



steamsounds Riding behind steam BR Standards

In 1947 the Railway Executive, set up to oversee the running of the soon to be nationalised British Railways, appointed Robert Riddles to be responsible for Mechanical and Electrical Engineering. Riddles had no time for diesels as a stop-gap measure between the use of steam traction and electrification which he saw as the ultimate aim. So, along with his two principle assistants, Roland Bond and E. S. Cox, he set about designing a range of standard locomotives incorporating the best currently available practices intended to see the railways through until widespread electrification could become a reality.

Sadly, this aim, was scuppered by the ill considered 1955 Modernisation Plan which included the large scale dieselisation and the removal of steam.

So, instead of British Railways continuing with steam into the 1970s and beyond, some of Riddles and his assistants' designs had criminally short lives.

Among the first of the new BR Standards to emerge were the Class 7P6F Pacifics. These locos were designed to work express passenger trains but also be useful with fast freights. They incorporated some of the best design features from previous Pacific designs but with better route availability. 55 were built between 1951 and 1954 and the class soon became known by the name of the first example, Britannia...

1. In 1995 Steam returned to Cornwall when 70000 *Britannia* was booked to work trains to and from Penzance.

Unfortunately things didn't go according to plan on the outward journey when pilot loco 7802 *Bradley Manor* ran a tender axlebox hot and had to be removed from the train at Plymouth. This left the Pacific to continue on its own to Penzance with a 12 coach load and some very steep gradients still to surmount. All went well until on the climb to St. Austell the loco stalled recovering from a 20 mph speed restriction and diesel assistance had to be provided.

For the return journey a week later on 21st October 1995 we had a load of 13 coaches and the powers that be insisted that the train be assisted by a diesel at least as far as Exeter. It even required some persuasion before they would agree that the Class 47 diesel could be coupled behind the steam loco rather than on the front.

This was unfortunate, indeed I very nearly decided not to bother going as the train, which started at Crewe had a very early start and would, no doubt have an equally late finish but, as there was still some scope for something to record I went.

Joining the train at Crewe we were not pleased to find that the coaches set aside for dinners were at the rear of the train and would be nearest the steam loco on the return, our seats would be right at the back. However, at Penzance after a little negotiating, we were able to occupy a vestibule window at the rear of the locomotive's support coach although this would mean spending most of the day standing.

Despite the diesel the effort proved worthwhile as you can hear in this recording.

After a servicing stop at Plymouth *Britannia* now had to face the South Devon Banks beginning with Hemerdon and its 2 miles of almost continuous 1 in 42.

The crew had renewed the request that the Class 47 provide minimal assistance and as far as can be heard in this recording that was what happened.

We were unfortunate to suffer a dead stand at a red signal close to the site of Tavistock Jc. not much more than a mile from the start of the climb. This recording begins as, with a little diesel assistance, 70000 restarts.

Having reached a little over 40 mph before the gradient steepens the Pacific sounds well being worked hard on the climb and speed only falls to 32 mph before the summit is reached.

And the Class 47? Well, although it is inaudible it must have been doing more than pull its own weight. I doubt that 70000 would have been able to maintain these speeds with 500 tons behind the tender. A fine performance none the less and a very fine sound!

2. *Britannia* wasn't the only 'Brit' preserved.

We were fortunate that 70013 *Oliver Cromwell* was kept in service right up to the end of steam in 1968 and took part in working what was supposed to be the final steam hauled train on British Railways.

Initially preserved at Bressingham in Norfolk and isolated there, 70013 has only recently returned to the main line where it has produced some fine and vociferous performances.

In 2009 70013 was part of the pool of locos working that year's Scarborough Spa Expresses, then still running via the 'proper' route including the morning and evening Harrogate circles.

One of the most interesting parts of the evening circle could be the run from York to Leeds but, that year, the train had been given a very strange path which involved crossing to the slow lines at Colton Jc. then back to the Leeds line at Church Fenton. Quite why remained a mystery as nothing ever overtook us while we were on the slow. However, on the evening of 1st September a minor miracle occurred; someone must have overridden the computer and we stayed on the Leeds line all the way.

It was great once again to pass through Church Fenton with the whistle sounding then head round the curve beyond at line speed and this recording begins as we approach the station.

