BR BULLEID BATTLE OF BRITAIN CLASS
34053 SIR KEITH PARK

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, thermic syphons, Bulleid-Firth-Brown wheels, electric lighting powered from a steam generator and power operated reverser, firebox doors and clasp brakes.

Built at Brighton Works and outshopped in January 1947, 21C153 was first allocated to Salisbury shed. However, it appears to have spent considerable time on loan to Stewarts Lane shed where it was noted hauling heavy Continental boat expresses, such as the Golden Arrow, on many occasions.

In August 1947 it received a wider cab and 21C153 was named *Sir Keith Park* officially on 19th September 1947. It was one of three Battle of Britain loco's lined up at Brighton station for a joint naming ceremony, the others being 21C155 *Fighter Pilot* and 21C167 *Tangmere* with Air Chief Marshal Park himself naming 'his' loco. New Zealander Sir Keith Park was Air Chief Marshal in the Second World War. He was in operational command during two of the most significant air battles in the European theatre - namely the Battle of Britain and the Battle of Malta.

In June 1949 21C153 became 34053 under the British Railways system of numbering and, in January 1951, it had been repainted into BR Passenger Green. Following brief spells at Nine Elms and Exmouth Junction, it returned to Salisbury in 1951 working over the entire South Western network

In November 1958, 34053 was rebuilt when it's mileage had attained 529,129 miles. Its air smoothed casing and chain drive were removed and it was coupled to a different tender with the side raves cut down then it returned to Salisbury shed. In July 1960 it went in to Eastleigh Works again to have a BR Speedometer and Automatic Warning System installed. Although a final transfer in 1960 saw it operating out of Bournemouth shed and many times it traversed the Somerset & Dorset at the head of the Pines Express.

On Saturday 6th June 1964, *Sir Keith Park* was photographed ready for departure at Swanage station at the head of a nine Bulleid coach train. It formed the 11:40 for London Waterloo.

34053 was withdrawn in October 1965 when it's final mileage was recorded as 825,317 miles. It was towed to Barry scrap yard in South Wales the following March although it's arrival was delayed by several weeks, as there were some connecting rods in 34053's tender which struck a bridge near Chandler's Ford. The convoy of locos, which also

included 76068, were left at the east siding of Romsey station for several weeks. After its eventual arrival at Barry it avoided the cutter's torch for a further 20 years.

34053 arrived at Woodham's scrap yard in Barry during March 1966 and it was to be 18 years before it moved on the first step of its restoration. Charles Timms had bought the loco in 1979, but it was June or July 1984 before it left Barry en route for the former Hull Dairycoates depot, arriving in November. It was the 153rd loco out of a total of 213 rescued from Barry. At the same time the tender of 35006 was purchased, although this was sold on to the Port Line project (which subsequently became Southern Locomotives Ltd) and this went to Swindon, not Hull. Incidentally, that tender ran with 34046 *Braunton* when that loco was first restored

At Hull the bogie and pony truck were removed and sent to Swindon in 1988 for work to be carried out using the former Swindon Works wheel lathe, and the boiler lifted from the frames for restoration. Several new parts were ordered and produced, mainly fabricated parts, such as running boards, smoke deflectors etc. Little work was done to the boiler or chassis at that time. The owner died in 1992 and the locomotive was sold, together with available parts, to Dr John F Kennedy and moved to the Railway Age at Crewe during 1992 with a view to early restoration.

Things didn't work out as planned, and in 1995 the locomotive moved to Thingley Junction (west of Chippenham, where the Melksham line leaves the line to Bath). Little work was done on 34053 during this period, and ultimately it was sold to Jeremy Hosking for use as spare parts for 34046 Braunton and moved to Bishops Lydeard on the West Somerset Railway in 1997.

