DCA13MR002 Conrail - Shared Assets Derailment/Hazardous Material Release Paulsboro, New Jersey November 30, 2012

# NTSB - Interview of Conrail Electronic Specialist

#### UNITED STATES OF AMERICA

#### NATIONAL TRANSPORTATION SAFETY BOARD

\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

Investigation of:

NOVEMBER 30, 2012

\*

CONRAIL DERAILMENT/HAZARDOUS

MATERIAL RELEASE
PAULSBORO, NEW JERSEY

\* \* \*

\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

Interview of: DENNIS FITTING

Incident Command Center Paulsboro, New Jersey

\* Docket No.: DCA-13-MR-002

Wednesday, December 5, 2012

The above-captioned matter convened, pursuant to notice.

BEFORE: TIMOTHY DEPAEPE

Accident Investigator

#### **APPEARANCES:**

TIMOTHY DEPAEPE, Accident Investigator Signal Group Chairman National Transportation Safety Board Office of Railroad, Pipeline and Hazardous Materials DuPage Airport 31 West 775 North Avenue West Chicago, Illinois 60185

\*\* P I I \*\*

\*\* P I I \*\*

CYRIL GURA, Safety Engineer
Track Group Chairman
National Transportation Safety Board
Office of Railroad, Pipeline and Hazardous Materials
DuPage Airport
31 West 775 North Avenue
West Chicago, Illinois 60185

THOMAS NOON, Signal and Train Control Inspector Federal Railroad Administration

DAVID KILLINGBECK, Chief Engineer Structures Federal Railroad Administration

THOMAS BILSON, Assistant Chief Engineer Maintenance of Way and Structures Conrail

DOUG TRACY, Assistant Chief Engineer Communications and Signals Conrail

WILLIAM KEEBLER, Assistant General Chairman Brotherhood of Railroad Signalmen

## I N D E X

<u>P</u>	PAGE
nterview of Dennis Fitting:	
By Mr. DePaepe	5
By Mr. Gura	7
By Mr. Noon	8
By Mr. Killingbeck	13
By Mr. DePaepe	15
By Mr. Gura	18
By Mr. DePaepe	19

### 1 INTERVIEW

- 2 (10:14 a.m.)
- 3 MR. DEPAEPE: It is currently 10:14 a.m. on
- 4 December 5th, 2012. We're here to interview Mr. Dennis Fitting,
- 5 and this pertains to the Paulsboro movable bridge accident,
- 6 designated as DCA-13-MR-002, which occurred on November 30th,
- 7 2012. My name is Tim DePaepe; that's D-e-P-a-e-p-e. I'm a signal
- 8 investigator with the National Transportation Safety Board.
- 9 We're going to go around the room and let everyone
- 10 introduce themselves. To my right?
- MR. GURA: Cy, C-y, Gura, G-u-r-a, Safety Engineer,
- 12 NTSB.
- MR. BILSON: Thomas Bilson, B-i-l-s-o-n, Assistant Chief
- 14 Engineer, Maintenance of Way and Structures, Conrail.
- 15 MR. TRACY: Doug Tracy, T-r-a-c-y, Assistant Chief
- 16 Engineer, C&S, Conrail.
- MR. NOON: Thomas Noon, T-h-o-m-a-s, Noon, N-o-o-n,
- 18 Federal Railroad Administration, Signal and Train Control
- 19 Inspector.
- 20 MR. FITTING: Dennis Fitting, F-i-t-t-i-n-q, Electronic
- 21 Specialist, Conrail.
- 22 MR. KEEBLER: Bill Keebler, K-e-e-b-l-e-r, Assistant
- 23 General Chairman with the Brotherhood of Railroad Signalmen.
- 24 MR. KILLINGBECK: David Killingbeck, K-i-l-l-i-n-q-b-e-
- 25 c-k, Chief Engineer Structures, Federal Railroad Administration.

