AVAILABLE (Cont.)

Murphy radio model TA222, P80 G.A.R., going in excellent order $50; ten ceramic nine pin valve sockets $20; HMV model 5701 complete going condition $40. Bill Lambie, 12 Foster Ave, Avalon, Lower Hutt. Ph 04/5678840.

WANTED

Turntable to play 16 inch discs at 33 1/3 rpm. E.J.(Ned) Matich, "Melody Park", 38 James Laurie St., Henderson, Auckland. Ph 09/8364400.

White plastic push fit knob for Bell Colt with stalk and clip intact to replace item broken by courier. Richard Webb, PO box 59-108, Mangere Bridge, Auckland. Ph 09/2756381.

1938 Zenith 7S-232 shutter dial mantel, P128 G.A.R., 1945 R.A. 4 knob Ultimate or Skyscraper (metal cabinet). 1938 Ultimate round dial console B.C.U. or B.X.U. 8 valve (magic eye).
Have for trade 1937 Al telephone dial polished rosewood Gulbransen mint condition. Ultimate 1933 model 5BB mantel in excellent original condition. Model B.A.U. 1936 Ultimate 4 valve reflex mint condition. 1936 Fairbanks-Morse tombstone upright mantel mint condition. For what have you or the above. Graham Lindsey, 110 Sylvan Ave., Northcote, Auckland. Ph 09 4192033.

Zenith shutter dial model 7S 238 three band 1938 tombstone "Waltons". Will pay your price. Steve Treadaway, PO box 31, Coromandel. Ph/Fax 07/8668507.

Dial glass for Ultimate, approx 1936, glass 5mm thick, 139mm high, 295mm wide, shows Aust/NZ stations on broadcast band, medium and shortwave bands. Has fine tuning dial above bandspread, ID on chassis COC-58541 E-9886. Also circuit data or info for Emerson in small bakelite case, 2 knobs, clock dial, gold/black markings clockwise 160 - 55 kilocycles. Emerson logo under dial. Serial U4B 884569, made in USA. Rex Handcock, 24 Fairfax St., Murchison. Ph 03/5239740.

Metal end piece for case of Philips 2516 receiver. Willing to pay heavy price. Syd Fountain, 12 Marlene Pl., Belmore 2192, NSW, Australia. Ph (Aust) 02/ 97592948.

Catalogues and Manuals for GR, HP, and Marconi test equipment prior to 1980. Reg Motion, 2A Hazel Tce, Tauranga. Ph 07/5768733 (after mid March).

Tuning knobs for Rogers Majestic 741 TRF, 1931. wooden with brass inserts. Peter Fleury, 9 Council St., Dunedin 9001. Ph 03/4560303.

Circuit diagram for Rogers Majestic model 79R31 which uses a pair of 2X3 rectifiers. Bryan Marsh, 20 Rimu Rd, Mangere Bridge, Auckland 1701. Ph 09/6367712.

SUBSCRIPTIONS

Members are reminded that subs for
1 April 1998 to 31/3/1999
are now due and payment should be addressed to the treasurer.

David Crozier
154 Grey St.,
Onehunga,
Auckland.

NB:-Those members who have paid up beyond 1988 have their sub expiry date shown on their bulletin labels eg, 3/2000.

Rec'd 31-1-98

N.Z.V.R.S. Bulletin

NEW ZEALAND VINTAGE RADIO SOCIETY

Vol. 18 No.4 February 1998

Bengt Svensson- a visiting member from Sweden.

Money P.9

NEW ZEALAND VINTAGE RADIO SOCIETY

A non-profit organisation devoted to the preservation of early radio equipment and associated historical information

PRESIDENT: Ian Sangster, 75 Anawata Rd, Piha Rural Delivery, New Lynn, 1250. Ph 09-8149597.

SECRETARY: Grahame Lindsey, 110 Sylvan Ave, Northcote, Auckland. Ph 09-4192033. General correspondence as well as requests for purchase of books, badges and power cable are handled by the Secretary.

TREASURER: David Crozier, 154 Grey St, Onehunga. Ph 09-6365954 or 0800-187161. Financial and membership matters are handled by the Treasurer. A list of members is available on application to the Treasurer with a self-addressed, stamped envelope.

NZVRS BULLETIN is published quarterly in the months of February, May, August and November. Opinions expressed by writers are not necessarily those of the society. Contributions should be sent to the **EDITOR** , Reg Motion, 2A Hazel Terrace, Tauranga. Ph 07-5768733. Bulletin distribution is arranged by Chris Hollis, 13A Princes St, Cambridge. Back numbers of most issues are still available from the **FOUNDING EDITOR**, John Stokes, 281C Hillsborough Rd, Mt Roskill, Auckland. Price is $1.50 each for numbers up to volume 10 and $2 for issues from Volume 10 onwards. Cheques to be made out to NZVRS.

NZVRS LIBRARY Requests for circuit diagrams, books and magazines from our library should be made to the **LIBRARIAN**, Ernie Hakanson, 17 Williamson Ave, Grey Lynn, Auckland. A small charge will be made for copies of items supplied.

AUCKLAND MEETINGS are held on the third Monday of each month at 7.30pm in the meeting room at the rear of the Methodist Church, 426 Dominion Rd, Mt Eden. Sales of vintage items are held at these meetings in the months of March, June, September and December.

WAIKATO AREA. Next meeting will be held at Geo. Were's, 27 Tatai Rd., Bowentown on the 15th of March commencing at 1.30 pm.

WELLINGTON MEETINGS are held typically from 1pm on the second Sunday of every month at Tireti Hall, Te Pene Ave, Titahi Bay. For further details contact Bob Hatton, 40 Rose St, Wadestown. Ph 04-4728788.

CHRISTCHURCH AREA. Contact Russ McKee, 39 Halliwell Ave, Christchurch for details. Ph 03-3525778.

CONTENTS	Page

FROM THE EDITOR

There are some interesting tales which come out of the early attempts to establish radio broadcasting in New Zealand and that of 2AH Wanganui is no exception. Little knowledge coupled with inadequate funds did not deter the members of the Wanganui Amateur Wireless Society from successfully producing and operating a transmitter which for a few short years helped kindle the enthusiasm of the general public for radio broadcasting. From this distance one can only admire the ingenuity of the club's members. We are indebted to Don Sutherland for his research into the history of 2AH.

The status 2AH had is an intriguing question. According to the 1923 Radio Regulations the letter "A" in its callsign classified it as an "amateur" station allowing it to operate only on certain nominated wavelengths outside of the medium frequency band yet it broadcast regular programmes presumably with official permission, on 220 metres which is within the MF broadcast band. It appears that in those early days there was a certain latitude given.

When I consider this issue I notice that all contributions have come from those parts of New Zealand embracing Wanganui and above. As an ex-Mainlander who lived for a long time in Wellington I cannot believe that nothing of note in the vintage radio field occurred South of Wanganui. Hopefully this issue is just an aberration and the origin of material will cover a wider spread in the future.

A number of members have contacted administrators in Telecom NZ and have been assured that the NZPO museum exhibits and technical library archives are properly stored and there is no intention of disposing of them in the future. While this is reassuring no mention has been made of when the museum equipment will once more be on display again: The Defence Forces are to be congratulated on their excellent public displays at Waiouru, Wigram and Ohakea. Telecom's "Spot" could perhaps stir his masters interest in establishing a facility to show off this country's telecommunications progress in a similar manner. A well set up public display would enhance Telecom's public image.

