#### **POST-WAR MODELS**

irst of all a word about prices. In 1940 the British government introduced a new indirect tax to help pay for the War. It was called 'Purchase Tax' and was levied on the trade price of items deemed to be 'consumer goods', not clothes, food, or Eddystone components.

The actual rate was determined by the Chancellor of the Exchequer and varied according to the needs of the economy. After the war it was continued until 1973, and was used as an economic regulator which varied according to the 'luxury rating' of the goods.

In 1946 Stratton's claimed that their Eddystone receivers were not 'consumer goods'. The Revenue authorities begged to differ and rated them as domestic receivers.

Stratton's then claimed that 'communication' receivers were not domestic receivers and left out the loudspeakers (which their first post-war cabinet had been designed to take). The tax-man ignored them.

After two years of debate the Revenue finally gave in, but determined that the criterion would be the presence or absence of a BFO! The tax varied between 30% and 60% of trade price until VAT replaced PT (which started at 8% of retail price across the board, but is currently 17.5%).

Secondly, a word about nomenclature. At some time in the very late 'thirties all Stratton's radio products were given an 'S' number. This stood for 'Specification' (not 'Stratton', as has been suggested).

The actual sequence of these numbers is very erratic. In general terms the numbers get greater with the passage of time, but not always so. The allocation of these numbers is usually credited to

Harold Cox, who by this time was the Technical Director of the Eddystone Radio section of Stratton's, which, it must always be remembered, manufactured more powder compacts and fancy goods than radios!

In the early 1960s a new system of numbering started, to run in parallel with this traditional nomenclature. It was the two-letter prefix of which the first was always 'E' (for 'Eddystone') and the second was a type designator, viz:

EA - Amateur

EB - Broadcast

EC - Communication

EM - Marine

EP – Panadaptor (not strictly a receiver)

EY - Yachtsman

In the late 'thirties a 'traditional' dating system was incorporated into the serial numbers of Eddystone receivers. Starting from 1923, it was a simple 'letter per year' which repeated every 26 years plus a 'letter per month' which utilised the first twelve letters of the alphabet.

The earliest sets extant, c.1926-7, to wit four Eddystone Twins and three Atlantic Twos, have no serials whatever, so I think this starting date of 1923 is wishful thinking. Serials of the 1930's don't fit this rule until 1939.

In theory there was a special order to this code; up to 1948 the month came first and from 1949 the year came first.

This was fine, but in practice it seems the job of punching out the serial plates was given to the newest apprentice who was never quite sure which way round he should be doing it and didn't like to ask!

So there seem to be as many errors as correct codes. But with a bit of luck, using the date spread of production given within as a guide, you will probably be able to get the right answer. The exceptions seem to be these of the Type EC models (above), most of which have the prefix omitted.

Other exceptions to the rule are the prefixes 'DD' and 'PP', which refer to the set being a development or preproduction model. The serial will always be very low (like PP0002).

These sets were not sold but raffled off to employees. They may or may not be something like the final product! But they do turn up.

#### Dating Code for Eddystones (see text)

A – 1923	A – 1949	A – Jan
B – 1924	B – 1950	B – Feb
C - 1925	C - 1951	C – Mar
D - 1926	D – 1952	D – Apr
E - 1927	E - 1953	E – May
F – 1928	F – 1954	F – Jun
G – 1929	G – 1955	G – July
H – 1930	H – 1956	H – Aug
I – 1931	I – 1957	I – Sept
J – 1932	J – 1958	J – Oct
K – 1933	K – 1959	K – Nov
L – 1934	L – 1960	L – Dec
M – 1935	M – 1961	
N – 1936	N – 1962	
O – 1937	O – 1963	
P – 1938	P – 1964	
Q - 1939	Q - 1965	
R - 1940	R – 1966	•
S – 1941	S – 1967	
T – 1942	T – 1968	
U - 1943	U – 1969	
V – 1944	V – 1970	
W - 1945	W – 1971	
X – 1946	X – 1972	
Y – 1947	Y – 1973	
Z – 1948	Z – 1974	



Type S.556 / S.556B 1946

**EDDYSTONE TYPE S.556:** 1946, First post-war model. De-luxe tea-planters' broadcast receiver. AC mains. 10 octal valves; 2 RF; 2 IF (450 kc/s); magic eye tuning,  $75\Omega$  input. Twin built-in 3" speakers. 580kc/s - 30.5mc/s Price £37 (plus purchase tax in UK) Rare

**S.556B:** As above but with internal 6 volt vibro-pack in place of the AC psu. (It is wrongly called the model '566' in the 556 handbook). It was intended for use with a 6-volt accumulator and petrol generator for charging. Very rare.



Type S.504 1946

**EDDYSTONE TYPE S.504:** 1946. First post-war communication receiver, based on S.556 but without speakers and with S-meter, BFO. Dual-gate Xtal filter, Noise limiter. 75 ohm input.

Same coil-box and frequency coverage as S.556, AC mains. Rare. ♠

NOTE: Most Eddystone 'half-moon dial' sets have provision for a  $400\Omega$  balanced feeder or end-fed aerial. In

the case of using the latter, a special shorting link must be in place ♠



#### Type S659 / 659B

**EDDYSTONE TYPE S.659:** 1947-8. Tea planters' set. 8 octal valves; AC mains, 1 RF; 1 IF (450kc/s) 4 bands, 520kc/s-30mc/s; magic eye, noise limiter (switch at rear); built-in speaker but offered with huge baffle speaker. Very rare.

**S.659B:** as S.659 but with built-in 6-volt vibropack instead of AC. Very rare.

NOTA BENE: TUNING DIALS MADE FOR THE S.659 WERE LATER USED FOR THE MUCH MORE COMMON TYPE S.670. THIS OFTEN LEADS TO CONFUSION. SEE UNDER S.670.

**EDDYSTONE TYPE S.640:** 1947. HF communications receiver; 1.7 – 31mc/s; 9 octal valves; electrical bandspread. AC mains; 1 RF; 2 IF (1,600kc/s); BFO, xtal filter, 4,000 manufactured from

1947-1949. Price started at £42 (plus UK PT) then dropped to £27 10s (became tax-exempt in 1948, as did all sets with a BFO). Optional separate speaker and S-meter. Aimed at the radio-amateur/SWL market. Common.



Type S.640 1947

**EDDYSTONE TYPE S.680:** A famous communication receiver which had a false start. The model (below) was exhibited at the 1947 Radiolympia Show and hailed as the successor to the S.504 (*ibid.*), using the latest range of miniature valves.



#### Prototype Model S.680 – 1947

Unfortunately it ran a little too warm (it was using the cabinet and mains transformer of the 640, which itself only just managed to keep cool enough). So it went back to the drawing board for a couple of years and re-appeared in 1949 as the 'New 680'. This has caused a little confusion as factory references called this the 680/2, but it was never marketed as such.

**EDDYSTONE S.680 (aka S.680/2): 1949-1951.** Noticeable differences from the previous photo show a deeper

cabinet and cooling louvres, together with phone jack at LHS of case. Stratton's most serious post-war product yet.



'New' Type S.680 (aka S.680/2)

15 valves (all miniatures except PSU). AC mains; 30mc/s to 480kc/s. Two RF, two IF (450kc/s), BFO, Xtal filter, push-pull output, variable selectivity, external speaker (option), noise limiter, S-meter. Available for rack mounting. Auxiliary bandspread dial gives 7 ft. 6 ins. per range. Price £85. Rare.

**S.680/2A:** special model for NZBC with different connectors at rear.



Type S.680X 1951-61

EDDYSTONE TYPE S.680X: a direct successor to the Type 680/2 (above). Commonly incorrectly reported as being a Xtal filter version of the Type S.680 (almost certainly inspired by S.358/S.358X, where it IS the difference – but both S.680 & S.680X have Xtal filters, and neither have a product detector – as has been previously reported). The obvious difference is the front panel, which follows the 750 with 32 ft of band-spread in place of the 7 ft 6 inches on the 680/2. The only circuit difference is in the frequency changer valve. Price ranged from £106 to £125. Production run 1,562. Common.



Type S.670 (The Seafarers' Radio) 1948-54

**EDDYSTONE TYPE S.670;** This was the first of a very successful series of broadcast receivers targeted at ships' officers and first-class passengers; they became known as 'cabin sets'.

In fact, the first batches were reserved for Export Only (in common with many other 'luxury goods') at this time of postwar shortage of 'hard' currency. (See also S.670A and S.670C). Stratton's north-eastern agent, Alf Willings of West Hartlepool had suggested that such a market existed. Most ships' power supplies were 110v DC and the only sets available for such voltages American midgets. These had no hash filter in the power lead nor did they have arrangements for a low-interference aerial. There would be a market for a decent general coverage set, he said, and there was.