- 1 MR. DEPAEPE: Thank you.
- 2 INTERVIEW OF DENNIS FITTING
- 3 BY MR. DEPAEPE:
- 4 Q. This is Tim DePaepe again.
- 5 Mr. Fitting, can you tell me your date of hire and any
- 6 jobs you may have held with Conrail, to the best of your
- 7 recollection, up to the current date?
- 8 A. August -- hire date August 2nd, 1976. I was in the
- 9 signal gang. I was a relay testman. I was an electronic
- 10 technician and an electronic specialist.
- 11 Q. Thank you, sir. We have some trouble tickets that
- 12 Conrail has provided us and we're interested in what you may have
- done concerning some of the repairs and costs for these tickets.
- 14 The first one is designated as event 62528 at the Paulsboro
- 15 bridge. The problem was the bridge will not lock. This was on
- 16 October 31st, 2012. And the repairs state, "removed debris from
- 17 the seat and the gears."
- In your own words, can you just tell me how you were
- 19 notified, what you did once you were notified, any maintenance,
- 20 inspection or repairs you may have made relating to this incident?
- 21 A. Supervisor Ohr told me to head down to the bridge and I
- 22 went down and inspected it. I couldn't get any kind of enable
- 23 (ph.). There was errors in the control room and I had no control
- 24 over the bridge and the bridge was unlocked and unseated.
- 25 Supervisor Ohr came down to assist. And out on the bridge there

- 1 was debris on the north side of the bridge not allowing it to seat
- 2 and blocks the drive.
- 3 Q. Did you assist in the removing of the debris?
- 4 A. Yes.
- 5 Q. When you were done, did you do any test to ensure that
- 6 the system then operated as intended?
- 7 A. After that was completed, we went back and opened the
- 8 bridge back up and then we tested it via radio and it worked as
- 9 intended; signals come in, bridge seated.
- 10 Q. Okay, thank you. I'd like to talk about another event
- 11 designated as 62587 again at the Paulsboro bridge, bridge
- 12 announcing failure to operate. This occurred on November 3rd,
- 13 2012. Repairs state: "Non-open and local control." Can you
- 14 again tell me, to the best of your recollection, what transpired
- 15 that day concerning this incident?
- 16 A. When I got there in the morning, the bridge was open and
- 17 I tested it and it worked as intended, via radio. And I did a
- 18 download in the C&S bungalow from the CR unit and I couldn't find
- 19 any problem.
- Q. Did you also as part of your inspection related to this,
- 21 did you try and clear the signal to see if the signal operated
- 22 properly?
- 23 A. When I tested it via radio, the bridge closed, the
- 24 signal come in green.
- 25 Q. Okay, thank you. The next event I'd like to talk about

- 1 is designated as 62644, again, the Paulsboro bridge. The problem
- 2 was reported bridge will not open. This occurred on November 6,
- 3 2012. The repairs state: "Clear error code in control panel.
- 4 Cause under investigation." Can you tell me what happened that
- 5 day when you worked on this specific issue?
- 6 A. The -- I'm trying to remember. The -- bridge will not
- 7 open. Actually, there was no control again in the control -- on
- 8 the control panel in the main bungalow and it had the error of
- 9 high pressure, filter clogged and north links failed to drive,
- 10 so --
- 11 Q. When you say north links failed to drive, are you
- 12 talking the slide rails or slide rail blocks?
- 13 A. Slide, slide rails. I cleared the errors and the bridge
- 14 opened automatically. Then I went into our bungalow, the C&S
- 15 bungalow, tested via radio. The bridge closed, locks drove,
- 16 signal went green. Rolled through the track circuits as
- 17 simulating a train and as soon as I cleared the track circuits the
- 18 bridge opened normally and went fully open.
- 19 Q. Okay, thank you.
- MR. DEPAEPE: At this point, I'm going to let the people
- 21 around the table here ask any questions they may have. I'll start
- 22 with Mr. Gura.
- BY MR. GURA:
- Q. Dennis, I just have a couple of questions. Have you
- 25 ever participated in the quarterly bridge inspection?

