

Ashington station c1920, with a North Eastern Railway BTP 0-4-4T arriving with a local passenger train. (Author's Collection)

oday the East Coast Main Line between King's Cross and Edinburgh is controlled by just nine signalling centres and track is known to be clear unless it is shown electronically to be occupied. Prior to modernisation in the 1960s and '70s every route was divided into sections, each controlled from a signal box. This was the Absolute Block System which assumed the line was blocked until it was proved to be clear by the use of block bells and block instruments. In this way trains were passed in safety from one section to the next.

Newsham North was a typical North Eastern Railway signal box situated towards the northern end of the Blyth & Tyne branch in south east Northumberland, built of bricks and with plenty of windows in wooden frames above. In its day it contained coloured levers in a large lever frame — red for working home signals in the vicinity of the box, yellow for distant signals, black for points, blue for the mechanical locking of points, white for spares. Distant signals gave drivers advance notice of whether they had a clear run into the next section or not.

Above the frame, on a substantial wooden shelf, were fastened the sturdy block bells and block instruments, electrically operated, also signal repeaters which showed whether the

SECRETS OF THE LOGBOOKS

ALAN WELLS describes how entries in Occurrence Books held in signal boxes can provide a glimpse behind the scenes and reveal a lot of background information. He shares what he has discovered about Newsham North and Hirst Junction on the former Blyth & Tyne branches in Northumberland.

relevant signals were working correctly, particularly when they were out of sight. Suspended from the roof beams, behind and above the levers, was the large, framed track diagram which showed the position of all points and signals and their corresponding numbers on the levers. There were handlamps and flags, also detonators for use in emergencies or in fog or falling snow.

Beneath the cabin floor were rods which prevented conflicting movements — the interlocking. For example, signals could not be 'pulled off' (ie cleared) until the points were correctly set; similarly a distant signal would remain locked in the frame until the home signals showed the line was clear. Speaking generally, points and signals were not interlocked until the 1870s.

Outside were rods which connected the levers in the signal box to the various points and wires to work the signals. All mechanical pieces of equipment were maintained by fitters over a given area; electrical components such as block equipment and telephones were installed or repaired by linemen.

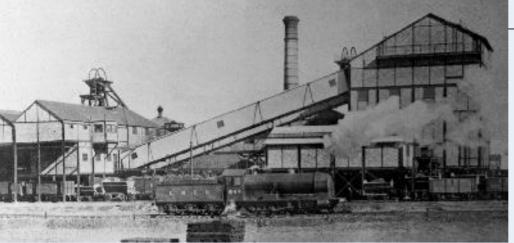
The North Eastern Railway, followed by the LNER and British Railways, kept an Occurrence Book in which anything out of the ordinary was recorded by the signalman. These were examined and signed by the station master or signalling inspector on their regular visits. With so much equipment things could go wrong, but if human misjudgement, rules being ignored and severe weather were added — then they did! These records, even though often mundane, can provide valuable information about railway operation on a particular route or branch at some periods in its history. In the 1950s and '60s it was possible to find Occurrence Books going back to the early 1900s which had lain for many years in a signal box drawer or cupboard and some of these have found their way into record offices, local history society archives or private collections.

o set the scene before delving into the log books of Newsham North, it is necessary to explain its location and environment. When collieries were situated near a navigable river it was a comparatively simple task to transfer coal to ships, but as pit shafts were sunk further inland coal had to be transported over greater distances. Because Blyth harbour had limited loading facilities in those early days, waggonways were laid to the River Tyne. Gradually the output of more collieries in south east Northumberland was fed into these routes, culminating in the formation of the Blyth & Tyne Railway in 1853. As more staithes were built on both sides of the river at Blyth a great deal of coal traffic and general merchan-dise travelled through Newsham.