7 miniature B8A valves + metal rectifier; AC/DC mains 110-250v. 1 RF; 1 IF (450kc/s) Push-pull output, built-in 6½" speaker. 4 bands, 520kc/s-30mc/s. 1948-54. Price £37 10s. (plus P. Tax if sold inland) Common.

NOTA BENE: Most S.670 sets were built using calibrated dial glasses originally made for the rare model S.659 and were so labelled. To compound the confusion the top left of the dial back-plate carried the legend 'MARINE RECEIVER 659/670' in the same place that the S.659 had a magic eye. Beware!

**EDDYSTONE TYPE S.670A** (1954-62), direct successor to the 'marine cabin receiver' type 670 (above) but with several changes. New 'slide-rule' cabinet. 6 valves plus metal rectifier. Single-ended output stage. Magic eye tuning indicator. 110-250 volts AC/DC. 1 R.F., 1 I.F. (450kc/s) Four bands: 150-380kc/s; 540-1500kc/s; 5.8-30mc/s. It is also listed in company records as the Type S.883. I can find no reason for this so far! Also it is believed that the TYPE 881/1/2/3 cabin tuner was a version of this set: 750 produced.



#### Eddystone Type S.670A

3,275 models were produced. It is remarkably rare for such a production run. Price £49. NB: versions of this model exist under the Marconi (MIMCO 2232A) badge. This may include some of the above production. Most examples are likely to have ended up in the ship-breakers yards.

**EDDYSTONE TYPE 670C** The final version of this successful line of marine cabin sets. Slight circuit alterations but otherwise very similar to the 670A (above).



Eddystone Type 670C

The main differences were the new-style cabinet, a built-in brute-force mains filter and two extra wavebands, now covering 150-350kc/s and 500kc/s – 30mc/s. 1962-64. 400-plus manufactured. Rare

Eddystone 670C/1, as above but badged as Marconi 'Elettra' – alias MIMCO 2232B 400 known to have been manufactured 1963-67. Very rare.



Eddystone S.670C/1
Badged as Marconi Elettra

Other versions of the 670A & 670C have been badged as MIMCO models, but details are hazy as the service information has not been found in Eddystone Archives.

**EDDYSTONE EM34** was also a member of the marine cabin 670C family but using the 'new' nomenclature. Audio output was 10 watts and it is believed to have been used as a Public Address driver (i.e. ships' "Tannoy"). It was badged as the **MIMCO 3873A**, (also named 'Elettra'). 100 were known to have been manufactured in 1965.

The whole 670-series was eminent over a twenty-year period and was probably the world's most successful 'universal' AC/DC 110-250v general coverage broadcast receiver. It is, however, probably responsible for getting the marque a poor name among those who believed these were the only sets the company built! But they were just as well constructed as the professional models costing three or four times the price and looking very similar.



Eddystone Type S.710 (1949)

enly post-war set to use a pre-war type of name! It was marketed as the 'All World Six': General coverage teaplanters' broadcast receiver. Built-in 6v DC vibropack; 1 RF; 1 IF (450kc/s); 4 bands 480kc/s - 30.6mc/s; internal 6½' speaker, 1949. Price £39. Production run: 270 models.

NOTA BENE:- Some of these models also used dial glasses from the S.659, but had the name 'All World' Six' in the top left corner.



Eddystone Type S.710/1

**EDDYSTONE TYPE S.710/1 – S.791 Combination for Communal Listening**This was a standard Type S.710 fitted with a special output transformer and supplied with a Voigt pressure drive speaker. Speaker length 54", dia 24", weight 16 lbs. This was suitable for a large number of people grouped indoors or out to hear broadcasts from distant or local stations. It was an export special and it is doubtful if any survive. Price of S.710/1, £49 10s. Pressure drive

speaker S.791 £16 18s. Six volt accumulator, 102 ampere hour, 40 hours listening time; (price on application!) ♠



Type S.720 'Yachtsman' (1950)

**EDDYSTONE TYPE** S.720 'Yachtsman' designed for use on cabin cruisers and yachts.7valves; 1 RF, 1 IF (127kc/s), BFO, built-in speaker, internal 12v vibropack – option for 24 volt adaptor. 3 bands. Coverage 80-620 metres (3750-480kc/s) and 900-2,300 metres (130-330kc/s). Special attention devoted to the reception of 'Consol' navigational signal with maximum intelligibility. Price started at £48 6s 8d then fell to £43 10s. Production run 100 models. Very rare. •



Type S.740 (1950-1954)

**EDDYSTONE TYPE S.740:** General coverage communications receiver AC Mains 110-250v. 8 valves; 1 RF, 1 IF (450kc/s), BFO, external speaker, provision for plug-in S-meter; (both optional; see page 55 *et seq.*).

4 bands: 30.6mc/s to 1.4mc/s and 205 Metres to 620 Metres. Production run, 900 sets. Price £32 10s. Rare. ◆



Type S.750 1950-58

**EDDYSTONE TYPE 750:** Stratton's first true double conversion communication receiver and also the company's first 'slide-rule' set which gave a linear logging-scale of 32 ft. Using 11 valves it had 1 R.F. stage, a tuneable converter to the first I.F. of 1620kc/s, straight into a fixed frequency changer with a second I.F. of 85kc/s and variable selectiviy, followed by BFO, N/L and O/P stage. AC mains. 32 - 1.7mc/s and 1465-Introduced at £49 10s. it 480kc/s. reached £75 by the time it ceased. Prod run 2054. Quite rare (considering its production run).

**TYPE 750/1** As 750 but for 110v 25~ only. Prod run 79, c.1955.

**TYPE 750/2** as 750 badged for Marconi as HR100, for use in coastal stations. Manufactured in two versions (difference not known), Edition 'A', 105 produced; Edition 'B', 545 produced. ♠



Type S.840 1953-4

**EDDYSTONE TYPE S.840:** 'Economy' communications receiver suggested by Stratton's agent in the British

Dependency of Aden on the Persian Gulf. They were selling lots of the very successful 670 'cabin' broadcast receivers and suggested that a similar set but with a BFO for SWLs would be a And so the 840 was good seller. created. The whole series (840A/840C - ibid.) ran for 15 years and was a great success. 7 valves; 1 RF; 1 IF (450kc/s) BFO; AC/DC 110-250v (work anywhere!) 4 bands, 480kc/s-30mc/s. £45. 501 manufactured. Rare.

(Bill Cooke, GØION, Chief Engineer at Eddystone throughout the period of these simpler valve sets, once told me that they were the company's bread and butter. If it weren't for the 670-series and 840-series they would have been stuck for work between big specialist orders.)



Type S.840A 1954-61

the 840 (above), built into the 'new' type slide-rule case with 32 feet of logging scale. Exactly the same circuit and specification. Price £49. 2,000 manufactured. Quite rare (considering its production run.)



Type S.840C 1961-68

**EDDYSTONE TYPE S.840C** Successor to the 840A (above) built into the new-

'60s style cabinet. Virtually the same circuit but with the addition of a 'magic eye' tuning indicator and linear scale device. This involved extra 'padding' capacitors (among other things) and it was necessary to have five bands to cover the same waverange. 1961-68 Price £58 increasing to £68. 3,500 known to have been manufactured by 1965. Common. ♠

EDDYSTONE TYPE S.730 Series: A large family of professional communication receivers, based on the 680X. 15 valves; 2 R.F.; 2 I.F. (450kc/s), BFO, IF cathode follower output, variable I.F. selectivity, xtal filter, xtal calibrator, adjustable scale, noise limiter, S-meter, audio filter (for CW), fully tropicalised.

Started with **730** in 1953 (prototype only made); followed by a run of 25 **730/1.** Then the **730/1a** (1954-8; production runs of 317) for the Diplomatic Wireless Service (some of which could be dismantled for the diplomatic bag). **730/2** in 1955 (Stratton's version of /1a – 40 built). **730/3** in 1956 (Stratton's version with switched xtal channels).



Type S.730/4 with detachable rack-mounts

**730/4** (1956-c.62) (without the switched xtal channels) was ordered by the Ministry of Defence in large quantities and is by far the most common model. It has provision for use with external power sources in the absence of mains supply. Price £230. Common.

**730/6**; 50 built in 1959. **730/7**; 1959; nothing known. **730/8**; 50 built in 1959. **730/10**; 1962; nothing known. ♠

### THE EDDYSTONE 770 Family of VHF and UHF receivers

This famous family was originally proposed after the start of the Korean War (1950-53) when the Ministry of Defence required wide coverage VHF surveillance receivers.

The original specification was for a set covering 20-250Mc/s. Stratton proposed this as the **S.770M**, which got as far as the 1951 Radiolympia, where it is described as a double superhet. It failed to work when the tuning-gang went into self-resonance at around 200Mc/s. After much further research the following models appeared:

**EDDYSTONE TYPE S.770R** VHF Communication receiver. 1953-63.



Type S.770R 1953-63

19 valves; 3 diodes; 6-band turret, 19-165Mc/s,1 RF; 4 IF (5.2Mc/s) BFO; Smeter, Modes:- AM-CW-NBFM-WBFM. (RAF Type R213.) 14 versions with minor differences. Price £250 . Production run: 2,250. Common.