It was moved by rail from Bishops Lydeard to Williton shed on 22nd February 1997 hauled by diesel shunter 08850 and coupled to a Toad brake van for the journey. During the summer of 1997, all the boiler tubes were removed to assess the boiler's suitability as a donor for Braunton. It emerged that Braunton's own boiler was the better of the two and, as Southern Locomotives Limited (SLL) was involved in contract work for Braunton, they were given first refusal to purchase the locomotive when it was deemed surplus to requirements.

A generous purchase price which included some parts, which Braunton had not required, combined with an offer from one of our generous shareholders to subsidise the purchase, saw 34053 leave Williton and move to Sellindge in December 2000. The locomotive was purchased with the full knowledge that SLL might never have been able to restore it given other commitments.

However, such was the support for its restoration, mainly because Air Vice-Marshal Park played such a vital role in winning the Battle of Britain, that it was decided to start work when Manston was completed. Due to lack of space in the works at Herston the frames of the locomotive were transferred from storage at Sellindge to the workshops of South Coast Engineering at Portland. Over a period of several months they were completely overhauled and repainted and a new drag box built and fitted. Meanwhile the driving wheels had been transferred to the SDR Engineering at Buckfastleigh for retyring, and the boiler was transferred to the LNWR Heritage Centre for overhaul.

In late 2008, after 34070 *Manston*'s departure, the frames were transferred from Portland to Herston Works, and it was decided to move the boiler to the West Somerset Railway for a heavy overhaul and the fitting of at least one new tube-plate.

In 2009 the rear tube-plate was ordered and delivered to the West Somerset, however it was then decided to move the boiler back to Herston and repairs started shortly afterwards. The driving wheel axle-boxes were white-metalled and machined and the driving wheels returned from Devon enabling re-wheeling of the frames to take place in 2009.

The trailing truck wheels and the front bogie were installed, although the latter is actually *Eddystone*'s and, as a result, 34053's was overhauled and is now running with 34028. With the reinstatement of the running plates, mechanical lubricators were fitted and the huge job of reinstalling all the pipework commenced.

In 2010 rapid progress was made, with components being fitted almost daily. Following further significant support from SLL shareholders virtually a full set of motion had been accumulated and the coupling rods and connecting rods were reinstalled. The new tender frames were riveted in late 2008 and the new tender was completed in 2010. The restoration of *Sir Keith Park* was completed in May 2012, at a cost of £773,000, and the locomotive travelled by low-loader to the Severn Valley Railway.

The deal to run the locomotive on the SVR was negotiated as there were already two working Bullied Pacifics at the Swanage Railway. After some weeks of testing, and adjustments, it entered passenger service on the SVR in August 2012. The recommissioning ceremony took place on Saturday, 31st August 2013. The New Zealand High Commissioner had a footplate ride and the event was also graced by the attendance of three aircrew who served during the Battle of Britain. These were Wing Commander Dick Summers, Squadron Leader Tony Pickering and Flying Officer Ken Wilkinson.

In January 2016 it visited the Great Central Railway and, in October 2016, it travelled northward to visit the Keighley & Worth Valley Railway. The Mid-Hants Railway also borrowed 34053 for it's commemoration of the end of Southern Steam in 1967 at their End of Southern Steam Gala in July 2017.

In January 2018, after 6 years at the SVR, 34053 moved to the Swanage Railway where was based for a number of years. After having some problems with the middle connecting rod big end the locomotive was back in service in October 2018. This was aided by the use of the coupling rod from classmate 34028 *Eddystone*. The decision was subsequently taken to undertake a full bottom-end overhaul with the work is being undertaken at Tyseley.

