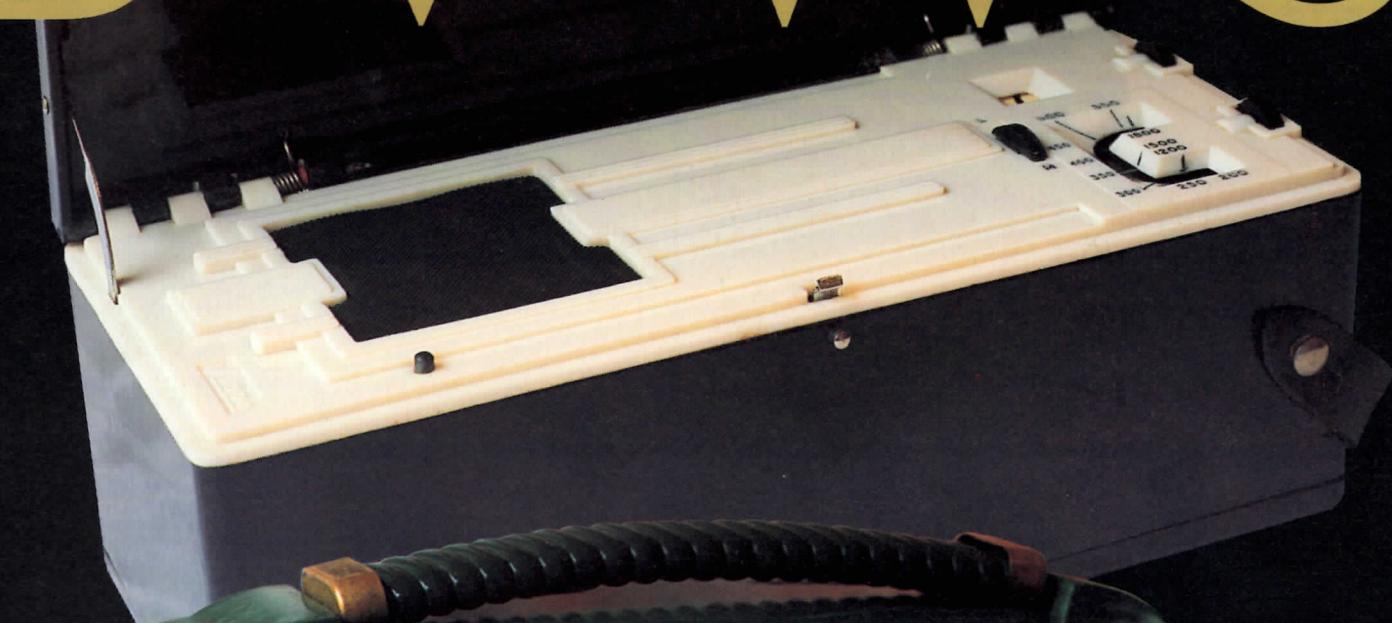


BULLETIN



BULLETIN OF THE BRITISH VINTAGE WIRELESS SOCIETY

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From the (Marconi) chair

I felt that in honour of Marconi I should replace for this year my trusty wireless chair made by the *Alphian Wireless Company* for one of *Marconiphone's* own creations which I managed to acquire recently specially for this purpose. The unique 'Marconi chair', based on the *Marconiphone* trademark is not as pretty nor as technically interesting as the Alphian chair I have been sitting in - at least metaphorically - on this page, but it is very evocative of the thirties. These were the years full of optimism about what the new technology might achieve, aspirations that were shattered by the Second World War. The latest electronic technology employed for mass entertainment in the thirties was turned into instruments of mass destruction, culminating in the atom bomb. Talk about turning ploughshares into swords. I would love to know more about my purchase. Who designed the *Marconiphone* logo, and who turned it into my chair? Presumably it was intended for *Marconiphone* agents. Perhaps one of the Marconi historians has the answers? Gordon Bussey where are you? I have managed to persuade my wife that the chair is an *objet d'art*, so it is for the moment residing in the sitting room, looking distinctly eccentric and being eyed suspiciously by the cat. It is remarkably comfortable to sit in - that is if one does not mind sitting on Marconi.



Readers may well have missed the change of the Chairman's chair. After all, there are much more interesting items to turn to in the Bulletin. What they cannot fail to have noticed is the changes that have taken place in the Bulletin since it has been in the hands of Carl Glover, our intrepid Editor. Some of you expressed worries about the changes and these have been taken account of in the subsequent evolution into the 'new look' Bulletin. I hope that you have enjoyed the Christmas issue which was intended to give you a foretaste of our dramatically enlarged format to start in 1996. This has taken a great deal of dedicated hard work and our Editor is to be congratulated. The 'new look' Bulletin really has evolved a great deal since the beginning of last year. There are still minor problems that need to be ironed out. For instance, some of the pictures have turned out far too dark in the last issue, which is a pity after all that design work. Also, several readers have commented that they would like to see the titles of the articles displayed more prominently, and this should be taken care of. Certainly, all of us on the Committee are always happy to receive constructive criticism.

One issue where dialogue with you is important is over how best to celebrate the Marconi Centenary, sixty years of high definition television, and twenty years of the BVWS. Plans are still in flux, but there has been a good response to Ken Tythacott's Questionnaire, the results of which were circulated with the previous Newsletter. Your reactions to our various proposals indeed were 'food for thought'. As a consequence the Guildhall dinner has been scrapped, and a two-day event of exhibitions, talks, demonstrations and a swapmeet is being arranged at our traditional Harpenden venue on 21 and 22 September. It is hoped that members can be persuaded to show off their choicest items. I may even bring my Marconi chair! Kidding apart, I am still keen to find ways to involve our partners, especially those of our visitors from abroad.

The Committee has put in place several working parties to organise the various parts of our anniversary celebrations in September. A great deal still needs to be done and time is getting very short. Our hard-working Events Organiser deserves all the help we can give him. Please let us have your ideas of what you would like to see happen as soon as possible. Further details will be given in the next Newsletter.

Celebrations on the day are all very well, but the Committee would like you to end up with more than sweet memories. In the past surplus money has been ploughed back into interesting publications, such as the ever popular facsimile of the Brown Brothers' trade catalogue of 1925/6. You will find the latest addition to your library posted with this Bulletin - Ray Herbert's *Seeing By Wireless*, generously sponsored by Quantel Ltd of Newbury whose digital image manipulation systems are in use world-wide. Ray's monograph commemorates the work of Logie Baird and the story of early British television during the pioneering years 1923 - 1933. This is the year of four important television anniversaries: (1) the 70th of the first demonstration of real television to members of the Royal Institution and the press on 26 January 1926; (2) also the 70th of the first licence to be issued specifically for the transmission of television pictures to the Baird Company on 5 August 1926; (3) the 60th of the BBC high definition service which commenced from Alexandra Palace in November 1936; and (4) the 50th of Baird's death at Bexhill on 14 June 1946

We are also planning a memento to mark the Marconi celebrations. All will be revealed in due course. In the meantime, I would like you to let me know how you want to celebrate our 20th anniversary. Write now! I will offer a 'bottle of bubbly' to the best suggestion.

Willem Hackmann



Picture on left: The pre Christmas envelope stuffing session at Willem's house. Starting from left to right: David Read demonstrating a previously unheard of use for an ironing board, Ken Tythacott also on leaflet insertion duty (you may recall that there were quite a few in the last Bulletin). And finally Willem Hackmann on sealing and stamp-licking. Also present were Mike (Murphy) Barker and Gerry Wells (also on leaflets) and Carl Glover inserting Bulletins.

Copious amounts of tea, cakes and biscuits were consumed, and even a small amount of beer (in order to test the findings in the December Bulletin on 'the effect of beer on stability', results, however were inconclusive as we only had two small bottles between us). An interesting but long evening resulting in some of the Committee getting home at 6.30 am.

The photograph on the right shows Enrico Tedeschi meeting Sir Clive Sinclair at Enrico's 'Sinclair archaeology' exhibition at Hove library, Sussex. Enrico has also self-published a book titled 'Sinclair archaeology', which is reviewed further on in this issue of the Bulletin. The children featured in the photograph are Sir Clive's grandchildren. The exhibition was heavily featured in the media and was seen on the 6 O'Clock News on BBC1, Meridian TV and heard on Southern Counties FM, South Coast Radio, Southern FM and featured twice in the Argus - a Sussex newspaper.

Change of Address

Please note that the Editor now has a new mailing address which is:
Carl Glover Bulletin Editor c/o Runciter Corporation, 33 Rangers Square,
London SE10 8HR

BVWS Photo Archive

Jonathan Hill has reported that so far he has not received any photographs in order to help with an illustrated article on the history of the BVWS. If you have any pictures to spare, please send them to:
Jonathan Hill, BVWS photo archive, 2-4 Brook Street, Bampton, Devon.



Confessions of a Cartologist Part II

Marconi in Postcards By Willem Hackmann



Fig. 1 Reproduction of pen-and-ink drawing of Marconi by unknown artist, on fine paper with embossed border. Maker not indicated but probably Italian. Postmark, Cannes 26 July 1903.



Fig. 2 Typical Edwardian pose which at the time seemed very informal when compared with the studio portraits of the Victorian era. Platino-bromide postcard by the Rotary Photograph Co., numbered 65 on the image, unfranked, but from c. 1903.

In Part I of this series I wrote that during the 'Golden Age' of postcards, stretching from about 1900 until the end of the First World War, every new craze was faithfully recorded. One of these was wireless telegraphy. There has always been a tendency to see technical innovation in terms of the lone inventor struggling against incredible odds to see his invention realised. Just think of James Watt and the steam engine, Logie Baird and television, Alexander Fleming and penicillin, and Cockerell and the hovercraft. Incidentally, how many would now remember that the inventor of the hovercraft began his career in 1935 as a radio engineer with Marconi, designing VHF transmitters, direction finders and radar? Real life, as we all know, is much too complex to be seen in terms of the heroic endeavours of a few. Marconi was cast in this monumental mould soon after his epoch-making experiments in 1895 and 1896. For the remainder of his life he was rarely out of the public eye. He knew, of course, that publicity was good for business. These considerations take nothing away from his achievements, technical and otherwise. He grasped the opportunities he found with both hands.

Wireless heralded in the new century. Guglielmo Marconi was the epitome of twentieth-century man, celebrated by every conceivable medium, including the humble postcard. Probably the best known photographic reproduction is the carefully composed image of him taken shortly after he arrived in London in February 1896 sitting behind a Righi-type transmitter and the 'mysterious black box' which contained batteries, coherer, tapper and relay. Today we would call this a 'publicity shot'. I have selected two postcards from my collection, both portrait studies of Marconi in heroic mould, the first (Fig. 1) a reproduction of a very fine pen-and-ink drawing posted

in Cannes on 26 June 1903. The second reproduction (Fig. 2) is by the Rotary Photographic Company of London. This is of about the same date as on one of my three examples of this postcard the sender has written on the front in ink '22.12.03 Signore Marconi'. This must have been a popular postcard for, judging by the changes of the style of the printing on the back of the card, it was kept in print over a number of years. The Rotary Photographic Company was possibly the most prolific publisher of 'real photograph' postcards in the early years, specialising in well known personalities. The firm took its name from the rotary presses used to manufacture the postcards at its works at West Drayton, about 2.5 miles south of Uxbridge in Middlesex. They were the first to introduce platino-bromide postcards in England around June 1901, when they moved to 23 Moorfields, and shortly afterwards to 14 New Union Street. We shall meet up with this firm again when we look at wireless 'greetings' cards. Both Marconi and Villa Griffone, the family home where he conducted his earliest experiments, are the subject of a rather uninspiring Italian postcard posted to England on 26 October 1902. An intriguing aspect of these images of Marconi when he was around 29-years old is that the Continental postcards like to show him with a delicate moustache, while the English prefer him clean-shaven. One of the most popular early wireless postcard images is Marconi's first high-power spark transmitting station built

Fig. 6 'Marconi Towers, Mullion', fine coloured card in the 'Argall's Series'. No other identifications, and unfranked. This series is not listed in Anthony Byatt, 'Picture Postcards and their Publishers' (Malvern, 1978), the printing of 'Souvenir Post Card' on the back is identical to that of a postcard of the Lloyd's signal station issued by Valentine.

Fig. 3 (below) 'Marconi Wireless Telegraph Station, Poldhu, Mullion with 'K' trademark on back. Note the motor car in front of the building. I have another darker anonymous version of the same postcard, neither carry a postmark.

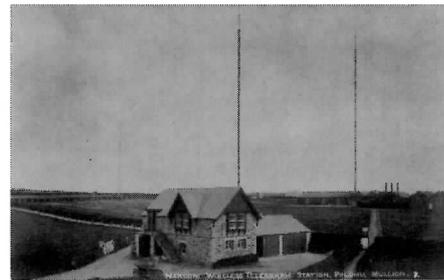


Fig. 4 'Poldhu Wireless Telegraph Station', 'Peacock autochrom', no. 1910, by the Pictorial Stationary Co. of London. Printed in their Saxony works in Leipzig. Unfranked.

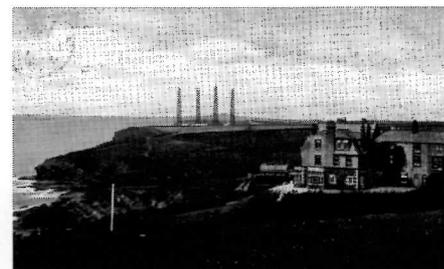
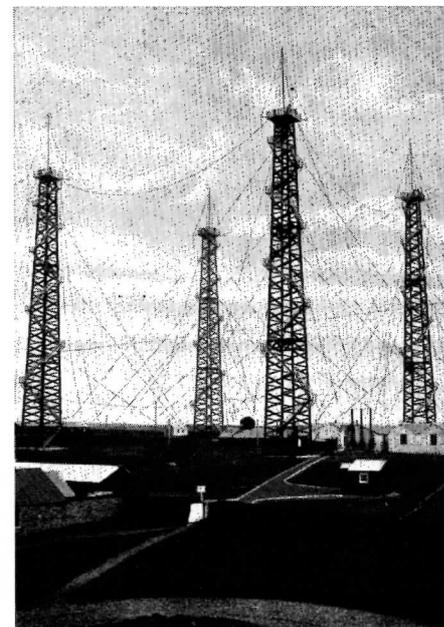


Fig. 5 'Polurrian Hotel and Wireless Telegraph Station', in the same series, no. P.5629, franked 27 July 1908. The sender is having a 'jolly time on this beach'.



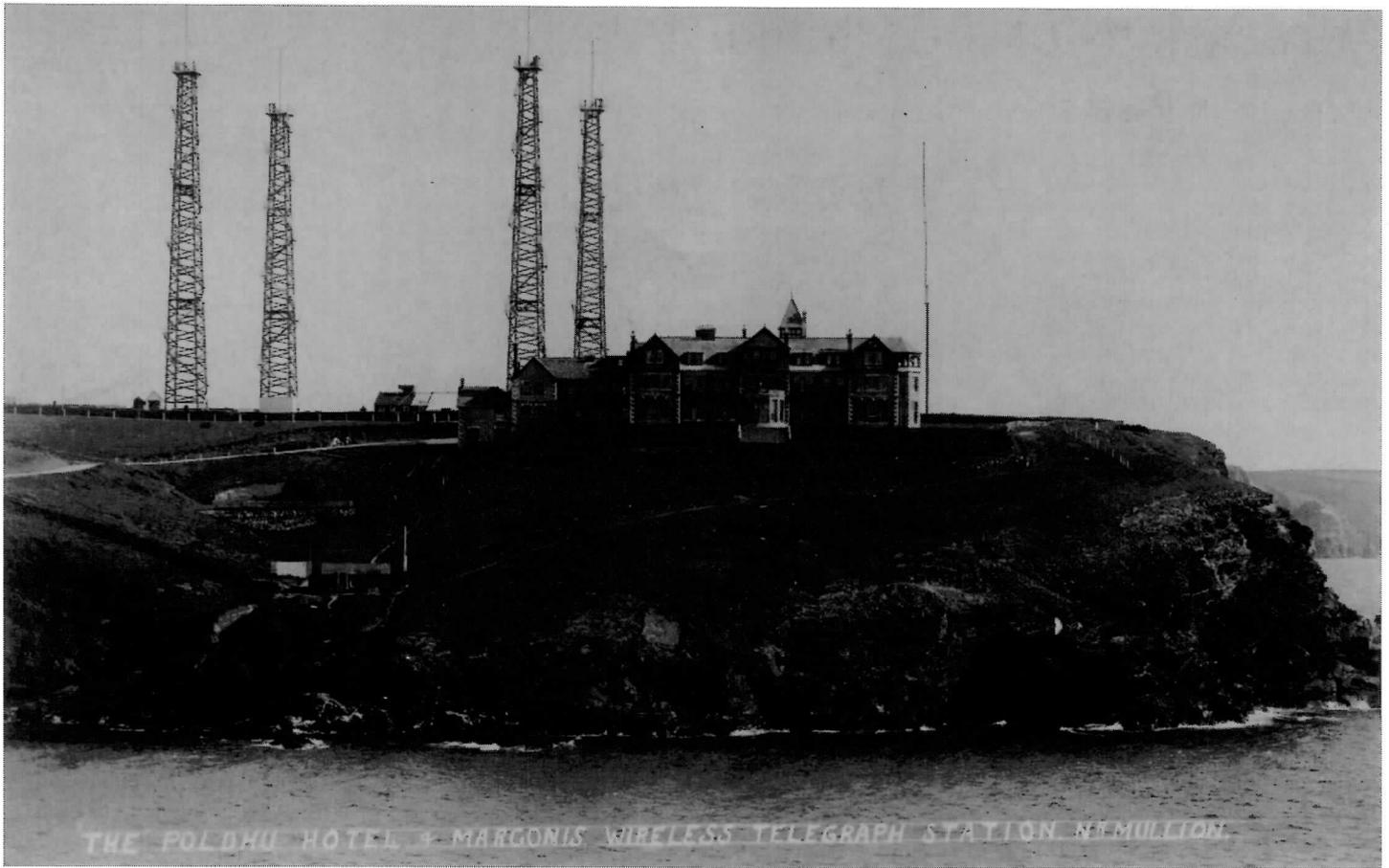


Fig. 7 'The Poldhu Hotel & Marconi Wireless Telegraph Station, Nr. Mullion', with blank reverse, but according to a second specimen by E.A. Bragg, 1 Claremont Terrace, Falmouth. This one was posted from Falmouth on 9 September 1912. Note the single wireless mast on the r/h side of the hotel, which also features on Fig. 4.

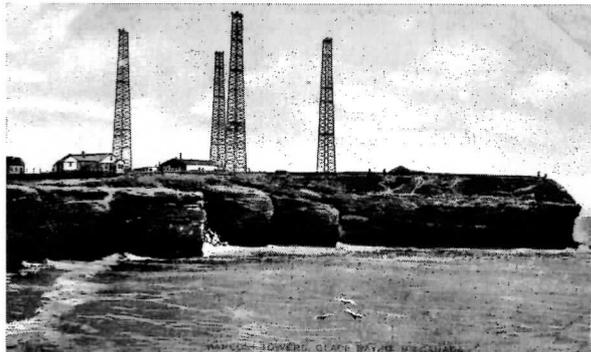


Fig. 8 'Marconi Towers, Glace Bay, C.B. Canada', by Nerlich & Co. of Toronto. Unfranked. This station was started in 1902, but the more substantial station which is the subject of this postcard was built in 1904.

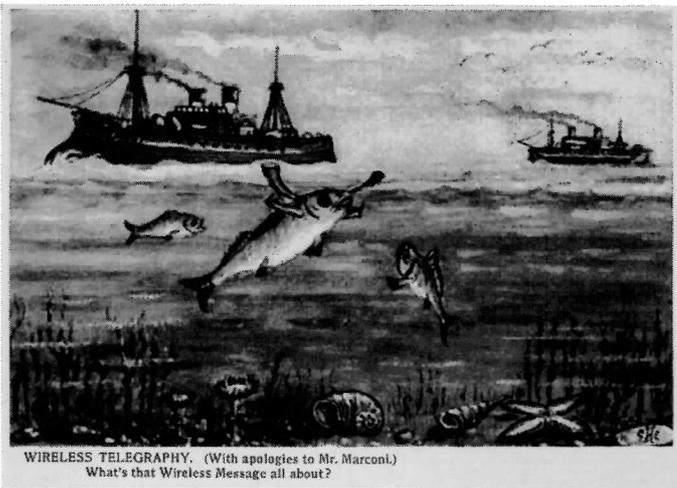


Fig. 9 'Marconi Wireless Station, Cefndu Summit' Caernarvon, 1912. Real photograph postcard by the local photographer W. Williams who had his shop in Castle Square in Caernarvon. Unfranked. For the present-day appearance of this site, see Peter R. Jensen, 'In Marconi's Footsteps - Early Radio' (Kenthurst, NSW: Kangaroo Press, 1994, pp. 64-69).



Fig. 10 'Wireless Telegraphy. (With apologies to Mr. Marconi.); 'Newfoundland' receives a 'Wireless Message' from the 'Lizard', in the Raphael Tuck & Sons 'Wireless Series', no. 637. This firm produced cards in enormous numbers. Judging by the series number, this design dates from 1901/2. Unfranked.

in 1900/1901 on the headland above Poldhu Cove, near the village of Mullion about twelve miles south-west of Falmouth. You may remember that Pat Leggatt described his pilgrimage to this site in the previous Bulletin. Judging by the twenty-one postcards in my collection, this station was photographed from every conceivable angle. Undoubtedly many of the postcards were purchased by the guests of the nearby Poldhu Hotel which features on most of the cards, and which is now an old people's home. Probably my earliest card (Fig. 3) is a real photograph of the experimental station with pole supports for the fan-shaped aerial before the four characteristic latticed masts were constructed. A number of postcard manufacturers jumped on the bandwagon and tried to entice the tourist to buy their version of the Poldhu station. The Pictorial Stationary Co. of London produced at least three views in their 'Peacock' series, two of which are reproduced here (Figs 4 and 5). The third is one of their coloured 'platinophoto' postcards (no. 5929, franked 30 March 1910). This company was established in 1897 and wound up in 1914, although it had been struggling since 1908. Their 'Peacock' trademark was applied for in 1901. Other general views of the four famous masts and the hotel were offered by O.F. Stengel & Co. also of London (no. E34629, one coloured, the other sepia), by the Great Western Railway in their 'The Cornish Riviera' series (very collectible because of the railway association), by Valentine & Sons of Dundee, and by the local firm of Eddy & Sons of Helston (the specimen in my collection, posted from Helston on 28 July 1908, was reproduced in the previous Bulletin). The famous postcard firm Raphael Tuck & Sons Ltd also reproduced this view in their popular 'Oilette' series introduced in 1903. These cards were described as 'veritable miniature oil paintings',



WIRELESS TELEGRAPHY. (With apologies to Mr. Marconi.)
What's that Wireless Message all about?

Fig. 11 'Wireless Telegraphy. (With apologies to Mr. Marconi.) What's that Wireless Message all about?'. Same series as the previous card. The fish are trying to 'listen in'. Unfranked. In five years of searching I have only seen these two cards in this series.



Fig. 12 'Swift as a wireless message my wishes rush through space to greet you', by Wildt & Kray of London, no. 1145. The trade mark on the back dates this unfranked card to be before 1914. Another specimen in my collection was posted from Dorking on 5 December 1905.



Fig. 13 'Marconi's Wireless Telegraph Co. Works, Chelmsford, Essex', by the local firm of Cornhill. Only one mast is shown. Unfranked.



Fig. 15 'Marconi's Wireless Telegraph Works, Chelmsford', by Fred Spalding & Son, Miniature Painters, Portrait and Landscape Photographers, 4 High Street, Chelmsford, no. 2008. Posted from Chelmsford on 15 October 1917.



