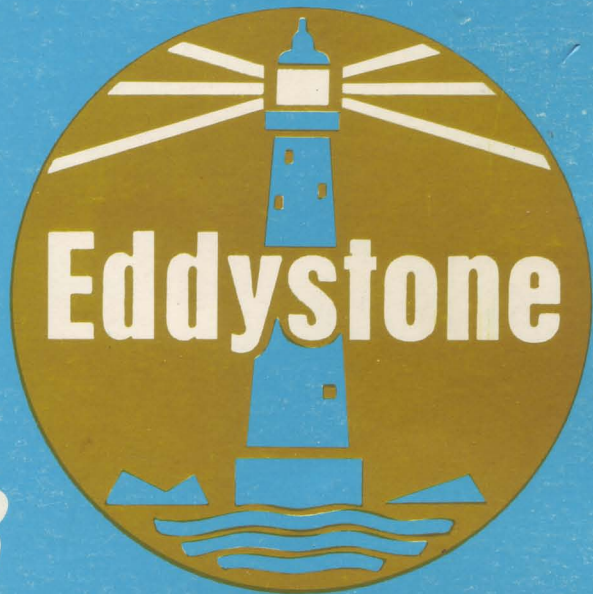


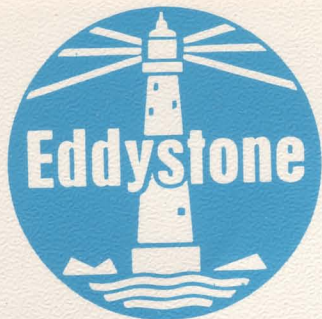
*The*  
*first 50*  
*years*  
*1923~1973*





*Eddystone's  
Golden  
Jubilee*

Eddystone Works, West Heath, Birmingham.



## How it all began

This year, 1973, Eddystone Radio celebrates its Golden Jubilee. We are, therefore, taking this golden opportunity to look back over the fifty eventful years of its existence.

To say that Eddystone was born in 1923 under the name Stratton and Company would be an over-simplification, and would also deprive us of the excuse to glance at a genealogy which, though somewhat complicated, is extraordinarily interesting.

In 1860, a Gloucestershire pin-maker, Mr Stephen Jarrett, and a Birmingham merchant, Mr Charles Rainsford, joined in partnership to start the firm of Jarrett and Rainsford, occupying premises in Islington, Birmingham, and dedicated to the task of producing steel pins.

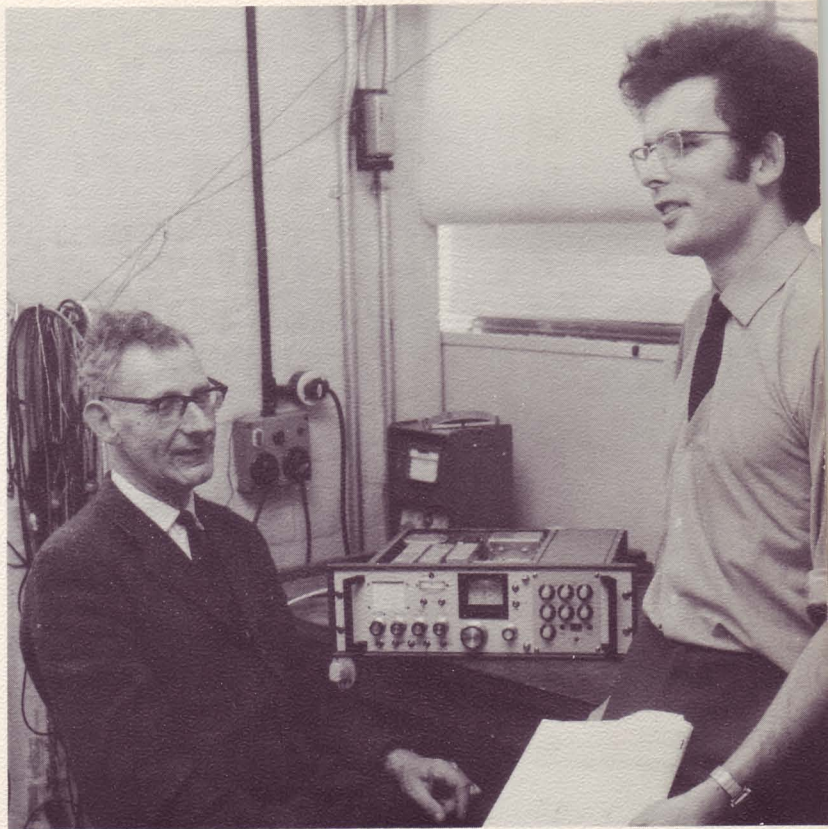
The formation of J & R is of significance in the history of Eddystone, but thirty-eight years were to pass before another event of significance took place. And that, surprisingly, was when in 1898 a 15-year old office boy, George A. Laughton, was taken onto the payroll. G.A.L was clearly one of those who carry a Field Marshal's baton in his knapsack. Only six years later, in 1904, when the Company expanded its activities to include the manufacture of hairpins, he was appointed assistant manager of the new enterprise.