- 1 A. No.
- Q. No. Okay. And are there any other incidents that are
- 3 not listed on that trouble log that you may recall within this
- 4 time frame, the end of October through November, that you may have
- 5 participated in that is not listed as a trouble code or you went
- 6 out and had to do some testing that's really not listed?
- 7 A. I believe I was out there on the 20th. I installed a
- 8 relay on the north end of the bridge at the signal location. It
- 9 was for the C-1T track circuit. I put a slow pick relay in there,
- 10 repeater relay, slow pick repeater relay. And that was only
- 11 because when I would do a download, the C-1T track circuit would
- 12 indicate occupied and unoccupied with a long train car, and
- 13 putting that relay in eliminated that. It would take up a lot of
- 14 data on the -- for the download that wasn't necessary.
- 15 Q. That's it?
- 16 A. That's it.
- 17 Q. No further questions.
- 18 MR. DEPAEPE: Mr. Bilson?
- MR. BILSON: No, I have no questions.
- MR. DEPAEPE: Mr. Tracy?
- MR. TRACY: No questions.
- MR. DEPAEPE: Mr. Noon?
- MR. NOON: I have a couple of questions.
- 24 BY MR. NOON:
- Q. On the one failure that you were working on, it failed

- 1 to open. You got that report from the trouble desk, who got it
- 2 from the train?
- 3 A. Which one was that? Which --
- 4 Q. The one where you said it failed to open.
- 5 A. I probably got it from Supervisor Ohr.
- 6 Q. All right. But I'm -- in other words, because normal
- 7 circumstances on this is that the train goes over, he radioed the
- 8 -- radios that the bridge is failed to open. Is that -- no,
- 9 failed.
- 10 UNIDENTIFIED SPEAKER: Failed to operate.
- 11 MR. FITTING: Failed to operate.
- 12 BY MR. NOON:
- Q. Failed to operate. Okay, failed to operate. And then
- 14 it gets down to the trouble desk and the trouble desk dispatches
- 15 somebody. So, anyway, you had dispatched. Is that how it went,
- 16 to the best of your knowledge?
- 17 A. Yeah.
- 18 Q. Okay. When you walk onto the bridge and you took a look
- 19 at the bridge, were the rails driven at the slide lock; the slide
- 20 rail, was that driven?
- 21 A. I went into the control room and looked at the indicator
- 22 panel.
- Q. And what did it say?
- 24 A. The north rail links were not driven and the rail -- and
- 25 the bridge was unseated.

- 1 Q. Did you go physically out to the bridge and see if they
- 2 were driven?
- 3 A. No, I --
- 4 Q. What position they were?
- 5 A. No, I did not.
- 6 Q. So at that time --
- 7 A. There was no trains around. I did not go out there.
- 8 Q. Okay. No, that's -- whatever. So you looked at the
- 9 error code, saw what it was, and then you took manual control? I
- 10 don't want to put words in your mouth. What did you do next?
- 11 A. I cleared the error codes.
- 12 Q. How do you clear the error codes?
- 13 A. Did an acknowledge and a reset. There's a button on the
- 14 machine.
- 15 Q. Okay. So you just reset it?
- A. And I watched the indicator lights for the south side go
- 17 out, and the bridge opened.
- 18 Q. All right. So when you reset the button, then it
- 19 engaged and everything started working normally?
- 20 A. Automatically, yes.
- Q. Okay. But you don't know if the --
- A. North side locks? No.
- Q. Whether they moved or didn't move, or --
- A. No. No, I did not. They just weren't indicating.
- 25 Q. So they may not have been driven? If --

