

Lessons Learnt from a Formal Investigation



Date: July 2013

Issued By: Corporate Investigation Manager, Milton Keynes, MK9 1EN

Document ref: NRRP 8

Title: Derailment of 6Z68 freight train near Castle Donington on 21st January 2013

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Photograph taken from Investigation Report

Overview of Event

- On 10th January 2013 at 16:06hrs, freight train 6Z96 travelled over a known cyclic top site on the Up Chellaston branch line from Chellaston East Junction to Sheet Stores Junction, near Castle Donington, Leicestershire.
- The driver of 6Z96 contacted the signaller and reported a rough ride, but did not reach a clear understanding of the exact location.
- The local on-call track team attended the site of the reported rough ride, but found the track to be within acceptable tolerances. This location was approximately 250 yards before the point of derailment. The team agreed as there was no risk to trains, they would return the following day in daylight to carry out a lift of the track.
- The cautionary speed restriction was lifted, and the line handed back for the safe running of trains at the line speed of 50mph.
- On 11th January 2013, the local track team returned to the reported site and carried out minor maintenance. They also carried out some track lifting around the derailment site, as it was a site of known poor quality track.
- On 21st January 2013, freight train 6Z68 travelling from Crewe to Toton derailed at the site.
- The principal causal factor to the derailment was the cyclic top fault.

Underlying Causes: Communication

- A clear understanding between the driver and the signaller of the location of the rough ride was not reached.
- Leading questions were used when seeking clarification.
- It appears that terminology used was not fully understood by both people.

Practices & Processes

- A thorough, understood process for responding to a report of a rough ride was not in place within the local maintenance organisation. Consequently, a known section of poor track in the vicinity of the rough ride was not inspected following the report.

Work Environment

- The derailment occurred in a known site of historically poor track quality, and had been proposed for refurbishment work. Despite this, no enhanced inspection regime was in place.
- The track at the site of derailment is of a condition susceptible to rapid rates of deterioration.

Other Factors

- The wagons involved were of a type prone to dynamic excitement by this type of track fault.
- The derailed wagons were empty, resulting in a low vertical load.

Key Message: During all safety critical communications, you must make sure you properly understand the meaning of all messages. If you feel a message has not been correctly understood by someone else, ask for it to be repeated back. Do not ask leading questions.