

BR BULLEID WEST COUNTRY CLASS

34028 EDDYSTONE

Even before the Second World War, the Southern Railway desired a larger range of locomotives to accelerate services which were getting heavier to cope with increasing passenger numbers. Brighton Works drawing office first proposed a 2-6-0 design, as a replacement mixed traffic locomotive, but the Kent Coast lines demanded a 4-6-0 or 2-6-2 at the least.

Scaling down Bulleid's existing Merchant Navy pacifics with shorter wheelbases, narrower boilers and smaller cylinders allowed both the 44 strong Battle of Britain Class and their 66 West Country siblings to feature the same welded construction, steel fireboxes, oil bath chain driven valve gear, Lemaitre multiple jet blastpipes, thermic syphons, Bulleid-Firth-Brown wheels, electric lighting powered from a steam generator and power operated reverser, firebox doors and clasp brakes.

No. 21C128 was built at Brighton Works by the Southern Railway in April 1946 and went straight into traffic from Ramsgate shed where it took up regular duties on Kent Coast services to Victoria and Cannon Street. Bulleid adopted the French style numbering system for his pacifics – hence 21C128. Following the nationalisation of Britain's railways, on 1st January 1948, it was re-allocated to Exmouth Junction shed in Feb 1948, and renumbered 34028 at the end of that year. The nameplates - *Eddystone* - were affixed officially in December 1948.

It soon appeared on Exmouth Junction's top-link duties such as the Atlantic Coast Express and the Devon Belle which it worked as far as Salisbury. In February 1951 it was repainted into BR Green and, in February 1954 the cab was modified. In August 1957 a BR Totem was affixed to the tender sides.

Following the conversion of some Merchant Navy locos the decision was taken to rebuild Battle of Britain and West Country classes into more conventional locomotives. The approaching demise of Southern steam saw the rebuilding programme halted when 60 out of the 110 locos had been rebuilt.

Out of those 60 engines, those built originally with narrow cabs had them widened during rebuilding. 34028 received a cut down tender in August 1958 at the same time as it was outshopped from rebuilding at Eastleigh when the mileage had reached 564,587. One disadvantage of rebuilding was it resulted in heavier locomotives, which barred them from some routes west of Exeter where a powerful loco was still required. This meant that 'original' lightweight Bulleid's were still required for this area.

Eddystone was one of the first Bulleid light pacifics to be rebuilt after which it was then transferred to Bournemouth shed where it worked services over the main line between Weymouth and Waterloo. It was also a regular performer on the Somerset and Dorset Joint Railway route to Bath. During this period it was often photographed on the most famous of the S & D trains, the Pines Express.

During March 1960 a speedometer was installed followed, in January 1962, by the fitting of BR's Automatic Warning System and, then, in September 1962 it was transferred to Eastleigh shed.

On Saturday 27th April 1963, *Eddystone* worked one of a number of Southampton football club supporters' special trains through to Birmingham Snow Hill. It was run for the F.A. Cup semi-final at Aston Villa between Southampton & Manchester United which Southampton lost 1:0. 34028 was in charge of 'Train 3' which left Southampton Central at 07:30 running via Basingstoke; Oxford and Banbury arriving in Birmingham at 11:03. No details of the return journey have been discovered although it's thought the same route was used.

It has been reported by a railway enthusiast, on the end of Snow Hill's platform 8, that: *The first to leave was the 17:40 (train 1) right time behind 34098 Templecombe. All the services via Oxford were right time except the 18:13 (train 4) behind 34052 Lord Dowding which left 2 late.* Assuming each of the first four trains were relatively evenly timed then it is likely that 34028 would have departed around 18:04. It is possible that 34028 was one of the Bulleid's turned and serviced at either Stourbridge Junction or Wolverhampton Oxley.

On 14th June 1964, *Eddystone* had the dubious honour of being the first rebuilt Bulleid Light Pacific to be withdrawn. This was 18 years to the month after being built at Brighton Works but only six years after it's rebuild at a cost of around £9,000 (equivalent to almost £233,000 in 2022). It had travelled 851,549 miles by the time of withdrawal.

It was sent to Woodham's scrapyards at Barry where it awaited its fate for the next 22 years. It was purchased by the Southern Pacific Rescue Group (SPRG) and moved to a base at Sellindge near Ashford. Like many restoration projects, the SPRG was born out of an individual's desire to restore a steam locomotive. A meeting of the Barry Steam Locomotive Action Group in November 1981, convened by Mike Cockayne for people interested in rescuing the remaining locomotives at Barry, brought together Richard Moffatt and Colin Hebbes. This was followed by a visit to Barry and a meeting with David Woodham.