In May 2019 it was reported that a Southern Locomotive Limited sponsor had agreed to fund the £200,000 cost of restoring the boiler from 34010 *Sidmouth* so that it can be swapped with that from 34053 *Sir Keith Park* when the latter's boiler ticket expires in 2021/22. The boiler from 34010 is being worked on until 34053 is ready for the replacement boiler to be fitted. The boiler from 34053 will subsequently be fitted to 34010. The locomotive returned to the Swanage Railway at the start of October 2019 following steam tests and trial runs at Tyseley

In early 2020 the locomotive was at Tyseley again for work on the bottom end. When the Swanage Railway advised that the locomotive should not return to there, because of financial concerns and the impact of Covid-19, SLL arranged for the locomotive to move to the Spa Valley Railway. The Spa Valley Railway looked after the engine over the winter of 2020/21 and had free steamings of it during the 2021 season. The boiler

certificate expired in February 2022.

Following storage at Corfe Castle station for a couple of months 34053 *Sir Keith Park* was transferred to Herston Works via Norden, on 2nd November 2022, on the same low loader that brought 34070 *Manston* back to the Railway. The major job of dismantling the locomotive, to prepare it for its transfer to Weybourne on the North Norfolk Railway, began almost straight away.

Within days the cab had been stripped, the motion partly removed, valves stripped for removal, cylinder covers loosened off so that the pistons can be taken out, brake rigging removed, smoke deflectors released and nameplates removed. Items such as the regulator needed to be removed for fitting into the 'new' (ex-*Sidmouth*) boiler, which was well on its way to completion. The hydraulic test was hoped to take place in January and the steam tests in February when all the necessary parts such as the safety valves, regulator, gauge glasses, etc., having been overhauled first, were delivered to NNR Weybourne shed.

However, in early 2023, there was a change of plan to try and speed up its re-entry into traffic. The original plan involved sending it to the North Norfolk Railway where the newly overhauled boiler (from *Sidmouth*) was going to be switched with its current boiler. This involved removal of the ashpan and the smokebox from *Sir Keith Park*'s current boiler which were both going to be re-used although they needed repairs. The whole job was made more complicated as the entire engine (with boiler attached) could not be delivered into Weybourne yard because of a sharp slope on the road into the Works area.

The release of the smokebox from SKP's current boiler and reinstatement onto the new one required significant work - the main problem being that no-one knew how much work would be involved making the new one fit. It was also unknown how much ashpan work would be necessary until the boiler is lifted from the frames.

With these unknown expenses to consider it was decided that SLL staff should do the bulk of the work at Herston to save significant contractor fees. After considering several alternatives SLL decided to send 34053 back to Tyseley where it will be united with the refurbished boiler sent from the North Norfolk after steam testing. They will loosely fit the smokebox to the boiler and then place the boiler on the frames and make safe for the transfer to Herston. Should there be any problems with this plan Tyseley have all the gear and expertise to rectify.

SLL's Herston staff and volunteers will then undertake the time consuming task of replacing the hundred or so bolts (which are disguised to look like rivets) which secure the smokebox to the boiler which is a long job even when all the bolt holes match up! The ashpans will already have been repaired and renewed where necessary at Tyseley

The smokebox from Sir Keith Park will need some serious cup-brushing and maybe needle gunning before primer is applied. It is hoped SLL volunteers at Tyseley will be able to help with this as it's so much easier to do the job when off the locomotive. The boiler is now heading for a hydraulic test in April and steam test in May, and should be ready for transportation to Tyseley by June.

However, a variety of problems arose which meant *Sidmouth's* boiler was again delayed and SLL were unsure whether the latest date of July for testing would be met. It

understood that six more stays needed to be replaced following the discovery of minor cracks, quite possibly caused by the major surgery which has been undertaken on the boiler, so this will add a little more time to the delay.

Not all of the time has been wasted as many more jobs have been accomplished at Herston which were planned for the period after it returned from Tyseley. The Tuesday gang at Herston continued to clean, strip and prime the cladding, which is an extremely long and time consuming task. All the crinolines (the framework round the boiler to which the cladding is attached) had been repaired and painted whilst about a third of the cladding was made ready for reinstatement.