Fig. 16 'Marconi Wireless, Chelmsford', by Jackson & Son of Grimsby, with their trademark 'Ja Em Ja' within a circle. Unfranked but World War I

and set new standards in colour printing. Two distant views of the station were sold by Frith & Co of Reigate, one entitled 'Pollurain', the other 'Gunwalloe Cove & Church'. Neither card is particularly outstanding, but The 'Frith's Series' of view postcards is one of the most extensive covering the British Isles. The founder, Francis Frith, goes right back to the pioneering days of photography, starting his business in 1859. The most prolific purveyor of this image is the 'Argall's Series' of which there are seven different imprints in my collection; remarkably none was posted. Two are general views, but the others are close-up of the 'Marconi Towers'. The nicest is the one on which is printed on the back 'Souvenir Post Card' (Fig. 6), which may have been issued on the occasion of the Royal visit to the station on 18 July 1903, although I have no evidence for this. Perhaps the most remarkable general view of the site in my collection is a real photograph (Fig. 7), of which I have two examples. The one reproduced is a bit of a puzzle as the back of the card is devoid of

any printing, but then I came across the second specimen which is now very faded but, which according to the back, was published by E.A. Bragg of Falmouth in their 'The Cornish Riviera Series'. It was posted from Falmouth on 9 September 1912. Poldhu was closed and the buildings demolished in 1934. The site is now marked by a 20-foot memorial stone, and is of course also remembered by the postcards that have survived in collections worldwide. It is extraordinary the number of postcards that were made of wireless telegraphy stations - hardly the most picturesque of subjects, but affirming the popular fascination with this new technology. They also give us a good visual record of the 'Marconi stations' that ringed our coast by World War I. I shall only list a few from my collection. They are in random order: Lizard (where Marconi constructed an experimental station shortly before Poldhu), Hatland Point (two cards in the Pictorial Stationary Co.'Peacock' series, nos M.C. 1770 and M.C. 2322), St Just (two versions by Milton, nos 307 and 103), Lochboisdale (two different views), Bembridge Down on the Isle of Wight (which includes the Yarborough Monument), St Margaret's Bay (with the South Foreland Lighthouse where Marconi

Fig. 14 'The Works of Marconi Wireless Telegraph Co. Chelmsford', published by E.A. Wicks, 16a Baddow Road, Chelmsford, no 2601-262. Posted from Chelmsford on 25 February 1917.

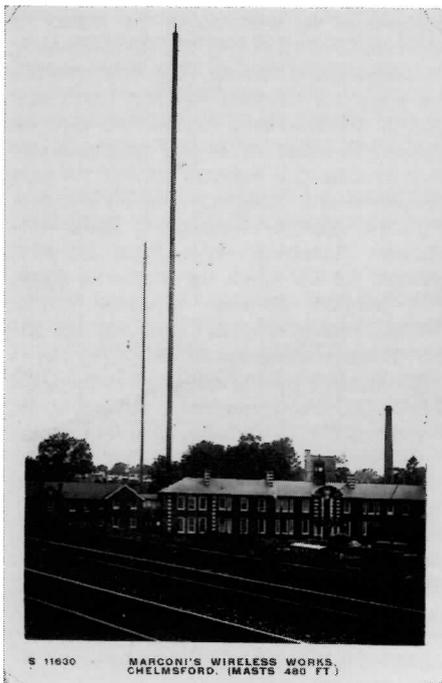


Fig. 17 'Marconi's Wireless Works, Chelmsford. (Masts 480 FT)', in the Kingsway Real Photo Series by W.H. Smith & Son, no. S 11630. Posted from Chelmsford on 8 May 1914.

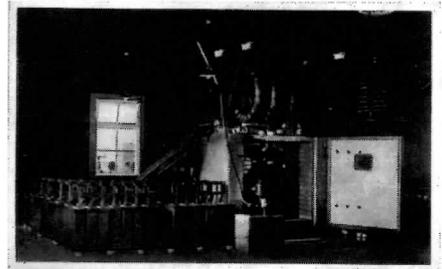


Fig. 18 'Marconi Wireless Series. No 3. Transmitting Plant at Poldhu Wireless Station'. Unfranked.

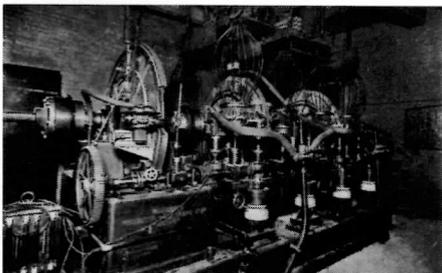


Fig. 19 'Marconi Wireless Series. No. 6. CW Transmitter at the Marconi Transatlantic Wireless Station, Marion, Mass, USA'. Unfranked.

established an experimental station in 1899), and four versions of the Lloyd's Signal Station at the Lizard. Two of these are in the 'Frith's Series' (postmarked 30 August 1908 and 27 August 1914), one has the Valentine's 'Souvenir Post Card' imprint, and the final one is by Radermacher Aldous & Co. of London. Perhaps these postcards were not that popular after all as they have usually not been posted! Many foreign wireless telegraphy stations also became the subject of the postcard frenzy. The one that bears an uncanny resemblance to Poldhu is the station constructed in 1902 by Marconi at Glace Bay in eastern Canada (Fig. 8) to form the other end of the trans-Atlantic link. Before your eyes start to glaze over, I will finish this section with a rare, but rather dull postcard of the Marconi company's station completed in 1914 on a



Fig. 20 'Marconi Wireless Series. No. 7. Senatoro Guglielmo Marconi'. Unfranked.

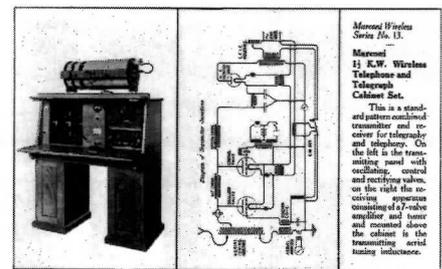


Fig. 21 'Marconi Wireless Series. No. 13. Marconi 1 KW Wireless Telephone and Telegraph Cabinet Set'. Unfranked.

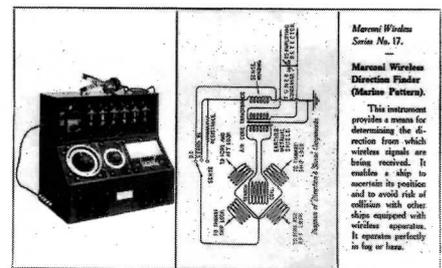


Fig. 22 'Marconi Wireless Series. No 17. Marconi Wireless Direction Finder (Marine Pattern)'. Unfranked.

mountain side at Cefn-dhu (Fig. 9), close to the village of Waenfawr, about ten miles east of Caernarvon in North Wales. Initially, the station was operated by landline from Towyn about sixty miles to the east, but later it was operated directly from London. The postcard shows the array of masts, each 400 ft long and weighing 80 tons. There is a small circular inset of Marconi now almost forty years old, who had brought much-needed employment to this bleak countryside. The station was taken over by the military shortly after the outbreak of war. It caught the public's imagination in September 1918 when, nearing the end of its life as a spark station, it sent the first direct wireless message from Wales to New South Wales. In the early 1920s, the station was converted to valve operation, but it was finally shut down in the 1930s. That

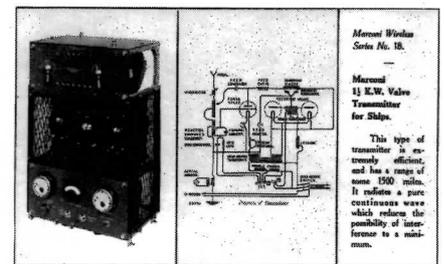


Fig. 23 'Marconi Wireless Series. No. 18. Marconi 1 KW Valve Transmitter for Ships'. Unfranked. The cards in this series carry no publisher's marks.

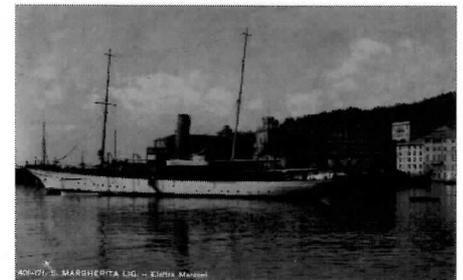


Fig. 24 'Elettra Marconi', S. Margherita Lighura, 401-171. Posted on 6 August 1934.



Fig. 25 'Who said Marconi? A wireless shock.', published by in the Rotary 'Grotisque' Series, no. 10516-24. Unfranked, but probably 1924 and therefore alluding to commercial broadcasting.



Fig. 26 'The Marconi System of Wireless Telegraphy', undivided back, posted from Berwick on 23 December 1903. The initials refer to the publishers William Ritchie & Sons of Edinburgh, and the artist was probably George Fyffe Christie.

postcard manufacturers reflected public interest in these events is shown by the following three cards. The two comic cards are by Raphael Tuck & Sons, already mentioned because of their 'Oilette' postcard of the Poldhu station. Figure 10 was obviously inspired by the first experimental wireless transmission (the famous 'S') received at Signal Hill, Newfoundland from Poldhu on 12 December 1901. Marconi's use of an aerial attached to a kite is depicted here attached to a Newfoundland dog, while the English end is shown by a lizard as the artist assumed erroneously that the Lizard station and not the Poldhu one was used for this experiment. By early 1902 seventy ships had been equipped with wireless telegraphy. Lochboisdale and Tobermory transmitting stations were built by the Marconi Company for the Post Office in

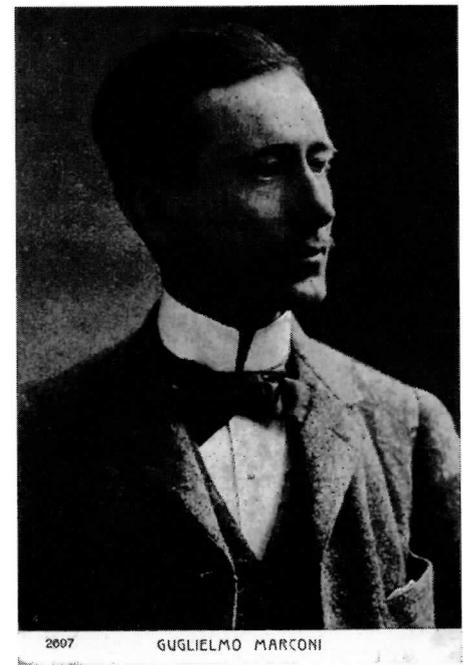
1906. This increased use by world shipping of wireless telegraphy is celebrated by the next card (Fig. 11). Both are in the firm's 'Wireless Telegraphy' series (no. 637). As I told you in Part I, cards were usually marketed in series of six, but I have only come across these two. In fact, good examples are now quite valuable as they only appear infrequently. The artists initials 'GHE' probably stands for George H. Edwards. The third (Fig. 12) is a 'greetings' card by Wildt & Kray of London who began trading in 1904. It was obviously inspired by the ease of the new communications technology and by another contemporary greetings card image of the 'Hands across the Sea' so popular with sea travellers. This Marconi-inspired 'greetings' card must have sold well as it appears fairly common at postcard fairs. In December 1898 Marconi settled his fledgling wireless company in an old silk factory in Hall Street in the small town of Chelmsford which had good railway links with London. His new wireless factory opened in 1912, grew spectacularly and became such a feature in the town that it was immortalised by a number of local postcard manufacturers. Figure 13 is probably the earliest general view of the works in my collection, as the two large masts do not yet feature. Note the window cleaner! The following two cards (Figs 14 and 15) were posted in 1917. These, and the next card (Fig. 16) by Jackson & Son of Grimsby, show a busy industrial scene. The factory was obviously working flat out during the war.

Jackson & Son of Grimsby became a limited company in 1914, and specialised in producing views of many towns and seaside resorts. There is one coloured view of the works in my collection, ironically printed in Saxony for Ernest Bucknall of Chelmsford, which was posted on 25 July 1917. This is rather a static view of the works and railway yard. The huge aerial masts obviously caused a lot of local interest as demonstrated by this close-up (Fig. 17) in the Kingsway Real Photo Series of W.H. Smith & Son, posted in 1914. This is probably the most common postcard of the Chelmsford works as it is the one found most frequently. Several of the others are now quite rare. The finest Marconi post cards in my collection were probably promotional ones issued in three sets in the early 1920s, entitled: 'Marconi Wireless Series of Picture Post Cards'. Each set of six is still in their original brown printed envelopes and retailed at 6d. The first set consists of: (1) Armoured Cruiser Equipped with a 25KW (1913) set; (2) Marconi 1.5 KW Ship Set. Interior of Silence Cabin; (3) Transmitting Plant at Poldhu Wireless Station (Fig. 18): showing the aerial tuning inductance jigger, condenser bank and disc chamber of the 60 KW synchronous spark transmitter; (4) Marconi Transatlantic Wireless Station at Caernarvon, Wales: general view; (5) Transmitting Jigger at the Marconi Transatlantic Wireless Station, Marion, Mass., USA; and (6) CW Transmitter (Fig. 19) at the above station. The second set consists of

portraits of six worthies of the history of wireless: (7) Marconi (Fig. 20); (8) Lord Kelvin; (9) James Clerk Maxwell; (10) John Ambrose Fleming; (11) Heinrich Rudolph Hertz; and (12) Sir William Henry Preece. The third set consists of actual valves and apparatus with their circuits: (13) Marconi 1.5 KW Wireless Telephone and Telegraph Cabinet Set (Fig. 21); (14) Marconi Transmitting Valve; (15) Marconi Receiving Valve Type 24; (16) Marconi 1.5 KW Spark Transmitter for Ships; (17) Marconi Wireless Direction Finder (Marine Pattern) (Fig. 22); and (18) Marconi 1.5 KW Valve Transmitter for Ships (Fig. 23). In 1919 Marconi purchased his famous yacht 'Elettra' as a floating wireless laboratory. On the postcard in my collection (Fig. 24), posted from Santa Margherita Ligura on 6 August 1934, the English sightseer has written: 'Marconi's yacht is here complete with ultra-short wave aerial systems, but haven't seen him yet or any of his works'. The nearest I will probably ever get to him (at least in spirit) will be through my postcard collection. At this point I should draw Part II to a close, but will leave the final say to two comic cards. Figure 25 by Rotary Photographic Co. neatly highlights the culture shock produced by this new form of communication, while Figure 26 focuses on the love interest.

Next to come: Part III - Wireless telegraphy and the comic post card.

All following postcards are kindly reproduced from the collection of Enrico Tedeschi, and are of Italian origin.

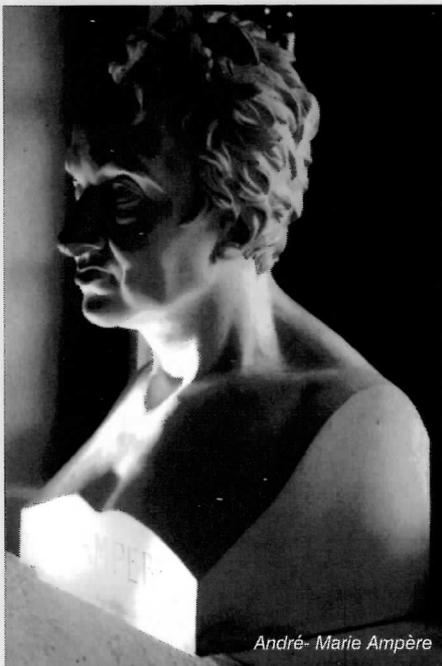




Guglielmo Marconi inventore dell'radio, 1874-1937 - XV



André- Marie Ampère (1775-1836) by Harold Page



André- Marie Ampère

Lyon, the second city of France, used to be over half a day's journey from Paris; now with the introduction of the 120mph. TGV train, the time is cut to two hours. In addition to a most attractive Mediaeval city area, the centre of banking with trade fairs going back to the fifteenth century and strong connections with the silk trade, the city claims to be the birthplace of the 'amp', to be precise, André-Marie Ampère. Still wishing to be precise, his house was not exactly in Lyon but some fifteen miles north of the city on Mont d'or.

The friends of the family Ampère have made the family home into a most attractive and informative Museum of Electricity. My first visit to the 'maison de Mr. Ampère' was some fifteen years ago and I felt that it was a poor memorial to the famous scientist, but my re-visit this year greatly impressed me. In addition to the original apparatus of Ampère's work, there were working models which were easy to understand, and in many cases one could actually see the sparks flying, which brought one up to date with more modern uses of electricity.

André had no formal education. He was taught by his father Jean-Jacques-Antoine Ampère who followed a most distinguished career, making his final exit at the guillotine in 1793, presumably because of his political views, not for his vast contribution to electricity.

The exhibits are divided roughly into four sections; firstly the documents of the '3 Ampères', André, the physicist, his father, Jean Jacques, and his son, a Professor of Literature and History. The second section, described as '18 fundamental experiments' includes models as fundamental as his work with elementary magnetism and the use of magnets to give rotation.

The third area- Electrostatics- electricity after Ampère- describes bottles and jars by Professor Van Musschenbroek of Leyden

(1746), vast objects now produced as tiny condensers. Batteries and accumulators by Volta, more 'piles' (batteries) by Wollaston and included also are cells by Leclanché, whose 'jars' are still to be found working in house bell circuits of the 1920's. There is also a Wimshurst machine, where you can actually see the electricity being generated. Theatre rheostats 1905-1975 which are massive and the Radiotherapy apparatus looking almost as frightening as the guillotine.

So far as the Vintage Wireless enthusiast is concerned, there are just three models. The lady gardienne was most helpful in unlocking the display cases for me to take photographs.

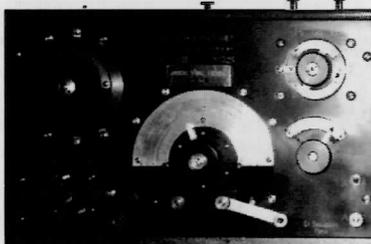
The earliest, claimed to be 1907, was rather like the Gamages bread-board but with a morse key. The base is of the most solid mahogany, the coil former being held into position with two wide polished steel bands locked with massive nuts and bolts, the crystal, usually referred to as a 'Galena', and the morse key of equally solid construction. The whole thing appeared to have been built to withstand a force ten gale. The tablet reads '1907 for the wire-less transmission of morse signals'.

There is next a Radio-Secteur in a nicely constructed cabinet, two tuning knobs and a stud wave change switch. The four 'tubes' are visible but discreetly veiled by a 'hammered' glass panel. A brass frame holds a card with printed station names and log references; added in hand-written ink is 'Davenport 200'. Apparently this little masterpiece would bring in the 1500m. Droitwich signals in 1925, something we find erratic and difficult even with a modern portable radio in Spain.

Finally, and about the same cabinet size, a Contrôleur d'Ondes Series 3 no.328 built in Paris. Solid brass terminals, large clear tuning dial, lockable with brass bars as if for use on a vibrating ship. A switch with positions marked Tikler and Vior, which my dictionary does not



Above: Radio-Secteur, below: Contrôleur d'Ondes



The Defiant M900

by Mike Barker. Photography by Mark Groep



I first came across the Defiant M900 some years ago, when I purchased a number of sets and one was amongst them. At that time I had no idea of the make or model of the set, as the card back was missing and there were no valves. No indication of manufacturer is shown anywhere on the cabinet.

There are however plenty of pointers to the manufacture of the chassis, as all paper condensers are made by Plessey Ilford. The speaker (JENSON) and electrolytic block (MALLORY) were also made by Plessey under

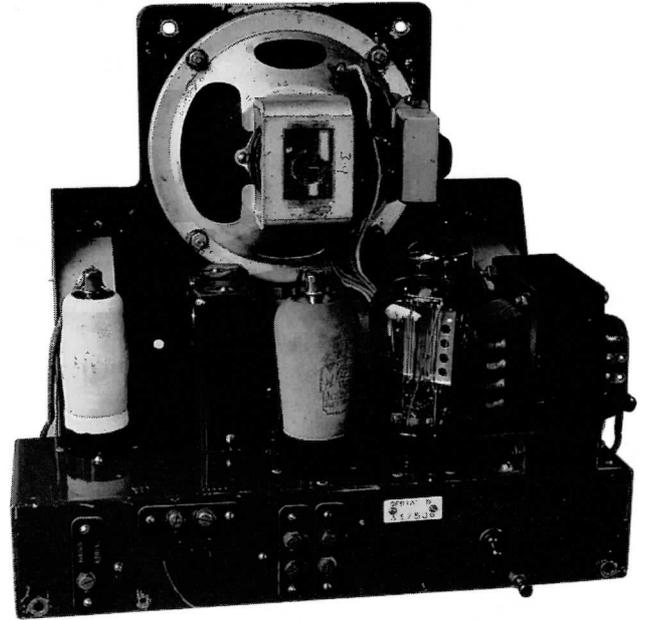
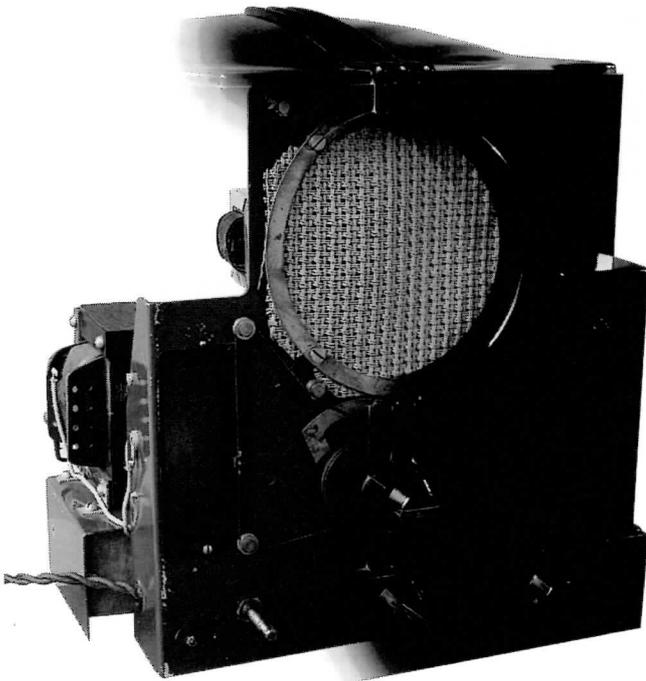
license. It was not until I got my first copy of RADIO RADIO that the puzzle was solved.

Made in 1935 for the Co-operative Wholesale Society Ltd (CWS) by Plessey Ilford, the M900 seems to be somewhat of a breakaway from the usual Defiant radios seen up to that time, having a Bakelite cabinet rather than the usual elaborately veneered wooden cabinets. The CWS had set up its own radio cabinet factory in Birmingham some time before, and until December 1933 GEC had been making radio

chassis for the CWS, and the CWS was also making radio cabinets for GEC.

By early 1934 an agreement was reached between the CWS, Plessey and BTH, that Plessey would design and manufacture Defiant radios using only Mazda Valves and cabinets from the CWS factory. I do not know if the CWS factory were able to press Bakelite cabinets, I would suspect not.

This in mind, and the complexity of the M900 cabinet and knobs, being unique to this

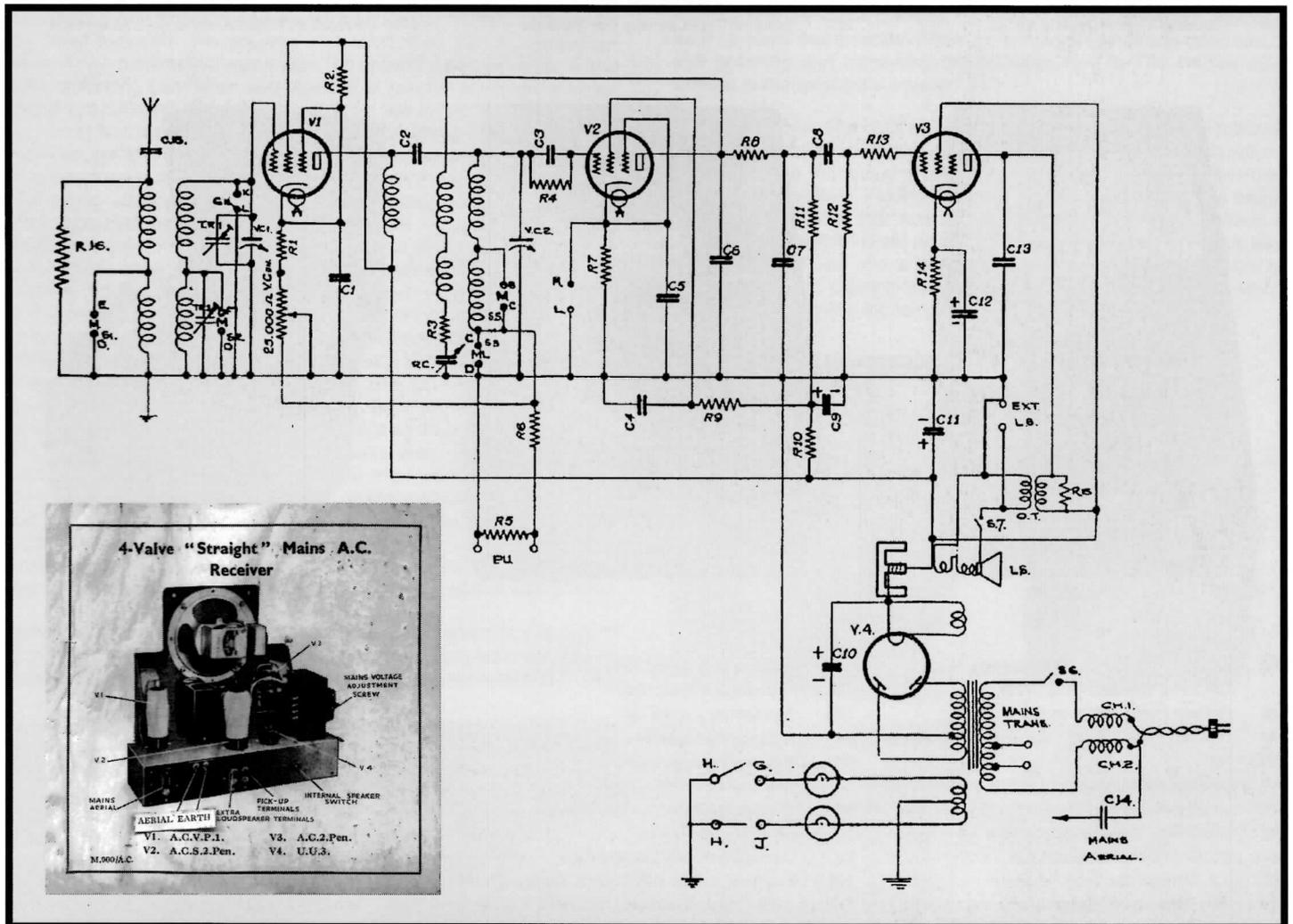


model I suspect the cabinet was manufacture by either E K Cole or Siemens Germany.

