ITEM NO. 3

Reports of Interview

REPORT OF INTERVIEW

Person Interviewed:	Mark Terry, Date of Birth 05/13/51
Interviewers:	Cyril E. Gura, NTSB Safety Engineer T. M. Brown, FRA Railroad Safety Inspector (Track) Joseph Guzzi, Amtrak Senior Director Track Maintenance John R. Gillette, BNSF General Director Rail Engineering Jeff J. Secora, Iowa D.O.T. Track Inspector Rail Division Lindon Bowen, Iowa D.O.T. Track Inspector Rail Division
Time and Date:	1200 CST on March 20, 2001
Location:	Berning Motor Inn conference room in Creston, IA
Reason for Interview:	It was explained that the interview was being conducted as part of the Nodaway, Iowa derailment investigation. Terry was the track foreman that may have installed the rail that broke at the point of derailment.

Terry began his railroad employment with the Burlington Northern Railway on April 14, 1976 as a track laborer. In 1977, he was promoted to a relief track foreman, and became a track foreman in 1978. Terry stated that he was presently employed by the Burlington Northern Santa Fe Railway (BNSF) as a track foreman. His normal work scheduled was Monday thru Friday 7:30 a.m. to 4:00 p.m. Terry stated the he was headquartered out of Creston, Iowa, and his section gang was responsible for a territory on the Creston Subdivision between milepost (MP) 391 and MP 412. He had worked on the Creston Subdivision sporadically since 1990, and continuously since March 2000.

Terry and his section gang was one of three section gangs and one-maintenance gang that was following the rail defect test car on February 13, 2001. As the rail defect test car would fine rails with internal defects, the gangs would take the appropriate remedial action. He stated that he was either working by himself or with another employee, but he could not remember. Terry stated that one employee from Glennwood, three employees (welders) from Red Oak, and possibly one man from the maintenance gang assisted in changing out defective rails. Terry was convinced that the broken rail identified at the point of derailment (p.o.d.), MP 419.92, came off his section.

Terry stated that he got the rail off the rail pile that he maintained at his section headquarters in Creston. The rail pile included rail that the welders had removed from other track locations for reuse. His best guess was that the broken rail was in the rail pile for a long time before he used it. He thought the broken rail was in the rail pile since March 2000. He remembered that the rail needed to have the bolts and splice bars removed. In addition, the rail ends had to be cropped because of rail-end-batter. He stated that the rail had two boltholes in each end, and he cropped enough rail so the second bolt hole was now the first bolt holt. This equated to about six inches of rail being cropped off of each rail end. Terry stated that he does not know if or when the rails in the rail pile are ever tested for internal defects before reuse.

Terry stated that there was a shortage of rails to use behind the rail test car. The Springfield Rail Complex had sent some additional replacement rails. He stated that the Springfield Rail complex sent primarily rail with head loss of 9/32, 10/32, 11/32, and 12/32 inches.

Terry stated that at the p.o.d., he had cut out a segment of rail with the identified defect, and then installed an equal length segment of rail that he had prepared from the rail pile. Once placed in the track, Terry remembered drilling the third hole on one end of the rail. However, he could not remember how the other end of the rail was drilled.

Interviewers explained to Terry that the anchor pattern identified on the broken rail suggested that rail was added to the track, and that a "rail adjustment" was necessary at a later time. Terry stated that he did not remember replacing the rail anchors with any specific pattern.

Interviewers showed Terry a photograph of the broken rail end with a 6/3-chalk mark, and asked if he knew what it meant. Terry stated that before he goes out with replacement rail, he measures the rail's head loss. He does this so he can match up the rail ends. He thought that 6/3 was actually 6/32 inches of rail head loss, and that the measurement occurred when he cropped the rail ends.

Cyril E. Gura

REPORT OF INTERVIEW

Person Interviewed: John R. Hart, BNSF Supervisor Rail Complex

Interviewer: Cyril E. Gura, NTSB Safety Engineer

Time and Date: 1235 CST on March 27, 2001

Location: Burlington Northern Santa Fe's Rail Complex office in Springfield, Missouri. Prior to the interview, Hart gave this investigator a tour of the Rail Complex & its operation.

Reason for Interview: It was explained that the interview was being conducted as part of the Nodaway, Iowa derailment investigation. Hart was the Rail Complex supervisor that may have sent the rail that broke at the point of derailment.

Hart stated that he was one of two Supervisors located at the Burlington Northern Santa Fe Railway (BNSF) Springfield, Missouri Rail Complex. During day-turn hours (7:00 a.m. 3:30 p.m.), ten Maintenance of Way employees (2 foremen, 5 trackmen, & 3 equipment operators), four machinists (equipment operators), three shop craft (1 crane operator & 2 helpers), one electrician, and one clerk worked under he and the other supervisor's direction. In addition, there were six contract employees (2 welders, 2 grinder operators, 1 maintenance person, and 1 person to control loading) and a contract supervisor that made the "flash butt" welds, ground the welds, magnetic fluxed the welds, and loaded the rail train. On the evening turn a BNSF foreman oversaw a second trick contract gang that conducted the same procedure.