Type S.770U

EDDYSTONE TYPE S.770U; UHF Communication receiver; 1955-63. 150-500Mc/s. Double superhet; 15 valves, 6-band turret tuner; 1 RF; 2 IF (50Mc/s); 2 IF (5.2Mc/s) AM/FM; 10 versions with minor differences. £250-£300. Common.



Type S.770S 1961 version

**EDDYSTONE TYPE S.770S;** UHF Communication Receiver; 500-1000Mc/s, cavity-tuned double superhet.



*Type S.770S 1962 version* 

30 valves plus 10 germanium diodes and 8 silicon rectifiers. First IF tunable 150-170Mc/s; 2<sup>nd</sup> IF 46.5Mc/s. Xtal calibrator. AM; WBFM; Pulse. Weight of table model 99 lbs. Production run: 100 models. Rare.



Type S.770R MkII 1963-69

exactly the same as the S.770R Mk II; exactly the same as the S.770R but in a new cabinet and with the addition of a xtal calibrator; scale adjustor, panadaptor output and linear dial bar (to even out the read-out). 12 variants with minor differences. Production run not certain but seems to have been short (a hundred or two). Rare

exactly the same as the S.770U but in a different case and with the addition of a xtal calibrator; scale adjustor; panadaptor output, linear dial bar (to even out the read-out) and push-pull audio output. Many (slight) variants. Production run approx 1,100. Medium rare.



Type S.770U MkII 1964-69

**EDDYSTONE TYPE S.700 known as the IMR.54:** Ships' main communication receiver. 1952. The International Marine Radio Company (IMRC), a subsidiary of STC (part of ITT) supplied many shipping lines (Including the famous 'Cunard') with radio communications.



Stratton-built IMR.54 still on RMS 'Queen Mary' at Long Beach CA (Photograph by Nate Brightman K6OSC)

In 1952 the installations of the '30s were still in use and badly in need of renewal. The company approached Stratton and arranged for them to design and manufacture a replacement receiver. It was to be designated the **IMR.54** and would be an exact physical replacement for the pre-war IMR.42.

The result of this liaison recognisably Eddystone, but 50% larger. It had 12 valves, 10 bands, switched IFTs for two frequencies and full coverage from 15Kc/s to 31Mc/s without a gap! 110v AC/DC. Used on RMS 'Queen Mary' etc. Production run 205. After this. Stratton & IMRC fell out over the contract price. IMRC took back all the jigs, etc., produced (at their expense) by Stratton's and started to make their own! These can easily be recognised by having a flat steel front panel (no fluting). All rare.

# THE SMALL VALVED EDDYSTONES

In 1955 Stratton's brought out their first post-war 'small' set. In fact it was not a short-wave set but an FM tuner. The BBC had decided upon using Band II wide-band FM for the new 'hi-fi' service (after extensive tests of FM versus AM on 3 metres.)

It was based on a small (11 inch wide) diecast front panel, in family style with the normal slide-rule sets of the period (which were 17 ins wide). This was followed by a variety of other sets using the same format. They were actually smaller than the famous transistor family (12 ins wide) of the '60s and '70s – the EC10 and its derivatives.

EDDYSTONE TYPE S.820 1955-58.
Broadcast HiFi FM mono tuner. 8 valves. 87.5-100mc/s plus one pre-set LW channel (for BBC Droitwich 'Light Programme' Tx on 1500 metres - 200

kc/s) and two pre-set MW stations for BBC Home and Light programmes. Low level output for HiFi amplifier.



**Eddystone Type 820 FM Tuner** 

Supplied without case for custom mounting in HiFi console. Production run 1,000. Price £38. Medium rare.

The tuning drive of all these 'small' Eddystones is based on the famous catalogue No. 898 dial sold as a DIY item for serious constructors.

ALSO badged as Mimco Type 2294A – 9 produced. Four produced with xtal control for Rediffusion. ♠

general coverage, 1956-59. Marketed for ocean liner passenger cabins and cult domestic. Universal AC/DC 110-250v. 5 valves (FC-IF-DET-LF-RECT) four bands: 150-380kc/s and 540kc/s-18mc/s. IF 465kc/s. Built-in speaker; brute force mains filter. Production run 3,010. Price £34 16s. Medium rare (considering the production run)



Eddystone Type S.870

**EDDYSTONE TYPE 870A 1960-66.** Identical with the above model but with 5

wavebands, extending the short-wave coverage to 24mc/s Production run 4,050. Price £32 2s. Again, medium rare – considering the production run.



#### Eddystone Type S.870A

EDDYSTONE Type S.890. 1956/7 VHF radio microphone receiver for the BBC. Single band; AM/FM with wide-range Automatic Frequency Control (AFC) to cope with drift in radio mic. 70-90 Mc/s. 10 valves; RF-FC-IF-IF-LIM-DIS-AFC-AF-OP-RECT. AC mains. Production run: 39

**S.890/1** as above but 100-120Mc/s. Production run: 12

Both the above are extremely rare.

**EDDYSTONE Type S.930-Series.** Very similar to the S.890 (above), used for radio-microphones and intelligence-gathering (bugging).



#### Eddystone Type S.930/12

Available in many frequency ranges; the following are known:

930 70-90Mc/s; ~/1 100-120Mc/s; ~/2 85-102Mc/s; ~/3 110-130Mc/s:

~/4 as 930 plus filter; ~/5 as ~/1 plus filter;

It is recorded that by February 1958 a total of 100 models of all varieties had been produced. (No individual records) All extremely rare. Most production for Military Inteligence.



**Eddystone Type S.901** 

EDDYSTONE TYPE S.901 1958 Radiosonde AM receiver; single band 27-28.8Mc/s. For receiving signals from high-altitude meteorological radiosonde balloons. AC mains; six valves: RF-FC-IF-DET-OP-RECT. Did not proceed past the prototype stage. ♠

### END OF EDDYSTONE 'SMALL VALVE RECEIVERS'

EDDYSTONE Type S.909, 1958, marine communication receiver. Designed for the Swedish Merchant Marine. Two band (1.6-4.7Mc/s) plus fixed switched crystal controlled channel on maritime distress frequency of 2182kc/s. AC/DC 110-250v. AM and MCW only. Single conversion superhet with switchable crystal gate (IF-465kc/s, bandwidth 10kc/s or 5kc/s at 20dB down). 7valves plus metal rectifier. 1 RF; 2 IF. Built-in speaker. Production run: 100.



Eddystone S.909-Series

EDDYSTONE Type S.909A (1959-63): As above but with optional external HT/LT source connectors. Production run 225.

**EDDYSTONE Type S.909A/1 (1959):** As above but no internal power supply. Production run: 25

**EDDYSTONE Type S.909A/2 (1963):** As above but with transistorised 24-volt power unit built-in. Production run 50.

EDDYSTONE Type S.909A/3 (1966): As Type S.909A/2 but in new style cabinet, like Type S.670C (ibid.) Production run: 50. All above are very rare in UK. ♠

**EDDYSTONE** TYPE S.910, 1957. communications receiver. No details other than the factory blueprint (BP) register, which lists the model. It does not seem to have passed the prototype was undoubtedly stage but forerunner of the 910/1. A very blurred photograph of it shows it to have 5 wavebands. This was used (presumably in error) in an American Marconi advert for the HR101 in 1962 (see below).

EDDYSTONE TYPE S.910/1, c.1961/2 marine communications Rx. I believe this set to have been sold only badged as the Marconi HR101. Double superhet with interpolation tuning of first IF stage. Very similar in operation to the 830-series (*ibid.*) but in general appearance much like the 730-series (*ibid.*) No picture is to hand. 16 valves, 6 bands; coverage 1.5-30Mc/s and 375-525kc/s. First IF 1350-1450kc/s; second IF 85 kc/s. Production run 200. Very rare ♠

EDDYSTONE Type S.888. 1956-7. Amateur bands communication receiver. AM/CW. Double superhet based on S.750 (ibid.). 11 valves, AC mains, 160-80-40-20-15-10 metre bands. AM/CW. 1RF; 2 FC (first IF 1620kc/s), 1 IF (85kc/s); variable bandwidth, audio CW filter, xtal calibrator. Price £100.

Production run: not stated but included in the numbers given for 888A (see below). Uncommon.



Eddystone Type S.888

EDDYSTONE Type S.888A. 1957-61 As above, but includes product detector for SSB (12 valves – some of which are different from the S.888 but do the same job!) Price £110; production run 550 (this includes the S.888 above). Medium rare. NB: some Models S.888A have been found to have dial plates bearing the Type No S.888. Always check the serial plate to be sure. ♠

**EDDYSTONE TYPE S.850/2, c.1961/2** VLF/LF communication receiver used for maritime and submarine communications and surveillance.