The chassis, of grey painted Aluminium is a self contained unit, leaving an empty cabinet when withdrawn. The set resembles a Superhetrodyn, with the two metal coil cans, but from the circuit, can be seen that it is a TRF of simple but thoroughly good design. Quality components seem to have been used throughout this set, although some economies are obvious.

Interestingly enough the circuit diagram for the M900 has a Mullard acceptance registration, even though Mullard had stopped supply of valves to Defiant at the end of 1933, this set seems to be based on a standard Mullard published circuit, but instead used Mazda valves.

The set, when in operation on Mw or LW switches in and out the dial illumination between the tuning scales, so unfortunately the set looks as if a lamp has burnt out. Yet when switched to gram, both dials are illuminated. The set must be handled with a degree of twiddling to achieve the very best stability of tuning. Using the fine tuning control in co-ordination



The list shows all the numbers we have identified so far, amounting to about 460. There must be many more and I would be grateful if members would continue to let me know of any numbers they come across which are not on the list - with make and model of set. I am grateful too for information on any errors which may be noticed.

Please write or telephone to me at 28 High Park Road, Farnham, Surrey GU9 7JL: tel 01252 719081

**G.P.O.Registration Numbers
The "Hundreds" Series
(all crystal sets)**

- 100 Marconi(& Millet) Crystal Junior Type RB1
- 101 Marconi(& Millet) Crystal A

- 160 International Electric Co.(IEC)
- 167 Gordon Castagnoli Castaphone
- 169 Chase Radio (The Chase Motors Co) Crystal CR2
- 171 H.W.Sullivan
- 176 Gamages Crystal Broadcaster No.1
- 177 Fellocryst crystal set
- 183 TMC No.2 crystal
- 185 J.A.Coomes crystal set
- 191 Drake & Gorham crystal set
- 195 Apollo crystal set, by Craies & Stravridi
- 200 Gamage Ideal
- (213) F.O.Read 2 valve amp?
doubt if correct PO number.
- 220 Gamage Ideal (same as 200?)
- 223 Unknown manufacturer 'FLB' crystal set

- 345 Birmingham Wireless Co. Gledallphone
- 347 J.S.B.Clarke crystal set, with plug-in coil, Jan. 1923
- 349 Cable Accessories Co. Revophone
- 350 Jos. Hopley & Son Ently Super 1
- 360 Hayes CA1 ?
- 373 Reliance Radio Service Co. No.3? (see 302)
- 375 Reliance Radio Co. crystal set
- 384 Cinechrome Instruments 'Cincho'
- 386 Negretti & Zambra 3-valve
- 391 Associated Wireless The Scout
- 393 Mechanical Utilities Co. "Faeritone"
- 398 Townshends Ltd Sensiphone
- 410 Amplifiers Ltd. Astrophone crystal
- 412 W.J.Henderson BRC1
- 419 CT Triumph No.1
- 423 Peter Curtis 'Radionette'
- 428 J.Mills & Son, Newcastle. crystal set
- 433 Ediswan Model 1923B
- 439 Hammersley Bros. London. Crystal set
- 441 National Wireless & Electric Co. The Gnat
- 444 Lintophone
- 447 No maker's name to be seen
- 448 H.E.C. Type A1 crystal set

GPO Registration Numbers by Pat Leggatt

- 102 Gecophone No.1 BC1001
- 103 Gecophone No.2 BC1002 or BC 1501
- 104 Elwell No.11
- 106 BTH Type C Form A
- 110 The OK Wireless Set
(or Associated Wireless Little Casket?)
- 112 RI crystal set type XLB
- 113 Burndept(Ethophone) Junior
- 114 Burndept Ethophone No.1
(same as Sterling No.1)
- 116 Unidentified crystal set (see PW 16/12/22)
- 118 H.D.Butler No.111: and WW crystal set
- 119 Same as 118?
- 122 RI No.1 type XLA
- 124 WEMCO (Walters) Crystal Detector Panel
(see also 0281 & 2002)
- 126 Bower Electric Co. No.1
- 128 Wainwright Manf.Co (W & M)

- 225 Nirvanax "Duo Coupling" crystal
- 226 Gamages Crystal Broadcast Receiving Set
(Early Wireless P81 quotes Fellophone Super Two which is really 2126)
- 233 Varoto Ltd. Voc.1
- 237 McMichael Radiomac Crystal Mark III,
a modified Mk III Tuner.
- 245 B & A crystal set
- 246 Walsall Electrical Co. crystal set
- 249 City Battery Co. CeeBee No.3
- 255 CA Mk V
- 260 Victoria crystal set
- 263 Broadway Radio Works Type A
- 269 Wilton Wireless Co, Wiltonia No.1 Crystal Set
- 270 Bassett Lowke Oracle
- 272} Unknown manufacturer crystal set
- 276} (both numbers on one set)
- 277 Reliance Radio Service Co. 'Reliance'

- 456 Icnaphone crystal set
- 460 Gecophone crystal set; also H.C.Tolfield Syren
- 469 British Radio Wireless Manufacturing Co.
- 485 Marconiphone Sterling A1
- 488 BDS Wireless Ltd. Mozzulphone crystal set
- 489 'The Leyton' crystal set
- 492 Abbiphone miniature crystal set type CRO
- 506 Big Ben Type 4
- 516 Edison Bell
- 518 Broadway Radio Works Junior 1 ?
- 519 Claristal crystal set: Universal Electric Supply
- 524 B & S.Smith Super B & S ?
- 548 Broadway Radio Works Senior II ?
- 551 Phonette crystal set
- 561 TMC No.5
- 570 Woodhall Wireless Manf. Co. "All on deck"



- 130 Sterling No.1, (same as Ethophone No.1,
GPO 114. See also GPO 0726)
- 132 General Radio GRC4 crystal
- 134 Western Electric 44001; Aeolian Aeriola Junior
- 138 MEC
- 140 A.G.W & Co Ltd. London: crystal set
- 142 General Radio Co. 'The Rex' or G.R.C.5
- 145 Metro-Vick Cosmos Radiophone Type C1
- 151 Mitchells Elec.Wholesales Co. No.1
- 153 J.A.Coomes Ltd. Desk receiver?
- 159 Falk Stadelmann Efescaphone No.3

- possibly also called 'Reliance No.2'
- 280 Ericsson Cat No.0/1002
- 296 'Montecryst' crystal set
- 302 Reliance Radio Service Co. No.3? (see 373)
- 312 Hayner Engineering Co.
- 313 ATM crystal set No.48308
- 315 Ward & Goldstone Sonola Cabinet
- 327 Frazerphone
- 332 Chakophone No.3 crystal set
- 335 F.O.Read 1-valve (ref. Sounds Vintage 2/1-5)
- 342 J.S.B.Clarke crystal set, Jan. 1923

- 584 Gamages
- 599 Siemens Type 125
- 607 Lissenin Wireless Co. Premierphone A
- 615 Edison Bell Type B
- 617 Wee Macgregor crystal set
(no standard BBC/PO logo)
- 639 H.E.W.
- 651 BTH Crystal set Type C Form B No. R.
- 656 Make unknown (in Ray Leworthy's museum)
- 665 Reliance Radio Service Co. A.1.
- 668 Lamplugh Regent ?

- 669 Revophone: Cable Accessories Co.
- 671 Re-Echo
- 717 Efescaphone valve/crystal
- 726 (see 0726)
- 745 OTB (Harding, Holland & Fry)
Type A Powder Box
- 748 Hammophone
- 765 Gamages vertical tube-type crystal set
- 786 Regent crystal set
- 792 Morch Bros. Rexophone crystal
- 801 See 817 below
- 817 Thames Electric Wireless Co.
(also quoted as GPO 801)
- 822 Martinphone crystal set No.0
- 827 Forest
- 854 Scottish Wireless Tel. Supplies
- 861 BTH Bijou Radiola
- 863 Westraphone (Western Radio Co, Cardiff)
- 871 Clyde Electrical Co. Clydelco crystal set
- 875 W.H.Collins Priorphone crystal set
- 879 E.A.C. Crystal Receiver Type B 476
- 880 'The Venus' (Radiophone Co)
& 'Ariel'(G.J.Graves)
- 881 Slew & Co. Gem
- 886 A.G.F. (Arthur G. Foulds Ltd, Edinburgh)
- 899 Master Radio Manufacturing Co
Mastervox "Junior" crystal
Davenport
- 900 Ward & Goldstone "Claristal"
- 901 G.H.J.Trading Co. Midge

**The "One Thousand" Series
(1-valve receivers unless otherwise stated)**

- 1002 Ericsson crystal set
- 1003 Elwell Aristophone 3-valve amp.
- 1005 Radio Instruments 1-valve
- 1007 Hestia Eng.Co. Hestavox 1 valve
- 1008 HPR Wireless Ltd Simplex
- 1011 Wholesale Wireless Co. 1 valve
- 1017 Gordon Castagnoli, Castaphone T.1.

- 1043 Gamages
- 1045 Peto Scott Broadcast Baby 1-valve
- 1054 Tingey 1-valve
- 1055 TMC No.1.
- 1059 Joyphone (J.Lipowsky & Co)
- 1062 Wireless Components Ltd 1-valve set
- 1069 Victor Radiophone Type 1 1-valve
(Medical Supply Association)
- 1086 C.S.Dunham ?
- 1087 C.S.Dunham ?
- 1094 TMC No.3 3-valve
- 1103 Ediswan Radiophone MB100
- 1107 The Ever Ready ?
- 1108 RI 5-valve
- 1111 Sterling type 1526 ?
- 1127 Lissenin No.1
- 1195 Fellophone 1-valve set
- 12139? H.Tinsley Anson Relay?
(could be model number)
- 1346 R.R & Co (Birmingham) crystal set
- 1402 Fellophone Table Grand 3-valve
- 1583 McMichael MHBR1

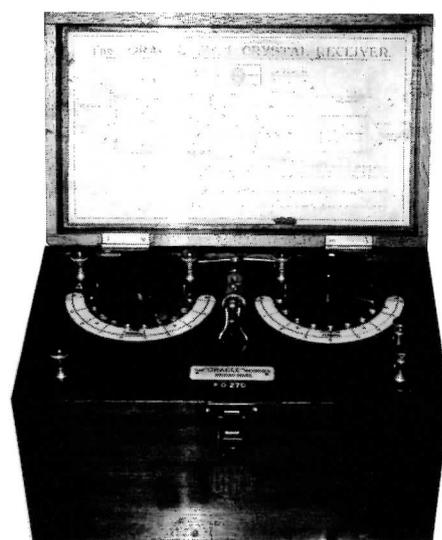
**The "Two Thousand" Series
(2-valve receivers unless otherwise stated)**

- 2000 Gecophone 2001 Smoker's Cabinet (1-v-0)
- 2001 Marconiphone V2 (see also 0175)
- 2002 Walters WEMCO 1-valve amp
(see also 124 and 0281)
- 2003 RI 2-valve tabletop
- 2005 Hestia Eng.Co.(Acton) Hestavox II (1-v-0)
- 2007 Cosmos Radiophone 2-valve receiver module.
RI ?
- 2009 Gamages Sonus(1-v-0)
- 2013 Ericsson 2-valve
- 2014 Elwell Aristophone Type 55
- 2015 Unidentified 2-valve set (see PW 16/12/22)
- 2020 Holborn Radio Co. Deskophone 2-valve
- 2021 Arcadian
- 2022 Gamages sloping panel 2-valve

- 2053 Western Electric 3 valve, 2-v-0.
uses Wecovalves. (same size box as 2197)
- 2057 J.S.B.Clarke 2-valve (1-v-0) Jan. 1923
- 2064 H.E.Ashdown 2-valve HF amp
- 2067 Re-Echo 2-valve 1-v-0
- 2069 Craies,Stavridi Apollo Type 8
- 2074 Ward & Goldstone
- 2082 Elwell Aristophone Type 56
- 2084 Sterling 2-valve long range
- 2090 Revophone. Cable Accessories Co.
- 2093 Smith (Weymouth) III. 3-valve sloping panel
- 2094 Manchester Radio type B3
- 2100 RI Type V2A 2-valve HF/Det
- 2103 Ericsson ?
- 2106 G.Castagnoli Castaphone ?
- 2109 AJS 4-valve sloping panel
- 2126 Fellophone Super Two & Pelmerset
& Tonyphone (British Engineering Products Co)
- 2136 W.J.Henderson HR2A
- 2140 Radiax Super Two
- 2165 C.S.Dunham
- 2168 W.Vanstone Stanophone
- 2170 Thames Electric Wireless Co. 2-valve set
- 2172 BTH VR2
- 2175 D.Vinnell & Son "The Vision"
- 2176 Bligh Radio 2
- 2184 Sterling type 1588
- 2197 Western Electric 2-valve HF/Det 'Open aerial'
- 2201 Gecophone type BC2501
- 2202 TMC No.7.
- 2217 W.Electric 2-valve Weconomy Tuner 44081
- 2285 Gecophone 1-valve amp.

**The "Three Thousand" Series
(mostly 2-valve or 1-valve amps)**

- 3001 RI V1M 1-valve LF amp
- 3003 Elwell Aristophone amp. type 304
- 3005 Western Electric LF amplifier
- 3006 Western Electric LS amp 2-valve
- 3012 General Radio Co. GRC13 2-valve amp.



- 1018 J.R.Wright Audiophone
- 1019 Holborn Radio Co. Deskophone 1-valve
- 1020 Radieco Simplex 1-valve
- 1022 Chase Radio VR1A
- 1027 Wireless Installations Ltd.
- 1033 Manchester Radio Co. Apollophone No.1.
- 1034 Ward & Goldstone "Goltone" 1 valve receiver
- 1036 Seagull 3-valve?
- 1038 Wireless Installations Ltd 1-valve
or Manchester Radio Co
- 1042 National Type N Mk I

- 2026 Chakophone No.1 Broadcast Receiver
- 2029 Ensign Radio Co. ?
- 2030 General Radio Co. GRC 16 2-valve receiver.
Matching amp. PO 3012
- 2031 Marconi Scientific Instrument Co.
2-valve (DEQ type)
- 2033 McMichael MHBR2
- 2039 Elwell 'Jonophone' V2
- 2042 Martinphone (Sherborne) 2-valve receiver
- 2045 Varoto Ltd Model VO.II
- 2049 Hestia Eng.Co. Hestavox II (same as 2005?)

- Matches PO 2030
- 3015 Audiophone 1-valve (see also 1018)
- 3026 Fellophone LF amp 2-valve
- 3030 TMC No.2 2-valve receiver
- 3040 Ward & Goldstone "Goltone" 1-valve amplifier
panel for crystal set
- 3042 Holborn Radio Deskophone 1-valve amp
- 3044 Ward & Goldstone amp. panel for crystal set
(also Ensign 1-valve LF amp.)
- 3046 Walters Note Magnifier Unit 1
- 3049 Ward & Goldstone amp. panel for crystal set

- 3059 Ward & Goldstone "Goltone" 1-valve amp.
- 3070 Ashley Wireless type 104 1-valve amp (Radio Radio says 2-valve)
- 3073 Broadway Radio Works 1-valve amp.
- 3076 Bassett-Lowke Oracle 1-valve amp
- 3091 Cosmos Radiophone 2-valve LF amplifier module Type A4.
- 3093 Wireless Components Ltd 1-valve amplifier
- 3094 J.S.B. Clarke 2-valve LF amp, Dec. 1922
- 3102 Western Electric 1-valve LF amp. standard B4 valve holder
- 3104 Marconi NB2 amp. and some models of A2 amp.
- 3108 Lang Squire Wireless Manufacturing Co 2V AF amp Type 2V matching 0671
- 3116 Wilton Wireless Co. No. 1a Note Magnifier
- 3121 Western Electric 2-valve amplifier
- 3127 Elwell Aristophone Type 53 4-valve (same as No.0305?)
- 3128 Martinphone (Sherborne) 1-valve amp flat panel
- 3142 W.A., of Sunderland, amplifier? (see 0649)
- 3185 Sterling type 1533 1-valve amp.
- 3186 Sterling type 1537 2-valve amp.
- 3188 Sterling type 1343 2-valve amp.
- 3189 Sterling 3-valve LF power amp.
- 3192 Cosmos 1-valve amp Model A2, for crystal set
- 3221 CT Ltd. 1-valve amp. (is this an error in place of 3321?)
- 3260 Arcadian 1 valve amp.
- 326(8?) Burndepth Ethophone V (but see 0323)
- 3276 H.E. Ashdown 2-valve amplifier
- 3285 Marconiphone 1-valve AF amp.
- 3293 Ericsson 2-valve amplifier
- 3321 CT Ltd. Triumph 1-valve amp. (see also 3221)

**The "Four Thousand" Series
(mostly crystal sets, but a mixture)**

- 4012 Lintophone Junior crystal set
- 4018 McMichael MHR4A 4-valve
- 4022 Hart Collins crystal set
- 4031 Empress Model A 3-valve set (or GPO 4777?)
- 4034 Ws Co The Crystella; and Tom Thumb crystal
- 4043 Meepon crystal set
- 4050 Mann, Egerton & Co. "Mecophone" 1-valve
- 4059 Saxon crystal set
- 4121 Unidentified crystal set
- 4129 The Cleave D.E. Set 4-valve (Bath firm?)
- 4145 Crystal set built into headphones: make unknown.
- 4147 Wisemanette crystal set
- 4150 Efescaphone 4-valve
- 4155 Brownie tubular crystal set
- 4163 Mills Wireless 'Novocastrian' crystal set
- 4177 Gecophone BC 2050 5-valve
- 4215 Marconiphone "Baby" crystal
- 4216 "A1 Radio" or Wates Bros. "Bijouphone" or Rooke Bros. "BEBEphone".
- 4232 ABR 4 valve table model
- 4276 S.J.H. Wilkes (Stetchford) crystal set
- 4277 Marconiphone VB4 aka RB12
- 4304 The Mcree crystal set
- 4307 Carlton crystal set
- 4322 E.H. Jones Radio (Sheffield) 3-valve
- 4332 Wincystal crystal set: coil with slider
- 4367 Clearcryst: Auriol Supplies Co.
- 4371 T.W. Thompson "Delaphone No.2" crystal
- 4385 Ediswan Model 1924B crystal set
- 4386 Pye model 730 3-valve
- 4393 Siemens SB39 3-valve

- 4870 Siemens MIP portable set
- 4930 R.C. Jones (Stockwell) 2-valve
- 4934 Re-Echo crystal set
- 4935 Woodhall Wireless Manufacturing Co. Woodhall crystal set
- 4961 Omniophone Radio Co. crystal
- 4987 Bettaphone crystal set
- 4991 T.P. Brady Co. crystal set

**The "Five Thousand" Series
(miscellaneous)**

- 5019 Mozzulphone 2-valve amplifier
- 5029 C.A.C. (City Accumulator Co) 4-valve portable (May 1924)
- 5146 Cosmos Radiophone receiver VR3 2-valve
- 5147 Cosmos amplifier A5 3-valve
- 5149 Curtis Silver Ghost
- 5162 A.T. Lee The Court Detector: part of The Court unit receiver
- 5172 Athall (Atherton & Hall) 2-valve Type SV2
- 5222 Houghton 1-valve
- 5228 Ericsson crystal set type 0/1050
- 5266 J.M. Jones (Blackheath)
- 5284 Wates Bijouphone CS New Model
- 5304 'SEDEH' crystal set & Zeitlin & Son No.s.2 & 3 and 'Rocco' crystal set (also J.R. Wireless Co. (Tottenham) Japhone?)
- 5318 Western Electric 44002 7-valve superhet (imported?)
- 5374 WW (Wilkins & Wright) crystal set
- 5393 Gecophone BC3000 (and BC3050) 1-valve
- 5394 Gecophone BC3200 Smokers Cabinet (0-v-1)
- 5433 BTH VR3 Form PA 3-valve superhet portable.





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The General Electric Co., Ltd., Head Office: Magnet House, Kingsway, London, W.C. 2

- 3336 Forest Radio National 1-valve LF amp.
- 3359 Forest 1-valve amp.
- 3360 Gecophone BC2580 amp. (for use with Gecophone P.O.No.s.2000 & 5394)
- 3364 Chakophone No.1 Amplifier
- 3380 Henderson BA2 2-valve set
- 3414 Weconomy 2-stage LF amplifier (Gecophone amp. identical to above, no number)
- 3415 Western Electric 2-valve amp. (for crystal set type 4401)
- 3423 Western Electric "Weconomy" 3-valve amp.
- 3452 Fellophone Little Giant (3452 might be only the serial number: see 3633)
- 3633 Fellophone Little Giant

- 4410 Bligh Audio/2 2 valve amp.
- 4447 H. Clarke & Co Imp crystal set
- 4542 Graves Tameside crystal set also Ariel crystal set
- 4545 Amplex Model A
- 4547 E.D. 1 valve
- 4548 Sterling Anodion type R1589 2-valve
- 4553 Belling Lee crystal set
- 4589 Sterling Three-Flex
- 4606 'PD Receiver': Automobile Accessories (Bristol) Ltd
- 4637 Baty 2-valve receiver (see Harmsworth P2101)
- 4682 F.A.B. (Fowler & Brigden) 2-valve reflex
- 4714 Peerless Crystal set
- 4742 W.J. Henderson 3-valve
- 4777 Empress model A (see also GPO 4031)
- 4826 Burns & Dudgeon crystal set

- 5435 Yorkshire Radio Co. Spotter
- 5448 Gecophone 3250 2-valve
- 5464 Gecophone BC3300 & BC3350 3-valve

**The "Zero" Series
(a mixture)**

- 0107 Siemens valve/crystal set
- 0108 RI tabletop type 5VA 5-valve
- 0109 RI tabletop 3-valve
- 0112 RI tabletop 4-valve
- 0113 HPR Wireless Hilophone 1-valve
- 0124 Ward & Goldstone Claphon 2-valve
- 0129 Chase Radio VR2D 2-valve
- 0135 T.H. Isted 3 valve Simplex
- 0136 Fellophone Two Valve Broadcasting Cabinet
- 0138 British Joyphone Co. (Lipowski Co.?)



Jameson Special Reserve

To mark the centenary of the invention of radio by Guglielmo Marconi, the Jameson Distillery is proud to release this unique limited edition, Jameson Special Reserve Irish Whiskey.

Born of an Italian father and an Irish mother, Marconi was the great grandson of John Jameson, who founded his famous Distillery in Dublin in 1780.

It was in Ireland that Marconi made the world's first commercial use of radio.

This very special whiskey is Jameson's tribute to a great man who changed the world of communications.



BVWS Car window sticker

You have probably noticed that you have received along with all the usual bits of paper and ephemera associated with the Bulletin, a lovely full colour car sticker for you to display in your window (car or otherwise). Originally the sticker was meant to arrive with the membership card, which turned up with the newsletter and 'sales and wants' list, but the time involved in the printing of these car-stickers would have meant the newsletter turning up a week later, which would be unacceptable. We hope you enjoy using them, I've got mine on the kitchen window.