The Springfield Rail Complex is one of three BNSF owned Rail Complexes. The other two are located in Laurel, Montana and in Pueblo, Colorado. Hart stated that all three rail complexes operate similarly. The primary operations at the rail complexes involve taking both new and second hand (sh) rail and weld them into continuous welded rail (cwr). The cwr lengths very from 1,200 feet to 1,400 feet for sh rail, and 800 feet to 1,440 feet for new rail.

Hart stated that when sh rail arrives in cwr form, it is visually inspected for obvious surface damage and defects. In addition, the cwr is visually inspected for excessive wear and "outlawed" rails, such as, "A" rails, "CR" rails, and open-hearth manufactured rails. As the inbound cwr progresses along the rehabilitation line conveyor, the rejected rail sections are cut out of the continuous lengths. Then the rail is welded back together into the desired lengths, and loaded onto an outbound cwr train. The rejected rails are loaded into a gondola as they are cut out of the inbound cwr. Hart stated that if a gondola is not available, the scrap rail is piled for later handling. Additionally, any odd lengths of visually acceptable rail that cannot be used in the welding process are kept for defect replacement rails. These rails are stockpiled by rail section for distribution as requested.

Hart stated that when sh rail arrives in jointed sections, it is visually inspected for the same obvious damage, defects, excessive wear, and outlawed rails, as for the cwr. The next step is to crop about 18-inches off each end of the rail, so now the rail segment is about 36-feet long. The rail is loaded onto a roller table, and then onto a conveyor system and welded into required cwr lengths. Basically, rails that are less then 30-feet long are not welded, and are scrapped. If replacement rails were requested, they would most likely come from the cropped jointed rail segments prior to welding.

Hart stated that laborers conduct the visual rail inspections. If they have any questions about a particular rail, they ask the foreman. If the foreman has a question, he asks a supervisor. If the supervisor has a question, the rail is scrapped. He stated that the inspectors are not given any specific training on rail inspection. Their training is primarily "on-the-job."

Hart stated that after the rails are welded into cwr, all "flash butt" welds are magnetic fluxed for defective welds. However, no other search for internal defects is conducted prior to shipping out the cwr or segmented rail sections. Hart stated that he does not know if the inbound rail was inspected for internal defects prior to being received at the Rail Complex. He knows what territory the inbound rail came off of, so he could check when the rail was last inspected. But that is not the normal procedure. He stated that if the rail was originally laid as new segments in a territory, the BNSF knows the accumulated tonnage and defect rate for that rail. But if the rail has moved as sh rail, the BNSF does not maintain the rail's accumulated tonnage history and defect rate history. For the time being, Hart was not shipping any sh rail until it was decided if additional inspections were necessary.

Cyril E. Gura

REPORT OF INTERVIEW

Person Interviewed:	William C. Thompson, Senior Director of Derailment Prevention
Interviewer:	Cyril E. Gura, NTSB Safety Engineer
Time and Date:	1700 CST on March 20, 2001
Location:	Telephonic
Reason for Interview:	It was explained that the interview was being conducted as part of the Nodaway, Iowa derailment investigation. Thompson explained the Union Pacific Railroad policy of how secondhand rail is generated and tested.

Thompson stated that the Union Pacific Railroad (UP) had three Rail Complexes that were operated by contractors. They were located in Laramie, Wyoming; Denison, Texas; and Pueblo, Colorado. The Rail Complex primary job was to generate continuous welded rail (CWR) from secondhand (sh) and new rail sections, but they also generated replacement rail. He stated that the sh rail was visually inspected for obvious surface damage and defects, and all "flash butt" welds were magnetic particle inspected for defective welds. No other search for internal rail defects was conducted prior to shipping out the CWR or segmented rail sections.

Thompson stated that it was normal procedure to have the sh rail tested for internal defects prior to the rail being picked up and sent to their Rail Complexes. This test for internal rail defects was not in addition to the regular test schedule, but occurred during the normal testing schedule. In addition, replacement sh rail may be gathered by the area Roadmaster during a rail change-out program for reuse prior to shipping the rail to the Rail Complex.

Also, it was not unusual for welders and track gangs to add changed rail to a section stockpile, as long as it was not previously identified as defective rail. None of these rails were tested for internal rail defects prior to reuse.

Cyril E. Gura

REPORT OF INTERVIEW

Person Interviewed:	Randy Daniels, Staff Engineer
Interviewer:	Cyril E. Gura, NTSB Safety Engineer
Time and Date:	0900 CST on April 18, 2001
Location:	Telephonic
Reason for Interview:	It was explained that the interview was being conducted as part of the Nodaway, Iowa derailment investigation. Daniels explained the CSX Transportation policy of how secondhand rail is generated and tested.