- 1 A. Well, it wasn't indicating. I can't say --
- Q. Let me ask you this. Did you hear anything -- could you
- 3 hear like it withdrew or moved, or it just went over?
- 4 A. You can't hear anything.
- 5 Q. Okay. Okay. I'm just trying to find out the position
- 6 of those -- I mean, clearly the signal system said something was
- 7 wrong.
- 8 A. Yes.
- 9 Q. I'm just trying to find out exactly what was wrong,
- 10 whether it was just an indication or physically the rails didn't
- 11 go in.
- 12 A. Right.
- Q. As an electronic person, you don't usually go out and
- 14 check physically on the bridge when you --
- 15 A. Oh, I do, if there's a train sitting there.
- 16 Q. Oh, I see. Because there was no train sitting there --
- 17 A. No.
- 18 Q. And there was no case of it asking for it to go through
- 19 a red signal because the train already had gone through it. It
- 20 was just (indiscernible) --
- 21 A. I do, do downloads, though --
- 22 Q. Uh-huh.
- 23 A. -- on the CR unit. And I had seen where the north
- 24 slides links are not driven. And that comes from our prox
- 25 detectors. That's only indicating that it's not up against a prox

- 1 detector.
- 2 Q. Um-hum.
- 3 A. It could be just back three-quarters of an inch or so.
- 4 Q. Right.
- 5 A. So it's not making, but still in -- against them, rail.
- 6 Q. Yes, I understand. I understand what you're saying. I
- 7 think the two questions are, if you don't routine -- well, here's
- 8 the question, right. You go out on a trouble call saying that the
- 9 signal is red and if there's a train waiting and then --
- 10 A. Then I will go out on the bridge.
- 11 Q. Then you go out on the bridge. When you've done these
- 12 things, have you ever found that the slide locks, the slide rails
- 13 have not engaged?
- 14 A. Yes.
- 15 Q. Okay. Is that kind of frequent? Infrequent?
- 16 A. I've seen it on several occasions.
- 17 Q. Several occasions.
- 18 A. Only the north links.
- 19 Q. Only the north side. Okay. But it has always been
- 20 indicating that it's red, the signal is red?
- 21 A. Yes.
- 22 Q. It's always indicated correctly?
- 23 A. Yes.
- Q. Okay. Do you have anything to do with the limit
- 25 switches on the bridge?

- 1 A. Not limit switches, no.
- 2 Q. Okay. Thank you.
- 3 MR. DEPAEPE: Mr. Keebler?
- 4 MR. KEEBLER: No questions.
- 5 MR. DEPAEPE: Mr. Killingberg [sic]?
- 6 MR. KILLINGBECK: David Killingbeck.
- 7 MR. DEPAEPE: Killingbeck.
- 8 BY MR. KILLINGBECK:
- 9 Q. A couple questions, Dennis. And I may have missed this
- 10 I the beginning of the interview, but your current title is what?
- 11 A. Electronic specialist.
- 12 Q. Electronic specialist. And how long have you occupied
- 13 that position?
- 14 A. Since 1985.
- Okay. So you've been at this for --
- 16 A. '91.
- 17 Q. Well, so, 11 years? Give or take.
- 18 A. Yeah, '85, '91, somewhere in that area.
- 19 Q. Okay.
- 20 A. I can't recall --
- 21 Q. So 20 years. Okay. Well, well just early.
- 22 Earlier on you had said that -- I believe it was a date
- 23 that was not an event logged in by the trouble desk. You said you
- 24 had done some downloads and saw that there were issues with long
- 25 cars --

- 1 A. Yes.
- 2 Q. -- losing the track circuit.
- 3 A. Previous to that, yes.
- 4 Q. Right. So you installed a slow release relay?
- 5 A. Slow pick.
- 6 Q. Slow pick relay. Okay. Did that replace, in layman's
- 7 terms, a conventional relay?
- 8 A. No. I made that a repeater relay off of the
- 9 conventional relay, off the track circuit relay, I made a
- 10 repeater.
- 11 Q. Okay. Is that an action that requires a change in the
- 12 signal plans?
- 13 A. That's been done.
- Q. And this is customarily something that in your capacity
- 15 you are allowed to --
- 16 A. Yes.
- 17 Q. -- make this change, this improvement, and then record
- 18 it in the record drawings?
- 19 A. I let my supervisors know.
- Q. Okay. But it doesn't have to go to a signal design
- 21 engineer to change the drawing before you can implement the
- 22 change?
- 23 A. I don't believe so.
- Q. Okay, that's all I had.
- 25 A. I mean, it's discussed between the supervisors and, I