Newsham, a junction on the former Blyth & Tyne Railway, had a down platform for services to Morpeth or Newbiggin, both of which were termini at the northern limits of the branch. The up platform handled passenger traffic to Monkseaton or Newcastle, while coal for the Tyne and elsewhere passed through. The branch

The 3.00pm train from Blyth to Monkseaton on the 'pass-by' line at Newsham with NER G5 0-4-4T No.67323 on 4th June 1958. Once clear of the points the locomotive would draw the train into the branch platform. (lan S. Carr)





LNER Q5 0-8-0 No.644 (NER Class T) passes Ellington Colliery c1930. (Author's Collection)

platform was used for trains to and from Blyth. Alongside this platform were loops and sidings and there were four tracks as far as Newsham South, two through lines and two 'independents'. An anomaly at Newsham was that there was no direct connection into the branch platform from

Blyth which meant that passenger trains had to run through the station on the 'pass-by' line and reverse into the platform or, as was sometimes expedient, into the up platform. This caused incidents which will be explained later. Replacing a trailing crossover with a facing one would have solved the problem — but for some reason it was never done.

Browsing through the pages of Occurrence Books from Newsham North, what can be found? What can we learn about happened all those years ago? Newsham North signal box worked to three others, namely Newsham South, Plessey Road and Isabella, each of which had a level crossing included in its operations. An early entry dated 10th April 1910 simply recorded "Opened to Isabella Jct. New Box 7 a.m. No. 12 from Staiths Distant dispensed with."

Alterations to track, signals or interlocking were recorded, for example, in 1911, 1912, 1922, 1930 ... but this was on-going. When signals were disconnected flagmen were used, working closely

with the signalmen. Entries indicated that maintenance, renewal and repairs were done on a regular basis, as would be expected. When the engineer took possession of the tracks all traffic movements were suspended apart from engineers' trains (known as P. Way workings) until the job was completed. If block instruments or bells failed, communications between signal boxes were done by telephone and trains were sent forward *at caution* after the drivers had been made aware of the situation.

On 22nd December 1927 an entry read as follows: "Special Mineral Train Ashington to New Bridge Street (Newcastle) Eng. No.2340 passed here at 3.33 a.m. and stopped at South Box for water. Unable to obtain water. Wrong Line Order Form issued at 4.17 to enable engine to go to Blyth."

Several derailments were recorded together with minor accidents. 25th October 1929 is an example of a signalman trying to describe what happened as briefly as possible: "The 6.40 Goods, Morpeth to Heaton Jctn. arrived here at 7.49 in Up Independent and set back clear into the Pass By to attach and detach traffic to and from the sidings and owing to the darkness and other trains shunting at the same time the Goods Engine No.962 came out of the Pass By without a signal and fouled No.2 Up Independent and caused a mineral train engine No. 1940 working a train from Bedlington to Heaton Jctn. to collide with Goods engine 962 and blocked the Main Up line whereas single line working had to be established on the Down lines between Newsham North and Isabella and Plessey Road at 8.45 p.m. Tool vans sent for and arrived here at 10.4." In short, engine No.962 moved forward again at a signal at danger and was hit by number No.1940 hauling a coal train!

Earlier, in December 1916, it was noted that "Engine 1227 working a mineral train from the North, while attaching and detaching mineral wagons on the full road, the rear portion of the train ran away on the Down mineral line to New Blyth, the engine having to go down after the rear portion and propel it to New Blyth and return on the proper line." Similarly, four years later: "While Morpeth to Blyth Pilot (ie local goods) 1998 was shunting his train at 6.40 p.m. on the empty mineral line part of his train consisting of Van and four wagons ran away facing road to New Blyth Branch causing accident to Engine and Brake at Mill Pit, proceeding to Newsham."

How do these vehicles run away? Perhaps the guard failed to couple up at the first attempt and the nudge of buffers was sufficient to set the standing wagons moving. It could have been a broken coupling — or that the guard failed to apply the brakes on his stationary brake van. Some guards would rather take the risk of vehicles running away if it saved them from walking alongside the train to release the van's

Another of the NER's powerful 0-8-0s — T2 Class No.1247. (Author's Collection)





brakes. It was easier to signal the driver to move forward then jump on the brake van as it passed! Fast forward to January 1945... "Coal train ex Crofton arrived 8.13 p.m. Informed by guard that train had divided. 'Vehicles running away on wrong line' sent to Isabella Box 8.13 p.m. Rear portion collided with engine and van 2354 following up from New Blyth." (The actual cause of this accident is not known.)

