# A BRIEF HISTORY OF EDDYSTONE RADIO

The story of Eddystone Radio is forever linked with the City of Birmingham, in the Midlands of England, 100 miles (160km) north-west of London. Birmingham is one of Britain's 'newer' cities, having grown enormously after the introduction of the canal system in the late 18<sup>th</sup> century. Metal goods of every description were produced and it was rightly known as the city of a thousand trades.

# IN THE BEGINNING

In the year 1860, Stephen Jarrett of Gloucestershire joined in partnership with Charles Rainsford of Birmingham. The former was a pin manufacturer and the latter a commercial traveller. Thus was started the firm of Jarrett & Rainsford.

Premises were taken at No 7 Broad Street, Islington, Birmingham. Probably somewhere near 'Five Ways' where Broad Street now joins Hagley Road on the A456.



### J&R premises in Broad St, Birmingham, from 1870 to 1909.

Stephen Jarrett was also a manufacturer of jewellery of all descriptions but the main business was the manufacture of pins. Business settled down well and in 1870 the firm moved to larger premises at 48 Broad Street. Probably near the present-day Symphony Hall.

Here they were to remain for the next 39 years until early in the 20<sup>th</sup> century. In the meantime the company acquired a new office boy in 1898.

# A NEW KID ON THE BLOCK

He was 15-years old George A. Laughton who had two years' previous experience in a coal merchant's office.

By all accounts, G.A.L. (as he was always thereafter described) was a bright lad and soon showed the entrepreneurial instinct which was to create an empire. By 1904 he was an assistant manager with the firm.

In 1909 the move to Kent Street took place, near the Birmingham markets area and just round the corner from the Bromsgrove Street location of Balmoral Works; later to become famous as the home of Eddystone Radio.

# THE STRANGE ORIGIN OF STRATTON & CO

In the year of the Coronation of King George V, 1911, G.A.L. was running a small section of Jarrett & Rainsfords, (J&R) selling coronation badges and flags.

Components were bought in from a small supplier who suffered from the ravages of alcohol and supplies were erratic. To cut a long story short G.A.L. bought the business for £50 and acquired four hand presses and two girl workers. He named this enterprise Stratton, reputedly after the hero in a novel his wife was reading.

In practise this is slightly questionable, as his eldest son, also named 'Stratton', was probably about 7 years old by then!

The following year, 1912, G.A.L. was elected a director of J&R. He would then have been 29 years old. The two companies followed their parallel courses, with Stratton & Co concentrating on men's jewellery.

During the First World War the firm manufactured parts for the famous SE5 British fighter plane and acquired much experience in the use of aluminium and duralumin alloy. This was to be of great value in the radio business.

#### TWO FIRMS AMALGAMATE

In 1919 J&R became Jarrett, Rainsford & Laughton Ltd., (J.R.&.L.) and the following year acquired Stratton & Co Ltd.

Although artificial jewellery was back in production, pins were still a staple part of the company's output.

# NEW TECHNOLOGY ARRIVES

In November 1922 the British Broadcasting Company (BBC, and

forerunner of the present Corporation) was formed and started broadcasting with low power transmitters in major British cities.

The best known of these stations was 2LO, the London station in the Strand. The Birmingham station (5IT) was opened the next day.

Young Stratton Laughton became a 'wireless fan'. Equipment was expensive. Home construction was widespread.

#### HOLLYWOOD STRIKES

Although talking pictures were not to arrive until the late 'twenties, the cinema had become a major source of entertainment during the First World War.

The 'Roaring Twenties' were created by this media, especially by the film "Flaming Youth" starring 'Jazz Baby' Coleen Moore.

She introduced the 'pageboy' haircut, which needed no hairpins at all. Stratton's market dwindled overnight from six tons to one.



Coleen Moore's 'pageboy cut' 1923

This happened towards the end of 1923 and Stratton Laughton suggested to his dad, George (Abe) Laughton that the shortfall in sales be made good by entering the radio component field.

This is where we enter a slightly grey area in the company's history.

Following total loss of records due to enemy action during 1940 there is very little hard evidence to go by.

Stratton Laughton claimed that the company started manufacturing components for home constructors in 1923, shortly followed by complete receivers in 1924. He also claimed that Stratton's was one of the first firms associated with the original British Broadcasting Company.

My own personal view is that these claims are slightly premature.

Stratton's first radio-related patent was filed in February 1925, as was the Trademark "Eddystone" and the Lighthouse device.

The company's single £1 BBC share certificate (which escaped the blitz) is dated September 1925. By the end of 1925 there were 1716 members of the BBC. The first written reference to an Eddystone receiver (that I can find) is in the Wireless World listings for spring 1926. ("Eddystone Twin" – early version.).

It is my own belief that Stratton Laughton and his friends were involved in 'Wireless Mania', (as were most bright young men at the time) during 1923/4 and that towards the end of 1924 decided to produce simple components. I don't really think the first complete receivers were constructed until the end of 1925 and marketed in 1926.

A fruitful area for ongoing research, I think. All contemporary evidence gratefully received by the writer!

In the meantime we do know that Stratton's took on board Harold Cox and Arthur Edwards (G)6XJ during this period and that these two were to provide a driving force for the next forty years. Their names crop up again and again in Eddystone history. Harold became Technical Director and Arthur became Sales Director, continuing with the firm until the late 1960's.