The rear sub-frame was needle-gunned and received the first coat of primer prior to undercoating. The wheels were cleaned and painted and time was now available for all the brake gear to be reinstated before the locomotive leaves for Tyseley. A considerable amount of work was undertaken with all the brake rods and hangers which has been re-bushed where necessary. New pins have been fitted with the addition of grease nipples to reduce future wear - this could reduce the necessity to replace them at the next overhaul.

The motion was stripped down for inspection, including the reverser screw which may have to be replaced. Numerous cab parts were also overhauled and the lengthy task of annealing all the copper pipes started. Meanwhile construction work took place within Herston Works with the installation of a mezzanine floor purchased from a company, in an adjacent unit, who no longer required it. This was to provide extra storage space for, among other things, many of 34058's parts which are currently being transferred to Dorset and Sellindge.

The hydraulic test of *Sidmouth*'s old boiler was planned to take place in August 2023, signalling the departure of *Sir Keith Park* from Herston Works in early September to Tyseley Works. This should coincide roughly with the arrival of the boiler from Weybourne.

Meanwhile much of the work planned to be done after the locomotive returned to Herston has already been completed. The brake rigging was completely overhauled and all the new brake pins were manufactured in Herston with grease nipples added - not standard Bulleid practice but an excellent way to minimise wear.

34053 *Sir Keith Park* left Herston bound for Tyseley and the tender left the Spa Valley on 16th October arriving Swanage on the same day. The latter needs some maintenance, as well as a repaint to match the rest of the locomotive, before it leaves the Works in May.

Much of the work related to releasing the smokebox was completed prior to SKP,s departure from Swanage. The Tyseley team will fix the original smokebox to SKP's 'new' (ex-*Sidmouth*'s) boiler and, after the attachment of the original ashpans (which may need some surgery), place it on the frames to make it safe for transportation. Most of the reconstruction work is scheduled to be undertaken at Herston.

The boiler passed its hydraulic test successfully and awaited its steam test before the end of November 2023. After a successful steam test the boiler will be transported from Weybourne to Tyseley where the second steam test will take place after the superheater header and elements have been fitted.

Also at Tyseley, SLL volunteers continued work on the smokebox barrel with the boiler then expected to arrive in a couple of weeks. So, the smokebox had to be cleaned of rust and a coat of paint applied, especially on those areas which become inaccessible once the boiler and smokebox were fitted in the frames.

There was a very late indication that the superheater header needed some repairs so it will probably be quicker to utilise *Sir Keith*'s original header. If this is the case the current one for *Sidmouth* will be repaired.

Meanwhile at Herston work continued on putting the finishing touches to the cab and cladding by Dave Ensor and his team. Ron Neal concentrated on overhauling various valves, cleaning valve shafts, and regrinding and machining new glands and bearings. The cab is now ready apart from the final lining out and numbering.

The backhead cladding is also complete as are the smoke deflectors and crinolines on to which the boiler cladding is fitted. All the electric lamps have been cleaned and painted with wiring conduits renewed, where necessary, and checking the electrics in general. The turbo generator has been overhauled and fitted with work continuing to anneal the many copper pipes.

The brake gear has all be overhauled prior to the locomotive leaving. Ashpan fittings were removed, along with the myriad bolts securing the smokebox to the boiler, to both speed up the boiler lift as well as saving revenue. Four lubricators, and associated fittings, have also been comprehensively overhauled by the team at Herston.

On 14th December 2023 the boiler for 34053 *Sir Keith Park* arrived at Tyseley from Weybourne, on the North Norfolk Railway, where it's been overhauled. It was transported by S A Smith hauliers of Biggleswade in Bedfordshire.

The boiler was then lifted into the air, rotated, and the rolling frames of *SKP* shunted into position underneath. The boiler was lowered and the front bolted in place while the firebox end was aligned with the ash pan.

There were, apparently, a few 'glitches' to sort out at Tyseley before it could be moved to Herston for final reassembly.

The current restoration target for 34053 *Sir Keith Park* being worked to is completion in early June 2024.

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/

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