A report on *Eddystone* listed defects such as cracked frames, wasted firebox, shot bearings, pitted boiler barrel, bent axles, asbestos contamination, etc., and of course it had no tender. However, in true pioneering style a reservation was made and the SPRG was born. A second visit to Barry was made by the embryo group, now numbering four, to carry out preliminary tasks to prevent further deterioration such as oiling the axle boxes, cylinders and the motion.

The next problem was fund raising. In other words, persuading unsuspecting individuals to part with money for a pile of rusting metal. Adverts in the Railway press and local papers swelled membership ranks but funds were still considerably less than the £6,500 that was the asking price for a Light Pacific.

The fund raising problem was resolved by the adoption of the method of part-ownership capitalization, similar to that used to finance 35027 *Port Line*. Their bank was approached for a loan which was agreed provided there were sufficient standing orders to cover loan repayments.

A new problem arose, in May 1984, when the reservation was challenged by another railway. The price of scrap metal had continued to fall and £6,000 was now the price for a Bulleid Light Pacific. A hasty trip to the bank was met with the response by the manager that with the reduction in the asking price, only one more standing order was needed. The bank manager then pushed across the desk a standing order form which he had completed on his own behalf. A cheque was sent to Woodham Bros. to complete the first stage of the project.

Eddystone arrived at Sellindge from Barry on Saturday 26th April 1986, minus a lot of parts and no tender. Work then progressed on several fronts with a number of new or used

parts procured as funds became available. These included steam injectors, cylinder drain cocks, lubricators and a number of motion parts including the weighshaft, outside radius rods and return cranks. Other acquisitions included water gauges, speedometer, vacuum brake ejector and most of the sanding gear. A surprise acquisition was the arrival, by post, of one of the drop links sent by someone with a conscience who had removed the part from the locomotive at Barry and it was hoped that other missing parts might arrive in a similar manner!

The locomotive was completely stripped down, allowing the frames to be grit blasted and painted. No major repairs were necessary apart from the need to replace the dragbox and this item was fabricated at Bitton and eventually fitted to the frames.

The locomotive was fully inspected by BR and a report received detailing work to be undertaken before a main line ticket would be granted. It appeared that the locomotive was in a much better condition than many other former inhabitants of Barry, in particular the boiler, which only required the replacement of a few stays and some remedial firebox work.

At this point, the Owners decided to put 34028 in Southern Locomotives Limited's (SLL) fleet but still without a tender to run with it. The lack of a tender was not overlooked, however, and SLL purchased four independent snowploughs from Railtrack. Surplus Schools class tenders had been converted to snowploughs by BR and, although the frames are not the correct type for a Bulleid tender, they provided a source of axle-boxes and horn guides.

34028's wheel sets were sent to Swindon for machining and tyre turning and the axle-boxes were re-metalled and machined in preparation for the re-wheeling of the frames. Work was also carried out on the lubrication system, prior to re-wheeling, involving the installation of seemingly endless lengths of copper pipework and associated lubricators.

The 13th September 1997 saw *Eddystone* pass its first restoration milestone with the re-wheeling of the frames. A large crane had been hired for the day and a large workforce turned out to assist and watch. It reached another milestone in May 1998 when its boiler was lifted back onto the frames.

Work continued on the difficult task of reinstating the driving wheel springs. This was particularly difficult as there was no pit in which to work and they weighed about 300lb plus they needed to be lifted up to the frames in a confined space.

Pipe runs for the steam brakes and drain cocks were all reinstated as were the outside pistons. Work also continued on the cylinder cladding and re-studding in preparation for the fitting of the cylinder covers. The front bogie was re-wheeled and reinstated under the locomotive.

During the spring of 1999, *Eddystone* became a 4-6-2 locomotive once more with most of the work to prepare the loco for its journey to Swanage where the final stages of the restoration were to take place. Sunday 20th June 1999, saw the arrival of the low loader to take the locomotive to Dorset. The locomotive was shunted to the head shunt at Swanage until restoration of 80078 had been completed as there was no space in Herston Works.

On Friday 1st October 1999, 34028 was hauled from Swanage to Norden by a diesel shunter. There it was transferred to the low-loader taking it to Herston. The team that restored 80078 then turned their attentions to *Eddystone*. On 29th September 2003, after 4 years work, 34028 left the works for final completion, testing and running-in on the Swanage Railway.

Although it needed a few weeks' work, it was decided that it would be nice if *Eddystone* could be in steam for the Southern Locomotives' AGM in October 2003. The locomotive duly put in a brief appearance at Swanage station, after the AGM, and then retired to the shed. During the winter of 2003/4 numerous small jobs that needed completing were duly attended to and the locomotive quietly entered service on the Swanage Railway in the Spring of 2004.

