

BR BULLEID WEST COUNTRY CLASS

34010 SIDMOUTH

Even before the Second World War, the Southern Railway (SR) 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 all-welded boiler, 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, steam-operated reverser and firebox doors, clasp brakes on all driving wheels and 'air smoothed' casing over the whole loco.

Their 18 ton axle loading and 8 foot 6 inch wide cabs enabled the class to be used almost anywhere on SR. Later members, 34071 onwards, were built with wider 9 foot cabs and were attached to larger 5,500 gallon tenders.

21C110 *Sidmouth*, was built at Brighton Works by SR in September 1945 and was the tenth Light pacific constructed. Running-in trials and testing were undertaken, generally between Brighton and Eastbourne, as well as occasional parcels and goods trains on the main Brighton – London line. *Sidmouth* had the early style flat fronted cab, short smoke deflectors and the bogie wheels had hollow axles (to save weight) but this was discontinued after the first thirty locos were built.

After running-in, the locomotive was allocated to Exmouth Junction shed in December 1945. It's duties there would have seen it operating over the SR's North Devon and Cornwall routes as well as on the main line to Salisbury. Although it appears to have carried nameplates from new, 21C110 travelled to the seaside town of Sidmouth in Devon on Thursday 27th June 1946 which was specially authorised as the branch was normally out of bounds to Light Pacifics. SR had organised the formal naming ceremony at Sidmouth Station by Mr A Lancaster-Smith, Chairman of Sidmouth Urban District Council's Publicity Department on 27th June 1946. Mr Lancaster-Smith was standing in for the Council's Chairman who was absent attending an important meeting at Folkestone.

The initial paint scheme for 21C110 *Sidmouth* was lined Malachite green livery and it was attached to a 4,500 gallon high-sided tender. *Sidmouth* was renumbered 34010 in the BR numbering scheme in January 1950 having been repainted into BR Green lined livery. During the four weeks ended 7th April 1951, it was transferred to Nine Elms for service primarily over routes from Waterloo to Bournemouth and to Salisbury and Exeter.

On 1st April 1953, 34010 *Sidmouth* hauled the Ian Allan "Loco Spotters Club" special train from Waterloo to Exeter Central and return. It stopped at Salisbury for water and again at Sidmouth Junction where some of the club members alighted for a special branch train to Exmouth and Exeter Central. Others got off at Exeter to catch another special branch train from Exeter to Exmouth and Sidmouth Junction. It must have been very

popular as 35013 *Blue Funnel Certum Pete Finem* hauled the Ian Allan "Trains Illustrated" special train on the same route but around 40 minutes earlier.

In February 1955 its cab was widened and remodelled with angled front windows to assist forward vision. Apparently *Sidmouth* hauled a special train to Wembley Stadium, in May 1956, according to a photographer that captured the loco at Hampstead Heath station. The caption mentions that it had been sent onto the Hampstead Junction line to turn. It states that the date was 15th May but this was a Tuesday and no event can be found at Wembley. However, on Saturday 5th May 1956 the FA Cup occurred in the stadium but involved Manchester City and Birmingham City - it is not certain that there would have been sufficient demand for a supporters train from the Southern Region. A bit of a mystery to be solved perhaps.

Having run 578,944 miles it was rebuilt to the "Modified" form and outshopped in February 1959 with a different tender where the side raves had been cut down. It remained a Nine Elms engine for another 5 years, until September 1964, when it was transferred to Eastleigh.

On Tuesday 5th May 1959, 34010 *Sidmouth* was at the head of a Pullman car special train conveying Mohammad-Reza Shah Pahlavi, the Shah of Iran from Gatwick. HM The Queen, HRH The Duke of Edinburgh and HRH Princess Margaret were present at Victoria station to greet the Shah. During November 1960, 34010 received a speedometer as well as BR's Automatic Warning System.

Another photograph shows 34010 hauling a Waterloo to Swanage train on 8th August 1963 with Duty No. 418 on the smokebox door. The leading four coaches, coming through East Hill cutting at Corfe Castle, are of Maunsell design. It left Nine Elms shed in September 1964 when it was transferred to Eastleigh shed. 34010 *Sidmouth* was withdrawn in March 1965 having run a total of 922,906 miles in BR service and sent to Woodham Brothers scrapyard in Barry to await its fate.