In 1911, he was running a small section of J & R that was making coronation flags and badges. Certain of the components needed for these items

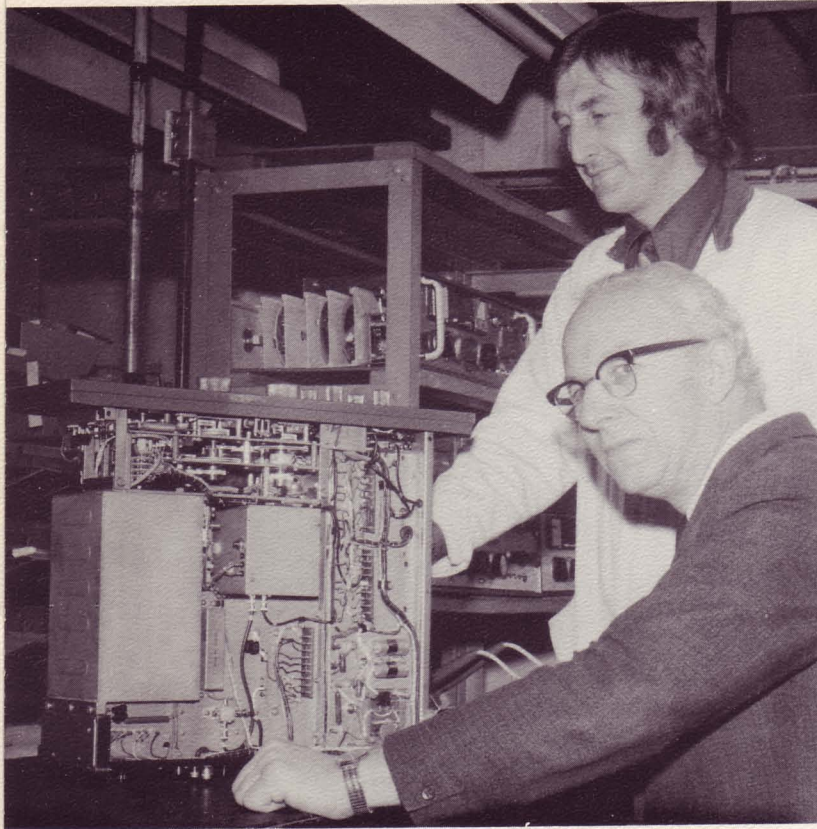
were supplied by a drunken manufacturer, teetering on the edge of bankruptcy. Clearly such a source was likely to dry up abruptly and dramatically. Determined to safeguard the continuance of his festive product line, G.A.L. decided to buy up the drunken supplier with his own money, and for the princely sum of £50 became the possessor of four hand presses, a few tools, some benches, and a staff of two girls and the alcoholic tool-maker. It was an inauspicious beginning for the concern that G.A.L. christened Stratton and Company. A year later it became a limited liability company, and also in that year, 1912, G.A.L. became a director of his employer's firm, Jarrett & Rainsford.

Within a few years G.A.L. had built up his infant Stratton company into a thriving concern that was manufacturing gentlemen's jewellery, ladies' compacts, a variety of small metal products, including knitting needles, thimbles, hat pins and crochet hooks, and a whole range of do-it-yourself kits for making model ships and aeroplanes, pearl flowers, seagrass stools and wooden bead mats.

In 1920 he sold the major part of his interest in Stratton's to J & R, in which, at the same time, he acquired a shareholding equal to that of each of Charles Rainsford's two sons, who had been running the business since their father's retirement in 1896. The company thus became Jarrett, Rainsford and Laughton Limited and also parent of the lusty Stratton's.



Eighteen months after working in the Press Shop and Assembly, Geoff Woodburn, Assistant Chief Engineer, embarked on a 16-year spell in Test, after which, and until the present day, he became concerned with development. He is seen here seated in front of the new 1990 receiver, which he is discussing with Geoffrey Mellor, Development Engineer.