- 1 guess, you know, Doug.
- 2 Q. Prior to actually doing it?
- A. Prior to me actually doing the work. But it, you know,
- 4 like I say, it was noted before that the C-1 track circuit -- it's
- 5 a short track circuit, and then with the long tank cars now, it
- 6 picks them.
- 7 Q. Okay. When you say it's a short track circuit --
- 8 A. It only runs from the southbound signal to the bridge.
- 9 Q. Which is approximately how far? 100 feet? 800 feet?
- 10 A. No, less than that. Less than 100 feet, I would say.
- 11 Q. Thank you.
- MR. DEPAEPE: This is Tim DePaepe again.
- BY MR. DEPAEPE:
- 14 Q. I want to ask a question relating to what David just
- 15 spoke about, the short track circuit. There are Pro circuits on
- 16 each side of the signals for the bridge, and then there are two
- 17 short circuits designated as B-1T and C-1T; is that correct?
- 18 A. Yes.
- 19 Q. When you say short, a rail car could --
- 20 A. Span.
- 21 Q. -- span that circuit?
- 22 A. Yes.
- 23 Q. That is why you need to protect it so you don't lose
- 24 that track circuit in the sequence of track circuits going down
- 25 based on the movement of the train; is that correct?

- 1 A. Correct.
- 2 Q. And you state about installing a slow pick relay to
- 3 assist so you're not losing that track circuit in the data.
- 4 Because, again, if my is correctly, this is a type of a track
- 5 stick so that things have to operate in sequence and pick up -- or
- 6 go down in sequence and pick up in sequence to ensure that you
- 7 don't have a car sitting on one -- or spanning one of these short
- 8 circuits.
- 9 A. Right.
- 10 Q. And you talked about installing this relay to correct
- 11 this loss of shunt problem, for lack of a better word. Isn't that
- 12 common in normal signal duties, be it highway grade crossing
- 13 circuitry, warning system circuitry, or signal system circuitry,
- 14 that maintainers and testmen and signalmen have to make changes in
- 15 order to ensure proper operation, then they give that -- they
- 16 usually discuss it with their supervision and, you know, it's
- 17 checked out with the drafting room and then the changes are made
- 18 on prints and then you get new prints. Is that not common or the
- 19 protocol involved, in general?
- 20 A. That's basically what happens. But I'll draw on the
- 21 print in the field and, you know, then I'll send a copy of that in
- 22 to our draftsman.
- Q. Yeah. But I guess what I'm saying, you weren't trying
- 24 to remedy a situation where you were losing -- or the loss of
- 25 shunt wasn't functioning properly so you're trying to ensure that

- 1 it was functioning as it was originally designed and intended by
- 2 adding this relay?
- 3 A. Yes.
- 4 Q. Okay. I want to talk about proximity switches just for
- 5 a little bit and the slide rails or slide locks. Have you ever
- 6 come out there and where either a proximity detector has failed
- 7 and no longer works and a signal would clear?
- 8 A. No.
- 9 Q. You were asked earlier about slide locks or slide rails
- 10 being properly driven. When you said they were not engaged, it
- 11 could just be there was maybe rail movement or something and the
- 12 proximity detector just didn't properly sense it in the fully
- 13 driven or engaged position; is that correct?
- 14 A. Correct.
- 15 Q. All right. Have you ever had to change out a proximity
- 16 detector?
- 17 A. Yes.
- 18 Q. Do you recall offhand just why?
- 19 A. The proximity detectors that we use fail closed and it
- 20 won't allow the PDSR to pick when the bridge opens up and you will
- 21 have a red signal even if the bridge is closed.
- Q. Just for clarification, PDSR is proximity detector stick
- 23 relay?
- 24 A. Yes.
- Q. Okay. Thank you.

