

Locomotive History – 45071

45071 was built as D125 at Crewe works, entering traffic in October 1961 and allocated to Derby MPD. Apart from a short spell allocated to Holbeck in the mid 1970s it was always a Midland Main Line loco, being allocated to Derby, Midland Lines, Nottingham Division and Toton during its career. Originally it was fitted with split centre head code boxes and was painted in lined BR green livery with small yellow ends. By 1969, it had been repainted into the standard corporate blue livery and carried the number 125 (the D having been dispensed with following the end of steam on BR).

On 22nd October 1974, 125 was rostered to work 6V86, the 19.42 Derby to Exeter Riverside freight train consisting of 42 vacuum braked mixed wagons (29 loaded and 13 empty) and weighing 767 tons (including loco). The train had an uneventful journey as far as Bristol, where it stopped for a Crew change. It departed at around 04.18hrs on 23rd, with a fresh driver and secondman. As there was no guards van, the guard travelled in the rear cab.

Meanwhile, the train in front, 6V35 18.28 Ince and Elton to Bridgwater hauled by 47441 and consisting of 13 privately-owned bogie pallet vans conveying Shellstar bagged fertiliser traffic arrived at its destination at about 04.55hrs and was waiting for the release of the ground frame at Bridgwater in order to shunt into the yard. Shortly afterwards at 05.04hrs, 6V86, travelling at approximately 45 mph, collided violently with the rear of the standing freight train. The force of the collision was such that 47441 was pushed forward about 100 feet and the two rear pallet vans of its train were telescoped and extensively damaged, spilling their load of bagged fertiliser onto the track.

Immediately after the impact, the driver of 47441 grabbed his track-circuit operating clips, jumped off the locomotive, and placed them on the opposite line. He then shouted to the man in charge of the station and his guard that something had run into the back of his train and told them to get onto the signalman immediately. He got back onto the locomotive, stopped the engine and proceeded to protect the opposite line with his detonators. The guard of 6V35 immediately used the nearest signal post telephone to ring the signalman at Bristol and inform him of the collision. After that he went back to 125 and from the offside of the loco spoke to the secondman, who seemed perfectly normal and replied immediately. He called to the station supervisor to get the ambulance and fire brigade and then, having asked where the guard of the train was, he went to the rear cab where he decided there was nothing he could do.

125 was seriously damaged at both ends, however the impact on the leading No.2 end cab was reduced by the cushioning effect of the fertiliser bags. The rear No.1 end cab was destroyed by 15 wagons behind the loco derailing and piling up, with one mineral wagon landing upside down on top of the rear cab. It was here that the guard unfortunately received fatal injuries. In addition, the loco body, frame and roof was distorted and the rear bogie displaced and

extensively damaged. Both Up and Down main lines were blocked by the wreckage of the wagons and some 240 feet of track was damaged.



125 stored at Derby Works in early 1975, showing the severely damaged rear cab.

During the subsequent inquiry, the driver of 125 stated that conditions in the cab of the locomotive had been comfortable, with the side and front heaters on. He remembered saying to the secondman that he did not want the back ones on as it would make the cab too hot. He thought he was running on green signals approaching Bridgwater and the next thing he remembered was regaining consciousness after the collision, seeing a pile of fertiliser bags in front of him, and trying to fathom out where he was.

The secondman recalled that about half an hour out of Bristol, he noticed that the cab was very draughty and on turning his head he saw the cab door on his side was open, although he didn't know where it had opened. He managed to turn round and slam it shut without getting up. He could not recall anything more about the journey after shutting the door and the next thing that he could recollect was seeing bags of something right in front of his eyes. He did not remember the crash and did not remember hearing anything. He remembered asking the driver "whatever is it?" and getting the reply "well it seems like a bridge has come down and we have gone into it".