Once on the following gradient our driver soon had 70013 working hard. Speed falls only slowly and by the time we reached Micklefield we were still doing 55 mph. The next question was, would we catch up with the preceding stopping train as had happened in the past? Well,



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someone must have been looking out for us and we had a clear run, not only through Micklefield but all the way through to Leeds. Beyond Micklefield, before we reached the summit of the climb a little over a mile away, we only lost a single mile per hour, an excellent performance with a 12 coach train.

The recording ends not far beyond Garforth after which the run down into Leeds was taken fairly steadily, no doubt to avoid getting in to Leeds too early and perhaps catching up with the preceding stopper. As a result we didn't get anywhere near a record run but a start to stop time of around 32½ minutes with a heavy train seems pretty good to me.

- Exactly two years later on 1st September 2011 *Oliver Cromwell* was once again working the Scarborough Spa Express, however the route had changed. Instead of the Harrogate circle we now had the Wakefield circle and there was no opportunity to pass through Church Fenton at speed on the way to a record run to Leeds. Despite the train passing within half a mile of Leeds station we did not call there.

Although there was much less scope for fast running there was still plenty of noise to be recorded particularly on the climb from Wakefield Westgate to Ardsley.

The start out of the platform at Westgate was always a difficult one and on this occasion wasn't taken quite gently enough to avoid a slight slip but once out onto the main line 70013 begins to accelerate well while a London bound East Coast service passes.

The 1 in 100 gradient continues to the site of the former Lofthouse station where a short easing to 1 in 280 allows speed to rise before the gradient resumes at 1 in 122. The summit of the climb is at Ardsley where once there was a loco shed and extensive sidings, all now long gone. Beyond the summit the line descends at 1 in 100 towards Leeds passing through Ardsley Tunnel where this recording ends. An excellent performance with a 12 coach train.

Britannias were not the only Standard Pacific design, there were two others.

Perhaps the least successful of the 4-6-2s were the 'Clans'. These were classified 6P5F and gained a reputation for being poor steamers and a little under powered although this may have been due to loco crew's unfamiliarity rather than something inherent in the design. As only 10 of the planned 25 locos were built, crews wouldn't have had the chance to become familiar with the idiosyncrasies of the class and be able to get the best out of them. None were preserved although, as I write this, there is an ongoing project to build a new one. When it is, perhaps we'll see what they were really capable of?

Riddles had been keen to build a new Class 8 Pacific and although the Railway Executive saw no need, the destruction of 46202 in the 1952 Harrow & Wealdstone accident created an opportunity to build a prototype. This was 71000 *Duke of Gloucester* which emerged from Crewe Works in 1954. The loco had modified form of Caprotti valve gear with poppet valves driven by a rotary cam, a design which gave very precise control of steam admission to its three cylinders. Unfortunately other design features were less successful and the loco, while theoretically capable of very high power outputs, proved incapable of producing the steam required to achieve them.

After just 8 years in service the loco was withdrawn and both outside cylinders removed, one earmarked for display in the National Railway Museum, the other removed to keep the loco balanced for transport to Barry Scrapyard where it remained until a preservation group purchased it in 1974.

Restoration took many years and much money; fabricating two new outside cylinders wasn't cheap, but the loco eventually returned to the main line and in due course, after modifications had been made to the original design that prevented the boiler producing enough steam, it has proved itself capable of some remarkable performances.

- During its working life with British Railways 71000 remained allocated to Crewe North and in December 1995 worked a train north from there heading for Carlisle via the Settle - Carlisle line.

In this recording 71000 is heard on the West Coast Main Line approaching Wigan beyond which is the climb at 1 in 104 to Boar's Head.

After passing Wigan at 65 mph speed only falls to a little below 60 on the climb despite the heavy lead behind the tender.

One of the most numerous of the Standard designs was the Class 5MT 4-6-0 of which over 170 were built. Largely based on Stanier's Black 5 these proved to be very successful. Five have been preserved but only one so far has ventured out on the main line. This is 73096 which has been based at the Mid-Hants Railway and, due to this has only worked main line trips in the South of England. Regrettably I never managed to get down south for a ride behind it so I'm sorry to say that I have no on-train recordings of these locos, not even on a preserved line so we will have to move on to the slightly smaller Standard 4-6-0s.