Carl Glover

Technical help is required by the blind

Many blind people have tape-reading cassette-type playback units and are supplied with tapes from a large library in London. Help is required to install and to maintain these, initially by giving some guidance to the blind, the average age of whom exceeds 74.

There are now over 3,500 technical helpers looking after 'Talking Books' throughout Britain but there are over 68,000 blind readers needing help- 42,000 of them are over 90 and we have as many as 230 over 100 years old.

There is an urgent need in the following areas:

Cheshire Widnes (2), Runcorn (2), Gatley (2)
Cornwall Newquay, Padstow, Mevagissey
Devon Okehampton
Durham Peterlee
Essex Grays, Thurrock, Romford, Upminster, Hornchurch, Harold Hill, Canvey Island
Hants Aldershot (2)
Herefordshire Hereford
Herts Barnet
Kent Tonbridge, Chislehurst, Penge, St Mary Cray, St Pauls Cray, Margate, Ramsgate, Maidstone, Sittingbourne, Gillingham
Lancs Dukinfield (Manchester)

London N1 Islington, N4 Haringey, N7 Holloway, N16 Stoke Newington, N19 Archway, NW2 Cricklewood, NW3 Hampstead, NW6 Kilburn, NW10 Willesden, E1 Stepney, E3 Bow, E5 Hackney, E12 Manor Park, E13 Plaistow, E14 Poplar, E15 Stratford, EC1, EC2, EC3, EC4, W1 West End, W4 Chiswick, W6 Hammersmith, W11 Notting Hill, W14 Kensington, SW5 & SW7 South Kensington, SW10 Fulham, SW11 Clapham, SW13 Barnes, SW14 East Sheen, SW15 Roehampton, SW17 Tooting, SW18 Wandsworth, SE2 Abbey Wood, SE10 Greenwich, SE12 Lee, SE13 Lewisham, SE18 Woolwich/Plumstead

Middlesex Enfield

Norfolk Cromer

Somerset Chard

West Sussex Midhurst (2), Petworth, Storrington, Horsham, Billingshurst, Pulborough.

Wilts Pewsey, Salisbury

Yorkshire, South Doncaster (2)

Yorkshire, North Skipton, Settle, Ingleton, Long Preston, Ripon

Wales Barry, Penarth (S. Glamorgan), Chepstow (Gwent), Cardigan, Llandeilo, Llandovery (Dyfed), Ystalyfera, Pontardawe, Clydach, Pontardulais (W. Glamorgan), Corwen, Llangollen, Wrexham, Holywell (Clwyd)

Would you be prepared to give up a little of your time to help the blind in this interesting

and rewarding work?

Volunteers should have technical abilities in electrical or electronic engineering. They are generally asked to look after up to twenty or more blind people: to visit them when required and to assist in repairing defects in their sets.

The time generally does not exceed one or two evenings per month

Circuit diagrams, a spare set and full technical details are sent out to each helper. If required, technical support is always available by telephone from London.

If you are prepared to assist or would like further details, would you please write to:

David Finlay-Maxwell MIEE. PHD.
 RNIB
 Prospect House,
 Huddersfield,
 HD1 2NU

Daytime Telephone: 01484 450982
 Fax: 01484 450703
 Home Telephone: 01484 435930

with the reaction control, the set can be very selective when tuning distant foreign stations, and has an outstanding amount of gain and even when used with a short indoor aerial many distant AM low power transmissions can be received at comfortable quality and volume.

When servicing this set, you will find a trimmer on the top of the front section of the tuning gang. This is in an un-accessable position under the speaker, this trimmer is set in the factory to ensure that both sections of the gang are the same capacitance, and should be adjusted with the gangs disconnected from the receiver using a capacitance meter, otherwise as it is not at all critical, leave it

alone! The only other adjustment is the LW trimmer, which should be set for maximum output with the set tuned to 1000 meters and a 1000m. signal injected at the aerial.

The set tends to have some annoying rattles, these are most likely from the two dials vibrating against the metal face of the chassis. This is easily cured with a touch of glue or hot pitch as originally used. Another source of vibration is the two metal reflectors behind the dials, one of which is in contact with the glass of the AC2/PEN valve. Tightening the reflectors and bending slightly away from the glass of the output valve will make the set more pleasant to listen to.

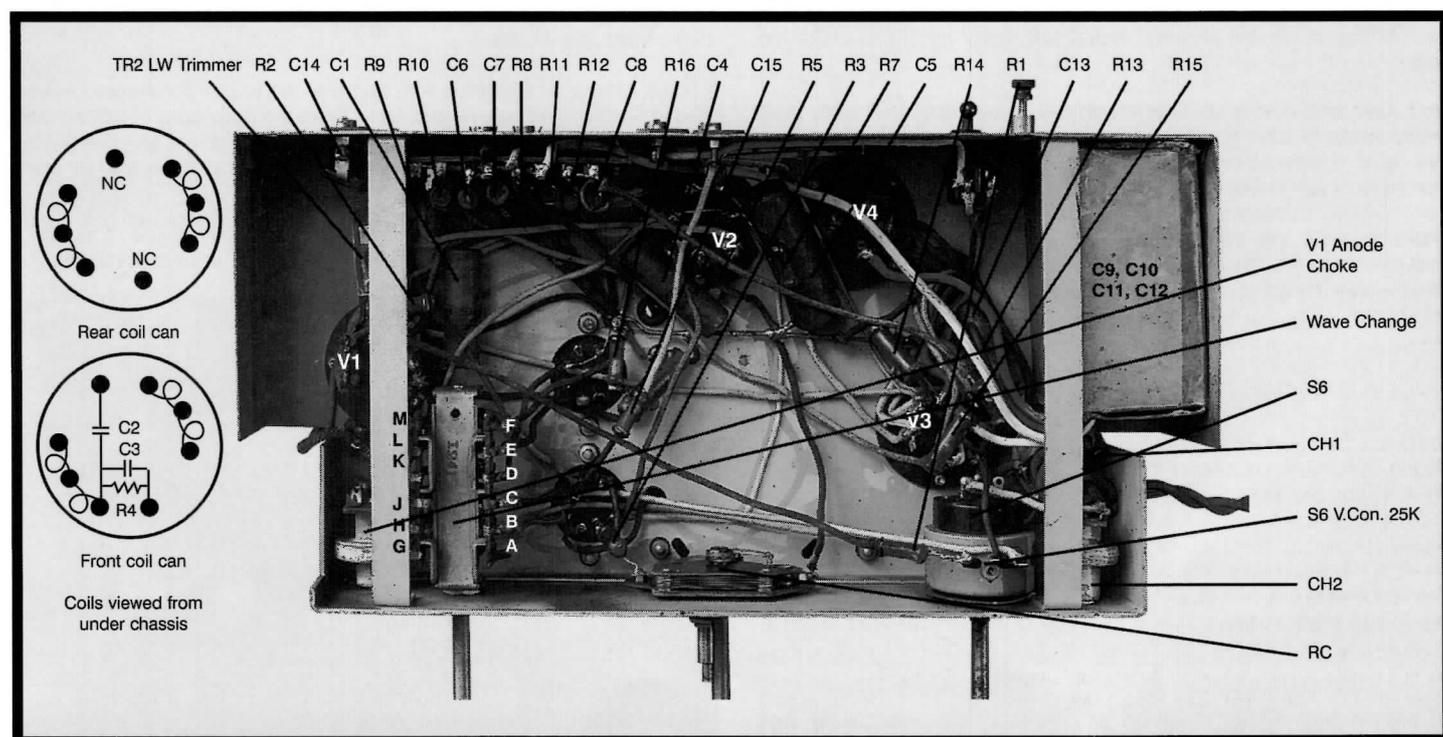
This set is rarely seen at Swapmeets and other events, and I do not know of many other examples, so it may be that the set was only made for a short time, in small numbers or was unpopular.

If you have any information specific to this set, such as advertising or hand books etc. I would be very pleased to hear about it.



Component listing for Defiant M900

symbol	value	Part No.	symbol	value	Part No.	symbol	value
C1	0.1 μ fd	plessey tub TL100	R1	2000 Ω	quarter watt	Vol. Con.	25,000 Ω 9:1
symbol	.00005 μ fd (in coil can)	plessey tub TW50	R2	0.1 meg Ω	half watt	S1	} in block
C3	.0001 μ fd	plessey tub TW10	R3	150 Ω	quarter watt	S2	
C4	.1 μ fd	plessey tub TW100	R4	1m Ω	quarter watt	S3	
C5	.25 μ fd	plessey tub TL250	R5	7.500 Ω	quarter watt	S4	
C6	.0003 μ fd	plessey tub TW30	R6	50,000 Ω	quarter watt	S5	
C7	.0001 μ fd	plessey tub TW10	R7	600 Ω	quarter watt	S6	switch in Vol. Con.
C8	.01 μ fd	plessey tub TW1000	R8	25,000 Ω	quarter watt	S7	QMB switch for Ext. Spkr.
C9	4 μ fd	} in block MA 10.O92	R9	.5 Ω	quarter watt	TR	air trimmer on 2 gang Cond.
C10	4 μ fd		R10	25,000 Ω	half watt	V1	AC / VPI Met. Mazda
C11	6 μ fd		R11	0.1M Ω	quarter watt	V2	AC / S2 Pen Met. Mazda
C12	25 μ fd		R12	.5M Ω	quarter watt	V3	AC / 2 Pen Clear. Mazda
C13	.01 μ fd	plessey tub TW1000	R13	.1M Ω	quarter watt	V4	UU3 Clear Mullard
C14	.0001 μ fd	TCC type M condenser	R14	150 Ω	half watt		Mains Trans. DRG 1007
C15	.0002 μ fd	plessey tub TW20	R15	25,000 Ω	half watt	RC	Reaction Condenser
			R16	20,000 Ω	quarter watt	CH	HF Choke CP. 10631
						CH	HF Choke CP. 10631
							3.5 volt 3amp pilot lamps
						VC1	2 gang 'H' type Cond.
						VC2	2 gang 'H' type Cond.



Last exit to ...Rochester ??

by Steve Sidaway

Madness, it is generally acknowledged, can take many forms. One of these is the obsession to surround oneself with more and more pieces of obsolete electronic equipment - in other words, to collect radios. Having been prey to this for many years now, and exhausting the supply of British 'fixes' available to me, goes some way to explaining why September 1995 saw me empty the Sidaway piggy bank and set off for the good ol' US of A and the Antique Wireless Association annual conference and swap-meet at Rochester, New York State.

Now if, like me, you're turned on (sorry about the pun) by names like Atwater Kent, Emerson, Philco, Belmont and Fada then Rochester NY is the place for you. Radios by the acre. Radios by the truck, caravan or recreational vehicle-load. Lots and lots of radios. Big brown boxes with curvaceous bodies and sinuous fretworks, that hum, whistle and squeal when caressed. Plastic coatings. AC/DC midgets!! (break off here for cold shower).

and the classic collectables like the Emerson 'Mickey Mouse' and 'Snow White' sets, Colonial globe, Sparton blue mirror are still making top dollar.

But there are real bargains to be had. For instance, if your interest is '20s battery sets then hire a container and BUY. American collectors don't seem to rate 2/3/4 valve sets of the 20's as highly as we do in Britain, possibly because there are far more of them. Even the more attractive 'three-dialers' with decorated panels may be had for under \$100 complete with original valves. Atwater Kent battery and early mains sets with external LS (except the 'breadboards') always seem to be bargains, being attractive and extremely well made (although the mains sets are heavy and would be expensive to ship over here).

But the Rochester meet is so much more than just a flea-market. The AWA run a full program of talks and events, which this year included seminars on the first 20 years of the radiotelephone, radio communica-



Anyway, back to reality. I last visited the Rochester meet about five years ago at the invitation of my good friend and fellow collector Frank Heathcote of Logansport, Indiana. Frank and I have corresponded regularly, exchanging radios and information (and occasionally Newcastle Brown and liquorice allsorts) for a number of years now and the memory of my last visit had faded sufficiently for him to invite me back!

So 3.30am on Tuesday 5th September saw us setting off in Frank's 1964 Chevy estate to drive the 700-odd miles from Logansport to Rochester. See what I mean about madness? Anyway, apart from the usual diversions around cities and some connecting toll roads (how droll - having to PAY to drive on roads that your taxes have already paid for - whatever next!) the Interstate 90 runs almost without interruption to Rochester, and 4 in the afternoon saw us roll into the car park of a motel about a mile away from the Thruway Marriott hotel where the meet was being held.

Here we pass quickly over the 'challenged' person who was 'personning' (well, this is America!) the reception desk and the 20 minutes it took to check in, and move down to the Marriott parking lot at 5 am the next morning. Frank had decided to take some choice pieces to sell (one of them a Marconi 42 - no accounting for taste!!) and so we had booked one of the 300 or so vendor pitches (yes, 300). This has to be one of the main culture shocks of a visit to the AWA conference. Just to see huge trucks roll up stacked to the roof with radios, camper vans full of Scott and Zenith consoles, estate cars brimming over with cathedral sets of every size and shape is alone almost worth the journey. And American collectors always seem easier to deal with, eager to help and explain, ready to make a deal - and for the next three days, deal we did!!

Don't get the impression that things are cheap over there. Radio prices have fallen back slightly in the US as in Britain, noticeably Catalin sets which no longer seem to fetch the ridiculous prices of a few years ago. But the best cathedrals like Atwater Kent, early 20's 'quality' equipment

tions, history of the telegraph, and collecting radio books and magazines. There was also a splendid display of early Marconi apparatus and ephemera with accompanying panels which told the Marconi story. Auctions are quite sensibly divided into separate categories for valves, paper collectables and general radio equipment, and specialist book dealers are also on site.

I could whet your appetites with some of the juicier purchases I made during our visit. But dear reader, let us leave the hurly burly of trading and swapping for a moment and, bargains safely stowed and tongues gently lolling, our thoughts must turn towards FOOD! We all know that it's easy to find places to eat in the States, good wholesome fare like that served by McDonalds, Burger King and Pizza Hut. But Rochester has much more to offer.....



Back in 1990 Frank and I found a wonderful Japanese 'hibachi' restaurant a couple of miles away from the Marriott which we vowed to visit again. With hibachi the food is cooked while you sit around the heated cooking surface, the chef supplying a kind of hari-kiri cabaret, juggling with knives and ingredients while producing delicious stir-fried dishes. Well, the restaurant was still there, and had expanded to include a large sushi bar, a delicacy I had always meant to try but never quite summoned up the courage.

So this set the pattern for our four-day stay. Get up early, quick breakfast,

down to the AWA meet. Browse, bargain and haggle until midday then a sushi lunch amongst the besuited and power dressed executives of Rochester. Back to the meet until evening, maybe more bargains or a seminar. Then drive back to our motel, quick change and off for more excellent Japanese food and radio conversation with other collectors. The perfect holiday!

So if you're wondering where to go for a break next year forget Spain, Greece or Turkey. Leave your partner behind, get on that 747 and join the international radio jet-set in Rochester. Only your wallet will regret it!!

Wireless Components

Having 'done' valves, Pat Leggatt is undertaking another series of brief articles explaining the nature and function of the various components in a wireless set. Starting with 'Wires', the series will continue with inductances, capacitors, resistors, tuned circuits, transformers, loudspeakers and aerials.

The explanations will relate to components as used in valve receivers, but in most cases the principles apply equally to transistor sets.

As with the 'Valves' series, the topics will be dealt with in a reasonably simple manner; and it is hoped that this may be useful for newcomers to the subject.

Wires and Wherefores

Can there really be anything interesting to say about something so elementary as a wire? Well some people (like me) will happily ramble on about any old thing, so here goes!

Wires of course are used to carry electric current. Connect the negative pole of a battery to one end, and a current of electrons will flow along the wire to the battery positive pole connected to the other end. Electrons travel surprisingly slowly along a wire, just a few millimetres per second; but, you will say, surely we get a virtually immediate current flow when a battery is connected. Yes we do, but this is because one electron biffs the next one along

and so on, in the same way as hitting the first one of a long row of billiard balls produces immediate movement of the one at the end of the row, although each individual ball in the row moves only a very short distance.

A wire will resist the flow of a crowd of electrons and obviously the thinner the wire, the greater is its resistance. Energy is expended in pushing the electrons along against the resistance, and this results in the wire getting hot. If the wire is sufficiently thin and the current sufficiently great the heat generated may actually melt the wire, an effect exploited of course in the manufacture of fuses.

But resistance is not the only property of a wire. Any flow of current will produce a magnetic field around the wire, which means that a wire will have some inductance. Furthermore, a wire and other adjacent wires or metalwork will form two electrodes of a capacitor, which means that a wire will have some capacitance.

Unless a wire is very long, or very close to other conductors or earth, its inductance and capacitance will have negligible effect at low frequencies: but at radio frequencies a wire's capacitance in particular can be significant. Capacitance to earth or to a receiver's metal chassis can shunt off radio frequencies, leading to some loss of signal; and capacitance to other wires may give rise to unwanted coupling

between different parts of a circuit, perhaps causing an amplifier to oscillate. So for this reason circuit wiring should be kept short and the different parts well separated.

The inductance and capacitance of a wire will form a tuned circuit, and this effect is sometimes made use of in very high frequency radio work where tuned circuits may take the form simply of two parallel wires adjacent to one another. Parallel wires used in this way are known as 'lecher' lines; but in case you think this is introducing a livelier note into our discussion, I have to tell you that it is nothing to do with randy men!

As a final point it should be noted that the resistance of a wire at radio frequencies is higher than that at low frequencies or DC. This is because, at radio frequencies, magnetic fields surrounding the wire force the electron flow into just the outer surface, a phenomenon known as 'skin effect'. The greater RF resistance leads to larger losses, and a partial solution is to wind tuning coils with thick wire having a greater surface area. A better solution is 'litzendraht' - from the German meaning 'braided or stranded wire' - usually shortened to 'litz wire' in English. Litz wire consists of many fine strands twisted together, but enamel insulated from one another, giving a much greater total surface area, and hence lower RF resistance, than a single conductor of the same overall diameter.

A visit to the National Vintage Communications Fair, December '95 at the National Exhibition Centre

by Nicholas Odell

Approaching the N.E.C. on the M6, the signs become larger, anticipation heightens, the countdown is on for the meeting of the National Vintage Communications Fair at a spectacular venue. Walking towards the N.E.C. complex from the car, and committing to memory the number of our car park, the realisation dawns that the Exhibition Centre is the size of a town - with its own bus service, train station and even the local airport. Its impact provokes a refreshing and reminiscent sense of the extravagant 80's still thriving here, in the less secure 90's.

Thousands of young women dressed in designer clothes streamed in from all directions towards the main entrance. Could they all really be Vintage Wireless enthusiasts? Could this be evidence of a swing towards greater youthful interest in things wireless? However, around the corner, illuminated banners shattered the illusion; they proclaimed 'BBC Clothes Show - Live'. Feeling less comfortable amongst the trendy crowds, we spotted an elderly, greying gentleman asking directions. We followed him, assuming that his interests were other than designer labels.

There followed a long trek - up staircases, along moving walkways, and always, the youthful horde in designer clothes travelling in the opposite direction. Nearing our destination and surrounded by enthusiasts for racing pigeons, caged birds and rabbits, a familiar queue was sighted, a flash-back to Harpenden's orderly queues with their quiet chatter. As the queue shortened surprisingly quickly, the adrenaline started to flow. Tickets were bought, first sightings made through glass doors and windows, of rows and rows of colourful varied radios; a candy-coloured Catalin, iconoclastic round Ekcos, stylish Zeniths adorning the stalls. Jukeboxes illuminated and in action, encouraged no jiving in their vicini-

ty, but rather drew studious expressions. Were the observers peering through the coloured glass into their past - or simply looking for the serial number? Others rummaged through boxes brimming with components, looking for that elusive PX4; and if you'd given up the search for a green bakelite Ekco, why not settle for a green bakelite telephone, or perhaps yellow, red or blue?

The Fair demonstrated that an interest in Vintage Wireless is far more than mere nostalgia. Here was an assembly of collectibles - rare survivors from a period characterised by adventurous, colourful and enthusiastic design, features lost in the scratchy black and white film and photographic record we occasionally see. Surely, no surprise therefore that aficionados travel from all over the world to attend the National Vintage Communications Fair. I'm hooked.



A woman with short, dark hair is shown in profile, looking towards the left. She is wearing a dark, long-sleeved top. In the foreground, an open vintage portable radio sits on a table. The radio has a light-colored, possibly wood-grain or painted, top and a dark, mesh-covered speaker area. A hand is visible, adjusting a dial on the radio's face. To the left of the radio is a rectangular box, likely the carrying case, with some faint markings. The background is dark and out of focus, suggesting an indoor setting with some decorative elements like a vase of flowers.

Personal portables

By David Read
Photography by Mark Groep

In this update of his Bulletin article 8 years ago, David Read traces the development of miniature valve portables

I was watching a school cricket match on a warm summers day in 1950, but my mind was not on cricket or even what to do in the summer holidays just around the corner. Near me the son of rich parents was sitting on the grass and listening to his Marconiphone P20B 'personal' receiver... A year or two earlier, I had acquired a one valve Gecophone in exchange for a Mars bar, but this was serious... Modern technology not an antique, and costing much more than a weeks' wages for the average working man. On two shillings and sixpence a week pocket money I had no chance of ever owning such an object and was consumed with envy.

Reflecting on that event over 40 years ago, I can now place a few things in perspective, arrange the progress of technology, and see where that miniature valve personal receiver sits in the continuous time scale of development and history. Dreaming of owning a miniature valve portable in 1950 I did not know that William Shockley leading a team at the Bell Laboratories had already invented the point contact transistor two years earlier. Or that I would be able to buy a transistor radio before the decade changed, or



Pictures top left to right: Ekco BP 321- 1957, Pye M78F- 1948, Ekco P63 Princess- 1948. Second row: Decca Deccette- 1953 with mains unit, Championette- 1948, RCA 54B2- 1946. Third row: Ever ready B1- 1947, RCA B411- 1951, Zenith 4E41- miniature battery mains.

that by the mid 1960s I would myself be working in a company in the forefront of developing integrated circuits, putting on a wafer what Loewe in Germany had put into a large vacuum tube in the 1920's with their 3NF valve, now recognised as the world's first integrated circuit. Least of all did I realise that my beautifully made but primitive Gecophone, so cheaply acquired, would become so much more valuable than that 'personal' receiver.

For me it is this unending development story, with its technology milestones, which provides meaning and sense to the collector and historian of radio. The P20B I so much envied as a schoolboy in the 50's was not of course the first portable, only the first really small one I had seen. Portables were in existence at the very start of public broadcasting

in the form of a few large receivers more properly described as 'transportables'. But, with wet accumulators large enough to provide comfortably in excess of 3 amps for several hours, enough single dry cells in a battery to provide 100 volts of HT, to say nothing of some models with integral folded metal horn speakers, one cannot imagine these portables being carried anywhere except on the running board of a Bentley!

By the late 1920s two developments had occurred which enabled a practical solution to the problem of portability, at least in terms of weight if not size. These were the moving-iron paper cone speaker, and low consumption two volt valves with oxide coated filaments of the HL and PM variety. Sets of this period, often in suitcase form, standardised into



Pictures top left to right: Emerson 640- 1950, Romac 'Convertible' 136- 1948 (Romac 'Personals' series 106- 126- 136, first released 1946, Vidor CN 429- 1953. Second row: Marconiphone P17B- 1947, Ever Ready N- 1951, RCA BP10- 1951. Third row: Braun 100B 154- 1954, Vidor Vagabond- 1957, Harpers GK 301 (from Japan).

a five triode TRF format and then, using screened grid tetrodes for HF amplification, continued into the late 1930's. The so-called unspillable jelly accumulators were a notorious cause of acid damage as collectors of such sets know only too well. Nevertheless, these sets designed to look like luggage sold well and proved that the market for portables actually existed.

Improvements in valve technology during the 30's, particularly with respect to multiple and complex electrode assemblies, gave rise to some rather more efficient portables with fewer valves and somewhat smaller cases; but at the outbreak of war in 1939, the situation in the UK was one of design chaos. Radio receivers, depending on the various trade affiliations for valves, were manufactured using old fashioned B4, B5 and B7, side contact, Mazda Octal, and International Octal line-ups. Even the old suitcase cabinet was still being made by Burgoyne, McMichael and Beethoven, with Roberts offering a smaller version with their M4B.

In spite of the proliferation of small radio cabinets in the USA during this

period, there was little apparent demand to miniaturise the radio in the UK. Indeed the American example did not really represent miniaturisation so much as putting too many components of conventional size into too little space, often resulting in over-heating with sad effects on waxed capacitors, rubber and composition materials, and so on.