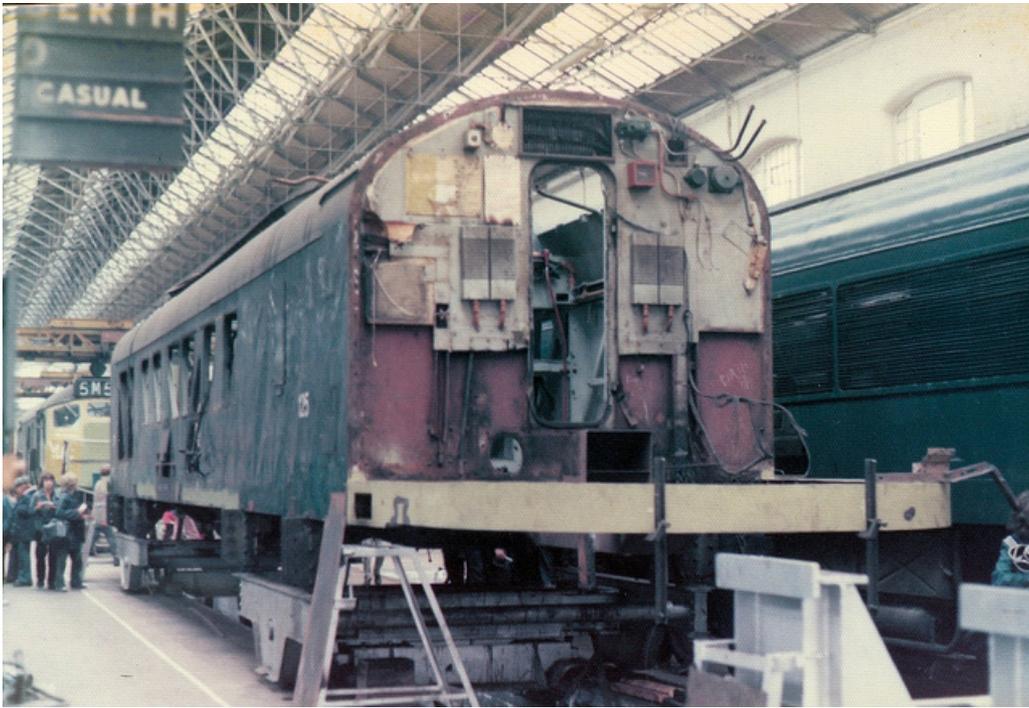
A Depot Maintenance Engineer was tasked with inspecting 125 after the crash and he reported that although he was able to climb into the leading (No.2 end) cab of the locomotive to inspect the controls he found that it was not possible to sit normally at the drivers desk because of the damage. He

found the power controller in the 'Off' position, the straight airbrake in the 'On' position and the vacuum brake in the 'Running' position. The Automatic Warning System (AWS) was in use and the AWS isolating switch was in the 'On' position and sealed. The cab lights were 'Off'. He later established that the 'Passenger/Goods' switch was in the 'Goods' position which was the correct position when operating a Class 6 train. The locomotive was fitted with the BR Automatic Warning System (AWS), with a Drivers Safety Device (DSD) pedal, but not with a Vigilance Device. Because of the damage to the DSD it was not possible to carry out a functional test after the incident. However there was no evidence that the operating mechanism was defective. The bulkhead door between the cab and the engine room was open and could not be closed. He thought that it might have swung open and been damaged on impact so he had been unable to check whether the seal between the door and the frame was adequate. However the ventilators in the cab roof were in order and clear of any obstruction. On further inspection of the locomotive at Bath Road Depot it was revealed that the electrical control equipment was in the first stage of field weakening which meant that the power controller must have been in the 'On' position on impact. The first stage normally functions at speeds of 45 to 48 mph and this gave some indication of the speed the locomotive was travelling at the time of impact. If the controller had been physically closed a sufficient time (more than about 6 seconds) before the collision, then the field divert would not have been in. He was consequently convinced that power was being applied at the time of the collision and said it would have been impossible for the impact to have put the electrical control equipment into the condition in which he found it.

A full brake test was carried out on all 24 brake cylinders and all were found in order with the exception of one. The speedometer was tested and found to be in good order, although the front cab speedometer was reading high because the circuit to the two balanced instruments had been interrupted in the rear cab due to the collision. When he inspected the locomotive at the site of the collision the brake blocks were hard on the wheels but it was not possible to tell whether this was as a result of a brake application being made or because the train pipe had been disrupted in the collision. The evidence on the drivers desk from the controls was that a full application had been made on the locomotive, however the power controller and airbrake handles might well have been knocked to the positions in which they were found by the impact and as a result of his later inspection he was of the opinion that there had been no brake application before the collision took place. He stated that he considered locomotive 125 to be in a good state of maintenance prior to the accident.

There was no evidence of any fault with the colour light signalling system or with the brakes of the train. The investigation concluded that both the driver and secondman had fallen asleep and missed the caution signals on the approach to Bridgwater. Unfortunately the signalling was fitted with Western Region AWS, which was incompatible with the BR AWS fitted to 125. Therefore the brakes did not automatically apply when 6V86 passed the protecting signals at danger.

Following recovery, 125 was moved to Derby works where it languished for several months awaiting a decision on its fate. Eventually it was authorised for repair and emerged from Derby Works in December 1975 as 45071, the last



125 (45071) under repair at Derby Works in 1975

locomotive to receive its new number under the 1973 TOPS renumbering scheme. During this repair it was fitted with dual train brakes and became the first class 45 to have its headcode boxes (destroyed in the collision) replaced by a flush front end with marker lights. The style of marker light carried by 45071 was unique and thought to come from Class 20. 45071 continued in service until September 1981 when it was withdrawn with a power unit fault. It was sent to Swindon Works for storage and was broken up there in July 1983.



45071 shows off its new front end, with Class 20 style lights in 1976.