- 1 Have you ever encountered in all your years of working
- 2 on this particular bridge any time where either of the proximity
- 3 detector relays, be it for the north or the south, were in the
- 4 down or disengaged position and they were able to clear a signal
- 5 over the bridge?
- 6 A. No.
- 7 Q. Okay, thanks.
- 8 MR. DEPAEPE: I'm going to quickly go around the room
- 9 and let people ask any follow-up questions. If not, I've got a
- 10 couple to wrap up then. Mr. Gura?
- 11 BY MR. GURA:
- 12 Q. You mentioned it failed closed. What does fail close
- 13 mean?
- 14 A. The proximity detect?
- 15 Q. Yeah. Like based on Mr. DePaepe's --
- 16 A. It would be like a relay made.
- Q. Okay. And what does that do then? The bridge is lined
- 18 for the track or lined for the --
- 19 A. There's four proximity detectors out there so you can
- 20 have one failure, you'll still have a red signal.
- Q. Okay. And which position would the bridge be in then?
- 22 A. Either/or.
- Q. Either/or. Okay. All right.
- MR. DEPAEPE: Mr. Bilson?
- MR. BILSON: No questions for me.

- 1 MR. DEPAEPE: Mr. Tracy?
- 2 MR. TRACY: No questions.
- 3 MR. NOON: I'm good.
- 4 MR. DEPAEPE: Mr. Noon? Mr. Keebler?
- 5 MR. KEEBLER: No questions.
- 6 MR. DEPAEPE: Mr. Killingbeck?
- 7 MR. KILLINGBECK: No questions.
- 8 MR. DEPAEPE: All right. This is Mr. DePaepe again.
- 9 BY MR. DEPAEPE:
- 10 Q. I know you were asked this, I think, by Mr. Gura, but I
- 11 just want to reiterate. Did you do any normal maintenance or
- 12 routine maintenance between October 27th and November 30th?
- 13 A. No.
- Q. Okay. I want to take this opportunity to allow you to
- 15 maybe, if you can think of something or know some information that
- 16 might help us with the events of November 30th, but first I want
- 17 to ask you specifically, did you work on that bridge in the
- 18 previous 24 hours before the accident? The accident was about
- 19 7 a.m. on November 30th. Did you work on it at all on November
- 20 29th?
- 21 A. No.
- Q. Okay. Do you have anything you'd like to add that might
- 23 help us with this investigation pertaining to this bridge and
- 24 procedures?
- 25 A. The only thing I have noticed in some downloads that

- 1 I've done is the train -- I don't even know which train it is. It
- 2 would be a northbound train and they work up at Paradise Road.
- 3 Sometimes a train is so long it is parked on the bridge for a
- 4 couple hours while they work and service the customers and then
- 5 they pull off, you know. And but the bridge does open.
- 6 Q. Okay.
- 7 A. From what I've seen just with the downloads.
- 8 Q. All right. I appreciate that.
- 9 MR. DEPAEPE: Well, unless there are any additional
- 10 questions, the interview of Mr. Dennis Fitting is concluding, at
- 11 10:39 a.m.
- 12 (Whereupon, at 10:39 a.m., the interview was concluded.)
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25

#### CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: CONRAIL DERAILMENT/HAZARDOUS

MATERIAL RELEASE

PAULSBORO, NEW JERSEY NOVEMBER 30, 2012

Interview of Dennis Fitting

DOCKET NUMBER: DCA-13-MR-002

PLACE: Paulsboro, New Jersey

DATE: December 5, 2012

was held according to the record, and that this is the original, complete, true and accurate transcript which has been transcribed to the best of my skill and ability.

\_\_\_\_\_

Kay Maurer Transcriber