BVWS bulletin

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The Vintage Wireless Museum

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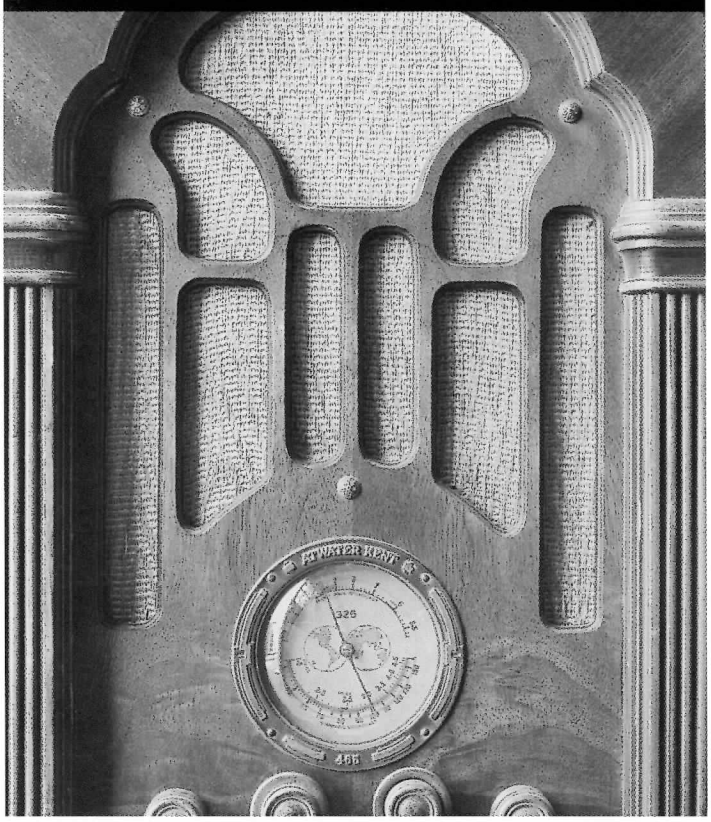
Proprietor: Gerald Wells. Please make appointments beforehand



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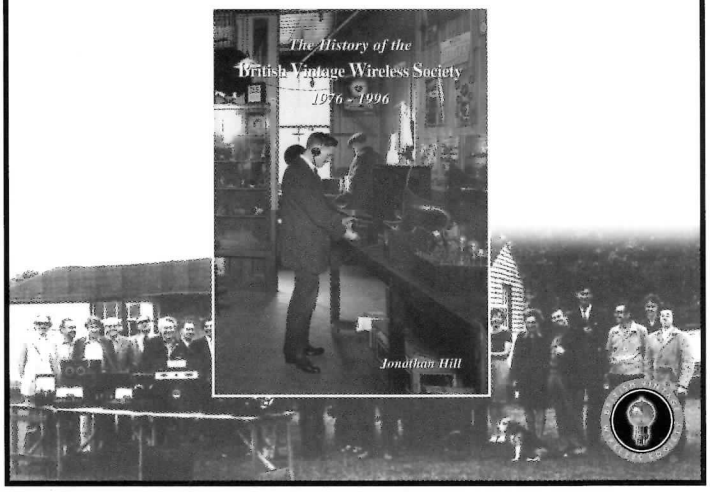

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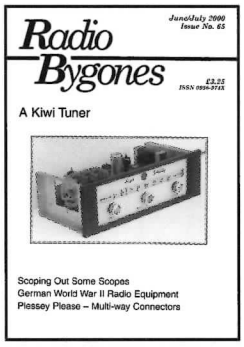

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Volume 25 No.4 Winter 2000

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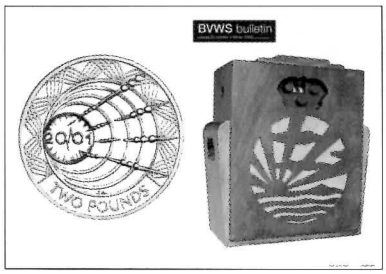

Front cover: Pye Twintriple. 1930. Four valve TRF.
Front cover: New marconi anniversary £2 coin

Front photography by Carl Glover
Graphic Design by Carl Glover

This issue Edited by Rob Chesters, Carl Glover and Ian Higginbottom. Proofreading by Mike Barker, Ian Higginbottom and Peter Merriman

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From the chair

A festive hello to you all!

It's time again to go out in the cold and pick a Christmas tree, struggle home with it and move furniture around to make enough space, then for the best part, the setting up with sparkling lights and decorations.

As promised, with this issue you will find the second BVWS CD-ROM containing the Trader Service sheets, numbers 801 to 1600. With this, we even-up the balance of Radio and TV service data for all those members who have patiently waited. The CD has been changed in structure to make it easier for the few MAC users amongst us to be able to see the internal directory levels, as this was a problem last year. However this year we state that the CD will NOT work with MAC Computers as the menu system is not intended to. We were only notified of two problems from users of MAC Computers last year, and the extra effort to redesign and change the disc from a familiar form that everyone now recognises from the previous version has been deemed not worthwile. I know from many letters and e-mails that you will find it of great use.

Once again this year we are using the Membership Renewal forms that were introduced last year. If you have received this Bulletin, you have also received the renewal form as it has your address printed on it, so if you have not yet found it, then you should rescue it from the bin straight away. All the renewal forms should now be sent to the new address shown on them, where Steve Pendlebury will do his magic, (not direct to me) and after the excellent effort on your part last year, please return them no later than 1st February as it makes life very tedious having to deal with late renewals. On the form you will find the a place for you to tell us which Bulletin Article for this year you have enjoyed the most, so that we can award the Author with the 'Pat Leggatt Award' at the AGM in 2001. There have been some really excellent articles over the past 12 months so it will not be an easy job picking your favourite. Also on the back of the form, you will find a question asking for your support of the proposed new Society Constitution which is enclosed for you reference with this Bulletin. If you have any comments on this matter please address them directly to Guy Peskett, who's address you will find at the front of the bulletin.

A first for this year is the option for non UK residents to renew their membership by Credit Card. We are aware of the ever increasing charges imposed on foreign members to purchase Euro-Cheques or Giro's for Sterling. This option is ONLY available for three year renewals at this time as it adds a considerable amount of administration to the Treasurer, and unfortunately there is an extra charge for the service which we have to pass on to the foreign members as the Society could not withstand the costs comfortably. Please take advantage of this facility otherwise it will not be repeated next year. It may then be reviewed and extended to all other members at a later date.

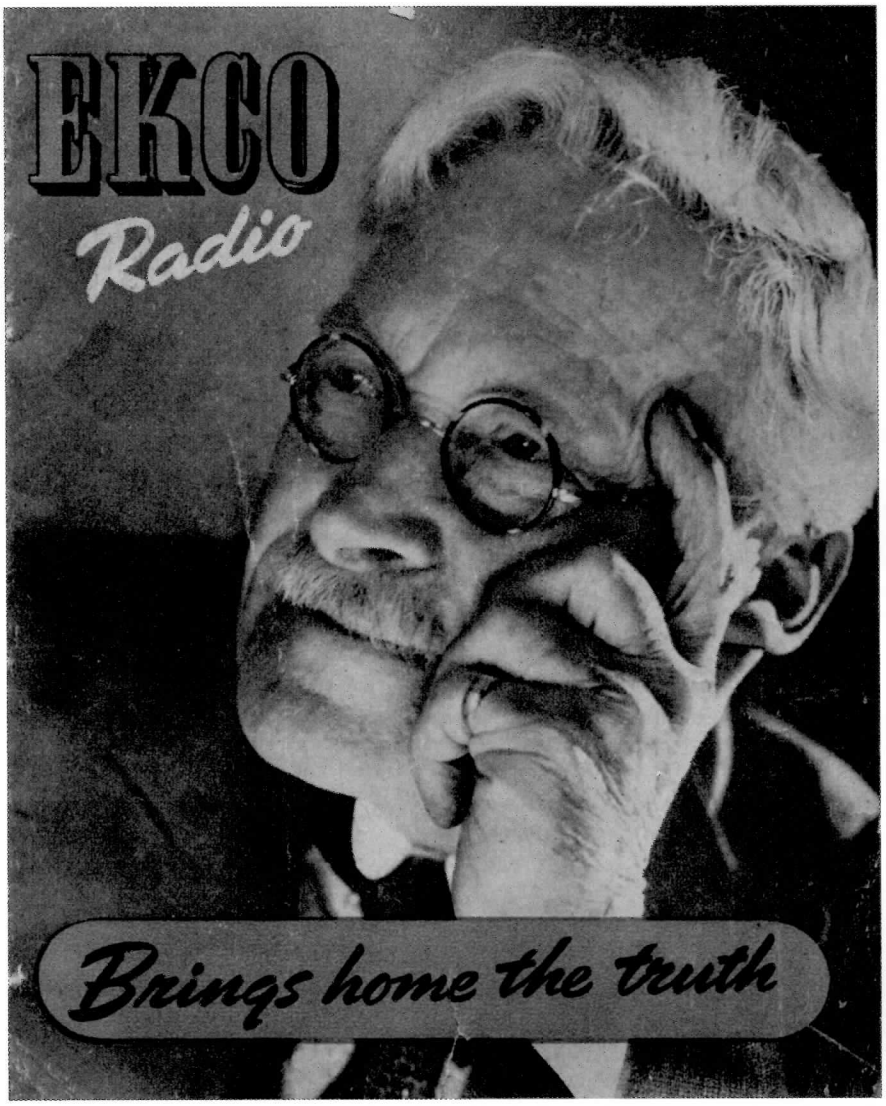
A large number of members will remember the Duncan Neale auction and the marvellous array of equipment. Well, after everything had been auctioned, there was still a significant amount of items to be disposed of. This has been done on behalf of Duncan's widow Marjorie, by setting-up stalls at Harpenden and the regional meetings and selling off everything we could transport. With the job complete, a significant donation has been accepted from Marjorie Neale in thanks for the Society's help given. It is fitting that a man that gave so much in terms of time and effort, and preservation of radio history and equipment should be honoured within our Society. We have decided that an award that reflects Duncan's enthusiasm and expertise in the field of radio would be appropriate. The award will be called 'The Duncan Neale Award for Excellence in Preservation'. This award will be granted annually by the Committee to a member of the Society who has displayed great effort in preserving radio history as laid down in the aims of the Society.

Well it just remains for me to wish you all, on the behalf of the Commitee, A Merry Christmas and prosperous New Year.

Mike

Ekco during the 'phoney War'

by Robert Chesters



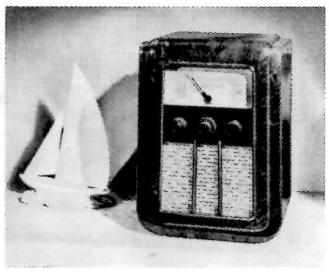
Top left: an image of homely reassurance. We are fighting for the things we hold dear.

Although the catalogue offers a wide range of sets from the economy of the AD75 to the luxury of the motor tuned high end "radio brain" sets, the majority of the 1940 catalogue are either reworkings of previously used mouldings or they are unsold models from the previous year.

Take for example, the AD75; although the wireless itself is a new model the cabinet is simply the mould of the 1935 AD36 that has been re jigged and set with a different speaker bar arrangement, they have chosen the characteristic "fleurs de lis" shape that instantly distinguishes this wireless from the AD36. As the copy of the advert takes great pains to point out that although the radio has been made with economy of materials in mind but without "cheapening" the finish, then one can make a pretty safe bet that the finish has been compromised!

In all fairness, the AD75 is a very nice little radio, and somewhat better than the AD36 - being a superhet - but the overall impression of the item is not as nice. It wasn't available in black and chrome and it didn't light up, both features recommending the AD36 to the customer of 1935 and to the collector of the second millenniium. However, it is possible that the homely defiance of the angry looking AD75 appealed to the public of the time precisely because it was different to the earlier model.

The B40 is another example of the use of a pre-existing cabinet mould for the new model in the range. Strangely enough, the battery models 40 and 39 are both comparatively rare and seldom turn up in perfect condition (I have had two of the B39 and one had been converted for mains - a very odd thing to do as a battery eliminator would have sufficed. Perhaps it was due to the valve shortage that was so prevalent during



the second world war.) When one compares the two cabinets closely they are obviously the same moulding neatly converted to offer the appearance of a completely new design. Again as with the AD75 the chassis is a different design but it is not so pronounced in this instance.

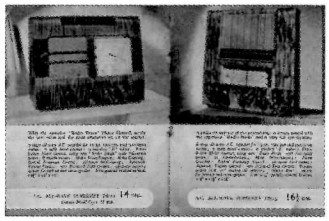
The "luxury' models are all the previous year's line of the big push-button motor tuned models that were so popular in the years immediately preceding the war.It is reasonable to assume that Ekco were simply using up unsold sets that were already in store as they had done this before both with the ACT96 which was carried on into the next year due to poor sales and the RG86 that was offered to the Belgian market in 1936 after having been sold in Britain in the 1935 season. The only completely new radio offered to the public for 1940 was a rather plain looking but neat little battery portable (the P151). The advert pictured here is the only image that reminds us of the war looming around us, through the presence of an RAF cap to the right of the radio set. This is interesting as many of the other images are almost making a conscious effort not to mention the war.

Despite the fact that the B40 is the B39 mould adapted in various ways it was one of the few "new" sets for 1940. Most of the work force had been called up at the time of manufacture (1939) and so it would have been out of necessity that most of the sets were reissues rather than completely new designs. The B40 is a rare set today and even though it is visually and literally speaking just the B39 turned upside down (compare the two - it's true I tell you) it is a mark of the amount of faith that people had in the idea that the war would "be over by Christmas". It is also a testament to the attempt by manufacturers to conceal their true activities. At this time Ekco were already manufacturing principally for the war effort and had moved most of their operation to Marlmesbury where the wiring looms for aircraft and the other airborne communications systems were being manufactured. The fifth column was everywhere and seemed to know too much through the general information made available for domestic purposes and so offering goods as they had always done would reduce E.K. Coles'' strategic importance as a target for the Luftwaffe.

Today, this has offered the collector an opportunity to go out and look for a relatively rare wireless set which while not perhaps as exciting an idea as finding bits of bomber in the street, is historically speaking just as important.

Occasionally, some of the "pre-war" Ekco sets do turn up with date markings for 1940 on the chassis and this is presumably due to the set having been unsold stock that had been reissued for the wartime market. It is interesting to note that most of the sets are in fact battery sets. Although I have no direct evidence to suggest this, it is not unreasonable to conjecture that the reason for this might have been the thought that mains electricity could be knocked out at any time in the cities and so it would be more desirable to supply people with radios that could be kept going even in the event of a power failure. This way everyone could be kept informed of what was happening whatever the circumstances.

To end on a brighter note, the AD75 advert pictures the set next to a rather nice decorative box. This box looks remarkably similar to one produced in the '30's by Grays potteries and relected an interested on traditional English regency body shapes and pattens. In fact, this would tie up with the fleur de lis speaker bars as they are the coat of arms for the Prince of Wales - the Prince Regent. Obviously, Ekco were looking associate even their most modernistic radio with a more sedate and peaceful world of the past- a world that was never to be the same again.



Tales from a Reluctant Traveller or Salutary lessons in buying abroad

By Mike Izycky

How many Volksempfangers could **you** get into a BMW?

Top right: the VE 301 is shown in the original Walter Kersting cabinet - reputedly used by the Nazis without the designer's permission, or payment.

I must confess that travelling doesn't come as second nature to me; in fact, I actively try to avoid it wherever possible. To me, a big journey is going in to the next town to catch a train to work- and that seventy-six mile journey still feels like an adventure to me. Just like the journey to Harpenden, in fact. Things (as do people) change, and this is true of radio collecting as much as anything else. After several years of collecting British sets I got Collector Wanderlust, something that eventually gets the majority of radio collectors except those very determined souls. The trouble is, that the sets that interest you don't always turn up at Harpenden, or the NEC- well, not that often, anyway.

A journey of a thousand miles may begin with a single step but a fast car and a good road system beats it into a cocked hat.

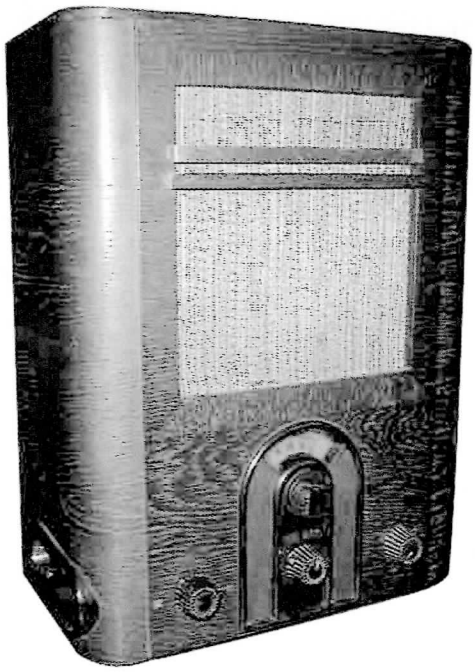
Many years ago, I acquired a large Bakelite piano-key set from a local gentleman along with a very nice Ekco A23. The set in question was a Blaupunkt "Roma", of about 1953 vintage. I turned my attentions upon this set and of course, once again I needed a map for it. Tudor Rees couldn't help, so again I advertised in the Bulletin and another society member came to my rescue, hailing from the fair city of Munich- his name being Gerhard Haberzettl. Gerhard very kindly sent these diagrams free, and of course I wrote a letter to thank him for taking the time to help a complete stranger. Well, that exchange of letters started a long line of correspondence and friendship between us.

I've had more than a passing interest in German sets for some time. I have childhood memories of a large German radiogram my grandmother used to own; it sported a full set of dentures/piano keys that seemed to do so much, and the cabinet was divided in to two halves- a glass-fronted cupboard with a quilted white lining and a candle lamp to illuminate it, decked out in glass shelves occupying the left-hand side. Also, a friend of my late father's used to own a large East German set (a Rochlitz) that he used to listen to the Ukrainian services from Canada on.

Over a period of time Gerhard acquired some

Far left: the VE301G. This was the luxury version of the volsempfanger peoples set series.

Left: VE301Dyn. The "Party Set". One had to be a member of the Nazi Party in order to obtain this stylish little radio. However, membership of the party was compulsory for many professions anyway.



interesting literature on my behalf; some reprints of wholesaler's catalogues (very useful) and a splendid book rejoicing in the title of "Radios von Gestern". This book is best described as a pan-European version of "Radio! Radio!", with added chapters on preservation and technical data. Now, I've often said that a set has to offer a certain degree of technical interest to me. Well, there certainly were some sets like this in this book, and one of them was again, a SABA: post war in origin: big, piano keys, typical gebissradio, as the Germans would say. Incidentally, in my last article I wrongly attributed SABA to being a Bavarian company: it isn't, it is in fact Baedenian (from the area of Baden Württemberg) in origin. My sincere thanks go to Gerhard for pointing out my error, for which I apologise.

You know that feeling that can only afflict a collector? Come on, that sudden, heady, rush of passion, that overwhelming desire that hits you square in the chest and head? Well, I got it in spades with this set. Not only was it big, well-made and attractive, but it had FM, variable selectivity, ultra-linear push-pull output... and self-seeking motor-tuning with the option for remote control! Reduced to a wreck, I gathered my composure and decided I must have one, there was no other option. I knew that there was little hope- unless I made a vulgar display of waving wads of cash about- of getting a pre-war SABA 980WLK, but this was more than adequate recompense. Some time passed, and yes, I got one of these remarkable sets (a Freiburg 9, if you're interested) via Gerhard's kind efforts. The remarkable thing was that in Germany a set of this quality has a price to match, unlike in England where most people would turn their noses up at this "piano-key rubbish". It cost me a reasonable DM250 (about £85 at the time) and this set me on the road to ruin- sorry, further interest in German sets.

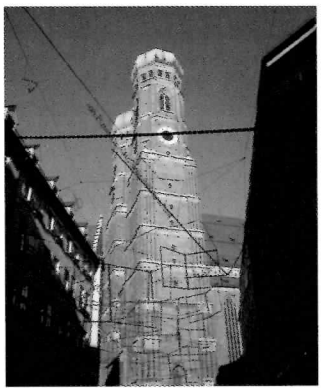
I've learned more about German sets and a little history too- like how our minor inconvenience over the Copenhagen plan turned in to a major problem for Germany, who found itself having to build FM sets from 1950. I also discovered that those Grundigs that turn up at Harpenden from time to time- those sets that gave the British wireless industry such a shock (sorry)- were, whilst being superior to anything we had at the time, mid-range models in their homeland. An article Gerhard supplied at the time I took delivery of my Freiburg 9 then showed there was more to SABA than I first thought, and German radio as a whole.

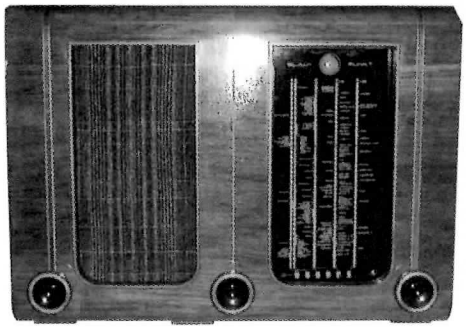
I don't know what you think, Dear Reader, but do you ever get the impression that radio design, and advancements thereof, died in about 1957: abandoned to its final decline into near-irrelevance by the unstoppable march of television? Think about it- name a good quality British table set from, oh, let's say 1963-4, shall we? Given up yet? Of course you have, because there weren't any. By 1963 we were making poor-quality radiograms which might have stereo facilities if you were lucky, Dansettes by the warehouseful, but the saving grace was that we were making world-beating hi-fi equipment. Not so in Germany. By 1963 SABA had made a set that was simply stunning- and if you look in the pages of "Antique Radio Classified", you'll see the U.S. market version of this set at sometimes optimistic prices that reflect the quality.

This set is called the Freiburg 14 in Europe, the Continental 410 in America. It still has that fabulous self-seeking motor tuning. It still has the option of remote control (if it was ever supplied, or hasn't been broken), but now not only can you tune it, alter the volume, turn it on and off and play with the Speech/Music setting, but you can even change wavebands between MW and VHF! Oh, but that's not all- it's STEREO too, with a transistor decoder and TWO magic eyes! If that wasn't enough, it has FIVE loudspeakers as well. "So your McMichael's got two loudspeakers? That don't impress me much" (with apologies to Shania Twain). Recently I went to Munich to collect one of these sets, as I had now become the proud owner of one. It was worth the flight and drive back, even for someone who typically won't venture beyond his front door if he can get away with it...

Over a period of time Gerhard had acquired some interesting pieces to add to my collection (and I really must get rid of some of my sets to make room...) and now the time had come to collect them. There were several sets to collect- two stereo SABAs (including this monster), a pre-war Blaupunkt, some Radione valve FM portables and to balance all this sophistication and high technology, some Volksempfangers. So, as time passed I gathered up the courage to make a decision about travelling to fetch them. Obviously I couldn't ship them- that would have cost a small fortune. In the end I realised there was no option; I'd have to go there and fetch them. This really was something I was not looking forward to, big time. After all, I've never driven on the

You know that feeling that can only afflict a collector? Come on, that sudden, heady, rush of passion, that overwhelming desire that hits you square in the chest and head? Well, I got it in spades with this set. Not only was it big, well-made and attractive, but it had FM, variable selectivity, ultra-linear push-pull output... and self-seeking motor-tuning with the option for remote control! Reduced to a wreck, I gathered my composure and decided I must have one, there was no other option.





Some the sights that one might see should one be inclined toward a more cosmepolitan approach to collecting. It is admittedly breath-taking.

Continent, for starters. Plus it's getting close to winter, and I hate driving in the dark... and yes, you're right, I was trying to make any excuse not to go that I could. This was of course, not an option. Gerhard had a large pile of radios that he'd taken a considerable time to find and purchase for me, and on previous experience I knew that they'd be stunning pieces. I told myself not to be so silly and look in to working a route out. I needn't have worried- Gerhard planned that for me too.

Originally I was to have driven both ways, but as circumstances worked out it became more advantageous for me to fly there and hire a car one way back to England. The combined cost of flights and car hire were only slightly more than it would have cost to drive my slightly thirsty car both ways and get a "Le Shuttle" booking. Eventually we settled upon a mutually convenient date- the last week in November. I had been originally invited over during the "Oktoberfest", but that holds little attraction to a teetotaller...! So with the date agreed, the flight was booked, the car prehired (more on this later) and then I was struck down with a flu-like virus just a few days before I was due to leave. Oh, great. I decided that my energies were best conserved for the trip, so for the first time in years I didn't attend the last Harpenden of the year.

It was rather a surprise to come over 800 miles to find myself looking at Brown horns, Marconi V2's and the like; but Gerhard said the appeal was the "scientific instrument" build quality of our products at that time.

Monday

November the Thirtieth arrived. D- (Deutschland) Day. I had packed my bags ready, picked up some cash in French, Belgian and German denominations ready for the return journey, and took a little light reading for the flight. The Reluctant Traveller was on his way. To add to my worries, my car had shown signs of a slow puncture in one of its rear tyres a few days previously: oh well, that's why it has run-flat tyres I suppose! I waved to Anne as I set off to Stansted Airport to catch the early afternoon flight to Munich. I drove through the torrential rain down the M11 to the airport, arriving in plenty of time to check in, relax and eat the sandwiches I'd made the night before. All went swimmingly- even parking the car wasn't too bad, although for a moment there was just a degree of concern that the car park I'd been directed to didn't actually have any spaces! Soon I found one, and squeezed my car in to it. I locked it up, asked it nicely not to have a flat tyre on my return and made my way to the bus stop.

