Market place

Members wishing to advertise in this space should ensure that their ads reach the Editor by the 20th of the month preceding the month of publication. Deadline for the next issue is Oct 20,1983. Please write or print clearly and be sure to include your name, address and phone number. There is no charge for this service.

WANTED

R.C.A. AR88 communications receiver or similar WW 2 vintage receiver in restorable condition; First IF transformer for Gulbransen 7GM; Dial glass for Philips model 597
Gordon Baker, 110 Wood St, Palmerston North. Phone 68-546

Large one-piece (3-section) valve shield with curved top, two required for Philco models 70 and 90.
Dave McLaren, 25 Aotea St, Dunedin, ph 44-777

Aerial and oscillator coils for Courier (Ultimate) 5CA or similar
Leo Robertson, 12 Essex St, Stratford

Set of four control knobs AND DIAL GLASS FOR Pye model "H" type PZ 60
Glynn Thomas, 23 Jull St, Napier, ph 54-820

A 1933 Wireless (condition immaterial) to make life complete for enthusiast born the same year
Donald Howell, 4 Brothers St, Avondale, Auck. ph885-936

Chassis only (any condition) for Atwater Kent model 20 battery set
Phil McGechie, 14 Auckland Rd, Warkworth, ph WW8864

Chassis for Atwater Kent model 55, chassis for Philips 531A; any Philips 'Monoknob' receiver; any pre-1933 Ultimate sets (complete or otherwise); speaker 8-inch Philco (USA)
Ray Knowles, 507 Wellwood St, Hastings, ph 84338 (collect)

Circuit diagram for Precision 'Electronamic' tube tester model 9-11; circuit diagram and operating manual for University Supertracer model HST, will pay for Xerox copies
K Stuart, 385 Queen St, Auckland

Handbook and instructions FOR Calstan tube checker model F501.
Mark Maloney, 22 Williamson Ave, Takapuna, Auck

Dial escutcheon (RH side) for RCA R28; Mullard PenA4 valve; cabinet to suit Crosley 40S, 41s, 42S series, condition immaterial; any AK or Philco cathedral (complete or cabinet only); will consider part exchange; early valves 'DF', 'R' or Franch 'R'; also still seeking chassis only for Atwater Kent model 70 type 'L'.
Mark Thomson, P.O.Box 52, Oputama, H.B. ph Mahia 628

Metal escutcheon for vernier tuning knob on Grebe 'Synchrophase'; Dial scale for Ekco model SW86.
Ian R.King, 238 Crawford St, Invercargill

Info wanted. I would like to hear from any owners of Bremer-Tully 'Counterphase 8' or Fada 80B Neutrodyne receivers. Arthur Williams, 26 Centre St, Invercargill

Cabinet for A K model P717X; Valves, type 211 (VT4C) and sockets for same)Jumbo 4pin): Ceramic octal valve sockets any quantity. Will swap for other goodies or will do quality guaranteed work on your radio or audio gear. Murray Dick, 14 Upper Queen St, Auckland.

Bakelite cabinet for Airzone "Radio Star", Bill Farmer, 26 Irirangi Road,Onr Tree Hill Auckland, ph 665-549

AVAILABLE

Australian Radiola chassis 1930, will swap for another similar chassis.
Leo Robertson, 12 Essex St, Stratford, Taranaki

Atwater Kent 555 (chest model) complete with speaker and metal top panel but less cabinet; Valves, collectors's items, Kenotron UV-213 rectifier,brass base,tip-sealed good fil; Radiotron UV-866 regulator; Rectron UX-216B rectifier,good fil.
John Stokes, 281-C Hillsborough Rd,Mt Roskill, Auckland

Drake's Radio Cyclopedia 4th Edit 1931, swap for 1st, 3rd, or 5th editions; RCA valve manual RC-12 1934, swap for RC-11,15, 17, or 19; Ghiradi 'Modern Radio Servicing' 1935 swap or sell.
Peter Noonan, 58 Abbot's Way, Auckalnd 5,

NZVRS BULLETIN

Vol.4 No.2 Aug.1983

NEW ZEALAND VINTAGE RADIO SOCIETY

An organisation devoted to the preservation and restoration of early radio equipment, and collation of associated information

[By courtesy of the B.B.C.

