UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:	*	
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CONRAIL DERAILMENT/HAZARDOUS	*	
MATERIAL RELEASE	*	Docket No.: DCA-13-MR-002
PAULSBORO, NEW JERSEY	*	
NOVEMBER 30, 2012	*	
	*	

Interview of: DAVID OHR

Paulsboro, New Jersey

Tuesday,
December 4, 2012

The above-captioned matter convened, pursuant to notice.

BEFORE: TIMOTHY DEPAEPE
Accident Investigator

APPEARANCES:

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I N D E X

I N T E R V I E W

(11:15 a.m.)

MR. DEPAEPE: Good morning. It is 11:15 a.m. on December 4th, 2012. My name is Tim DePaepe; last name D-e-P-a-e-p-e. I'm with the National Transportation Safety Board.

We're going to go around the table real quickly. Everyone's going to introduce themselves, spell their last name, and say what organization they're with.

MR. GURA: Cy, C-y, Gura, G-u-r-a, Safety Engineer, NTSB.

MR. BILSON: Thomas Bilson, T-h-o-m-a-s, B-i-l-s-o-n, Conrail, Assistant Chief Engineer, Maintenance-of-Way and Structures.

MR. NOON: Thomas Noon, T-h-o-m-a-s, N-o-o-n, FRA, Signal and Train Control Inspector.

MR. TRACY: Doug Tracy, D-o-u-g, T-r-a-c-y, Assistant Chief Engineer, C&S, Conrail.

MR. OHR: David Ohr, D-a-v-i-d, O-h-r, C&S Supervisor, Conrail.

MR. KILLINGBECK: David Killingbeck, D-a-v-i-d, K-i-l-l-i-n-g-b-e-c-k, Chief Engineer of Structures, Federal Railroad Administration.

MR. DEPAEPE: Again, this is Tim DePaepe. We're here today to discuss the Paulson [sic] movable bridge derailment and hazardous material release that occurred on November 30th, 2012,

designated as DCA-13-MR-002, and we're going to be talking specifically about signal -- or bridge trouble tickets and any knowledge that Mr. Ohr may have about any of those trouble tickets that happened on the days that we're going to talk about.

INTERVIEW OF DAVID OHR

BY MR. DEPAEPE:

Q. Mr. Ohr, on page 2 of 362528, incident number, the problem says the bridge will not lock. There is a repair, removed debris from the seat and gears. Under the notes it says, "Per Supervisor Ohr, the maintainers removed the debris from the seat and also removed debris from the gears which control the seat."

Can you tell me what your knowledge is of that particular event, you know, when you got called, who you may have dispatched out, or if you just took the follow-up information? Can you describe in your own words basically what happened in relation to that particular event?

A. That event would be from debris getting pushed into the bridge seats and the lift gear for the span. It was myself and Mr. Gary Golden were on site. On this particular event, there was debris lodged into the lift's gear, which was blowing a cutout, and we lost our power to the gear and it had to be removed, and reset the cutout to operate the bridge, caused by a high tide.

Q. I was going to ask what type of debris are we talking about? I mean, is --

A. Tree branches, river debris.

Q. I'm going to step back one second because I wanted to ask you something prior to the questioning and that's basically how long have you worked for Conrail and can you just describe your -- the positions you've held up to the current date?

A. I started Conrail 2002 as a maintainer in the C&S department. 2008, applied for a management position in the Bridge and Building Department. I worked that position until September of this year, 2012, moved over to the C&S Department as Supervisor of Construction, C&S.

Q. Thank you, sir. Going back to that, in the first incident we were talking about, is this type of problem -- is this a common problem with this particular bridge that there's debris and sometimes holding up operation?

A. It can be common. We had this situation with Hurricane Irene a lot. All the debris was coming downriver into the bridge and there has been quite a few times where there has been debris either in the seats, but not so much in the gear.

Q. Okay. I'd like to move to another event designated as 62619. The problem was bridge will not open. It says, "Adjust prox detector, cause under investigation." In the notes, it says, "Informed by Supervisor Ohr, Inspector Greiner found the north side rail pumping under train moves causing the prox detector to break contact. Inspect adjusted prox switch on the north side of the bridge and test it."

Can you tell me what transpired with this particular

event?

A. We were -- we got a call from the trouble desk about the bridge not opening.

Q. Dave, could you speak up louder just a little bit?

A. I got informed by the trouble desk they had a issue with the bridge where I spent -- or I sent Inspector Greiner down, and this is what he observed and adjusted the prox switch. Other than that, I have no other information on that.