Having served in the RAF during the war on Combined Ops with the Army and Navy, Desmond Sheppard returned to Eddystone. After working as Goods Inward Inspector, then as Receiver Inspector on the assembly line, he became Chief of Supplies, Storage and Movement. In the photo he is seated at the 958 assembly line with Chargehand Derek Walters.

We now approach what is veritably the watershed in the history of Stratton's. In the early 20s, women took a determined step along the road to liberation, collectively lopping yards off their skirts and, more portentously from our point of view, their hair. The wholesale cropping, bobbing and shingling was accompanied by the sound of falling hairpins, and almost overnight the plant at J R & L that had turned out six tons of hairpins a week came to a standstill.

The problem of how best to deploy the idle resources was answered with a question put by G.A.L's eldest son, wireless enthusiast George Stratton Laughton, who had recently joined J R & L, 'Why not make wireless components?' In those days, radio, pioneered by Guglielmo Marconi at the turn of the century, was still in its infancy. But it had been used for military communication in the First World War, and an enormous number of men had returned from the Forces with the enthusiasm and knowledge to build their own sets. Moreover, by now, wireless was not merely the hobby of hams and an official communications medium, it had become, through the formation of the British Broadcasting Company, a means of entertaining and informing the masses. Consequently there was a vast potential market for wireless parts for the home set builder. In these favourable circumstances, it was decided in 1923 to act on G.S. Laughton's suggestion.

## The birth of the radio business

J R & L's wireless business was concentrated in Stratton and Company Limited at Balmoral Works, Bromsgrove Street, Birmingham. The manufacture of the fancy goods that had been Stratton's concern was taken on by the parent company, who wisely continued to market them under the Stratton trade name — already becoming a household word in many countries.

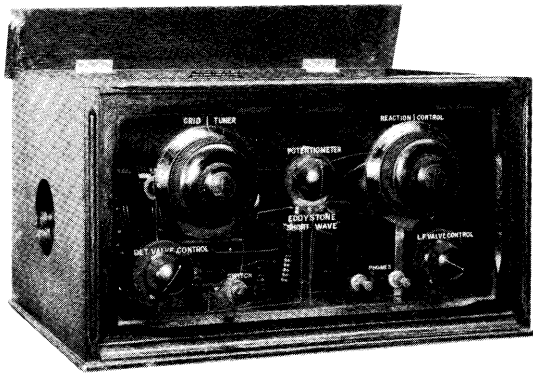
For the wireless products, the trade name Eddystone was adopted — a name that had suggested itself to G.A.L and his son on their way home from the office. It was a farsighted choice: the endurance and reliability associated with the lighthouse were to be fully reflected in the radio equipment.

The decision to go into radio may be said to have been inspirational. From that moment on, however, Stratton's adopted an evolutionary course, each stage of its growth emerging logically and inevitably from the previous stage; each development reflecting past experience. And the force that drove the firm so rapidly and surely along its chosen path was enthusiasm. Working with radio meant more to the employees than a way of earning a living: it was a consuming interest and the extension of a hobby.

The first four years saw the Company establishing itself not only as a components manufacturer but also as a designer and manufacturer of



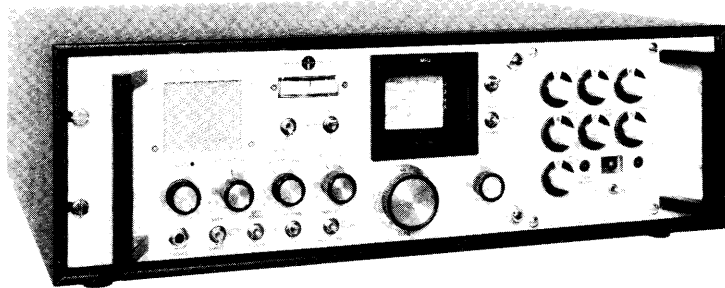
Brenda Taylor, Chief of Sales Services, joined Eddystone in 1946 to help reorganize sales and reinstate a retail market after the war. She is now involved with publicity exhibitions in addition to her sales service duties. Discussing a new display stand with Mrs Taylor is John Cantrell, Deputy Service Manager.



receivers, one of the first being the 'Eddystone Twin', a 2-valve, oak-encased set with a plate glass front. In 1924 Stratton's also introduced the first of what was planned to be a chain of Webbs retail radio shops. The venture did not grow beyond five such shops, however, and it was finally decided to keep only Webbs Radio in London. Although this became one of the leading establishments of its kind, it was closed in the mid-60s, as, by then, the Company's main activity called for the undivided attention of management.

By 1927, G.A.L had come to the conclusion that the future of wireless lay in the higher frequencies, which were then almost unused except for experimental transmissions.