AUCKLAND MEETING CALENDAR

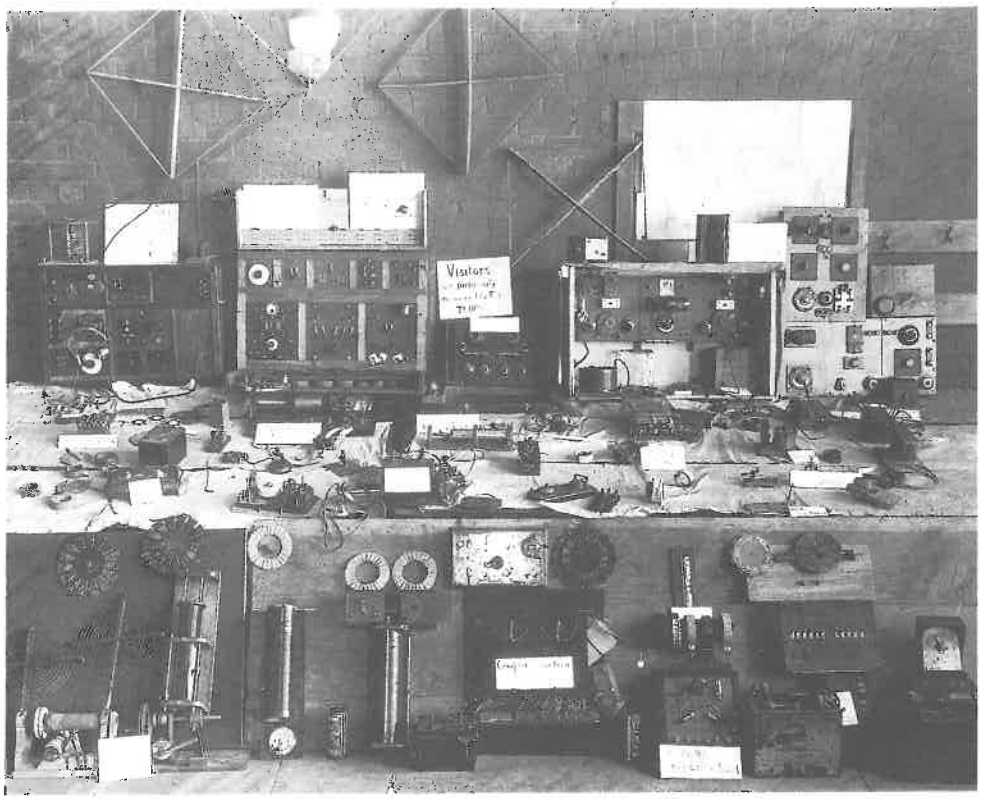
16th February: John Stokes speaks on servicing.

16th March: Annual General Meeting followed by Auction of radios and related equipment.

20th April: Bring and tell "Wells Gardner radios"

NEW MEMBERS WELCOMED

Rodney Champness	NSW
Ross Jowitt	Auckland
Dennis Mabin	Taranaki
Andy Nicholson	Christchurch
Doug Flemming	Masterton
J Duthie	Southland
Jon Moses	Auckland
Lyel Fontaine	Auckland
Rex Birch	Whangarei
Eddie Wood	Invercargill
William Rush	Hamilton
Ralph Boshier	Auckland
Damien Jurgen	Tauranga
Steven Morgan	Wellington



WANGANUI AMATEUR WIRELESS CLUB DISPLAY (c1923)

Wellington telephony concerts were received on the set at top left while the one next to it had received Melbourne concerts with better than gramophone quality. The collection on the table includes a 75 volt "B" battery, variable coupler, complete crystal set, spark coil, homebuilt variable condenser, wavemeter, morse keys and various type of spark gaps. Left front is a machine for winding honeycomb coils with samples of the coils wound. Next to it is a complete station, set of De Forest coils and a three valve amplifier panel.

PIONEER BROADCASTERS - 2AH WANGANUI

Don Sutherland Reg Motion

Public interest in wireless communication rapidly increased after WW1 especially after the introduction of wireless telephony, as demonstrated by Professor Jack in Dunedin in 1921. Wanganui was in the vanguard of towns where this interest blossomed and the story of its wireless club makes fascinating reading.

The Wanganui Amateur Wireless Club was formed in 1920 at a time when practical radio work by amateurs was entirely forbidden. Nevertheless the first members numbering about a dozen were keen enough on the science to devote time to theoretical study. At that time valves were a dimly understood thing and not one of the members had actually seen one.

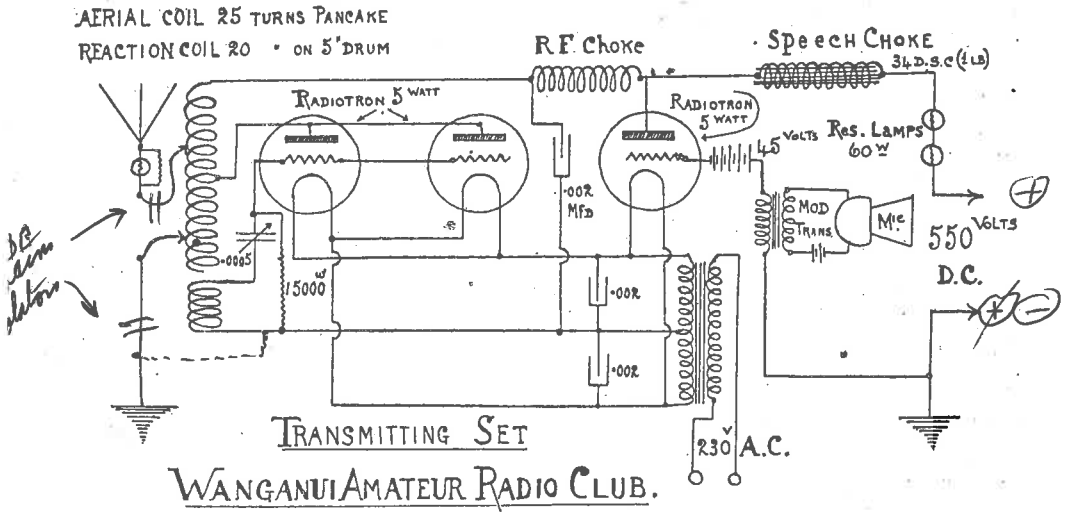
As soon as the restrictions on amateur reception were lifted (April 1921) club members commenced building apparatus. The first signals from VLW were hailed with delight and the enthusiasm of members was greatly stimulated.

> In 1921 provisional permission to receive radio signals required the applicant to pass an examination and to supply references from the police; the location of the receiving apparatus was then recorded and any modification to the receiver required the written permission of the Radio Inspector.

The club next obtained a radio valve and built up a De Forest Ultra Audion circuit. Morse signals dominated the air waves at that time. The first telephony transmission was received on 600 metres from a station which could not be identified since no call was given. Some time after this Mr C Forrest commenced working in Wellington with a De Forest O.T.3 set and one or two club members were successful in receiving him.