Q. When it says, "north side rail pumping under train," would that be a rail on the bridge that was pumping?

A. It would -- in this case he'd probably be talking about the miter shoe, or miter rail.

Q. Can you explain to me what a miter rail is?

A. A miter rail would be coming from the fixed span of the bridge to the movable span of the bridge where the two spans are connected by the rail.

Q. How would he know that it was pumping under the train if he wasn't there when the train move took place?

A. He would have to be there for a train move to --

Q. Okay. It's not something that after a train goes by that you'd be able to --

A. No.

Q. -- determine?

A. No, it would be definitely under a load.

Q. Under a load. Under the movement of a train. Since you

weren't there, I'm not going to go into more detail for that, but I want you to explain, you know, it says "prox detector." What does -- what is a prox detector? Is that the proper name for it?

A. A proximity detector is a sensor that will indicate position of metal as per like a rider rail. And when the rider rail rides into the shoe on the miter rail, miter shoe, it will indicate the position of the rail.

Q. Okay. I've heard it also called a slide rail, is that the correct term for it, that slides in?

A. Yeah, I've heard that term also. I always refer to it as a rider rail.

(Off the record.)

(On the record.)

MR. DEPAEPE: All right, we're back on the record. This is Tim DePaepe talking to Mr. David Ohr.

Getting back to the 62644 event, it says that "Found the north side rail pumping under train moves causing the proximity detector to break contact. Inspect and adjusted proximity switch on the north side of the bridge and tested."

UNIDENTIFIED SPEAKER: Are you on 44?

UNIDENTIFIED SPEAKER: You said a different number.

MR. DEPAEPE: Did I?

UNIDENTIFIED SPEAKER: Yes. We were talking 62619.

BY MR. DEPAEPE:

Q. I want to be on 62619, my apologies. That's the one we

were talking about before we took a break. It said he adjusted the prox switch on the north side of the bridge and tested. Do you know if anybody from the track department determined why the rail was pumping? I know adjustments can be made to devices, but wouldn't you have to first repair the rail from pumping, then adjust the prox switch?

A. Correct. I'm not sure if the track department went out for an issue with the rail pumping.

Q. Okay. To your knowledge, a maintainer wouldn't just adjust the prox switch to clear the problem without getting someone to repair the cause?

A. Correct.

Q. Okay. As you said, you were not actually there at the time. I believe that answers all the questions I have on that particular incident.

Now I'd like to move to 62644. This was a bridge will not open problem. The repair was, clear error code in control panel; cause is under investigation. Under the notes, it states that the crew reported to dispatcher bridge announced failure to operate, informed Supervisor Ohr. Per -- Specialist Fitting will handle.

Can you explain what this means to me and what happened with this particular event?

A. Received the call from the trouble desk stating that the train crew reported after a move that the bridge failed to operate

or open after the move. I had a specialist in the area. I sent him down to investigate and he cleared the code, tested the bridge, and it was working as intended afterwards.

Q. If that error code that he cleared -- what is that error code for? Is that part of the signal circuits or is that part of the bridge circuits?

A. It would be part of the bridge circuit.

Q. And with that error code in place or displayed, do you have to clear that code in order to get the bridge to operate again?

A. On most codes, yes, you do. It's a failure to operate code. You do need to reset the code and take control on the B&B control panel to operate the bridge.

Q. While that cleared the problem -- or cleared the reason why the bridge wasn't opening at that time because of the existence of the error code, would the specialist do any investigation as to why that code was present?

A. Yeah, he would look at things on our side, prox switches, anything that he can see physically.

Q. Okay. So it's not just a matter of clearing the code and walking away, you'd want to try and discover why that code manifested itself?

A. Correct.

Q. Okay. Can you explain proximity switches to me a little bit, what your knowledge of their design and function is?

A. On this particular bridge or are you --
Q. On this particular bridge.
A. On this particular bridge, you have a north and south side of the bridge. Each slide bar lock will drive into the miter seat and -- it'll be prox switch 1 and 2, say, on the north side and 3 and 4 on the south end. And when the lock is driven, those proximity switches will indicate the lock is driven there. And 1 and 2 has to come in and 3 and 4 has to come in in order to pick the relay and indicate that the bridge is locked, and then displays a good signal.
Q. Okay. I'm going to shift to the day of the accident now, November 30, 2012. Have you had an opportunity to look at any of the downloaded signal information for that day?
A. No, I have not.
Q. Okay, thank you. Can you tell me how that signal circuit is designed to clear a signal? In basic terms, what needs to happen for that signal to clear?
A. In order to initiate the signal or --
Q. The way the circuit is designed, what has to happen for that signal to clear?
A. For that signal to clear, obviously, the train will approach, drop the track circuit down, key in the bridge. The bridge will then swing. The bridge will then, once it's in the line position, will seat. Once it's seated, then the locks will drive, the prox switch on the north and south end of the bridge

will indicate, come back, pick a relay, give you a green signal --

Q. All right --

A. -- if all prox switches come in. The train crew will then proceed across the bridge with a good signal. The track service will pick up. Once he clears the last circuit, then the bridge will initiate opening, the rails will retract, the bridge will lift back up and open.