It lay at Barry until 1982 when it was bought by Mr Graeme Walton-Binns and moved to the North Yorkshire Moors Railway. The plan was that the NYMR would restore the loco and use it on their line, however the resources to do this proved to be unavailable. After 15 years further rusting at Grosmont it was offered to two SLL supporters, Norman Taylor and Peter Wood, though it was finally acquired by SLL and moved to Sellindge in 1997 where restoration work commenced.

Subsequently *Sidmouth* was leapfrogged in the restoration queue by *Sir Keith Park* because of the strong historic associations of this loco, which led to generous support being offered towards its restoration.

SLL concentrated its operations at Herston and *Sidmouth* moved there in 2006. The frames were stored for some time on 30 ton Bogie Bolster C wagon KDB 923235 at Norden, the boiler is (now) being restored at the North Norfolk Railway, and many components (in various stages of restoration) are at the Herston Works. Given SLL's need to overhaul its operational fleet little work was done on *Sidmouth*, though it has a steady band of supporters - not least in the town of Sidmouth - and attracted interest from the wider community.

In November 2015, SLL announced that it would start work on *Sidmouth* in early 2016, when the overhaul of 257 *Squadron* was completed. The project was then estimated to cost around £500,000 and an appeal to raise funds was launched.

During 2006 the tyres on *Eddystone* slipped, while in use on the NYMR, and *Sidmouth's* were fitted to *Eddystone* temporarily. *Eddystone's* wheels were then sent to SDR Engineering at Buckfastleigh, for re-tyring, and subsequently these were used on *Sir Keith Park*, whose wheels will be used on *Sidmouth*. At the end of the Summer, with the delayed completion of 34072 and the need for 34028 to come into the workshop to be stripped so that its overhaul could begin, work on *Sidmouth* had to stay in the background although plenty of work was still undertaken.

Sidmouth's driving wheels are six feet two inches in diameter and the correct grade of steel for the tyres is now only made in South Africa. They were fitted at SDR Engineering and, around the same time, new nameplates were sponsored by Julia Creek from *Sidmouth*.

Sidmouth came with some motion parts missing and some rods - which were flame cut and, therefore, unusable. Some years ago as the new connecting rod was ordered, steel blanks for new coupling rods were also obtained. The connecting rod was fully machined but the coupling rods were not. SLL are always on the look out to gather missing parts from other Bulleid loco groups and from private owners, though probably some items will have to be made from new.

SLL currently has four tenders suitable to run with *Sidmouth*, and that should suffice as it's unlikely that all five Bulleid Light Pacifics will ever be in service simultaneously. However many people would like to see an 'original' high-sided tender running with *Manston* or *257 Squadron* and that aspiration may become reality one day.

Cylinder and valve covers - a combination of new castings and originals - are being machined and overhauled as necessary. The original crossheads and slidebars have been gathered and cleaned up but new axle box bearings and trays are having to be made. Castings for the covers were ordered and new cab, running boards and cladding will have to be built from scratch.

New buffer castings were purchased and machined and the new front hook has been machined already. New safety valves will be made in the workshop as these have been sponsored by an SLL shareholder who also volunteers in the workshop. All components for the lubricators await assembly. One boiler clack valve casting is in stock but a second one needs to be obtained or made. Some of the vacuum brake ejector and injector components are available but other parts must be bought or made. The reverser mechanism is in need of some repair similar to the drain cocks and cylinder relief valves.

During March 2017, continuing delays to the completion of 34072, and an unplanned bottom end overhaul of 80104, slowed progress on *Sidmouth*. However two sets of driving wheels and those for the front bogie and rear pony truck were re-tyred at Buckfastleigh and returned to Herston. A Bulleid chimney was located, by chance, beneath an overgrown shrub in a Devon garden. Agreement was reached to repair and use it after which the chimney was moved to Herston awaiting minor repairs and general restoration.