In fact, the main incentive to miniaturise electronic applications was concerned with deaf-aids rather than radios. The pioneer work with respect to vacuum tubes was carried out by Hivac who from 1935 onwards developed methods both for sealing lead-out wires without the conventional stem pinch, and for constructing pentode electrode assemblies within a 10mm diameter bulb. Outside the British Valve Makers Association they carved out a niche unique in the industry. Similar developments in the USA led to miniature valves designed specifically for radio applications being announced by RCA late in 1939. With 'glass button' bases and lead-out wires stiff enough for plugging directly into a valve socket, RCA's announcement was a major milestone. The new 1.4 volt, 0.05 amp valves measured only 9mm by 54mm, had 7 pin bases arranged in the now familiar B7G configuration,



Pictures top left to right: Marconiphone P20B- 1948, Hermes Tourist- 1947, Emerson 432- 1941, Sonora Candid- 1940. Second row: Bush MB60- 1957, P.A.M Circa 1947, Ever Ready B2- 1947. Third row: Motorola HS 183, ZRK Russian miniature valve portable, Ever Ready Sky Captain- 1961, one of the last valve battery portables made.

and were available in production quantities by early 1940.

The stage was now set for something really new in domestic radios, something that was actually small rather than pretending to be small, something that looked like a handbag, lunchbox or attaché case, but in reality was a superhet with integral speaker and batteries. Unfortunately the stage was also set for World War II which had already brought the British domestic industry to a halt, and when America entered the war after Pearl Harbor in 1941 their domestic industry also ceased. Unlike the situation in England however, a great many portables had already been snapped up by the market place and the first truly 'personal' radio the RCA BP10 had established in a single step the practical limit in miniaturising a 4 valve superhet with integral frame aerial in the lid, speaker, and batteries. It measured 8.75" by 3.6" by 3" and turned on automatically when the lid was opened. The entire RCA BP10 personal receiver was actually smaller than the battery compartment needed for the British suitcase portable and indeed often smaller than the HT battery itself. This underlines the other crucial development needed for miniaturisation, namely the layer battery for HT, also developed in the USA, in which the

fifty or more traditional zinc/carbon cells connected in series were replaced with a compact and integral construction of solid layers. Where LT was concerned, a single torch cell sufficed in place of an accumulator since the four 0.05 amp filaments consumed in total less than a conventional torch bulb. These developments took place in the USA as Britain entered the war in Europe and whilst the new B7G valves were available as imports, the radio industry was entirely diverted to support the war effort; thus with the exception of the 'civilian' receiver made to a common standard by manufacturers no new radios were available to the public until the war was over. Outside the domestic field, however, collectors will be aware of the MCR1 spy communications receiver which used these new valves.

The end of the war brought about the re-introduction of the BP10 and similar products in the USA whilst the first 'personal' portable of British manufacture was a handbag radio, the ROMAC 106 described in *Wireless World* in November 1946. Measuring 9.5" by 5.25" by 2" and with the frame aerial embedded in its shoulder strap it immediately established a different shape and style. A rival 'personal' in terms of



Pictures top left to right: Emerson 558- 1947, Braun Exporter- 1954, Admiral- 1941 miniature battery / mains portable. Second row: AWA Radiola- early Australian made 'personal' set, Burgoyne playboy- 1947.

release date was the VIDOR 353. This was similar in size to the BP10 but was made of black bakelite with a white urea formaldehyde panel. It had a long wave loop antenna embedded in the back cover as well as the usual one for medium wave in the lid. With its Egyptian art deco panel design and very high quality of construction it is perhaps the most pleasing of sets in this category. It was priced at nearly £21 including purchase tax, about 4 times the then average weekly wage. Next year, when Radiolympia opened its doors in October 1947 the Burgoyne Playboy and the Marconiphone P17B were shown in addition to the ROMAC and the VIDOR. Future releases followed with the Pye M78F, the Marconiphone P20B of boyhood memories, the Championette, and the Ekco Princess of handbag shape designed by Welles-Coates. The age of the 'personal' receiver had dawned in England.

Battery consumption, particularly LT, was inevitably a problem with these small receivers, and before long the typical DK 91, DF 91, DAF 91 and

DL 92 valve line-up with 0.05 filaments was superseded by the '96' line-up in which the filaments consumed only 0.025 of an Amp. This was an astonishing achievement and it is too easy to be blasé about it today when almost everything is taken for granted. In May 1953, Decca released the Deccette which contained the concluding milestone for this article on portable valve receivers. The Wireless and Electrical Trader described it as 'an unconventional internal aerial comprising two coils wound on an iron-dust rod'. Thereafter, the ferrite rod internal aerial became standard on most receivers as a more compact and sensitive replacement for the loop antenna.

For the Bulletin cover we have chosen to show the Motorola 49L-13Q 'lunchbox' and the VIDOR 353 with a large selection of contemporary American and British sets shown and described in the illustrations accompanying the text. Page 20 shows a contemporary Marconiphone display advertisement for the P20B for placing in dealers' windows.

Ampère continued

enlighten me to translate. The description tablet, in English and French mentions two models providing 'Music for all the family, including opera. 1925'. Both of these models are a first sighting for me; most encouraging to see them in such safe hands for many more years of preservation.

The object in the electricity section which amused me most was a device for making electricity from steam. The C.G.B. we're doing this in Ipswich until a few years ago but not as neatly as this model. Imagine Stephenson's Rocket with the wheels removed, a large barrel body and a five foot funnel topped by a

solid brass ferrule. The steam passed via vanes, rotated under pressure to drive the dynamo. What voltage, or even how many amps it expelled is not disclosed!

Another section deals with the more modern uses of electricity, motors and generators of all sizes, even an attempt at a small one-seater car. (There is a much better one in the nearby motor museum.)

The excellent Audiovisual illustrates the life of Ampère and the history of electricity. The commentary is in French of course, but easy to follow, most of the terminology being

international.

If you are in France and have the wish to explore the roots of electricity take the Autoroute out of the car park at Calais, follow l'Autoroute des Anglais until it becomes A.6 to Lyon. Before Lyon take the Sortie la Gardee Limonest and follow the D73-D92-D73 to Poleymieux on the road to Neuville sur Soane. The leaflet says, open each day except Monday, but just to be sure the telephone no. is 78.91.90.77. It could be a Saint's day or some other very good French reason for taking a day off.

The Burndept Ethophone V

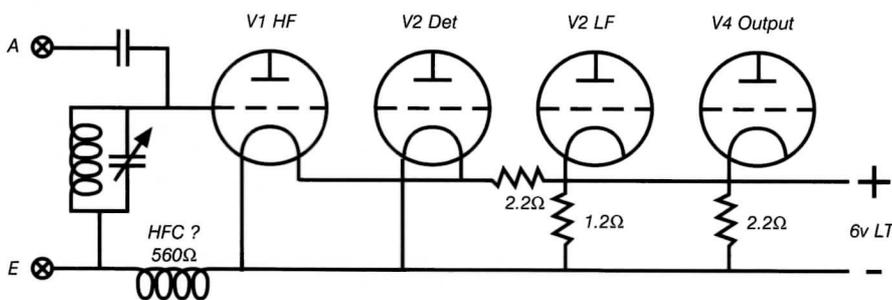
by Pat Leggatt

A year or two ago I acquired the original 1923 version of the Burndept Ethophone Five. It is the Mark I, although not actually labelled as such since presumably it was not then envisaged that later variations, Marks II, III, IV and V would follow. It is a nice-looking set in a



handsome oak cabinet, with all the brass terminals for batteries, loudspeaker and headphones on the front panel. The circuit is reasonably conventional: four triodes configured as tuned HF, detector with reaction, and two transformer-coupled LF stages. High/Low-power switching is provided to cut out the second LF stage when not required, thereby economising on battery and valve life.

But there are one or two points about the circuit which are a little puzzling; and I have sketched a skeleton diagram to illustrate these. First, what is the purpose of the wire-



wound component between the Earth terminal and the LT negative line? It consists of many turns of fine wire on a wooden former, with DC resistance of 560 ohms. Is it intended simply as a resistor, or is it an HF choke? Either way I can't understand what it is there for.

Other puzzling features are the filament series resistors. These take the form of short lengths of spiral resistance wire, as if cut from an electric fire element. One might have expected that Burndept would have used their own form of filament resistors with a Miniature Edison Screw fitting, torch-bulb style; and indeed there are holes in the baseboard where these could have been fitted. But there is no sign of screw holes or other fixings for these holders, so it could be that they were never fitted and that the spiral elements are original.

Unfortunately I don't know the original valve line-up for the Mark I, but some sort of clue is given by the values of the filament series resistors. Assuming my set was not one of the first off the line in 1923, but was actually made in 1924, the output valve V4 could by then have been a Marconi/Osram LS5 (4.5 volts at 0.8 amps) for which a 2.2 ohm dropper would be nearly correct. V3 could be a DE5 (5-6 volts at 0.25 amps) for which a 1.2 ohm dropper would be suitable.

But the 2.2 ohm dropper feeding V1 and V2 in parallel is difficult to understand: I can identify no valve available by 1924 which could be used in the V1 and V2 positions as currently wired. But in any case one doubts whether Burndept would have been guilty of such bad practice as feeding two valve filaments in parallel via a dropping resistor: if one valve burns out or is removed then the other will be badly overrun and burn out too!

So perhaps V1 and V2 were originally fitted as two Marconi/Osram DE3's (2.8 volts at 0.06 amps each) in series across the 6 volt supply, with a small series resistor to give some safety margin against an over-enthusiastic accumulator. This idea may be supported by the fact that the wiring to V1 and V2 filaments in my set has been modified, as evidenced by the wires being sleeved in systoflex whereas the rest of the original wiring is bare.

As a final point of doubt, both LF transformers have been replaced with later types, often necessary of course with sets of this age. But again the wiring to the transformer feeding the first LF stage is in systoflex, and I wonder if as originally manufactured the detector might have been resistance-capacity coupled to the first LF: this indeed was the arrangement in the Ethophone V Mark IV.

In fact I have the set working nicely with 2 volt valves from a 2 volt supply, where the drop across the filament resistors is negligible. But I would very much like to know what an original Mark I Ethophone V was like. Can anyone tell me what the circuit should be, what valves and filament resistors were fitted, and what the 'HF choke' by the Earth terminal is for. I would be most grateful for any advice.

The Cabinet refurbishment service

by Harold Page

I joined the family firm in 1947 after service in the R.A.F. as an Air Navigator. Like all 'new brooms' I wanted to reorganise the procedures and image of the Company. The war years had seen a scraping existence, living on repairs and selling one's meagre allocation of new radios, only a dozen or so a year.

One of my bright ideas was to build up the prestige of our Service Department. Our multiple competitors did not even have a Service Department, so I felt that we should doll it up and make a feature of it. Hitherto customer's sets, when repaired, were returned to them in the Morris van, and in order to avoid contact damage, were wedged in with an old army blanket. The new order changed all this. Each set (radio- no T.V. at that time) upon arrival had the fluff and dust sucked out by an old vacuum cleaner motor with its exhaust going out into the street. Nobody complained. After the repair the cabinet was polished and any scratches filled in by a mixture of creosote and linseed oil. (Page patent pending.)

A series of green baize covers, stencilled F.A.PAGE Ltd. SERVICE DEPT., were made by my grandfather who was a Master Tailor. Hey Presto, the Page Silver Service was launched.

It had to happen. The ever-eager Bert was striding up the customer's front drive, name bearing green cover to the fore, when he stubbed his toe on a stone and down went the newly repaired radio leaving Bert holding on to the baize cover. Now sometimes one's Guardian Angel is at hand - the customer was out!

The victim was rushed back to the workshop; it still worked, but was badly scored on one side. Bert's pal was a French polisher, so he stripped and 'did' the offending side, so well in fact, that it made the rest of the cabinet look shabby. The polisher had earned himself five bob but the matter had not been completely remedied. Overnight Bert had another of his flashes of ingenuity. He telephoned the customer to ask if he would like to have the cabinet, a fine one he assured him, refurbished for a special price of half a guinea-10/6 (52.5p today)

He agreed, the polisher made himself a bonus, and everybody was happy. I didn't hear what the engineers said about my baize covers, but a good employer should always be just a little deaf, and sometimes a little blind too.

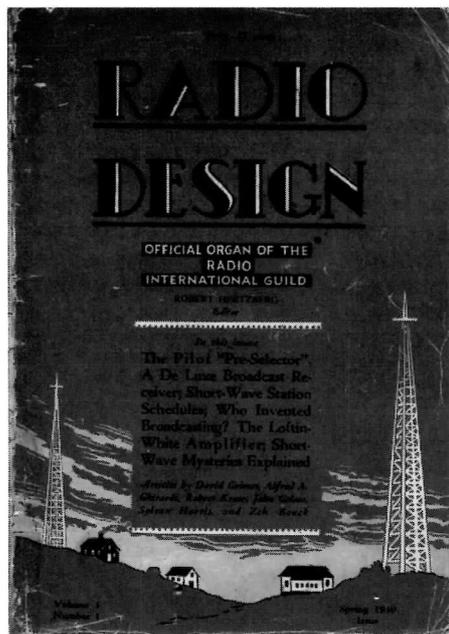
The pioneering days of radio in the USA around 1930 were sometimes far from dull. I hope that these extracts from 'Radio Design' (Pilot Radio's house magazine) will kindle some interest in pre-super-hot radio (not that they represent my main obsession, but I feel and perhaps others will, that Radio pioneers seemed to have a rather good time occasionally!)

John Watkins

Rolling down to Rio - 1930 style

by E. Manuel

ON THE twenty-fifth of March the flying laboratory of the Pilot Radio and Tube Corporation



'Radio Design' the house magazine of Pilot radio, from which this article has been taken.

will take off from Roosevelt Field, Mineola, Long Island, on the first commercial good-will flight to South America. Starting from New York City, this flying symbol of business amity will wing its way to Rio de Janeiro, eleven thousand miles distant.

Several records will be established by this flight. It will be the longest flight ever made by any business organisation in its own plane in the furtherance of the interest of its customers. It will be the first commercial good-will flight of any length ever made. It will be the first commercial good-will flight from North to South America and it will be the first time that any standard type of plane has made the complete journey from New York to Rio over the contemplated and somewhat hazardous route.

The purposes of the trip are threefold: It is hoped primarily to promote commercial good-will between the two great continents of the Western Hemisphere- the vast manufacturing country of the north and the almost unlimited agricultural land of the south, countries ideally complementary.

Complete equipment carried

The flying laboratory will carry complete radio transmitting and receiving equipment, and it is

believed that the flight will demonstrate beyond argument the utility of such apparatus on long distance airplane flights. By altering the route slightly, in passing down the west coast of South America, it is expected to establish a new airway particularly adapted to the requirements of land planes. The pilot of

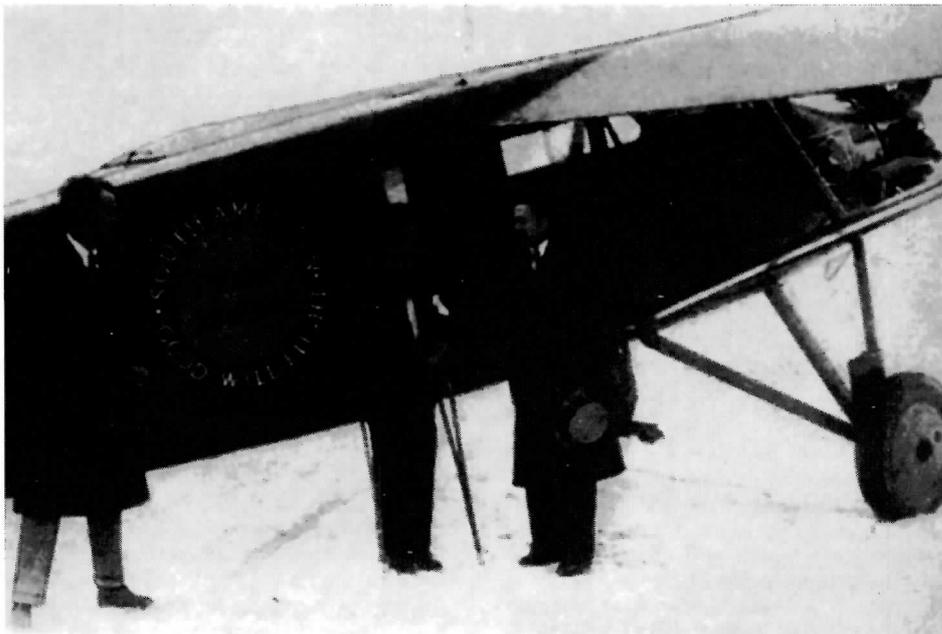
under his direction, and he has accompanied the Stinson J-6 monoplane on all of its long flights.

The route

The air-lane covered in the complete journey to South America and return will be twenty-two thousand miles long, and with the contemplated stop-overs will take between two and three months.

Leaving New York with letters from Mayor Walker to the heads of South American municipalities, the first stop will be made in Washington, D.C., where messages will be picked up from President Hoover and the Pan-American Union, carrying further words of

the plane has spent several months mapping out the course.



Mr. Manuel, general export manager of the Pilot company, is shown at the right, shaking hands with Mr. Bouck, while Mr. Alexander looks on. Mr. Manuel sailed from New York for Rio de Janeiro early in February, so as to be in South America to meet the fliers on their arrival there.

The crew

A crew of two will be carried in the plane. The pilot will be William H. (better known as Bill) Alexander, a veteran with 7,000 hours flying since his first 200 hours built up in the R.F.C. during the World War. In the course of his flying time, Alexander was a lieutenant commander with the U. S. Navy, in charge of flying instruction at Pensacola, Florida. He is one of the best known mail and transport pilots in the game. He holds F.A.I. Licence number 1, issued in 1911; a sporting license, and the Department of Commerce transport and mechanic's licenses.

Zeh Bouck will accompany Alexander as co-pilot navigator and radio operator. Mr. Bouck is well known to the readers of RADIO DESIGN, and needs little additional introduction to them. Mr. Bouck has been closely identified with radio broadcasting since its inception, as a writer, engineer, editor and radio operator. The special airplane transmitter and receiver carried on the flying laboratory has been designed by him. Aside from his radio activities, Bouck has been associated with aeronautics for some years. He is an experienced navigator and the editor of 'Aero News magazine'. As engineer in charge of aeronautics with the Pilot Radio Laboratories, the activities of the flying laboratory have been

commercial and general good will to the southern continent. The plane will then proceed to Atlanta, Georgia, and Miami, Florida. A ninety mile over-water hop takes the good will flight to Havana. The next leg of the journey is another over water hop to Mexico, following the coast up to Vera Cruz, and then inland to Mexico City.

After a brief stay in the Mexican capitol, the nose of the plane will again be headed south for Guatemala City. Re-fueling here, the flight proceeds to Managua in Nicaragua and Panama in the Canal Zone.

The most hazardous leg of the journey now lies before the aviators- from Panama to Buena Venture in Colombia and Guayaquil in Ecuador- twelve hundred miles of cliff bordered coast, with impassable mountains on the left.

Crossing the next international border brings the fliers into Peru, with stops at Talara, Trujillo, Lima and Arica. Anti-fogasta, Chile, is not far away, and then the capital, Santiago. The next leg of the journey is the shortest hop in the flight, but necessitates crossing the Andes at an altitude of twenty thousand feet to Mendoza in the Argentine.

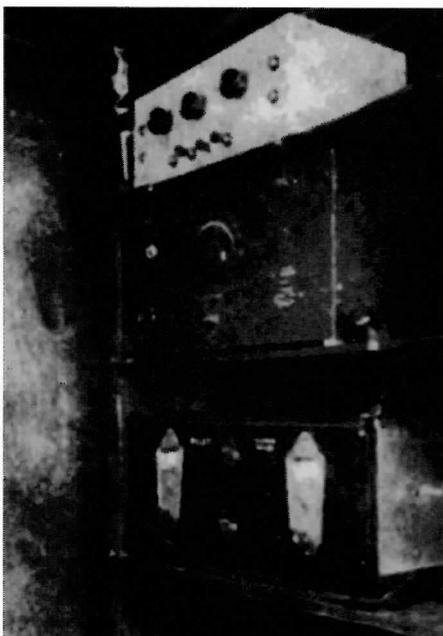
It is planned to arrive at Buenos Aires the first

day of May, with a stop over of one week during the radio show there. The flight will continue to Montevideo and San Paola, and then to Rio de Janeiro in Brazil, and follow the coast north as far as Victoria and Natal.

The exact course of the return flight has not been decided upon at this writing, and its selection will be determined largely by the difficulties of the southern flight.

The radio apparatus

The radio transmitter and receiver have been designed for airplane purposes. The transmitter consists of two 210 type tubes, especially evacuated by Eveready Raytheon to withstand high plate voltages. The plate and



The radio equipment in the rear cabin of the rear cabin of the plane. At the bottom is a 'Super-Wasp' receiver; above it is the transmitter.

filament potentials will be supplied by a dynamotor and a storage battery, respectively. The storage battery will also operate the dynamotor, and will be charged continuously

in flight by a wind-driven generator. This arrangement permits emergency transmission from the ground. A trailing wire antenna will be used for general transmitting and receiving purposes. The transmitter will operate on wave lengths in the neighbourhood of forty meters for communication with amateurs and the Pan-American airway stations along the route. It is expected that the good will flight will maintain consistent communication with North America throughout the tour via amateur radio. A six hundred meter wavelength will also be available for distress purposes.

'Super Wasp' used

The receiver is a redesigned A.C. 'Super-



The size of the Pilot plane can be judged from this picture, which shows six-foot Mr. Alexander sitting on a wing strut.

Wasp' operated from batteries. A.C. tubes are used to reduce microphonics. The receiver will be supplied with plug-in coils covering the amateur and American broadcast bands, the

600 to 800 meter ship wavelengths and the 800 to 1,100 meter aircraft bands. A loop will be available for receiving where directional effects are desired. The entire ignition system on the plane will be shielded to eliminate ignition noises, which otherwise would cause considerable interference on a high sensitivity receiver of the type employed.

Communication will be in International Morse code, in both English and Spanish. I. C. W. will be used on the plane.

Flying equipment

The plane will be completely fitted out for a long distance flight. With the co-operation of the South American governments, it is understood that special permission will be granted to carry photographic equipment, both still and movie cameras. Among other equipment will be Irwin airchutes, revolvers, pistols and rifles, ammunition, emergency food rations, medical supplies, plenty of quinine, water, extra oil, air mattresses, pajamas, chewing gum, tobacco, fruit, a wind drift indicator, two compasses, two chronometer watches and three wrist watches, and a Battenberg disk.

The plane ordinarily will carry a twelve hour supply of gas. However, on particularly long hops, additional gas will be carried in the cabin, and transferred to the main wing tank by means of a wobble pump. Oil can be replenished, while in the air, by an oil pipe leading to the crank-case.

The first commercial good-will flight to South America has been made possible by the hearty cooperation of many organisations interested in the vast possibilities of Pan-American commerce. The Richfield Oil Company of New York will ship Richfield gasoline and Richlube lubricating products to all stopping places along the route. The National Carbon Company, through its subsidiary, Eveready-Raytheon, is furnishing vacuum tubes and 'B' batteries. Among the other cooperating organisations are Aero News magazine, the Irving Parachute Company and the Stinson Aircraft Corporation.

The Patience of a Saint

by John Wickham

I refer to my wife who is ever patient in humping me around in my wheelchair (no I'm not after sympathy, just praising a wonderful woman). She takes interest in my hobby and we both look at old black-and-white movies to see what radios are used in them. It's getting to be quite a habit.

I recently wrote about my 40 year quest for a lacquered Pye Black Box which now takes pride of place, but I also wanted a 1950's jukebox.

Living in a tiny, first floor flat with my only means of entry being a stair lift could prove to be problematic concerning jukeboxes. I must also point out that all other space is taken up by 'wireless' from the 20's to the 50's.

I found a 'Rock-Ola Tempo II', which was the anniversary edition of the company, unrestored but in good working order. I even liked the coin-slot marks made from people tapping coins whilst pondering which record to play.

Space is the main problem: the jukebox could go in the second bedroom even though it's already a combination radio museum / piano room / doll's house room and also contains a massive freezer. Not to mention the 1920

Kesslegram floor-standing mahogany gramophone. I suppose the freezer could go and the fridge in the kitchen could be replaced by a combination fridge / freezer, anyway my wife will love the jukebox.

The Rock-Ola has to enter the flat in a dismantled state now that free space has been achieved. "No darling, I promise not to buy any more radios or records or anything"- those promises run off the tongue so well. I have to reduce the wireless collection as promised, but can't get the price I want, so a stall at Birmingham will have to do (don't forget Harpenden!- Editor).