THE VILLAGE WIRELESS EXPERT

This picture, from a 1928 publication *Wireless,The Modern Magic Carpet* by Ralph Stranger, immediately engenders the thought - Was it posed? Well, posed or not, we can nowadays describe it in only one word - delightful. Apart from the "expert's" heavy work boots and overalls note also the fringed tablecloth - a period piece in itself.

NEW ZEALAND VINTAGE RADIO SOCIETY

PRESIDENT: Des. Wright
3 Coquille Place
Bucklands Beach
Ph. 535-8928

SECRETARY: Eric Kirby
10/29 Owens Rd.,Epsom,
Auckland 3
Ph. 603-054

Correspondence, membership enquiries, subscriptions: To Secretary, at address above.

N.Z.V.R.S. BULLETIN ...
EDITOR: John Stokes
617 Dominion Rd., Mt.
Roskill, Auckland 4
Ph. 604-213

Contributions to the BULLETIN, and advertisements, should be sent to The Editor.

EDITORIAL COMMENT

One of the most frequently heard remarks uttered by casual observers when viewing my display of old radios is: Haven't they got a nice tone? Transistors sound so tinny. I've heard these same remarks repeated so often that I'm beginning to wonder if there is any truth in them! What these people really mean is: 'Don't bigger sets sound better than smaller ones?' At least that's what I think they mean. To non-technical people the word 'transistor' has come to mean a small hand-held portable radio, known colloquially as a 'Tranny'

To me,the fact that so many people tolerate the reproduction from these tiny sets is not really surprising, but I often wonder if any of them own transistorised hi-fi outfits as well. There used to be a saying amongst American TV repairmen - "As long as it moves ,they're happy", meaning that as long as there is any sort of a picture visible the customer is happy. This may be interpreted as a rather cynical criticism of the average TV viewer's lack of ability to know a good quality picture from a bad one. After hearing the horribly distorted sounds that emanate from some transistor radios perhaps the above saying could be paraphrased to - 'As long ~~as long~~ as they can hear it,they're happy'.

Not so many years ago, before the advent of the transistor, we had valve portables,and they likewise did not have as good a tone as the larger household sets. Like transistor sets, and for two of the same reasons, they also sounded tinny. A small speaker in a small cabinet cannot provide as good bass response as a bigger speaker in a bigger cabinet,regardless of whether the 'motive power' is solid or vacuous state.

Cnce upon a time all radios ,at least all except some console models, used 8-inch speakers. In pre-war days it was a rule-of-thumb that it was just not possible for anything less than an 8" speaker to handle 3 watts output and at the same time have a good bass response. In fact I seem to remember that there was only one manufacturer in the whole of N.Z. in those days who made a set using a 5-inch speaker. How about that?

But,getting back to the opening remarks,I sometimes wonder if,when listening to today's transmissions on an old radio, we do not delude ourselves slightly and imagine that these used to sound just as good in the old days; in other words whether we hear through a haze of nostalgia. After all,recording techniques improved enormously since the war and transmission standards are also better than they used to be (in spite of the 'Cptimod'). It's not fair to give all the credit to the old receivers!

J.W.S.

R1

THE CROSLEY "TRIRDYN"