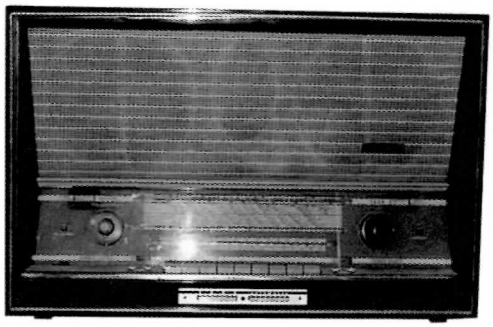
As I walked towards the metal detector prior to boarding I casually tossed my keys and wallet in to the bucket alongside; I'd been through this drill no end of times in Atlanta during the Olympics. Much to my surprise the alarm still went off, and in no time I found myself being frisked by airport security; no doubt to the amusement of my fellow passengers. I was wondering what was going on, and then the guard looked me in the eye and said "Hello... what have we got here?" I put my hand down in to my pocket and then it dawned on me what had set it off; a pocket-sized can of lock de-icer. I explained it to the guard, who seemed to be amused at my being prepared for the winter ahead.

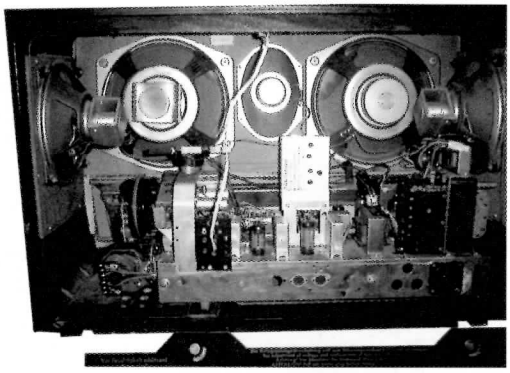
The flight arrived early in Munich, and as I disembarked from the plane I realised how cold it was. At that time Munich had just had a sudden flourish of very cold weather, and snow lay everywhere. I passed through Customs, where my very obviously new and empty passport (I had just reapplied for it, having let my old one lapse) was examined with almost suspicious thoroughness by the official in his booth, and handed back with a cold gaze. I wandered around the terminal block at Munich airport- although the ticket said that my flight was due to arrive at Terminal "C", in fact it arrived at Terminal "D". This was of no import though as despite the names, Munich is just one airport- and not a huge one at that- subdivided in to five areas called "A" to "E". Shortly afterwards Gerhard arrived and we made our way to the car parks, and then to his home where I was very kindly invited to stay.

After a most pleasant meal, we adjourned to the cellar where his collection was housed. This seemed to be commonplace; the collection being in the cellar, which unlike most British cellars, is warm and dry! The first thing that struck me was how international a flavour his collection had. In addition to the "local produce", there were representatives from France, Belgium, Spain, Austria, America and of course, Britain. In fact, quite a bit from Britain. It was rather a surprise to come over 800 miles to find myself looking at Brown horns, Marconi V2's and the like; but Gerhard said the appeal was the "scientific instrument" build quality of our products at that time. Much to my surprise I also encountered some sets that looked exactly like certain British ones- and not just the GEC "Victor Three" either. For example, an AEG version of the Marconi 47? I was then introduced to my new charges, and revelled in their condition and quality: and the first moment I heard my Freiburg 14 I fell in love with it. With all this excitement over, the time came to call it a day and retire for the night.

Tuesday

Tuesday came, and the first thing that we decided to do was to try to change the car hire details. The rental company (I won't mention names here, but it has a radio connection) seemed very reluctant to change the details of the hire when I was in England; I knew I would need to make an early start on Thursday morning (when I was due to return home) so it would make sense for me to collect the car on Wednesday night and load it up ready. Similarly, it would make more sense that I picked it up from a more local office than Munich airport, which is actually something like twenty miles away from Munich to the North. So telephone calls were made to the rental company's office nearby and then to the "national" office in Germany. Whilst all I got in England was "it'll affect your deal, Sir; ooh, can't possibly do that" it was the opposite story in Germany: "No problem, Sir, it'll be fifty marks extra for this arrangement". Very pleased with ourselves, we set off to do some sightseeing- in a sense this was my first holiday abroad for twelve years. Armed with my trusty digital camera, we drove in to the centre of Munich to look at the sights; sadly we were too late to see the carillon working in the New Town Hall, but I at least was able to enjoy one of the most enchanting sights I have ever seen- the "Christkindlmarkt" in the Marienplatz. In the unlikely event of your German being worse than mine, this is the Christmas Market; where traditional decorations, toys and fare are sold. It all has to be locally produced, and the sight of all this filled this particularly cynical person's heart with a joy not





This page: Far left, The Saba Frieberg, Right: The insides of the Saba Frieberg showing the extensive array of speakers to be found within.

Bottom of page:A Radione R20 a neat little set for the German personal portable market.

experienced in a long time- the market was as far removed as it could be from the typically trashy and vulgar offerings you find in the average street market in Britain at Christmas time. After a traditional Munich dish for lunch, some more sightseeing and photography was undertaken, then I decided to get some cash.

Now this is where the first problem of the trip struck; as anybody who's travelled abroad will know, the easiest and best way of obtaining your local currency is to use a hole in the wall machine; you get a far better deal. I had intended to withdraw the admittedly substantial sum on my credit card over a few days. It was at this point that near-disaster struck. I put the credit card in the machine... and then realised I had completely forgotten my PIN number. This was so embarrassing...! I explained what had happened to Gerhard, who was very understanding; it didn't stop me feeling a complete and utter fool though. After trying to resolve the situation one way, I opted to use the card for my current account at home, mindful of being overdrawn. I withdrew as much as I could and put the money in my pocket, still red with embarrassment.

So we set off for Haag to visit another collector, who is a great friend of my host. Again, I was greeted with a warmth that cheered me; and I was extended hospitality that touched me deeply. At the same time, inside I was saddened and angry with myself. In case you're wondering "Why?", the answer was simple. Everyone around me, as we sat at the table and drank tea, ate cake and enjoyed conversation, was speaking English to me- and not broken English, but excellent English of a standard that many people in England would have difficulty aspiring to. Yet here was I, falling in to the very cliché that I detest so much of the Brit abroad- can't speak hardly a word of "foreign" and hoping that everyone spoke my language. I felt very humbled by it all, as I managed a simple "Guten tag" to our host's wife: and I resolved to do something about it when I returned.

Here was another collection of a truly international flavour- with sets from as far afield as China (a Siemens crystal set with "Siemens" in Chinese script) and India, with numerous American Catalin sets and yes- more early British crystal and valve sets. Even my host remarked upon how odd it must have been to come all this way to look at British sets! The Indian set caught my eye in particular- it was marked "National Ekco Radio" and was a bright orange U29 with a later front moulding that looked as though it belonged on a later set such as the Ekco A104/U143. I only wished I'd asked permission to take some photographs of this truly wonderful collection- again housed in a large, warm cellar with a fabulous view towards the mountains. As we parted, I was given yet another surprise: a gift of a chocolate Sonora Cadillac! By now it was dark, and very cold, but the crisp, clear mountain air was wonderful, and by now I'd beaten all vestiges of the ailment that afflicted me a few days before. We set off back to Munich ready for a truly excellent dinner, in the company of Gerhard and his wife Renate, and enjoyed a wonderful evening of conversation.

Wednesday

Wednesday morning arrived. The first task of the day, after a typically hearty German breakfast was to get some more cash to pay for this mountain of radio sets; and following this, some more sightseeing. After an excellent lunch in a local Chinese restaurant, Gerhard proposed that a trip out from Munich to a nearby village would be a good idea, so that I could get used to driving a car with the steering wheel on the wrong side. All of a sudden I felt the same as I did the day I took my driving test... only more nervous. What if I bent my friend's car? How do you explain that and stay fashionable? I decided that discretion being the better part of valour, I decided to just drive around the small villages, and not do the crash (no pun intended) course on the Autobahn. I'd save that for tomorrow morning...

The rest of the day was spent packing the sets up for their journey across four countries; in between we went to fetch the hire car. Arriving at the hire car office, there was some confusion over the vehicle and what hire charges I would be paying- it didn't help that of course, I don't speak German and English was the representative's second language. It was all resolved eventually, and I was given the keys to my transport- a shiny silver BMW 3-series. Well, they could hardly give you any other car in Munich, now could they?! So with all but the briefest experience of driving on the wrong side of the road, I drove through the fading Munich rush hour back to Gerhard's home ready to load the car up. My only concern was would everything fit

Here was another collection of a truly international flavour- with sets from as far afield as China (a Siemens crystal set with "Siemens" in Chinese script) and India, with numerous American Catalin sets and yes- more early British crystal and valve sets. Even my host remarked upon how odd it must have been to come all this way to look at British sets! The Indian set caught my eye in particular- it was marked "National Ekco Radio" and was a bright orange U29 with a later front moulding that looked as though it belonged on a later set such as the Ekco A104/U143.

I was to be embarrassed one more time by my inability to speak German; as I was taking a break along the A7 I had opened up the car to ventilate it a bit, and I had also opened the boot up to get something out of it. As I stood by the car, I heard someone speaking to me- he'd spotted the pre-war Blaupunkt sat facing outwards in the boot. Once again, I apologised to him for not speaking German, and was completely taken aback by his reply; "That's okay, I was asking how old was that radio?" I told him, and buried my head in my hands in shame once he'd walked away.

inside? Well, I was soon to find out... in the cold night air we carried the sets out to the car and loaded it up- worried that there was always the danger of slipping over or scratching some of these sets. After about half an hour, the car was full, with some room left to place those minor things like clothes... and that was it. I was ready for the journey home.

Thursday

Thursday arrived, and with it my return home. After a good breakfast, I said goodbye to my hosts of the last four days and climbed in to my transport; remembering of course that the steering wheel was on the left, of course. Thankfully Gerhard lives but a short distance from the A8 so I didn't have to worry too much about city driving. By eight o'clock I was heading westward towards Augsburg and Ulm. It took but a few minutes to gain enough confidence to press on a little, but I must confess that I was surprised to find that the first car to go flying by at warp speed was a British-registered Mondeo! I had my own ideas what the autobahns were like before I started upon this journey, and the reality was somewhat surprising. For a start, they owed more to the A1 in England than the M25 or whatever; the major difference being that they were much better maintained and not 60% roadworks for their entire length. Road manners were considerably better than in England- in fact the journey across Germany was easily the best part of the whole trip. Another thing that I found sensible was that there were plenty of parking places alongside the road at regular intervals, many with toilets and somewhere to sit and rest, even in remote locations. I wondered why we couldn't have this in England, and this indeed came up in conversation the night before. I explained that in England not only would we continually be arguing about who would pay for it, but that any facilities would be vandalised inside a week.

I was also surprised to see that there were speed limits on the autobahn; generally only when it was wet, though. A sudden downpour demonstrated why this was the case- they certainly could use some of that porous tarmac technology over there! Equally surprising was the occasional sign enforcing a minimum speed- generally 110km/h. The exits of the autobahns were the most unlikely place to find quite harsh limits too; often as little as 30km/h and with Mr Gatsonides' invention overseeing you. The journey was punctuated with several rest breaks, as any wise driver would take; it also gave me an opportunity to get the camera out from time to time to record some of the sights. I was to be embarrassed one more time by my inability to speak German; as I was taking a break along the A7 I had opened up the car to ventilate it a bit, and I had also opened the boot up to get something out of it. As I stood by the car, I heard someone speaking to me- he'd spotted the pre-war Blaupunkt sat facing outwards in the boot. Once again, I apologised to him for not speaking German, and was completely taken aback by his reply; "That's okay, I was asking how old was that radio?" I told him, and buried my head in my hands in shame once he'd walked away.

The journey continued- the beautiful forests and hills with their hillside towns of Southern and Central Germany slowly turned in to the more industrialised north and at twenty past three I passed in to Belgium. Slowly the road signs changed, as did the roads; no longer the super-smooth autobahns, but a rougher surface. No roadworks putting it right though- just signs telling you that the road was bad! It was but a short distance from the border to what Rob Chesters described as a "ballet for motor cars"; also known as the Liege bypass. This road took you seemingly in every direction except towards Brussels and where I was going! Soon though it was time for another break, so I pulled in to a service station near Charleroi. It looked like the Belgian equivalent of a "Little Chef", but presumably with edible food. I only wanted a Mars Bar and a drink; that would hopefully prevent me being reminded that I'd forgotten most of my schoolboy French too. As the counter assistant smiled and said "bonsoir" to me, she reminded me that night was indeed approaching; the skies were turning golden blue and the lights were slowly being switched on upon the passing cars as the sun set across Belgium.

I headed off towards Lille, and at a quarter to six La belle France announced herself by all the lights going out. The road had been illuminated all the way across Belgium, and exactly coincident with the stark concrete outpost that is the French border control, the light standards disappeared. I drove in to Lille just in time for the rush hour; but I now had Radio Four to keep me sane whilst negotiating my way across the city. The trip towards the ports took much less time than I thought it would, which turned out to be a good thing; because an unpleasant surprise was waiting.

You know home is near when you see signs marked "Tunnel sous La Manche". I arrived at the Channel Tunnel terminal bang on seven o'clock; for once the surrounding area wasn't blocked by protesting French lorry drivers, as it was in the weeks before and after my journey. Contrary to what the Web site of the car hire company had told me, their office was NOT easy to find, nor were there any immediately obvious signs directing me there. I had no option but to approach the tollbooths and ask. I drove up to a booth, forgetting for the moment that I was driving a car with its steering wheel on the left. The booth was on my right. As it dawned on me what an idiot I'd just been, I got out of the car and spoke to the young woman in the booth.

"I'm ever so sorry to trouble you, but I'm lost and looking for the <name removed> office. Can you help me at all?"

"No problem", she replied. "You need to-"

At this moment her explanation was drowned out by the yelling from some bloke in his Honda behind me, who had half-climbed out of his car to berate me. "Get a move on, some of us want to get home" he shouted. Well, I wasn't having this. I'd been driving for over eleven hours through three countries and I'm damned if I'm having some tax-dodging booze-cruiser doing his Christmas shopping shout at me.

"Do you mind?!" I bellowed in my best English accent; "I'm trying to sort out a problem here and you've interrupted this lady's explanation. Now unless you want me to come over there and give you a slap I suggest you get back in your car and keep your mouth shut. Do we understand each other?"

The driver of the Honda, somewhat taken aback by the fact that the voice coming back at him was English, despite the German car with the German plates in front, climbed quickly back in to his car. I turned to the young woman and apologised. "I'm very sorry for that outburst. Please, you were saying..." To my surprise she smiled a huge smile at me and said in her soft French accent, "Oh, that is okay. I wish I could say that to these people sometimes, but I am not allowed to." We laughed, and then she told me that I needed to make a giant U-turn in the compound and head toward the exit, where her friend would be waiting and she would explain the directions to me. Sure enough, after swinging around the compound and playing dodgems with the other cars, I arrived at the gate where her friend was indeed waiting, and she directed me to the rental office. I drove as quickly as I could and then as I approached the site my blood ran cold. To all intents and purposes, it looked closed, save for a lonely fluorescent table lamp glowing near the desk, cutting through the darkness. The barrier was down too- but miraculously it raised. There was life here, luckily for me; these people had my ticket (part of the car hire package) to cross the channel, as well as the change of car for a right hand drive one.

You see, my research showed that the offices in Munich were open until eleven at night, as were the ones at Stansted- so mistakenly I assumed that the same would apply to the EuroTunnel office. Ha! Not a bit of it. This place, an International Terminal I might add, closes its hire office at seven: and I've arrived at seven-ten. Contained within its darkened glass walls were two surly Frenchmen who were far more interested in getting off home, and lost no opportunity

in reminding both myself and the American couple already in the office of this fact. To top it all off, after I apologise for being late, they point out that they don't have a similar "class" of car so would I take the BMW to England? No chance, I think- yesterday I had seen the one-way surcharge for leaving a car in England, hired from Germany. I insisted upon a right-hand drive car- and I get a Ford Focus (with a dodgy fuel gauge) for my troubles. Taking my all-important ticket and the keys, I returned to the BMW, and unloaded the contents in to the Focus, with the occasional "hurry up!" being shouted across the floodlit parking area from the two Frenchmen in a hurry. Soon the contents were transferred, I double-checked that I had left nothing behind, and I was on my way; wishing to myself as I headed back to the A16 (yes, it is THAT convoluted a route!) that despite the costs I had kept the BMW...

The remainder of my time on the mainland Europe journey consisted of a lot of sitting around and waiting in the car; the actual Tunnel journey was quite impressive. Very smooth, and very quiet. I emerged in to the Folkestone air at about half-seven our time, and charged along the M20, knowing that I needed to drop off the Radione sets in Bromley first. Although initially annoying at first, I found it quite ironic that the only wrong turning I should take in driving across four countries was at the badly arranged M20/M25 junction!

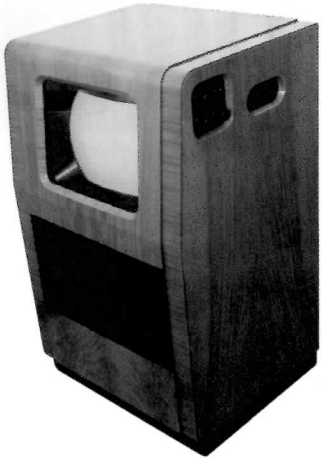
I arrived (eventually) in Bromley, dropped the Radiones off, and enjoyed a very welcome bacon buttie before heading off again towards the M25 and ultimately, home. I could have got to the hire office at Stansted before it shut, but by now I was getting very tired and didn't fancy the palaver that dropping the hire car off/getting the bus to the long stay car park/driving my own car back (assuming it didn't have a flat) to where the hire car was/swapping all the sets AGAIN would entail, so I pressed on home, where I could at least get some sleep and unload the car in the morning before returning it to Stansted. At just about midnight, I pulled in to my own driveway, turned the engine off and practically fell asleep there and then.

At last, I was home. It was well worth it, though.

The RGD 1050 Console series of 1950

by Antony Hopwood

I was very interested to see Terry Martini's excellent feature on the restoration of a mighty RGD TV. I use the term 'mighty' because the television was only a quarter of the full RGD lineup in that style console.



About 15 years ago, a friend rang me from a local auctioneers to say that they still had some large vintage radio items in the barn after a nearby house sale and that I could have them free if I took them away! The free trailer load turned out to be 3 RGD consoles, dirty and dry but undamaged. The main unit was a 10 valve 5 band radio type 1050C which is described in the Molloy and Poole Radio volumes and listed as a 1950 release. Also in the same console style as Terry's TV, is a record player and record store and a further floor-standing extension speaker. I believe the new cost for the 3 was about 500 guineas! According to the single black cover volume Television Engineers Servicing Manual by Molloy & Poole (1952), the B in the basic model number is Birmingham and S prefix is London, or Southern. Because RGD were a Midlands firm the B model was released first. The original tuning alignment on Terry's set would give a clue.

The radio had been stripped of its valves, so I had to raid my spares stock. Testing showed that the only fault was that the grease on the tuning capacitor wiper spring track had solidified and derailed the spring cutting out all the short wavebands.

Even the August 1949 smoothing electolytics reformed using the gentle warming up technique recommended by Terry. The set has been in regular use since then and the RF design is so good that there is a linear tuning scale on all bands and 5kHz resolution on the logging scale. WWV at 20MHz is only 8 KHz adrift when the set is warmed up, so no realignment has been needed.

The only failure was about 10 years ago - the mains transformer went up in smoke when the UU7 rectifier developed an internal short while the set was running unattended. Another transformer was fitted and normal service has been resumed.

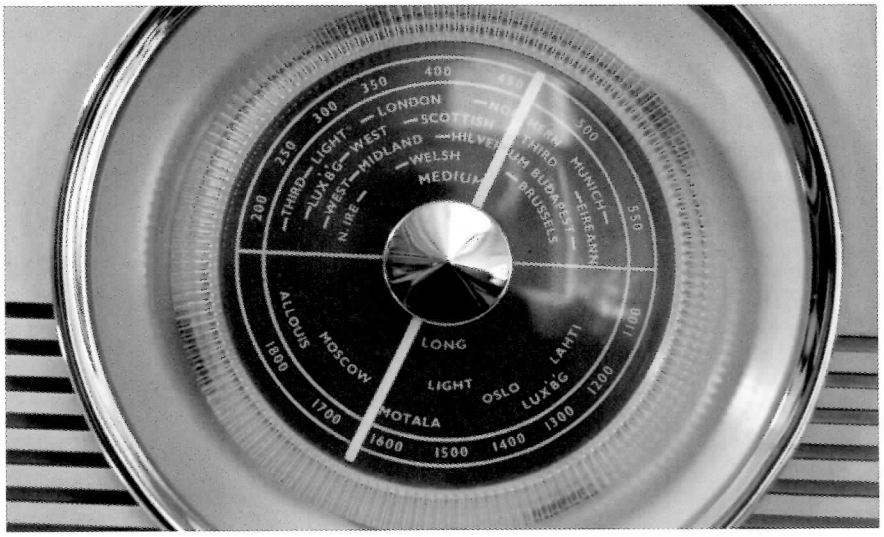
The sound quality from the push-pull PX4 output is excellent. Unfortunately, the two other consoles have to be stored in the shed because I don't have enough space to set them up as well - I think RGD must have been selling to the hotel and castle customer when you consider that all 4 consoles together would have needed a space at least 7 feet long by 18 inches deep by 30" high! The RGD 1050 rig gets my vote as one of the biggest (and best) home entertainment systems ever sold.

Above: Terry martini's RGD television.

Left: The RGD 1050 This rig gets my vote as one of the biggest (and best) home entertainment systems ever sold.

What can you hear on your wireless?

by Ian Liston-Smith



Although many of us spend a great deal of time and money acquiring lovingly restored vintage radios, how often do we actually listen to them - other than to check that they still work? In the UK, the names and wavelengths of our stations now bear no relation to what was printed on so many old radio dials. So perhaps some readers have lost track of the selection of long and medium wave stations that are currently available on these "unfashionable" bands.

Some years ago the government decided that the BBC was to discontinue duplicating national services on medium wave that were already available on VHF/FM. Eventually this lead to Radios 1, 2 and 3 leaving medium wave once the BBC's VHF/FM transmitter network had expanded to give national coverage of these stations. This enabled Radio 1's medium wave frequencies to be allocated to the national commercial broadcaster Talk Radio (now Talk Sport), Radio 2's frequencies were given to the BBC's new network Radio 5 Live and Radio 3's channels went to another national commercial station, Virgin Radio. Many, but not all, BBC local radio stations continue to be broadcast simultaneously on medium wave and VHF/FM, although few if any commercial local stations do this, save for their news bulletins.

A comprehensive list of local UK stations, their programme formats and frequencies is not included here as there are literally hundreds of them! The start of the radio section of the Radio Times contains a list of local BBC and commercial radio stations in your area. However, for a much more detailed list, two excellent guides are available:

Radio Stations in the United Kingdom.
This is published by the British DX Club and lists the names, frequencies, powers and contact details of all UK and Irish radio stations. It's available from:

The British DX Club, 126 Bargery Road
Catford, London SE2 2LR
www.co.umist.ac.uk/BDXC
bdxc@bigfoot.com

Note: The following URL from the British DX Club website contains all British medium and long wave stations: www.co.umist.ac.uk/BDXC/lists/am.html

The second recommended publication is:
The Radio Listeners Guide (ISBN 1-871611-11-3). This also lists all UK stations, but additionally gives coverage maps for the national networks, clearly showing what should be the best frequencies for your area. It also contains other news and information regarding the British broadcasting scene and even two pages about vintage radio by Jonathan Hill.It is available from:

PO Box 151, Abingdon, Oxon, OX3 5DP
Tel: 01865 820387
clive@radioguide.demon.co.uk

Before I go on to outline the UK's medium and longwave national networks, it is perhaps appropriate to explain a little about how these bands are organised.

Each broadcaster is allocated channels in a way which is designed to minimise mutual interference, not only to other broadcasters in the UK and Ireland, but also to those in Europe. Throughout long and medium wave in Europe and Asia these channels are now all arranged in multiples of 9 kHz, e.g. 891, 900, 909 kHz, etc. This has two advantages; one being the simplified design of frequency synthesisers for modern domestic radios. More significantly, however, it minimises "heterodyne interference" between stations, particularly at night.