It doesn't help that our musical tastes are miles apart- I'm a fifties freak and my wife likes Richard

Clayderman and Classical music. They don't mix on a jukebox. I originally wanted a Wurlitzer 78 rpm jukebox but weight, size and cost proved to be prohibitive. Never mind, by Saturday the 6th of January I will have all the money in the world- if I win the lottery! Just think about the house I could buy, the radios, televisions and jukeboxes too. Ah well, anyone can dream.

I should point out that my jukebox came from Norwich, along with most of my radios. It has been a good hunting ground for me. My wife is a Norwich lass and many of my ancestors hark from there. I came back to the UK for a year's break in the mid-seventies. It's been a long year.

The Changing Nature of Oliver Lodge's Wireless Experiments at Oxford in 1894

by Berthold G. Bosch

In his paper "The use of the relay with the coherer" (Bull. BVWS, vol. 20, no. 6) Anthony Constable recently showed how even an authority on science history like Hugh Aitken can be misled. In his highly appreciated monograph 'Syntony and Spark' [1] Aitken credits Oliver Lodge with being the first person to have demonstrated Hertzian wave telegraphy. Meanwhile this verdict has widely been accepted as a quite recent book again shows [2]. Aitken's conclusion concerning the priority relies not least on the testimony of John A. Fleming as given by him in the 1937 Marconi Memorial Lecture, and on a wrong circuit diagram of Lodge's receiving apparatus which can be traced back, as A. Constable pointed out, to W.H. Eccles' book "Wireless" of 1933 [3]; see Figure. Anthony Constable asked "Why did Eccles illustrate Lodge's work with such an obviously incorrect diagram?... So dear old Eccles, a Lodgean through and through, told us that Lodge did something which the great man himself always claimed he did not do!"

Now, the answer to Anthony Constable's question, and to some other related ones, can be derived from the historical events Sungook Hong recently described in a well-documented article entitled 'Marconi and the Maxwellians: The origins of wireless telegraphy revisited' [4]. S. Hong reconsidered the issue which Silvanus.P. Thompson in The Times of July 15, 1902, phrased as: "The point is which of the two was the first to send a wireless telegram? Was it Lodge in 1894 or Marconi in 1896?"

Lodge's Demonstration in 1894

Concerning Lodge, Thompson referred to the important demonstration by O. Lodge, as also noted by Constable, before the British Association at its annual meeting at Oxford University on August 14, 1894. Already on June 1 of that year Lodge had delivered the Hertz Memorial Lecture at the Royal Institution in London where he demonstrated reflection, refraction, and polarisation of the Hertzian waves, and further explained the behaviour of the human eye in terms of an analogy with the coherer. The latter physiological topic was a major research activity of Lodge; see e. g. [5]. In Oxford, at a joint session of the Physics and the Physiology sections of the Association, Lodge split this lecture into two parts, with the first on 'Experiments illustrating Clerk Maxwell's theory of light' and the second one on 'An electrical theory of vision'. Both the London and the Oxford lectures were supported by experiments showing Hertzian wave transmission through space. At Oxford a Branley coherer as well as a (more sensitive but less stable) single-point 'coherer' devised by Lodge himself were employed on the receiving side. For the required tapping of the Branley coherer Lodge used a clockwork apparatus. The Oxford lectures were a great success but, as again S. Hong [4] points out, there was not the slightest hint of telegraphic

signals, of 'dots and dashes'. Lodge's purpose was to investigate the relation between optics and electromagnetism, between light and electromagnetic waves, and in particular between optical receptors and electromagnetic ones. Reports on the meeting as published in the scientific press (e.g. Nature, Electrician), and in The Times focussed on the physiological aspect of the demonstration.

Maxwellians versus Practicians

Since about 1886 there had been a strong controversy between the 'Maxwellians' or 'Theoreticians' (in particular the academics O. Lodge, O. Heaviside, S.P. Thompson, and G.F. FitzGerald) and the 'Practicians' (primarily W.H. Preece of the British Post Office): see [6]. As for Lodge, he had as a young student decided to embark on work aimed at producing and detecting those electric waves predicted by Maxwell [1]. The struggle heated up in 1896 by G. Marconi's arrival in England and his joining Preece's party. A climax was reached when in July of 1897 Marconi's all-embracing Patent no. 12,039 was granted. Already the year before, on Sept. 28, 1896, FitzGerald in a letter to Heaviside had expressed the feeling of the Maxwellians: "On the last day but one Preece surprised us all by saying that he had taken up an Italian adventurer who had done no more than Lodge & others had done in observing Hertzian radiations at a distance. Many of us were very indignant at this overlooking of British work for an Italian manufacturer. Science 'made in Germany' we are accustomed to but 'made in Italy' by an unknown firm was too bad" (IEE Heaviside Collection). Still worse Lodge's patent application on wireless telegraphy, filed in May of 1897, was finally reduced to only the principle of "syntony" i. e. to circuit tuning, albeit an important feature by itself.

'Constructing Lodge's Priority'

The Marconi patent led the Maxwellians, in particular S.P. Thompson, to constructing Lodge's priority, as the historian S. Hong puts it. A Maxwell-Hertz-Marconi genealogy was not acceptable to them. Let me sketch in a very condensed way this 'construction' as described by Hong at length [4].

In a lecture on 'Telegraphy across Space', held at the Royal Society of Arts on March 30, 1898, Thompson claimed that Lodge in 1894 transmitted *telegraphic signals* to a distance and made *communication* between parts of the building; see also [7]. A similar statement by Thompson was published in 1898 in the Electrical Review [8]. In April of 1902 Thompson attacked Marconi in the Saturday Review [9] and stated that "the original inventor of the wireless telegraphy" is "Professor Oliver Lodge". In 1906 the issue came up again at the International Congress on Wireless Telegraphy. Thompson there repeated his claim of Lodge's priority, which caused Ambrose Fleming to forcefully object by stating: "But there (1894 in Oxford) was not a single trace of any suggestion of application to telegraphy in his lecture and in the reprint of it" [10]. A similar statement is found in Fleming's voluminous book "The Principles of Electric Wave Telegraphy and Telephony" (London, 1906). And again Fleming refuted Lodge's 1894 telegraphy in his article 'Wireless Telegraphy' for the 1911 edition of

the Encyclopedia Britannica.

Oliver Lodge himself did not put forward the priority claim for a long time. Only after Thompson's death in 1916 did Lodge take Thompson's role in emphasizing a telegraphic nature of the 1894 experiments. In his book 'Talks on Wireless' (London 1925) Lodge recalled "transmitting signals in the Morse code... through a relay by operating an ordinary Morse tape instrument... In August 1894 I exhibited this method of signalling ... in Oxford." And in 1926 Lodge came even more to the point by writing about his lecture in 1894: "The sending instrument was... set in action by a Morse key... The receiving apparatus was a filing tube in a copper head, in circuit with a battery, actuating either a Morse recorder on a tape, or, for better demonstration, a Kelvin marine galvanometer... When the key was only momentarily depressed, a short series of waves was emitted, and the spot of light then suffered a momentary deflection. These long and short signals obviously corresponded to the dashes and dots of the Morse code; and thus it was easy to demonstrate the signalling of some letters of the alphabet, so that they could be read by any telegraphist in the audience..." [11]. This description of the 1894 event became Lodge's standard recollection until his death in 1940, reiterated e.g. - at the age of almost 80 - by him in the book 'Advancing Science' [12] and in his autobiography [13]. Lodge's argument and that of his supporters was then, in 1932/33, obviously taken up by W.H. Eccles and with some imagination transformed from the written and oral testimony into the receiver circuit diagram (containing a relay) reproduced on page 54 of Eccles' book [3] which was to cause such confusion.

Fleming's Change of Mind

It should be added also that J.A. Fleming, since 1931 no longer adviser to the Marconi Company, was soon irritated and misled by the Lodge tradition which meanwhile had developed. Fleming himself was in 1894 present at Lodge's lecture in London but not at that in Oxford. When Fleming in 1937 was asked to deliver the Marconi Memorial Lecture he inquired in a letter to Lodge about the exact nature of the 1894 Oxford experiments and explicitly referred to Eccles' circuit diagram he had noticed. In the answer Lodge assured him: "I did at Oxford demonstrate actual telegraphy... The deflections of the spot of light were plainly visible to the audience, and gave quick and prolonged response corresponding to the dots and dashes according to the manipulation of the key at the distant end." In contrast to his earlier conviction Fleming accepted Lodge's claim and wrote back: "It is quite clear that in 1894 you could send and receive alphabetic signals in Morse code by electric waves and did send them 180 feet or so. Marconi's idea that he was the first to do that is invalid." (Letters of August 24, 1937, and of August 26, 1937, in UCL Lodge Collection). And in the Memorial Lecture Fleming now credited Lodge with the priority.

Such is the story as convincingly told by Sungook Hong [4], put together from ample genuine source material.

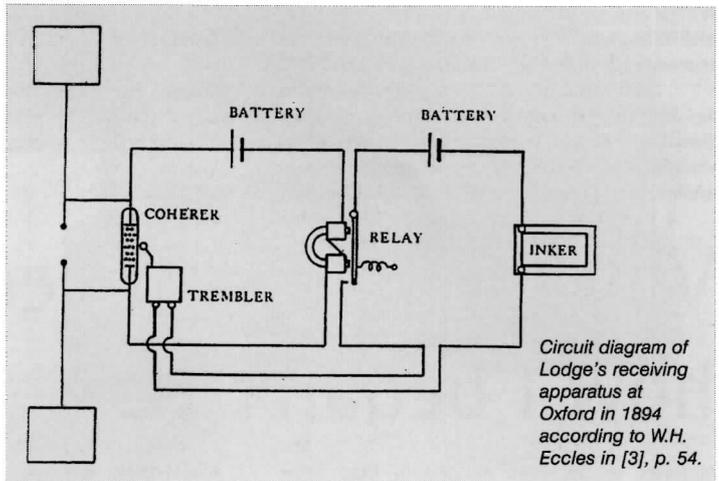
Let me close with a personal remark. The step from "merely" sending electromagnetic waves through space and detecting them, with Hertz

as the first person who achieved this in 1888 (apart from earlier experiments by Loomis, E. Thomson, A.E. Dolbear and D.E. Hughes; see e.g. [14]), to inserting a Morse key at the sending end for switching the spark discharge and thus being able to transmit information, appears reasonably obvious to me. But judging from the general discussion, just this step is supposed to make all the difference. Quite another thing, to my mind, was the feat of bridging great distances with this sort of novel signalling, a feat no doubt to be credited to Guglielmo Marconi.

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Restoring the Philco 444 by Dave Newman

Never being one to decline a challenge, I could not resist the temptation to purchase the very sorry looking Philco 444 'People's set' shown in the photo's. I checked the cabinet for cracks, correct knobs and the completeness of the 'interior'. All in a very poor condition, having been retrieved from a leaky ramshackle shed, it was however, essentially complete. Taking the set home, Mary : my wife, laughed when she saw it, but being un-deterred, a complete restoration was decided upon.

The chassis and components, wiring loom, valve holders, transformer etc. were removed. The speaker was dismantled into its component parts. A new baffle board was made. The chassis, speaker frame, IF and valve screening cans were sand blasted to remove corrosion, then re-plated and polished. The mains transformer was tested and painted. The original smoothing capacitor was cleaned out, and a modern capacitor mounted inside. The can was stuck back together, and when mounted onto the chassis, the retaining bracket covered the cut around the can. The tuning capacitor was carefully sandblasted and lubricated; new rubber gromets were made and the gong was re-fitted to the chassis. Next, the capacitors with tags mounted on the cases were cleaned out and modern capacitors fitted inside. They were then re-fitted onto the chassis. The original resistors were cleaned and re-used along with most of the original wiring loom. The wax and paper capacitors were heated in the oven for 10-12 minutes, the insides had modern capacitors placed inside. The ends were then sealed with wax and mounted in the wiring. The on-off control had to be replaced due to rust, but luckily the wavechange responded to a good clean. Both LW and MW coils were open circuit. The wires had rotted at the tags so they could be unwound a turn on the connectors. The coils were then re-sealed in wax. I replaced and rewired valveholders, tested and replaced the valves, only the rectifier was replaced. I then started on the speaker. The field winding had to be re-wound. The frame was repainted. The tears in the cone were carefully repaired with Evo-Stick and sprayed black to make tidy. I assembled the speaker and mounted it on to the baffle board. All that was left to do was to check all the wiring, and make sure all was in order.

I plugged in and switched on. The dial lamp lit and after what seemed a long time a soft hum was heard, but turning the tuning knob brought no results. Quick checks with a meter showed HT present in all the correct

places. Time to get out the Signal generator and find out what was going on. With the generator connected running at the IF frequency I could just hear a tone from the speaker. Realigning the set as per the trader service sheet made a vast improvement. Now with a 20ft aerial, weak stations on MW could just be heard, but still not good enough. I removed the IF transformer and checked the resistance of the windings- they were OK, but when I removed the can and examined the winding, all was clear. The wax that was used to hold the coils onto the wooden former had disintegrated allowing the coils to move apart and reduce the coupling. With the IF coil fixed and put back MW now worked well, but still no LW. A check with the scope revealed the LW Osc was not working, checking back revealed that a section of the wave change switch was open circuit and polishing and tensioning the contacts fixed it. The chassis now worked to the required standard.

Now the hard bit! The cabinet. Cleaning by hand soon became tedious, so I used an electric polishing mop - this worked wonders. I used polishing paste No.5 to remove small scratches. All this work was rewarded with a lovely cabinet. I looked through Mary's material bag and found some speaker fabric that was almost identical to the original. When it was re-assembled it looked as good as new, all the hard work was well rewarded. After one and a half year's work and a constant supply of refreshments and words of encouragement and patience (Thanks Mary) the project was ready for competition entry.



The BVWS Committee 1995 - 1996

From left to right: Rupert Loftus- Brigham, Carl Glover (Bulletin editor), David Read (Treasurer), Willem Hackmann (Chairman), Mike Barker (Membership secretary), Peter Bannon, Ken Tythacott (Events organiser), Dave Adams (Minutes secretary / Information officer) and Gerry Wells (technical advisor).

Ian Higginbottom was missing from the photograph as he was ill during this Committee meeting.

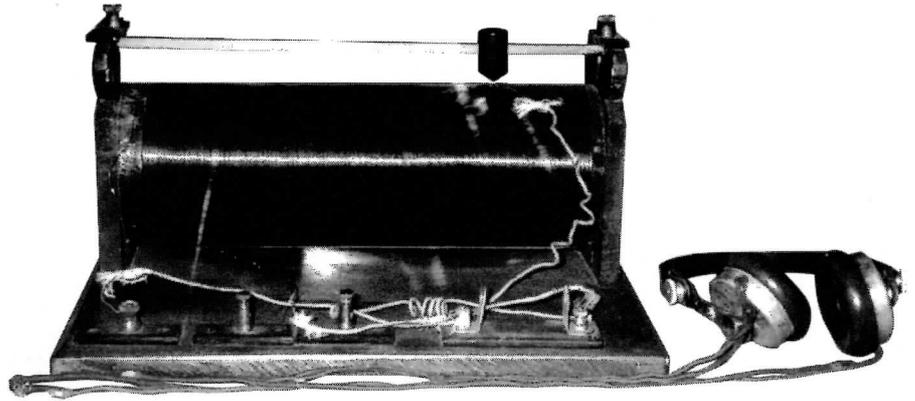
Harold Page's family have been involved in the retail section of the radio industry since 1921.

He joined the family firm after war service as an Air Navigator in the Royal Air Force.

During his 40 working years he operated an up market small group of three shops in Ipswich and Woodbridge.

A Past President of Retra, the Radio Electrical and Television Retailers Association, also their representative on the Retail Consortium.

He has visited factories in Holland, Norway, Sweden, Finland and was one of the early visitors to the Sony factory in South Wales. Made many visits to the Bang and Olufsen



Vintage Radio Collecting- how I began

by Harold Page

factories in Denmark as one of their main dealers and a director of their British Finance Company. In 1986 he won their coveted Dealer of the Year Award.

Having retired in 1987 he now has two main interests in addition to his family and grandchildren. One is his collection of over 150 vintage radios; the other touring to all parts of Europe visiting friends and family in his caravan without television or telephone but with his wife Barbara to whom he has been married for 48 years, always hoping to find yet another interesting radio for his collection.

His writings are not intended to be in-depth technical researches into circuit development, but deal in the main with the Sociological influences on the people who listened in to the various models. His long connection with the industry has built up a store of reminiscences and stories of the times.

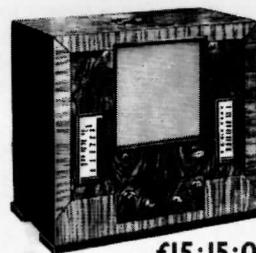
Although I did not realise it, my collecting really started in 1948, I had spent four years as a Navigator in the Royal Air Force when I joined the family business, started by my father when he came back from India after the 1914 - 1918 war.

Like all 'newcomers' I decided to clear out the rubbish from the workshop store. In the attic I found a small windmill like contraption which I thought was a Wimshurst machine. Why we had it I did not know, so out it went into the rubbish bin. Several years later I discovered what I had assumed to be a Wimshurst machine was in fact a 1930's Baird Scanner used in experimental television transmissions around 1936-37.

My folly having been realised, from then on whenever we took in anything vaguely interesting it was put into the upstairs store room.

In the post-war pre-television days we took in part exchange 1920 and 1930's radios. There was little demand for second hand sets so from time to time on Wednesday afternoons, early closing day, we would load up the Bedford van several times and take 50 or so superb HMV, Pye and other models to the incinerator.

A SELECTION OF
RADIO
RECEIVERS
TO SUIT ALL TASTES



£15.15.0

Hire Purchase Deposit 31/6.

In our opinion this Receiver is the finest value from this year's Olympia being a Superhet of concert hall tone at the remarkable figure of 15 guineas. His Master's Voice have certainly succeeded with this model in setting a standard of tone hitherto impossible in super selective

Receivers. This model has already proved our best seller. Seven Valve Superhet with automatic volume control, 22 gns. Hire Purchase Deposit 46/-.

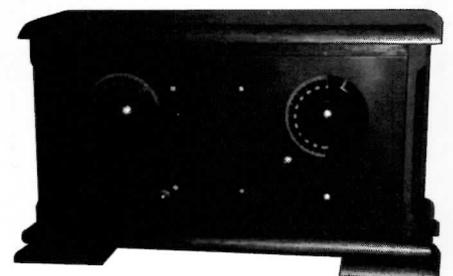
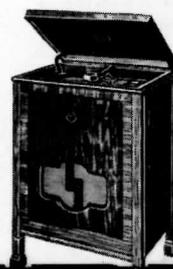
H.M.V. RADIO - GRAM

Radio chassis as above with automatic stop outside volume control for gramophone, and in beautifully finished walnut cabinet of modern design.

29 GNS.

Hire Purchase Deposit £3 1 0.

Seven Valve Superhet with automatic Record Changer, 48 gns. Hire Purchase Deposit £5.



BOBBY PAGE & CO.
16 · ST. MARGARET'S GREEN · IPSWICH
TELEPHONE 3698

It is with this sacrilege on my conscience I suppose, I have in my retirement some forty years later built up a collection from various sources during my travels. At first I limited my collecting to pre 39 and 45 models, but one has to realise that even after that date and the advent or some say, intrusion, of television, many interesting models have helped swell the collection

The family business was started as I said by my late father Frank Page and two partners Fred Boddey and Stan Keeble. This was in 1921. In 1981 I was firmly installed as Managing Director so it was decided that we should stage an exhibition to celebrate the sixtieth year of our trading in Suffolk.

Bearing in mind that we were still very much in business with two shops in Ipswich and one in Woodbridge, in no way did we want to give the impression of an old fashioned organisation looking only to the past, so the exhibition featured all the latest models from all our agencies. In one section only we advertised

there is hope and life after this desperately debilitating disease.

With the untiring help and interest of one of my managers Mike Holmes we have collected and in many cases, restored a collection which grows and grows.

I have given talks and discussions to Rotary clubs, Probuss and Round Table clubs, Women's Institute gatherings and many others. After practically every talk somebody has come forward with an interesting model from the family treasures. Many people have discovered old radios when clearing parents' or grandparent's houses recognising the item to be of interest not to be thrown away. They are pleased that their family radio will have its place in an interesting collection.

In my talks I try to create interest from the social history of radio and broadcasting by showing how cabinet designs have changed with fashion. Those interested in the technical expertise and development are well cared for

Anglian Life in Stowmarket, Suffolk: after that we were given space in the museum at Stranger's Hall in Norwich, Norfolk where they were able to provide glass display cabinets and props, making a spacious and attractive display. So well accepted was this exhibition, that its period was extended until June 1994 to visitors, many making two or more visits, coming from a very wide area. In June the display travelled to Moyes Hall museum in Bury St. Edmunds Suffolk where it remained until mid September 1994

The exhibition set out to tell the sociological story of radio, displaying models from those of home construction in the 1920's, made to order early valve sets, early production line models, pre 1939 mass produced radios with some radiograms. This period is frequently referred to as the 'Golden Age of Radio', well built sturdy models from this time are well covered in my collection. The War Time Civilian Radio covers the period of hostilities when only two models, one mains, one battery operated, were allowed to be made.

COLUMBIA
A screened grid Three Valve with good selectivity and wide range, complete with batteries.
£7 · 10 · 0
cash.
Hire Purchase Deposit £1.
Two Valve Model as above £4 · 4 · 0
Hire Purchase Deposit 10/-

COLUMBIA
An outstanding screened grid Receiver of excellent tone, having the volume of a mains set. Selectivity ample for modern conditions. Complete with all batteries.
£8 · 15 · 0
Hire Purchase Deposit £1.

Q.P.P. RADIO-GRAM BATTERY MODEL
A battery Radio Gramophone embodying the very latest Radio improvements. The Gramophone outfit is in every way equal to that of a mains set with a definite improvement in tone, and at the very low consumption of 9 m.a.
20 GNS.
Hire Purchase Deposit 2 guineas.

PYE RADIO
of Cambridge are still the leaders of Portable Radio and this Receiver, a **SIX-VALVE SUPER-HET** removes all previous difficulties of separating the foreign stations from our own programmes. The tone is a great improvement on all previous models.
Complete with all batteries £14 · 14 · 0
Hire-purchase Deposit £1 · 6 · 6
This receiver is also made for A.C. mains at £15 · 15 · 0
Pye O/B Four Valve Battery Portable £10 · 10 · 0 (in Oak cabinet) Hire Purchase Deposit 19/-

E.K.C.O.
a 5-valve Superhet of wonderful quality of outstanding value at £14 · 14 · 0 in Black and Chromium and in walnut at
£13 · 13 · 0
Hire-purchase Deposits 25/- and 27/-

ELECTRIC TORCHES AND HANDLAMPS. ROYAL EDISWAN ELECTRIC LAMPS FROM 25 WATT TO 100 WATT ALWAYS IN STOCK.

LUCAS
Electric Cycle Lamps 3/9, 5/7, 6/6 and 7/8.

C-A-V ACCUMULATORS
The 1934 Glass Cell.
2 NAG5, 24 amps. ... 9/6
2 NAG7, 36 amps. ... 12/-
2 NAG7, 48 amps. ... 14/6
Prices include first charge and acid.
Portable accumulators for all makes of sets always in stock.

HIGH TENSION BATTERIES

BETTER	POWER	T · E · C
120 volt. ... 5/8	120 volt. ... 11/-	
100 volt. ... 4/8	100 volt. ... 9/-	
60 volt. ... 2/9	60 volt. ... 5/6	

HELLESEN
108 volt. ... 12/6
99 volt. ... 11/6
60 volt. ... 7/-

HELLESEN HI-LIFE
120 volt. ... 11/-
108 volt. ... 10/-
99 volt. ... 9/-



Above: Helen Rowes, curator of Strangers Hall, Norwich with a HMV 580 Radiogram.

Left: leaflet advertising the services of Boddey, Page and Co. The family business which Harold joined after leaving the RAF in 1948.

for anybody to enter their old radio for a competition to find the oldest radio supplied by the Company. The prize would be a Bang and Olufsen television. The response was beyond our wildest dreams, much new business was transacted. Interesting oldies flooded in. The prize winner was a 1920's four valve circuit in the traditional cabinet, double doors with battery compartment below, made to order, as they then were, by Boddey, Keeble and Page the original Company. I was unable to persuade the owner to give or sell me the treasured veteran, but he agreed that I could borrow it when ever I wanted.