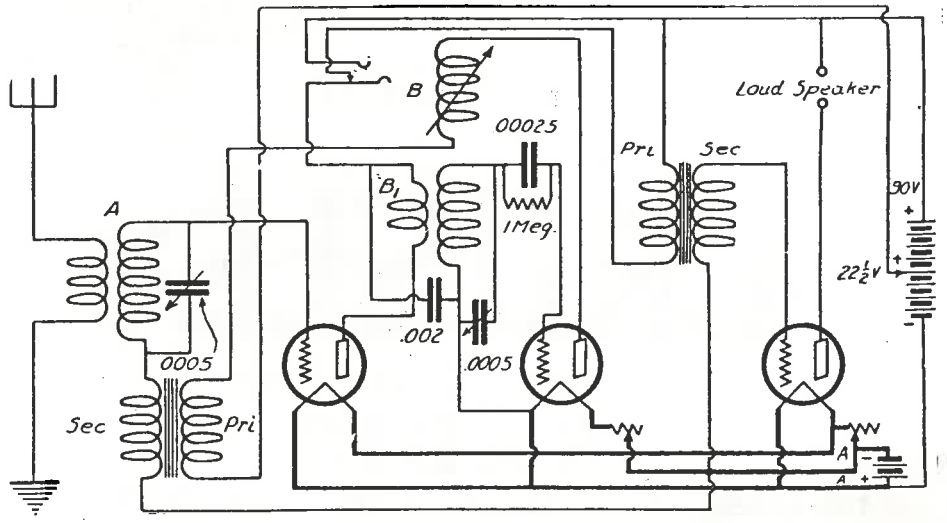
by Alan Douglas

Readers of my previous story on the de Forest D-10 (NZVRS Bulletin Vol.4,No 1) may have wondered about my mathematics; between my rough draft and my final submission, I changed "50 or 100" to "100 or so" without making a correspondingchange in the percentage. One percent is the figure I have seen quoted, for antiques, in general, as the percentage of original items that ultimately survive, but for radios I would be tempted to make it 2%. In other words, if 50 of a particular model had been made originally, you would be lucky to find more than one now in the hands of collectors.

No such problem exists with my next 'subject', the Crosley "Trirdyn", a 3-tube reflex model made during 1924-25. It is readily available in the U.S. nowadays because of its great popularity in the past. Available in a number of different cabinet styles, the Trirdyn offered excellent value and was the 'flagship' of the Crosley line in the years when Crosley was as close to the top of the radio industry as he ever got (third after Atwater Kent and RCA).

A 'flagship' model selling for $75 (reduced to $60 and $50 in 1925) seems almost ludicrous when you consider that Atwater Kent's cheapest models sold for $80 in this period, but Powel Crosley built his whole reputation on low prices. If there was a cheaper way to build a radio, Crosley would find it. His slogan "Better, Costs Less" was reputed to have been interpreted to his engineers as "Better cost less" ! Atwater Kent pinched pennies on production costs as well as anyone, but he would never substitute molded shellac for quality Bakelite, or gumwood for mahogany, nor allow his radios to look cheap the way that Crosley did.

But Crosley's formula worked ... for a time. His company grew steadily and he acquired control of of others: De Forest of Canada in 1924, Amrad in 1925 and American De Forest for a short time in 1927. He was always a potent factor in the U.S. radio industry, and in the 1930s expanded into appliances and automobiles. Unlike many of his contemporaries, he retained personal control over his company, which speaks well for his careful planning and reliance on his own resources. His condiderable success was entirely of his own making.

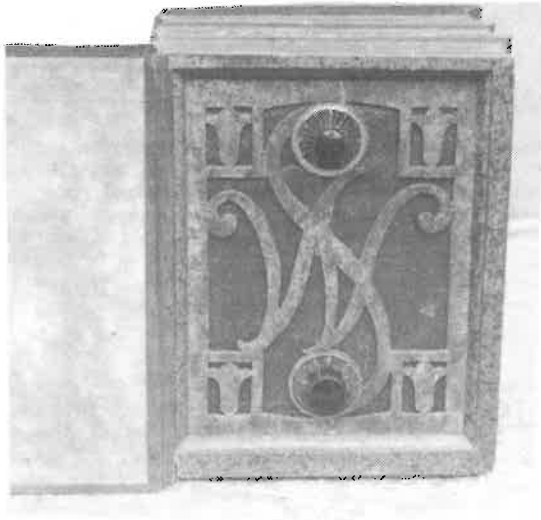


CROSLEY "TRIRDYN model 3-R-3

Some models used a different antenna input circuit but otherwise they were the same. The first RF tube also worked as the first AF stage.