In 1927, therefore, Stratton's produced its first short-wave receiver. Known as the Eddystone 'Short-wave Two', it covered a range from 15 to 85 metres and was the only commercially available set in the world capable of long-distance reception of the newly introduced BBC short-wave services. It found an immediate market among both the home short-wave listeners and expatriates such as planters, public works constructors and overseas administrators. The Company had taken a step that was to affect its whole future. The 'Short-wave Two' was followed in 1928 by the Eddystone 'Scientific Three' — one of the first screened-grid short-wave sets — which was available in both cabinet and portable form, and, in 1929, by the 'Scientific Four'.



The old and the new. Listeners in 1927 must have been fascinated by Eddystone's first short-wave receiver, through the glass panel of which they could see the parts moving and the valves light up. The 1990R receiver, below, is the Company's latest equipment, and is still under development.

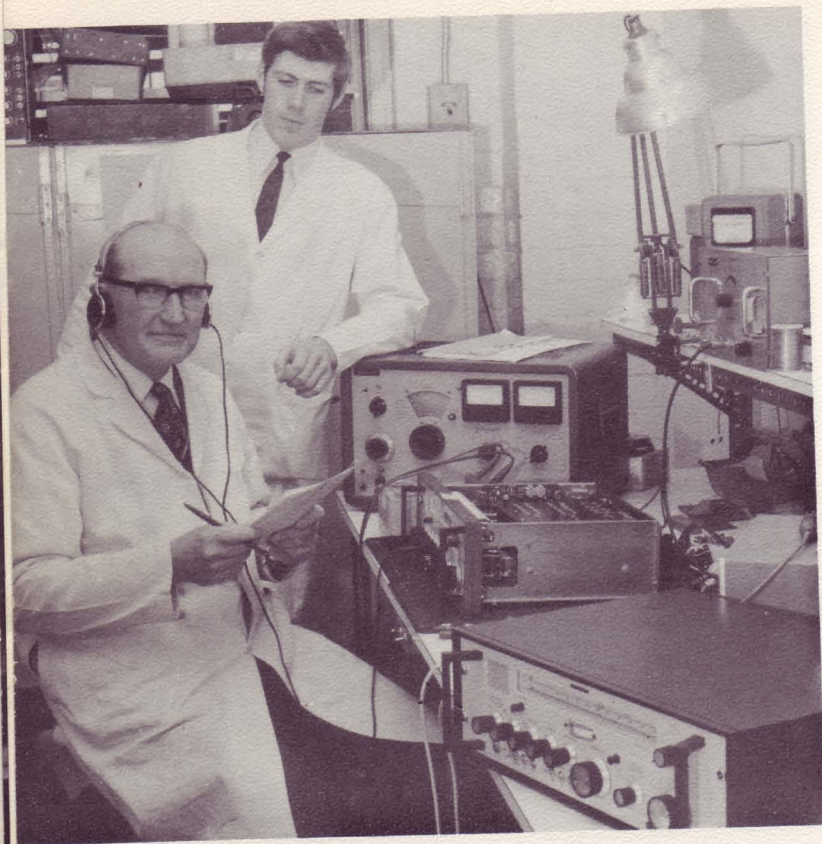
## Stratton's in the 30s

During the 30s, nearly all the 25 to 30 people who worked at Stratton's were licenced radio amateurs, and the Works itself had a station, G6SL, which transmitted regularly on Sundays with beam and omni-directional aerials. Throughout this decade, nine of our present-day colleagues joined the firm. Wilf Williams joined in 1930, Jack Shrimpton in 1932, Joe Addison in 1933, Bill Cooke, Jack Gwynne, Desmond Sheppard and Maisie Porter in 1935 and Geoff Woodburn and Ken Wilkins in 1938. Without exception they state that one of the most memorable features of production in those days was that each man carried the making of a component or receiver through from start to finish, from tool making through metal bashing, cabinet filing and wiring to final assembly. As a work pattern this would turn the O & M man of the 70s white, but it made for a degree of job satisfaction rarely encountered these days. Wilf Williams remembers with pride the first set that he made, which had specially marked controls for the blind. All our 'veterans' recall the models of the period: the 'Kilodyne Four', the 'Sphinx', the 'Quadradyne', the 'Homelander', the 'ERA Seven' but in particular the 'All-wave' and the 'All-world' series. Geoff Woodburn remembers the 'All-wave Two' being so tough that the set which fell overboard during an Arctic expedition needed only to be swabbed out and dried before it started to work again. Jack Shrimpton recalls the 90 'All-wave Fours' that



Managing Director, Dick Carroll, with his secretary, Maisie Porter. Mr Carroll transferred from Marconi-Elliott Microelectronics Limited to Eddystone as Works Manager in 1968 and became Managing Director the following year. Miss Porter is one of the longest-serving members of the Company, her memories of which reach back to pre-war days!