From this point onwards many people have been kind enough to donate or sell me interesting additions to the collection.

In 1987 having been inconvenienced by the viral disorder ME for over ten years my health was not improving and I felt obliged to sell my business and retire. Travelling, much sunshine and relaxation plus a sympathetic Doctor and Family have brought me to a most enjoyable period of my life.

I apologise for including boring medical details but I do so to illustrate to any fellow sufferers of Myalgic Encephalomyelitis, that

by other collectors and museums and would not be advised to look to me for in-depth technical research and gratification.

Our story is to trace the course of radio from the experimental era when success came from building one's own receiver from parts bought in the local Radio Shop, and delight in the satisfaction of being able to find and listen to a local or foreign transmitter. Today we accept world-wide linkage of radio stations around the globe! plus as a bonus some messages from time to time from space to provide what can sometimes be described as a 'wallpaper background' of radio programmes.

Having collected well over 150 different models ranging from a 1919 Bread Board early crystal set to the 1990's Bang and Olufsen knobless touch-tuned thin plinth, I must make one of two decisions- I can 'squirrel' them away in the attic or spare room to be looked at occasionally only by myself and a few interested friends; or assemble them into chronological order and present them for public view in a suitable museum.

The latter was my decision. My first public exhibition took place in the Museum of East

Immediately following the end of the war some models introduced in 1939 were brought again into production in limited numbers There soon followed many models made in England and radio enjoyed renewed popularity prior to the introduction of affordable television to the homes of the general population.

The German companies of Grundig and Braun were the first to export to Britain large impressive multi speaker table models with VHF wave bands giving sound quality not previously experienced from a domestic radio. Soon followed table radios from other countries, Denmark - Bang and Olufsen, Norway - Radionette. Names like Loewe Opta, American Emerson, Australian Kreisler and Spanish iberia sets became mingled with British household names like Pye, Ekco, His Masters Voice, Bush, K.B. and so on.

Space does not permit me in my first article, to describe in much detail the individual models. However, I will take one model from each decade of the interesting story of radio and describe its points of interest.

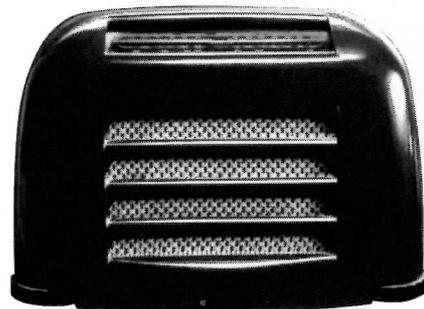
For my first model I must take the T.M.C No 2



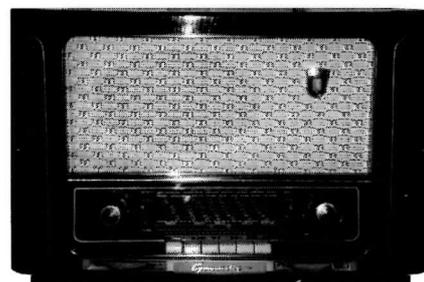
crystal set, beautifully preserved, no restoration was necessary. Simple circuitry, slide coil tuning, cat's whisker crystal detector. Input brass terminals; one for aerial, another for earth. Two more terminals to feed one pair of headphones. The case, a cube of 14cm made in walnut complete with dovetail joints at the corners.

What makes it so special for me is that in addition to the BBC roundel a further small badge reads 'Boddey Page and Co. Radio House, Ipswich'. Sold by my family company in 1924, I was aged one at the time! Bought by a farmer living just outside Ipswich where he would have been able, with a good outside aerial, to hear the 'new' BBC experimental station at Chelmsford some 40 miles away.

The farmer who gave it to my collection would take no payment, he was just so happy to see it returned to the family firm from whom he had purchased it for £4 sterling so many years ago.



My second favourite is a model made by Pye Ltd. of Cambridge. It features the speaker motif of the rising sun cut by fret saw into the solid walnut cabinet. The design came from the Art deco period, frequently found in domestic architecture of the time in stained glass windows, garden gates and door lights. The cabinet measures 16x 16x 8". There were several models featuring this design. The earliest a 5 valve battery portable, complete with leather handle and turntable. Several similar models followed with cabinet variations. In 1931 my model MM has 3 valves + rectifier, 2 wavebands and internal frame aerial. This made it a 'transportable' meaning that it could be transported from room to room. It had to be plugged in to the mains of course. The term transportable was almost a mis-description, you had to be quite strong to carry it. The leather handle had been dismissed on this model to be replaced by two deep finger grasps cut deeply into the solid walnut side panels. A most robust model. The emblem of the Rising Sun depicted all that was good about this era of radio. Alas at a later date after the war, it depicted the Japanese flag and an intrusion into the marketplace from a country now to dominate world electronics - but that's another story.



The early 1930's brings me to number 3 on my list. Again a cube 18.5x 18.5x 18.5cm, this time in a Bakelite case. Gone are the solid walnut dove-tailed joints replaced by a new material, much in vogue as a cheap substitute for wood. The maker was Kolster Brandes LW (originally Kolster of Holland). The model 'Masterpiece' was a 2 valve battery operated LW/MW receiver. The two valves were French 'Fotos'. The 0-100 degree cone loudspeaker fitted neatly into the lid. The amazing story of the Masterpiece is that it was never sold. The entire stock was taken by a cigarette manufacturer who 'gave' them to smokers who collected coupons from the cigarette packets. It has been calculated that one coupon from each 6 penny (old pence) packet of ten cigarettes would require some 500 packets to be smoked and some £12.10s to be paid out.

In view of what we now know about smoking and the effects of lung cancer I wonder how many people suffered, or even died in their effort to obtain this little Masterpiece.

Number 4- the mid to late 1930's: The Golden

Age of Radio So many wonderful models in distinguished solid cabinets, rich walnut veneers, illuminated dials, bold knob controls and speakers giving sufficient bass response to rattle the ornaments on the mantelpiece; not too much treble, this came later with VHF transmissions and tweeter speakers. How difficult to choose, but again for sentimental reasons I select a His Masters Voice Radiogram model 580. The year 1938 and the price 45 guineas (£47.25 sterling). The cabinet depicts in full size a bureau, a sloping front pulls down to form the desk and to house an autochanger 78 rpm to stack and play 8 records of either 10" or 12" size. On the right hand side a large square dial illuminated to reveal long and medium wave bands, a host of short wavebands going down to 7 metres and Television sound. Bass and treble controls and on the later model a 'magic eye' tuning eye to tell you when you were on station. A back control enabled the family to listen in another room by extension speaker-second sets had not yet become a reality. At knee level a large elliptical speaker gave generous output and mellow tone. On either side cupboards opened to reveal six volumes of albums to house the family record collection. My parents had the identical model at home, they loved it and spent many happy hours listening to songs from the shows and their favourite Gilbert and Sullivan opera recordings.

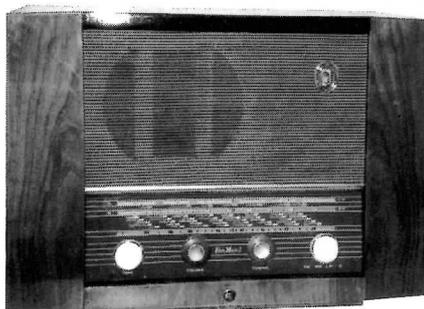
Alas, during the war they moved to a smaller house and had to sell the radiogram. When I returned from the Royal Air Force I was sad to see it gone and for many years looked for a replacement without success; not very many had been made.

However, only a few years ago in 1990 I had a phone call from a man I had not seen since I was a teenager. He was the youngest son of my father's late partner Fred Boddey. His message was that his mother had just died, well into her nineties and unbeknown to me she had the twin model to that owned by my parents. He presented it to my collection. It has now been fully restored and works as well as it did in 1938.

The story is that my father and his partner won a prize for reaching a sales target with the His Master's Voice company. The prize was a bureau model radiogram, each at £47 a time. It was a valuable reward when the average wage was about £4 per week.

Choice number 5 brings us to the period of war time 1939- 45. One immediately thinks of the only new model to be made during this bleak period, the W.T.C. War Time Civilian Radio in its austere white wood cabinet. It was produced in very limited quantities to an identical design laid down by the government, I have two or three in my collection all still working well; also I have the original showroom ticket, price £10 plus purchase tax £2-3-4d (£2.16) for the mains model.

However, my personal favourite is the His Master's Voice portable model 1406. A five valve, truly portable 2 waveband radio. Bakelite fascia and knobs, with a leather handle, the cabinet is wooden covered with Rexine fabric. It was powered by a 90 volt H.T battery and the L.T supply came from a rechargeable 1.5 volt battery; the cells were surrounded not by acid, but a jelly making it a non-spill storage accumulator. This little gem



was given to me complete with the original cardboard carton, instruction book and invoice, hand written by my father. Alas the box was stolen from a display at an early exhibition, one of the hazards of putting one's collection on show to the public, but don't be put off, there are many more advantages and much pleasure from sharing one's collection with visitors young and old from many towns far and wide.

My final period is the 1950- 60's. A revival time for the table radio enjoyed by so many families before television became financially available to the masses.

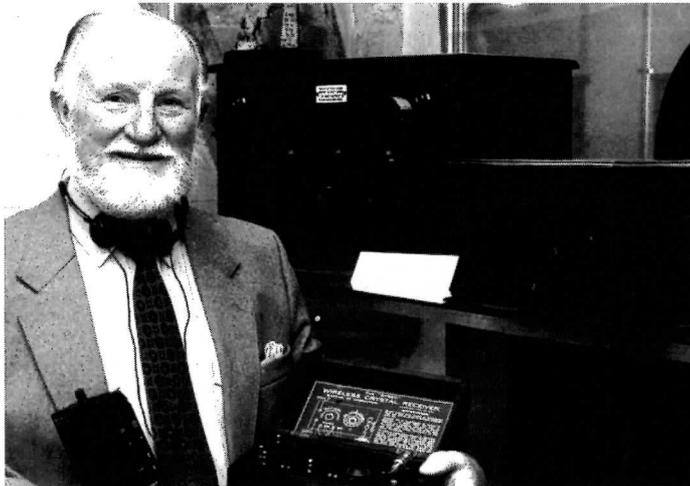
It might seem odd that having been surrounded by an enormous choice of produced models including the Murphy baffle radio A104 as shown at the 'Britain Can Make It Exhibition', I am going to choose a German model. My fascination is not only to marvel at the sound production from these teutonic boxes of black veneer with gold trim, but I admire the sheer cheek of the German Grundig and Braun companies for intruding into a very strong British market, not by price cutting, their models were almost double the average British price, but by clever quality reproduction on VHF to feed 3 or more speakers. To make them even more acceptable to a market place still smarting from the wounds inflicted by the war, they gave them very British sounding names like 'The Marlborough', 'The Warwick' and 'The Hastings'!

For a second example from this prolific period I select the KB FB10. Interesting because it was different; most previous radios had been cubic or rectangular, but this little gem had a round shape a bit like a pop-up toaster of the period. Yet another feature nick-named it 'the toaster' by engineers because the four valve AC circuit generated so much heat that the small plastic cabinet (17.5x 25.5x 16.5cm) blistered and bubbled. However, it was an ideal radio for the kitchen or the bedroom and initiated a second-set market. A market leader also because it was available in four colours, bright red, a softer green,

powder blue and ivory. They had two wavebands: long and medium and later a model with a single VHF waveband which could also be used as a tuner unit to earlier models produced before VHF transmitters reached all parts of the British Isles.

It seems odd to comment about a market for a second set in the home, my grandchildren must have at least a dozen various radios amongst their possessions but there was a time, not so long ago when to have two radios in one home would have been quite an extravagance for Mr Everyman. But this is progress. Our industry has made unimagined progress within a period of only seventy years.

Below: Harold Page, with some examples of his collection



Minutes of the BVWS Committee meeting held at the Vintage Wireless Museum at 7.30 pm on Tuesday 21 November 1995

1 Apology for absence from Carl Glover who was unwell.

2 Matters arising from the minutes

Re the suggestion that organisers of regional meetings be allowed to retain any proceeds, John Howes informed the Committee of his intention to continue paying over to the Society the proceeds from his meetings. The Committee expressed their appreciation of this.

Discussion ensued as to whether the regional meetings would be deemed 'private enterprise' and whether regional meetings were 'affiliated' and covered by BVWS insurance. Ken said he would obtain clarification.

Regarding the matter of our being told by the management of Harpenden that we could not use the stage, Ken supplied the meeting with copies of the correspondence he had conducted on this matter with the management and St. Albans District Council. It was revealed that the stage failed to meet safety regulations and the management was 'playing safe' in forbidding our use of it. However Ken had obtained permission from the Council's Licensing Officer for us to use it in the limited fashion that we require for our auctions.

3 Next Harpenden meeting, 26 November 1995

Ken supplied details of expected expenses and income. He sought and obtained the

Committee's approval for the proposed gratuities and payments to staff. Mike would take over the job of auctioneer for an hour in order to give Terry a lunch break

4 Marconi Centennial Function

Ken reported that the Guildhall had agreed to charge us the concessional rate (£500 less) that they usually grant to a charity.

Discussion arose again on the advisability of planning on this scale since it would only be a minority of members who could take part. Ken would compose a 'flier' for the Bulletin by which members could inform of their wish to attend. It was felt that since the function was intended for the public as well as members the quality and scale should reflect well upon the Society and do justice to the importance of the centenary. It was agreed to form a sub-committee with powers to co-opt outside the standing committee. The work and responsibilities could be sub-divided as follows: the exhibition, the dinner, marketing and the rest of the programme such as Harpenden and other events.

5 1996 Programme

Ken reported that there was no change in the details already announced.

6 Bulletin

Willem reported on Carl's behalf that there was enough material for the next Bulletin. The feedback from members was very favourable regarding the quality of our magazine, indeed it was 'getting better and better'

7 Postal vote

Willem reported that there were no nominations for anyone other than the existing

Committee so far, There would be one vacancy in that Dave Adams, for health reasons, would not be standing next year.

8 Membership Secretary's report

Mike reported that the paid-up membership was 1078. This was an increase of 35, nine of which were new members. It was reported that the sale of back-numbers had been good. This was a result of Mike's efforts.

9 Membership cards and car badges

Mike produced samples that he had obtained. They were attractive and were of the 'credit card' type. The quote was £745 plus VAT for 5000. They could be in different colours so that each years issue would be different. The artwork would be of our choosing and Carl would be the designer. It was agreed that we should proceed with this. Mike had no information so far on car badges.

10 Ray Herbert's monograph (28pp) on the history of the Baird Television Co.

Willem reported that the sponsors of this had offered, say, 1000 copies to the Society for £800. It was agreed that this should be free to members and would be issued as a supplement to the Bulletin. The arrangements would be left to Carl and Ray.

11 Any other business

David Read informed the meeting that the system of exchanging magazines with other societies was not working simply because the previous editor had not passed over the list. Complaints had been received from some of non-receipt while, presumably, magazines were still being sent to the previous editor. The help of Pat Leggatt would be sought as he has always maintained good liaison with overseas

Continued on page 35

The apprentice

by Harold Page

In the 30's, entry into the trade of Radio Engineering was by serving an Apprenticeship. The young boy would leave school at 14 years and serve a year's period of learning as laid down by an Apprenticeship Deed. At this time also, assembly lines were being laid down in the local factories and many manual workers were now unemployed.

After a convincing after-luncheon talk by the Employment Officer at a Rotary lunch, my father was persuaded to accept a Mature Student for re-training. His old job, assembling Ransome's lawnmowers, was now done by machine.

Sam ought really to have been re-trained as a blacksmith or a pile driver, but he always fancied a nice clean job repairing wirelesses.

He could be relied upon to do small in house repairs, clean volume controls and the odd wave change switch. An inventive lad was Sam. He invented a switch cleaner (was it

called Servisol in those days?) drip device. It would more or less persuade the granules of carbon in a volume control to slide away and not give a loud crackle at the slightest adjustment. Sam used his invention in the house when he was let loose to do some field service calls.

One day a receiver was brought into the workshop for a volume control change and general service. Sam's treatment had only provided a temporary cure in this case. Our number one engineer always preceded any diagnostic attack with an Avo or probing with any form of scientific device by sniffing into the back of the cabinet. A strong smell of pitch indicated a mains transformer to be rewound, a less pleasant smell of sulphur a wire wound resistance failure could be expected and so on.

This 'patient' produced a most unusual smell on the sniff test. We all had a sniff and could only liken it to Brasso. When the back was removed it revealed large cream spots going green at the edges, more or less confirming our worst suspicions. The customer was questioned and he agreed that the smell test

appeared to be correct.

Now, what I hadn't told you was that Sam's invention comprised an old Brasso tin, name still printed on, and a length of thin tube into the component. Slight unscrewing of the lid would allow just enough fluid to flow to do the job. A quick cup of tea with the customer's wife, hey presto, the job was done, not even a chassis bolt needed to be undone.

The customer was quick to realise how all this worked, so when the volume control started to crackle again, he thought he would save the 7/6 charged for a home visit by Sam, and buy his own tin of Brasso. Feeling that he could do a really good job and dispense with the pipeline, he laid the set on it's face and splattered the wonder liquid through the holes at the back rather as one poured vinegar on to a bag of fish and chips. It worked for a day or so, but alas not for long, so it had to go to the experts.

Sam's invention was not banned, but he was persuaded to remove the word 'Brasso' from the 'header tank'.

The 'PICTURE' valve

by Fraser Ramsay

Whilst employed as a Television engineer in the late fifties, the above all-embracing and often erroneous expression regularly trotted out by the customer, never failed to irritate. When presented with a 'blank screen' fault the customer would inform you with the utmost confidence that what was required was a 'Picture Valve', and no amount of explaining that there was no such animal would convince them otherwise. They were referring of course to the failure of the EHT rectifier valve, and annoyingly, nine times out of ten they turned out to be correct in their diagnosis. So it was that the EHT rectifier valve became familiar to the public and was known as the 'Picture Valve'

The valves employed at the period were the Mullard EY51 and the Mazda U25; these being wire ended i.e. they sported no pins but were connected to the LOT by three wires; the anode connection protruding from one end, and the two heater wires from the other. These wires were secured to the LOT with neatly rounded blobs of solder to prevent arcing.

Many of you older readers will remember those perspex formers used in the line transformers fitted to the EKCO at that time, and how they used to disintegrate around the U25 valve with varying degrees of fizzing and spluttering, accompanied with that pervasive ozone smell. Messrs Radiospares and other such firms used to supply replacement paxolin formers into which the LOT innards were transposed.

The 405 line time base whistle presented somewhat of a problem at the time although we engineers barely gave it a passing thought. Actually, it may sound rather Irish, but I don't believe that we were really aware of it until it wasn't there! Having said that, I recall my niece marrying a Frenchman and the poor fellow, being used to the 625 and 819 line systems employed in his own country, reacting rather badly to ours while on holiday with us. Indeed he became quite demented, and would cover his ears and yell "Mon Dieu! Quel Bruit!" (loosely translated as "Corblimey!... what a racket!"). The majority of the viewers came to accept and largely disregard the whistle and there were very few complaints in that department. However, some of the set manufacturers took the matter more seriously and tried to lessen the whistle to some degree.

Perhaps you recall those attractive Murphy V310, 410, and 510 models; the ones with pop up lids on top and rounded cabinets. The LOT's and EHT valves in these and subsequent models were contained in aluminium, oil filled cans, in an effort to dampen the line whistle. On failure of the U25 valve it was a case of carefully opening the can and decanting

the light oil temporarily to another container. The valve was then replaced, the oil returned, and the soft aluminium brim of the can crimped to effect a seal.

A similar approach to the problem was made by HMV with their 1845? model; actually I'm not quite sure of the model number but it was the one with the nice looking cabinet and dark screen and utilising an EF80 as a sound output valve! In this instance the LOT and EY51 valve were encapsulated in a grease filled, bakelite container and the replacement of the valve proved to be a rather messy operation.

The Philips projection models used an oil filled EHT unit containing no less than three valves, but I personally had little success in the repair of these.

With the passage of time plug-in Mullard EY86 and the Mazda U26 types were subsequently developed employing ceramic valve holders. These were a much welcomed advance over the wire ended ones and gave little trouble apart from the tendency of the heater winding to corrode and go open circuit. It was a simple, if sometimes awkward procedure to replace the single turn winding; often with a length of thin fuse wire, suitably insulated.

Perhaps at this juncture mention should be made regarding the Ferguson 306T model: it being the only set to my knowledge to have an EHT rectifier tailor made for it. The Ferguson 306T was designed to operate with an EY86, but due to constant failure of this component, Mullard brought out a more robust type exclusively for this model. For Messrs Mullard to have made this unprecedented concession, I suspect that there may have been a legal wrangle going on behind the scenes between the two manufacturers regarding valve specifications and the like. Incidentally, you won't find this 'maverick' listed in any of the valve data manuals, but if my memory serves me correctly it was designated TY86F or something similar.

CRT's were now steadily increasing in size, requiring higher EHT drive voltages and the EY86 was superseded by the DY86 and DY87, and finally the DY802; the latter type being universally adopted until the end of the valve era.

As I had previously remarked, the simplistic term the 'Picture Valve', much used by the customer, had become slightly irksome to the repair man. I recall, on one occasion on asking a lady customer, somewhat sarcastically, how she knew it was the 'picture valve', and being told that Jim from next door had informed her. "Ah!" I said, "This Jim, is he in the trade then?" "Why no! she replied, "But Jim knows about these things ...he's a PLUMBER!" "Grrrrr *#*#!!"

societies.

Mike reported that he had started to select from back numbers of the Bulletin articles suitable for reprinting. The authors would be consulted. David Read raised the subject of the Society's constitution. It was agreed that a copy of the proposed revised version would be sent to members as soon as it is ready

Minutes of the BVWS Committee meeting held at the Vintage Wireless Museum at 7.30 on Tuesday 9th January 1996.

1 Apology for absence from Ian Higginbottom as his work was requiring his absence from home.

2 Matters arising from the minutes

Re. regional meetings, Ken informed the Committee that the meetings organised by Alex Woolliams were entirely 'free enterprise' and not under the auspices of the Society.

3 Report on Harpenden, 25th November 1995, 'Auction and Mini-mart'

Ken presented his customary full detailed report. He expressed gratitude, readily endorsed by the Committee, to Ron Deeprose, Terry Ransome and helpers for the way they carried out their task of conducting the auction. They started one and a half hours early because of the number of lots- Mike Barker gave Terry a lunch break- and they finished their task at 5.55 pm. The computer broke down and receipts could not be given. It was hoped that we could organise 'porters' next time to supervise collection of lots. There was a minor hiatus near the end caused by a mistake in identification of lots but this was eventually resolved. The bring and buy sale- almost an exhibition- attracted a lot of interest but total sales were only £200 (£10 for the Society). We record our gratitude to Pam and Andrew Zimmer for their efforts in conducting this.

The stalls in the small hall did well possibly because the auction lots were not as interesting as usual (a glut of homemade sets).

The number of helpers was 45 in all. We are sure all would wish to thank them and, of course, Ken, for a most enjoyable day.

The surplus of £903 to the Society was some £200 less than expected due to a smaller attendance, increased expenditure in photocopying etc. for the auction and transport costs incurred in retaining lots in security against a cheque. Ron Deeprose and Terry Ransome have declined any financial appreciation of their work.

4 Arrangements for next Harpenden and the AGM on the 25th of February 1996. It is expected that the AGM proceedings will not require more than half an hour since all the voting will have been carried out by post and that there will be time for expressions of views from the floor. The time suggested was 12.30 to 1.00.

5 Guidelines for BVWS events

Ken had drawn up a comprehensive guide for anyone considering organising a regional meeting. This he offered for consideration by the Committee and members who are planning meetings. Four members have informed Ken so. Two new venues are proposed, Birmingham area and Dorset.

6 Report by Carl Glover on the December 1995 issue and on the forthcoming first issue for 1996.

Carl apologised for the flaws in the December Bulletin, the fault lay with the printers (the proofs were perfect). The first issue of 1996 would be in March and Carl would need all contributions by the middle of February. The Committee, generally, reported on the favourable comments coming from all quarters on the quality and content of our Bulletin.

7 The newsletter

In the absence of Ian, Carl reported that they had agreed that there would be six issues at two or four month intervals. In future any fliers etc, such as usually went with the Bulletin, will come with the Newsletter. This would achieve better timing of information and would reduce the labour of 'stuffing' the Bulletin (into envelopes).