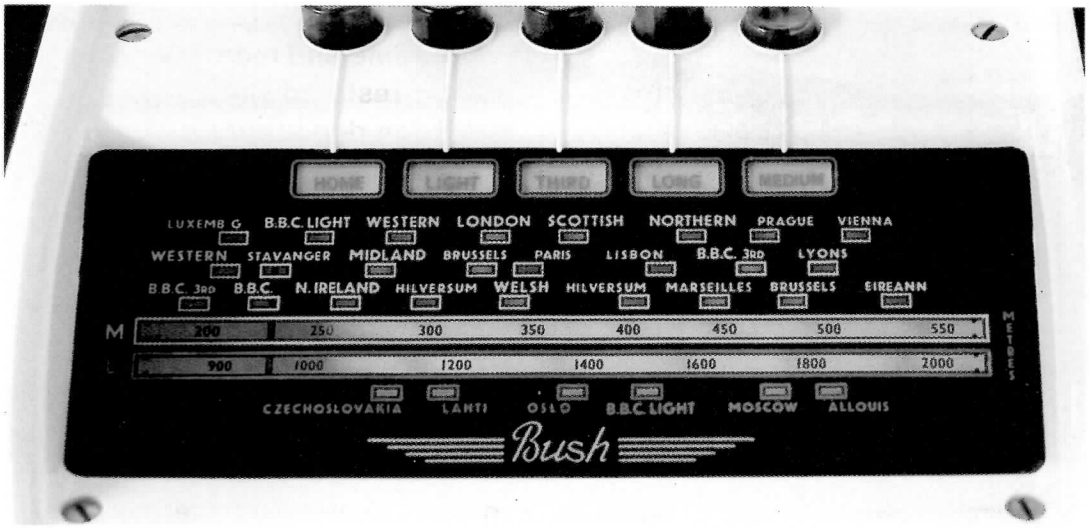
Until 23 November 1978, medium wave consisted of a mixture of 8 and 9 kHz channel spacing, with one of 10 kHz. (The long wave channel adjustments happened in stages some years later.) But there was also a significant number of stations which operated with odd off-sets between these channels.

At night, when sky wave propagation occurs (increasing the distance of a station's audibility by hundreds of miles), this inconsistent arrangement lead to heterodyne interference.

For example, the relatively low power Albanian transmitter on 1153 kHz caused an unpleasant 2 kHz heterodyne whistle to 1151 kHz, a channel used by many of the UK's local stations.Although the worst of this interference has now gone, it still occasionally occurs when a poorly maintained transmitter drifts from its allocated channel. During the day this is usually of no consequence - unless the wayward transmitter is part of a synchronised group. But at night, the frequency difference between it and the other stations sharing the same channel becomes audible as anything from a low frequency rumble to an audible and annoying whistle, depending on the frequency discrepancies between the stations.

Incidentally, any whistles you hear that *change* pitch as you tune through them are always caused by image or other spurious signals generated within your radio! This is particularly troublesome on some short wave sets, but that's another story...

Nearly every domestic radio produced in this country from at least the 1930s to the 1970s had the



dial calibrated in metres. But the trend for the last ten years or more is to quote a station's frequency in kilohertz (kHz) or megahertz (MHz), and the dials of newer sets reflect this.The hertz (Hz) is now used as the unit of frequency (previously known as 'cycles per second') in honour of Heinrich Hertz, the German physicist whose early experiments led to the development of radio.

It just so happens that the speed of electromagnetic radiation is, rather conveniently, very nearly 300,000 km/second (299,792.458 km/s to be precise). Thus divide 300,000 by frequency in kHz to obtain wavelength in metres.

eg. 1: frequency of Radio 4 is 198 kHz
300,000 /1215 = 1515 metres

eg. 2: frequency of Virgin Radio is 1215 kHz
300, 000/1215 = 246.91 metres

Readers might remember this latter wavelength as the old 247 metres of Radio 1 prior to November 1978. However, broadcast engineers have always measured a station's allocated frequency. A station's published wavelength was only an approximation. Likewise, Radio Luxembourg's well known wavelength of 208 metres was actually 208.33 metres when calculated from its 1440 kHz channel.

The ease with which the stations in the following lists are received depends upon a number of factors; the sensitivity of the radio, the stations' signal strengths in your area, the level of electrical interference (particularly from computers and TVs) and the accuracy of the dial. If the radio was re-aligned in accordance with its service sheet, dial calibration accuracy for most radios should be within 10%.

The other limiting factor might be the frequency coverage of the radio. Many older models were not designed to tune beyond 1500 kHz (200 metres). Coverage can often be extended slightly by careful alignment at the expense of losing some frequencies at the other end. This of course will also upset dial accuracy and I wouldn't recommend it.

Here is the list of national stations and their main frequencies. The wavelengths are rounded to the nearest whole number of metres.

BBC stations:

Radio 4	198/720 kHz 1515/417 metres

The World Service is carried on these frequencies through the night. (The frequency was changed from 200 kHz, 1500 metres on 1 February 1988 when it shifted to a 9 kHz channel.)

BBC World Service	648 kHz 463 metres

This frequency is beamed to Europe from the transmitter at Orfordness on the Suffolk coast, but is also audible around South East England.

Radio 5 Live	909/693 kHz 330/433 metres
BBC Radio Scotland	810 kHz 370 metres
BBC Radio Wales	882 kHz 340 metres
BBC Radio Ulster	1341 kHz 224 metres

Non-BBC stations broadcast from the British Isles.

Atlantic 252	252 kHz 1190 metres.

Located in Trim, Co Meath, Republic of Ireland. This station provides an excellent signal throughout the UK. Its main audience is in the UK.

RTE Radio 1 (Irish Republic)	567 kHz 529 metres
RTE Radio 2FM (Irish Republic)	612 kHz 490 metres
Talk Sport	1089/1053/1107 kHz 275/285/271 metres
Virgin Radio	1215/1197/1242 kHz 247/251/242 metres
Manx Radio (Isle of Man)	1368 kHz 219 metres.

There are of course a number of strong stations from Europe which provide very clear signals, particularly at night. They often carry classical music and other types of programming which is no longer available in the UK on medium or long wave.

The following short list is a selection of European stations that broadcast English programmes in the evening. They are sufficiently strong after sunset to be generally quite easy to receive. For those with access to the internet, English programme details are available from their websites.

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This article was not intended to be an exhaustive examination of medium or longwave broadcasting. But I hope it will encourage more of us (including me!) to switch on our lovingly restored sets more often and listen to them!

American Forces Network (via Germany) 873 kHz
www.afrts.osd.mil 344 metres

Radio Finland 963 kHz
www.yle.fi/rfinland/ 312 metres

Radio Sweden 1179 kHz
www.sr.se/rs/index.htm 254 metres

Voice of Russia 1386/1494 kHz
www.vor.ru/Eng_EUR.htm 216/201 metres

Trans World Radio (via Monte Carlo) 1467 kHz
204 metres
www2.gospelcom.net/twr/broadcasts/europe.htm

Radio Vlaanderen International 1512 kHz
www.rvi.be/uk/index.htm 198 metres

Radio Netherlands (via Belgium) 1512 kHz
www.rnw.nl/en/html/europe.html 198 metres

Vatican Radio 1530 kHz
www.vatican.va/index.htm 196 metres

LBH Radio 1385 kHz
www.lbhradio.com 216 metres

This station uses the same transmitter as the Voice of Russia after it closes at 2300. Programming is in English from studios in London for the UK and Europe and is for the gay and lesbian audience.

Proposed major new stations
There are a number of significant stations which plan to come on air this year (2000). Rumours abound regarding the likelihood of any of them actually appearing, but despite that brief details are given below.

Delta 171 171 kHz
(No known website at time of writing) 1754 metres

This station plans to construct an artificial island off the Dutch coast. Programming will be aimed at a UK audience and is expected to consist of mainly contemporary music.

Musicmann 279 279 kHz
www.longwaveradio.com/ 1075 metres

Due to be built on the Isle of Man using a revolutionary cross-field transmitting aerial. Programming is likely to consist of 'adult orientated rock' and should provide a good signal throughout the UK.

Radio Luxembourg 1440 kHz
www.pjede.de/208/ 208 metres.

(No official website found at time of writing)
"The Great 208" closed its medium wave transmitter in December 1991 - although it is still available via the Astra satellite. The station has been planning to make a comeback on its original frequency for the past year or so with its familiar style of programming.

Radios which also receive short wave will bring a tremendous selection of international broadcasts, provided a good aerial is available. Short wave broadcasting and aerials are subjects in themselves and will not be described here. If you want to explore the short wave bands, there are a number of publications available to help.

World Radio TV Handbook
Passport to World Band Radio
Global Radio Guide
Short Wave Magazine

These all contain programme and frequency information from international and domestic broadcasters throughout the world. Short Wave Magazine is published monthly, but the others are published annually. All are available through the larger magazine and book shops or through Short Wave Magazine's book ordering service on 01202 659930.

This article was not intended to be an exhaustive examination of medium or longwave broadcasting. But I hope it will encourage more of us (including me!) to switch on our lovingly restored sets more often and listen to them!

Sources:
World Radio TV Handbook 1977
Radio Stations of the United Kingdom
The Radio Listener's Guide
Radio Times

Classic reprints at affordable prices

by Andy Emmerson

BVWS members despairing at ever finding copies of early wireless and television books at a reasonable price will be refreshed to know they can now have some classic titles without problems. No need to fight for them either since an enterprising company in the USA has reprinted them along with a huge number of other technical books.

These are in fact facsimile reprints intended for libraries, so they are hardback books, printed on good quality paper. I have bought two of them and the print quality is superb. The only thing that's slightly disappointing is the half-tones but text and line art drawings are superb.

You can order by post, fax or off their website **(http://www.scry.com/ayer/telecomm/title00.htm)** and the presumably subsidised surface mail charges are extremely reasonable. By quoting the ISBN you can probably order through Amazon.com or your local bookshop but prices might be higher.
Sample titles include:

Archer, Cleason L.,
HISTORY OF RADIO TO 1926

Blake, George C
HISTORY OF RADIO TELEGRAPHY AND TELEPHONY

Dunlap, Orrin E., Jr.
MARCONI: The Man and His Wireless

Fessenden, Helen M.
FESSENDEN: Builder of Tomorrows

Hancock, Harry E.
WIRELESS AT SEA: The First Fifty Years

Hawks, Ellison
PIONEERS OF WIRELESS

Lodge, Oliver J.
SIGNALLING THROUGH SPACE WITHOUT WIRES

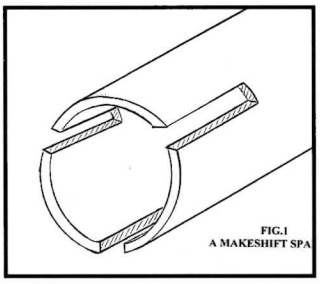
Tiltman, Ronald F.
BAIRD OF TELEVISION: The Life Story of John Logie Baird

Ayer Company Publishers, 1 Lower Mill Road, N Stratford, NH 03590, USA.
Phone: 00 1 888-267 7323, fax 00 1 603-922 3348.

Repairing a BTH loudspeaker

by Mike Field

At a recent Harpenden swap meet, I found a BTH C2 horn loudspeaker base unit for which I had the correct horn waiting at home. It was dirty and the diaphragm rusty, so I did not expect a fully working unit. Sure enough on checking I soon found that the coils were open circuit. However the bobbins of these and similar loudspeakers are easy enough to rewind provided that you can cope with the very thin wire required.



It was then a simple matter to dismantle the base unit and remove the open circuit coils. I imagine members have their own way of rewinding coils but, although I do have an AVO coil winder, I prefer to use a home made gadget made from Meccano to minimise the breakage of fine gauge wire.

After cleaning off the surface dirt I attempted to unscrew the electrical unit from the base cowl to gain access to the coils but it resisted all my efforts. Various releasing agents were tried without avail. The problem was that the unit cannot be held easily without damage in a vice so the only turning grip is hand power. What was needed was some form of spanner which would enable the unit to be unscrewed without damaging the base cowl. The brown bakelite housing of the electrical unit has three indentations around its diameter and if a suitable fitment could be devised to engage them, the problem would be solved.

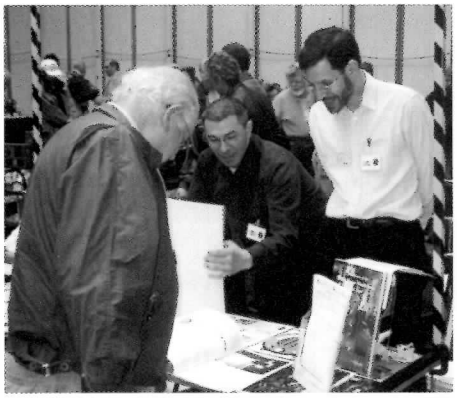
Some exotic and difficult-to-make designs were considered and discarded until I noticed some debris at the side of the road left by hole diggers repairing a gas main. Protruding from a pile of old tarmac was a short, rusty length of three inch diameter pipe which just happens to be the same diameter as the base unit. Doing my bit as a public spirited citizen and keeping Britain tidy, I removed the offending pipe. Three suitable sized indentations were cut into the end of the pipe (see illustration) to fit the indentation of the base unit. The pipe was then held vertically in the vice and the base fitted over the indentations. I could now grasp the base cowl with both hands and after a bit of a struggle the two parts began to unscrew accompanied by loud protesting noises.

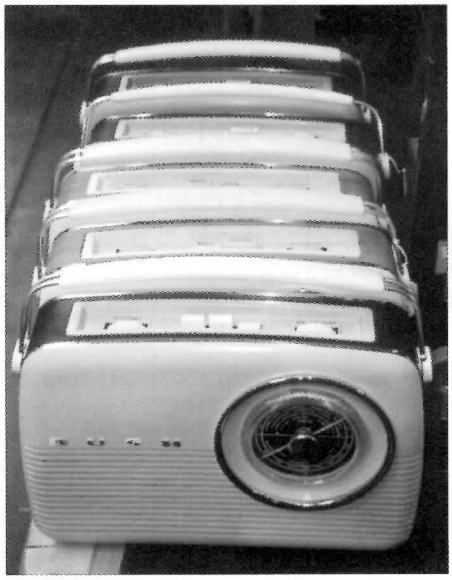
It was then a simple matter to dismantle the base unit and remove the open circuit coils. I imagine members have their own way of rewinding coils but, although I do have an AVO coil winder, I prefer to use a home made gadget made from Meccano to minimise the breakage of fine gauge wire. The upshot is that, for minimal cost, I now have a perfectly good, working BTH speaker.

September 17th 2000AD
The Birmingham NVCF

Despite the best attempts of outrageous fortune in the shape of the fuel famine, the September NVCF went ahead as usual with the stalwarts manning their stalls as ever. Here are just some of the things that you may have missed. Will they be there again?

Mike Barker and Gerry Wells valiantly manning the BVWS stall as a new member signs up. That's going to mean that there are quite a lot of us now!





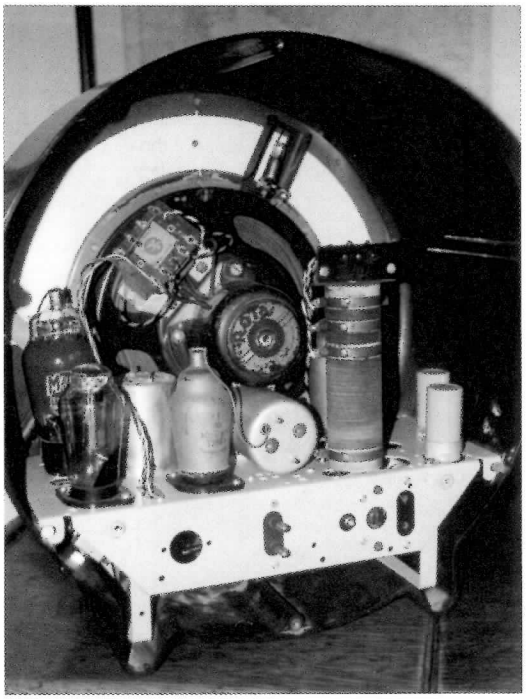
The Bush TR82 and its variants. With a cabinet designed by David Ogle (as featured in a recent bulletin article) it is probably the "one to own" of the British transistor range- after you have all the others, of course!

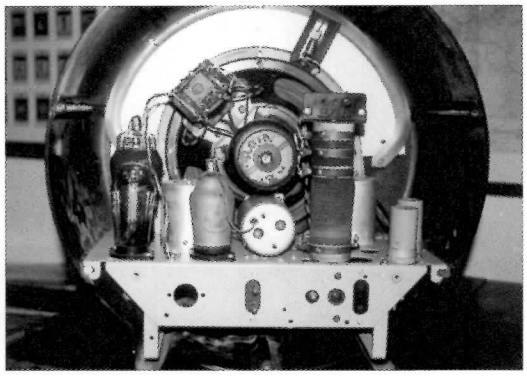
SPORTS REPORT

Caveat Emptor

by Edgar Jones

Right: the original advert for Ekcos now famous AD65 model of 1934. Far right and below: the infamous but now restored AD65, this example has had the usual modification of the original IF amplifier being replaced for an easier to obtain equivalent.





This cautionary tale is presented as a warning to collectors of vintage radios. As a novice, I had become interested in 1930s wirelesses because much of my childhood had been spent listening to sets repaired by my father, a former Signals officer. A visit to the Design Museum focused my mind on round Ekcos.

A helpful letter from Jonathan Hill directed me towards the National Vintage Communications Fair in Birmingham. I went on a fact-finding trip to assess prices and availability. There I met a dealer who had a brown AD65, which was beyond my budget, but he promised to let me know when another set came on the market.

In June, the dealer sent me an e-mail to say that he had a brown AD65 for sale, and I agreed to visit his home to inspect the set. When I arrived he told me that the wireless did not work, though this might simply be the result of a faulty fuse. He invited me to open the back. While I was inspecting the inside, he commented that he was simply a dealer and had no technical knowledge of radios. He said that the case was genuine, though it had a crack at three o'clock, and that the dial, chassis and cloth were also original. The set was priced at £480 and we settled on a figure of £470, which at his request I paid in cash the following day. When delivering the wireless, the dealer commented that he was puzzled by the fact that there were two switches on either side of the case, and that he did not know their purpose. One of these, I later discovered, was a modification.

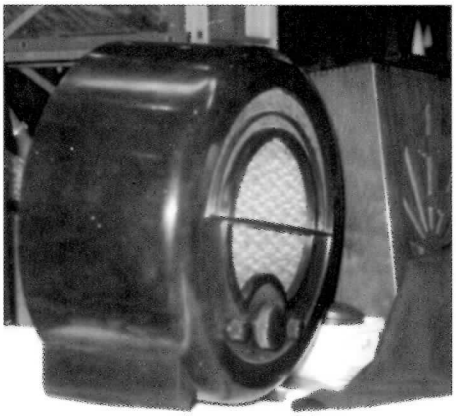
In July, I took the radio to the Vintage Wireless Museum where Gerry Wells showed me the Ekco AD65 in his collection. It was immediately apparent that the set I had purchased had been substantially rebuilt with post-war components. Only the chassis remained from the original 1934 specfication. I telephoned the dealer to tell him of my discovery and disappointment. I asked him either to make a contribution to the repair or to offer a refund. He refused saying that this was simply a matter of 'caveat emptor' and that as he had not misled me, the responsibility was entirely mine. Gerry Wells kindly offered to restore the wireless, and a week later I was in possession of a genuine round Ekco.

As Trading Standards confirmed, the dealer had acted entirely within the law. I am not entitled to a refund or a contribution to the cost of the extensive restoration. Clearly, round Ekcos and other sought-after wirelesses had attracted the attention of individuals beyond the enthusiast, and the beginner has to be vigilant. The one pleasant side- effect of this depressing experience was to meet a group of friendly and genuinely committed collectors who have been unfailingly helpful and sympathetic.

The one pleasant side- effect of this depressing experience was to meet a group of friendly and genuinely committed collectors who have been unfailingly helpful and sympathetic.

Blackpool

The event in the far North went ahead as planned in September this year with some interesting items on sale and display. I came away with a beautiful little American set that I have always liked and was as happy as a sandboy. with my purchase. It has not been as well attended as the Birmingham event but that leaves open the stronger possiblity of the elusive goodie still being there for you to buy. I can vouch for this as I bought my Kadette Jewel pretty late on in the day. I strongly recommend a trip to the seaside next year. You'll definitely see me there! (Ed.)



Do you recognise these pictures?

Recently this collection of photographs was supplied to the BVWS with the idea that we might be able to find something out about them. They were inspected by the committee members and we all agreed that they are extremely interesting.

However, we did not recognise the people depicted. Perhaps you may know who these likely lads are: maybe you are one of them.

If you can shed any light on these images then any information about what was happening and who the people were would be gratefully received. Hopefully the printed matter will jog someone's memory a little. Even if you don't know, don't forget to show them to some of the 'old boys' of wireless whom you might know; it could be the answer.

Dear Mr. Smith,

In reply to your letter of May 16th I have pleadure in sending you photographs of the Receiving Room at Bridgwater for yourself and Mr. Setchell.

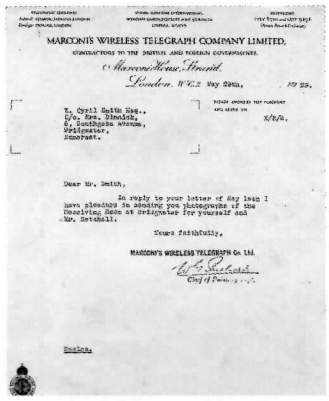
Yours faithfully,

MARCONI'S WIRELESS TELEGRAPH Co. Ltd.

W. S. Richards

Chief of Publicity Dept.

Detail of one of the two letters found with the photographs



MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED,
CONTRACTORS TO THE BRITISH AND FOREIGN GOVERNMENTS.
Marconi House, Strand,
London, W.C.2 May 20th, 1929.

E. Cyril Smith Esq.,
C/o. Mrs. Dimmick,
6, Southgate Avenue,
Bridgwater,
Somerset.

X/8/4.

Dear Mr. Smith,

In reply to your letter of May 16th I have pleadure in sending you photographs of the Receiving Room at Bridgwater for yourself and Mr. Setchell.

Yours faithfully,

MARCONI'S WIRELESS TELEGRAPH Co. Ltd.

W. S. Richards
Chief of Publicity Dept.

Enclos.

DUNLOP RUBBER CO., LTD.

Technical Photographic Section,
Research Centre,
FORT DUNLOP
ERDINGTON
BIRMINGHAM 24

Tel. 427.

24th October, 1949.

B.B.C. BIRMINGHAM, RESEARCH CENTRE.

Dear Mr.Smith,

Enclosed are two photographs which I promised to forward to you, on your recent visit to Fort Dunlop.

Hoping you find these satisfactory,

Yours sincerely,

G.Stimson
Technical Photographer.

Mr.E.C.Smith,
Outside Broadcast Dept.,
c/o B.B.C. Birmingham.

The "Meccano" Crystal Set by Hornby

byGeoffrey Dixon Nuttall

I had heard rumours of the existence of this set, but only recently came across details, and here it is. The original version of this was produced in the US by the American branch of the company.

Frank Hornby visited the US in 1922, and was so impressed that he ordered a British version. The only trace of the original is the reference to"grounding" in the instructions.

There was an earlier version (RS1), but this was ready-made. For some reason the Postmaster General objected, and it had to be withdrawn. This one is RS2, and I have never seen one, and neither has anyone else, so it may have been a failure, or perhaps, like other Meccano models, it was dismantled to make something else.

Several special parts were introduced to make this set possible. Insulating parts were made from "specially prepared fibre." This was only to be obtained from Meccano, presumably it was chosen for its high frequency properties. Even the crystal was their own, "developed by our scientific staff". I didn't know they had one! Called "Meccolite" it was made in their own laboratories, they say. A list of parts is shown, but this is the American version, and does not quite correspond with the British one. It also has some gaps, as we shall see.

This set is made up on a baseplate of unspecified material, but probably it is fibre. As will be seen, assembling this set required quite a lot of work. The tuning capacitor is assembled from separate plates (16 of them), and there are fibre spacers between them, so that it has in effect a solid dielectric. The coils were supplied ready wound, and covered up to 500 metres.

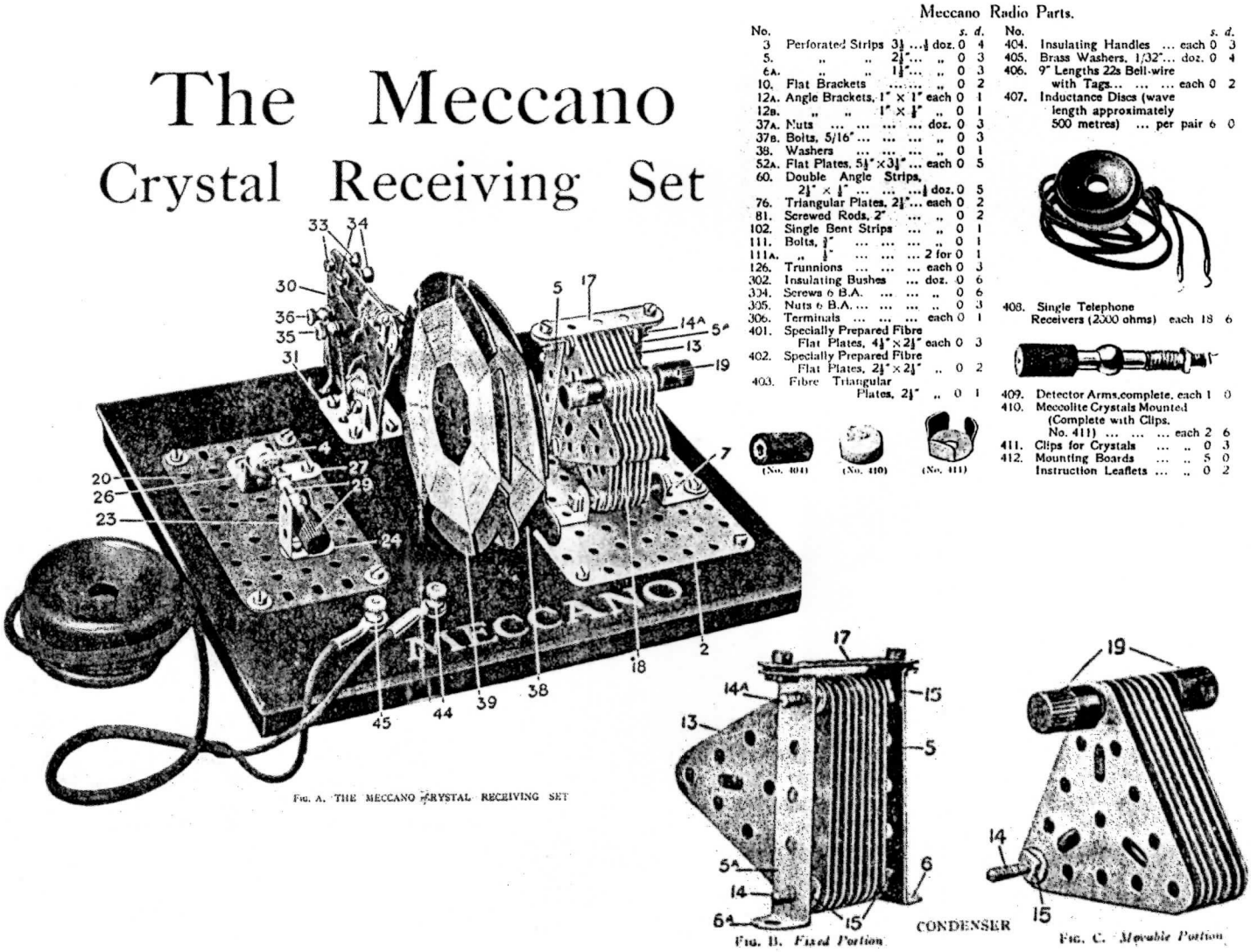
Some of the under-chassis wiring used Meccano strips instead of wire, but as there is no mention of removing the paint this cannot be considered a good idea- but perhaps Meccano was not painted in 1922? [*I have seen many different types of Meccano myself and some pieces are indeed unpainted-ed.*]

The kit of parts cost 45 shillings, which seems reasonable. Note that only one earphone is included. There was also a kit for a suitable aerial, which cost 12s. 6d.