# THE SHORTWAVE REVOLUTION

By 1927 short waves were well established across the world, due to the pioneering work of early radioamateurs. One of these was Gerald Marcuse, G2NM, who obtained a permit from the British Postmaster General to transmit speech and music to the British Empire.

Power was to be 1 kW input, wavelengths 23 and 33 metres and the first transmission was on September 11<sup>th</sup> 1927. The experiment continued for almost a year.

The BBC also started experimental broadcasting on 20 metres from G5SW, Chelmsford (Marconi) in November 1927.

The result was a demand for shortwave receivers from expat Brits. Stratton & Co were ready to fill that need and c.1927 produced what is believed to be their first short wave set, the Atlantic Two.

By 1930 the company had ceased making medium wave only sets and from then on everything was focused on the higher frequencies.



George Brown G5BJ works on a VHF Lecher Line transmitter (G6SL) in the roof-top laboratory at Stratton's Balmoral Works, 1935. Signals were received in New York.

#### **RAPID EXPANSION**

Sets were produced by the company in bewildering variety. Eddystone receivers were used by many scientific expeditions of the 1930s, such as the British Arctic Air Route Expedition and the Hudson Strait Settlement Expedition.

In 1935 work started on VHF experiments and portable Eddystone five-metre equipment was used by the 1936 Mount Everest Expedition.



# EDDYSTONE TYPE 215 VHF 100 Watt AM Tx

#### Over 250 were supplied to the police and Admiralty during the war

During the years 1935-8 much effort was made demonstrating to the police and military to gain acceptance of VHF equipment for use in cars and tanks, but without success. It was not until after 1938, when war was looming, that Stratton's were to serve a purpose of national importance in this field.

#### WAR CLOUDS FORM

The London Metropolitan Police Authority covering some 95 police stations and Scotland Yard, sent an urgent request to Stratton & Co to tender for an automatic wireless telephone network. This was accepted, and work commenced day & night to complete the system for July 1939.



AFTER THE 1940 BLITZ

The installation worked perfectly throughout the war. Similar equipment was supplied to many prominent police forces including Birmingham, Glasgow and Edinburgh.

We are dependent on salvaged ephemera for all our information of the 'twenties and 'thirties. Virtually nothing survived the bombing of October and November 1940.

J.R. & L., in conjunction with the Air (for whom thev Ministry were manufacturing radar IFF components) took over a disused Lido known as 'The Bath Tub' at West Heath (sometimes referred to as 'Kinas Norton') on the southern outskirts of the city. All that remained were two signal generators, a beat frequency audio oscillator and a Q meter! Benches and fixtures were made from from the timber taken dressing cubicles: tools were purchased from local ironmongers and within three months production had outstripped preblitz figures. Type 358 receivers were back in full production. All this improvisation was done under the Harold Cox: direction of Arthur Edwards had joined the Fleet Air Arm.

During the war no further damage took place and over 4.5 million components for use by H.M.Forces were manufactured. Just over 4,500 transmitters, 7,264 receivers and 45,000 other supplementary pieces of equipment were supplied, for Police, Army, Royal Air Force, but mainly Admiralty requirements.

After the war ended times were difficult in the radio business. War surplus depressed world markets. A major decision, perhaps an error, was made not to re-enter the VHF two-way radio field. It was decided to concentrate on specialised communication equipment, well constructed for performance and stability and selling on these points rather than price; a policy which brought success for many years.

#### TIMES CHANGE

In 1964 the death of George Abe Laughton brought the company to a crossroads. Eddystone Radio was the odd man out in a family company that produced goods for the cosmetic market and the "Woolworth's" trade. The family felt that the communication business had grown in complexity beyond their understanding. A decision was made to sell the radio business to one of their largest customers, Marconi, in 1965.

Solid state was just starting. It was to overlap valve production by about a decade and the last valve set was manufactured in 1973. At about this time Marconi made a policy decision that their subsidiary, Eddystone Radio, should pull out of the High Street and concentrate purely on professional receivers.

The H.F. receiver market was starting to shrink as competition from the Far East started to bite. The size of ships grew, requiring fewer radios. The ocean liner 'cabin set' market vanished in the new 'air travel for all' regime. Satellite communication became a practical reality.

Around 1980 the company entered the broadcast transmitter field in partnership with the BBC. This was very successful and took things into the '90s when Eddystone and the BBC pioneered the new Digital Audio Broadcasting (DAB).

# END OF AN ERA

In 1995 the lease on the premises at the Bath Tub expired and the company relocated on a small industrial estate in Selly Oak, within the City of Birmingham, ready to take up the digital challenge. Unfortunately the expected expansion didn't materialise (nor has it yet done so in 2002).

The end of the cold war had seen a big drop in government orders and the increase in satellite communication further reduced the demand for professional HF receivers. Combined with an economic crash in Malaysia, where a large VHF/FM broadcast transmitter order was cancelled, this end of spelled the Eddystone's ownership by Marconi, itself in a parlous state.

In 1999 the firm was bought by Megahertz Communications. After three years in the doldrums Megahertz went into receivership and Eddystone Radio (receivers) was sold to Ring Communication. The Transmitter section has been sold to SBS of Hastings and is now known as Eddystone Broadcasting.