About the beginning of 1923 a proposal ,was put forward that the club should install a transmitting station and several members there and then made donations totalling nearly 20 pounds towards the cost of the necessary apparatus. None of the members had any knowledge of transmitting telephony, but difficulties were there only to be overcome and enquiries were made as to what was necessary. At the same time an application was made for a permit but this was immediately turned down. However, a set of parts alleged to be sufficient was purchased and a transmitting set made up. As soon as the 1923 regulations came out one of the club members sat for an operator's license and a Grade 1 permit to transmit was obtained.

When first built the transmitter consisted of two UV-201 tubes using a Colpitts circuit with a magnetic modulator. Building it was one thing but getting it to work was another. The initial problem was a failure to oscillate which was put down to the tubes but replacing these with a UV-202 made no improvement. It was then suspected that the plate supply of 210 volts from dry cells was too low so a small water-motor driven generator, giving about 150 to 200 volts, was put in series with the cells but this served only to make the plate of the tube nearly white hot. Success came eventually when other coils were tried until at last the set oscillated.



2AH Transmitter Circuit, as published in NZ Wireless and Broadcasting News of February 20, 1924 (no prizes given for reporting the significant drafting errors).

RADIOTRON UV-202—5-WATT TRANSMITTER

THIS transmitting tube is a popular one for low power radio telephone sets and for amateur C. W. telegraph sets for transmission up to distances of two hundred miles. Two 5-watt tubes in parallel will put from one and one-quarter to one and three-quarters amperes in the amateur's antenna. Using one of these tubes as a modulator and the other as an oscillator for experimental radio telephony, distances up to forty miles can be covered, and at least four times that distance when the two tubes are connected in parallel for C. W. telegraphy. Four or five 5-watt RADIOTRONS can be operated in parallel with increased range.

The 5-watt tubes may also be used as power amplifiers in radio receiving circuits. The energy amplification obtained therefrom is particularly useful for the operation of loud speakers.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

Overall Dimensions....2⅛ in. x 5 in.	Plate Voltage.....350 V. Normal
Base.....Four Prong Standard	Plate Current..... .045 Amp.
Voltage of Filament Source.....10 V.	Output Impedance.....4000 Ohms
Filament Terminal Voltage.....7.5 V.	Amplification Constant.....8
Filament Current.....2.35 Amp.	Watts Output.....5 Normal

SHIPMENT

RADIOTRON UV-202 is shipped in a standard cardboard carton in which the tube is well protected from mechanical shock or vibration. Shipping weight: 1 lb.

RADIOTRON UV-202..... $8.00

The UV-202 Transmitting Valve.

Modulation was the next problem. The magnetic modulator supplied was quite ineffective so it was returned and a modulation transformer purchased. Using this transformer the oscillator was grid modulated and on 3 July 1923, a test transmission was made using gramophone recordings followed by King George's Empire Day message. Good reports were obtained from a large number of receiving stations in the district including one from Maxwelltown.- club members were greatly encouraged.

A considerable increase in size and height of the antenna produced reports of reception from Marton and Levin then further improvements in the transmitter resulted in a telegram from Dunedin reporting good reception on a one valve set. This put new heart into the operators and several further changes were proposed.

A transformer was constructed to power the valve filaments from the local mains supply thus overcoming the need to carry the previously borrowed accumulators up and down the steep stairs to the YMCA attic where the transmitter was located. Also, a more robust RF coil was constructed from copper strip recovered from the alternator armature coils of an old Ford car. This slightly improved radiation and greatly facilitated tuning.

Broadcasts took place on Tuesday and Saturday each week from 8pm to 10pm using a wavelength of 220 meter (1364kHz) and a power of 10 watts. The contents were mostly gramophone recordings and local news.

Reports were now being received from as far away as Auckland. Most agreed that the speech modulation was good but the music was "tinny" and since 2AH was using an ancient gramophone to feed the "talking end" of an Ericsson telephone handset this was understandable. Some reports spoke of bad "swinging" at times and this was attributed to the grid modulation being employed. A change was made to choke (Heising) modulation but it required some experimenting with components before good modulation resulted. This form of modulation practically eliminated the "swinging" problem.

Powering the transmitter high tension supply from batteries was a real difficulty but this was solved when a lead from the local 550 volt DC tramway supply was contrived. Two 60 watt light bulbs in series broke this supply down to about 350 volts to suit the UV201 valves.

In December 1923 the club held a well attended public exhibition of apparatus used for radio receiving purposes and profited to the extent that they were able to buy their own gramophone to replace the one they had borrowed for their past transmissions.

By February 1924, one year after starting the transmitter project, all the above changes had been made and the transmitter was essentially complete (see circuit diagram). Input to the oscillator was 30/40 watts and reports of good reception were being received from Russell in the Bay of Islands to Waiwera South near Invercargill.

2AH was still transmitting in June 1925 although obviously having difficulty in staffing its station with suitable volunteer operators and this, coupled with the cost of maintaining the transmission, caused it to cease the service some time towards the end of 1925.

Nevertheless during its time the Wanganui Amateur Wireless Club with its station, 2AH, provided a valuable contribution to the progress of radio in New Zealand.

For the record the officers and committee of the club at that time were:

President -	R.S.Withers	Committee	C F Goodman
Vice-Pres.	S L Freeman		O S Chamberlain
	R R Robinson		H Ball
Secretary	G S Bissett		T W Cooper
Asst, Sec.	L M Mellars		J H Whellan
Treasurer	E M Bennett		P Palmer

Acknowledgments: The authors acknowledge the following sources of information used in constructing this article.
NZ Wireless and Broadcasting News, 1923/24.
Weekly Wireless Notes by "The Grid" in the Wanganui Chronicle for 1923/25.
The History of Broadcasting in New Zealand, 1920-1954; J H Hall.
The Radio Years - Patrick Day.

During the course of research on Wanganui station 2AH the following rather interesting list was found. It was compiled by "The Grid" who wrote a weekly article for the Wanganui Chronicle at that time (July 1923). The full text follows.

"TELEPHONY TRANSMITTING STATIONS

The following is a list of the stations which should be heard by local amateurs and the nights of their transmissions etc.

Auckland Radio Service Ltd.- 260 meters; call 1YA; power up to 500 watts; Tuesday to Friday inclusive from 7.45pm to 10pm.

Mr P Stevens, Gisborne.- 335 meters; power 11 watts; Wednesday, Thursday and Sunday.

Wanganui Amateur Wireless Club.- 220 meters; call 2AH; power 10 watts; Tuesday and Saturday from 8pm to 10pm.

Wellington Broadcasters Ltd.- 275 meters; power at present 15 watts but increasing shortly to 250 watts; Monday and Friday 7.30pm to 10pm.

Dunedin Radio Supply Co.- 370 meters; power 500 watts; call 4YO. Wednesday and Saturday 8pm to 10.30pm.

Otago Radio Association.- 300 to 370 meters; power 50 watts. Tuesday and Friday 8pm to 10pm.

British Electrical and Engineering Co., Dunedin.- 370 meters; power 250 watts; call 4YA. Thursday and sometimes Sunday, 8pm to 10 pm.