R1
and A1

R1



THREE VOLUMES OF HARMSWORTH'S WIRELESS ENCYCLOPEDIA?

No, it's three volumes of "OUR WORLD TODAY". At least that's what it says but it's actually a Stewart Warner model R111 in disguise. Another example of a gimmick model from 1933.

BROADCAST RECEIVER QUIZ

1. What early TRF AC set used a push-pull 1st RF stage ?
2. What AC superhet used a type 41 power tube as an oscillator ?
3. What set used a pair of 226 voltage-amplifying triodes as a push-pull output stage ?
4. In some of the RCA-HMV R4 models why was one IF coil can made of aluminium and the other of iron ?
5. What manufacturer made use of a dynatron oscillator in ceratain early model superhets ?
6. What was a "Superoctodyne" ?
7. What set used 8 type 45 valves in the output stage ?
8. Name two makes of sets using the 'Peerless' dynamic speaker which had a single-turn voice coil ?

ANSWERS TO QUIZ

1. Crosley model AC7. 2. Colonial model 601, 603. 3. Pilot 'Pilotone'. 4. Who knows?
5. Crosley,e.g. model 120. 6. The tradename given to early Australian Philips superhets using octode converter valves. 7. Zenith model 1000Z (1934).
8. Edison models R1, R2. Sonora model 5R.

MORE YET ON THE THEATRETTE

BY John Stokes

In the previous article on the Theatrette and its derivatives mention was made of an Australian model about which I was unable to supply details due to a lapse in my (mental) filing system. Since then Ray Kelly of the H.R.S.A. has come to my aid by providing the necessary key to the reference source in the Australian Official Radio Service Manual. Sure enough in Vol2,p.75 there was a little flag marker which I had inserted to facilitate relocation ! Ray also provided photocopies of ads of the period which showed the external appearance of the Briton Theatrette to be almost identical to the British made original, the only difference being in the use of white control knobs. The following description appears on p.75 of the above mentioned manual:

"Theatrette Series

An entirely different principle has been adopted in the design of the latest Briton Mantel receivers. In order to achieve a strikingly attractive design the conventional method of construction, using a chassis, has been abandoned, and the components of the receiver mounted on the moulded bakelite cabinet. Room was found for an 8-inch speaker."

Well, that sounds like a Theatrette all right, but leaves a lot of questions unanswered. For instance - who was the Briton Electrical & Radio Pty Ltd and how did they come to make such a model? Could the set have been made under license (Not a known Philips procedure,though of course Philips patents were available to set makers through the Australasian Radio Technical Services & Patents pool).,

This particular Briton set was the model 30 (1938) having the following valve line-up: EK2G, 6U7G, 6B6G, 6F6G, 5Y3G. There was also a 4-valve version using: EK2G, 6U7G, EBL1, 5Y3G. The circuits appear in Vol.3 of the A.O.R.S.M.

The 1937 edition of the Radio Trade Annual of Australia states that the Briton company was registered on July 1,1936. However,as the Briton name does not appear in the Australian Official Service Manual after 1940 it it assumed that the firm went out of business at that time.

Information has recently come to hand from France concerning Philips 'Theatrette type' receivers sold in that country. There were four models; the V4A (AC) used 4-volt side-contact valves, the V4U used 200 mA side-contact valves and a Philips baretter type C8 or C9. Both these were 1936 models bearing the name style"Pionnier" (Pioneer). The 1937 models, V6A and V6U, were known as "Junior". They were identical to the previous year's except that the V6A used an AL4 output valve in place of an AL3. All models had the same cabinets, dials and knobs as the familiar V7A Theatrette.

'THERE'S ~~GOLD~~ SETS IN THEM THAR HILLS'

A haul of goodies obtained by Alan and Stan Brehaut after a recent back-country expedition.

WHO SAID THAT ?

" Radio is a commercial failure, and its popularity with the public is waning. Radio is unpractical commercially and aesthetically distorted, and it is rapidly losing its grip in the market and in the home."