rom 1905 the North Eastern Railway favoured the use of autocars where the locomotive was coupled to one coach or between two and used as a push-and-pull unit. It was mentioned previously that trains from Blyth had to reverse into the platform at Newsham, which caused confusion to some passengers. One signalman drew attention to the possible danger as follows: "During the past few weeks, in the dark, many carriage doors have been opened on the wrong side, especially when a Branch train sets back into the Main Up Platform; there is a great danger to the passengers, and also doors have been broken by trains on the Main Down. I have written to the Station Master today, asking that something should be done in the matter."

As if fulfilling the prediction, the following was recorded on 28th June 1919: "As the 7.36 p.m. Car was leaving the station I observed a carriage door being opened by a girl. I immediately placed the Up Advanced Starting Signal to danger and stopped the car. Before the car was brought to a stand the girl jumped out and fell in the six-foot way. I promptly ran to her assistance and on reaching her found her rather shaken but not seriously hurt. The Car was delayed about three minutes in consequence."

Steam railcars, named after stagecoaches, were introduced by the London & North Eastern Railway in 1927 for use on some branches. They were generally regarded as being very reliable but on 18th June 1929: "The 3.52 p.m. ex Central, Steam Coach 'Brilliant', arrived here at 4.39 p.m.

and was unable to go forward and had to be shunted to the short end of Down Independent. Left here again at 5.59 p.m. for Central, light, via Backworth." Also, on 14th March 1943, "The 8.43 O.P. (ordinary passenger) ex Blyth derailed at No. 36 points at 8.50 p.m. when setting back into Branch Platform. Steam Coach 'Industry' 2271"

Several reports relating to World War I and II were included. Although not railway related, the signalman thought it important enough to write down on 23rd August 1916 that an English airship had passed over Newsham station in the direction of Blyth from Percy Main. Perhaps he first thought it was a German Zeppelin as there had been previous raids on the River Tyne. Joy and euphoria could not be contained on 11th November 1918... "End of war news at 10 a.m. Peace flags flying, buzzers blowing, rockets fired from ships in Blyth Harbour."

It all happened again when a terse entry on 3rd September 1939 read "War declared, notified 11.15 a.m. Air Raid Warning Red received 11.40 a.m. Green received 11.52 a.m." This would be to test sirens in the town. Houses were hit near the line to New Blyth in February 1941 and single line working was in operation between Newsham North and Bebside as the up line had been damaged by a bomb. Two months later a mine was dropped near the entrance to Blyth station. All lines were blocked and a signalman was killed. On another occasion the book denoted that the guard and fireman were "supplied with rations". Train Control was advised: engine No.428, cattle.

What other reports were found at Newsham North? In October 1925 the fireman of engine No.1842 informed the signalman that a wagon was on fire in No.1 siding. It was taken to the water column by engine No.1933. When another wagon fire occurred on a separate occasion the guard and enginemen of engine No.257 were asked to attend and deal with as necessary!

40-ton and 20-ton coal wagons at Ashington Colliery. (R. Miles Collection)



Engine No.257 was detained from 3.05 to 3.55pm. Each signal box was given a ration of coal, usually half a wagon load at a time, but if the supply was inadequate firemen were usually willing to fill a large scuttle from their engine. A 'delivery' of a different kind was made in January 1930 — "Received nine pen nibs today for cabin use"

Animals straying on to the line were obviously a potential danger. Sheep, horses and pit ponies were mentioned, but a note in the Occurrence Book of 1911 gave scant attention: "Horse killed at Isabella Jct. by 9.58 p.m. Down Passenger. Little delay to train."

Drivers also reported 'pitfalls', where holes appeared in the ballast. These were caused by mine workings underground. If the track was deemed to be unsafe, speed restrictions were imposed until the faults were rectified.