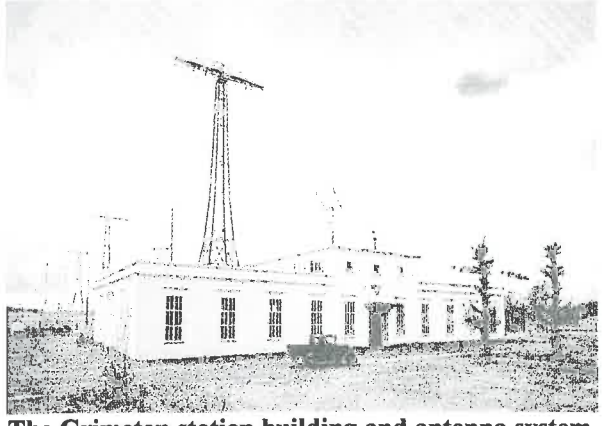
In addition to the above stations which transmit regularly there are a number which work intermittently. Amongst these are Mr Rowson of Hawera, Mr Bunce of Timaru, Mr Orbell of Christchurch, Mr Bell of Shag Valley, Mr O'Neill of Dunedin and Mr Vincent of Sydenham.

Of the stations mentioned above only the local club station can be efficiently received on the crystal. All the others require one or more valves for efficient reception.

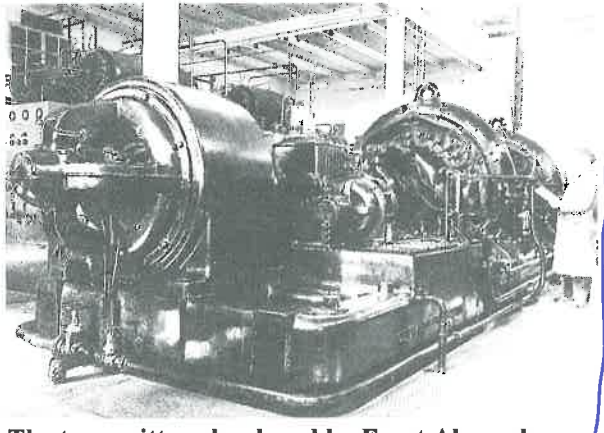
A VISITOR FROM SWEDEN

At our Monday night meeting on October 20th we were privileged to have as a guest speaker a visitor from Sweden, Bengt Svensson (see cover photo). Bengt has been a member of the NZVRS for many years and is a keen radio historian and collector of pre-1933 radio apparatus with a special interest in military radio. In addition, he is a licensed 'ham' (SM0UGV) and also a vintage car enthusiast specialising in Volvo.

By prior arrangement and at his own suggestion, Bengt made a special trip to New Zealand to see the writer, and also timed his visit to coincide with the October NZVRS meeting. He also very kindly offered to bring with him a 16mm sound film, plus some slides. This film (which had an excellent commentary in English) covered all aspects of the world's only surviving and fully operational 500kW Alexanderson alternator which is the heart of the complete and original long-wave transmitting station, callsign SAQ. This station came into operation in December, 1924 on a wavelength of 18,000 metres (16.7kHz) and after many thousands of hours use the alternator shows no sign of wear whatsoever; it is virtually as good as new. Today the installation is maintained in working condition by a group of volunteers



The Grimeton station building and antenna system which is carried on six 127m high masts.



The transmitter, developed by Ernst Alexanderson and built by General Electric in USA

Bengt, who spoke fluent English, gave a short supplementary talk mentioning, among other things that Sweden had no society of vintage radio enthusiasts, which seemed surprising in view if the fact that neighbouring Norway has a well established group.

His presentation was received with much acclaim by all those present and was certainly an occasion to be remembered. It is hoped that the film may be transferred to videotape at some time in the future so that NZVRS can obtain a copy.

John Stokes

At the 1984 NZVRS Exhibition - Kit Farmer (L), Margaret Thornton (R)

Article and photo by John Stokes

On page 19 of the last bulletin brief reference was made to the passing of Kitty Farmer. Perhaps some members who knew Kit may be unaware that in addition to her well-known catering skills she also had literary talents. Long-time bulletin members may remember a delightfully witty article written anonymously in the form of a letter which appeared in the May 1986 issue. Now with Bill Farmer's approval the author's identity can be revealed and the article below reprinted here in her memory.

A RADIO WIDOW'S LAMENT

(By one of them)

Dear Radio Widows,

I really have been meaning to write this letter for two or three years and was rudely shocked into action when I noticed a similar epistle in an American radio magazine, how dare these Yanks steal a march on us. Anyway I don't reckon they know half the trials and tribulations of us Kiwi wives. Do you? I bet we can beat them hands down when it comes to living with these radio buffs of ours. "All the world be queer but thee and me", but these radio blokes, well I ask you!

Now just a few do's and don'ts on how to cope (as if you didn't know).

Supposing you have a friend living in Timbuctoo whom you have been dying to see but never can get your radio buff to leave his workshop and take you. Just draft a phoney

advertisement for the local paper reading something like this:- Antique radio, very rare, apply personally to Joe, Timbuctoo. Have your bags ready packed for I guarantee you will be shoved into the car before you can say 'knife'. And how lovely to see your friend and catch up on the news while 'He' goes to look for the elusive Joe.

And, another thing. Whatever you do don't rearrange your lounge, dining room or, in fact, any room and leave a spare space because, before you can turn around, there in all its splendour, occupying that space, will be a beaut old Atwater Kent 808 or similar reposing in all its glory. If it has a wee bit of borer, not to worry if it gets into your priceless antique whatnot. Be reasonable, far better for that great old radio to have a good home. Nor is it wise to clean off you sideboard, buffet or the like because if you do it will be immediately littered with circuits, radio gazettes etc, etc. Then there are all those endless little pieces of paper by the phone that every so often your man comes and searches through for - " that radio bloke's name and phone number". Don't worry, just go on with what you were doing; you haven't thrown anything out, have you? Surely you know better than that. No, you have just collected them all up, put them in a bag labelled Radio Rubbish and thrown them into a cupboard.

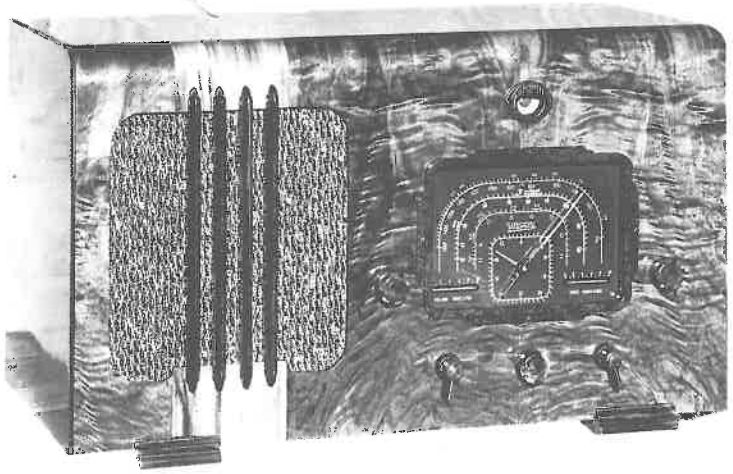
Then there are times when you are trying to tell him something and he has his head stuck inside an old radio and is just not listening to you. Don't despair, just stand off and swear like a trooper. I'm telling you he will be so shocked by the language (if you know it all) that he will listen alright. But, of course, this little trait of not listening comes in quite handy at times, especially if you have forgotten to tell him something he should have been told. Just look wide-eyed and say "but I did tell you dear when you were fixing that old Zenith".