In his forty years' service with Eddystone, Jack Shrimpton, Inspector, has turned his hand to many things, including carpentry, but throughout he has been mainly concerned with test, and is seen here, seated, with Terry Parker, Chief of Test, discussing the 1830 receiver.

were made in a single month — all for export and all tested by him. The 'All-world Eight' is remembered for its success in receiving Admiralty approval. All the components for these receivers were tropicalized and were built into solid aluminium die-cast cases which, when the lid was closed, were insect- and spider-proof — important in the pest-ridden surroundings in which they found themselves.

Also in the 30s, Stratton's started to work on v.h.f, and notched up another first. The special quench-type transceivers that it made for an Oxford University Everest expedition were the first walkie-talkies in the world. Operating in the 60MHz region, they had a range of 5 to 6 miles.

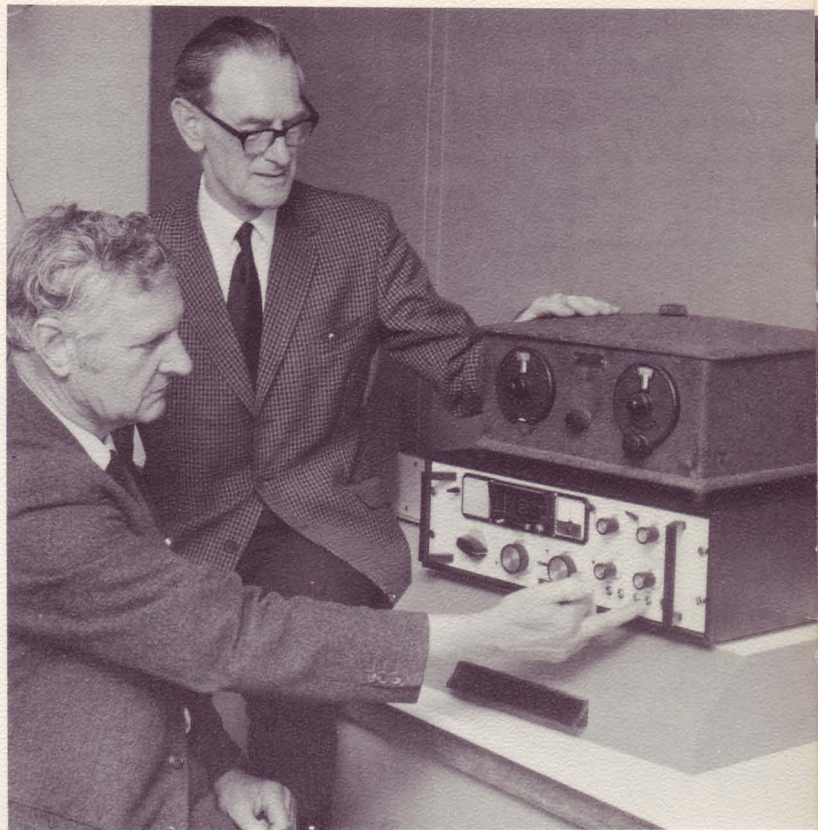
In 1937, a 60MHz tuned line, audio modulated transmitter emerged from the development laboratory — a garden hut on the roof of Balmoral Works, access to which was by way of a ladder and a hole in the ceiling. Wilf Williams recalls that during tests of this equipment, a telegram was received from New York saying that signals had been picked up there. A lot of effort went into promoting the idea of portable v.h.f two-way equipment for use in police and military vehicles. Not until the Munich crisis in 1938, however, did the notion of v.h.f two-way communication really catch on. Then the Metropolitan Police Authority, responsible for 95 police stations and Scotland Yard, asked Stratton's to tender for, and to submit for test, an automatic wireless tele-

phone that could provide communication between all their stations. A day-and-night, seven-day-a-week effort resulted in equipment which, based on the tuned-line transmitter, outstripped its competitors. A substantial order followed and, once again pushing aside any thought of statutory working hours, Stratton's built and delivered the whole installation by July 1939, ready in the event of war and enemy action to take over from the telephone network. The order was at once followed by others from many police forces including those of Birmingham, Glasgow, the City of London, Edinburgh, Renfrew, Dumbarton, Paisley, Stoke and surrounding Pottery Towns. Both Jack Gwynne, currently secretary of the West Bromsgrove Amateur Radio Society, and Jack Shrimpton remember their involvement in these huge installation exercises, the former in Birmingham and the latter in London.