Q. Thank you very much. That was a very good description of the operation. If -- you said the proximity detectors, there's 1 and 2 on the south end and 3 and 4 on the north end and each rail has its own proximity detector. If one fails on one end, the corresponding relay will drop; is that correct?

A. No, actually the relay -- yes, it won't even pick. So you won't -- you will not get a green signal.

Q. Okay. If either the north or south end proximity detector relay is down, the way the circuit is designed, would the signal clear?

A. No, you will not get a signal.

Q. One or -- it doesn't matter if they're both down or just one is down, in that case the signal will not clear; is that correct?

A. Correct.

Q. Okay. Those are the only questions I have for you at this time. I'm going to allow everyone at the table here to ask you any questions. Then we may do another round for rebuttal and

that's how we're going to proceed.

MR. DEPAEPE: Mr. Gura, any questions for Mr. Ohr?

BY MR. GURA:

Q. I have a couple. First name Cy, C-y, last name Gura, G-u-r-a. I got an e-mail that you sent that talked about codes and failure codes. It basically says, "I arrived on the derailment site at Paulsboro movable bridge. I was instructed by Jerry Kaminski to shut off commercial power that was being supplied to the bridge and to all C&S locations. I recorded the DTC from the main B&B controller point."

What's DTC mean? And then I'll read off the codes and you can tell me if those are like recent codes or what kind of codes are they?

A. DTC is a diagnostic trouble code.

Q. Okay. And the DTC diagnostic trouble code then refers to these codes?

A. Yes.

Q. And this is located on the programmable logic controller?

A. This is a main control point located at the bridge, which is the PLCs.

Q. Okay, the PLCs. Okay. And you said it's the B&B, so normal -- this is B&B information not C&S information?

A. Yes.

Q. Okay. Now it says code 45, you know. I'll read them

off. "Code 45, hydraulic tank low-low level, level trip." And then it says, "Code 78, bridge failed to open." "Code 79, bridge failed to close." And then is says, "Code 5, local lockout hydraulic pump motor." And then is says, "Cade" instead of Code.

A. Oh.

Q. This is C-a-d-e, unless it was just a spelling error on your part. Then it says, "Code 10, limit switch fault creep 101S3A," and then "Code 11, limit switch fault creep 101S3B." And then "Code 19, position switch fault ST link/7LS1A/B," and then "Code 44, hydraulic tank low oil level." Now, I read them all off, but is this just for one day or is this an accumulation of codes since the last time they were erased?

A. This would be from the one day that was there because -- like I have no knowledge of anybody erasing the codes prior to that. This is what I observed when I was -- came on site. So I would say it would just be from that day.

Q. It would be just from that day. Now I'm going to go through each code and maybe you could just explain them to me and I'll go across them individually. Code 45, hydraulic tank low-low oil level trip. What does that mean?

A. Basically what there is in that hydraulic unit, there's a float switch. Why that code is on there, I am not sure, but I do know it's reading off of a float switch inside the tank.

Q. Inside the tank that drives the hydraulic ram that opens and closes the bridge?

A. Correct.

Q. Okay. And then Code 78, fail to open, is that self-explanatory; that just means the bridge did not open after the previous train?

A. Yes.

Q. And then Code 79, bridge failed to close?

A. I would -- my opinion, I would say that happened when the train crew keyed the bridge up.

Q. The accident train crew?

A. Yes.

Q. Okay. And then Code 5, local lockout hydraulic pump motor?

A. I'm not sure about that code, to be honest with you.

Q. Okay. Could any of these codes occurred after the derailment when --

A. Yes.

Q. They could have occurred after the derailment. So when we're talking about the limit switch fault creep, is that a limit switch in the bridge where it's swinging?