And its really not so bad when he inadvertently rests the hot end of his soldering iron on one of his good handkerchiefs, after all they are only worth about $3 each. It's far worse when you are saving like mad for that new carpet and you are nearly there when an old radio he has always wanted comes up for sale. You weren't counting on that were you? Not to worry, after all the longer you have to wait for the carpet the longer it will last. After all, it might even see you out.

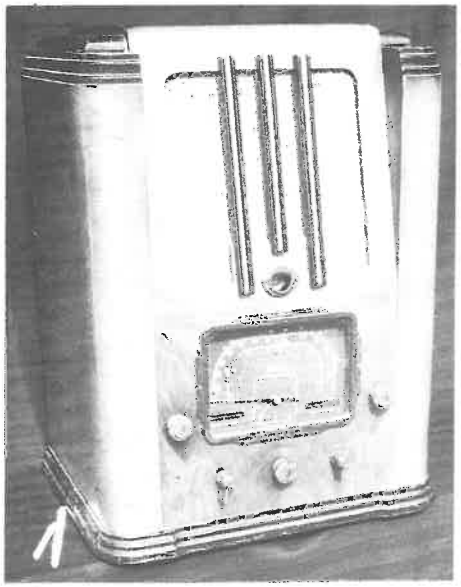
But you will agree with me, I think, that you have really reached rock bottom when after showering and dressing one morning, you get an itch. Then, on investigation and to your utmost astonishment you find, resting in your knickers, one offending threadlike piece of copper scratching hell out of your rear. Now, I ask you, how can anyone be expected to put up with that sort of thing? I could go on and on, but take heart you wives, at least you have not had to give your man up to some lush blonde; your man prefers copper wire, condensers, volume controls, speakers, coils and suchlike. At least you know where he is don't you. In the workshop with his head inside some priceless (he hopes) old radio.

Yours ex-statically,
May Day. (Alias **Kitty Farmer!**)

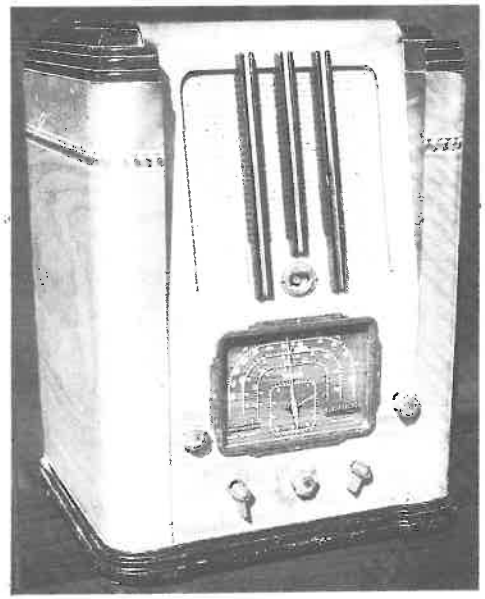
This article originally appeared in the NZVRS bulletin May 86, Vol.7, No.1, P.6



Above:-Ultimate BCU in horizontal cabinet.



A pair of Ultimate BCU's in upright cabinets
(the speaker grille bars have chromed metal inserts.)



ULTIMATE's BCU

Ian Sangster

In 1937 Ultimate produced their BCU model, a handsome, sensitive radio. The set has an attractive multicoloured rectangular dial with the pointer working in an arc. The set uses metal valves. Ultimate's circuit data to hand shows that some 1936 models used metal valves, principally a 9 valve set, so the BCU was not the first Ultimate to use them.

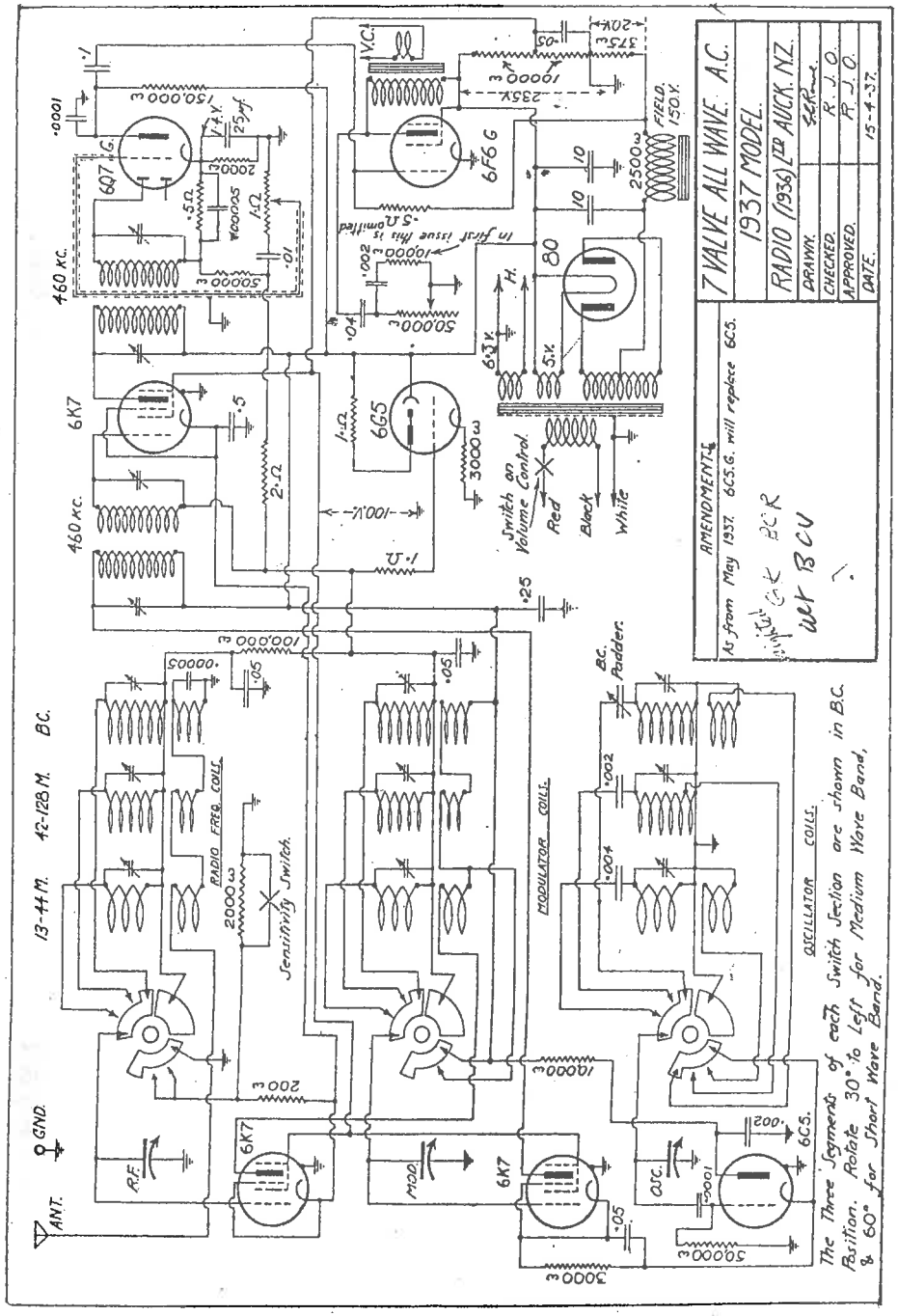
The valve complement is as follows: 6K7 r.f., 6K7 mixer, 6C5 oscillator, 6K7 i.f., 6Q7 detector and 1st audio, 6F6 audio output, 6G5 magic eye and 80 rectifier. The use of a 6K7 as mixer and the separate 6C5 oscillator is worth mention. The Wells Gardner Gulbransen and Airline 7L models dating from May 1936 share the same oscillator and mixer arrangement. The only difference between the valve line-up of both these sets is that the Ultimate uses an 80 rectifier and the Wells Gardner a 5Z4MG.

