



steamsounds Riding behind steam 46229 Duchess of Hamilton

Designed by William Stanier and described by many as his masterpiece, the Princess Coronation Class of express passenger locomotives were built at Crewe for the London Midland & Scottish Railway with the first example appearing in 1937.

The tenth example of the class, numbered 6229 and named Duchess of Hamilton, emerged in September 1938 and, in the following year swapped identities with 6220 Coronation for a trip to the United States in connection with the New York World's Fair and, due to the outbreak of war, didn't return to the UK until 1942. 6229 resumed its correct identity when both locomotives were in the works at the same time in March of the following year.

In 1947 6229 lost its streamlined casing and, at nationalisation, became 46229 continuing in service until being withdrawn in February 1964.

Along with a number of other locomotives, 46229 was purchased by Butlins for static display at one of their holiday camps. 46229 went to Minehead deep in GWR territory. 46229 remained there until 1975 when Butlins, perhaps having decided that static steam locos were no longer the attraction that they had once been, agreed a 20 year loan for the locomotive to go on display at the National Railway Museum and the loco left Minehead by rail, was cosmetically restored in Swindon Works before going on display in York in May of that year.

Three years later the Friends of the National Railway Museum funded the restoration of the locomotive to main line condition and the locomotive returned to the main line on 10th May 1980 hauling two trains around the York Circle, a route that the locomotive was to become very familiar with over the next few years.

46229 continued working trains on the main line until requiring overhaul in 1985.

After that was completed, the loco returned to service in 1990 and continued hauling charter trains for the next 6 years followed by a further period working on preserved lines before finally being withdrawn from service in early 1998.

Since then the locomotive had been on static display at the NRM and has recently been restored to its original streamlined condition. In this guise 6229 looks magnificent and we can only hope that, one day, the locomotive will be returned to main line service and we can once again experience performances such as these examples that you are about to hear on this disk.



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1. 46229's final two runs before coming out for overhaul in 1985 were over the Settle to Carlisle line and the first of these ran on 19th October 1985 with steam haulage from York to Carlisle and, after a not particularly exciting run from York, we were delighted to find that our driver for the run to Carlisle was to be Jim Melia.

A Long Preston water stop gave the opportunity of a chat with Jim and he assured us that he would do his best, as he always did, to give us a good run although, having worked the Leeds to Carlisle service trains during the previous week, he did warn us that rail conditions were not all that good and he might have to take things easy, particularly in the early stages of the climb, after all, he didn't want to slip to a stand!

With water taken and all the passengers back on board, rather than the more usual whistle, Jim gets a more personalised 'right away' from the guard and soon has the Duchess accelerating on the falling gradients towards Settle Jc.

Passing the junction just 2 miles from the start at, for Jim, a conservative 55 mph everything sounds to be going well although the Duchess does lose her feet slightly on the 1 in 100 gradient beyond. After a some slightly more serious slips beyond Settle station Jim takes the sensible course of easing the engine back and by the time we were through Taitlands Tunnel and approaching Helwith Bridge speed had fallen to 36 mph. At Helwith Bridge the railway becomes level for a short distance and Jim takes advantage of this and, as the 1 in 100 gradient resumes, speed is back up to around 50 mph.

Beyond this point there being fewer lineside trees to drop leaves on the line, rail conditions were better and beyond Horton-in-Ribblesdale speed gradually increased from 52 to a maximum of 56 mph before Ribblehead. A fine performance on a 1 in 100 gradient with a 12 coach load behind the tender.

And, despite the S&C's notoriously noisy track, what a fine sound.

Eventually we reached Ribblehead where speed had to be reduced for the restriction over the viaduct and this recording ends.

2. As you have already read, 46229's first trains after restoration were round the York Circle; the route from York, through Leeds and Harrogate then back to York via Knaresborough. In later years the loco travelled over this route many times at the head of the Scarborough Spa Express and put in some excellent performances.

Being a regular traveller on these trains meant that, over the years, we got to know some of the York crews and many of them became just as enthusiastic as their passengers to see good performances from the locomotives in their charge; one such was Harry Wilson.

Harry was without doubt a character and, whatever happened, any run with him as driver was certain to be 'interesting'.

On the evening of Sunday 12th August 1984 Harry was waiting for us at York ready for a run round the circle with his favourite engine, 46229. Now, as I said, runs with Harry



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could usually be expected to produce something of note and plenty of noise was usually guaranteed, however I for one was not quite prepared for what transpired between York and Leeds on this particular evening.