Eddystone Type S.850/2

11 valves; 6 wavebands, 10kc/s-600kc/s. AM/CW. AC mains. 1 RF-FC-2 IF (720 kc/s)-AM Det-CW Det-NL-BFO-AF-OP. Variable bandwidth, 2 xtal gates, S-meter. CW audio filter. Production run: 100. Very rare.

EDDYSTONE Type S.850/4, 1965/72. Same as above but in new style case

and with crystal control on eight spot frequencies. Production run: 200. Price (1972) £312. Very rare.



Eddystone Type S.850/4

EDDYSTONE Type S.880, 1959-61. High stability communication receiver. AC mains; 0.5-30.5Mc/s in 30 switched ranges. Double-conversion superhet with crystal controlled first LO and tunable first IF. Second IF 500kc/s. Permeability variable tuning.



Eddystone Type S.880

AM/CW/SSB. 21 valves plus 4 silicon diode HT rectifiers. Variable bandwidth plus crystal gate. Crystal calibrator. Every facility. Resetting accuracy within 1,000 cycles at all frequencies. Production run not revealed. Specially developed for government intelligence agencies for radiation from oscillators to be undetectable outside the room of operation. Weight 95 lbs. Price £350. Rare

**EDDYSTONE Type S.880/2**. 1962/5 New version of above with some circuit

changes but same general setup. 23 valves plus diode HT rectifiers. New case. Wt 99 lbs. Production run 600. Medium rare.



Eddystone Type S.880/2

**EDDYSTONE type S.880/3; 1964/67,** as above but badged as Marconi H2301 and with crystal controlled SSB BFO oscillator. Production run; 300. Rare

**EDDYSTONE Type S.880/4**, 1966. GCHG version of S.880/2. Production run; 25. Very rare. ♠

EDDYSTONE S.830-Series 1962-73. A large family of successful HF/MF general coverage double superhets with tunable first and second local oscillators. First IF 1,250-1,450kHz. Second IF 100kHz. AM/CW/SSB. Resetable to within 1 kHz on all frequencies without external calibrator. Every refinement (the jewel in the crown!) AC mains; 15 valves, 4 diodes, 9 bands, 300kHz -- 30MHz (Except for the 830/4 – Canadian\* model 120-560kHz and 1.5-30MHz). The last valve set to be manufactured (21st January 1973); price range £275-£442.



Eddystone S.830 Series

Production runs: -

830 - 200 (1962)

830/2 - 200 (1963);

830/4 - 415 (1965-7) (Canadian\* model see above)

830/6 - 3 (1966);

830/7 - 950 up to the end of 1967 (it remained in prod for another 5 years) 830/9 - 67 (1965/6) (synthesised

oscillator input).

830/11 - badged as STC.

830/12 - badged as Hagenuk

(Germany) quantity not known; wavebands as 830/4.

The model 830/7 is common in the UK. the rest are rare or very rare. The 830/4 is regularly reported in North America. 4

EDDYSTONE Type S.950, dated 8/8/74 in the Blue Print (BP) Register but this is an anachronism! A crystal controlled single conversion single channel 9-valve superhet receiver for AM signals in the VHF band 110-130MHz. Intended for Air Traffic Control use it was produced seven years after the first appearance of the S.990R (ibid.) transistorised VHF receiver. It is just possible that it was produced to fill a Ministry requirement for an atom-proof receiver. Cascode RF-FC-3 x IF (10.7MHz crystal filter) germanium det - amplified AGC - line monitor and OP. Rack mounting panel 3½ ins deep; AC mains, remote control.

Six examples were produced and sent to Belfast for evaluation. They were never heard of again. Keep watching! 0

EDDYSTONE Type EA12, 1964-69. Amateur bands only communication receiver based on the 830 series but

with crystal controlled first oscillator and tunable second.  $(1^{st} IF = 1.1-1.7MHz)$ . Nine bands each of 600kHz (160-80-40-

20-15-4 x 10metres).

AC mains: 13 valves, silicon diode HT rectifiers; large S-meter; slot filter; crystal filter; audio CW filter; variable



#### Eddystone Type EA12

selectivity; AM/CW/SSB, cascode front end; 2 RF, 2 IF (100kHz). Internal speaker; very deluxe. Price £178. Production run: 350 up to Dec 1967 (it continued for a further two years). A little scarce due to steady demand, but all that were made are in private hands!♠

**EDDYSTONE** Type 940. 1962/70. HF/MF General coverage communication receiver. AC mains. 13 valves. 5 bands, 480kHz - 30MHz. Cascode front end, 2 RF, 2 IF (450kHz); crystal filter, S-meter, variable selectivity. Price £106 (1962) - £153 (1969). Production run by Dec 1967: 1,500 (continued in production for another 3 years). Common.



#### **Eddystone Type S.940**

(This set was developed in a short time to fill a gap in the market between the Type 840C (c.£50) and the Type 830 (c.£300). It became very popular worldwide with well-heeled SWLs)

**EDDYSTONE Type 940 variants:** there is an ongoing debate about other version of the 940. Such as 940HF (?);

940/1 (with xtal channels); 940/2 (fighting vehicle version); 940/3 (H.M. Coastguard version). All I can say is that the Eddystone factory Blue Print (BP) Register has an entry dated 23/10/62 (BP 1035) described as "Crystal control for '940'; theoretical circuit mods [see BP 1131]". BP1131 is dated 16/6/64 and is described as "Calibrator Unit – LP2806 Circuit diagram." Nothing very exciting there.

The factory production run list has only one entry (apart from the one listed above). It is: - "940/2, as 940 with  $50\Omega$  and  $600\Omega$  (outputs) and NO mains transformer or HT components. QTY 6 date 2/69." This equates reasonably with the 'fighting vehicle' requirement and is confirmed by Bill Cooke (who designed it) and told me a small quantity was ordered by the Ministry of Defence for evaluation, but nothing came of it.

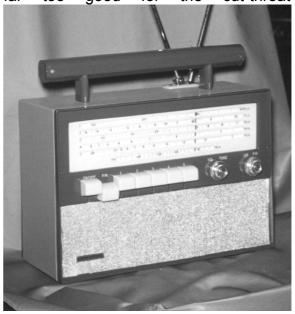
I think it is safe to say, that as with ANY model of an Eddystone receiver, oddballs are bound to turn up from time to time which are quite outside the normal production runs.

**STRATTON PORTABLE,** All-band transistor radio of 1961. Strictly speaking this was not an "Eddystone", but as it was developed in Stratton's Eddystone laboratory it is worthy of a mention.

The Laughton family, owners of Stratton and its Eddysone Radio division before the sale to Marconi in 1965, had family connections with the John Myers mail order company.

Transistor radios were new and it was thought that an opening might exist. The radio covered Long, Medium and Short waves up to 30MHz as well as VHF/FM. It was built into a diecast box with ferrite rod aerial in a plastic handle and rabbits' ears for HF/VHF.

Needless to say, the build quality was far too good for the cut-throat



Stratton Portable 1961

competition of the mail-order market. Three sets were constructed. They were raffled off amongst those involved with the development. But you never know; one day . . . But it gave Eddystone's their first experience of solid state design.

EDDYSTONE Type S.960, 1962. The company's first solid state general coverage communication receiver. Virtually a model S.940 (*ibid.*) with transistors in place of valves. Six switched ranges; 500kc/s to 30Mc/s. Internal 12 volt battery and internal speaker.



Eddystone S.960

Twelve transistors and seven diodes. One RF stage, three IFs (465kc/s, bandbass xtal filter). The performance was inferior to its parent S.940 and after two years' production it was dropped. By this time the EC10 (*ibid.*) had entered production and overtaken it. Production run: 150. Price c.£150. Very rare.

### THE COMPACT TRANSISTOR EDDYSTONES

After the false start (but invaluable experience) with the above two models Eddystone launched into their most successful ever sets (in terms of sales), the EC10-series.

They continued the style of the valved 'slide rule' receivers but only 12 inches wide, with built-in 9-volt battery pack (optional mains PSU available) and speaker. They were an instant success, being very 'dinky' and attractive. The performance was not up to that of the valved sets but they received rave notices in the radio press. The early germanium transistors depreciate in performance after the 30 or 40 years which have now passed and this has given them a worse reputation than they deserve. They DO need to be considered in this context, but are still perfectly good for AM broadcast Dxing.

**EDDYSTONE Type EC10, 1963/69.** General coverage communication receiver. AM/CW. Battery pack or optional AC power supply.



Eddystone Type EC10

Ten transistors. Five bands: 550kc/s-30Mc/s. BFO, CW audio filter, speaker, (IF = 465kc/s). £53. Production run: 6,020. Common.