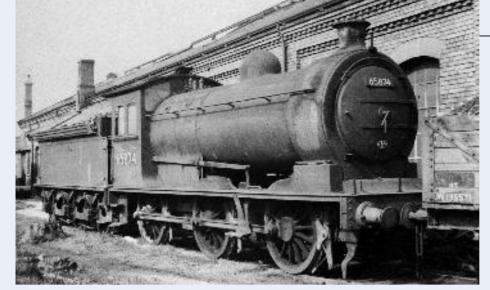
Plessey Road signal box, which was about mile away, was recorded in the log of Newsham North as being involved in several mishaps where trains - or, as on one occasion, a bus - crashed into the gates. A large crate caused some consternation when it was blown on to the line, but it was quickly removed. Plessey Road ceased to operate as a block post from 5.08pm on 9th July 1930 and became a 'gate box' only, opening and shutting the level crossing gates on instructions from the signalmen in the North box. Once the change was made Newsham North worked through to Bebside, the next station. A report in the Occurrence Book of Newsham North indicated a derailment at Bebside on 28th December 1955 when both up and down lines were blocked. The 'Obstruction Danger' bell signal was received at 2.54pm but the 'Obstruction Removed' was not given from Bebside until 8.59pm.

From time to time signal boxes were subjected to an analysis of the number of moves made with the levers each hour over a full day or two days. This may have been done to re-assess the classification of the cabin for wages purposes, or it may have been an appraisal of how well the equipment was working. Such a record referred to Newsham North on 18th and 19th June 1924 and revealed the following:

Number of lever movements: 5,234
Train signalling (ie bell signals): 971
Hand signals, etc: 140
Number or trains over the two days: 250

It is worth recording that the first signal box on the Blyth & Tyne Railway was at Newsham and it was there that two of the formidable NER snowploughs were stationed to be used on the branch and elsewhere when required. During fog or heavy snow platelayers were deployed as fogmen. They were stationed at distant signals where a detonator would be clipped to the rail. If the detonator exploded when a train passed over, it warned the driver that the next home signal could be at danger. If the fogman heard the signal wires move he would know the signal above was 'off' and he would remove the detonator and replace it when the train had passed. Standing there in those freezing conditions was not a job for the faint-hearted!

ix miles north of Newsham was Ashington station, called Hirst until October 1889. It was one of two intermediate stations on the Blyth & Tyne branch to Newbiggin, the other being North Seaton. Hirst had facilities for passenger traffic and a modest goods yard



The NER Class P3, LNER Class J27, 0-6-0s were the backbone of coal movements on the Blyth & Tyne branches. Introduced in 1906, these sturdy locomotives lasted until the end of steam. No.65874 is seen at South Blyth shed. (Author)

capable of handling general merchandise, livestock and road carriages brought in on flat trucks. Coal from the collieries in the area had to be taken via the East Coast Main Line for a few miles to Morpeth, then on to the Blyth & Tyne to Blyth if it was for export.

In 1886 a new connection from the Ashington collieries complex was made with the NER at Hirst station and this became known as the Linton branch. It enabled enormous tonnages of coal to be taken to staithes at North Blyth by a much more direct route. From the chaldron wagons carrying 2 tons 13 hundredweights there evolved wagons to carry 8, 10, 17, 20 or 32 tons; then, in 1903, bogie vehicles were introduced to convey 40 tons each between Ashington collieries and Blyth. Locomotives to handle this lucrative trade were largely 0-6-0 tender engines of various classes, but there were variations. Most of these were shedded at North Blyth, South Blyth or Percy Main.

Inevitably, many entries in the Occurrence Books from Hirst related to the Linton branch of which these are three examples. On 19th August 1902 it was noted that, "As coal train loco 1961 was entering Linton branch five wagons became derailed at 3.55 p.m. and were put on again by colliery engine. Tool vans sent for but stopped at Bedlington as not required."

Later that year "Mineral train no. 937 overran the From Branch safety points at entrance to colliery at 8-50 p.m. blocking the Down Main line to Newbiggin. The 8-40 p.m. ex Bedlington to Newbiggin was detained here until single line was commenced between here and Woodhorn Colliery cabin at 10 p.m." Normal working was not resumed until 9.53am the following day. On 30th July 1903 "Train of coal empties, engine 1694, derailed all wheels on points when entering Linton Branch at 2-20 p.m. Still off at 7 p.m." As will have been noted, some signalmen kept their reports very short and did not go into detail!