Another peace-time development that was to have special significance during the years to come was a differential condenser, type 339, for use on high frequencies. Developed for the National Physical Laboratory in 1935, it was incorporated in I.F.F. equipment used by the RAF.

## We go to War

By 1939, most people realized that war was close at hand, but Jack Shrimpton must have been among the first to know just how close when, at 8 o'clock on the morning of 1 September, he picked up the following ham message,



Jack Gwynne, foreground, returned to Eddystone after six years in the RAF on night fighter radar. Twenty-five years ago he was asked to help out in Stores and has stayed ever since.— now as Chief Buyer. Six years in RAF Signals, spells in Eddystone's Stores, Service, Development and Training Departments lie behind Wilf Williams, Section Leader Production. Here they compare the 'All-wave Four' with the 958 standard receiver.



Until the blitz in 1940, Jarrett, Rainsford and Laughton occupied almost the complete block of premises bounded by Lower Essex Street, Bromsgrove Street, Gooch Street and Kent Street in Birmingham. The photo shows the devastation caused by the November bombing, resulting in the move to The Bath Tub.

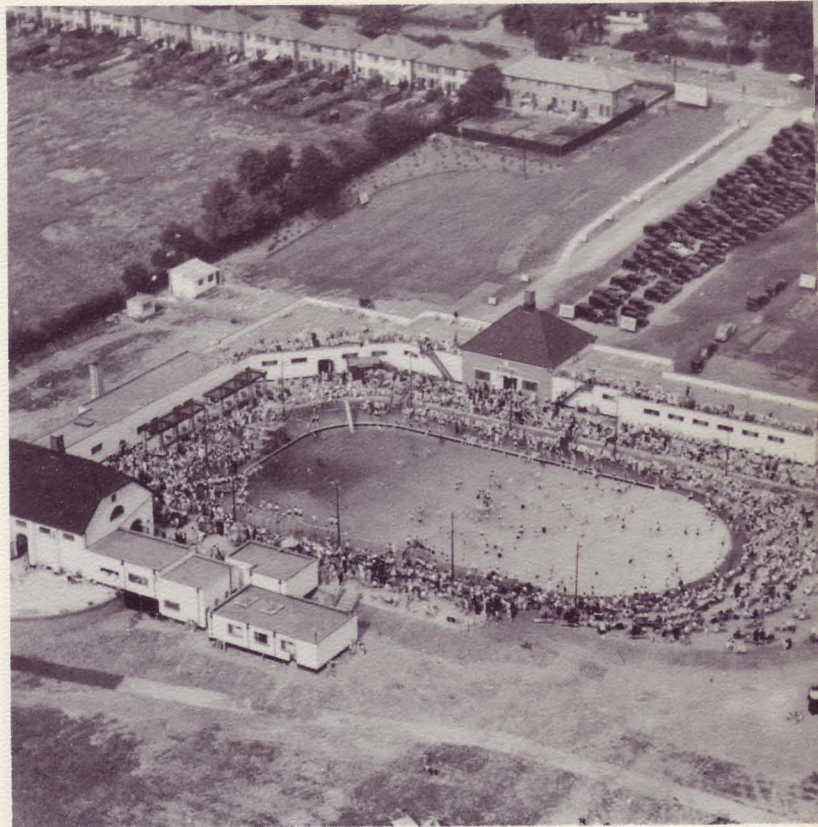
'DJB calling W2XE . . . Hullo W2XE we have some news for you. This morning at 5.15 under the leadership of our glorious Fuehrer, we crossed the border into Poland.'

When war was declared two days later, many of Stratton's most experienced men went into the Forces, in particular the RAF. Already providing a considerable amount of Service equipment, the firm had to meet greatly increased demands. Twelve-hour shifts were organized and women were recruited and trained, many of them becoming so expert that Ken Wilkins remembers them carrying out final test and complete alignment on v.h.f transmitters and receivers.

On the night of 24 October 1940, Stratton's suffered its first disaster. An oil bomb fell on Eddystone (formerly Bromsgrove) Works and within minutes the building was ablaze from end to end. The fire watch, E.M. Lauze, H. Cox and E.J. Pickard, with complete disregard for personal safety, removed practically all the valuable technical equipment. The next day, it was taken to Globe Works, another section of J R & L, some 200 yards away. Production was resumed and was steadily building up when a second disaster occurred. On the night of 19 November, high explosive and oil bombs totally destroyed Globe Works. For three weeks the fire smouldered, feeding on rubber tyres and flour that had been stored there for the Ministry of Supply. Of Stratton's equipment, only two signal generators, one beat frequency oscillator and a

'Q' meter survived — once again E.M. Lauze was involved in the rescue work, subsequently receiving the BEM for his efforts.