8 The update on Ray Herbert's 'History of Baird Television'

The Society would be able to buy copies at 70p each- a considerable concession which we shall acknowledge on distribution. It is expected that it will accompany the Spring issue of the Bulletin.

9 Postal ballot

Mike reported that a third of the membership had returned voting forms so far; none, of course, is opened until the 31st of January when the count is made. (Any members who put their renewal subscription in the envelope will have to wait to be so recorded!).

10 Membership report

Mike reported that 300 had arrived so far. Sales of back numbers and posters are going well. Mike also reported that the BVWS has had a stall at non- Society events.

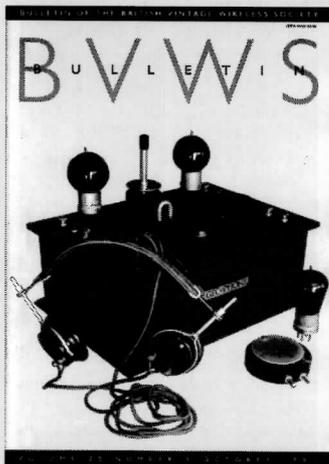
11 Proposed Marconi Centenary Celebration

Ken reported that only 10% of the membership had replied to the request for member's opinions on the proposed exhibition and dinner at the Guildhall. While only 25% of these raised objection it was agreed that it could not be interpreted as a majority opinion of the Society. An amended programme would be drawn up. The Harpenden meeting would still be held (Mike Barker would have charge on this occasion) but other activities at several venues would be arranged and the costs reduced. Ken would be choosing a team to help him.

12 Any other business

Peter reported on his investigation into the possible registration of the name of the Society and our logo. He had sought advice from patent and trade mark agents, Page, White and Farrer. The main points from his findings were 1: Cost of registration £200 - £300. 2: The required art work would be an extra outlay. 3: Registration must include the name of the person making the application which could give rise to legal difficulties. It was agreed to postpone discussion on this.

The following BVWS Bulletin back numbers are currently available.



Vol 10 Number 2 Inc. The KB Masterpiece, Extinct Species "A Monster Defiant".

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

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

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

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

Vol 15 Number 1,2,3,4 Inc. The wartime Civilian Receiver, Coherers

in action, Vintage Vision.

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

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

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

Vol 19 Number 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 3, 4, 5, 6

Supplements:

1 "Just a Few Lines" The Birth and Infant years of BBC Television.

2 "Metro-Vick 1922-1928", "Early Television in the UK", "Industrial aspects of the Valve before 1925"

Brown Brothers 1925/26 Component Catalogue re-print SOLD OUT!

All bulletins and supplements are priced at £2:00 each + postage.

Postage: for individual bulletins add 50p, for 2-5 bulletins add £1, for 6 or more add an extra 20p each.

All requests for back numbers, should be sent to the Membership Secretary (Mike Barker) whose address can be found in the inside-front page of this bulletin.

Letters

Dear Editor

While recovering from the seasonal overdose of Christmas pud I read with interest Gerry Wells's talks on the early Marconi superhets and their 'foolproof plan' reported in 'A Set for All Seasons' in Bulletin Vol.20 No.6 Pg.110.

I have a Marconi 272 which has successfully deterred all repair cowboys, (up to now that is), and mainly required attention to the capacitor block, as Gerry describes, in order to restore it to working order. However, even when fully restored, my example suffered from very serious loss of sensitivity below 230 metres which spoils the enjoyment of using the set. Now the 'Trader' service sheet for this model acknowledges the existence of this low sensitivity problem and actually advises deliberate misalignment of the RF tuned circuit in order to 'fix' it. Confused by such curious advice I felt it necessary to try and understand what was bugging the set.

Using an oscilloscope to look at the control grid of the frequency changer valve (MS4B) I found there was a large signal present at the frequency of the local oscillator. This rose to a climax when tuned below 230 metres where the local oscillator frequency falls within the band width of the RF-bandpass circuits, (the relatively low IF makes this inevitable). To some extent this effect can be observed in other receivers, but in my 272 the level was so high that it caused overloading of the valve thus de-sensitising it to wanted RF signals. The trouble arises from spurious coupling between the LO and RF signal circuits brought about by the use of unscreened RF coils, the layout of the front end wiring and the MS4B itself.

I cured this defect by winding a coil of 12 turns of 28 SWG wire over the top of the medium wave oscillator coil. (temporarily removing the can to gain access), earthing one end of the coil, and connecting the other end via a IOPF trimmer to the control grid of the frequency changer. With the receiver tuned to 200 metres, and the aerial disconnected, the trimmer was then set to give minimum LO signal at the control grid. The setting is quite sharp and critical. This modification works because these additional components inject the grid with just the right magnitude and phase of LO energy to cancel that induced by the spurious couplings and is akin to the principle of neutralisation of triode RF amplifiers. Naturally the coil has to be connected in the right sense for it to work at all.

With this modification in place the improvement in sensitivity below 230 metres is really quite dramatic and I believe that it endows the set with an excellent performance more in line with the original design objectives. The purist may frown on modifications but this one does not require any hacking of the original hardware, the two additional components may be easily removed if so desired.

Yours sincerely Martin Reed

Dear Editor,

It has given me great pleasure to have joined the Society and at least, in view of the distance between us, to be the eager recipient of the 'Bulletin'. Would that I could participate in the rest of the Society's activities, but you cannot have a magnificent climate for Christmas and then just pop on a train to attend a meeting!

So be it. The reason I am writing is to ask if you could include in the next available Bulletin a request for assistance with a piece of test gear that I acquired a few months ago. The instrument in question is a Mullard" High-Speed valve tester, and it came complete with dozens and dozens of test cards, a defunct cathode-ray tube, and no operating manual. These last two items I have acquired from England and I thought that my troubles were more or less over and I could begin to put the tester into use. But alas, it was not to be.

The difficulty concerns the adjustment of the 'spot' when the H.T. card is applied. The position of this 'spot' is not in accordance of the limits prescribed in the operating manual, and I am referred to seek the services of a Mullard representative when this happenstance occurs. Such a person does not exist in this part of the world, and I wonder if I could be introduced, via the columns of the bulletin to such a person who may be a member of the Society, or at least someone who has practical knowledge of the more arcane workings of the tester.

It would be wonderful indeed to find such a person, or, perhaps, obtain an access to the service manual which is, in another part of the operating manual, referred to in the context of overcoming difficulties in setting up the tester for operation. I do beg you to believe that there is no-one and nothing in this part of the world that I can ask for to help in this predicament.

It goes without saying that I will defray all, and any, expenses incurred in this respect. I have an active account with Barclays Bank in London, and I can remit all costs in Sterling. I would only ask that either my Fax facility, or airmail only for any letters etc., be employed in answering this plea for help. All surface mail to this Continent takes weeks and weeks to arrive, if it ever does, and the speed of communication is well worth my paying for. Thanking you in anticipation,

Yours faithfully,

John Holmes.
2/10 north street
midland
WESTERN AUSTRALIA.6056
phone & fax 09 274 5126
Ex England: 010 619 274 5126

Dear Editor

The recent swapmeet at Portishead, on Sunday 7th January was, as usual, a friendly and interesting meet. There were plenty of low priced bargains for radio collectors, with one complete radio selling in the auction for 10p! I was able to find a nice pair of Sterling Radio Head Telephones in the original box and packaging. It is always good to find original packaging with items, and I believe that this enhances any collection.

As well as low priced bargains, there was a mint Philco "Peoples Set" for sale and the usual range of Ekcos and Marconis etc. Portishead is always good for spares and components, and a number of undamaged bakelite cabinets were offered in auction, including a nice early Silvertone, which failed to reach its reserve. Our next swap meet is on Sunday May 12th, and we are hoping that members will come to see us, even after Jonathan's excellent event at the NEC the week before.

On a less happy note, some visitors reported some unofficial leafletting at our event regarding a long standing dispute between BVWS members. I wish to make a personal appeal to those concerned. Please don't use our small event in this way. We all know what effect politics has, and the convivial and easy going atmosphere of Portishead is such a pleasure to us. Everyone is welcome at Portishead, including visitors who are not BVWS members. There is a BVWS stall at each meeting, and Mike Barker and Willem Hackmann are usually on hand to give advice on joining the society.

Best wishes to you all in 1996.
Alex and Carol Woolliams

Dear Editor,

I have set out below the contents of a letter I sent to Scarborough Library recently and which is self-explanatory.

"I wonder if your Library holds copies of your local paper dating back to the early 1930s? And if so whether you could try and find some information for sometime between 1930 and 1935 (I believe) the Baird Television Co had a demonstration unit in Gala Land, which was an underground funfare, at the South end of the Promenade and near the bridge to the South Cliff."

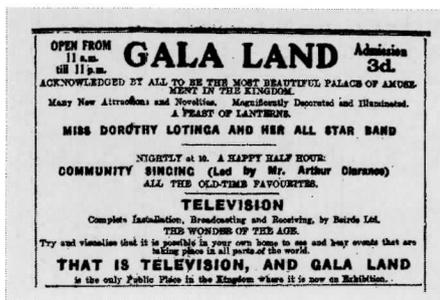
There was an entrance charge of 1/- (one shilling) if I recall correctly, and I and several young friends went in. We were all in Scarborough for the day from Runswick Bay, and I would be 13-18 years old.

Inside we were shown the equipment which, if my memory serves me right, was centred around a Nipkov Disc, patented in 1884, and the basis of most television methods until the early 1930s.

I was invited to be 'Televised', and the picture was viewed by my friends in a nearby cubicle. I assume that the picture was transmitted by Line and not by Air.

This year is the 60th anniversary of Commercial Television in the UK (1936), as well as the Centenary of Marconi's registration of his Patent for transmission and reception of 'Wireless Waves'. The British Vintage Wireless Society, of which I am a member, is planning to commemorate these events with its members, and my experience might just be of some historical interest.

It is also interesting to reflect how many people alive today were televised prior to 1936 bearing in mind that the BBC and the Baird Co worked together from 1929 and various trials were made with public demonstrations and in 1931 the Derby was televised. In 1932 the BBC broadcast a half-hour programme on 4



evenings each week. In the USA some 15 or more companies had TV broadcast schedules, many of an experimental nature, around this time.

So, I am anxious to obtain any information, dates, copies of adverts, leaflets, etc relating to the demonstration in Gala Land, and hope that you may be able to help."

It seems to me that my experience might have some degree of Historical interest and if included in the Bulletin might prompt some other Members to put forward their own experiences and memories.

If you feel that my suggestion has any merit I can tidy up the presentation, although there is not much more that I can add.

Yours sincerely
Harry Sayer

Having just received the December issue of the Bulletin may I congratulate the new Editor on a job well done. I like the new style and this latest issue contained a most pleasing assortment of articles on very varied aspects of our hobby. In particular I enjoyed Enrico's piece on Transistor Radios and Willem's description of his post card collection. My only complaint is that most of the photographs were much too dark resulting in a lot of detail being lost. No doubt this is a technical matter which can (hopefully) be easily overcome for future issues. With regard to the workings of the new committee I am pleased to see that the financial situation of the society has been recognised resulting in a reduction in auction commissions and a possible subsidy for the proposed centenary weekend. However I feel that the funds of the society will still far exceed that necessary for 'contingencies' so, in the absence of any other specific proposals, I should like to suggest that the committee could consider reducing the entrance and stall fees for Harpenden. Also, to encourage as many members as possible to participate in the A.G.M. why not have free admission to members for this particular Harpenden for at least the next 3 years ?

Yours sincerely,
Ken Bailey.

The BVWS Bulletin

I would like you to know how much I enjoyed the December edition of the BVWS Bulletin. Please would you convey my thanks to all those who spent so much time and effort in making it possible. All the articles were of considerable interest and Dennis Yates' account of tracking down the original of the magnetic detector magnets was fascinating. Top marks for the cover design and its quality. However there are two points that, in my opinion, require attention. The article

headings are indistinct and in fact give the impression that they are sub-headings. The other problem is that many of the photographs are too dark. On pages 110 and 112 some photos are totally black and devoid of all detail.

I apologise for making criticism but I hope feedback of this nature will assist with the fine tuning of our Bulletin. My saying 'Our Bulletin' prompts me to state that I would like to see more input from 'Mr. Joe Collector' as well as the good old regulars. OK I know some of the answer is in my own hands, I will get pen to paper and hopefully produce something of interest and worthy of publication.

I wish you all the very best for the new year.

Yours Sincerely
Bob Smallbone

Editor replies

I was not a very happy Editor when I discovered that all of the Christmas Bulletins had most pictures printing far too dark. However this is one of the few things beyond my control as I do most of the scanning and all of the design work on the Bulletin, but I cannot do the printing. I have talked to the printers concerning this matter and hopefully this Bulletin will be a shining example of printing at its best (I hope). Please note new improved bigger headings!

As regards Ken's point regarding reduced Harpenden entry and stall fees, how about an extra eight pages in the Bulletin? This benefits all of us rather than the members who can get to Harpenden.

I would like to express my thanks to all of you who have written letters for these pages, they make a very interesting read.

The Fifties Set

Dear Editor,

When I first started to collect jazz records in 1954, there were two distinct groups of followers- the 'traditionalists' and the 'modernists'. The former were interested in varying degrees to (a) the classic jazz period of the 1920's to early 1930's (b) the 'revivalist' period of the late 1930's when there was a resurgence of the older style (c) the post-war continuation of the revival which culminated in the 'trad' boom of the 1950's. The 'modernists' were interested in that period from the mid-1940's onwards which saw the evolution of the modern jazz movement. It was very rare to find individuals whose tastes embraced both. Furthermore, both groups largely decried the music from the mid-1930's to the early 1940's when classic traditional jazz had declined and the big bands came to the fore in the so-called 'swing era'. This was a pity, as much good music appeared in this period.

The names 'mouldy figs' and 'boppers' were coined to describe members of the two main groups. There was also a gap noticeable in the 1950's between those who preferred the 78rpm recordings of the past and those who, like myself, were collecting classic jazz reissued on the new (at the time) long playing record. This was a far more convenient method of putting a collection together when the 78rpm versions were no longer available.

I have noticed similarities to this state of affairs in the world of the wireless collector. It seems to me that the majority are interested in the early days of radio, up to and including the 1940's. There are also groups which are interested in early transistor sets and those who are specialist collectors of certain manufacturers or certain types of radio. Whilst not criticising any of these or other groups, it seems that the 1950's sets are largely ignored. This period can be likened to the 'swing era' of jazz although much of this music is now recognised as being in the mainstream development of jazz.

The majority of my radio collection falls into the 1950's period as, apart from liking many of these sets anyway, they are much more easily available and affordable than the 'classic' earlier ones and can give as much pleasure (compare LP versus 78rpm). Some 1950's sets seem to be acceptable to the 'traditionalists', such as the Bush DAC 90A and the KB FB10 'Toaster'. I suspect that most of the 'modernist' early transistor set collectors also have an interest in the past. I myself have a small collection of 'novelty' transistor sets and examples of the DAC 90A and 'Toaster'. I also have a non-working homemade 4-valve 'coffin' set from the 1920's which I use to display a horn speaker on-driven from a 1950's Bush VHF 61!

My first inkling of the anti-1950's situation came when, shortly after joining the BVWS, I took a stand at a local 'swapmeet' to dispose of some surplus items. At the end of the day the 1950's sets were largely unsold (reasonably priced and open to offers!) but the transistor sets were all snapped up. This did surprise me. Of course I had no earlier sets to offer. This has been my experience at subsequent 'swapmeets'.

So, to each his/her own, but I feel a relevant period of valve radio is being largely ignored and we should preserve these sets for future generations before they are all discarded as worthless. After all, those sets which incorporated the VHF band enable us to hear all major British broadcasts of today on vintage equipment, from the end of an era, without modification.

Many thanks to John Ounsted for recent articles on 1950's sets.

Yours sincerely
Tony Voysey

Dear Editor

I have recently joined the Society and received my first BVWS Bulletin which made excellent reading, well done! I was wondering if I could write a few lines about myself that might be of interest to members based around the Cheshire area. Having recently retired from BT after 32 years service, my aim is to pursue my first love (apart from the wife!). That is vintage radios. I have spent the last year relearning my radio theory by reconditioning about 40 wirelenses I acquired during the past few years, and now have a sales area at my wife's shop at Knutsford, Cheshire. I would be glad to meet any members who can all come down for a 'natter', free coffee provided of course, and perhaps we could arrange a monthly social meeting to swap information, ideas or anything related to the cause of keeping the 'valves glowing'

I can be contacted Saturday or Sunday at the Knutsford Arts and Antiques centre at: 113 King Street, Knutsford- 01565 654092

Yours sincerely
Bob Dufton

Dear Editor,

Having received the latest plans for the 'Marconi patent' celebration by the Society this year I feel it is a case of 'too little too late'.

After the intriguing absence of even a faint celebration to mark last year's Centenary of Radio, the Society this year is celebrating the 'Marconi patent' centenary with something which is more adapted to preach to the already converted, than to really mark the official beginning of the invention which has changed this century and the life of all of us.

It seems to me that, to give the occasion the importance which it deserves, the celebration should have been directed to the external part of the Society and not to us members who (I hope) are already aware of it and are well convinced of its historical and practical importance.

To have the celebration in London where Marconi came to live in 1896 and where he applied and registered patent no. 12,039 would have meant that many people outside the Society would have been able to participate or get the information from the media.

What we seem to be doing now at Harpenden is to congratulate ourselves on how clever we are that we have chosen to be aware of the importance of the Marconi patent and how intelligent it is on our part to try and preserve its history by putting artefacts and memorabilia on one side for future generations.

I think that we already knew that, and we don't need another celebration to witness what we are and why we collect.

Hoping that plans for the celebration will be changed and that the emphasis will be directed to those outside our Society, I am.

Yours Sincerely
Enrico Tedeschi

Events manager Ken Tythacott responds:

A majority of BVWS members may not agree with Enrico's views. Three events are to be commemorated in September 1996 - not one. These are the centenary of Marconi's UK patent, sixty years of high definition television and of course, 20 years of the BVWS. Most of the television and radio community are fairly obsessive about their hobby and enjoy the social contact. Many would feel isolated without our Society. Therefore for the average member, the 20 year anniversary of its formation is probably as memorable as the other two events. Your Committee's current plans reflect this view.

Enrico stresses the importance of Marconi's work. There can be no doubt that he made a major contribution to the development of wireless communication and of course his work is recognised, but not to the exclusion of all others. Marconi saw the potential and had the business sense and the backing to register his patent and develop the system. However, supporters of Hertz, Lodge and Popoff amongst others, would argue that he was not the first to discover and demonstrate electromagnetic radiation.

Turning now to Enrico's statement that the Society is doing 'too little, too late'. In fact the Society has been preparing for 1996 for some time. In 1994 under delegation from the Committee and later the emergency Committee, it was agreed that I would investigate the possibility of staging a large exhibition at a major national museum. Having prepared an extensive exhibition proposal and hawked it round all the major museums and obtained sponsorship pledges totalling £80,000 from interested companies, it was evident that in the current economic climate with emphasis on popular scientific history eg. computers and space technology, we were not going to be offered the necessary facilities.

Under a new Chairman, the Committee then moved to proposal B involving an exhibition and function at the Guildhall in London. It was felt to be necessary to consult with the membership by means of a questionnaire and the majority of those who replied were in favour. However, there was insufficient response to proceed with confidence and the Committee moved to proposal C referred to in the recent circular to members.

So now we are with plan C- a Grand Two Day Week End event at Harpenden based on original plans for the museum and Guildhall venues. It is almost like coming home- many of the members who have contacted me feel that way too- let's face it, the Society has been meeting there for nearly 20 years.

A working party has already been hard at work for some weeks to plan the event and Enrico has been invited to join us. I have been at it one way or another for 18 months. When I leave the Committee in 1997, I will have been involved with the commemoration project for nearly 3 years.

Although we set out to organise more ambitious events, with hindsight and remembering the disturbance of 1994, a period of consolidation without a lot of 'flag waving' may after all be the best way forward. Perhaps the Society can then prepare for another celebration in 2001 on the centenary of the 'alleged' first Atlantic communication by wireless. But how can it be said that the Society is doing 'too little too late'? Members give their time voluntarily - it's not a job. There is a limit to what can be achieved in the time available, by the few who are prepared to be involved.

On the matter of Enrico's proposal to open the commemorations to a wider audience, the original plan for a museum exhibition would have involved the public. However, of the many subsequent reactions that have been received, the majority emphasise that the Society is for the Membership- not the world at large. That is not to say that we do not welcome guests from outside the Society. In fact the Committee intend to attract as many overseas visitors and invited guests as possible and make our 20 year celebration as enjoyable as we can for them and for us. But it is the case that after all is said and done we are only a medium sized Society comprised mainly of people who enjoy collecting wireless and television sets and ephemera for nostalgic reasons. The BVWS is not a learned Society, neither are our funds unlimited.

I hope that this response has allayed fears in some quarters that very little is being done for the Society to commemorate these important events in the history of communication and adequately covers the matters raised by Enrico in his letter. The content represents my personal viewpoint and does not necessarily reflect the view of the Committee.

Ken Tythacott

N E W S

Further Harpenden meetings

More dates for your diary - mark them in now! An auction will be held on the 9th June, a weekend meeting on the 21st and 22nd September (see advert on next page), the year finishing with another auction on the 24th of November 1996.

Other meetings

There will be a NVCF meeting at the NEC meeting on 5th May.
Mike Barker will be holding the Wootton Bassett swapmeet on the 30th June and December 8th 1996.
Alex Woolliams' Portishead meetings will be held on the 12th of May and the 8th of September.
John Howes' Tunbridge Wells swapmeet at the Camden Centre will be on the 11th of February, followed by a Southborough Audio Jumble on the 14th of July and a swapmeet at Southborough on the 13th October.
Gerry Wells will be having his garden party on 8th June.
There will be a Radiophile Summer Special on 21st July.

Bulletin Index

The Bulletin Index is currently available up to issue 20/6 and is a complete cross

reference of authors, subject matter and main articles back to the beginning of the society. Please send a large SAE with a cheque for £2 payable to Pat Leggatt at 28 High Park Road, Farnham, Surrey, GU9 7JL. His telephone number is 01252 719081. (Please note that the Garretts Farm address no longer applies as he has moved.

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, as the Bulletin is only as interesting as the articles that comprise it. We welcome all suggestions and comments regarding the new appearance of the Bulletin and hope that it is catering towards your needs as a collector / enthusiast / historian. Your article can be just a few paragraphs long as long as you think it conveys its message across 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.

Please send all articles handwritten, typed, and / or on floppy disc to: Carl Glover, c/o Runciter Corporation, 33 Rangers Square, London SE10 8HR. Please remember, the Rothsay Street address no longer applies any more.

Marconi RB7 required

Gordon Bussey urgently needs a 1922 Marconi RB7 with aerial stand for sale or loan for a future project. Please contact Gordon on: 0181 660 2240.

the British Vintage Wireless Society

proudly invites members and guests to a 'grand weekend celebration' of twenty years of the Society - The Marconi Centenary and Sixty years of High Definition Television

on Saturday 21st &
Sunday 22nd September 1996
at Harpenden Halls -Harpenden -
Hertfordshire - England

the two day programme will include:

A large exhibition covering a wide range of member's interests. Each decade of wireless and television development up to and including the transistor will be represented. Archive Marconi, Marconiphone and vintage television equipment will be on display. Early receivers will be working.

A traditional Harpenden 'Swapmeet' Collectors market packed with interest and opportunity to find that elusive item you have been looking for. You will find something you need at this event.

A 'quality auction' (absolutely no junk) of a broad range of vintage items. Overseas visitors are invited to bring items for auction and return home with something from the UK.

Lectures and simulated experimental work of Hertz, Marconi and Baird. Rare archive film and video material will be shown.

Vintage amateur radio station in operation

Restoration contest - 'bring and buy' and much more.

Members and guests from overseas will be welcomed. It is expected that many will come as part of a holiday. Harpenden is a small country town in the County of Hertfordshire near London and well known tourist venues. Heritage tours can be organised for wives and guests who may not wish to join in wireless activities. We will find comfortable and reasonably priced accommodation for those who prefer to stay in the area on Saturday night.

It will be a great occasion - put it in your diary now - Those from abroad should consult their travel agent without delay

Write to Ken Tythacott the Events Manager at 21 Barrett Road, Fetcham, Surrey, KT22 9HL, England enclosing SAE, or telephone 01372 452569 for further information.

**Do not miss this event
there will be something for everyone**

**Do not miss an
opportunity to
exhibit your
favourite items.
Radio, Television,
ephemera from
the earliest
days right through
to the transistor
era will be
welcomed, don't
worry, security will
be as tight as we
can make it!**