In 2006, *Eddystone* was moved to the North York Moors Railway, initially for a year. Unfortunately, within a few weeks, it was discovered that at least two driving wheel tyres had been slipping and the locomotive was withdrawn from service. It was not possible to do the repairs at Grosmont as there was no means of lifting the locomotive to remove the wheels. An agreement was reached with the Bluebell Railway to make use of their wheel drop to enable the necessary repairs to be carried out and then subsequently run the locomotive there for a year. Once repaired, the locomotive worked regularly on the Bluebell Railway.

34028 visited the West Somerset Railway to attend their Gala weekend in March 2009. After the event *Eddystone* received attention to its axle-boxes, courtesy of the WSR's lifting equipment. Both *Eddystone* and *Manston* were towed from Swanage to Eastleigh, accompanied by 30053, to attend the highly successful Eastleigh Works Centenary between 23rd and 25th May 2009. The following year saw 34028 venturing onto new territory when it visited the Churnet Valley Railway in Staffordshire.

Its boiler ticket ran to 17th August 2014, when it was withdrawn from service for its 10 year overhaul. The boiler overhaul was undertaken by SDR Engineering at Buckfastleigh, and the axle boxes refurbished at Tyseley. It was hoped that the loco would return to service in 2020 but this did not occur due to the effects of COVID-19 on working arrangements and the personnel involved.

34028 *Eddystone* arrived back on Swanage Railway metals after seven years of tremendous efforts and no little cost (around £350,000 it is believed). After sundry 'fettling' works and running-in workings, it returned to passenger service in May 2021.

The locomotive was taken out of service again, in August 2021, when a ten-inch long crack an eighth of an inch thick was discovered on its leading bogie frames. It was not expected to be out of service for long. The Mid Hants Railway agreed to lend the bogie of its West Country locomotive 34007 *Wadebridge* whist repairs were made to 34028 *Eddystone*.

In December 2021 the locomotive was withdrawn from service after getting wheel flats on all six driving wheels. The flats occurred when the loco's steam brake was left on while it was top-and-tailing with classmate 34072 257 *Squadron*. The locomotive was moved by road to the DB Cargo's maintenance facility at Toton where the damage was repaired using a ground lathe. 34028 was returned to Swanage in February 2022.

Sunday 19th March 2023 saw the SLL AGM followed by three days given over to annual shareholders Driving & Firing days. These ran with 34028 *Eddystone*. Thirty Six Shareholders, plus some friends, participated with all supervised by Swanage Railway crews.

On Monday 3rd April 2023, 35028 was towed to Norden by Class 33 diesel 33111 for loading on to road transport of our friends at SA Smith of Biggleswade. *Eddystone* was moved to the North Norfolk Railway (NNR) to be used on Easter weekend services (7th - 10th April) as well as appear the following weekend as a guest loco at their Spring Steam Gala on 14th, 15th & 16th April. It proved to be a popular visitor.

On its return it has since undertaken all rostered turns with regular boiler washouts to maintain its availability.

In late November and during December 2023, 34028 "Eddystone" hauled the Swanage Railway's 'The Polar Express' services. It was fitted with a large headlight on the smokebox door and temporary "POLAR EXPRESS" decals on the tender sides. These trains proved very popular with some sold out completely.

TECHNICAL DETAILS			
ORIGINAL		REBUILT	
Wheel Arrangement	4-6-2	Wheel Arrangement	4-6-2
Cylinders (3)	16 ins x 24 ins	Cylinders (3)	16 ins x 24 ins
Boiler Pressure	250 psi	Boiler Pressure	<C 1952 280 psi then >C 1952 250 psi
Tractive Effort	27,715 lbs ft	Tractive Effort	280 psi - 31,050 lbs 250 psi - 27,715 lbs
BR Power Classification	7P 5F	BR Power Classification	7P 5F
Driving Wheel dia.	6 ft 2 ins	Driving Wheel dia.	6 ft 2 ins
Bogie and Trailing Wheel dia.	3 ft 1 in	Bogie and Trailing Wheel dia.	3 ft 1 in
Loco & Tender	67 ft 5 ins	Loco & Tender	67 ft 5 ins
Weight (8 ft 6 ins cab)	86 tons	Weight (9 ft cab)	91 tons 13 cwt

ACKNOWLEDGEMENT

Southern Locomotives Limited: <https://www.southern-locomotives.co.uk/>

Information compiled by Peter Sykes 26th January 2024