A. Yes, it is.

Q. Okay. And the same thing with the other limit switch?

A. Yes.

Q. It says, "Limit switch fault creep." It has a different number, 101S3B?

A. And the other one is 101S3A?

Q. Yes.
A. Yeah, it's a redundant system.
Q. They're redundant systems?
A. (No audible response.)
Q. Okay. And then the 19, Code 19, position switch fault ST link, 7LS1A/B?
A. That would be the south track link or slide lock. It would be that circuit.
Q. It would be the slide lock circuit?
A. (No audible response.)
Q. Okay. And then again we have Code 44, hydraulic tank low oil level.
MR. GURA: Okay. I'm going to pass it over. I had another question, but it escaped my mind.
MR. DEPAEPE: All right, Mr. Bilson?
MR. BILSON: Tom Bilson, Thomas Bilson, T-h-o-m-a-s, B-i-l-s-o-n.
BY MR. BILSON:
Q. Dave, those error codes, do they appear in order or they just kind of mix in and flash up? I'm not aware.
A. To my knowledge, they appear in order.
Q. Okay. And they could have been caused, like the loss of oil in the tank would say --
A. Correct.
Q. Going back to the incidents we spoke about earlier,

62644, when they say, "under investigation," is that still under investigation or has that been closed out; do you know?

A. I'm not -- I don't believe that ticket is still open.

Q. Yeah. So when Mr. Fitting goes out, he checks all the rail links to make sure all the locks are working and puts it back in -- how does he do that? Does he put that in -- does -- he just puts that -- does he work that from the remote, goes to local control?

A. He would go to local control to check the links, to drive them, and then I have my guys test it also in remote before they leave to ensure that's working also.

Q. Okay. I think that's all I have.

MR. DEPAEPE: Thank you. Mr. Noon?

BY MR. NOON:

Q. My name is Thomas Noon, T-h-o-m-a-s, Noon, N-o-o-n. Yeah, I have a few questions. Failure to open, does that mean that it didn't move at all or did it -- could it be halfway? Could it be open, but not locked? Does failure to open mean there was no --

MR. DEPAEPE: We're going to go off the --

(Off the record.)

(On the record.)

MR. DEPAEPE: It's 11:42 a.m., we're back on the record. Mr. Thomas Noon of the FRA is questioning Mr. David Ohr.

Go ahead, Tom.

BY MR. NOON:

Q. The question was failure to operate. When you go out there, do you -- can the bridge be in any position other than not locked? Could it be half opened, half closed?

A. I've -- I don't mean --

Q. So --

A. I'm sorry.

Q. Go ahead, go ahead, answer.

A. I had never seen -- besides debris being in the bridge for the full move, I mean, I have seen that where -- so, like the best answer to your question is yes.

Q. It could be --

A. If it doesn't complete the whole move, it will time out and you'll get the code.

Q. Okay. So, theoretically, the bridge can attempt to open and move a few inches and then it would fail --

A. Yes.

Q. -- and the message would come out? Okay. So it could be in any position --

A. On the --

Q. Okay. That's one of the questions I wanted to ask.

So the announcement just says bridge failure; the code says open or closed?

A. Correct.

Q. Okay. When you go to the site and the bridge has got a

problem and you read the code, do you clear the code and then fix the problem or do you fix the problem and then clear the code?

A. You need to clear the code, then fix the problem.

Q. Okay.

A. Because you will not have control of the bridge with the error codes in place.

Q. Okay, that's what I wanted to know. But once you correct the problem, you don't have to do anything else --

A. No.

Q. -- with the code as far as -- because once you eliminate the code, you're on your own?

A. Yes.

Q. You have control of the bridge and you can do what you want?

A. Correct.

Q. Okay. Standard operating procedure is you correct the problem and --

A. Test the bridge.

Q. Okay.

A. Back in service.

Q. Okay. And then you report it back in service?

A. Yes.

Q. To the trouble desk or --

A. Trouble desk.

Q. And then what --

A. And the dispatcher.

Q. And the dispatcher. Does trouble desk gives it to the dispatcher or do you give it to the dispatcher?

A. I call both.

Q. Okay. All right. The debris that usually hangs up the bridge, is that usually on the pivot end, which would be in the south end, or the north end where --

A. It's possible to get debris in both. There has been times where the debris was on the ring gear in the pony wheels. You get logs floating in there. There's also been times where you have debris on the bridge seat side.

Q. Has debris ever -- has the bridge ever climbed on top of the debris to make the bridge uneven?

A. Well, yeah. That -- I mean, you -- there's possible that you have bridge -- debris on the bridge seats --

Q. Um-hum.

A. -- the bridge span, right up on it.

Q. Um-hum.

A. At that point the bridge won't lower and it will blow the kickout -- the cutout for it, the bridge seat circuit. So, yes, I mean, that is possible.