No time was lost finding new premises. The following day the parent company took over the Lido at West Heath on the outskirts of Birmingham. It was complex of fun fair, swimming pool, dance hall and chalets and was known locally as The Bath Tub. Stratton's was allocated the ladies' dressing rooms and the ballroom. Ken Wilkins recalls that although the ballroom had long been unused, the ash-trays were still filled with butt ends, the cups on the tables with coffee dregs and — happy days! — the bar with drinks. Setting up the place for production called for ingenuity and improvisation. Timber from the dressing cubicles was used to make the benches and fixtures, Jack Shrimpton — a carpenter and joiner before coming to Stratton's — doing a lion's share of the work. Tools bought from local ironmongers were used to make the special tools, jigs and equipment for production. Within three months, Stratton's had risen, Phoenix-like, from the flames, type 339 condensers were flowing out of the ballroom, and so too were type 358X receivers, used extensively by the Services. These were of special importance on two counts. Firstly, because supplies of the only comparable set, made in the USA, were unpredictable, owing to U-boat action; second, because these were the first Eddystone professional receivers. The Company was set fair on the course that has led to its reputation as one of



The West Heath Lido, or Bath Tub, as it was in the carefree days before the war and before it became the permanent home of many sections of J R & L, including Eddystone.



Joe Addison, standing, joined the Company at 14. He spent the war years in the RAF as a Wireless Operating Mechanic. He is now Chief of Production Engineering, having had extensive experience as Chargehand and Foreman in both assembly and pre-production development. With him here on the 990R assembly line is Chief Inspector, Ed Green.

the world's leading designers and makers of professional equipment.

By the end of the war, Stratton's had supplied the Police and Armed Forces with 4½ million radio components, over 4,500 transmitters, over 7,250 receivers and 45,000 supplementary pieces of equipment. Often the heart of a Stratton man in uniform would be gladdened as he recognized a piece of Stratton equipment in some remote theatre of war — Joe Addison remembers just such a reunion in Egypt, Desmond Sheppard recalls using a 358X receiver in Socotra in the Indian Ocean — and the untiring workers at home were given a real lift when they knew that their two-way radio equipment had played its part on D-Day as a cross-channel link.

### Après la Guerre

After the war there were difficulties. The Services placed very little business, and the unloading of surplus stocks by the Government departments in this country and the U.S.A. depressed the home and export markets. Indeed, Bill Cooke recalls that when he came back from the RAF his first development job, far from being a glittering new receiver, was an r.f seaming machine for the parent company, which was launching itself into the plastics market.

In spite of the gloom of the immediate post-war period, policies had to be laid down for the future. It was decided, perhaps surprisingly, to withdraw from the v.h.f two-way field. It was

also decided that there should be no return to the domestic receiver market. Instead, the Company was to pursue its development of professional receivers, so successfully started to meet the demands of war. In the event, it proved to be a policy that has paid off handsomely. With little encouragement from potential users, the Company developed the tunable v.h.f Eddystone 770R and the tunable Eddystone 770U — two receivers that subsequently captured a world-wide market. The 770R was used in America for tracking the first Russian Sputnik to orbit the earth, and considerable quantities went to Russia, China and Jodrell Bank, probably for the same purpose.

Other winners of the period were the Eddystone 670, a shipborne, all-metal, a.c/d.c, 90-250V receiver, used extensively by The Marconi International Marine Company for cabin installations, and a main ship's receiver that was given Post Office approval.

A pioneer effort to produce a high performance receiver in which valves were virtually replaced by transistors resulted in what must have been a record weight-of-steel to transistor ratio, but unfortunately the product was not proceeded with.

For a long time Stratton's was the only company in Europe to produce continuous tuned receivers up to several hundred megahertz.

## New Name . . . New Era

In the mid-60s, the long association between Stratton's and G.A.L came to an end. By now,



Chief Engineer, Bill Cooke, right, has been with Eddystone for 38 years. His war-time RAF experience of setting up and running newly developed radar equipment proved invaluable on his return, and for 30 years he has been involved in receiver design. He is here discussing with David Lakin the 1990 receiver, currently under development.



Ken Wilkins, 16 when he joined Eddystone, was too young to go to war. He later did a three year National Service stint as a radar fitter in the RAF. After working in Eddystone's Final Inspection, Service Department and Commercial Section, he became Sales Manager in 1969. He is seen here with Dave Travess, Works Manager, holding the new 1001 receiver.