In November 2017 the boiler moved from Bridgnorth to the Weybourne site of North Norfolk Railway Engineering Ltd. It was examined for metal thickness, etc., and a schedule of repair/restoration work prepared which started in 2018 and has been progressing ever since. The new intention became to use *Sidmouth's* boiler on *Sir Keith Park*, when it was scheduled for overhaul in 2022 and to swap boilers. *Sir Keith Park's* boiler needs much less work than *Sidmouth's* and restoration will be timed for completion when its frames, wheels and motion are also complete. *Sidmouth's* bogie and rear pony truck were also overhauled

as both needed to be available when *Sidmouth's* frames came into Herston Works.

Work continued on *Sidmouth's* boiler (for use on *Sir Keith Park*) and, when the boiler is approaching readiness, *Sir Keith Park* will be transferred to Herston Works for dismantling and the boiler prepared for lifting. It will then be transferred to the NNR for the boiler swap, a complicated procedure as the ashpans have to be partially renewed. Once the work is complete *Sir Keith* will be returned to Herston for reassembly. Hopefully, before its return to the Spa Valley, there will be an opportunity to see all four of our Bulleids in action together at Swanage.

Sidmouth's restoration has been persistently delayed by urgent work on other locos. The immediate problem has been the lack of a facility to grit blast the frames and, to get things moving, it was decided to move the frames to Sellindge where there is space and resources to do this work on both *Sidmouth* and *Brocklebank Line*. Depending on the timing some further restoration work will also be done before the loco returns to Herston.

In September 2021, SLL issued an update on all their locos and the piece about 34010 *Sidmouth* is as follows:

The groundwork has now been prepared for both Sidmouth and 35025 Brocklebank Line at Sellindge, with these two projects moving forward together before the former is returned to Swanage. We have now acquired our own grit blasting equipment, including an almost new cabinet blaster for smaller items, and one of our friendly neighbours has agreed to lend us his large compressor free of charge. He has also kindly sold us for a peppercorn a fibreglass van body which will be perfect for grit blasting everything smaller than the locomotive frames themselves. We will need to cocoon the frames with plastic. By coincidence a scaffolding firm has just rented some land for storage a few yards from our area, and have offered to organise undercover accommodation for Brocklebank Line and Sidmouth's frames for us. It has been necessary to purchase a new 40 foot partially insulated container so that the many parts already overhauled, and ready to bolt back on to the engine, won't deteriorate during the Winter owing to heavy condensation in our current 40 foot containers.

On 9th November 2021, *Sidmouth's* frames were craned off the Bogie Bolster C wagon and transferred to Sellindge by lorry where work has started on the long task of grit blasting, painting and repairing the frames so that they be transferred straight to Herston Works once the job is complete.

It was reported in June 2023 that reconstruction work had started and the frame extensions had arrived. A specialist water jet cutting company in Kent, recommended by both the Spa Valley and the Kent & East Sussex Railways, was used to provide the extensions.

A new dragbox, which was kindly donated by Phil Swallow (owner of 34027 *Taw Valley*) many years ago, is perfect with all the holes drilled in exactly the right place. Unfortunately the holes in *Sidmouth's* frames aren't, so quite a lot of work has to be done to rectify. A shelter over this part of the frames has been created so work can continue in most weathers.

Work is now proceeding with repairing 34010's trailing doubled frame sections. During this loco's previous residency at Sellindge they were de-riveted and split apart to clear out expanded rust. Also, the heavily corroded end sections were cut away in readiness for new pieces to be fitted. This part of the operation has already commenced with the profiled replacement left and right-hand plates weld prepared and temporarily bolted into position,

together with the de-rusted frame elements.

We have had the dragbox back from the appointed contractor who fitted a pair of gun metal wear plates which bear on the trailing truck, thus distributing weight and facilitating smooth sideways movement.

The KESR's boilermaster and coded welder will be undertaking welding on the frames and has already inspected and passed the work achieved so far. The next task will be to fit the new front buffer beam acquired many years ago which will be a relatively easy job compared to the drag box.

Sir Keith Park's old boiler is to remain at Tyseley Works. Finances permitting, a start will be made on the overhaul for its new career on *Sidmouth* (following its earlier use on *Lord Beaverbrook*, *Dorchester*, *Lord Dowding* and *Sir Keith Park* over the years.)

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 2nd November 2023