

Wheat Train (or The Two Big Engines that Couldn't)

Background

The north edge of our farm was the south edge of ice, of the last ice age. Our farm was free of rocks. Everything to the north of us had hard red iron containing silicate rocks ranging from small to hundreds of pounds. But the point that I need to state is that the elevation dropped from the north edge of our farm going south for about 1.5 miles. The Burlington railroad tracks ran through our farm in a north-south direction.

As a kid, I was fascinated with the trains. I was particularly fascinated with the trains during the wheat harvest. The Burlington had a main line going from Lincoln to St Joe and on to Kansas City and a branch line that started at Table Rock and went through our farm, south to Pawnee City and then turned west and ran for several hundred miles roughly parallel with the Kansas Nebraska border. This line extended well into the wheat producing region. Kansas City is the largest wheat exchange in the world and much of the harvest was sent to Kansas City through our farm.

Every evening about 6:00 PM a freight train would come through from west to east. During Wheat harvest it would be long loaded with wheat and pulled with two steam engines. Two engines were known as a "double header". The train would stop about half a mile west of Pawnee City and then bring cars to and or pick up cars from PC. The engines with the obtained cars would then return to the parked train and hope to be able to get up enough speed to make it through our farm over the hill to reach level tracks.

The two engines produced a fascinating pattern of sounds. They were pulling as hard as they could so their "chugs" were loud. Their drive wheels apparently were not exactly the same size so their chugs gradually went from being in sync to out of sync. The cycle for different engine combination would range from a few seconds to maybe a minute. It fascinated me.

Nearly every evening our family focused on the sounds of the double header and tried to predict whether or not it would make it through our farm. The critical point was about 200 yards south of the road crossing for the road that ran along the south of our farm. The engine operators were trying to operate the engines for maximum power without slipping. As the train slowed with an increase in the grade, the chugs would be about one per second, and then with a little more steam, the wheels of one of the engines would start to slip and the chugs would suddenly be about ten per second. The steam valve would be closed, the wheels stop slipping and steam again increased. Almost always, if the wheels slipped, even once, the train was doomed. It would not make it over the hill.

There was a half mile "side track" just north of our farm made for such a stalled train. The train would stop, and be disconnected in the middle and the front half taken over the hill and placed on the side track and the engines then returned for the back half of the train. We could follow this operation by sight and sound. The lead engine would signal what it was going to do with whistle patterns. If it was going to back up, the signal was three whistles, I don't remember if the forward signal was two or four whistles, I think four.

Wikipedia to the rescue:

Despite the advent of modern radio communication, most of these whistle signals are still used today:

- One short Stop or stopping; apply the brakes
- One long Approaching railroad station or junction (if moving), or apply air brakes and equalize pressure (if standing)
- Two short A general answer signal or acknowledgement; identical to the "roger" or "10-4" radio terms
- One short, one long Inspect the train
- One long, one short Visibility obscured
- Two long Train is about to proceed forward; release the brakes
- One long, two short Additional section follows signaling train
- Two long, one short or two short, one long: Train is approaching a meeting or waiting point
- Two long, one short, one long: Train is approaching a grade level crossing (i.e. a road crossing). This is a widely used safety signal used to warn motorists and is blown at every grade level crossing, except where local noise ordinances prohibit it. Known in railroad rulebooks as rule '14L'
- Three short Train is about to proceed in reverse (if standing), or train is about to stop at the next station (if moving)
- Three long Train cars have come unhooked; train has come apart
- One long, three short Flagman, go protect the rear of the train
- One short, three long Flagman, go protect the front of the train
- Four short Request for signals
- Four long Flagman, return to the train from the west or north
- Five long Flagman, return to the train from the east or south
- Four short, one long Fire alarm; fire on the train
- Multiple short Danger, get off the tracks! Used to warn pedestrians or livestock who are on the tracks in front of the approaching train.