The Class 4MT 4-6-0 were designed for use on mixed traffic duties on lines where the larger 5MTs would be too heavy and the class, built between 1951 & 1957 eventually numbered 80. All, as originally built, had single chimneys but some were later fitted with a double blast pipe and chimney. Six have been preserved and three have worked on the main line.

- 75069 is one of the locos that was fitted with a double chimney and on 12th April 1986 worked a train from London Marylebone to Stratford-upon-Avon.

In this recording 75069 has suffered signal checks caused by a preceding stopping train after passing Leamington Spa and is heard recovering from yet another one at the foot of Hatton Bank. A little slipping is soon overcome and the driver seems determined to regain some speed. The gradient here is 1 in 108 steepening slightly to 1 in 103 then easing a little to 1 in 110 causing some fine sounds from the loco. The hard work is to no avail however as further checks are soon encountered.



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6. Another of the class to see use on the main line is 75014, one of the class which retained its single chimney.

On 6th June 1998 75014 worked a train starting at Carnforth which first ran to Preston before returning north to Carlisle over Shap, the return to Preston and Carnforth being via the Settle - Carlisle line. With just 7 coaches behind the tender we anticipated getting some decent speeds on the ascent to Shap but the loco was not steaming well so, while we were never in any danger of not getting to the top, performance left something to be desired. The steaming problem proved to be due to a blocked spark arrestor in the smokebox and after this had been dealt with at Carlisle performance improved considerably, as did the noise as can be heard in this recording made climbing Whalley Bank.

From 30 mph over Whalley Viaduct speed rose to no less than 39 mph on the 1 in 82 gradient before falling by just 3 mph at the very top of the bank.

The next BR Standard class on the list is the first of three 2-6-0 tender classes. This one, a Class 4MT, was intended mainly for freight on routes requiring a lighter axle load than the Class 4 4-6-0s.

Built between 1952 & 1957 the class eventually numbered 115 and of these, 4 have been preserved.

7. The only Class 4MT 2-6-0 to work on the main line is 76079 which, at the time this recording was made, was visiting the North Yorkshire Moors Railway. Since that time the loco has been sold to the NYMR and is now a permanent resident on the line.

Being main line certified 76079 is able to work trains on the Esk Valley line as well as between Grosmont and Pickering and that is how it was being employed on 1st September 2005. At that date the NYMR were running trains between Whitby and Glaisdale a section of the route that included the 1 in 102 climb from Grosmont and with just 5 coaches behind the tender 76079 is ready to depart for Glaisdale as this recording begins.

Not long after the start there is a bridge over the River Esk to cross and like many bridges on the line, this one has a speed restriction on it but once clear, 76079 makes some fine sounds on the gradient through Egton.

The recording ends about a half mile from Glaisdale where there is yet another speed restricted bridge.

There were two other BR Standard 2-6-0s with even lighter axle loadings. None of the Class 3MTs survived into preservation but four of the lighter Class 2MT 2-6-0 were purchased for preservation.

None of these have worked on the main line perhaps being thought of as far too small to pull a commercial load at main line speeds although, having had a couple of runs behind the Ivatt Class 2MT 2-6-0s on which the design of these was based, I'm not sure that is quite correct.

8. Instead of hearing a Class 2MT 2-6-0 on a main line run we shall have to visit the Keighley & Worth Valley Railway which is home to 78022 and instead of riding behind the loco, we are going to have a footplate ride.

As this recording begins 78022 is ready to leave Oakworth for the next stop at Haworth and once under way, the fireman is soon at work on the shovel. On the Worth Valley's steep gradients 78022 is restricted to 4 coaches. That was the load on this occasion and it makes a relatively easy load for 78022.

After passing through Myholmes Tunnel Haworth isn't far away and the recording ends as we come to a stop in the platform.

The range of Standard locomotives wouldn't have been complete without a selection of tank engines and 3 types were built, two 2-6-2s of Class 2MT and Class 3MT and one Class 4MT 2-6-4. None of the 2-6-2Ts survived into preservation although there is a project to build new examples of both, the Class 2MT being 'converted' from what remains of 78059 after its purchase from Barry Scrapyard minus tender and various other fittings.

Of the Class 4MT 2-6-4Ts no fewer than 15 of the 155 built have been preserved and 3 of these have worked on the main line.