**EDDYSTONE Type EC10 Mk II, 1967/77.** As above plus S-meter, RIT (fine tuning knob) and standby switch. Production run not listed, but known to have reached 100 a week for long periods; say 10,000. Common.



Eddystone Type EC10 Mk II

**EDDYSTONE Type EC10A2-series;** (previously known as Type EC10A/2). A series of marine receivers based on the EC10 but with the following differences: 13 transistors; 5 bands: 300-550kc/s; 1.5-30Mc/s, plus a fixed crystal-controlled 2182 kc/s call and distress channel. IF = 720kc/s. 12 or 24 volt operation.  $600\Omega$  output.



Eddystone Type EC10A2/1

Three versions were available: EC10A2/1, bench mounting; EC10A2/2,

19" rack mounting with forward-facing speaker. EC10A2/3, 19" rack mounting with extra speaker for ship's intercom. 1966-77. All very rare.



Eddystone Type EC10A2/3

EDDYSTONE Type EB35, 1965/70. Broadcast general coverage AM/FM. Battery pack or optional AC mains power supply. 13 transistors, 6 bands: 150-350kc/s, 550kc/s - 22mc/s, 88-108Mc/s. (IFs 465 & 10.7), speaker. Later models had extra FM IF stage 14 transistors). (making Verv fashionable in the 'Swinging Sixties': H.R.H The Prince of Wales had one fitted in his car by Webb's Radio (Stratton's retail outlet). Production run 2,100 by January 1967. Price £55. Fairly common.

**EDDYSTONE Type EB35A.** As EB35 but VHF band is 155-175Mc/s marine inshore Narrow Band FM (NBFM). Very rare.



**Eddystone EB35** 

**EDDYSTONE EB35 Mk II, 1970.** Broadcast AM/FM, same as later model EB35 but re-styled case. NATO Stock

Number 5820-99-523-7337 Fairly common.



Eddystone Type EB35 Mk II & II/S
EDDYSTONE Type EB35 Mk II/S, 1970
As Mk II but with FM stereo decoder for feeding HiFi amplifier. 20 transistors.
Rare.

**EDDYSTONE Type EB35 MK III** "Statesman" 1976/80. AM/FM broadcast set. Same general spec as EB35 but completely new circuit using silicon transistors, FETs and ICs. Switchable Automatic Frequency Control (AFC). Rare.



Eddystone Type EB35 Mk III

**EDDYSTONE Type EB36, 1966/69.** Broadcast receiver, 9 transistors; as EB35 but without VHF/FM band. Price £54 5s 7d. Rare.

**EDDYSTONE Type EB36A, 1969.** Special version of EB36 intended for professional monitoring purposes.



#### Eddystone type EB36

Primarily in world-wide news collection agencies. (Press news broadcast monitors). Narrow IF bandwidth with piezo-electric ceramic filter.  $600\Omega$  line output. Supplied with AC power unit with the option of 12 or 24 volt units or battery-pack. Very rare.

**EDDYSTONE Type EB36 Mk II 1970.** As EB36 but new case and circuit. Very rare.

EDDYSTONE Type EB37, 1971/2. As EB36. Marketed for ships' cabin use and as a short wave tuner for HiFi setups (becoming fashionable round about this time.) Price £97. Rare,



Eddystone Type EB37

**EDDYSTONE Type EY11, c. 1968** Yachtsman's navigational receiver. This set is a bit of an enigma, because it was originally thought that it never proceeded beyond the prototype stage, but then one appeared at a rally!



#### Eddystone Type EY11 - prototype

The early model (above) was, incredibly, an inch narrower than the rest of the "small solid-staters". Its frequency coverage is 150kc/s – 6Mc/s in 4 bands, with facility for Consol navigation (a form of MF hyperbolic global positioning using a stopwatch and counting the pips). It also had DF loop facilities.



#### Eddystone EY11 - later version

The 'rally' version is much more akin to the EC10 Mk II and has the look of a production model, but it has no serial plate. Facilities are similar but the frequency coverage is 150-550kc/s and 1.5-18mc/s in five bands. Probably unique (until . . . )

All these "small transistors" are fitted with the same 'slab' battery pack which takes 6 x D cells (large; we used to call them HP2). The optional AC psu replaced this. It was the S.924, a simple zenner regulated unit with positive earth. NB The EB35 Mk III has negative earth and uses the S.924A psu. Both these units are rare.

Two unusual Eddystone 'radios' are the Noise Measuring sets made to MPT and Home Office designs and marketed under licence from the Post Office.

**EDDYSTONE Noise Measuring Set No 31A.** 1971. Solid state VHF portable interference tracer and measurer.



Noise Measuring Set 31A

Consider it to be a combination of receiver, 1dB step attenuator (110dB range) and high accuracy RF Voltmeter. Coverage 31-250MHz in three ranges (using 3 tuners). Internal rechargeable batteries & charger. Price (1972) £660. Medium rare.

**EDDYSTONE Noise Measuring Set No 40A c.1975.** Solid state HF portable noise tracer and measurer.



Noise Measuring Set 40A

Generally similar to the 31A (above) in principal but covering the frequency range 130kHz to 33MHz. Rare. ♠

#### A PAUSE FOR THOUGHT.

Although the sequence of descriptions is by no means in strict date order it does follow the years to a degree. I think we have reached a point where a review of events is appropriate.

The change from thermionics to solid state took place over a decade (1962-73). During this period both valve techniques as well as transistor practice advanced with haste. In 1965 the parent company Stratton, itself owned by the Laughton family, sold the Eddystone part of the business to Marconi, itself part of English Electric, soon to be acquired by GEC.

The most immediate effect was a review of the business side of things, culminating in a general 20% rise in prices! Apart from a new Logo there was very little obvious change in outlook except for the closure of the famous Webb's Radio, wholly owned by Stratton and not wanted by Marconi. Imhoff was appointed the main London retail outlet.

By the early '70s competition from the Far East was looming and the decision was made to withdraw from the 'High Street' market and concentrate on purely professional equipment.

This, again, was not an overnight change. The EB35 Mk III was still in the 1980 catalogue. So was the EC958/12, 75-transistor, 70-IC Independent Sideband supermodel in the £ thousands plus price range.

In the 1971 catalogue the 830 valve series was next to the 1830 transistorised replacement, of virtually identical (but slightly better!) performance.

As the 'seventies progressed through to the 'eighties Britain (and much of the rest of the world) was plagued with inflation, the like of which had never been experienced within these shores. This was reflected in the price of Eddystone radios and prices of sets with

long production runs were seen to rise as never before. For instance, the EC958 started at around £750 in 1969 and by the end of its run in 1980 was over £3,000. An optional bench cabinet costing £18 in 1972 had reached £60 by 1981. The S.990R VHF receiver checked in at £325 in 1969, reaching £1700 by 1980. Prices, therefore, cease to have much relevant value unless they are compared year for year.

Also the availability of 'recent' sets is a questionable matter. Although some sets are disposed of through trade auctions I hear that more and more are being consigned to the skip as HF radio stations (e.g. former Post Office coastal stations) are being dismantled.

We continue with our description of Eddystone receivers, having covered the last valve and simple solid state sets and move into complex sets intended only for the professional. Having said that, some were sold to well-heeled SWLs and amateurs.

**EDDYSTONE Model S.990R** VHF communication receiver, 1967-1981. This, the first transistorised VHF set was an instant success and had a long life.



Eddystone Model S.990R (early)

Single superhet; 38 transistors; IF 10.7MHz. AM/CW/FM; frequency range 27-240MHz in four bands. AC mains or 12 V.DC. Provision for 8 fixed crystal controlled channels. Crystal calibrator and scale adjuster.

Speaker, tuning meter, IF selectivity 30kHz and 200Khz as standard, others

to order. Civil Aviation Authority No 10D/CA/5967, NATO Number 5820/99/199/2527. Used for Air Traffic Control, Coastguards, etc.



Eddystone Model S.990R (later version)

Variants are 990R/1 and 990R/2, very minor changes. Price in 1969 £325. (1972) £466. (1980) £1,700. Fairly common.

EDDYSTONE Model S.990S. UHF communication receiver, 1968-78. First UHF transistorised receiver, 42 transistors, frequency coverage 230-870MHz in two bands. AC mains or 12Vdc. Tuning meter; loud speaker. Crystal calibrator and scale adjuster. I.F. 36.5MHz. bandwidths 1MHz on FM; 1MHz or 6MHz on AM. NATO Number: 5820/99/199/2528. Medium rare. Price (1972) £466

**VARIANT S.990T** for television monitoring. (very rare)



Eddystone Model S.990S and S.990T

**EDDYSTONE Model EC958 series.** A very large and successful range. The EC958 was the company's first high stability solid state receiver and was by far the most complicated set undertaken

by that time (late '60s). It was designed by Don Ford, a brilliant Stratton engineer who sadly died young.