If you think those words sound like a mixture of sour grapes combined with wishful thinking,well so do I. The man who uttered them was Thomas A.Edison and the year was 1926. By this time broadcasting was beginning to make considerable inroads into the record and phonograph industry and Mr Edison was obviously concerned about the state of business. Not surprisingly, he was critical of the new medium of entertainment, hence his attempt to belittle it.

Events were to prove Mr Edison's prediction wrong, in no uncertain manner, for not only did the rapid growth of broadcasting hit the phonograph industry hard but it even lead to his own company entering the field of radio manufacturing in 1928 (if you can't lick 'em, join 'em).

Because,at the time, RCA was not issuing further manufacturing licenses it was necessary for Thomas A.Edison Inc to buy out an existing holder, in this case the Splitdorf Radio Corp, before production could commence. Splitdorf had been in the radio business since 1924 and Edison radios were made at that company's Newark plant. Edison's dalliance with radio lasted a bare three years, with production ceasing in 1930. Incidentally, the production of records and phonographs had already ceased in the previous year, at the end of 1929.

R1 and R3

RESTORING A PILOT "SUPER WASP"

by Ian R.King

A couple of years ago, whilst grubbing about in a damp and dirty garden shed in Western Southland, I stumbled upon the wreckage of a Pilot "Super Wasp" lying in the bottom of a spidery Rinso carton. The elderly pensioner to whom it belonged expressed amazement and unbelief that anyone in his right mind should covet such rubbish but, with due thanks and best wishes, into the back of the Holden it went.

Some months later I looked at it with wilting resolve and put it back at the rear of the workshop for a very rainy day. Being an Invercargillite that rainy day soon came. The remains were dragged out again and washed, the sub chassis given a soapy Steelo manicure and the old black fabric spaghetti washed and oiled with furniture oil. Next, a stiff toothbrush with Brasso was vigorously applied to the two dial escutcheons. After drying these were then treated with clear polyurethane spray. Next came a very careful trial with a soft damp cloth on the two dial-scale surfaces. The printed figures withstood the gentle wiping and the scales eventually came up like new.

All components used in this kitset receiver were manufactured by the Pilot Co around 1928-29 and were of excellent quality. Both tuning condensers with bright nickel plated frames shining brass vanes look very nice indeed. No fixed capacitors other than mica were used but these and the glass-tube gridleak were O.K., merely needing a scrub. The valve sockets likewise responded to to soap and water, even their nickel-plated terminals were unaffected by the damp conditions they had suffered over the years. Such quality ! It makesone wince at what we accept for plating today.

All,however,was not sweetness and light. Both interstage transformers had open primaries and the woodgrained and gold printed steel front panel was rusted away beyond redemption. Not to worry. These things have a habit of turning up in the most unlikely places. The main body of my treasure was boxed up and placed in a wardrobe until such an event occurred.

Some 12 months later when walking through a tumble-down shop in central Otago with my old friend Ivan Fagan what should be peeking out from under a work bench but a Super Wasp front panel plus a box containing a full complement of ten plug-in coils. An exuberant "Hey ! look at that" and a hands and knees excursion under the bench brought to light in addition two black steel-cased audio transformers with nickel-plated terminals and,wonder of wonders, the primaries were intact. Ignoring Ivan's protests, he was given a modest cheque for Christmas and the Holden was turned homewards with another precious little cargo.

The project was now all 'go'. Two more days and nights, a handful of bronzed nuts and bolts, a steady hand with the soldering iron and it was all history. Progress during the final stages was considerably accelerated by having on hand an invaluable copy of Radio News which featured a constructors' article and circuitry for the Wasp kitset. With the addition of a horn speaker from the collection, valves types 22, 201A (twice), and a 112 in the last stage, plus a suitable A.B.C. power unit, the time had come to find out what gave previous generations of radio constructors a 'high'.

I was not disappointed. A modest aerial under the tiled roof of my home and 45 volts HT on the detector brought forth,with beautifully smooth regeneration qualities, a plethora of strong signals from Japan, Sweden, Korea, Aussie, BBC, etc. They were all there with ease. Fellow mwmbers, if you want fulfillment in your hobby, and complete satisfaction, find yourself a battered Super Wasp kitset and restore it.