Recently I was able to work on my Ultimate BCU. The chassis was fitted with new capacitors, power was applied and measurements made. High tension voltage was low. A replacement capacitor, fitted by me in a screen or ht bypass, was completely shorted. The brand was UCC with a white plastic tube casing and ceramic filler at the ends. By the time I discovered this the white plastic tube had swollen considerably but all held together. Beware of new-old stock UCC capacitors of this type. It is good practice to check new capacitors before fitting, faults which you have built in to a set can be the trickiest to find.

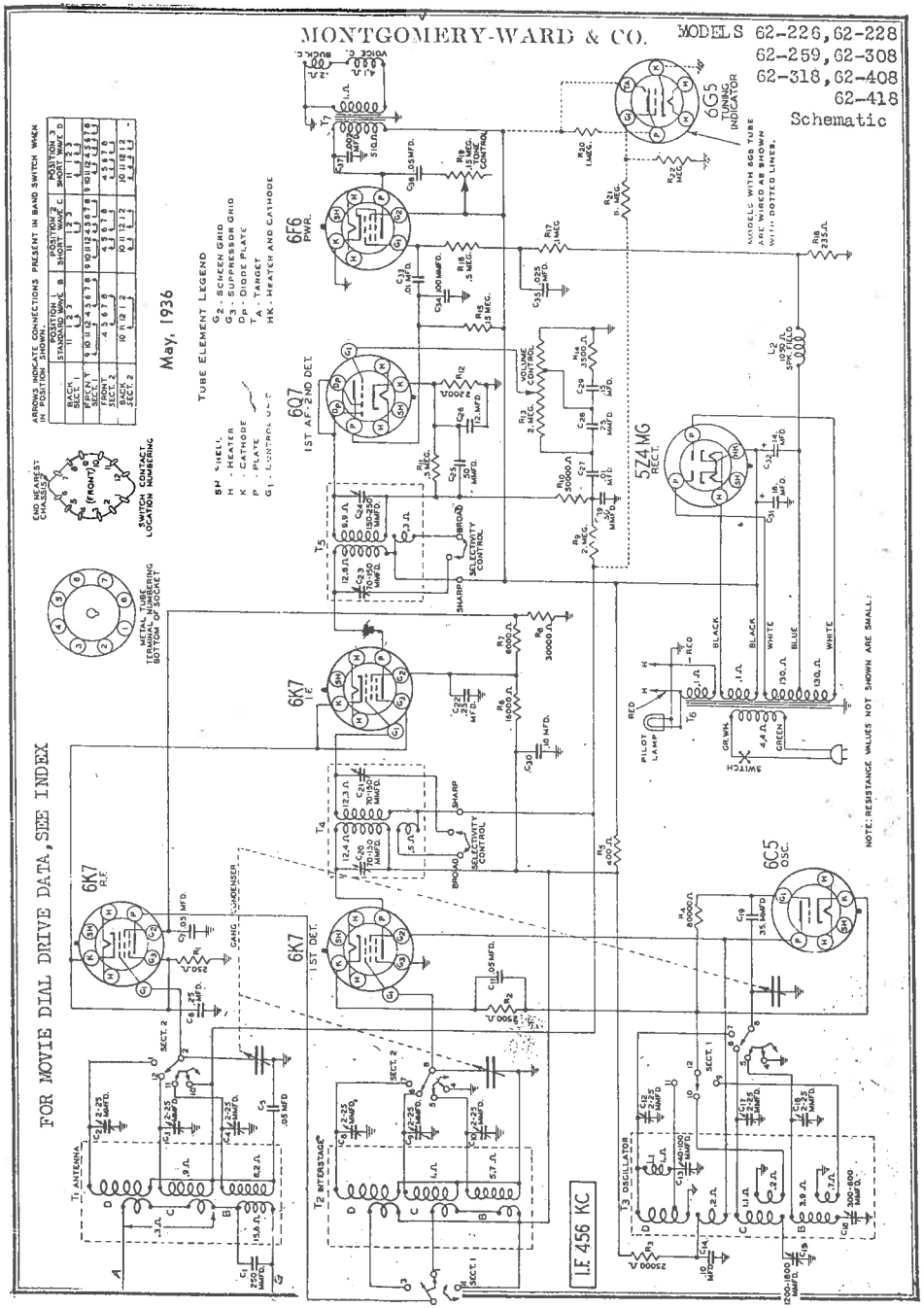
The BCU is another fine performer from the Radio Limited stable, but both chassis that I had to work on had problems with a small rubber idler wheel in the dial drive. Talking to other club members who had worked on these sets convinced me that this is a common problem so I shall share my findings with you. I am not equipped to turn replacement rubber wheels to diameter. If you are familiar with these sets you will know that the rubber tyre needs to be quite wide thus precluding the use of an O-ring.

I built up the tyre on the wheel to slightly smaller diameter than I needed with rubber-like self amalgamating tape, Scotch 70. Self amalgamating tapes are tapes which do not have a tacky adhesive but stick mainly to themselves as they are wrapped around an object. The tape is stretched as it is wrapped, this changes the thickness of the tape and assists its adhesion. I used this property to build up a tyre around the brass wheel which showed the least step where the start and finish point of tape laid. When I judged sufficient build up of tape had been made I trimmed it to finish, as explained, with the smallest step. Then I cut a length of 25.4mm heat shrinkable tube to be slightly wider than the roller built up from tape. I then shrunk the sleeving over the tape on the roller as a tyre over a tube. Two attempts were necessary to get the correct diameter, the original rubber tyre being so deteriorated as to be unreliable as a gauge of diameter. The extra length of the sleeving, shrunk down at either side of the tape build up, helped to hold it central. I do not regard this as a perfect solution, some readers may have other ideas but it worked for me.

The Ultimate BCUs that I have seen come in two types of upright cabinet, one with a marquetry band around the top and one without. An attractive horizontal cabinet was also used. Related sets were produced in the National and Courier brands.



Circuit of Ultimate BCU



Circuit of Montgomery-Ward Airline, produced by Wells-Gardner, seen in New Zealand as Gulbransen 7L, showing similarities.

REPRODUCTION - OR FAKE?

In New Zealand we have not suffered to any extent from faking of radio artefacts but overseas it is not unknown and such fakes will find there way here, even though we may not find them locally produced. The following is a greatly condensed version of an article originally published in the British Vintage Wireless Society journal, in which David Read, a well known British collector of long standing, discussed the subject and offered some advice.

For an object to be reproduced or faked the genuine article must have a value in the market place which is considerably greater than the cost of producing the modern imitation. There is,, of course, nothing new in this and faking is itself an ancient activity (eg. carbon dating of the Turin Shroud revealed a much younger object than was previously claimed although the technique of its manufacture remains unknown).