The mechanical tuning system was more complicated than a clock and had over 100 parts. All models had a fully-tuned front end turret with interpolation frequency setting (i.e. two knobs, one for coarse, the other for fine). It could be re-set within a few Hz then locked. A triple superhet, it covered 10 kHz – 30MHz in 10 bands. It is considered by some aficionados to be the finest set the company ever built.



### Eddystone Model EC958 rack mounting

The various models ran from 1969 to 1984. During this period the prices started at £750 and finished at around £6000 (EC958/12). It was an era of high inflation. Specific models may be rare, but a little patience will locate one version or another.

EC958 The basic model of 1969-73: 41 transistors; 46 diodes and 12 ICs. The frequency display was optical back-projection (reminiscent of the Murphy A-104 of 1946). Early models had the wrap-around desk-cabinet like the one shown on the early 990R (*ibid.*), but later ones were rack-mount with optional desk cabinet (as shown). Price (1972) £1.137 (plus VAT).

**EC958/1** As 958 but with special SSB filter.

**EC958/2** As 958 but with special CW filter.

**EC958/3** As 958 but with specifications for the Canadian government.

**EC958/4** As 958 with military specification.

**EC958/5** Marine version badged as Marconi 'Nebula'.

**EC958/D** was badged as Debeg (Germany).

**EC958/H** was badged as Hagenuk (Germany).



#### Eddystone Model EC958/7E

version, 1973-83, with digital kHz readout (readout to 1Hz with accuracy of >4Hz). 48 transistors, 53 diodes and 42 ICs. Also badged as the Marconi H2311.

**EC958/12** As EC958/7E but with added independent sideband facility. 1974-84. 75 transistors; 99 diodes and 70 ICs...



#### **Eddystone Model EC958/12**

No doubt there will be other models, but they will all be versions of the main three pictured here.

**EDDYSTONE Model 1830-series.** 1971/7 General purpose HF/MF solid-state replacement for the valved 830-series (*ibid.*)

A medium-cost range of high-grade receivers for general applications in the

band 120 kHz to 31MHz. All versions (at least 8) are based on the 1830/1 (below) which was UK MPT-approved as a reserve receiver for CW, MCW & AM for maritime installation. AC mains or 12 or 24 volt DC. Analogue dial (rotating drum). 10 crystal positions above 1.5 MHz (some models were available with 50 crystal channels). 1971-74. £566-£644 plus case. Medium rare.



Eddystone Model 1830/1 on optional speaker plinth.

EDDYSTONE Model EC964-series. 1971>. A range of high performance AM/SSB crystal controlled communication receivers, intended for use by unskilled operators. All are powered by AC mains or 12/24V DC via external converter.



#### Eddystone Model EC964/1

The EC964/1 has 28 channels in band 1.6-4.5MHz, plus 24 channels in marine allocations 4.0-27.5MHz. (Ch 1 set to 2182kHz). Price (1972) £857

The EC964/3 has 28 channels in band 1.6-4.5MHz (Ch 1 set to 2182kHz).

The EC964/4 has 12 channels in band 1.6-30MHz and will also work off 24V DC direct.

The EC964/7 (c.1980) is a single channel low cost SSB receiver intended for fixed frequency terminals. Crystal controlled on any on specified channel in the range 1.6-27.5MHz. Also available on any spot frequency 400-535kHz. Price (1972) c.£400; price (c.1980) c.£1k



Eddystone Model EC964/7

**EDDYSTONE Model 1670 (c.1980)** A thirty-channel synthesised marine receiver covering the range 1.6-4.2MHz, in addition to 2182kHz. Dual conversion with first IF of 1400kHz and second IF 100 kHz. AC mains supply. Reception mode to order. (USB-LSB)



Eddystone Model 1670

**EDDYSTONE Model 1000-series.** A family of low-cost general coverage receivers, all single conversion, analogue scale (rotating), tuning meter, AC mains, 12v internal Deac battery (NiCad) with charger.

**Model 1000:** 1971-74, AM/CW/SSB; coverage 550 kHz to 30MHz. S-meter, twin mini-speakers. 12 transistors, 2 ICs, 22 diodes. (Looks the same as 1001 – below – but without xtal selector

switch beneath tuning meter). Price (1972) £234.



#### Eddystone Model 1001

EXACTLY as Model 1001. 1972-4. Exactly as Model 1000 but with the addition of ten crystal-controlled spot frequencies in the bands 1.6-30MHz. 14 transistors, 2 ICs, 22 diodes. (Power source as 1002). Price (1972) £256.

**EDDYSTONE Model 1002.** 1972-7. Professional-grade broadcast receiver with provision for stereo FM reception in the VHF band 88-108MHz and AM in the bands 150-350kHz and 550kz – 30 MHz. Single conversion, IF 465kHz. and 10.7MHz. Tuning meter, AC mains plus charger for internal NiCad. Or 12V DC external source. 18 transistors, 4 ICs, 23 diodes. Used by HM Forces as 'comforts' set. Price (1972) £273.



Eddystone Model 1002

**EDDYSTONE Model 1004** 1972-81. Marine approved reserve receiver; rack speaker, mounting, large single CW/AM/SSB. Seven ranges covering 150-535kHz and 1.6-30MHz. Integral pre-tuned crystal controlled converter to provide instant selection of 2182kHz International Distress and calling channel for emergency watchkeeping at sea. Ten crystal controlled channels.

Single conversion; IF 720kHz with selectable bandwidths. Variable BFO and tuning meter. Power sources as 1002. Price in 1972: £312

The 1004 was also badged for Redifon, ITT, Hagenuk and Marconi (Sentinel), with or without the ten crystal channels.



Eddystone Model 1004

#### **EDDYSTONE Model 1630/1.** 1981.

"Watchkeeper". One of the company's more curious sets was this single channel marine radio. Designed specifically for maritime use as a Radio-Telephone Distress Frequency Watch covering Receiver the frequency 2128kHz, in compliance with TSC267 and also MPT1204/1 (Climatic and durability Testing of Marine Radio Equipment). Modes of reception are A", A2H, A3 and A3H. Power supply AC mains or 24 V DC. Bulkhead fitting. about 10" wide by 6" high.



"The Watchkeeper"

Eddystone Marine Model 1630/1

EDDYSTONE Model 1635 1983; single channel (2182kHz) Another watchkeeping receiver. The use of digital integrated circuitry provides the logic to interrogate all received signals and to automatically operate the Mute

when an alarm signal is received. Power supply AC mains or 12-32V DC.



**Eddystone Marine Model 1635** 

**EDDYSTONE Model 1570.** c.1980. A low-cost general purpose AM/FM-CW/SSB receiver. Model variants covered the requirements of both professional and semi-professional users.



Eddystone 1570 - early model

Digital frequency scale; coverage 150-350kHz, 580kHz – 30MHz, 88-108MHz FM. S-meter, Speaker, product detector. AC mains, 12V DC, optional internal rechargeable sealed lead-acid battery. Telescopic whip aerial. 17" wide. Price £600 in 1981



Eddystone 1570 – later model

**EDDYSTONE Model 1590.** C.1980 Similar to 1570 but without the FM band and with 19" rack-mount panel. Provision for 12 crystal positions for super-high stability operation.



Eddystone Model 1590

**EDDYSTONE** 1837-series. Model A large family of general 1977-83. purpose and maritime High Stability double conversion receivers. Frequency coverage 100kHz-31MHz in 9 bands. Power supply; AC mains or 12/24V DC with inverter. Many minor variations in facility but all cover AM/CW/SSB and have six-digit electronic display and tuning meter. Variable IF bandwidth. Rack-mounting (cabinet option). 1837/1S is badged as the Marconi Prices (1980) in the £2.5k Pacific. region. Medium rare.



Model 1837/1 (in desk cabinet)



Model 1837/3 (in desk cabinet)

**EDDYSTONE Model 1838-series.** 1976-84. A family of high stability HF receivers intended for maritime telephony applications in the range 1.6-

31MHz. Very closely related to the 1837 (above). Variations of mode coverage: 1838/1 – AM & USB; 1838/2 – AM, CW & USB (LSB on CW); 1838/3 – AM,CW & USB (LSB on CW) on a frequency coverage of 100kHz to 31MHz. Appearance is the same as the 1837 series (above). Price range (1972) c.£600, (1980) c.£2k. Medium rare. ◆

**EDDYSTONE** 1990-series. 1975/84 A series of professional-grade general purpose VHF/UHF communication and laboratory receivers (all look-alike).



#### Eddystone model 1990R/2-X

EDDYSTONE Model 1990R/1-X. 1975/84. 25-235MHz, variable tuning with 36" metal 'film scale' roll, plus ten crystal channels. Speaker, tuning meter, calibrator and scale adjuster. Wide/narrow IF. AM/CW/FM/Pulse. Rack-mounting, optional desk cabinet. AC mains or 12V DC. Price (c.1982) £3614.