This first track starts as we leave York. Most drivers take things fairly easily until at least the loco is well clear of Holgate Bridge and then open up. Not Harry!

The acceleration produces a speed not far short of 50 mph before the regulator is closed and the brakes have to be applied for a restriction under a low bridge at Copmanthorpe. The fireman seems to have his fire well prepared as the safety valves lift almost as soon as the regulator closes. Once the loco clears the bridge Harry soon gets the regulator open and off we go again.

The track ends near Bolton Percy where Harry, not before time, eases the engine, perhaps because he was in danger of exceeding line speed at Church Fenton!

3. Now for Leeds Bank.

As the recording starts we are approaching Church Fenton station at 71 mph, a mile an hour over line speed for the curve beyond the station.

After passing through the station with the whistle wide open and with the train onto the curve beyond Harry wastes no time in getting the regulator wide open ready for the climb through Micklefield to Garforth. So far so good.

A few minutes later speed has fallen off a little but is holding steady at 58 mph.

Everything is going fine, but not fine enough for Harry because he lengthens the cut-off and the roar from the chimney deepens.

46229 is a fine engine and responds to this totally unnecessary treatment by accelerating by a couple of miles per hour before falling again to 58 mph at the very top of the bank.

The representative from the Museum on the footplate during this run was John Peck and I know that he was absolutely appalled at Harry's treatment of the Duchess. Now, although I like a bit of thrash as much as the next man, I have to agree with him, this was no way to treat a Lady!

4. A week later 46229 was on the SSE once again and our driver for the evening was Gordon Spanton. Now Gordon, was a very good engineman but certainly not in the same category as Harry! Gordon would usually get us from A to B within the booked time and usually, without too much fuss so on this particular evening no-one expected any fireworks.

However, as we usually did, we had a word with him before departing from York and made sure that he knew the current state of affairs concerning fastest runs for the various sections, in addition, we also knew that Kim Malyon from the NRM would be riding on the engine with him from Leeds so we could be sure that some encouragement would be forthcoming from that quarter.

However, the ensuing run from York to Leeds did nothing to raise our optimism as



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Gordon gave us one of the slowest runs we were to record, in fact the slowest unchecked run of the season taking almost 40 minutes with speed falling to the low 30s on Leeds Bank. Not very promising.

Being a Sunday we had the advantage of using platform 6 at Leeds which meant that we could get straight out onto the Harrogate line without using any speed restricted crossovers. As we got the 'right away' I can recall wondering if it would be worth while turning my recorder on. I'm certainly glad that I did!

Once under way Gordon opened the loco up and as we began to accelerate realisation quickly dawned that he wasn't going to ease up and that we really were going to get a run for our money. We passed Wortley Jc. in just over 4 minutes at 37 mph, Headingley 2½ minutes later at 51 mph and reached Horsforth in just under 9½ minutes at 55 mph with the climb from Wortley Jc. having occupied no more than 5 minutes 21 seconds, the fastest time for this year.

On arrival at Harrogate, Gordon, with a big grin on his face, was heard to remark; 'I didn't think she'd go up as fast as that!' and when someone complimented him on his 'superb enginemanship' he simply looked shocked and said; 'You must be joking, we're all bloody mad!'.

This recording starts with the departure from Leeds and ends as Gordon shuts the regulator at Horsforth.

5. During the summer of 1985 Duchess of Hamilton had been based at Marylebone and in the capable hands of the drivers there had provided some remarkable performances. On 5th October 1985 the locomotive travelled north on its way back to York to work its last few trains before coming out for overhaul and, on this last run out of Marylebone, we were hoping for something special.

In the early stages of the journey, while the running was good enough, the engine wasn't worked particularly hard. This situation changed dramatically after High Wycombe.

This recording starts as we pass through the station, where there is a speed restriction, at around 30 mph. Once clear the driver opens the engine up ready for the climb to Saunderton. On gradients never steeper than 1 in 164 speed rises rapidly and, in just over 2 miles has topped 60 mph. The driver gradually extends the cut off and speed continues to rise until, after Saunderton station, reaches a little over 70 mph before the regulator is closed close to the summit.

A truly remarkable performance with a 12 coach load providing us with what was, at the time, one of the highest power outputs ever produced by a preserved steam locomotive in the UK.

We had been hoping for something special and we certainly weren't disappointed!

