

# Real and Imaginary

by "Vector"

## The Stone Age of Broadcasting

In celebrating the transmission and programme aspects of the birth of British broadcasting, let's not forget that largely unsung body of men, the pioneer retailers and their service technician-engineers. I am delighted, therefore that the editor has agreed to my suggestion that, for this issue, I hand over my page to one of my correspondents, J. T. Chaffe, to reminisce about the far-off days of 2LO.

The original service engineers came into the business by various doors. My introduction to electricity came at the age of eight, when the village milkman showed me how to make a Morse key using a block of wood, two nails and a strip of Meccano. Three years later I was operating my first spark set, but this sounds much more grandiose than it really was. I was scarcely more than a tea-boy in the enterprise; the prime mover was an older boy who lived a few doors away. He was much more knowledgeable than I, but we had a common interest in reading all the textbooks we could lay our hands upon, even though we didn't understand nine-tenths of what we read.

The breakthrough came when one author in an unguarded moment informed us that an electric bell could, when suitably modified, be used as a feeble generator of wireless waves. Hitherto our schemes for building an induction coil had been thwarted by an excruciating lack of cash; now, the pearly gates were open wide. We cajoled two defunct shunting bells from a friendly railway linesman and rewound them, adding capacitance plates across the spark gap à la Hertz. Our aerials were wire mattresses and our receivers crystal detectors and single telephone earpieces (the latter by the unwitting courtesy of the L. & S.W. Railway Co.). To our amazement the set-up worked, although our Morse would have given any Naval instructor apoplexy. May the Post Office forgive two youthful pirates!

In (I think) March 1922 I was on holiday at a cousin's at Surbiton. He was some years my senior and an advanced wireless fanatic; his den housed, amid other mysteries, a crystal detector coupled to a one valve note magnifier. This was the first

thermionic valve I had ever seen; you could read by the light it gave off. One Tuesday evening at 8 o'clock, Jack fiddled with the catswhisker then put a pair of 'phones into my trembling hands. Hastily I donned them . . . . Wr-r-rattle calling . . . . Wr-r-rattle calling . . . . Oh, the magic of the moment! P. P. Eckersley was in fine fettle; he clowned throughout and sang a ditty called "She sat in the sink and sank". I was hooked. From that moment any other than a career in wireless was quite unthinkable.

But the harsh reality of school intervened. 2LO, run by the Marconi Company, began transmissions in May 1922. The station was taken over in November by an association of wireless manufacturers who called themselves the British Broadcasting Company. Other B.B.C. stations came on the air in rapid succession, but with no help from me; I had to submit to the horrors of Latin, trigonometry and differential calculus while all these exciting things were going on around me.

I filled in my time devouring any wireless periodical I could acquire (*W.W.* was a weekly at sixpence in 1922 and went down to 4d in 1923). I haunted the physics lab. and plagued the life out of my physics master. I extorted cash from my impecunious parents and bought components with which to build sets for neighbours (our own set was almost permanently disembowelled). In short, I became that *bête noir* of all service engineers, the "young chap next door who knows all about wireless". How I was to hate his guts in the years to come!

By the time I left school in 1926 the home-constructor craze was at its height and wireless dealers were legion — some good, some bad and many indifferent. I was lucky, I got taken on by a really good one; he offered me an apprenticeship at 7/6 per week; hours 9 to 6 (or later, if there was a backlog of repairs) and a half-day on Wednesdays. My parents were horrified; they thought I had gone to the city to apply for a civil service clerical job. Times were bleak, and wireless, they said, was a passing fad. But, bless them, they didn't stand in my way, so I took the job.

The shop was manned by assistants, the boss and I doing all the servicing and

installation work. By this time the sloping panel type of set, upon which I had cut my teeth (and many square yards of ebonite) had given place to the oblong box approach. We had our own design of detector-21.f. with swinging coil reaction and we undercut the commercial sets by a bland disregard of such details as royalties. Bare wire of square cross-section formed the connections and right-angled bends were obligatory (never mind about stray capacitance — it looked good!). Soldered joints had to be immaculate if I wished to avoid a kick on the posterior.

In addition, kit sets were coming into vogue; some of these, such as the Cossor Melody Maker and Mullard Master Three, were sponsored by the valve manufacturers. I used to supplement my income by building these at home for four bob a set. We also built the designs of the wireless magazines to order, including in 1926, the immortal *W.W.* "Everyman Four" designed by W. James. I well remember the Scott-Taggart "Omni" and the subsequent S.T. series; the Lodge "N" circuit, and many others.

Most receivers of the early period were battery-driven but h.t. "eliminators" were rapidly coming into favour in areas where a mains supply was available. Some cities in those days had two, and sometimes three, different supplies — 230V a.c., 200V d.c. and 110V d.c., so both customer and service engineer had to go warily to avoid fry-ups.

Our best-selling commercial receiver was the Brandes III, a det. — 21.f. of neat design. The loudspeaker was a discrete item; most models were horn types, with the Amplion "Dragon" the status symbol. We carried our gear in a bull-nosed Morris open tourer, or if that wasn't available we parcelled the equipment and staggered aboard a tram. I remember vainly trying to make the top deck with a Langham portable. This was housed in two massive hide suitcases, either one of which could be carried only by those in peak physical condition.

Before I sign off I should like to mention Frank Murphy, who brought many wholly revolutionary concepts into receiver manufacturing, servicing and manufacturer-dealer relationships, not the least of which was the supply of full service information and intelligent service diagrams. Frank's heyday was in the mains receiver era, a bit beyond the early days; his disappearance from the radio scene was, in the long term, a great loss to the industry.

I should like to ramble on, but space will not permit me to talk of the nutters (including a death-ray inventor) one met. Of the house in which I found a body that had been there for weeks — ugh! Of the tobacco millionaire I mistook for a minor servant; I used him as a soldering iron hander-upper for the best part of an afternoon. Or I could tell you of a set installed in a certain notorious district, after which the lady of the flat invited me into the bedroom in lieu of a tip. Or of an inexplicable spooky mystery — but I must stop. I'm sure today's service engineers meet the descendants of those odd-ball characters, anyway.