**1990R/1-S.** As above except Marconi Synchroniser fitted in lieu of crystal selector, allowing continuous selection of one channel in increments of 100Hz. 1975-84. Price (c.1982) £5855.



Eddystone Model 1990R/2-S (in desk cabinet)

**1990R/2-X.** As 1990R/1-X except frequency coverage is 25-500MHz. 1975/79.

**1990R/2-S.** As 1990R/1-S except frequency coverage is 25-500MHz 1975/79.

**1990R/3-X** As 1990R/2-X , 1975/84 Price (c.1982) £4223.

**1990R/3-S.** As 1990R/2-S, 1975/84. Price (c.1982) £5855.

**1990S**. 440-1000MHz, continuously tuned, with Marconi Synchroniser fitted. AM/FM/Pulse. 1978/84. Price (c.1982) £5961. ♠

EDDYSTONE EC1680-series (1982). A look-alike family of low-cost compact marine receivers. Single conversion superhets (IF=1400 kHz) with power requirements to suit customer. Standard set is AC mains or 24V DC.



#### Eddystone Marine Model EC1680/3

**EC1680/1** Single channel at 500kHz. Alternative frequency in the range 400-535kHz could be provided to customer requirements. Modes CW/MCW.

**EC1680/2** Seven channels between 400-535kHz. Modes CW/MCW/FSK.

**EC1680/3** Single channel in the range 1.6-30MHz. Modes: AM/USB (LSB, CW or FSK to order).

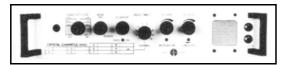
**EC1680/4** Two channels in the range 1.6-30MHz. Modes AM/USB (LSB, CW or FSK to order). c.1980 ♠



Eddystone Marine Model 2004 (1984)

Tunes 400-535kHz, IF 262kHz. Modes CW/MCW. AC 110-250V or 24V DC ♠

**EDDYSTONE Model 1964.** 10 channel compact low-cost marine receiver of great versatility. Many versions offering a mix of channels and modes from MF to 27.5MHz. (1981)



**Eddystone Marine Model 1964** 

**EDDYSTONE Model 1650-series.** The company's first microprocessor-controlled general coverage communication receiver. Introduced in 1984 and having many variants, all look-alike.



Eddystone model 1650-series

Sealed membrane front panel. Frequency coverage 10kHz to 30MHZ in 5Hz steps. 99-channel memory, any number scannable. Keyboard entry or knob tuning. Any segment of spectrum sweepable. Built-in motor-tuned preselector option. Double conversion: first IF 46.205MHz, second IF 1.4MHz. AC mains or 24V DC. Prices c.£3.5k.

Model 1650/1 AM, CW, USB.

Model 1650/2 AM, CW, USB, LSB

Model 1650/3 AM, CW, USB, LSB, ISB

**Model 1650/6** Special GCHQ remote control/direct entry model, (no tuning knob), limited facilities. (1988)

**Model 1650/8** VLF model 10 kHz to 160 Khz; built in test equipment (BITE). (1988-2001). Submarine communications.

**Model 1650/9** AM, USB, LSB, CW, NBFM or FSK option. (1990-95)

**Model 1650/9H** High performance version. (1990-95)

**Model 1650/10** (1989) Independent Sideband (ISB) receiver. AM, USB, LSB, CW, ISB.



Eddystone Model 1650/10 ISB

**EDDYSTONE Model 1995.** The company's first microprocessor-controlled VHF/UHF communication receiver. Suitable for surveillance, monitoring, re-broadcasting, point-to-point and laboratory use. (1984).



Eddystone Model 1995 VHF/UHF

Double conversion; first IF 515MHz, second IF 10.7MHz. modes: AM, FM, USB, LSB, CW, FSK, TELEX, PULSE. Choice of 7 IF bandwidths. Frequency: -

**1995/1** 20MHz to 470MHz

**1995/2** 20 MHz to 1100MHz

**EDDYSTONE Model 1810** VHF tactical military receiver. (1990) 20 to 88MHz. Modes: NBFM (AM option). 11-16v DC. 99 channel memory, scanning facility.



Eddystone Model 1810

## EDDYSTONE "ORION" SSB HF TRANSCEIVERS

A range of mobile "go anywhere" HF radio-telephones introduced in 1984. Intended for use in areas of poor infrastructure. Also adaptable as base stations. Built-in speaker. Tuning meter. Power output of all models on SSB = p.e.p. 150 watts.



"Orion 5000" mobile TxRx

"ORION" Model 5000. Eight-channels; frequency coverage 2 to 16MHz. Power supply 13.8V DC. USB standard, LSB optional. Base station has built-in AC mains psu.



"Orion 5000" base station

"ORION" Model 5500. Six-channel ruggedised military transceiver. Frequency range 2-16MHz. Power supply 13.8V DC. Consumption: receive

mode 100/300mA; transmit: 12A for average voice.



"Orion 5500" military RxTx

"ORION" Model 5600 Base Station. (1991) Intended for use with a comprehensive range of ancillary units to provide Telex and Voice facilities. Modes: USB standard (LSB option), FSK +/- 85 Hz at 50, 75 or 100 Bauds. With modem additional facilities are ARQ, FEC and SELFEC. Power output on FSK; 60 watts.



"Orion 5600/3" base station

"ORION" Model 5700 Marine Transceiver. (1988).



Intended for marine or base use by Patrol Craft, Fishing Boats, Rescue launches, Supply vessels, Customs craft or any marine authority requiring reliable medium to long range communications. Coverage 1.6-16MHz; 6 channels. A radio-telephone alarm generator is provided on the 2182kHz distress frequency. USB standard, LSB optional. Power requirement: 13.6V DC. (24 V DC, also AC mains, as an option).



"ORION" Model 5600 Compact FSK/Voice System. (1989).

Operating on 8 channels over 2-16MHz a heavy duty AC power supply permits continuous FSK operation with standby DC supply.

The modem allows interfacing with a wide variety of teleprinters. Intended for use by Police, Government departments, Survey teams, Relief organisations, engineering contractors, shipping companies and any group requiring reliable long-distance communication.



"ORION" Model 7000. (1996-2002)

Frequency range 1.6-30MHz transmit, 10kHz – 30MHz receive. Power output 100 watts all modes. (USB, LSB, CW, AM). Digital display, 10Hz frequency

resolution. Digital baseband signal processing and speech compression. Features BITE (Built In Test Equipment) for rapid fault identification. Supply 13.6V DC. AC power pack option.

The "Orion 7000" was the last Eddystone transceiver to be manufactured in Birmingham.

Price c. £1.3k



EDDYSTONE Model 6100 VLF/HF Channelised Receiver (1997)

Frequency coverage 1600kHz to 30MHz standard with 10Hz resolution. 10kHz to 30MHz /F option. Local keypad entry or remote control.

Modes: AM, USB, LSB, CW, ISB (/3 variant), FSK (/K variant). Dual conversion, first IF 45MHz, second IF 1.4MHz. 99 channel storage, automatic scanning. Built In Test Equipment (BITE). Rack mounted (optional desk cabinet).

The memory has an integral lithium battery which retains all information for a total period of approximately ten years with power removed.



EDDYSTONE Model 6200 VLF/HF Receiver. (1994-2002)

Virtually the same as the model 6100 (above) but with frequency selection also by spin knob in 10Hz increments. Price c.£2.5k. This was the last Eddystone receiver manufactured in Birmingham.

## PANORAMIC DISPLAY UNITS

Panoramic display units are specialised oscilloscopes intended to be used with certain Eddystone receivers (and some others) to examine the signals present within the bandwidth of the set's intermediate frequency and hence to analyse the sideband content whilst also listening to the transmission.

They are more of a laboratory instrument than an aid to reception, but brief details are given for those members wishing to play with them! They were first introduced into the range c.1963 with two models; one for use with the MF/HF receiver type 830 (it would also work with the EA12), and the other for the 770R Mk II for VHF.



#### Panoramic Receiver EPR27

This consisted of the model S.830 type receiver together with a plinth Loudspeaker Unit Type S.906. Above is mounted an **EP20 Panoramic Display Unit.** This unit serves a dual purpose in that it can also be used as a wobbulator for visual alignmement of standard IF channels of 100kc/s, 470kc/s etc. The whole equipment will provide a useful display on signals of less than 0.5µV.



#### Panoramic receiver EPR26

Similar to the EPR 27 (above) but using the S.770R MkII receiver (later versions also used the S.770U Mk II UHF receiver with a suitable IF Converter Type 939) together with the EP17R Panoramic Display Unit. In this case the wobbulator facility was used at 5.2 and 10.7 Mc/s.



#### Panoramic Display Unit EP14

Frequency coverage (*intermediate frequencies*) 5.2 Mc/s (1 Mc/s bandwidth) and tunable 6.2-60 Mc/s.



