



Adventures with a Stopwatch

By Mike Coulson

My father joined the LNER in 1940 as a cleaner and became a fireman within about a couple of weeks. His work on the LNER, of course was interrupted by the war. He joined the Royal Artillery to start with but he very quickly got moved up to the Royal Engineers to a railway company when they realised that he had some experience of firing steam locomotives. In fact, I remember him telling me, that as a young fireman he was seconded to Eastleigh at one time and he can recall firing Merchant Navy's but this of course 1942, 1943 before the light Pacific's were introduced. He was horrified at the Merchant Navy; a huge fire box a real challenge to fire. He saw war service in the Royal Engineers and he went over to France his job was moving petrol from a pipe line to the tanks.

So, I got the bug for trainspotting because I was taken to the engine sheds when I was a lad, when I was very small to pick up dad's pay. My association with the Southern Region began in the early 60s with trips down to Brighton. My dad had a brother who lived in Brighton, Brighton had a steam Sheds, dad and I went down to Brighton Shed and he fixed me up a footplate run on 34014, Light Pacific out of Brighton. I was very much a fan of the Southern Region of the particularly of the wonderful Merchant Navy Pacific's and certainly I was fortunate enough I did time the subject of this project 35005 Canadian Pacific.

I acquired a stopwatch in 1964 the last holiday I took as a teenager as a with my parents and it was in Jersey. We boarded the boat train in Southampton and it was, guess it was pulled by a Merchant Navy 35026 Landport and Holt Line by the time we got to Weymouth they had taken off the Merchant Navy and we went through the town hauled by a little diesel shunter. When we got to Jersey the first thing I wanted to buy was a stopwatch so I could time the trains. The stopwatch enabled me to time quarter miles which was an accurate way of determining the speed of the train by timing alternative quarter miles.

To determine the speed of the train you record quarter miles and speeds but you are also recording the times between passing points which is stations, signal boxes, mile posts in order to provide a check, a balance on the speeds which you've recorded to ensure the speeds that you've recorded with a stop watch look reasonable when compared with the passing times between various timing points. So, for instance if you've passed two timing points at an average of 60 mph you probably couldn't have been travelling at more than 61mph.

Most railways in this country have quarter mile posts situated on the side of the track, usually only on one side of the track. Certainly, in those days they were only on one side of



the track. In the case of the Waterloo Weymouth line they started from 0 at Waterloo. So, for instance mile post 1 was just before Vauxhall Station, mile post 3 was just before Clapham Junction and of course when you stared at them for hours and hours, day after day you got to know where they were. Which ones were missing as well and the odd one was placed inaccurately as well but again you got to know these after a while. So, what you're doing with your stopwatch you are measuring the time between 2 quarter mile posts, the number of seconds if you divide that into 900 that gives you speed and miles per hour. That's the algorithm. The number of seconds between quarter mile and divided it into 900. So, for example a quarter of a mile in 15 seconds is miles per hour. Just the same as a mile in 60 seconds, a mile a minute. Quarter of a mile in 10 seconds is 90 mph, quarter of a mile in 9 seconds is the magic 100 mph.

I timed a run on the Pines Express which was an express train that originated in Manchester and went through to Bournemouth via Oxford and Reading. I boarded it at Basingstoke and travelled to Reading on it, the date was the 1st August 1964, the locomotive was 35005 Merchant Navy 4-6-2 Canadian Pacific of Bournemouth Shed and the crew were from Bournemouth. The load was 13 coaches which is a fair old whack, 465 tons of carriage and then about 510 tons altogether counting luggage and passengers.