
RSGB
75 YEARS OF RADIO

Eddystone Radio
A MARCONI COMMUNICATION SYSTEMS COMPANY



*An
Exhibition
of
Radio Equipment
1913 - 1988*

- 1 Crystal receiver built by Mr A Trevelyan Lee (LYX), later 2DJ, in 1913. Awarded 1st prize in an exhibition at the Royal Horticultural Hall and featured in "The London Daily News and Leader". Designed for portable use with a "spark sender" (see item 2) fitted with a send/receive switch, two switched permanent crystal detectors and spare. Tuning was achieved by movement of the solenoid-type coil winding within a fixed solenoid coil covering very long wavelengths.
- 2 Spark sender built by A T Lee for use with receiver (item 1), with Tesla Coil, commercially made coil and large variable capacitor.
- 3 Two-slide "Jigger", pre-1914. Used for tuning.
- 4 Three-valve receiver built by A T Lee in 1916. Uses Q detector and V24 valves, two-pin plug-in coils, and swinging reaction variable capacity tuning. Battery operated from 4.5v flashlamp batteries connected in series for the HT.
- 5 1914-1918 Spark Trench Set used during First World War.
- 6 Replica of "Gamages Crystal Set Kit" for medium wave. Originally available in 1919.
- 7 "Buzzer" wavemeter built by A L Corbett in the 1920s.
- 8 Gambrell Wavemeter for 80m and medium wave, 1924.
- 9 Replica of 45 metre transmitter built by G6JP in 1925 rebuilt in 1988. One valve oscillator (T50) giving 50w CW with 1000v HT.
- 10 90 metre transmitter/receiver built by George Jessop, G6JP in 1926. Uses 2 valves, detector/ audio amplifier for receiver and oscillator/ modulator for the transmitter giving approx 10w output.
- 11 Eddystone "Short Wave 2", 1926. Covered 10 metres to 85 metres and has a glass-fronted case. Available in kit form.
- 12 Three-valve battery operated receiver "BTS Oceanic Bandspread 3", 1930s. Rebuilt by Fred Ward, G2CVV, during the second world war.
- 13 Battery operated valve shortwave receiver, modified from a Wireless World design and built by J H Lambert in the 1930s. Uses 6-pin plug-in coils and separate heterodyne oscillator instead of reaction.
- 14 5 metre transmitter built in 1931 by G6JP. 4-valve push-pull Hartley oscillator and modulator giving 5w output. Used in an air to air radio test in 1934 by Douglas Walters, G5CV and G6JP.
- 15 "Halcrafters SX27" AM/CW/wide-band FM receiver, 1936. Valve superheterodyne covering 26-143 MHz.
- 16 Eddystone "All-World Two", 1937/38. Features Eddystone "slow-motion" bandspread tuning over a range from 15.5 metres to 52 metres with two coils, adaptable by use of extra coils to 200 metres.
- 17 "RME 69" 9-valve superheterodyne 6-waveband receiver with crystal filter, 1936. 9 metres to 500 metres with bandspread.
- 18 Webbs Radio "M50" rack-mounted AM/CW transmitter, 1938. Covers 40, 20 and 10 metres using a crystal oscillator, 807 valve in the PA and modulated by a pair of KT66s giving 50w output.
- 19 Eddystone "640" receiver, 1940s. Continuous coverage from 1.7-31 MHz in 3 ranges. Separate gang condensers for band-setting and bandspreading. Including optional signal strength meter.
- 20 RCA "AR88" receiver, 1944. 14-valve superheterodyne covering 73kHz-30.5MHz in 6 wavebands. Weighs 110 lbs!
- 21 "B2 Spy Set", 1945. 2-valve transmitter, EL32 crystal oscillator and 6L6 in the PA and 4-valve superheterodyne receiver. Covers 3-16 MHz in 3 wavebands giving 30w CW output. Mains or 6v DC operation
- 22 a) Valve transmitter CO-PA, built by G2CVV in the late 1940s. Uses 6V6 crystal oscillator and 807 in the PA.
b) Aerial tuning unit for above. Also built by G2CVV.
- 23 Eddystone "680" professional communications receiver, 1940s/50s. Continuous coverage from 30-480 MHz. Two RF and IF stages. Finished for tropical service.