Footnote: The Pilot Super Wasp set a standard for S.W. receivers and was used by amateurs well into the 30's. It was also produced in A.C. form. The battery version retailed at £14 in N.Z.

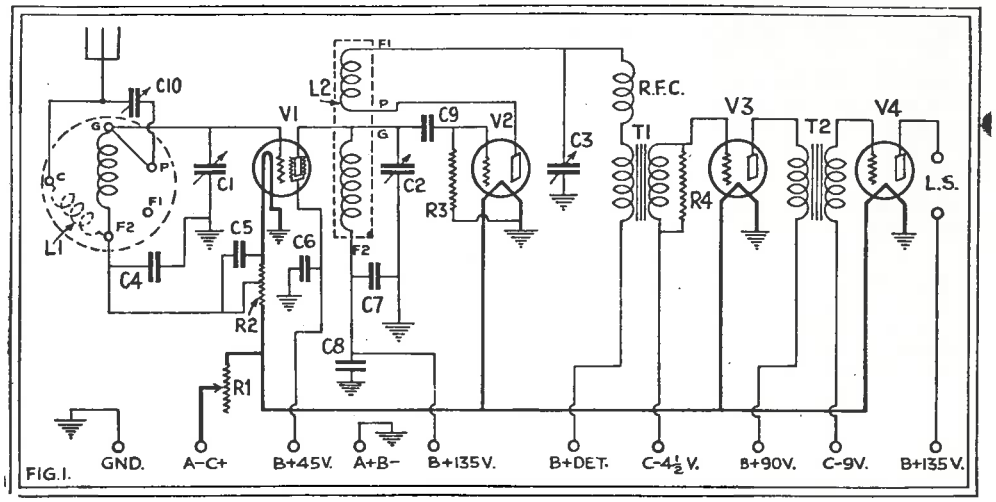
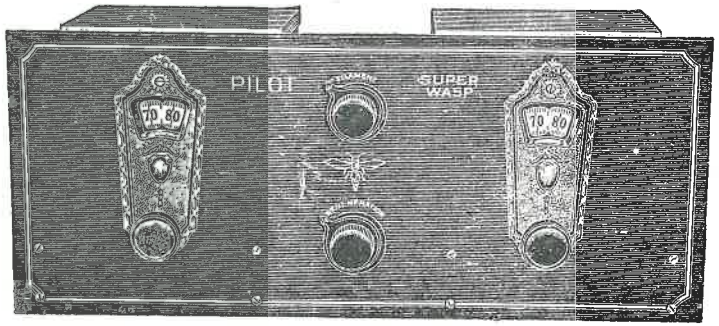


FIG.I.

Circuit diagram of Pilot Super Wasp



PILOT SUPER WASP

THE MINI-MICRO TRANSMITTER

by PETER LANKSHEAR

Have you ever wished, when demonstrating your old radios, that the programmes were from the same era? How much more appropriate would be some of the classic programmes of the 30's and 40s now available on tape, featuring your favourite old-time recordings.

The Mini-Micro Transmitter provides the answer. It is a high quality transmitter of strictly limited range which can be fed from a tape or cassette player and tuned in on on a chosen frequency like a regular transmission. As a bonus your tapes, ~~your tapes~~ will sound much better than when heard through the speaker of the usual small cassette player.