6. In the Summer of 1996, Mel Chamberlain's Days Out programme of steam hauled trains suffered considerably from both a fire risk ban and, in the case of trains that could have run, a significant lack of bookings.

One series of trains that we had been looking forward to were the three trains planned



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to run from Crewe and reach Carlisle via Shap. These would be the first steam hauled passenger trains over the famous bank since steam finished in the North West of England in 1968. Originally booked for August, the trains were cancelled due to the fire risk ban but new dates in the autumn appeared in due course. These were advertised as the Shap Time Trials with three engines booked to work one train each over Shap to Carlisle on three days.

The locos were ex LNER A4 60007 Sir Nigel Gresley which worked the train on 30th September 1995, BR Standard Pacific 71000 Duke of Gloucester on 2nd October and, with Duchess of Hamilton working the final train on the 3rd October. Each loco would have 11 coaches behind the tender weighing in at a little over 430 tons.

While it would have been nice to have travelled on all three trains I decided to do just one, the last one with 46229, and despite the eventual result of the 'trials' it is a decision that I have never regretted!

The sections of the route chosen for the 'time trials' for each locomotive were Grayrigg, Shap and, later in the day, the climb to Ais Gill. The idea was that the locomotives would pass a certain point at the foot of each climb at 60 mph before attempting to put in the best performance that the loco was capable of.

In this recording 46229 is approaching the bottom of the climb to Grayrigg, about a $\frac{1}{2}$ mile before Milnthorpe at the regulation 60 mph where our driver begins to open the Duchess up.

Unfortunately the loco begins to prime badly and he soon has to ease the regulator. Speed falls to 56 mph but once the priming stops and the locomotive can be opened up once more, matters improve until approaching Oxenholme speed has recovered to 68 mph.

On the previous day Duke of Gloucester had put in an excellent performance on this section and as we proceeded up the climb we were gradually gaining on the Duke and despite the much slower start, by the time we were just above Hay Fell, we had got to within 6 seconds of that loco's running time.

However, on the engine, the crew were having problems. Firstly, the priming had caused a considerable loss of water level in the boiler and it was proving difficult to restore this as the exhaust steam injector was playing up. In addition to this when the safety valves lifted one of the two valves refused to seat until the boiler pressure had dropped to 180 psi.

Falling water level meant that the driver had no option but to ease the loco on the upper part of the bank. Passing Lambrigg Crossing we were still doing 58 mph but by Grayrigg we were down to 46.

During the course of the climb the weather deteriorated with rain coming down like stair rods at one point! I had some difficulty recording at times; with a strong south westerly wind blowing, the right hand side of the train was the place to be but towards



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Grayrigg the line swings right to take an almost easterly course and this caused the side I was on to be exposed to the wind and torrential rain which is clearly audible in the recording.

After the recording ends and with the climb to Shap still to come, speed was allowed to fall to just 25 mph on the easier gradients to allow the water level in the boiler to recover before reaching Tebay.

7. In charge of 46229 on that day was Crewe driver Frank Santrian who was without a doubt as keen as we were to get the best out of the loco on the climb to Shap Summit. Aided by fireman Bob Morrison, in the short distance between Low Gill and Tebay they managed to get a satisfactory amount of water back into the boiler but, because of this were unable to do much to raise boiler pressure. All this meant that, instead of starting the climb at 60 mph as was intended we were only doing 54 mph.

As this recording starts we are approaching Tebay and as the sound of steam blowing through indicates, the fireman's side injector is still playing up.

Once on to the 1 in 146 through Tebay, Frank soon has the regulator open and speed rises to 57 mph before the 4 miles of 1 in 75 commence.

As we proceed, Frank opens the loco up more and more until he has the loco working in full forward gear with the regulator fully opened on to the second regulator valve.

With a slower start and the boiler pressure being maintained at around 175 psi rather than the 250 it should have been there was no way that we were going to beat the Duke which on the previous day had been able to pass Shap Summit maintaining 51 mph.

However, forget the figures, just listen to the noise! I can honestly say that it is one of the finest sounds I have ever heard from a steam locomotive.

In a report published in the December 1995 issue of Railway Magazine detailing the performance of the three engines involved the caption to a photograph of 46229 passing Greenholme reads; 'The assault on Shap by Stanier's 'Duchess of Hamilton' in the pouring rain had to be heard to be believed.'

Well, I'll certainly second that. The Duke might have put in a sparkling performance but I know what I'd rather listen to.