Some dedicated Meccano enthusiast might like to make one of these, but he would first have to contrive the special parts. However, careful inspection of the photos reveals that there is quite a lot of redundancy in the design, for example, the fibre plates are not necessary, as the baseplate gives all the mounting holes needed. (These plates are not shown in the parts list). The triangular plates (part no.76) present a problem, but there is no need for all the holes, and careful assembly should remove the need for the fibre spacers, so that the capacitor would then have an air dielectric. What is the purpose of the threaded pin, numbered 8 in the photo? Possibly an end stop?

The insulating plate on which the coils are mounted can luckily be replaced by a 2 1/2" square plastic plate, which is part 194a in the latest list. It may be a bit flimsy, so use two of them.

The coils will have to be wound by hand, but this is not difficult, only boring. I suspect that the crystal holder is in fact a standard item, whatever they say. And do remember to remove the paint.



Meccano Radio Parts.

No.		s.	d.
3	Perforated Strips 3½ ...½ doz.	0	4
5.	" " 2½"... "	0	3
6A.	" " 1½"... "	0	3
10.	Flat Brackets ..... "	0	2
12A.	Angle Brackets, 1" × 1" each	0	1
12B.	" " 1" × ½" "	0	1
37A.	Nuts ... ... doz.	0	3
37B.	Bolts, 5/16"... ... ... "	0	3
38.	Washers ... ... "	0	1
52A.	Flat Plates, 5½"×3½"... each	0	5
60.	Double Angle Strips, 2½" × ½" ... ...½ doz.	0	5
76.	Triangular Plates, 2½"... each	0	2
81.	Screwed Rods, 2" ... "	0	2
102.	Single Bent Strips ... "	0	1
111.	Bolts, ¾" ... ... "	0	1
111A.	" ½" ... ... 2 for	0	1
126.	Trunnions ... ... each	0	3
302.	Insulating Bushes ... doz.	0	6
304.	Screws 6 B.A. ... ... "	0	6
305.	Nuts 6 B.A. ... ... "	0	3
306.	Terminals ... ... each	0	1
401.	Specially Prepared Fibre Flat Plates, 4½"×2½" each	0	3
402.	Specially Prepared Fibre Flat Plates, 2½"×2½" "	0	2
403.	Fibre Triangular Plates, 2½" "	0	1
404.	Insulating Handles ... each	0	3
405.	Brass Washers, 1/32"... doz.	0	4
406.	9" Lengths 22s Bell-wire with Tags... ... ... each	0	2
407.	Inductance Discs (wave length approximately 500 metres) ... per pair	6	0
408.	Single Telephone Receivers (2000 ohms) each	18	6
409.	Detector Arms,complete, each	1	0
410.	Meccolite Crystals Mounted (Complete with Clips. No. 411) ... ... each	2	6
411.	Clips for Crystals ... "	0	3
412.	Mounting Boards ... "	5	0
	Instruction Leaflets ... "	0	2

(No. 404) (No. 410) (No. 411)

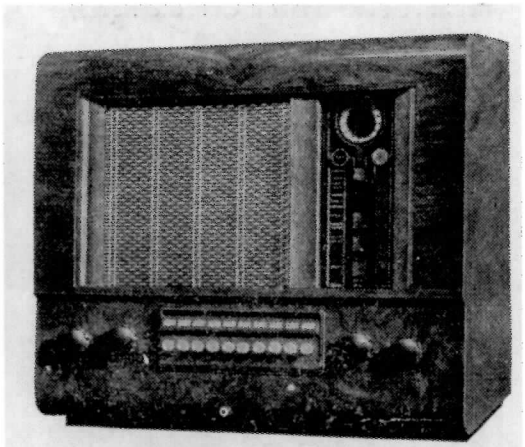
FIG. A. THE MECCANO CRYSTAL RECEIVING SET

FIG. B. *Fixed Portion*

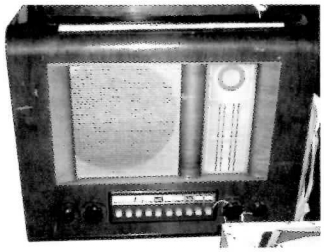
FIG. C. *Movable Portion*

Bush radios: some of my favourite things

Mike Gohl talks about his Bush collection



Model P.B. 65 Bush Button Receiver.



Well, it all started way back in the 1980's, when I was very active with jumble sales and me and a friend noticed that this charity shop had an old radio for sale. I managed to obtain it for the princely sum of two pounds (a lot of cash for me as I didn't get much pocket money).

The radio turned out to be a Bush VHF54 (it uses the same cabinet as AC34 but has FM instead of SW). I took it home and cleaned it up and like a fool plugged it in(I hear you say did it go with a 'Bang'). Well it worked fine I used to watch as the output valve glowed blue (it probably had a duff coupling capacitor on its grid causing excess currents to flow in the valve)and that smell always associated with unrestored radios (this one had it's original wiring). I had it for some time and later got a Bush DAC90A in cream bakelite. This too was cleaned up but alas all it did was light up its heaters.I didn't know anyone who could fix it anyway.

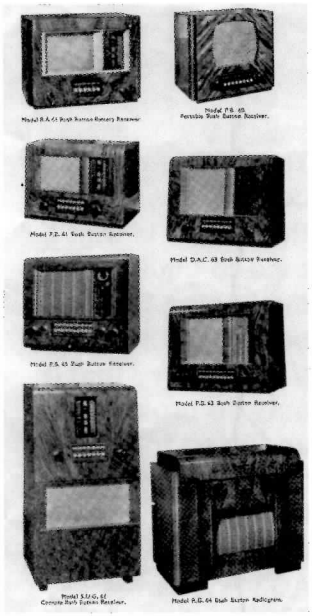
A few months later my dad said he was fed up with these radios and wanted them out of the house. He said they were a fire hazard waiting to happen. Reluctantly I rang a collector my mum had seen advertising in the local press and the sets were taken away. I thought that was the end of that (little did I know).

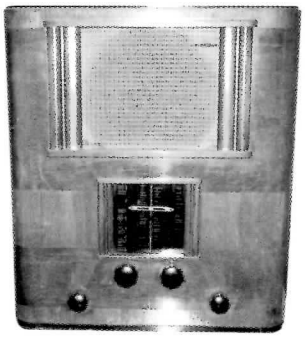
About 10 years passed and I was going past a junk shop and I saw an old radio. Now I would have gone past it but it reminded me of an old radio my grandad had and that it was the same set as the one I had bought 10 years previously (actually this was a Bush AC34 and not the VHF54 that I had had before). I got it home and cleaned out all the dirt and noticed that this set had the same valve in all its holders (a rectifer, in fact). I thought this odd, even with virtually no knowledge of radio. A collector who I again contacted through an advert in the paper agreed to restore the set. It took some time to arrange; when he rang back, he said it would cost 80 pounds. This seemed a lot (now I know it was). I had another set I had acquired and I agreed to swap this with the collector in exchange for repair of the Bush. A few weeks later it arrived from repair and a good job had been done.

A few years later in April of 1996 I was going past a junk shop and I saw a smaller version of the set I had had repaired by a collector. This was a Bush AC41. This time in view of the expense of repair I thought that I would undertake such a job myself (a ludicrous suggestion). Who was I to undertake such a job when I knew so little of valves and the high voltages found in such sets. I did however have a go as I was against having to pay a large amount for a repair. I am a radio engineer and after I cleaned the set I noticed that several wires that go through the chassis had perished along with the protective grommet. These I replaced.

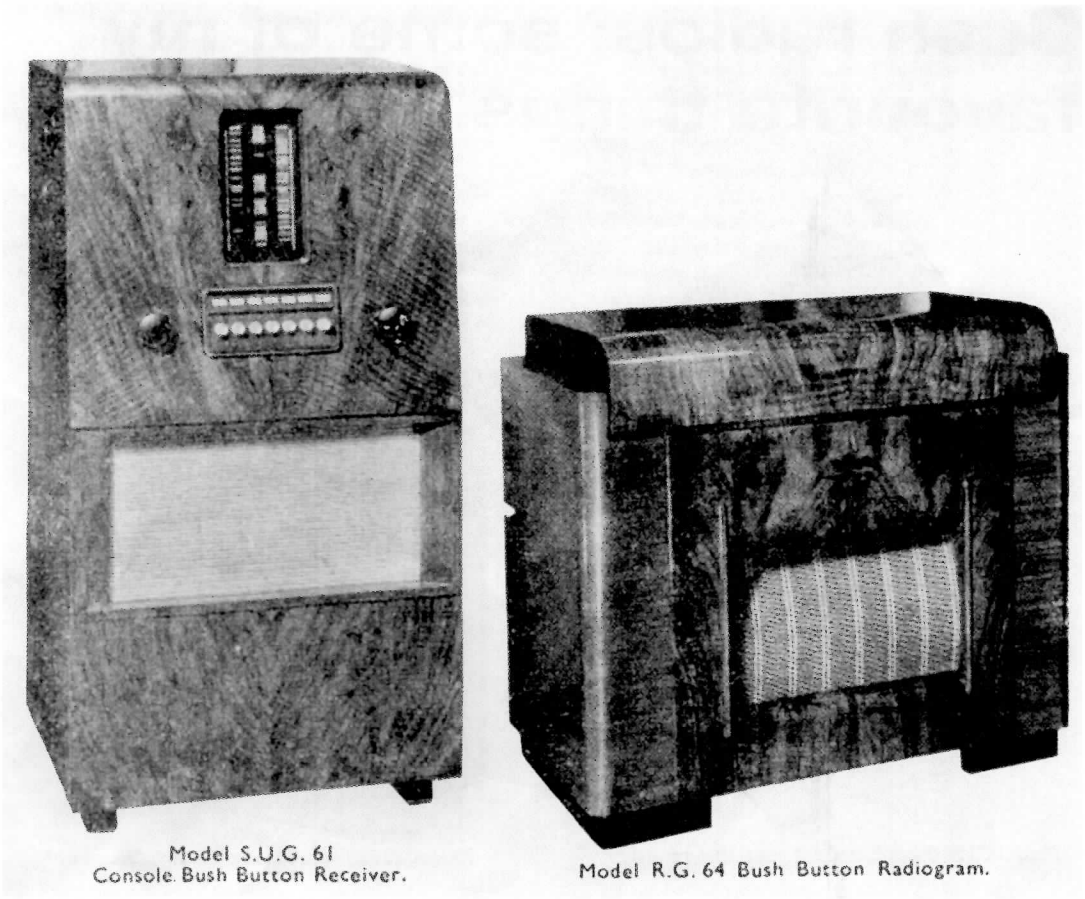
OK its shameful admissions time. Yes, I used new wire. Oh God, it was brightly coloured blue/yellow and red, it was all I had. I switched on. The heaters came on but that was all, no crackle, no hiss; just an eerie silence. At this point I rang a friend and he asked if had I checked the HT. What was HT? So I went to the local library the next day and borrowed one of those common core books (the American series). The next day I checked the HT on the set (now I knew what it was). There was HT on one side of the smoothing capacitor but not the other. Hey presto, that was the fault. There was a 1000 ohm resistor between both caps and due to the perished wiring it had gone open circuit. I put something I had found in my brother's junk box and switched on. It was strange as the set warmed up a 'station' faded out of nowhere and I was mesmerised.You know I still get that feeling today everytime I repair a set and switch on. Now the only thing old radio's don't pick up is old tunes from the 30's, 40's and 50's but then that would be impossible. I don't mean via the pick up socket either. It would be quite funny to be given a radio to repair and the fault said 'picks up old stations'.

Ever since I fixed that first Bush (AC41) in 1996 I have been collecting radios. In my early days I paid many a high price for sets which now I know I could





My favourite sets are the Bush SW43 and the really interesting Bush AC34.



Model S.U.G. 61
Console Bush Button Receiver.

Model R.G. 64 Bush Button Radiogram.

The problem with collecting some of these sets is that I tend to aquire duplicates.This is because when I see a set I worry that it may be broken up and used for parts, so I buy it and now have many duplicates - 4 times AC34's,5 times AC41's, 2 times SAC31's, 2 PB61's, 2 AC71's, 2 times SSW33's

pick up for A few pounds. I remember paying 80 pounds for a Bush VHF90 (not the one with the big dial, the other one with the oblong tuning scale) and a Bush AC2, even then I thought this a lot to pay for 2 sets, nowadays I could pick up the former for a few pounds and the latter for even less, and have done at the NEC and Harpenden swapmeets.You see knowledge is power and if you stumble to start off with in any hobby not knowing what is the correct price then you can easily get ripped off.

To cure this problem of paying too much I was introduced to different organizations in radio circles and now am a member of the BVWS, Radiophile and also go to the NEC a lot. This allows me to mix with other collectors and to get a fair Idea of market price of radios to buy and sell.

Since I became involved with these organizations the actual price paid for radios has fallen and now I tend to know what not to and what to pay for certain radios.It also gives me a wealth of knowledge and helps in my collection.

Why do I collect Bush?

Now apart from the obvious Bush radios that come to mind DAC90, DAC90A, DAC10, AC3 and the TV12, 22 televisions Bush seems to be a forgotten make unlike Philco, Ekco, Pye, Philips, Murphy etc. I thought some time ago that I would focus my collecting mainly on one make of set.This came about due to the sheer lack of space caused by collecting so many different models.Therefore I began to collect Bush. However being a set not much in the limelight they tend to be forgotten and a good source of parts for the well known sets, especially the bakelite ones.This proves a problem for me especially when I'm at an auction and people are bidding for a certain set and it has a desirable valve in it. The problem is then that once the valve has been taken out the set is invariably scrapped for bits and then lost for ever. The set I need which uses this valve is the PB65.

This makes collecting Bush difficult for me. I have several gaps in my collection; namely Bush SSW37, PB65, SAC21, VHF 54. (More info on radios that I want can be got from my web site at the following address freespace.virgin.net/jamie.gohl)

Now, some people will be saying that some Bush sets are rather boring to look at, Well, I would be first to admit that this is true of some perhaps the PB50, PB51, PB53, PB55, PB61, PB63, PB65 etc. They may be boring but because they stuck mainly to the Mullard circuits that the receiver designs were based on, they are really reliable (apart from the push-button unit).

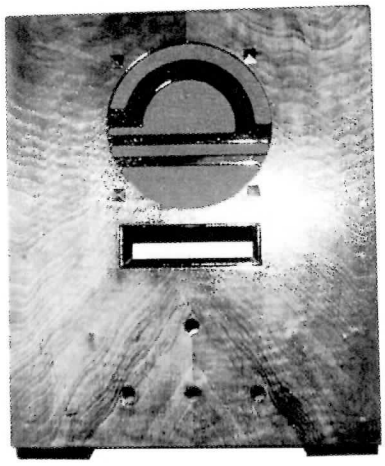
Here is a list of the Bush sets I have in my collection SSW33, AC23, SW41, SW43, SW45, PB50, PB51, PB53, PB55, PB61, PB63, PB65, SAC25, SAC35, AC71, AC81, Civilian set version U1, PB12, DAC73, AC11, AC34, AC41, VHF41, DAC10, DAC90, DAC90A, AC31 SAC31, BAC31, EBS4 (export model), SUG52, and a few more. That's quite a few Bushes - almost enough for a garden centre my dad says.

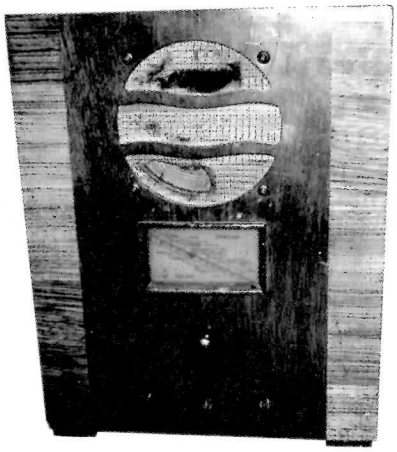
The problem with collecting some of these sets is that I tend to aquire duplicates.This is because when I see a set I worry that it may be broken up and used for parts, so I buy it and now have many duplicates - 4 times AC34's,5 times AC41's, 2 times SAC31's, 2 PB61's, 2 AC71's, 2 times SSW33's

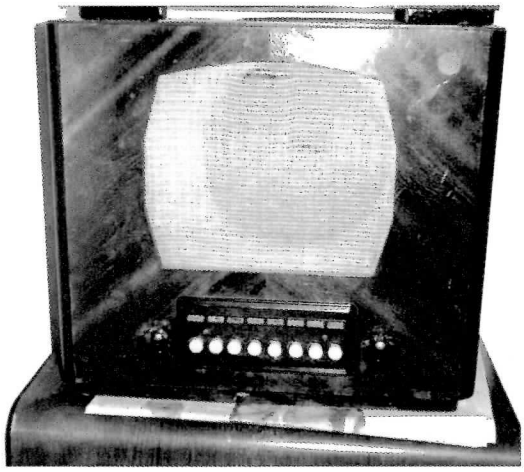
Lastly, I have never managed to acquire a Bush VHF54 the set that started this hobby off all that time before.If any reader has one for sale I would be pleased to get in touch...

Bush radios are built very well indeed, rather like a brick privy if you know what I mean.They use decent coils,valves and have a good chassis generally apart from the 1930's ones (they tend to rust). The 1950's sets were aluminium and didn't rust though they did tend to aquire a slight white deposit (when in a damp location) but this could be cleaned off.

Some types of valves used by Bush Radio eg: TH4B, VP4B, TDD, PENA4, PENB4 etc. used 4 volt heaters. In the late 1930's Bush went over to octal valves ECH35, EF39, EBC33, EL33 etc. with 6.3 volt heaters, CCH35, EF39, EBC33, CL33 with universal series







heaters and in the 50's they went over to Loctal valves or rimlock as they were known ECH41, EF41, EBC41, EL41 etc. with 6.3 volt series heaters, UCH41, UF41, UBC4, UL41 etc. with universal series heaters then later they went on to ECH81, EF89, EABC80, EL84 etc. 6.3 volt heaters UCH81, UF89, UABC80, UL84 etc. with universal series heaters. Of course most of these valves are easy to obtain and I find the hardest items to aquire for a restoration are knobs.This is because there are so many different types. 1930's sets have some very unusual knobs and I find some of these hard to obtain. I tend to get quite a few sets with these knobs missing and I put it down to their simply dropping off rather than having been taken off. The grub screw holding the knob to the spindle just doesn't seem to have enough bite and the knob is lost between the floorboards.

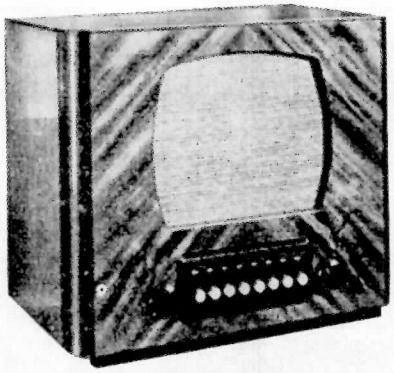
When it comes to restoration I prefer to get the set working first and only then do I work on the cabinet. I have my own workshop and as I live on my own have no problems with wives/girlfriends moaning about sets left all over the place. Actually I do keep them tidy as I once stubbed my toe on a chassis (yes it does hurt as much as getting lego and children's toys under your feet, I remember that from staying at my brother's house some years ago when he had young children). So nowadays, I do like to have a certain amount of order. Most of my spares, valves etc. are kept in a filing cabinet in the workshop while the scrap chassis are in the garage. Yes I do scrap sets but only if they are literally falling apart. If the set is tatty with a couple of worm holes then it is assigned to the garage (I won't let worms in the house even if it is treated and I don't mean by taking it out to dinner!)

I also collect Ekco and HMV and Marconi they add a certain flavour among all the conservative Bush radios.

I undertake all my own repairs and some of my cabinet finishing is also done by me. If I have a really desirable Bush (to me) then I ask a friend who has done a very good job in the past.

As mentioned earlier I tend to get duplicates; this is good as I can use them to try different refinishing techniques such as french polishing,varnish,wax etc. This can also be done on certain cheap sets (not Bush) I get as they can be used as test cases and if I cock up well there's no real loss.I recently did this to a cabinet of a worm-eaten Ekco A28 and proved that the varnish reacted with the wood stain.In this case it wasn't a costly mistake and the old cabinet was assigned to the shed for future reference.I won't be using that varnish again. Now if I had done that to a really good example of Bush then I wouldn't be able to sleep at night. Now I know you can strip it off but it's harder to get new varnish off than old.

On the subject of the chassis and old capacitors I tend to remove the old innards on the electrolytic ones and put new ones inside. I don't go as quite this far when it comes to coupling capacitors as these are just under the chassis and as long as they are tidy that will suffice.You see in the 1950's when radios were being fixed engineers used to just snip out the old bits and put new ones in. Now I at least make sure the tops of the chassis look original. I have several sets awaiting repair and they have rather unsightly round smoothing



Model P.B. 60.
Portable Bush Button Receiver.

Above and below: The Bush PB50 push button only set -an unusual design that lacked the conventional tuning scale. This idea was mooted in the late thirties but only really came into its own in the 1950s with truly "knobless" designs that were entirely preset by the wireless retailer or serrvice engineer.

capacitors on top of the chassis instead of the waxed cardboard rectangular types.

I always use a Variac to power up a chassis and this is not done until I've checked the mains transformer for resistance on its primary/secondary windings. I also check the field coil and output transformer on a multimeter. Then and only then, after all capacitors have been tested for short circuits (especially the one across DAC90A mains input). I also use an ammeter in series with the Variac to monitor the current. If it goes suddenly high and stays there then I switch off. It's better to be safe than sorry. In the past I used to enjoy going out to answer the door with my hair full of tin foil and a whistling noise in my ears.

As a conclusion I would like to offer a few points that I think are of use to the collector:

(1) Early bush receivers like SW41,SW43 had a nice touch of the dial lamp lighting on thier respective dials as you changed wavebands.

(2) That Bush made a lot of different DAC90A dial variations(colour)

(3)dates for the following sets.

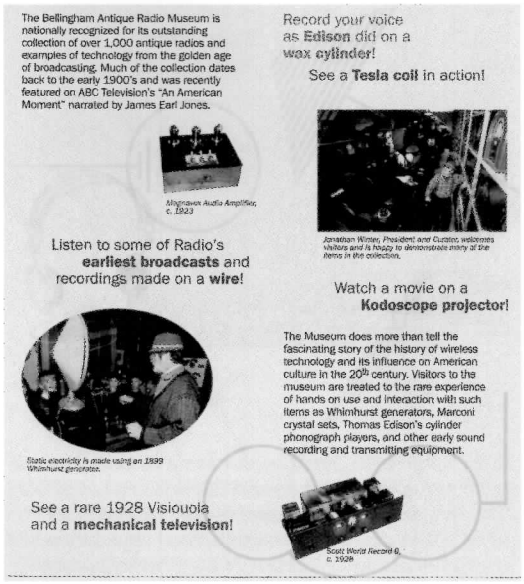
1935-1936 season	AC23
1936-1937 season	SAC35
1937-1938 season	SW41,SW43,SW45
1938-1939 season	PB50,PB51,PB53,PB55
1939-1940 season	PB61,PB63,PB65

Apparently, a PB60 is rumoured to exist, like the PB50 it to is only push button (no dial) but I have never seen one. [*I have - ed*]

Suggested Enthusiasts Holiday Destinations: The Bellingham wireless Museum

If you are going to be in America at some point in the future, then it might be possible for you to nip into the Bellingham wireless Museum. I am sure that by the time anyone gets to the States they will have all forgotten the recent excitement of the close run election between Bush and Gore, in fact, I doubt that anyone will even care - except for Messers Bush and Gore that is. However, the politicians come and go but wireless history will still be there.