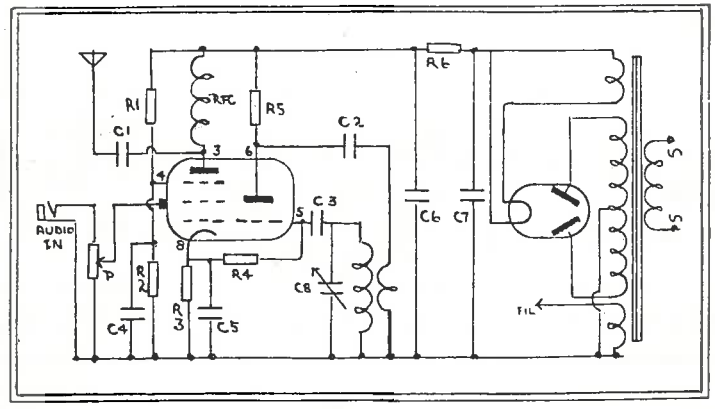
Service signal generators with external audio inputs can be used, but because the installation has to be dismantled whenever the generator is used for servicing, this method is not always satisfactory. Furthermore, not all generators have provision for external modulation and results from those that do can be quite unacceptable. The writer's generator, a popular Japanese model, required 10 volts of audio to achieve only 20% modulation, above wich distortion becomes quite intolerable.

The Mini-micro is a simple device, producing a stable signal capable of up to 70% modulation with low distortion over the entire audio spectrum. One volt of audio, easily obtainable from the external output of a tape or cassette player, is sufficient to modulate it. The Mini-micro avoids the shortcomings of a simple modulated oscillator by using a frequency converter tube. The oscillator section generates a low powered carrier, and modulation is applied to the normal control grid of the mixer section. A combined signal without undesirable interaction results and is sufficient strength to cover a display area when using a yard or so of antenna.

Just about any converter tube with a separate oscillator anode can be used, the type 6K8 being very satisfactory. If a different tube is used the anode dropping resistor should be reduced to 22K ohms. It is a good idea to use an oscillator coil appropriate to thetube selected. The older pentagrid types of the 2A7/6A8 family needed more turns on the feedback winding than did later types.

Construction is not complicated and chassis layout, dimensions andcomponent values are not critical. Setting up is quite simple. Connect a yard or so of wire to the aerial terminal and then check with a nearby receiver that ther is an unmodulated carrier somewhere on the broadcast band. If there isn't, reverse the connections to one of the oscillator coil windings. Now adjust the variable capacitor to tune the carrier to a locally vacant channel (check from the low frequency end of the dial upwards to avoid confusion with harmonics). Finally, connect the tape player to the audio input socket and adjust the audio control so that the modulation is at a good level without distortion.

WARNING If you are at all unsure about the mains wiring get it checked out. Also, although the RF output is very small, don't use a large aerial or you may be in trouble with your local Radio Inspector.



R1=33K, R2=22K, R3=270 ohms, R4=47K, R5=39K, R6 ia a 5watt W/W type which should be 6.8K for 250 volt AC secondary voltage, 8.2K for 270V, 12K for 300V, 18K for 350V, 22K for 380V. P=100K to 1Meg volume control. C1=100 to 1000pF C2=100 to 500pF, C3=50 to250pF, C4, C5=.01 to.1mF, 400V polyester, C6, C7=8 to 19mF, 450V, C8=variable padder about 600pF, RFC=1 to 10 millihenry, coil= B.C. osc coil.

THE MINI-MICRO TRANSMITTER

NOTICES

MEMBERSHIP LIST

At a recent meeting of Auckland members it was unanimously agreed that a membership list should be made available for general distribution. It is therefore the intention to publish such a list in the near future.

If you do not wish your name to appear on this list then please advise the Secretary immediately . In the absence of a reply it will be assumed that you have no objection to having your name included on the list.

* * * * * * * * *

CALLING ALL HAMS

Members of the NZVRS who are also amateur radio operators - would you be interested in taking part in regular 'skeds' on the 80 metre band with the object of furthering the hobby of vintage radio and getting to know other members with similar interests?
If interested please contact: Phil McGechie, 14 Auckland Road, Warkworth.Ph WW 8864

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SUPPLY OF CIRCUIT DIAGRAMS

Members requiring copies of circuit diagrams are advised that the charge is $1 for the first page,plus 25cents per page for any additional material pertaining to the same model. Add 40cents to cover handling and postage for up to 5 pages. Don't forget to quote the model number of the receiver,or where this is not known,send a sketch of the chassis lay-out, valve used and other other relevant information. Enquiries to:

Bill Farmer, 26 Iriangi Rd, Auckland. Ph 665-549