

Track Field Notes

The Norfolk Southern Piedmont Division R-line is a 190.52 mile track segment, originating at a junction to a mainline near Charlotte, NC, extending through Columbia, SC and ending in Augusta, GA. This track segment is owned and operated by Norfolk Southern Railroad. The designation for direction is north and south. Numerous small towns and industries are located near this track segment. The R-line is designed and maintained to comply with The Code of Federal Regulations Class IV standards which allows a maximum speed of 60mph for freight trains. Norfolk Southern has set speeds for the Columbia to Augusta segment at 49mph with some restrictions along the way.

The segment of the R-line at Graniteville is a single main utilizing Track Warrant Control as a method of operation. The speed for this area is 45mph. The track is constructed with 132lb continuous welded rail. Crossties, tie plates, fasteners, anchors and granite ballast help maintain geometry and restrain movement within Class IV standards. Several grade crossings exist near Graniteville. The closest curvature is a left hand, one degree curve beginning at MP R-178.45 and ending at MP R-178.65. The closest turnout is at MP R-178.3 and provides access to Avondale Mills. This number ten turnout is of similar construction and material to the main track. A spring frog, switch points and a New Century 51B switch stand with a high mast and red and white reflective targets were also used.

A track records inspection was performed for the R-line between Columbia, SC and Augusta, GA. The time line for the inspection was November 9, 2004 to January 5, 2005, a span of approximately eight weeks. Emphasis was placed on the segment between the R178 and R179. No defects were recorded by Norfolk Southern for this segment during this time period. The Federal Railroad Administration requires Class IV track to receive twice weekly inspections. Norfolk Southern was in compliance with this frequency requirement. Also, required by The Federal Railroad Administration is a monthly switch inspection. Compliance was met December 7, 2004 for this requirement. Federal Railroad Administration Report number three, dated January 8, 2005, indicate no defects noted for this records inspection.

On January 14, 2005, clearance was given to visit the accident site. A track inspection was performed on the Avondale Mills turnout and the track north and south of the turnout for approximately one tenth mile. No mainline track damage was incurred due to the accident. The track north of the turnout had been removed to allow for cleanup. The switch handle and lock had been removed from the switch by the FBI as part of their investigation. The switch stand, mast and targets had been removed by NS and retained by the Division Engineer. The Avondale Mills turnout and the track south was in tact and had no defects per 49 CFR Part 213. A section of the Avondale Mills track, near the heel of the frog and toward the mill incurred damage due to the accident and had also been removed to allow for cleanup. The remainder of the industry track was intact. NS has a maintenance limit of

141feet, beginning at the switch points and extending into the Avondale Mills industry track. Federal Railroad Administration Report number eight, dated January 14, 2005 indicate no defects noted for this inspection.

Previous Federal Railroad Administration track inspections of the R-line performed by the South Carolina State Inspector from the Office of Regulatory Staff were referenced. Report number ten dated January 19, 2004 and report number 11, dated January 20, 2004 revealed no defects at the Avondale Mills turnout or between mile post R178 and R179.