- 24** 19-set, war-surplus HF transmitter used by amateurs from late 1940s.
- 25** Experimental SSB phasing transmitter built by G2CVV in the 1950s. Complete with a 6N7 linear.
- 26** "LG300" AM/CW transmitter, 1954. Covers 80-10 metres. 7-valves with 813 in the PA giving 150w.
- 27** Eddystone "888" amateur band receiver, 1950s. 12 valve 2-IF stage design with 40:1 reduction tuning and crystal calibrator at 100 kHz intervals. Covers 160-10 metre bands.
- 28** PCA "Hamobile" 6w 2 metre AM/CW transmitter/receiver, 1954. 12-valve receiver, 8-valve transmitter.
- 29** Eddystone "EA12" amateur band receiver, 1963. 160-10 metres AM/SSB/CW with independent RF, IF and AF gain controls.
- 30** "KW2000A" SSB/CW transmitter/receiver, 1963. 160-10 metres with 100w output.
- 31** a) G2DAF SSB/CW transmitter, home built in the 1960s. 160-10 metres, 3-valve/4-transistor design with mechanical filter giving 100w.
 b) G2DAF SSB/CW receiver, home built in the 1960s. 160-10 metres SSB/CW, 30-transistor design with mechanical filter.
 c) G2DAF linear, home built in the 1960s. 80-10 metres, 2-valve grounded grid with variable screen drive design giving 400w pep output.
- 32** Eddystone "EC10" receiver, 1965. Covers 550kHz-30MHz AM/SSB/CW. 13-transistor/diode design. First commercial all-semiconductor receiver available.
- 33** Yaesu "FT101" SSB/CW transceiver, 1970s. First popular Japanese hybrid-type transceiver covering 160-10 metres with 100w output.
- 34** G2DAF 2 metre SSB/CW transceiver, home built in the 1970s. All solid-state with phase lock loop VFO, 10w output.
- 35** Heathkit "HW101" SSB/CW valve transmitter/receiver, produced as a kit in 1971. Covers 80-10 metres with 100w output.
- 36** Demonstation "Packet Radio" mailbox station utilising an IBM PC clone and operating in the amateur 70 centimetre band. The station is linked to other packet stations in the UK network and it is possible to send and receive messages all over the world via satellites and HF gateways. The station's own mailbox contains all of the greetings messages sent by the world's national societies to the RSGB on its 75th Anniversary. In addition to demonstrating packet radio, the station will be linked to another station in the exhibition by means of the very latest 9600 baud data transmission technology developed in the UK by James Miller, G3RUH.
- 37** a) Kenwood "TS940" HF transceiver, 1980s.
 b) Kenwood "TM221ES" 2 metre mobile transceiver, 1980s.
 c) Kenwood "TH25E" 2m handie transceiver, 1988.
- 38** a) Yaesu "FT767" HF/VHF/UHF transceiver, 1987.
 b) Yaesu "FT712RH" 70 centimetre 45w FM transceiver with optional digital voice recorder.
 c) Yaesu "FT73R" 5w 70 centimetre handie transceiver.
- 39** a) Icom "IC781" HF transceiver, 1988.
 b) Icom "IC1200" 23 centimetre 10w FM mobile transceiver.
 c) Icom "IC12E" 23 centimetre 1w FM handie transceiver.



The following have loaned items for display:
 Eddystone Radio — Items 11, 16, 19, 23, 27, 29, 32
 G2CVV — Items 1, 2, 3, 4, 5, 7, 12, 13, 22a, 22b, 25
 G3LLL — Item 33
 G3LXP — Items 15, 17
 G4AJ — Items 18, 20, 21, 26, 28
 G4SOT — Item 24
 G4MTP — Item 36
 G6JP — Items 6, 8, 9, 10, 14
 G8KW — Item 30
 ICOM UK Ltd — Items 39a, 39b, 39c
 Lowe Electronics — Items 37a, 37b, 37c
 RSGB Headquarters — Items 31a, 31b, 31c, 34, 35
 SMC — Items 38a, 38b, 38c

66 On behalf of Eddystone Radio Limited I am very pleased to be able to congratulate the Radio Society of Great Britain on its 75th Anniversary and to support its exhibition of radio equipment by sponsoring this programme.

In 1923, a Birmingham company whose main interest was the manufacture of hair grips and cuff-links, set up a wireless division under the name Stratton and Laughton. It decided on the trademark of the Eddystone Lighthouse as a symbol of the 'reliable and solid-as-a-rock' nature of its products.

The company became a subsidiary of the Marconi Company, (no newcomer to radio itself) in 1965 and changed its name to Eddystone Radio Limited. Continuously since those very early days, Eddystone Radio has been at the forefront in the design and manufacture of radio communication equipment in Birmingham and has enjoyed a happy association with the radio amateur movement whose interests the Radio Society of Great Britain has so ably represented for these past 75 years.

For many of its earlier years the company sold wireless components and published designs in its own magazine 'The Short Wave Manual'. It was a pioneer in VHF communications, being one of the first to equip the police and ambulance service with mobile radio telephone equipment prior to the second world war. The company's VHF equipment was used during an attempt on Everest in the 1930s and its shortwave receivers were used to listen to the Empire Service in all corners of the world.

Many of its commercial receivers found welcome use by amateurs and shortwave listeners alike and, judging by the classified advertisements in today's amateur press, still do. Some radios were designed specifically for amateur use, notably the '640' in 1946; the '888' in 1952 and the 'EA12' in 1963. An unmistakable hall-mark of these sets was the superb mechanical engineering and the famous 'Eddystone Slow-Motion Dial'. Those youngsters not familiar with how things were in the 'good old days' will have a chance to see these and other sets on exhibition here this weekend

and I am pleased to say that we have a fine collection of the company's historical past on permanent show at our factory museum.

These days, the company sells radio receivers, transceivers and sound broadcast transmitters to professional users throughout the world but we are proud of our roots in such romantic names as the 'Eddystone Twin' (1924), the 'Short Wave Two' (1926), the 'Scientific Three' (1924), the 'Homeland Four' (1931), the 'Kilodyne Four' (1931), the 'All Electric Kilodyne' (1935) and the 'All World Eight' (1936). Although appealing to a different market, the company's products today still embody the standards of their forebears; namely the best of British design and workmanship at an extremely competitive price.

Of course, apart from the obvious connection with its products, amateur radio has always figured large in the company through the enthusiasms of its employees. On behalf of the company I am proud to be the latest in a long line of holders of its original call sign, G6SL which is given an occasional airing on open and exhibition days.

We look forward to the year 2013 when we can help the RSGB celebrate its centenary. Who knows what these next 25 years will bring both in terms of amateur radio and its technology? However, I feel confident that the RSGB will still be serving the best interests of those for whom this hobby is an important part of our lives. Today's youngsters, who we are so keen to attract, will probably be running the whole show and the rest of us will be the old-timers who wax lyrical about transistor PAs and CW and 'how it was so much harder in our day'. 99

Chris Pettitt, G0EYO
Managing Director
Eddystone Radio Limited

The Eddystone Radio display shows some examples of early broadcast receivers and other equipment as well as looking at the most up-to-date products and some of the projects under development for the future.