#### Panoramic Display Unit EP15

Coverage 100 kc/s (30 kc/s bandwidth) and tunable 400 to 800 kc/s. (c.1965)♠



#### Panoramic Display Unit Series EP961

Introduced in the early seventies the EP961 range was the first to use solid state circuitry. Although primarily intended as ancillaries for use with standard receivers, their sensitivity is sufficiently high to allow use with direct aerial connection in many applications. Provision is made for connecting a pen recorder. Screen size 10 x 6cm with log or linear scaling. Power supply 100-250V AC or 12V DC.

**EP961A** Frequency coverage 50kHz to 800kHz. Sensitivity for 1cm deflection 10µV. Resolution 200Hz.

**EP961B** Frequency coverage 500kHz to 36.5MHz. Sensitivity for 1cm deflection 25μV. Resolution 6kHz. price (1972) £1049. ♠



#### Panoramic Display Unit Series EP1061

Introduced in the mid-seventies these transistorised display units were designed as ancillaries for use with standard receivers of the period. They provided high-resolution linear or log displays on a screen 10 x 6cm. Power supply 110-250V AC.

**MODEL EP1061A/1.** Input frequency switched 100kHz or 1.4MHz. Sweep 30

frequency variable from 1.5kHz to 15kHz. Price (c.1980) c.£1.6k.

**MODEL EP1061B/1.** Input frequency 21.4MHz. Sweep frequency variable from 20kHz to 10MHz. Price same.

MODEL EP1061B/2. Input frequency 21.4MHz. Sweep frequency 20kHz to 2MHz. Also features a switch-selectable fast sweep range from 0.5 secs to 0.01 secs. Price (c.1980) c.£1.8k ♠

# EDOMETER TEST INSTRUMENT Catalogue No S.902 (1965)

A versatile transistorised instrument which functions as a dip oscillator, signal generator, absorption wavemeter, AF tone generator and AM modulation monitor.



Seven plug-in miniature coils. Frequency coverage 390 kc/s to 115 Mc/s. Powered by 9v. PP3 battery.

**S.902 Mk I** was supplied in cardboard box and is usually minus coils. V. Rare.

**S.902 Mk II** was supplied in beautiful mahogany case, as well as of improved circuitry. Price (1969) £27 10s. Rare. (but usually complete). ♠

# RECEIVER ACCESSORIES

As well as producing a wide range of components for the home-brewer Eddystone produced accessories for their own receivers.

Some of these have actually been 'badged' other makes. The first item was almost certainly the moving-iron horn loudspeaker advertised to go with the Eddystone 'TWIN' in 1926. Although bearing the Lighthouse logo in the form of a transfer, it was probably one of the many BTH models of the period.

Things really got under way in 1946, which was when the company became a serious contender in the 'class' market. The die-casting, in which Eddystone were particularly successful, was used to the full extent.



#### **Loudspeaker Model 688 (1946-61)**

7" diameter housing with 5" speaker unit, 2.5 ohms, black ripple with chrome feet (other finishes available with other numbers). Price (1954) £3 3s 3d. Production run 5,500+ These are quite rare.

A 5" diameter version, Model 652, with 3.5" speaker was also produced for a short period. Price £1 17s 6d in 1949. These are extremely rare.



#### TYPE 774 Mounting Blocks (1946-61)

For lifting the front of the receiver to give a more convenient operating position. Die-cast aluminium, finished ripple black. (other colours with other numbers) Price (1954) 11s 6d per pair. (As rare as hens' teeth!)



#### TYPE 989 Plinth speaker (later)

These two very similar models tilt the receiver in the same manner as the blocks (above), Extra controls may be positioned beside the elliptical speaker (3 ohms). Price of 989 (c.1980) £30. Very rare, but easily replicated by a handyman with plywood.

The Mounting Blocks (top) are designed to suit best the sets in the style of the S.640 and S.680X. The Plinths are designed for the later models (S.940 and after)



#### Model 899 Speaker

General-purpose loudspeaker unit in drawn steel case. Oyster hammer or two-tone grey (/F). 7" square with 5"  $3\Omega$  speaker. C.1964 Very rare.



#### **Model 669 Signal Strength Meter**

This was produced specifically for Eddystone Models S.640, 740, 750, 888 and 888A. These sets have an octal socket ready to receive the plug on the Meter. It is not suitable for other sets (e.g. 670/840) which do not have built-in tuning meters. The movement has a 200 µA full scale deflection and is calibrated in "S" units and decibels above S9 on the basis of a 4db increase in carrier strength for each "S" point (This is rather optimistic by modern standards which allow 6db per "S" point - this is easily remedied by shunting the meter!) Manufactured c.1946/60. Price £5 15s 6d. Very rare.



#### Catalogue 1419 Pillow Speaker

A flat , smooth bakelite grille, approx. 4" dia. by 1" thick. "When slipped under a pillow, speech and music can be heard clearly by a resting person but will not be audible to other occupants of the room." C.1950. Price £3 14s 3d including matching transformer, flex and plug. Advertised on the back of the instruction manual for the Model 670. Extremely rare.



**Vibrator Power Unit Model 687** 

Designed to operate specific Eddystone receivers from a six-volt accumulator. It consists of a transformer, non-synchronous vibrator, 6X5G rectifier and the necessary filtering to prevent R.F. interference. Smoothing is not included as the components in the set provide

this. Suitable for the S.640 and S.740, c.1947-57. Price in 1949: £7 10s 6d. 1954: £13 5s Very rare.

Vibrator Model 687/1 basically similar to 687 above, but adapted for use with the Models 750, 888 and 888A, which have balanced heaters. Price in 1954: £13 16s 6d. Very rare. ♠



#### Model 689 Semi-automatic Speed Key Model 689 c.1949-54

A futuristic 'bug' key which failed to draw hams away from the traditional American 'open' bug key. Its history is surrounded by controversy and I don't intend to open the debate here! It has been well aired in 'Morsum Magnificat' magazine. Needless to say it is now in great demand and fetching silly prices! Price in 1949 £3 17s 6d, '54: £4 5s 3d. Very rare.



**Modulation Level Indicator Model 678** 

c.1948-55. Looking sufficiently like a model 669 S-meter, this AM modulation meter is likely to be mistaken for one, especially if it has lost its aerial and coils. Covering the (then) 6 bands from Top to Ten, it operates by plugging the appropriate coil into the back and adjusting the telescopic pick-up until the meter reading coincides with a special mark on the dial. On switching over it then indicates modulation percentage directly. This is a passive device using two germanium diodes and can also be used as a field strength meter and AM phone monitor. Price in 1949: £8 15s. in 1954: £10 6s 6d. Very rare.



#### **Absorption Wavemeter Model 696**

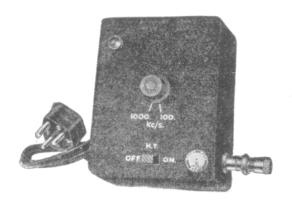
Housed in a standard diecast metal box this handy device uses eight miniature plug-in coils to give continuous coverage from 200 kc/s to 150 Mc/s. Two coil-stands are included to take coils not in use and individual hand-calibrated charts are supplied in a containing tube. The movement is 200µA and a germanium crystal is used.

The later model 696/1 was supplied with nine coils and covered the frequency range 200 kc/s to 200 Mc/s. Price in 1954: £13 10s 6d. Very rare. ♠



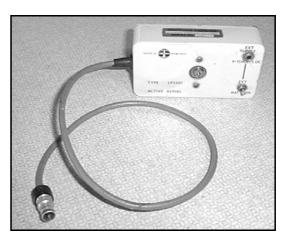
Model 732 Mains Filter
EDDYSTONE Model 732 Mains Filter

C.1948-58. Designed specially to reduce interference on board ship where the sparking at the dynamo commutator was notoriously 'dirty'. Intended especially for the model 670 and 670A but suitable for all the earlier models with the non-polarised connector shown. Price in 1954: £2 15s. Rare.



#### **Crystal Calibrator Model 690**

c.1949. Fitted into a diecast box (4½" x 3½" x 3") and operates from 210/230V AC mains. The circuit uses 'a miniature valve' (unspecified). Harmonics from the 100 kc/s oscillator are usable up to 30 Mc/s and those from the 1000 kc/s oscillator up to 60 Mc/s. 0.01% tolerance. Price £12. Very rare.



Eddystone Active Aerial Type LP3382

1975. Price unknown (still searching for Combined aerial and an advert!). aperiodic amplifier for use with any receiver having a low-impedance aerial input connection. It provides a useful voltage step-up over the range 10 kHz to 30 MHz. Internal PP3 battery or external supply (9-15V DC). The amplifier and battery are contained in a diecast metal box and a 21.5" telescopic rod is fitted (missing on the picture!). Uses one Field Effect Transistor (2N3819), one amplifier (BC214) and emitter-follower one (BF594). Very rare.

\*\*\*\*