The Victorians produced great quantities of reproductions which were sold as such, and whilst much of this imitated furniture and fine art, many objects were reproduced simply because the technologies developed in the Victorian age made this easily and cheaply possible. Today many collectors imagine that these imitations are originals simply because they are old!

In the last 10 years or so modern technologies and materials have deskilled and lowered the entry cost of making reproductions. Many of the techniques used have been pioneered by museums, initially as expert restorers and then to raise money in the museum's shop through the sale of reproduction artefacts.

Unfortunately the techniques now available have not only transformed the economics of making imitations sold as reproductions but have attracted the attention of fakers whose objectives are quite different. Today it is virtually impossible to buy objects such as art deco figures, lamps, clocks and certain scientific instruments and know whether they are genuine or not. Thus the market in many of these objects has been totally destroyed by a loss of confidence by the buying public.

What should a radio collector do?

Firstly be more interested in learning about the subject than making money. A novice collector will make mistakes and learn, but a greedy collector, more interested in price than value, will get badly burned.

Learn the difference between new wood and old wood, French polish and varnish, black plastic and vulcanite, modern wire and old.

Acquire an eye for anachronisms such as radios apparently made in the 1920's yet with valve holders, transformers and variable condensers made in the 1930's. Very basic components such as capacitors and resistors are also a useful telltale.

These simple guidelines usually weed out the amateur fake. The professional fake is much more difficult but experience will develop your eye and intuition. Lastly it should be remembered that honest imitation and reproductions will form a legitimate personal or business activity. Many years and an owner or two later these may be fraudulently sold as originals by a person who "thought they were genuine"

Truly the buyer must beware.

A RESTORATION Gerry Billman

The upper photo was taken in my workshop on a day when Ross Paton was visiting. The console in the foreground has a General Electric chassis (perhaps Model 18) in a local cabinet and no-one seems to have seen this combination before. The lady I purchased it from told me her mother bought it shortly before the war and they listened to the war news on it. The cabinet appears to have been poorly made and polished and my guess is that the retailer who sold it imported a few G.E. chassis and fitted them in local cabinets, purchased as seconds, then sold them in his shop. I was assured that the set was purchased new and was not made to order.

The cabinet was in a sad state when I purchased it with most of the veneer either missing or peeling on top where damp pot plants had stood for years and the rest of it had suffered the usual bumps and dings that come with years of use.

The chassis required a replacement power trannie, a few new capacitors and a dial overhaul while the repaired cabinet came up well after stripping and polishing it.

The lower photo shows the restored set alongside a more familiar radio in the same style of cabinet. It now looks and sounds "as good as new".

An interesting 1931 advertisement:- note the Emerson "clef" above the twin dial All-Wave.

VALE ! Bruce Kelly.....A Tribute from the New Zealand Vintage Radio Society.

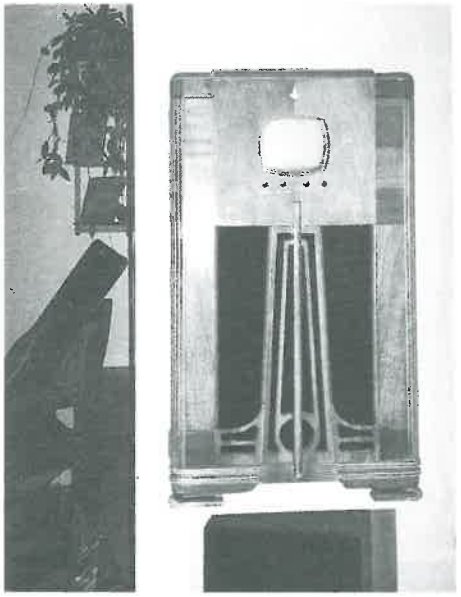
There must be few if any NZVRS members who have not heard of Bruce Kelley, one of the founders of the Antique Wireless Association (AWA) back in 1952 and who, for the next 46 years, devoted so much time and energy to furthering the aims and objects of this Association.

In case any reader does not know, the AWA was the first organisation of its type to be established anywhere in the world, and still remains the best known; but this is not the place to comment on its growth and development. Suffice to say that if any one person's name is forever linked to that of the AWA, it is Bruce Kelley's.

As many NZVRS members will know, Bruce was editor of the AWA's journal, *The Old Timer's Bulletin* (OTB), a position he so ably held for nearly a quarter of a century, right from the time of its inception in 1960. But that was only one of the many ways in which he worked for the AWA. Dedicated and tireless, that was Bruce. Those NZVRS members who had the pleasure of meeting 'B.K.' personally during visits to the USA, invariably spoke highly of his kindness and hospitality.

News of Bruce Kelly's death reached us late in 1997 and his passing may perhaps be regarded by many as marking the end of an era.

J.W.S.



SACRILEGE OR NOVELTY?

Barry Williams

Vintage radio put to an unusual use. While recently on Norfolk Island I visited a home where the owner, Tony, had put an old consul radio cabinet to an unusual use.

Tony had acquired an empty radio cabinet manufactured by Emerson Radio and Phonograph Corp., New York. He had then sawn off the front of the cabinet and attached it to a cupboard door in his lounge.

The photograph opposite shows it in position (note the distinctive Emerson clef above the dial opening).

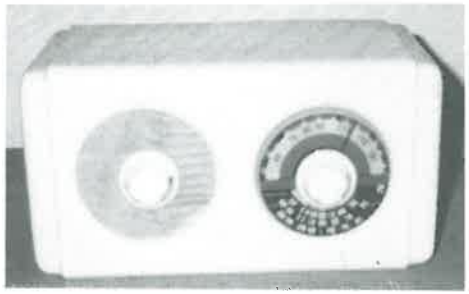
Certainly a talking point!!

SWAP MEETS

Photos by Gerry Billman

Waikato Meet at the late Frits Willemsen's home in Hamilton. L to R, John Danks, George Were, George Millard, Rod Osborne, Reg Motion, Digger Holmes, Chris Hollis, Ewan Herbert.

Garage Sale at Graham Lindsey's home in Auckland. L to R, Mike Diack, Ernie Hakanson, Graham Lindsey (bending over), Ian Sangster, Bob Cook, Phil McGechie.



CAN YOU HELP? (Chris Hollis)

Our Bulletin distributor seeks help in identifying two new additions to his collection. There are no names or other distinctive marking on either set.

The first (top photo) has a New Zealand dial and is fitted with loctal valves type 7Y4, 7C6, 7B7, 7C7 and 7C5. The chassis and front panel are spot welded together.

The second (lower photo) has a metal case, uses octal valves and has three preset tuners.

Chris Hollis would be grateful for help from anyone and can be contacted at 13A Princes St., Cambridge, Ph. 07/8276046.

A Sad Story with a Happy Ending

Rod Osborne

While helping a friend and fellow member of the NZVRS get some junk ready for the Cambridge sale I noticed a very old, very large and very rusty amplifier on his top shelf. Normally an item to be ignored, I noticed that this one had two KT66s which I needed to repair an amp.