The Bellingham Antique Radio Museum
1315 Railraod Ave.,
Bellingham, WA 98225, USA
Or stop of at the web site at:
www.antique-radio.org



Help! For reconstructing WW2 Bombe machine at Bletchley Park

Bletchley Park has asked for help on locating some Selenium (or maybe metal oxide) rectifiers.

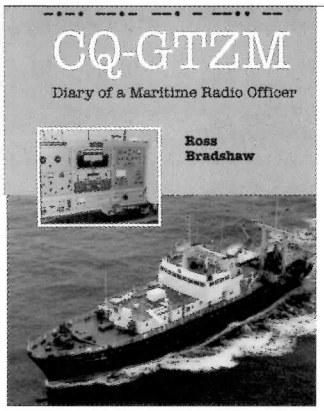
Here's the spec:- Metal rectifier Selenium. S.T.C. Code H18-8-1. (60 ma. in forward direction).

We only have the technical specs to go on but an ex STC employee has found a unit about twice as long (22 "junctions" as against around 12 (maybe 8?) on the original drawing) with fixing positions at both ends but otherwise identical to our drawings.

This has marked on it :- SenTerCel C52 at one end and H18 22 1WZ at the other.

This STC chap felt fairly sure that this was Selenium (where as some of my Siemens chums said it was metal oxide). So do you think that your contacts can search for some (in fact we need 104!) but any would be good?

If you can help please contact Andrew Emmerson (midshires@cix.co.uk).



CQ-GTZM diary of a Maritime Radio Operator
by Ross Bradshaw

Deicated to all radio officers afloat and ashore, this book covers a six year period in which Ross Bradshaw graduates from the School of Marine Radio and Radar through to being a radio officer for the Marconi Company. Travelling all over the world and using many varied types of communication equipment (and often repairing them). One gets quite a sense of life at sea in the Merchant Navy and how to survive it.

The book is interspersed with photographs of the equipment utilised in the wireless room on board each ship that Ross sailed in and they are legion. It is refreshing to see the technical aspects of the diary intermingled with that of day-to-day existence at sea. It taught me a lot anyway.

To those interested in maritime radio this is going to be an invaluable addition to their library. The book is priced at £12.95 plus £2.05 for postage and packing. It is available direct from the author through the following address:

R. Bradshaw, 23 Boycott Ave, Oldbrook Milton Keynes, MK6 2PN.

The Saga of Marconi Osram Valve

Barry Vyse and George Jessop:
Vyse Ltd, 14 Cranbourne Drive,
Pinner, Middx., HA5 1BZ
346 pp, 240x170mm and 700 illustrations,

Barry Vyse and George Jessop both worked for the M-O Valve Company – George for 45 years from 1926 and Barry for 17 years from 1970, eventually becoming the MD. It quotes not surprising, therefore, that this beautifully illustrated book is full of first-hand information and anecdotes. It covers the whole history of the company from its early days as the Robertson Electric Light Company, through to its eventual closure in 1988. During all this time the company occupied premises in Brook Green, Hammersmith, in west London.

This book is not just a history of valve making; it gives details of hundreds of different types, ranging from the very earliest R types of WW1 through to the all-glass envelope types of post WW2, and includes magnetrons, high-power transmitting valves used by the Post Office and the BBC, and miniature valves used in artillery fuse circuits and hearing aids.

An enormous amount of research has gone into its production. It is a 'must have' for anyone, even if only remotely interested in valves.

Where the authors stray from the M-OV story there are, inevitably, a few errors of fact, but these do not in any way detract from the story told – and told most ably.

Keith Thrower

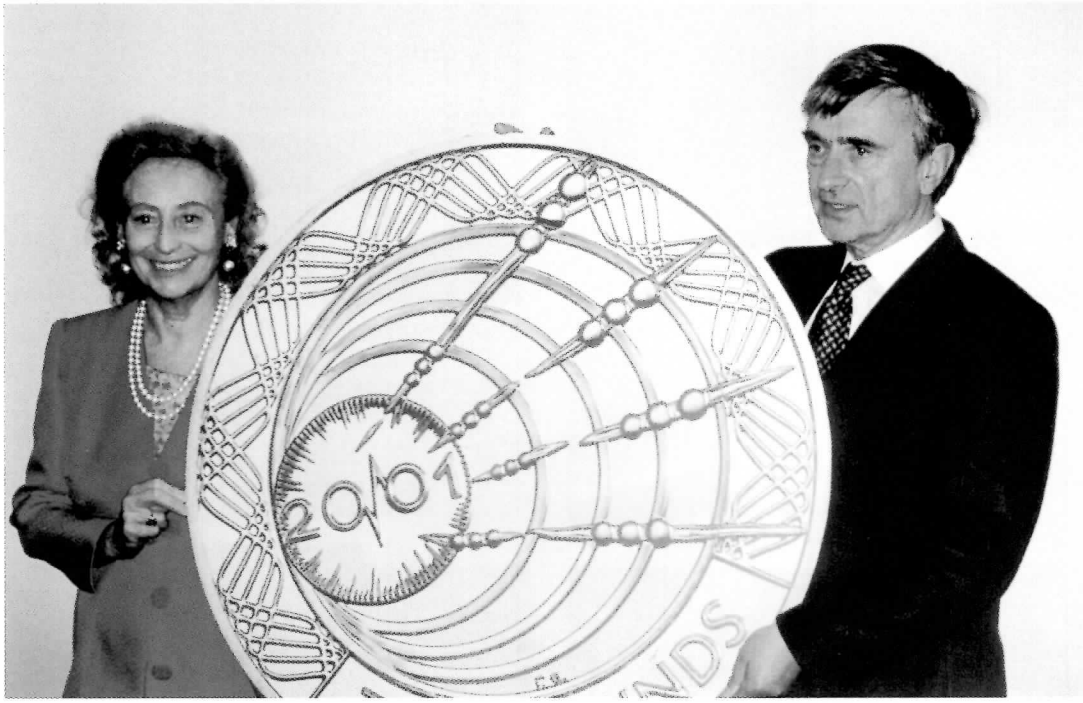
(see advert on inside-rear page for purchasing details)

Royal Mint unveils Marconi £2 coin

Next year sees the the centenary of Marconi's first wireless transmission across the Atlantic. The signal was transmitted from Poldhu in Cornwall to St. john's, Newfoundland in December 1901. To commemorate this hugely significant achievement, the Royal mint will be producing a special version of the £2 coin.

Taking radio waves as its theme, the design highlights Marconi's tremendous impact on 20th century communication. radio waves can be seen both in the centre and in the outer border, while a spark of electricity linking the zeros of the date represents the generation of the signal that was transmitted across the Atlantic. To accompany this special the normal edge lettering on the £2 coin ('Standing on the Shoulders of Giants') will be replaced by the inscription 'Wireless bridges the Atlantic ...Marconi 1901..."

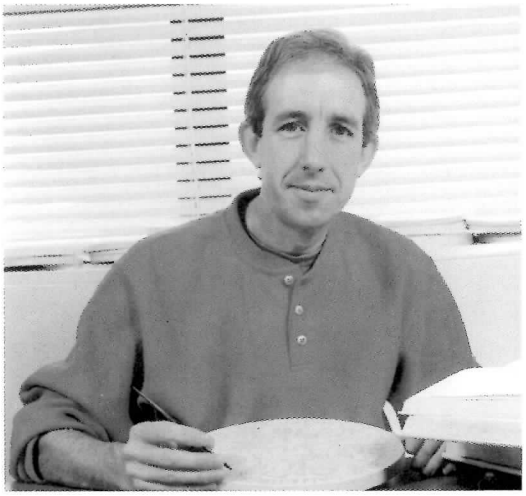
continued on page 44



Left: Gordon Bussey and Princess Elletra Marconi displaying a model of the commemorative Marconi coin.

Far left: The designer of the Marconi coin: Robert Evans.

Below various dignitaries and BVWS members including Dr Tom Going, Gordon bussey, Guy Peskett, Lee Smallbone and Mike Barker.



Welcome to the Harpenden Halls

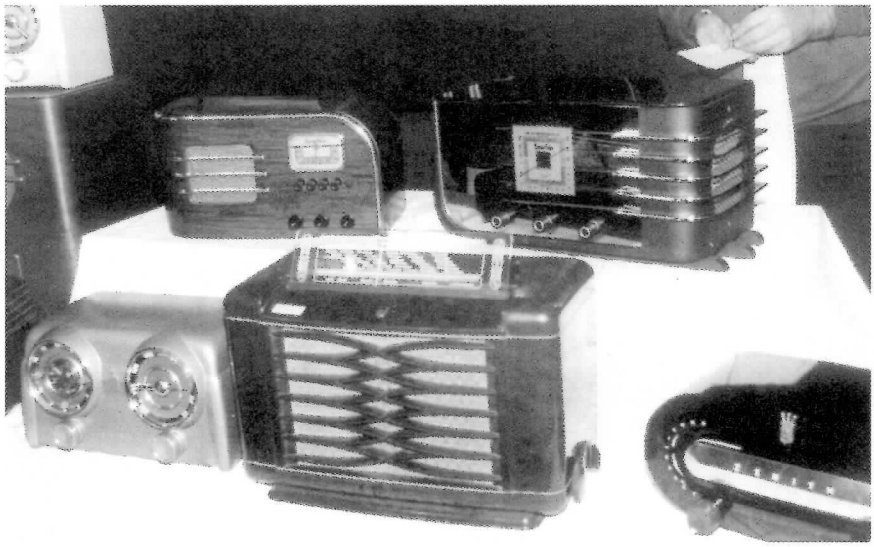
Yet again, the doors opened and the goodies were available to a keen and cheerful crowd. In fact, this was a day and a half. My most vivid recollection was of trying to take some last-minute photos of the stalls all set up and looking pretty when the doors opened behind me and a sea of Wireless enthusiasts surged forward in a great wave spanning the entire length of the doors. I thought that I was at a rock festival.

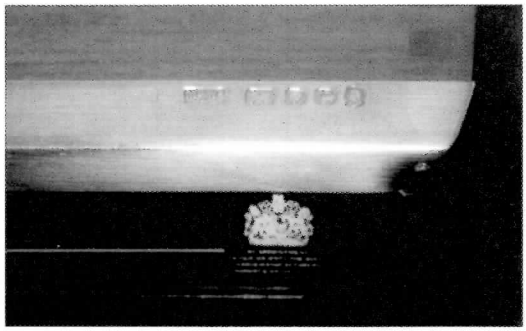
The meeting contained all the elements that I joined The Society for. I attended the 'Talking about Wireless' event and listened to the question and answer session, hung about in the cafe and talked radio with other like-minded fools and gawped at the wares on display in the main hall and the auction. There were some real gems - a Sparton "Sled", an Ekco AC97 in black and ivory and a Cosmos set of the twenties that I am sure every collector of the period would want if they were being truly honest. the 'Sled' and the AC97 were a bit on the restored side but I don't think that others are going to turn up in the next few weeks and the lucky collectors who eventually own them will be the envy of their friends and the only wireless connoisseurs who don't have some justifying to do to their spouses.

The Wilsons had a very unusual transistor radio (from John's collection) in a Roberts silver jubilee special edition. The radio was mountedin solid silver. Here I have attempted to show it in all it's boxed glory but to be perfectly honest it is far better when seen in the metal.

I managed to capture Terry Martini making a purchase. A projection TV set which he is threatening to restore and even to write an article for the Bulletin about his endeavours. I am sure that we are all now looking forward to hearing more about this. The last tale of televisual recreation went down very well from what many of the readers have said to me at various meetings so I know that it will be well received.

I have to admit that I didn't see a lot of swapping but plenty of people went away with new radios for their collections. What ever happened to that quaint old business of swapping at 'Swap Meets'? The 'Bring and Buy' was reasonably well stocked and Gerry Wells held his usual 'Wireless Clinic' in the small hall. If there is a wireless that just leaves you stumped then I am sure that Gerry can put it right.





Talking about wireless a great success

At the November Harpenden around 100 people gathered in the small hall for our first Talking About Wireless. We heard and saw three excellent presentations. Jim Duckworth and Keith Thrower cast light on two important eras of receiver design while Tony Hopwood contrasted Jenkins and Baird as the inventors of television. There was plenty of discussion, especially on the merits of Baird and Jenkins.

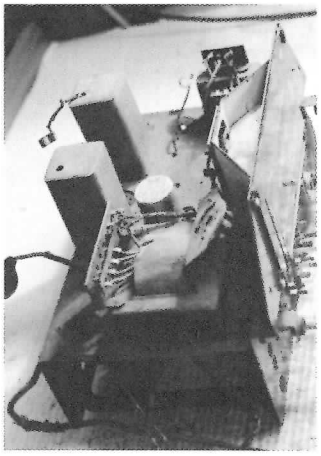
We would like to present further Talking About Wireless sessions. Tentative plans are for the June Harpenden. Have you something you would like to tell us about or some equipment you would like to demonstrate? As an incentive we offer a year's free membership to each presenter. Please contact Jeffrey Borinsky (contact details at top of page 3)

Vandalism or Pragmatism?

Work done to a Murphy A90

by Ian Liston-Smith

I have some reservations regarding writing and submitting this article. Some BVWS members will no doubt be appalled at what I am about to describe, although others may well have done it themselves for the same reasons...



On a July day last year at the McMichael Amateur Radio Rally I saw a Murphy A90. It was sitting on the ground surrounded by boxes of old radio magazines, aerial accessories and computer boards. For those unfamiliar with this radio, it is an unremarkable early 1940s AC mains, long, medium and short wave superhet in a plain wooden cabinet.

At first glance the set was in a pitiful condition, but as I stepped nearer it was clear that it was even worse! Its wooden case was covered in grime and paint splashes. The dial surround was rusty, as was the chassis. Despite that, the dial and back, although grubby, were undamaged. There were no 'ham holes' drilled into the chassis or case and all the knobs were still attached. A challenging project!

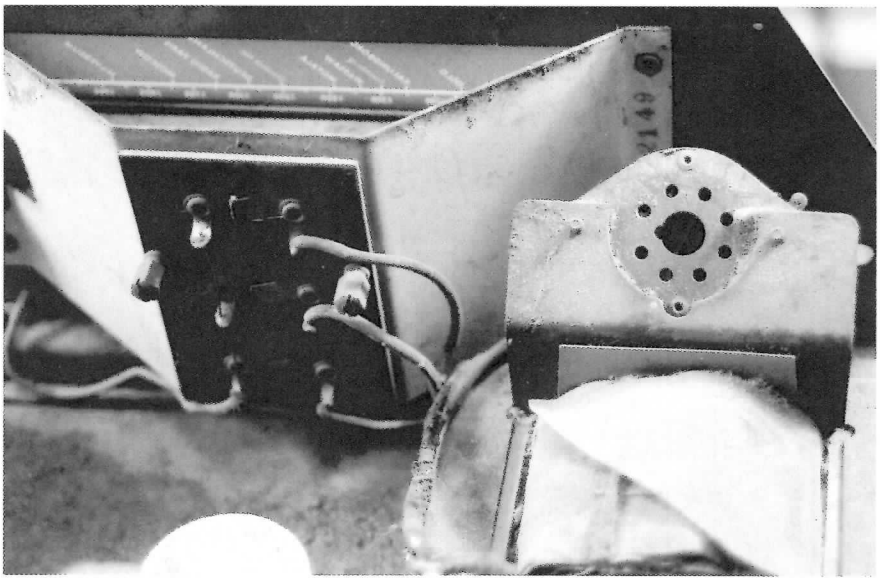
On closer inspection at home, it was obvious that it had probably been kept in a damp shed for many years. Most of the bolts holding items to the chassis were so badly corroded that their slots had all but vanished. Flakes of rust could be lifted from the chassis itself.The cotton insulation on much the wiring was sticky (though with what, goodness knows!) and the Systoflex sleeving was unravelling. It had previously been repaired as evident from a few lengths of plastic wiring and an incongruous looking electrolytic capacitor suspended between the tag-strip and an unlikely looking earth point on the tuning capacitor.

Curiosity got the better of me and after doing the usual resistance tests around the mains wiring and HT line, I decided to see if it would make any radio type noises at all. I connected it to my variac and over the period of about an hour, I gradually wound up the mains input volts. At about 100 volts all the heaters were glowing dimly. At 170 volts the speaker made a humming noise, with crackles when the volume knob was turned.

Amazingly when I connected my 60 foot aerial, signals on long wave became audible, albeit faintly. Unfortunately the set didn't work on the other bands. Nevertheless that was enough to prove that nothing drastic was amiss, so I resisted the temptation of turning up the volts any higher.

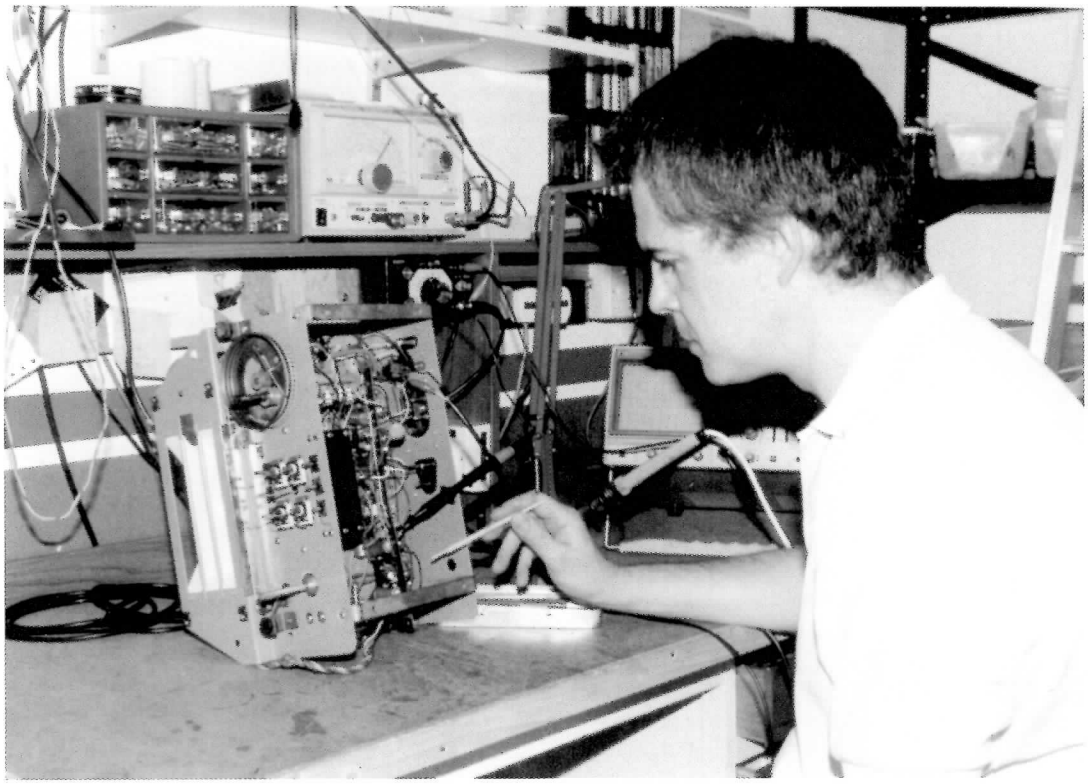
After thinking long and hard, I decided against the piecemeal approach, i.e. replacing parts one at a time after individual testing. In my opinion the only way to guarantee full working order of a set in this parlous condition is to strip it down completely. This allows thorough cleaning of the chassis and all other parts.

Before setting about this task I took some close-up photographs in case I later needed reminding where anything went. This is a useful precaution, as even the Murphy service sheets don't supply an exploded view of the mechanical assembly. (Unfortunately I didn't take any proper 'before' photos as I didn't intend to compose this article about it.)



Removing components from the chassis is an opportunity to see how well or badly the set was originally constructed. Mechanical construction was excellent - it's hard to think that Britain was in the darkest days of W.W.II when Murphy expended so much effort on frills like chain a drive for the supplementary short wave dial and a three section painted steel chassis. There's even a conveniently located internal steel bracket for temporary mounting of the tone control when servicing the set without its cabinet.

However it was under the chassis that the wartime constraints showed. Quite a few parallel resistors and capacitors make up values that were presumably unobtainable. The original published design of the A90 has independent cathode biasing on each valve and a separately decoupled HT feed to V1. In later production the HT feed was simplified and the cathode biasing to



The realignment started well. However, a quick test with the aerial connected showed the set was receiving signals on all three bands, but not as well as expected. It turned out that I had missed a link connecting C9 to the grid of V1.

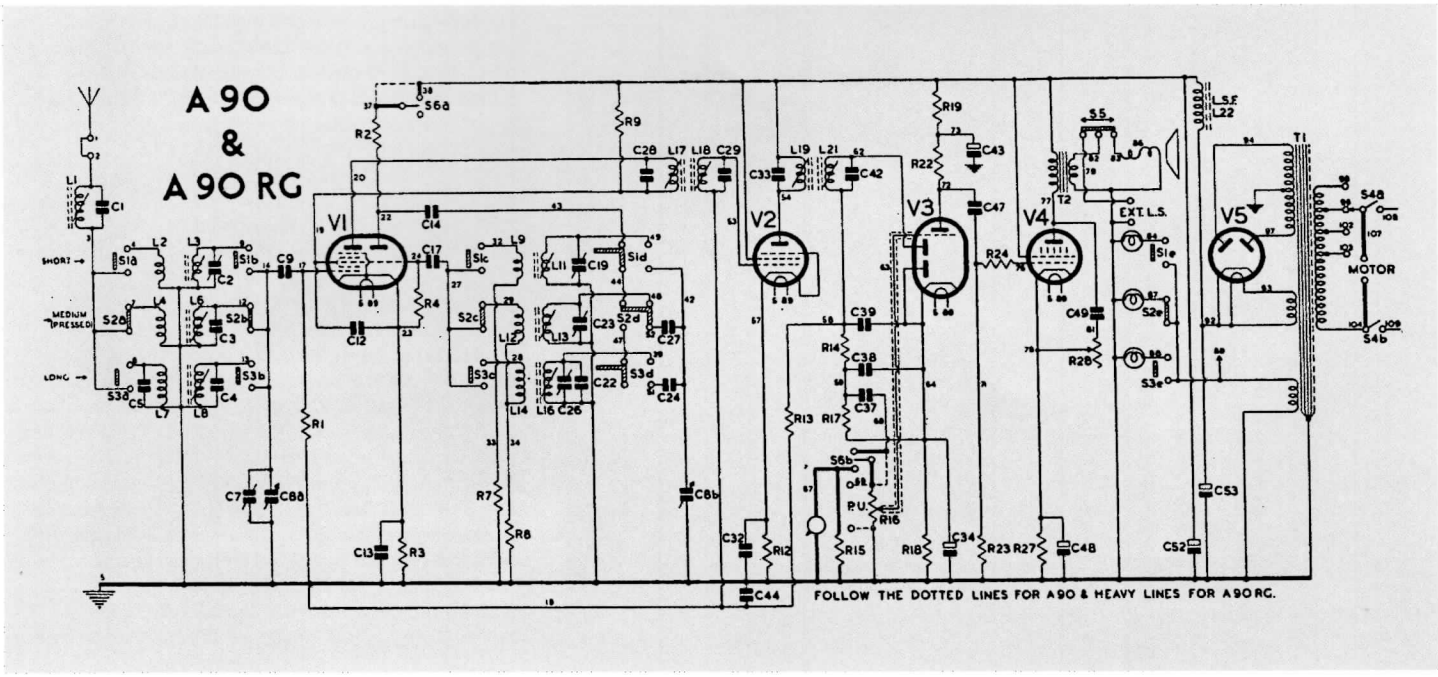
all valves was derived from a single potential divider network. It seems that these and other chassis divergences were made to meet the contingencies of war. Some of the original wiring had a somewhat haphazard appearance too, particularly around V4 where pins carrying HT were almost touching an earth tag. It looked as if the set left the factory in that condition.

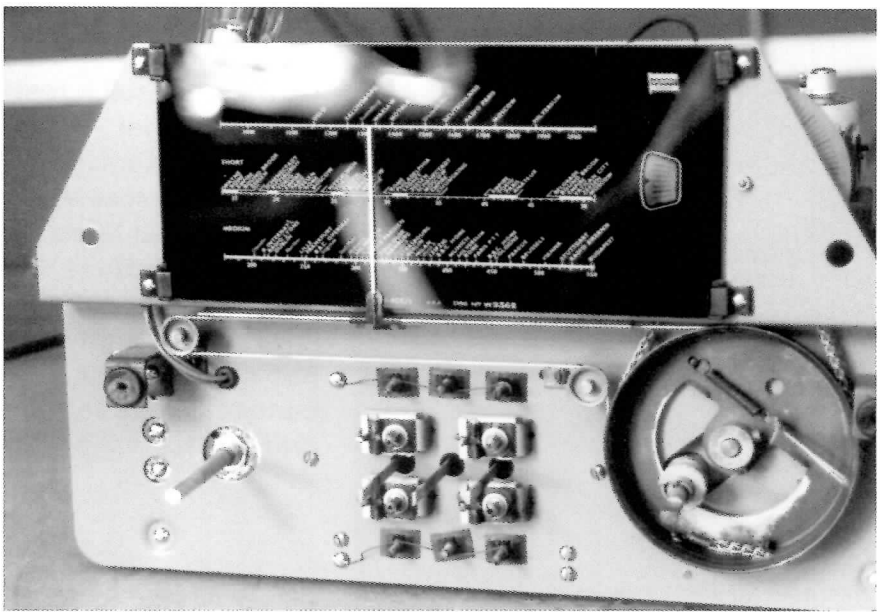
But to return to the dismantling... The rusty bolts holding the output transformer and electrolytic capacitor clip were very difficult to remove. Dripping lubricating oil and leaving it to penetrate over night only loosened one of them. Eventually I filed new slots into the heads and heated them up with a 45-watt soldering iron. The oil and extra purchase from the new slots enabled them to all unscrew without any of them shearing off.