Daniels stated that CSX Transportation (CSXT) owned and operated two Rail Complexes. They were located in Nashville, Tennessee and Russell, Kentucky. The Rail Complex primary job was to generate continuous welded rail (CWR) from secondhand (sh) and new rail sections, but they also generated replacement rail. He stated that sh rail was visually inspected for obvious surface damage, and all "flash butt" welds were magnetic particle inspected for defective welds. There was no other search for internal rail defects conducted prior to shipping out the CWR or segmented rail sections.

Daniels stated that it was normal procedure to have the sh rail tested for internal defects prior to the rail being picked up and sent to their Rail Complexes. This test for internal defects was not in addition to the regular test schedule, but occurred during the normal testing schedule. In addition, replacement sh rail may be gathered by the area Roadmaster during a rail change-out program for reuse prior to shipping the rail to the Rail Complex.

Also, it was not unusual for welders and track gangs to add changed rail to a section stockpile, as long as it was not previously identified as defective rail. None of these rails were tested for internal rail defects prior to reuse.

Cyril E. Gura

REPORT OF INTERVIEW

Person Interviewed: David Lowe, Engineering Superintendent

Interviewer: Cyril E. Gura, NTSB Safety Engineer

Time and Date: 1625 CST on April 18, 2001

Location: Telephonic

Reason for Interview: It was explained that the interview was being conducted as part of the Nodaway, Iowa derailment investigation. Lowe explained the Canadian National Illinois Central Railroad policy of how secondhand rail is generated and tested.

Lowe stated that the Canadian National Illinois Central Railroad (CNIC) had two Rail Complexes. They were located in Markham, Illinois and Transcona, Winnipeg Canada. The Rail Complex primary job was to generate continuous welded rail (CWR) from secondhand (sh) and new rail sections, but also generated replacement rail. He stated that the Markham facility was owned and operated by a contractor, and supplied the CNIC and the other Canadian owned United States located railroads with much of the sh CWR and segmented sh rail. The sh rail was visually inspected for obvious surface damage, and all "flash butt" welds were magnetic particle inspected for defective welds. There was no other search for internal defects conducted prior to shipping out the CWR or segmented rail sections.

It was normal procedure to have the sh rail tested for internal defects prior to the rail being picked up and sent to their Rail Complexes. This test for internal defects was not in addition to the regular test schedule, but occurred during the normal testing schedule. In addition, replacement sh rail may be gathered by the area Roadmasters during a rail change-out program for reuse prior to shipping the rail to the Rail Complex.

Also, it was not unusual for welders and track gangs to add changed rail to a section stockpile, as long as it was not previously identified as defective rail. None of these rails were tested for internal rail defects prior to reuse.

However at the Transcona Rail Complex, the rail would enter a classification shed where, in addition to the usual visual inspection for excessive wear and damage, the Canadians ultrasonically inspected the railhead and web for internal defects, and induction inspected the rail-base for internal defects. These additional internal inspections were conducted prior to the rail being welded. After welding the CWR, the welds were magnetic particle inspected for weld defects.

Cyril E. Gura

REPORT OF INTERVIEW

Person Interviewed: Hayden W. Newell III, Manager Innovative Research

Interviewers: Cyril E. Gura, NTSB Safety Engineer

Time and Date: 1500 CST on April 20, 2001

Location: Telephonic

Reason for Interview: It was explained that the interview was being conducted as part of the Nodaway, Iowa derailment investigation. Newell explained the Norfolk Southern Railroad policy of secondhand rail and defect replacement rail testing.

Newell stated that the Norfolk Southern Railroad (NS) owns and manages one Rail Complex. The Rail Complex is located in Atlanta, Georgia. Contractors, under the supervision of NS managers performed the work.

Prior to picking up the secondhand (sh) rail and sending it to their Rail Complex, the NS schedules testing for internal rail defects. If prior testing is not accomplished, the NS will schedule the testing for internal rail defects shortly after the continuous welded rail (CWR) is re-laid. Replacement sh rail may be gathered by the area Roadmaster during a rail change-out program for reuse prior to shipping the rail to the Rail Complex.

Upon receipt of the sh rail, the Rail Complex primary job was to not only generate sh CWR, but also generate replacement sh rail. Newell stated that the inbound sh rail is inspected for excessive wear and surface damage. The undesirable areas are cropped out, and the railhead wear is matched up for best fit, then the rail is welded together in desired CWR lengths. The rails are not tested for internal defects at the NS Rail Complex, nor are the flash butt welds magnetic particle inspected for weld defects. He stated that the NS did not have any problems with the integrity of "flash butt" welds, so they quit having the additional testing conducted. If they started to have weld integrity problems, they probably would start testing the welds.

Also, it was not unusual for welders and track gangs to add changed rail to a section stockpile, as long as it was not previously identified as defective rail. None of these rails are tested for internal rail defects prior to reuse.

Cyril E. Gura