It must be remembered that colliery track was never to the same standard as that maintained by the railway company. The engine 1694 referred to above was a T Class 0-8-0, a very powerful locomotive introduced in 1901 and weighing (with tender) over 100 tons. As far as possible, NER drivers kept their own engine and the driver of T Class No.651 seems to have been quite a character who was involved in several incidents:

17th December 1903: 16th February 1904:

13th August 1906: 10th October 1907: Divided train Engine struck Down platform

Loco broke colliery gate Side rod dropping off. Repaired by driver!

In 1901 it was reported in *The Engineer* that a T Class had hauled a demonstration train weighing 1,326 tons at Tyne Dock. It covered eleven miles in 52 minutes. Similar trials followed at Blyth —

and the engine? It was No.651.

Reference has been made to single line working as a way of keeping traffic moving following a derailment. When this was introduced a responsible official, such as the station master or an inspector, acted as conductor. He wore a red armband with the word PILOTMAN in white letters. No train was allowed over the single line working unless the pilotman was on board the engine or had personally given the driver authorisation to proceed. He would do this if there was more than one train in the same direction.

Mention has also been made to 'Tool Vans', a railway term for the breakdown train. On the Blyth & Tyne branches it was usual for the train based at Percy Main to attend incidents and, when called out, it took precedence over other traffic. The standard North Eastern Railway formation consisted of a crane, packing van (carrying wooden blocks of various sizes), tool van and a mess van in which the crew rode and had their breaks. In British Railways days the 75-ton crane based at Gateshead was used when required.

It was not only the Linton branch which featured in the log books of Hirst. On 15th November 1905 one pair of driving wheels of an 0-4-4 tank engine, No.387, derailed on points. The driver was able with care to re-rail himself then departed with a theatrical special to Bedlington. In September 1906 sister engine No.1919 mounted a rail on a crossing when detaching a carriage truck and was derailed. At the end of December 1908 the goods pilot was stuck in a snowdrift between Woodhorn and Newbiggin until it was rescued by snowploughs.

An entry on 18th July 1916 noted "As goods engine number 1961 was pushing into goods yard from the Up line, engine burst a tube. Phoned No. Blyth and [was] instructed to put 1183 standing here to goods and send 1961 home. Driver refused and left at 2.38 p.m. taking 1961 with him to North Blyth." No.1183 was one of the powerful Y Class tank engines capable of hauling 1,000-ton loads.

Two further entries are worth recording. 28th October 1905 relates that "Policeman Briggs informed me at 11.17 p.m. that driver of the 11.13 p.m. Passenger had struck something on line between Bedlington and No. Seaton, I telegraphed to Bedlington and was answered back that he had struck some sleepers laid across the line and that the keys were out of the rails." This would have been a deliberate act which could have had serious consequences. Another incident could also have caused injury on 31st October 1914: "As goods was leaving for Newbiggin at 9.43 a.m. Porter R. Gibson went through the bridge with a one-wheeled barrow. He was turning the corner when goods passed him. Engine cleared him, but the handle of a wagon brake caught the barrow and turned him over and over to the middle of the bridge. Barrow smashed and Gibson bruised on head and legs. Goods stopped to see if he was alright and left at 9.48 a.m.'

From very modest beginnings in the midnineteenth century Blyth was Europe's coalhandling port in 1961 when 6,889,317 tons were despatched. The former Blyth & Tyne branch remains but a shadow of its former self. Newsham North signal box was demolished, though Ashington still handles traffic into and out of the Alcan terminal nearer the coast. All the collieries in Northumberland have now gone, though Woodhorn Colliery is now a museum.

Four Class J21 0-6-0s remained in service in 1960 but were withdrawn shortly afterwards. No.65033, shown at South Blyth, was a regular visitor to Bedlington on local goods workings. (Author)

