. Most people aren't very interested – particularly if it's going to cost heaps of money.

### Will they be serviceable?

In this throwaway world we are

forced to live in, it is unlikely that the radio receivers of today will survive like those of yesterday. It is not that difficult or expensive to restore a 50-60 year old radio. But whether the radios of today will be serviceable in the year 2050 is fairly debatable. Fancy trying to substitute a 50-year old chip – now that could be difficult!

Perhaps the receivers of today will not have the necessary appeal to become truly collectible tomorrow. Only time will tell.

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