The chassis is made of three sections, one being the dial bulb backing plate. Rivets had to be drilled out to separate two of them. Rivets also held the valve holders and these were drilled out, as were those securing the paxolin mountings for various sockets on the back panel. Once the chassis parts were separated I made an attempt to rub down the rust. It soon became clear that no matter how long I tried I wouldn't make a very good job of it, so I took all three sections to be shot blasted and resprayed in a local workshop.

To save money I asked for the front plate and main chassis to be placed with their next blue spray job. This was unlikely be an exact colour match to the original blue, but close enough for me. But I asked for the off-white dial bulb backing plate to be sprayed as near to the original colour as possible so that the reflected dial lighting would look authentic. A small local firm did an excellent job of this for a total of £15.

While this was being done I thoroughly degreased and cleaned all the metal parts, tag strip, transformers, dial and knobs. I even dismantled both the volume and on/off-tone controls. The latter didn't switch reliably as the grease in it had hardened. I also degreased the wipers and tracks before rubbing them gently over with a 'B' pencil. This brought the track resistance down





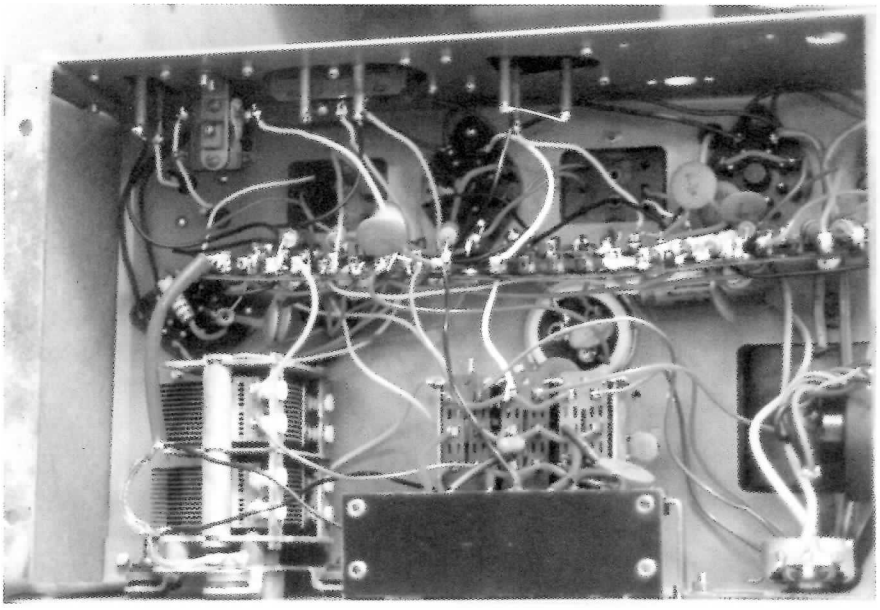
One should be very cautious however, when connecting an earth, be it to a water pipe or mains earth. The old and possibly weakened insulation between the mains winding and the transformer core could break down.

slightly, but not enough to affect the circuit. This pencil trick usually solves the problem of a noisy track when cleaning doesn't cure it. I didn't completely dismantle the wave-change switch, as it looked rather intricate, so I just squirted it with cleaner. This, as I should have learnt by now, later turned out to be a mistake...

All the inductors and transformers gave the correct DC resistance and didn't need any work other than gentle dusting. On the other hand I decided to replace all the capacitors and resistors with modern types. Even the mica capacitors (often in perfect working order after 50 or more years) were cracked, open circuit or 'leaky', including those in the IF cans. Most of the resistors may have tested OK, but it was possible that some would turn intermittent or noisy weeks, months or years later, given the apparent storage conditions the A90 had endured. Even the wiring was to be totally replaced.

Before reassembling the set I had to make another decision. Whether to reassemble to the modified 'wartime contingencies' circuit to which mine had been built, or to rebuild to Murphy's initial specification. Presumably this latter specification gave better performance as their post-war A98 design had reverted to the original A90 circuit, so this is what I decided to do.

Rebuilding started with mounting the new components on the tag strip. This was an easy job as Murphy's excellent service sheet shows the location of each component. When the chassis had been resprayed and returned, I bolted the transformers into place, riveted the valve holders back and started the rewiring. Another advantage of their service sheets is the numbering system used to show corresponding points on chassis layout and circuit diagram. This makes rewiring much easier - once you've spotted the misprints.



The time came for the first powering-up. There were no bangs or smoke so things were looking good. All voltages were reassuringly within 15% of those listed in the service sheet. But after turning up the volume things were clearly amiss. Even with the aerial connected stations were very weak. The set also howled uncontrollably. Closer inspection revealed that I'd missed an earthing connection from one of the decoupling capacitors. Once corrected things sounded much better. Signals were audible on each band, although they were fairly weak. This was not surprising however, since I'd replaced all the capacitors so none of the tuned circuits were now likely to be properly peaked.

I followed the service sheet's detailed IF alignment instructions. This got the IF stage more or less aligned, but then I used my wobulator to get the best IF response curve. It was at this point that I noticed one of the dial bulbs was intermittent. It was due to a poor connection on the wave-change switch and was therefore likely to mean that its other connections to the oscillator and aerial input were also going to be unreliable.Investigating this meant removing all the connections to numerous inductors and trimmers. This wasn't quite as bad as it sounds as the front section of the chassis is removable to give access to all the RF components.

The wave-change switch is made up of six small paxolin boards, each one with six contacts crimped onto it. Four twisted protruding metal tags from the switch mounting assembly hold down each of these little boards. The tags were straightened out and the switch assembly eased apart. All the contacts within were in need of a good clean with a fibre brush and solvent - something I should have done before reassembly! The connections were retensioned and the switch reassembled. I guess the retaining tags will bear only two or three twistings and untwisting before breaking off, so I hope I don't need to do it again.

Before I started the RF realignment the cleaned dial was carefully mounted and the repainted pointer set to its correct mark. The realignment started well. However, a quick test with the aerial connected showed the set was receiving signals on all three bands, but not as well as I'd have expected. It turned out that I had missed a link connecting C9 to the grid of V1. A wonder it was working at all! The RF alignment was straightforward - the only problem I encountered was the need for an extra 10 pF on the long wave aerial padder to allow it to peak properly.

While adjusting the pointer so that it was parallel to the glass at both ends of the scale, disaster struck! The pliers slipped and cracked the scale - damaged beyond repair of course. Very luckily indeed, Mike Barker (the BVWS Murphy expert) had a spare dial in perfect condition. This was very gratefully received.

A final addition was a three-core mains lead, to replace the perished two core one. The A90 is an AC only set with an HT transformer isolating the chassis from the mains. The A90 has an earth socket connected directly to the chassis, so to connect this to a water pipe would be the same as connecting a mains earth as they are normally bonded together anyway.

One should be very cautious however, when connecting an earth, be it to a water pipe or mains earth. The old and possibly weakened insulation between the mains winding and the transformer core could break down. But I have repaired or restored at least 20 vintage sets, and only once has this been a problem. I always take the precaution of testing the transformer insulation with a megger. This won't meet modern safety standards as the test is only about 400 volts, but ANY leakage revealed by this check indicates that the transformer might be unsafe.

Of course the connection to earth via the earth socket or mains lead can be left off, but this will reduce

the effectiveness of the aerial. (My article describing the deployment of aerials and earths will appear shortly in the BVWS Bulletin.)

Just when the set looked as if the rebuild was complete, I noticed what sounded like significant mains-borne interference coming from the loudspeaker. This appeared in unpredictable busts. The interwinding screen on the mains transformer seemed intact, and it soon looked as if the noise was coming from within the set itself. The characteristics of the noise led me to conclude that it was due to a shorting or intermittent turn in the mains transformer. Mike came to the rescue again (perhaps having more faith in Murphy components than me) thinking that such a drastic fault was unlikely. The big clue was that it only occurred on medium wave, and Mike conclusively proved to me that the fault was prior to V1. The main possibility was that HT was tracking across a paxolin tag strip to a component in the aerial tuning circuits. But all these are mounted on the wave-change switch which has no HT on it.

Another clue was the noise coincided with a slight dimming of the medium wave dial bulb. As the bulbs are fed from the separate LT winding, the only cause of the bulbs varying in brightness would be a poor contact in the switch (which had already been thoroughly cleaned) or contacts in or around the bulb. This is where I eventually located the fault.

Murphy used rivets to hold the various metal parts of the bulb holders together. The current to each bulb passes through four unsoldered metal-to-metal contacts. This was fine when the contacts were new, but after 60 years this arrangement is quite likely to provide poor contacts. The bulbs are switched by the same part of the wave-change switch as the aerial circuits, hence the pick-up of the interference in this part of the circuit prior to V1. I cured this fault by cleaning and soldering all these riveted joints.

The wooden case was obviously assembled from odd pieces, and to disguise this Murphy used a very dark lacquer. A local furniture restorer brought it back to its original condition. The base section even includes a burnt piece. Another sign perhaps of the shortages manufacturers endured during the hostilities.

This A90 is now working perfectly - possibly better than it was when it left the factory as the modern capacitors have no significant leakage and perform better at RF than the original waxed paper types. The external appearance is almost as if it just left the factory - an objective I strive to obtain in all my renovations. (I say 'almost' because the lettering on the knobs has all but rubbed off and unfortunately the embossing in not deep enough for it to take new colouring.)

Although I earlier described this model as 'unremarkable', its performance is anything but. The local oscillator hardly drifts at all, so even short wave signals stay put. The radio is also very sensitive, even when judged against my modern communications receiver.

But as the title suggests, is such ruthless reconstruction with modern parts vandalism? I dare say that in some peoples' eyes the answer is 'yes'. They will consider that what I did was only one step removed from stripping out the chassis and replacing it with a transistor circuit board. I know there are those who would have drilled out the old capacitors and replaced the new ones inside. Unfortunately I have yet to see this done convincingly. And how is that accomplished with resistors or mica capacitors? One might be able to source suitable vintage components, but they are likely to have deteriorated since manufacture. Using these, in my opinion, is only investing in future faults.

I could also have located the appropriate cotton covered hook-up wire, but it's hardly worth the effort if all the components are new! Nevertheless, having said that, I do have some sympathy with Fraser Donachie when he suggested in the Spring 99 Bulletin, among other things, that unrestored sets will demand higher prices as they become rarer. (Incidentally, I wouldn't describe my work to this A90 as 'restoration' - other than restoring it to full working order and original appearance.)

It's true that future historians will relish finding say a mid-twentieth century radio complete with original components and materials, even if it doesn't work. But surely to some extent we are responsible for keeping sets working while the appropriate high voltage/wattage components are still available? The manufacture of these large components is dwindling even faster than the standard wire-ended types as the trend towards surface mounted devices and digital electronics gathers pace. Try finding a good 16 uF 450 volt electrolytic capacitor or 5 watt carbon resistor in 15 years time! Hence my uncompromising attitude to using reliable modern components while they are still at hand.

As I have no intention of selling this radio, my pragmatic approach means the set I have now works as least as well as it did when it left the factory in 1940. It is electrically safe and electronically works to Murphy's original specification. With a little care there's no reason why it won't still be working in 2040, though AM broadcasting will doubtless be long gone by then!

Is such ruthless reconstruction with modern parts vandalism? I dare say that in some peoples' eyes the answer is 'yes'. They will consider that what I did was only one step removed from stripping out the chassis and replacing it with a transistor circuit board.

Editor's Piece

I have been following the developments at Bletchley Park with great interest and have been gasping and swooning as the saga of the stolen enigma machine continues to unfold. I wonder why it was sent to Jeremy Paxman, but then again why not Paxman. It has recently been revealed that Denis Yates, a long time member of the society has been arrested in connection with the "blackmail" attempt on the Bletchley Park Trust. I did hear from an independant source that an Enigma machine was floating about at the Newark antiques event, perhaps this is where it was bought.

Anyway, the last year has seen vintage wireless continue to gain in recognition with plenty of coverage from antique and collecting programmes on TV and from the print media in general. The Museum in Chester has closed so if you were just about to get around to going in January then you have left it too late. It is starting to look as though Gerry Wells is going to be the longest surviving private wireless museum in the world. I think that it has been a great achievement and proves that fashions and money interests come and go but there is no substitute for genuine enthusiasm to see it through in the long term.

The year has been a learning experience for me, as I have been getting to grips with the technonogy of the bulletin.

I hope that you have all enjoyed the Bulletin in my first year of working on it and have been interested by the many fascinating articles about a wide range of subjects that I have personally enjoyed reading as they have come in. In fact, if you have found anything of contention or of interest, why not write in about it; your input is both valid and appreciated. Who knows what influence your contribution to the letters page might have?

Lastly, don't forget to celebrate the Marconi centenary next year. It is not often that a message was sent across the Atlantic for the first time.

A Merry Christmas to you all!

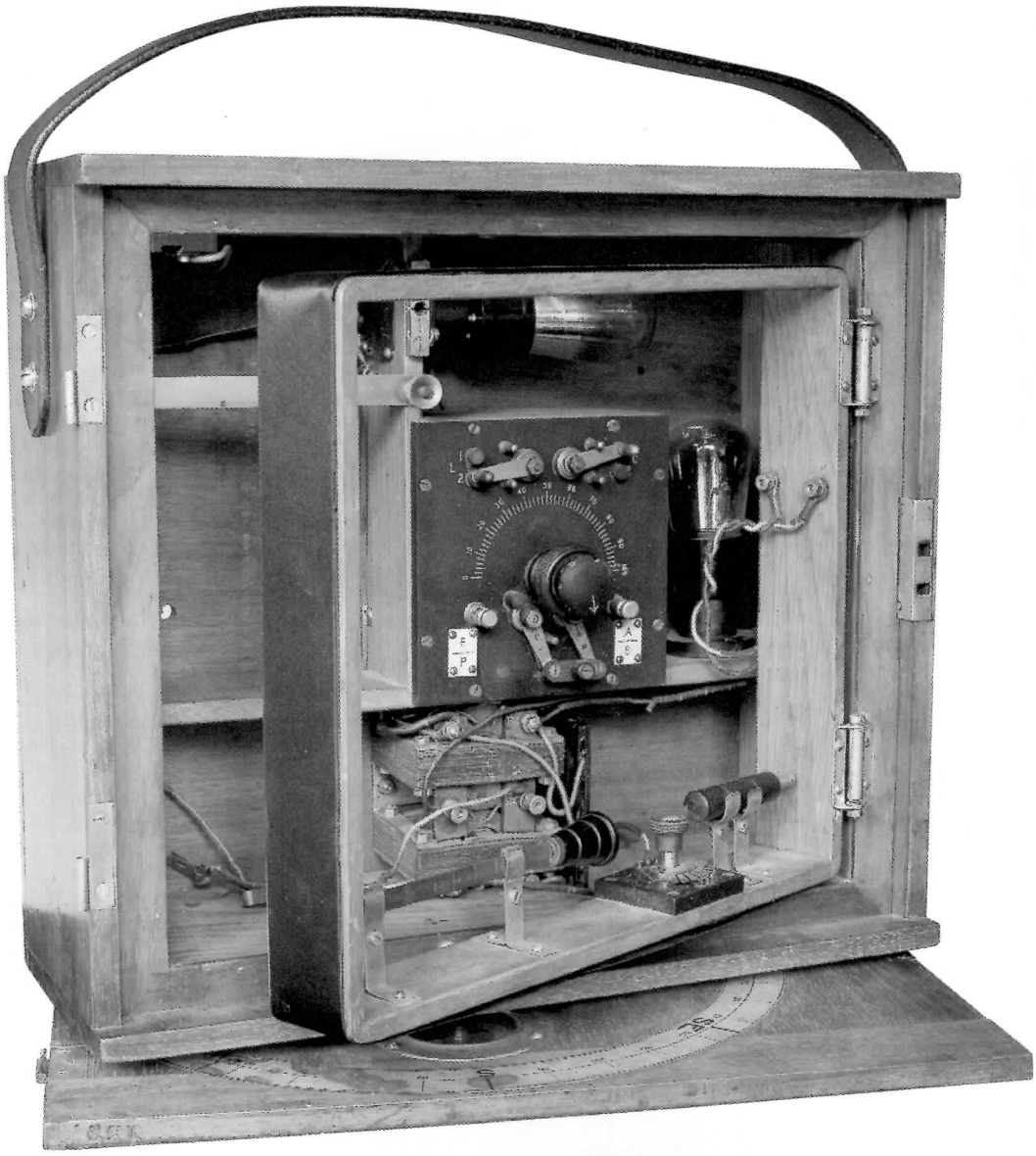
Robert Chesters

The portable radio in British life

by Geoffrey Dixon-Nuttall. Photography by Carl Glover.

I have recently been reading a book entitled 'the portable radio in American life'. This while interesting and nicely illustrated is on the whole rather like a book on 'Snakes in Ireland'. it tries to manufacture a subject that doesn't really exist. There seems to be a great gap in their experience, for example on page 112: 'The true portables made between 1930 and 1938 have left little trace today'. How different from the position in this country!

I don't really know why portables are such a British phenomenon, but maybe our national fondness for picnics (usually along main roads) has something to do with it. I have vivid memories of my father taking his Twintriple in the back of the car, where it occupied most of the back seat, so that he could hear the racing results.



Right: BTH 1920. Two valves. Headphones only

All right then, what is a portable? I think it must be battery operated, and with its own built-in aerial and loudspeaker. Some of the early ones had a trailing aerial and headphones, but these were not true portables. Probably the first quasi-portable of any note was the BTH two-valve of 1920. This had its own frame aerial and batteries, but headphones were essential. It must have had a limited sale anyway, as it only recieved weather reports and time signals; broadcasting had not yet arrived.

The first mass produced portables were usually of the five triode variety. these had two RF amplifiers (untuned), detector, an audio stage and output, the last three stages being transformer coupled. With only one tuned circuit (the frame) the selectivity was minimal, but so was the sensitivity, and the two or three stations available came in quite well. Marconiphone and Pye were the best known firms that made these things, but they were turned out in their thousands by all sorts of minor companies. The first Pye model was simplified further by having fixed tuning; 1500 metres or nothing. Actually the performance of some of these things, though not brilliant, was better than one might expect.

An enormous number of firms started in the business. Most of them only lasted a year or two, but the prices charged made it a profitable life while it lasted. A portable was by its nature a luxury item, and the market was pushed for all it could stand. Although portables were quite simple to make, it was not easy to make a good one. The chassis were quite often wooden, and the tooling required was elementary. My 'Pelican' five-valver was listed at £40 in 1926, and by the look of it they didn't make many of them.

The Golden Age

Tony Constable has a list of sets in 'Early Wireless' that includes 27 portables. By the next year (1927) only six of these feature in the 'Wireless World' Buyer's Guide. One or two of them sound like very fly-by-night outfits.

How about the 'Non-Aerial Co.' or the 'Venus Co.'? some of the sets were one or two-valvers, which probably means that they only worked headphones.

By the next year some old friends were established, like Hart Collins and Rees Mace. On the whole minor firms, eg. Beethoven, seem to have made a speciality of portables, except for Pye. EMI were not really interested–their sets were really transportables with polished cases, and of great weight; but Philips made one, and then gave up until 1937. GEC and Burndept also had a go, among the major names.

Most of the sets in the Wireless World 1927 Guide are five triode sets, but one or two have ideas of their own, including a three valve superhet. Rolls produced the first of the suitcase sets, with the speaker and frame aerial in the lid. There were a few neutralised triode RF stages too.

In 1930 a better class of portable started to appear, with a screen grid stage and two tuned circuits. Again the circuit was more or less standardised, and the performance varied from very good to poor. One of the problems was that the gain was too great on locals if there was anything like decent sensitivity. AVC would have been the answer, but the best sets either had a seperate volume control or a combined one which reduced sensitivity as well as applying reaction. Without this one was reduced to turning the set round for minimum, or detuning. A nasty form of volume control used a filament dimmer. This worked, but had a time delay.

Pye surprised everybody by going the whole hog and having two RF stages, in their 'Twintriple' series. This made for a very good set, but it must have been very expensive to make–anybody who has taken one to pieces will note the time taken to undo all those screws! McMichael also produced a set with two RF stages. This was given a rave review, but neither of these sets were repeated; the sets that succeeded them had only the usual single RF stage. Sets with two RF stages tend to be a bit temperamental, anyway, and this is worse

Top: Interior of Rees superhet

Above: Rees superhet. 1929? Eight valves. Made by Rees, Paris.

The coming of the moving coil speaker made a difference to the reproduction. As prices started to come down, the smaller firms which had made portables only went under.

Above: Pelican. 1926. Five valves TRF. Made by Pell, Cahill & Co. Built in horn speaker.

with a portable which has feedback to its built-in aerial, unless carefully screened.

All these sets used reaction, and to make the most of the performance some skill was required. The Twintriple had no official reaction, but most of the ones I have met actually go into instability on full volume.

A way of getting better performance was to move the frame aerial away from the set and the easiest way to do this was to put it in the lid of a suitcase, in the style pioneered by Rolls. Most firms tried their hand at the suitcase portable, the most well known set being McMichael, and probably the smallest, Roberts. a strange halfway house was produced by Lissen (and of course their clone Ever Ready), in which the speaker was on a horizontal baffle which tilted when the suitcase was opened.

The coming of the moving coil speaker made a difference to the reproduction. As prices started to come down, the smaller firms which had made portables only went under, for example Rolls-Caydon. (You could get quite a good portable for about £9)

On the Continent they had a preference for large and expensive sets with superhet circuits. This also applied to their portables. These had a good performance, but required great skill to get the best out of them. As they had a frame aerial the usual superhet problem of radiating local oscillators did not cause much trouble.

The 'Wireless World' review of portables in March 1938 still contained 19 makers, but three of them were fictitious, as HMV was a clone of Marconiphone and Vidor and Burndept were identical, as were Lissen and Ever Ready. Roberts made an appearance with their M4B, which had actually been in production, with minor changes, since 1932, but the excellent Philips superhet (225B) was ignored, for some reason. (It had appeared at the 1937 Radiolympia). Until then it had been thought that a RF stage was essential to remove the images, but when it proved possible to build sets with a high IF this could be dispensed with. Beethoven, Burndept, Spencer (Gordon, Elf), EMI and Pye listed superhets, the last two having RF stages. McCarthy made a reflex TRF! Prices averaged 9 guineas.

All these sets used 2 volt valves with an accumulator. This was the Achilles heel of the portable, as the acid inevitably damaged the cabinet. To avoid this they were filled with jelly, but there still seemed to be some free liquid. Charging these small accumulators was a problem, as most garages had only facilities for either 6 or 12 volt batteries and the usual method was to put them in series with a few car batteries and pass a current of about ten amps. As the recommended rate was about 2 amps this destroyed the small jelly

Left: Roberts M4B. 1934 Four Valves TRF. Push-pull output (Class B). Price 9 guineas.

Pocket radios had always held a fascination, but there were virtually no commercial attempts to build one. The only pocket set to attract any notice was the 'Pocketphone', which was sold as akit in 1937. This had three valves and only worked earphones. With the advent of 'Alldry' valves one or two personal sets appeared in the US, but the battery consumption was still too great to have anything but novelty value.

accumulators quite quickly.

In 1938 the first range of all-dry valves appeared. These were the octal types 1A7, 1N5 etc. in America and the side-contact DK1, DF1 etc. on the Continent. These although economical had a minimal performance and a superhet circuit was almost essential to get them to give acceptable results. One or two TRF sets were tried, but only as a stop gap; they were merely the usual accumulator-operated chassis with a change of valveholder. In fact the Vidor one (CN320) works very well.

One of the first well-known sets to use these valves was the Ever Ready which although of unprepossessing appearance was an excellent performer. The answer, as always, lay in using high quality IF transformers.

At first the output valves had only one filament, but the later ones had two to step up the output power available. These could either be connected in series or parallel, but the valve still gave only 200 milliwatts. A fairly good speaker was necessary to make the most of this.

The passing of the Personal set

Pocket radios had always held a fascination, but there were virtually no commercial attempts to build one. The only pocket set to attract any notice was the 'Pocketphone', which was sold as a kit in 1937. This had three valves and only worked earphones. With the advent of 'Alldry' valves one or two personal sets appeared in the US, but the battery consumption was still too great to have anything but novelty value. The 'Mighty Gem' atttracted interest in 1939. This in spite of its name was actually made by Majestic in the US. It was a three-valve superhet, using a diode-triode-pentode and a moving iron speaker. After the war the first British personal was the Romac with its shoulder strap aerial. Again this had a performance which was strictly of novelty value, as the battery life and the two-and-a-half-inch speaker made it not really fit for serious use. The advent of low consumption (25mA) valves made the personal more of a proposition, but the idea had by then lost its appeal. The ill-fated Pye M78 had a five inch speaker, which was a brave try, but once the transistor appeared the very small personal more or less fizzled out. A series of small 'suitcase' sets, mainly by Vidor, were the nearest thing to it.