9. On 24th May 1992 we had a steam hauled run on the Cambrian main line with 80080. This train was originally advertised as running to Tywyn where passengers would have time for a ride on the Tallyllyn Railway but we were told that this had been vetoed by the Civil Engineer responsible for the route, the reason given being that steam locos were not to be permitted to cross Barmouth Bridge. As Barmouth Bridge is some way beyond Tywyn it is, of course, possible that this gentleman had failed O Level Geography but I think that a more likely reason was the state of another bridge near Dovey Jc.

So, instead of going to Tywyn, the train terminated at Machynlleth where passengers wishing to visit the Tallyllyn were conveyed by bus.

One of the attractions of this route is the climb to Talerddig during the return journey but this recording was made later on the less steep climb after Welshpool. This climb had often been entertaining during previous runs and this run with 80080 was no exception.

This recording begins as we pass the site of Buttington station at around 55 mph. On the following climb speed is held above 40 mph until the engine has to be eased for a speed restriction at Plas-y-Court. Once clear of this the top of the climb near Westbury is not far away.

10. Another Standard Class 4MT 2-6-4T to have worked on the main line is 80079.

On 2nd May 1998 80079 was motive power for a train from Crewe to Bleanau Ffestiniog and, ever since I first travelled on the Conway Valley line, I had always wanted to have a steam hauled run into Blaenau Ffestiniog and indeed, I still do!

After a satisfactory run from Crewe 80079 ran round its train at Llandudno Jc. and while waiting there, a retired railway man, on hearing



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that 80079 was taking 6 coaches up to Bleanau Ffestiniog remarked that, with that load we wouldn't get past Milepost 19!

After a very scenic run alongside the Conway, 80079 is heard in this recording, which begins soon after passing Betws-y-Coed, starting on the steep climb through the Lledr Valley.

At first the Standard Tank sounds to be doing well on the gradient up to the viaduct over the Afon Lledr and accelerates a little on the easier gradients over the bridge.

Climbing once again through the woods beyond 80079 sounds as well as I have ever heard it until, approaching Pont-y-Pant, things start to go wrong.

The man at the Junction was absolutely right; Milepost 19 was exactly where we were brought to a stand. It wasn't bad rail conditions that caused the stall but having 6 coaches strung out round extremely tight reverse curves with the wheels binding on the check rails.

The final BR standard class in the collection is the Class 9F 2-10-0.

These locos were primarily intended for working the heaviest freight trains, a task they were well suited to and were only very rarely seen on passenger trains.

One exception to this was their use on the Somerset and Dorset where they proved their worth as passenger locos on the steeply graded route putting in some remarkable performances with heavy trains.

Nine examples of the class have been preserved including the last steam locomotive built by British Railways, 92220 *Evening Star* which is the only one to have run on the main line in preservation. This locomotive is part of the National Collection and, being based at York was a regular performer in the 1980s on the Scarborough Spa Express.

11. 1983 was the year when we really started to get to know the York drivers who were to entertain us for the next few years with their exploits on the Scarborough Spa Express. Some drivers we got to know more quickly than others. One driver in particular that we looked out for was Harry Wilson.

Now some, myself included, could occasionally be heard to criticise Harry's style (if that is the right word) of enginemanship but one thing that no one could argue with was the fact that, whatever he did, we were never bored!

Take the evening of 9th August when Harry had *Evening Star* for the evening circle.

We started with a badly checked run from York to Leeds which featured a max of over 70 mph before Church Fenton then, after leaving Leeds for the climb to Horsforth, a further signal stop ruined any chance of a record climb.

As this recording begins we are dawdling across the viaduct at Kirkstall with the safety valves roaring for all they are worth. On the train we were wondering what Harry was playing at since we now had a clear road. It was only as we approached the far end of the viaduct that Harry decided to get the regulator open wider and I can still recall that the subsequent acceleration felt more like that of an EMU than a steam loco!

By the time the train had passed through the short tunnel at Headingley about a mile further on speed had risen from around 25 mph to almost 50 mph. Beyond Headingley speed continued to rise to a maximum of 56 mph before reaching Horsforth and falling gradients into Bramhope Tunnel.

No wonder the S&D enginemen were so impressed with the 9Fs.