After some adroit negotiation my friend said I could have the valves for $5.00. This was fine with me so I climbed up the ladder to remove them when he said " BUT you must take the amp too". No amount of pleading would make him change his mind and even an appeal to his normally kind wife was to no avail. Therefore, at great risk to my wellbeing, but with my friend's enthusiastic help, I took the thing down, removed the KT66s and put it in the van to take to Cambridge, probably to leave in the wheelie bin after the sale.

On arrival at Cambridge I took the amp out of the van and left it under our table while we set up our display. I then went to see what bargains were available on other tables. When I returned there was a note on the amp saying please don't sell before contacting Jim on table 33. This I duly did and he was delighted to see me as he had been looking for one of these amps for a long time. He eventually persuaded me to sell it to him for $40.00.

Unfortunately the friend who sold it to me arrived as Jim was paying me for the amp and for some reason your editor gave me some long sideways looks that day as we manned our table.

FROM THE LIBRARY

The following are extracts of articles from vintage radio magazines received by the NZVRS library. Photocopies of these articles are available at $1 each plus postage from the librarian - Ernie Hakanson, 17 Williamson Ave, Grey Lynn, Auckland. Phone 09/3766059

81. Adjustable Diaphragm Headsets. photos, descriptions. Old Timers Bulletin, Vol 38, no 2, p38, May 1997.

82. Converting a Zenith 4V31 to AC Power. Photos, description, circuits. Old Timers Bulletin, Vol 38, no 2, p43, May 1997.

83. Pitting the AK40 against its Competition. Comparison tests on an AK40 and its contemporaries. Methods, results. Old Timers Bulletin, Vol 38, no 2, p48, May 1997.

84. The Heathkit GR-81 "Economy SWL Receiver". photos, circuit description. Old Timers Bulletin, Vol 38, no 2, p51, May 1997.

85. Book Review. Heathkit - A guide to the Amateur Radio Products. 248 pages, 1995. available from A.R.C., PO Box 2, Carlisle, MA01744 . Old Timers Bulletin, Vol 38, no 2, p57, May 1997

86 Tranoceanic! detailed review of the Zenith Transoceanic portables, photos, descriptions, history. BVWS bulletin. Vol 22 No 2, p4, Summer 1997.

87. Gods and Mythology at Zenith. A critical commentary on the book 'Zenith Transoceanic, The royalty of radios' BVWS bulletin. Vol 22 No 2, p8, Summer 1997.

88. The ones that nearly got away. Photos of some of the items from the aborted Marconi auction. BVWS bulletin. Vol 22 No 2, p12, Summer 1997.

89. Direct action tuning. Philips 555A, 660A, 855A, 735A and 680A. Photos and description. BVWS bulletin. Vol 22 No 2, p20, Summer 1997.

90. Wireless sets for the clock and watch trade 1923/26. photos, history. BVWS bulletin. Vol 22 No 2, p28, Summer 1997.

91. A POGO receiver, 1925 French set, Systeme Abele Berrens type AB4. photos, circuit, description. BVWS bulletin. Vol 22 No 2, p30, Summer 1997.

92. Those early American tube bases. UX, UV, UY designs. photos description, history. BVWS bulletin. Vol 22 No 2, p35, Summer 1997.

93. Restoring AWA Radiolettes. model 24, 28, 34, 37. circuits, photos, description of problem areas etc. HRSA Radio Waves No 60, P21, April 1997.

94. The Kreisler model 11-99. photo, circuit, description. . HRSA Radio Waves No 60, P5, April 1997.

95. The Hypresco 4. photo, description, circuit. HRSA Radio Waves No 60, P22, April 1997.

96. The Marconi Magnetic Detector. description, photo, explanation. . HRSA Radio Waves No 60, P5, April 1997.

97. Early American valvemakers. Moorhead, Cunningham, RCA, General Electric. valve designs, history, photos. . HRSA Radio Waves No 60, P31, April 1997.

MARKETPLACE

Advertisements for the next issue must reach the editor by the 18th April 1998. Ads should be either hand printed or typed on a separate page. Note that no verbal or phone ads will be accepted. Remember to include your name, address and phone number. There is no charge for ads but the NZVRS is not responsible for transactions between members. Address ads to:
Reg Motion, 2A Hazel Terrace, Tauranga, New Zealand.

AVAILABLE

Radios listed below are to be sold at the Peter Webb Galleries Ltd, 18 Manakau Rd, Epsom, Auckland (unless sold prior to Auction) on 17th February at 6pm (clock and radio auction)
1) Scott 12 valve All Wave 1933, serial Q71.
2) Courtenay 1931 made by W Marks Ltd. Cathedral style, distributed by Stewart Hardware, Wellington.
3) Wurlitzer, Cathedral style made in USA 1932.
4) Philips 1928 QP. Made in Holland.
5) Grebe 1925 MUI. Made in USA.
6) STC 1931. Made in Australia.
1,2,4,5, in excellent unrestored condition
3 & 6 have been restored to excellent condition.
These radios have had regular use.
E.J.(Ned) Matich, "Melody Park", 38 James Laurie St., Henderson, Auckland. Ph 09/8364400.

Latest edition Collectors Guide to Antique Fourth Edition Radios. Brand new USA book by Mary and Sue Bunis. Price $65 includes P&P. Steve Treadaway, Ph 07/8668507.

Radios of the 30s, 40s, and 50s, including a few tombstones and consuls. For schedule write to R. McKee, 39 Halliwell Avenue, Christchurch 5.

Dial glasses for Astor Mod J.J. & Dial scales for Radiolette 37 etc. Both are professionally made. Astor $20+P&P, Radiolette $10+ P&P. Money orders only. Syd Fountain, 12 Marlene Pl., Belmore 2192, NSW, Australia. Ph (Aust) 02/ 97592948.

At least 100 early British 5, 7 and side pin valves from Cossor, Mullard etc. Mostly N.I.B. Swap the lot for a couple of good 212/4212s or W.H.Y. Lots of other valves available. I'm looking for early large triodes. Mike Diack, 6 George St., Mt Eden, Auckland. Ph 09/6301014.

FOR TRADE: Pilot G528 cabinet, AK 447; Philco, AK, Zenith knobs (originals). Howard model "O" Cathedral, Silver Marshall Cathedrals, Loewe multivalve set. Wanted: Pilot H594, H597, H714; Philips 352A; AK 208, 628; Pilot knobs and parts; chassis AWA/GE bakelite cathedral. Bill Moore, 3049 Box Canyon Rd., Huntsville, Alabama 35803. Ph 205-880-1207, Email bill_Moore@Mevatec.Com.

Used valves, all tested with an AVO valve characteristic meter. 01A-$15, 30-$10, 27-$10, 47-$8, 42-$4, 24A-$9, 6L6-$6, EL34-$7, ECC81,82,83-$3, 57,58-$4, 6V6-$2, 2A7-$5, 5Y3-$2, 6X5-$3, 6X4-$2. New 6V6G-$6. Show valves, used transmitting valves, Siemens RS1006B, CV11, RG62D, U19, C1149/1, etc., $5 each. Large 4 pin ceramic transmitting valve sockets $5each. New Edison Gem phonograph springs $30 each. Various Philips, RCA. Osram, Mullard valve data books, Johns Ltd 1938/39 catalog $20. Send SSAE for full listing of valves (over 500 types) and literature. Peter Fleury, 9 Council St., Dunedin 9001. Ph 03/4560303.