Mains-Battery operation

It was not long before the cost of batteries produced a demand to run these sets off the mains. This was easier in the US, as they had fewer volts to get rid of. (it was necessary to cater for DC as well as AC, so a resistive

Above left: Pye Twintriple. 1930. Four valve TRF. (Two RF stages).

Above right: Roberts M4Q. 1938 TRF. Nine guineas. QPP output.

The first transistor sets were actually hybrids, as high frequency transistors did not at first exist. EMI for example produced a small receiver with three valves and two transistors.

dropper was needed.) Many ingenious circuits were used, but the general principle was to run the valve filaments in series, fed by a dropping resistor from the HT, which was derived from the mains via a rectifier. This was a valve in the US, but usually selenium in this country. One of the most useful of the novelty circuits used a mains output valve, with the filaments in series as its cathode resistor. This gave a useful sound output when run from the mains and stabilised the filament voltages.

Several problems arose from series filament operation. First, the anode current of the valves returned via the filaments and had to be bypassed, and as the signal also passed through them decoupling was required. Also, as all the filaments were at different potentials, the design of the AVC system became tricky. There was a further possible problem when operating from mains, as if one of the filaments blew the whole chain would rise to the peak voltage. This placed a strain on the low voltage electrolytic capacitors employed.

It was not until after the war that the British mains/battery set appeared in quantity; the pre-war Double Decca was on its own and judging by the number of modifications it needed, not fully developed.

Several different approaches were tried to improve the circuit. As there was virtually no DC mains left, a transformer could be used, which reduced the waste heat. Another approach was to run the filaments in parallel, which required quite expensive smoothing but was much safer, and proper AVC circuits could be used. This arrangement was used by Vidor, Bush and Roberts.

A desire to keep in touch with home led to a demand for long distance and hence short wave performance. The first short wave portable was the Zenith Trans Oceanic, which came out of America in 1942. The British postwar portables made by Vidor and Roberts, among others, had short waves as standard.

A new series of valves had appeared in 1940. This was the 'Button base' miniature 7-pin series, 1R5, 1T4, etc. These had the same performance and consumption as the octals. Initially they were used for 'personal' sets, but eventually replaced the octals completely.

Postwar British 'alldry' sets used the octal series and were all superhets. The button-base valves were not available in this country at first, but, as usual, when they were made by British manufacturers each maker gave them different type numbers. Mullard produced them as the DK91, DF91, etc. A few accumulator portables were produced after the war and one or two used these octal valves. (The 'K' series).

A significant advance was made by the introduction of the ferrite rod aerial, as winding frame aerials was a time-consuming and skilled operation. The ferrite rod also reduced the space required and improved the 'Q' of the circuit.

The final development of the battery valve was the 25mA series. (Mullard DK96, DF96, etc.). These were equivalents to the original miniature series, but only drew half the filament current. This made possible the use of smaller batteries. Mains-battery sets now only needed half the dropper wattage or smaller mains transformers.

The coming of VHF presented a problem to the designers. The battery valves were not really good at high frequencies, but eventually, pioneered by the German manufacturers, AM/FM sets were made. (eg. the Ever Ready Sky Emperor, nine valves 1958). Even using low-consumption valves the battery life was really too short. This type of set was only just getting going properly when transistors came along.

Transistors

The first transistor sets were actually hybrids, as high frequency transistors did not at first exist. EMI for example produced a small receiver with three valves and two transistors. (Model 1410-1958). This gave a very satisfactory performance and economy but was only a stop-gap. in fact it rather missed the boat, as other manufacturers soon brought out fully transistorised sets. The first British all-transistor set actually appeared in 1956 and was the Pam model 710. This was produced by Pye under the name of one of their subsidiaries, in case it was a disaster. In fact it worked very well, and sold as a novelty, in spite of its high price

(£30). Other manufacturers produced their own models in 1958, for example Ever Ready, Roberts and Vidor. The latter (the 'Gem") was the last set that they produced before retiring from manufacturing.

At first transistor sets were for battery only, as the first sets had a modest performance and the battery life was enormous. However, as the output power available steadily increased, so did the cost of batteries, and soon simple power units were included. These only had to supply six or nine volts and most of them at first were unregulated, but the high output Class 'B' stages made regulation necessary.

Again the first transistors were not suitable for VHF, but again led by the Germans, the AM/FM transistor set became possible. The first ones were large and expensive, but as experience was gained they got smaller and cheaper. The performance also got better and better. Probably the ultimate in simplicity is the modern AM/FM set with only one chip, including everything from the VHF tuner to the output stage.

The portable radio has now reached the stage when although it is more portable than ever it is not really used as such. Some of them are very nearly of communications quality, with bandspread and single sideband reception. People on picnics now use their excellent car radios and the portable set's longest journey is probably upstairs to an invalid's bedroom.

Non-portable transistor sets have been made, but never sold very well. The public conception of a transistor radio is something that must have a handle on top, even if it is never used. The usual position of a 'portable' is on top of the 'fridge' in the kitchen.

The portable radio has reached its ultimate state, but no longer has a job to do! The girl in the punt now has her own Walkman and peace has returned to the river.

Cabinet Design

Early portables were finished in the usual French polish of the day, but when they got small enough to be carried about in earnest this was not hard wearing enough, and a leather covering was used, or leathercloth for a cheaper job; although this is more hard wearing than leather! This meant that the shape had to have square corners to make the covering wrap properly, and simple box shapes were used. These developed into quite complex shapes, with lids over the controls, usually with a lock. This was presumably to keep the servants out; in most cases it was all part of the pretence that one always travelled with one's wireless.

The suitcase developed its own style, with polished control panels, as these were covered by the lid. the fretwork on the loudspeaker fret often used the maker's trademark. Turntables were sometimes fitted and these were often detachable.

The upright type of set either had the controls on the front or the top, or in some cases on the side. Really heavy portables had a handle on each side.

After the war the stylists had an interesting time devising new shapes. One of the most original was the Murphy which covered up the speaker with the dial when folded. As stronger plastics were developed these were used for the whole cabinet, particularly as the sets were getting smaller. Metal was used for parts of the cabinet, but only sparingly as it screened the aerial. in some cases the ferrite rod, which superseded the frame aerial, was incorporated in the handle, which improved its signal pickup.

Construction

Early sets were built along the same lines as cabinet models of the day, with components screwed to a baseboard. This soon gave way to the standard metal chassis, but the requirement for a frame aerial meant that some of them had to be unusual shapes. In some designs (Pye) the frame was actually hard against the chassis, which reduced its 'Q' noticeably. Aluminium was used extensively to save weight.

With the coming of the printed circuit board the weight of the set went down and the metal chassis had less and less to support. Transistor circuitry enabled even the output transformer to be disposed of, and the chassis eventually disapeared entirely. With the use of plastic loudspeaker frames almost the only metal parts were the decorative trims on the cabinet!

Top left: Philips 225B. 1937 Superhet. 9 guineas.

Top: Philips 'Colette' 1950's. Mains-battery, Long, Medium, Short & VHF. Nine valves.

Above: Roberts R66 Mains-battery superhet. 1956.

Non-portable transistor sets have been made, but never sold very well. The public conception of transistor radio is something that must have a handle on top, even if it is never used. The usual position of a 'portable' is on top of the 'fridge' in the kitchen.

Above left: HMV 1410 1958. Hybrid, three valves and two transistors. Superhet.

Above right: Roberts 808. Complete SW coverage plus VHF, alarm, 45 preset stations.

What was the job a portable was intended for? I suppose the classic situation is the girl in the punt, trailing her hand in the water and listening to a dance band.

Other factors in the reduction of weight were the adoption of mains-battery circuitry, which enabled the use of smaller batteries and the use of power supplies mounted in the mains plug. These were used not only to save weight, but to reduce hum, which could become a nuisance when the set was used by the bedside.

Some portables compared

What was the job a portable was intended for? I suppose the classic situation is the girl in the punt, trailing her hand in the water and listening to a dance band. Not much power output was needed and only the ability to receive locals. The weight should not be enough to overbalance the punt and the batteries should last long enough to last the afternoon. This modest specification would be met by most of the portables made in the late 1920's; but to impress the girl, the set should be better than her other boyfriend's! So the performance was gradually improved beyond what was necessary. What follows is a summary of how well some of the early sets worked.

An early portable (1920)

The BTH two-valver was one of the first portables, if not actually the first anywhere. It dates to the time when there was no broadcasting; so what was it actually used for? Mainly for time signals, which were transmitted from the Eiffel tower, among other places. it only operates headphones, as one might expect.

Operating it is an experience rather, I imagine, like driving an early car.

The controls comprise:

A plug for switching on the LT

A swinging reaction coil.

A shorting switch which progressively shorts out turns on the frame aerial.

Another one which does the same for the reaction coil

A switch for parellel or series tuning.

A tuning capacitor with a vernier section.

The instructions start off rather ominously by advising you to operate the set in a quiet room. This is important as I found that the performance is subdued, to say the least. It will be seen that if a station is found, using the built-in compass as a guide, a record must be kept of all the settings as it will never be located again!

My set has lost its original valves, so the performance is nothing like the designer intended. It is not necessarily better than when it was new, as the modern valves tend to make it more unstable. Still I have located Radio 4 at a quite reasonable level, but only with great difficulty. A point is that there is no provision for dimming the filaments; if the valves were bright emitters originally they would not have lasted very long, but as the set was only used for time signals they presumably would not have neede to. this set is not really one for the punt, I feel.

Pelican IV (1926)

This is a typical five-valve set of about 1926. it has a built-in horn speaker and is in very large mahogany case. The circuit is the usual two RF, detector, two LF. It is built on a wooden chassis. The frame aerial is wound for long waves, and an ingenious system of series/parellel switching uses all the turns on medium wave as well.

With great care several stations can be obtained on this one, but only by keeping the reaction on the threshold of oscillation. To calm it down, they have inserted a bit of resistance wire in the filament of the first valve. The slow motion drive is one of the nastiest I have met, they made it themselves, and the backlash is remarkable.

The built-in horn gives a variation on one note which is very tiring to listen to. Still in its day it probably impressed the girls, though the weight would have unbalanced the punt somewhat. At £40, it was definitely a rich man's toy.

Rees Superhet (French, probably 1929)

This is more like it. Although about the same size as the Pelican, the performance is really quite impressive. As it has a screen grid, it must date from about 1929. The weight is again quite a problem, and as it has eight valves the batteries must have had a very short life, as there is not room for a big accumulator.

As is usual with these early superhets, there are three tuning controls, but this is not as difficult as it might

appear, as they are all marked 0-100 and if you start with all the numbers the same you won't be far out.

The sensitivity is very good; about as good as a rather poor modern transistor. As it has a large moving iron speaker the quality is bearable as well, so if you are strong and wealthy this would be the ideal set for a picnic and its capacity to bring in foreign stations would certainly be impressive. I don't know what the original price was, but it must have been quite high. It has a very solid canvas carrying cover with leather straps, which alone is worth quite a bit of money. This one would really pull the girls.

Pye 25 (1929)

This is another TRF five-valver, but the improvement over the Pelican is remarkable. This set is really very usable, although the single tuned circuit means that Radio 4 can be heard over most of the long wave band. There is a turntable, so turning the set round will reduce this effect. For most purposes this is probably good enough, as the sensitivity of the superhet is unnecessary for listening to the locals.

In fact the performance of this set is probably as good as any for the purposes for which a portable would be used. From now on the competition was not to make a portable work, but to make it work better than other makes. The requirement to receive a local programme in the open at reasonable volume had been achieved; now it was required to impress one's friends!

Roberts M4Q (1938)

This model came out in 1938, and is a typical four-valver (screen grid, detector, LF and output). The feature of this set is the QPP output stage, which was reputed to give 0.9 watts. I have not measured this, but it certainly makes a loud noise!

We now have a set which requires no skill to operate, as the volume control regulates gain and reaction together. The sensitivity is good enough to bring in a number of foreigners and it sounds quite pleasant, as it has a moving coil loudspeaker. It is quite a reasonable size and weight too. Various up-market features, like the lock and key and the canvas cover, while adding nothing to the performance, are good status symbols. It cost nine guineas and was good value in its day.

Philips 225B

This was one of the first small (four valve) superhets, using the special valves developed for the circuit; in fact Philips, who never really went into portables, probably only brought out this set to demonstrate the possibilities of the valves.

This has all the performance of a mains set, except for the power output. It has the new high IF of 470 kHz, and this means that it can manage without a RF stage. Previous superhet portables virtually had to have one to reduce the images. Apart from the weight, which is still quite considerable, this is a very good receiver, much too good for the job it is called on to do.

Zenith Transoceanic (1942 onwards)

These sets were designed to impress, quite apart from anything else. I doubt whether they count as portables at all, as the weight with batteries would put anybody off carrying them anywhere. But they do work; those who have not used one are in for a surprise.

There are various models of this set, but the typical one has bandspread short waves, a sixteen position tone control and provision for detaching the frame aerial for operation in screened buildings or aeroplanes. It works on AC/DC mains or batteries and has the longest telescopic aerial in the business. The immediate postwar model had push-pull output, but this was dropped later. The poshest models were covered in brown leather.

I don't think they were ever very practical, but they were certainly very impressive. The motoring equivalent would be the four wheel drive car which never gets muddy, as I suspect the short wave bands were hardly ever used in practice. But if you have the strength to carry it abroad, this will keep you in touch.

References:
List in 'Early Wireless' - 1926
Wireless World:
Buyer's guide 1927 p.659
Buyer's guide 1928 p.517
Review guide May p.508
Buyer's guide 14/11/1929 p.585
Typical designs p.579
Buyer's Guide November 1929
Portables Buyer's Guide june 1930 p.604
Typical sets p.623
Buyer's Guide (supplement) 1932 (1933 sets)
Price Guide 1934 December
Portables 1938 March p.289

I don't think they were ever very practical, but they were certainly very impressive. The motoring equivalent would be the four wheel drive car which never gets muddy.

Below: Zenith Transoceanic

Letters

Dear Members
Majestic Transformers at Parkstone, Poole, have provided an excellent service over the last few years doing vintage transformer rewinds. Sadly, I have been advised they can no longer offer this service because the person has retired. Assuming other members have also suffered from "bubbling transformer syndrome", can anyone advise whether there is another company who can do this work? Alternatively, does any member have the capability to rewind transformers?

Regards,
Jerry Aldrich

Dear Editor
I am a radio collector from Austria. I would like to know about the company AURATONE Labs London. I read in an old newspapar from 1950 that this company produced a mini radio: AURATON with subminiature tubes and with earphone.

Do You know about it? There was a photo in this newspaper too.

Regards
Robert Losonci
Vienna

Dear Editor
I found your webpage on the Internet and am a member of the Dutch Historical Radio Association.

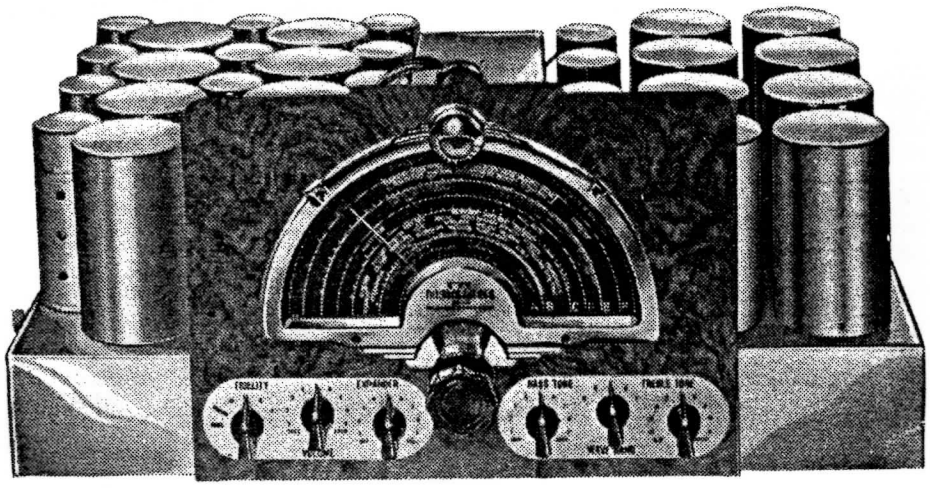
Recently I aquired an Osram Music Magnet No. 4 by G.E.C. Would you happen to have any information about it (drawings of circuits etc) or could you tell us where in England we can get such information?

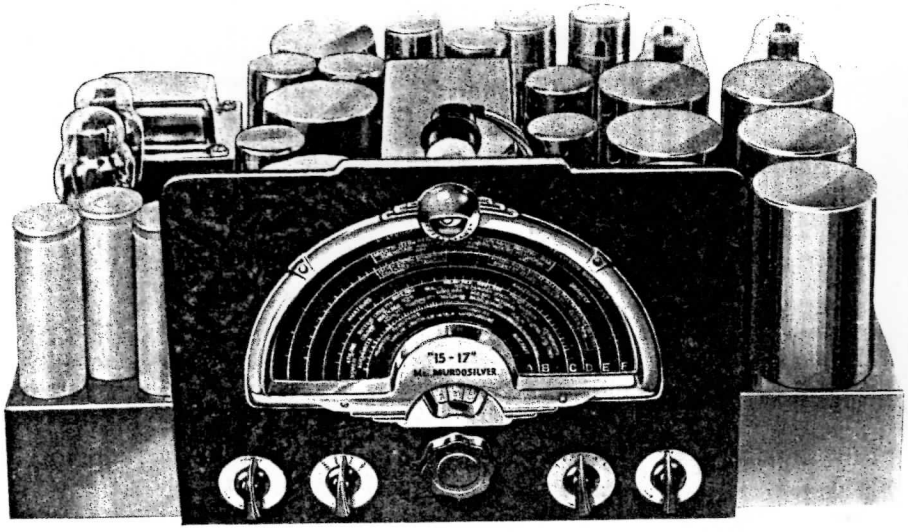
best regards,
Ben Koks

Dear Editor
I've been a member of the BVWS for over a decade and value the BVWS Bulletin highly.... I'm hoping the readers might be able to help me with a bit of research... I would put this request in the regular adverts but feel a photo would be of value. (I could provide a higher resolution picture if necessary...)

I prepare occasional lectures for presentation at various vintage radio conferences here in the US. I have agreed to make a presentation at the 2001 annual conference of the Antique Wireless Association at Rochester, New York. The subject will be a historical review of the use of thermoset resins such as Bakelite in the manufacture of radio chassis. A few years ago BVWS members made me aware of the work of John Sargrove and his design of the E.C.M.E. machine for the automatic manufacture of MW - two valve - mains receivers for 'Third World' markets. (See attached photo.) I have photos from an August 1948 issue of FORTUNE Magazine which show the machinery & radio subpanels. But none show the back views of the cabinet.
This remarkable machine was never used for anything other than experimental production runs of perhaps a few hundred sets... Do any of our members have knowledge of the

Pictured above: right John Sargrove and the first machine made radio set (pictured left).You may recognise the cabinet.


The Mcmurdo Silver 15-17 of 1937



The Masterpiece VI also of 1937

existence of one of these sets in a public or private collection? I am very interested in making whatever arrangements would be necessary to photograph one of these sets. Of particular interest would be how the sprayed zinc conductors and carbon ink resistances have survived atmospheric exposure.

Robert Lozier
600 E. Green St.
Monroe, NC 28112 USA
704-283-2638 - E-mail: kd4hsh@juno.com
http://www.homestead.com/kd4hsh/openingpage.html

Dear Editor
I am writing with reference to the Mcmurdo Silver Co. featured in the BVWS Journal last year.

The products of Mcmurdo Silver are well known to collectors in the USA but are, perhaps, not so well known in Britain. The chassis are characterised by their gleaming chromium plated appearance and prior to 1987 were available in the UK through an agency or direct from the laboratory in Chicago which was owned by (GPH) Glens Patents Holdings actually based in the UK in London. This is an area of future research for me as I wish to confine this letter to the activities of the UK Company.

Known as the British Mcmurdo Silver Co., it was set up around October 1937 with an HQ and showrooms at Elsey Court, Great Titchfield Street, London and a manufacturing factory at 8a Warners Yard London. In mid '38 the showroom was moved to 17 Hertford Street, Park Lane. In 1940 they moved to the Cromwell Road and post war to Ashtead, then to Portsmouth where Mcmurdo still exists. Today, they appear to know little of the radio history of their company.

However, back to 1937. The company director was a Mr. Patrick De Lazlo who had the licence to manufacture for USA Mcmurdo Silver, he was also a director of celestion who made the speakers over here which were direct copies of Jensen Models. The very latest models were manufactured in the UK such as the 15-17 and the masterpiece VI plus a range of accessories. These were a noise suppressor, an anti noise aerial the RT9, model 17 extension speaker, gram/mike preamplifier and a microphone. In addition, they had a special products division which would custom-build as required; a typical example would be a Radio, TV & gramophone with 18" speaker, two tweeters and a 30 record changer all in a large decorative cabinet. Now that would be nice to find.

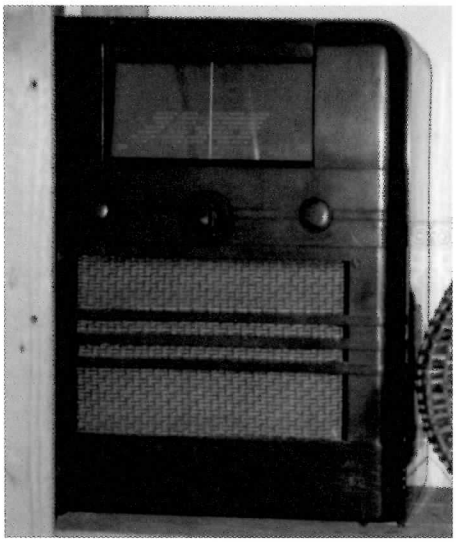
Of the aforementioned, only the 15-17 has turned up and surprisingly there have been a few over the years. The model was made between 1937 and 1940 and saw many changes during its production run.

I am collecting serial numbers to gauge how many sets have survived. So if you're a Mcmurdo Silver owner I would be grateful for your serial numbers. So far I have 16 the earliest is A1001 and the latest A2163. There are just two more items of interest which have not surfaced yet. Firstly, Mcmurdo Silver fostered the British Empire Export Market and Manufactured an export model.This was tropicalised and had polystyrene coil formers. So far not one of these has turned up. Post war high fidelity public address amplifiers for paging and music reinforcement were manufactured throughout the period 1947-50. These have also failed to surface. The story is not quite finished yet an I am in correspondence with a director (retired) of Mcmurdo, so something may come from this. Anyone out there can you add to this? Please telephone with your serial nos. at 01653 - 694804

Yours in anticipation
Andrew Denton

Dear Editor
My daughter has knocked over a bakelite radio which is missing its back panel, and I do not know what it is. The radio case is totally smashed and though I have all the pieces, the main glass is broken and the case breaks are rough.

Can you tell me how I would go about getting a valuation as my insurance covers it but I do not know if the value of repair will exceed thevalue of the radio at present. I only have 15 radios and this was my pride and joy!



The bakelite radio recently destroyed in the accident.

I have attached a picture of the radio before its unhappy demise yesterday! I can take photo's of it in its broken state as well if needed.

Yours hopefully
Andrew Booker (ajbooker@bigfoot.com)
Nottingham

I recognise this set as being a Cossor that was produced both in 1939 and then immediately post war around 1945/46 I think that it is a model 77 - perhaps another member could help (Ed.)

Dear Editor
A brief throwaway line in the article on Marconi-Osram valves gave further currency to a commonly repeated error, and in the interest of historical accuracy I feel obliged to present the actual facts.

The notion that the sale of an Osram factory to Siemens-Ediswan 'achieved for the enemy in peace what he was unable to gain in war' is a complete nonsense. The authors are confusing Siemens Brothers Ltd, a British company since its establishment in 1858, with the Siemens concern of Germany.

Collaboration between these two organisations ceased for good in 1914 and it was not until around 1970 that the German firm re-entered the UK market in any major way.

The authors may protest that the British Siemens company was started with help from its sister company in Germany but British Osram was to a far greater degree a spin-off from an entirely German company. And who started the oh-so-British GEC, to which Osram later belonged? None other than three Germans, Binswanger, Hirst and Byng!

I could go on to demonstrate that the majority of the pre-WW1 electrical and telephone industry in Britain was run by foreign interests but disproving 'received history' doesn't make you popular.

by way of an extra request, I wondered if anyone has any sales literature, contemporary press reviews or a user manual for this Ferguson radio. It's the model 773, a top-of-the-range console set of 1938 with motor tuning, television sound, etc. etc. I'm happy to pay all photocopying and postage costs of course.

Yours sincerely,
Andrew Emmerson.

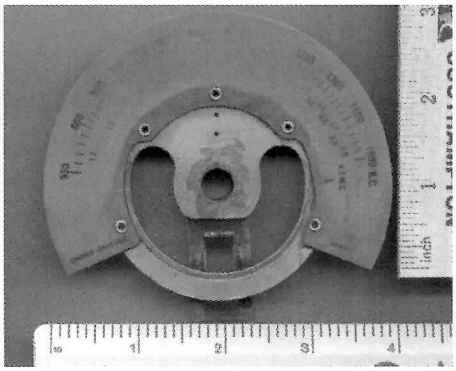
Dear Editor
I am writing to the bulletin readers with a plea for help.

I've recently acquired a very nice Silvertone cathedral from the US for my collection, needing restoration. 6-tube superhet chassis, three knobs in triangle shape, keyhole dial, broadcast and short wave. Good looker.