G.A.L was chairman of the parent company which, in 1958, had changed its name from Jarrett, Rainsford and Laughton to Laughton & Sons Limited. In 1965, Stratton's was sold to The Marconi Company, at that time part of the English Electric Group.

Probably a certain confusion had always existed in people's minds because radios were made by Stratton & Company, while Stratton fancy goods were made by Laughton & Sons. It seemed a good moment, now that Stratton's was acquiring a new parent, to change its name, leaving Laughton's in clear-cut possession of the Stratton name. Stratton & Company therefore became Eddystone Radio Limited. Eddystone and Marconi had worked together for many years, and were friends of long standing, both The Marconi Company and The Marconi International Marine Company having used a great deal of Eddystone equipment in their communication systems. Eddystone Radio is now a part of Marconi Communication Systems Limited, a company within GEC-Marconi Electronics, which was created after the merger between GEC and English Electric.

Changing parents has in no way changed the Eddystone organization. It continues to operate as an autonomous company, under its own managing director, and having its own design, development, production, sales and servicing facilities. From its greatly extended and improved Bath Tub premises, it continues to produce

equipment of which over 65 per cent is exported, and which is used by airport services, defence ministries, universities, radio and television broadcast services, u.h.f equipment manufacturers, post and telegraph services, and such discriminating non-professional users as the specialist short-wave listeners, linguists, boat owners and the many international travellers who wish to listen to broadcasts from their own countries.

Naturally the firm has grown. There are now over 250 men and women at The Bath Tub. But that number is still small enough to allow the 'family' atmosphere to live on. Many of the members of the Eddystone 'family' have gone on to achieve high office in other spheres, and we like to believe that their success is in some part attributable to their early experience with us — men such as David Parsons, some time Chief Engineer of Rediffusion; George Brown (G5BJ) who was responsible for the transmitter section of the v.h.f two-way equipment, so successfully used by the Police, and who became Chief Radio Engineer of Birmingham Police; Walter F. Lovering, who holds the Chair of Radio Communications at Imperial College, London.

Times, techniques and technology have changed during our half century of endeavour, but the single-minded devotion and sense of personal involvement of those who work for Eddystone are as evident now as they were fifty years ago.



The present-day Eddystone management team. Left to right, Jack Stanley, Accountant; Ken Wilkins, Sales Manager; Dick Carroll, Managing Director; Bill Cooke, Chief Engineer; Dave Travess, Works Manager and Ken Mills, Personnel Officer.





The Bath Tub Family, 1973, grouped outside the main office block at Eddystone Works, West Heath.

## Today

The present-day range of products is tangible evidence of the inventiveness and expertise of our engineers, and the skill of the men and women who make and assemble the parts with such precision. We are moving forward in the vanguard of receiver design, keeping our sights firmly fixed on providing the highest possible level of specification at the most economical price.

The variety of facilities that we offer through our range of receivers is widely embracing. There are crystal-controlled receivers having up to 52 channels; receivers for use at sea; receivers for monitoring; receivers for point-to-point, fixed and mobile and shore-to-ship services. Our general-purpose receivers for f.m stereo, for high quality broadcasting, for the small boat owner, and for long-range, short-wave reception are all standard products. Our unique v.h.f/u.h.f receivers in the range 27MHz to 870MHz are used all over the world, and have now been joined by a v.h.f noise measuring set, originally made for the Post Office.

In this 50th year we have phased out the last of our valved receivers — not through lack of demand, but because, unhappily, it is no longer possible to obtain many of the components. Our range of receivers, therefore, is now totally solid-state, and meets the requirements of many Defence and postal authorities world-wide. Our range of components, though now limited compared with that of the past, is widely known and sold throughout the world.

## Our products

**EC10/EB37** Series of inexpensive general-purpose receivers for broadcast and general h.f/m.f application.

**1000** Series of modular receivers for broadcast and m.f/h.f monitoring on land and sea.

**1830** Series of double conversion G.P. receivers, including crystal control facility, for military, civil and marine applications.

**958** Series of high stability, general-purpose receivers, with versions providing digital readout and all the facilities required for professional use, including f.s.k and i.s.b modes.

**964** Series of single channel and multiple channel spot frequency receivers, including remote control facilities.

**961** Series of panoramic receivers and adaptors.

**990/1990** Series of v.h.f/u.h.f tunable receivers for general military and civil applications.

**31A** Series of radio frequency interference measuring equipment.

We also produce and supply a range of active and passive antennas, diecast boxes, knobs and variable capacitors, as well as a range of receiver accessories.

*Compiled by Pam Reynolds.*

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