There is, as always, a problem:

At some time in the past the knob shaft and mechanism has been removed from the three-gang tuner. The dial scale (semi-circular, celluloid - you KNOW the sort....) and its supporting ring are still there, and I'm sure I can fabricate the shaft/drive mechanics. However, whoever has had the set since this happened has been tuning it by sticking their finger through the keyhole dial aperture and pushing the tuner round by pushing the scale - result, about a third of the lettering is worn away.....

Now I've overcome this in the past when I've had access to a good matching dial by copying in reverse onto acetate film (used for overhead projectors), then supergluing this to a piece of authentic plain material cut from an old dial. You can then peel away the acetate, leaving its surface behind, trapping the



The silvertone scale and its scale

lettering. Looks absolutely authentic and it lasts... the last one I did was about ten years ago and hasn't deteriorated at all.

The problem here is that I don't have access to a good dial - So, what I need is someone who can scan in the worn one I have, and reconstruct the lettering. It's only black numbering for kc/s - no station names etc. Any contacts, ideas, huh, pretty please?

Have already posted a couple of pleas on some net clubs, plus got a couple of US collectors looking for a whole tuner, chassis for me but....

If you can help please contact me by writing to the Editor or by contacting at the telephone

no. supplied at the front of the bulletin.

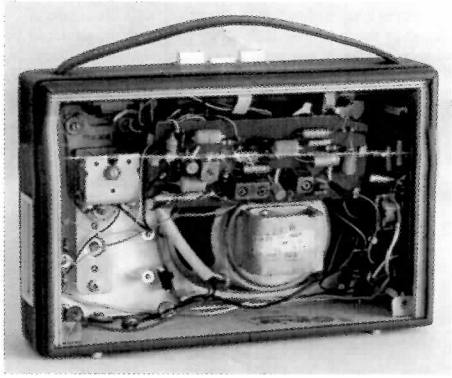
Yours sincerely
Steve Sidaway

Dear Editor
I have recently purchased an immaculate Celestion moving iron speaker made in December 1928. I don't know the model number, but it is identical to the one featured in Celestion's advertisements of the time - the reclining lady, a reproduction of which can be found on page 83 of 'The Set Makers' by Keith Geddes. The cabinet and interior are in immaculate original condition, but the coils are open circuit. Would any of your members know how to rewind these coils, which I believe should be 2000ohms? The wire is very thin and I wouldn't like to attempt to do it myself without advice. I want to preserve the originality of the speaker and get it working as originally intended. My next purchase will be a suitable wireless - if I can find one.

Many thanks and best wishes,
Jonathan Dobson.

Dear Editor
Can anyone help with service sheets for the following: Roberts Type RT1, Dynatron Nomad type TP11, Ever Ready "Sky Leader", HMV Transistor 7 model 1424, Fergusson "Fairway" FM/AM Model 3112

Could anyone suggest the make and model of the set in the following picture.
All information would be gratefully recieved and I can be contacted at: 88 Clarkes Way, Houghton Regis, Bedfordshire LU5 5HX



Yours sincerely
John Wickham

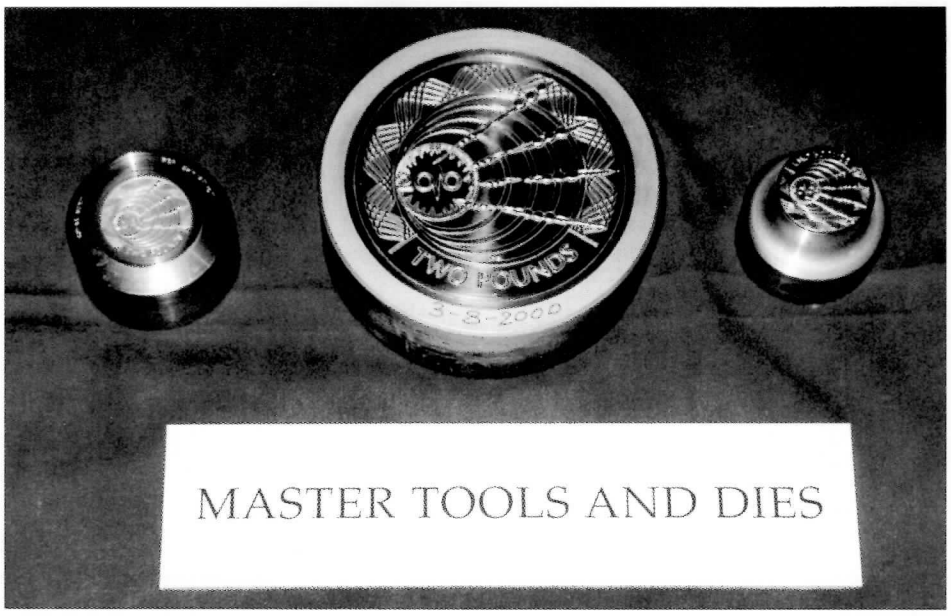
Dear Editor
The Winter of 1999 must seem a long time ago to you all now. It has been a great pleasure to make such a donation to the BVWS funds, the Society which gave Duncan such constant consumming interest over the years. The gift would not have been possible without the many hours of effort by Mike Barker and Guy Peskett sifting and sorting out all the remaining parts of Duncan's collection. Believe me many many hours / days were willingly spent working well into the evenings. You all contributed by purchasing, so it was 100% efforts. I am indeed proud of everyone's efforts, as Duncan would be.

Thank you,
Marjorie Neale

Marconi coin continued

The winning design was created and sculted by leading Welsh artist Robert Evans. Cardiff-born Robert, a senior member of the Engraving Department of the Royal Mint, has been responsible for numerous medals and small sculptures, including awards for BAFTA and the Rugby World Cup. His medals have been presented to the Queen, to the National Museum of Wales and to the University of Wales. A clearly delighted Robert Evans said: "Every artist dreams of having their work seen by a wider public; just imagine how many millions will see and handle this British coin, and my name's on it–brilliant".

Deputy Master of the Royal Mint, Mr Roger Holmes, added: "We have been delighted at the excellent response to this unprecedented public consultation. it was particularly pleasing to have the involvement and support of the *Radio Times* which we considered to be particularly apt for the Marconi coin because of its title, origins and subject matter. I would like to thank everyone who made their views known for their help in this important task



Minutes

Minutes of BVWS Committee meeting held on Thursday 28 Sept 2000 at 5 Templewood Ealing

Present: Mike Barker (chair), Terry Martini, Jeffrey Borinsky, Rob Chesters, Ian Higginbottom, Guy Peskett, Carl Glover (on the conference telephone), Steve Sidaway (part time on telephone).

1. Apologies for absence: Steve Sidaway,

2. The minutes of the meeting on 27 July 2000 were accepted as a true record.

Matters arising

4(ii) It was agreed that speakers giving talks at the November Harpenden meeting should have their subscription for the following year waived.

3. TM tabled an outline proposal for a BVWS organised event with a TV theme at Alexandra Palace in late summer 2001. The event could include visits to the BBC accomodation, Talks on TV related topics, opening by a TV celebrity, display of early and notable TVs. It was agreed to set up a working party chaired by TM to develop the proposal.

4. CG reported a computer crash which had delayed the design of the Autumn Bulletin. He expected to have recovered from this and sent the Bulletin to the printers by 3 Oct so that they would be with the mailing team by 8 Oct. It was agreed to procure two hot pluggable 40 Gbit external hard drives to improve the backup capability of his and **RC**'s machines. (less than £1k for both).

5. The future of the September Harpenden meeting was raised but no decision was taken. It will be raised at the next meeting.

6. JB reported that the Society's financial position was satisfactory, the balance standing at just over £20k. About half the VAT overpaid to the printers has been recovered and most of the rest should be received during the next month. Negotiations to set up credit card facilities for overseas members with three year subscriptions were continuing with the Society's bankers. The arrangements would be in place for this year's renewals.

7. MB reported that the membership stands at 1346. Steve Pendlebury has had an accident at work which has delayed his taking over the membership task. This is now scheduled for after the renewals have been sent out.

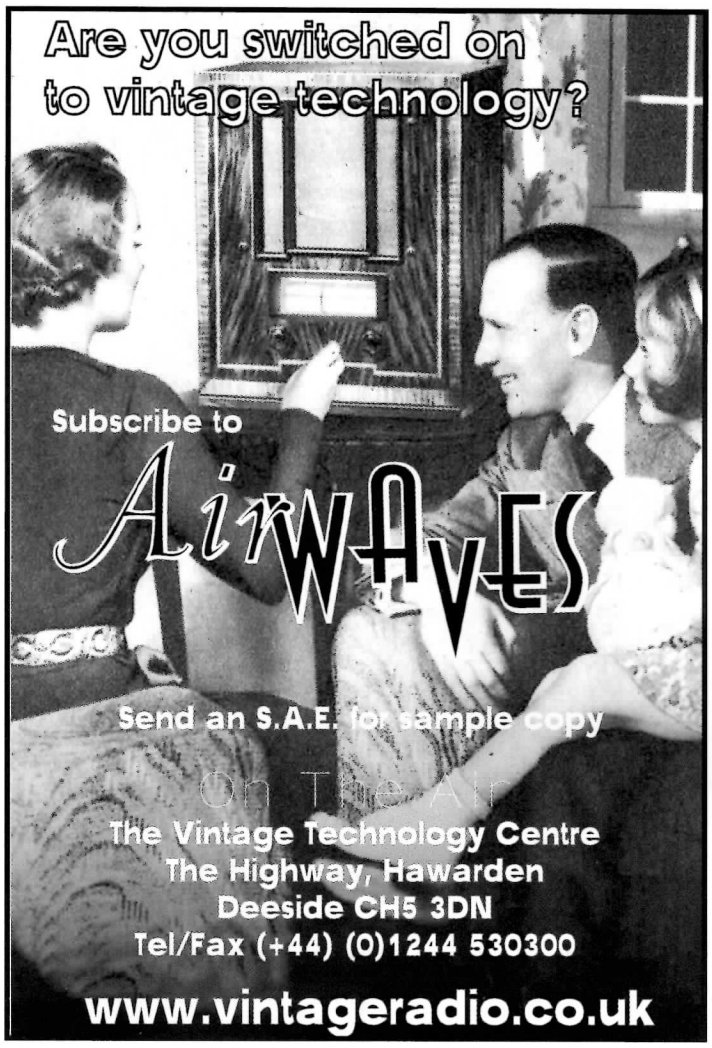
8. A draft amended Constitution was tabled by GP for consideration outside the meeting. Comments were requested by 6 Oct.

9. AOB

It was suggested that some members would like binders for their Bulletins, MB will investigate options and prices.

10. The next meeting will be at the Vintage wireless museum on Thursday 7 Dec.

The meeting closed at 11.28pm.



AUDIOJUMBLE 2001
Ninth year

Annual sale of vintage and modern Hi-Fi equipment at: the Angel Leisure Centre, Tonbridge, kent

Sunday 18th february 2001
10.30 - 4.30pm

Stalls £25 Admission £3
9.30am early entry £10
Bookings/enquiries 01892-540022

large cafeteria serving hot and cold meals all day. mainline railway station within walking distance

Valve Amps • Tuners • Records
Speakers • Components • Books
Cassette decks • Tape recorders

Back issues

Vol 10 Numbers 2, 3 & 4 Inc. The KB Masterpiece, Extinct Species "A Monster Defiant".

Vol 11 Numbers 1, 2, 3, 4 Inc. BTH VR3 (1924) receiver, Marconi's 1897 tests, Origin of the term 'Radio', Baird or Jenkins first with TV?

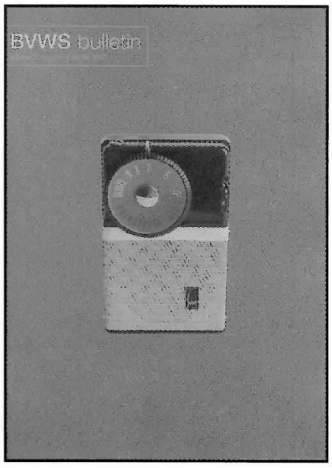
Vol 12 Numbers 1, 2, 3, 4 Inc. the Emor Globe, The Fultograph, Ekco Coloured Cabinets.

Vol 13 Numbers 1, 2, 3 Inc. Direct action tuning, The Philips 2514, Noctovision.

Vol 14 Numbers 1, 2, 3, 4 Inc. Cable broadcasting in the 1930's, The story of the Screen Grid.

Vol 15 Numbers 2, 3, 4 Inc. The wartime Civilian Receiver, Coherers in action, Vintage Vision.

Vol 16 Numbers 1, 2, 3, 4 Inc. The Stenode, The Philips 2511, Inside the Round Ekco's.



Vol 17 Numbers 1, 3, 4, 5, 6 Inc. Wattless Mains Droppers, The First Philips set, Receiver Techniques.

Vol 18 Numbers 3, 4, 5 Inc. The First Transistor radio, The AVO Valve tester, The way it was.

Vol 19 Numbers 1, 2, 3, 4, 5, 6 Inc. The Birth of the Transistor, Super Inductance and all that, reflex circuits, A Murphy Radio display, restoration.

Vol 20 Numbers 1, 2, 4, 5, 6 Inc. Radio Instruments Ltd., Japanese shirt pocket radios, Philco 'peoples set', notes on piano-keys, the story of Pilot Radio, the Ever Ready company from the inside, the Cambridge international, the AWA Radiolette, this Murphy tunes itself!

Vol 21 Numbers 1, 2, 3, 4 Inc. Marconi in postcards, the Defiant M900, GPO registration No.s, Personal portables, the transmission of time signals by wireless, the Ekco A23, historic equipment from the early marine era, the birth pains of radio, inside the BM20, plastics, Ferdinand Braun, pioneer of wireless telegraphy, that was the weekend that was, the first bakelite radios, BVWS - the first five years, the world of cathedrals, Pam 710.

Vol 22 Numbers 1, 2, 3, 4 inc. Another AD65 story, the Marconiphone P20B & P17B, listening in, communication *with* wires, the story of Sudbury radio supply, French collection, Zenith Trans-oceanics, Farnham show, Alba's baby, the first Murphy television receiver, AJS receivers, Fellows magneto Company, Ekco RS3, Black Propaganda.

Vol 23 Number 1 inc. Sonora Sonorette, Bush SUG3, RNAS Transmitter type 52b, North American 'Woodies'.

Supplements:
1 'The story of Burndept'.
2 'WW 1927 data sheet'
3 'Seeing by wireless' the story of Baird Television
4 reproduction Marconi catalogue

Earlier Bulletins and supplements are priced at £2:00 each + postage. Bulletins from volume 21 onwards are priced at £2.50 each. + postage.

Postage:
for individual bulletins add 50p, for 2-5 bulletins add £1, for 6 or more add an extra 20p each. 23 Rosendale Road, West Dulwich London SE21 8DS Telephone 020 8670 3667. Cheques to be made payable to 'The Vintage Wireless Museum'.

News and Meetings

The keeper of the list

I have taken over the role of custodian of the BVWS list of G.P.O. Registration Numbers. As many members will know the project of assembling this list was started in the early days of the BVWS and, more recently, has been enthusistically carried on by Pat Leggatt. I encourage members to help build the list, whenever they get the opportunity. The BVWS Handbook contains the current listings - one in numerical order and one ordered by name. Please let me have any additions, or suggestions for corrections, by mail or over the phone.

Martyn Bennett, 58 Church Road, Fleet, Hampshire GU13 8LB
telephone: 01252-613660
e-mail: martyB@globalnet.co.uk

Portishead meeting 2001
Alex Woolliams will be holding a swapmeet on Sunday the **14th January 2001**. For further details please contact Alex on 0117 9776576 or you could email him at: woolly@eggconnect.net. Details by post can be acquired by writing to him at: 11 Knowle Road, Bristol, BS4 2EZ.

Southborough/Tonbridge meetings 2000 and 2001
Two events from John Howes at the end of this year and the beginning of the next.**Sunday October 15th 2000** South East area BVWS swapmeet at: Victoria Hall, Southborough, Kent. Also the **'Audio Jumble 2001'** at the Angel centre, Tonbridge, Kent All enquiries John Howes 01892 540022

NVCF 2001
As ever, the most significant wireless fair will be two **NVCF** events at the **Birmingham NEC** next year with the first on the **29th of April 2001**. Despite a relatively poor turnout at the September event this year this has not put paid to an event that offers the chance to expand one's collection and if it isn't at the NEC then it's either not worth looking at or is just so blindingly rare that you will have to just wait until the next one and hope for some luck. Alternatively, you could try going to Harpenden - it might be the day when your boat comes in. IN fact at the moment the boat would probably be more use than a vintage wireless for a lot of people (all though living on high ground I have been lucky! *ed.*).

Harpenden meetings 2001
There will be an auction, a restoration contest and the AGM on Sunday **4th of March.** Sunday the **10th June** hosts a swapmeet. Autumn is heralded with a swapmeet on **2nd September**, and the year finishes with a swapmeet on the **25th of November**.

Gerald Wells' garden party 2001
For those with busy calendars Gerry Wells will be having a garden party on Saturday **9th June 2001**, 23 Rosendale Road, West Dulwich, London SE21 8DS. Telephone 0181 670 3667.

New Articles
If you have anything interesting to say concerning Wireless, Television, Broadcasting, Collecting etc. please send it to the Editor for future publication in the BVWS Bulletin. Your article can be just a few paragraphs long if you think it conveys its message to your fellow members.

Also if you have any photographic material that would look good in the Bulletin, don't hesitate to post it to the Editor. The chances are that I will definitely use it!

Please send to: Robert Chesters, 32 Eaton Road, Handbridge, Chester Cheshire CH4 7EN. Tel: 01244 675826
email: bakelite.ekcos@virgin.net

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interested in vintage wireless or military radio?
Why not subscribe to *The Vintage Wireless Trader*. Published approximately six week intervals. Contains hundreds of out of print, old and collectable wireless and TV books and magazines, vintage and valve communications receivers, valves and components for. the short wave enthusiast and amateur as well as **subscribers wants and sales**. Send six first class stamps for one copy or £8 for the next eight issues.

Callers welcome to our vintage wireless shop, address above, open Tuesday, Thursday, Friday and Saturday, 10am - 6pm, other times by appointment. Pre-war and components in stock, also government surplus and valved communications receivers

Swapmeet at
Portishead
14th January 2001

Clarence House, High Street, Portishead
doors open at 10.am
Hot meals served throughout the day • bring and buy stall auction at 1pm

£2 entry - no booking required
£10 for stall plus helper
stallholders please book by telephone or letter

Ring Alex Woolliams for bookings on: 0117 977 6576
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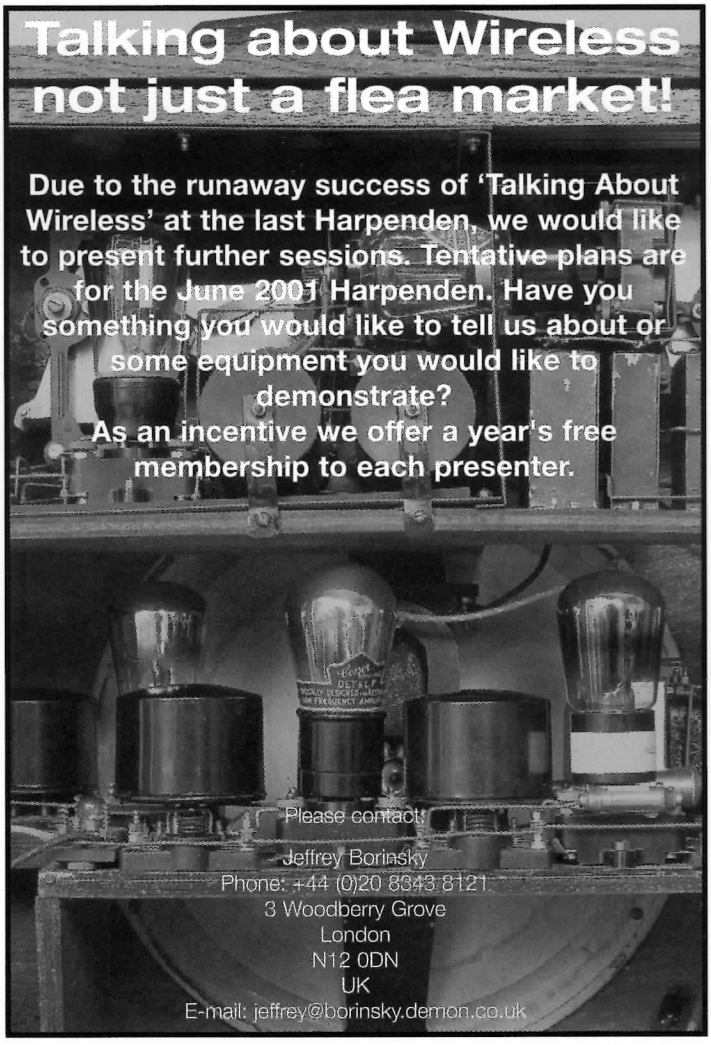

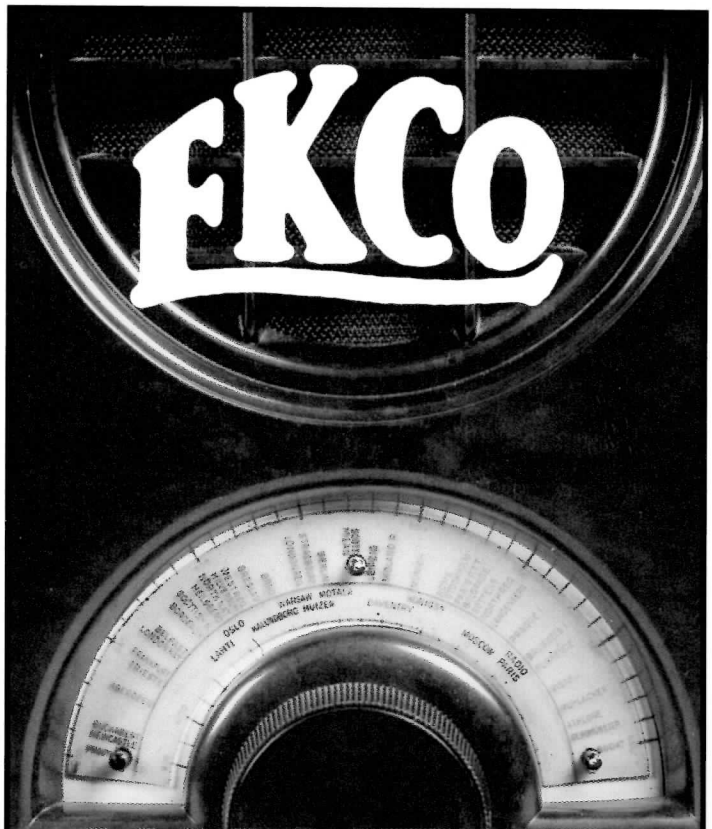

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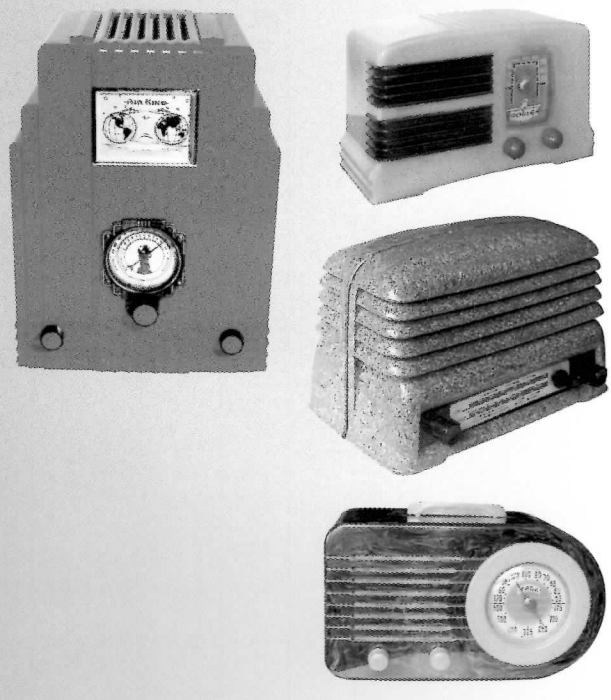

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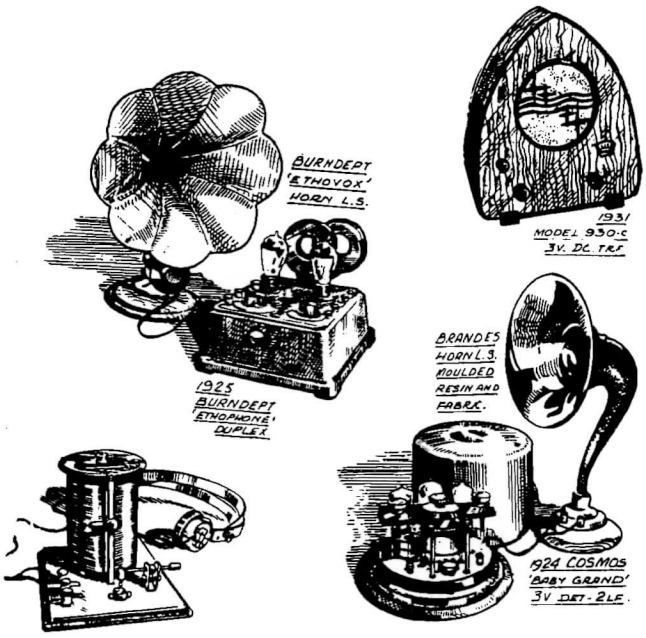

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