Q. And the limit switch would catch that first?

A. Correct.

Q. Okay. Have you ever come across a situation where the slide rails were not driven because the bridge wasn't aligned?

A. Not aligned?
Q. Not aligned. I mean, it went to drive, but it hit the abutment. Have you ever come across that situation?
A. The abutment or the --
Q. Or anything?
A. Or the shoe? No, it --
Q. Or the shoe, yes. Did not fit into the shoe?
A. No.
Q. All right, okay. There was one other question I wanted to -- can the slide rails -- they work in tandem on each side so that they both go like this, or both operate. Have you ever come across a situation where only one drove and the other one did not? Is that physically possible?
A. Unless there's physical damage to a common rod that -- or a, you know, a linkage coming off the motor, that would be the only way I could see that happening.
Q. Okay.
A. If something's actually physically broken.
Q. Okay. Right, that's -- but something that could happen, but you've never seen it?
A. I've had one incident where on the north end, one rod did break years ago and was repaired, but did not -- I mean, it did drove to a point. It was an issue, but it wasn't --
Q. But the proximity detector detected that it was fouling?
A. I'm unsure of that. I do know that the arm was broken,

but --

Q. Okay. All right.

A. -- I don't recall if it was indicated on the prox switch.

Q. When they say you make an adjustment to the prox switch, you're talking about the prox switch having threads on both sides and locknuts on both sides? Your adjustment is you untighten that and you adjust it to the spacing, the air gap or whatever the thing is, because it had become loose? Is that the general --

A. On the south end, the bracket is a piece of angle iron, which is mounted to the rail and sits in a hole in the rail. On the other end, there is adjustable brackets in and horizontal and vertically adjustments.

Q. All right. Okay. Now, have you been out -- I wanted to ask a question --

(Off the record.)

(On the record.)

MR. DEPAEPE: All right, it's 11:51. This is Tim DePaepe. We're back on the record. Mr. Noon is questioning Mr. Ohr. Go ahead, sir.

BY MR. NOON:

Q. One of the log events that -- we have mentioned pumping and that was a visual call by the maintainer. He saw the -- so the bridge was -- what I'm asking you is did the whole mechanism jump up and down or just the slide rail or just one part? And

that caused the adjustment to be made on the proximity detector? Do you remember that? I mean, I don't remember if you were there or not at the time.

A. I wasn't there on site for that.

Q. Um-hum.

A. But I think that was just a general observation of the move over the miter.

Q. Does -- on the calls that you were on or present or to your acknowledge, which side of the bridge gets more defects --

A. North.

Q. -- failures?

A. North side.

Q. The north side, okay. I think that's all I have.

MR. DEPAEPE: Mr. Tracy, do you have any questions for Mr. Ohr?

MR. TRACY: Not at this time.

MR. DEPAEPE: Mr. Killingbeck? Killingbeck.

MR. KILLINGBECK: Killingbeck. Yes, I do. This is David Killingbeck again, K-i-l-l-i-n-g-b-e-c-k.

BY MR. KILLINGBECK:

Q. I've got a list of questions here for you, Mr. Ohr. These DTC codes that Mr. Gura was reading off and you indicate have to be cleared from the screen on the PLC, is it procedure, policy, or habit to write those down in any kind of logbook?

A. We have a -- it's more habit. We have no recorder

module on that unit so it's hard to go back and troubleshoot. So what we've -- since we have the problems with the bridge, we've been making a list. But as far as a standard log, no.

Q. Okay, you've just said something about you have no recorder module in the PLC, correct?

A. Yes, correct.

Q. And this recorder module, if it was present, would that maintain an electronic log of events that had occurred and been cleared?

A. Yes.

Q. So your understanding is that there is no electronic record of former error codes buried deep down somewhere in this PLC?

A. To my knowledge, there is not.

Q. Okay, thank you. This list of DTC error codes that Mr. Gura listed off from an e-mail that he had received from you, are there any timestamps on those?

A. To my knowledge, no.

Q. Okay. You've indicated that if the bridge is trying to open or close and it fails to complete its operation, that it will time out. Do you have any knowledge as to how long that timeout period is?

A. Yes, I know it's only a few minutes, but I'm not sure of the exact time. This is to, one, to preserve the hydraulic unit on the bridge and in the case that there is a obstruction or

something, they don't do any further damage.

Q. Okay, thank you. The limit switches that are available for the operation of the swing span itself, there is -- from photographs I've seen, it appears that there are a pair of roller-type limits that detect when the bridge is swinging into its closed position; is that correct?

A. There's -- yes, there's -- first -- they don't indicate -- they may indicate creep speed, which slows the bridge down so it comes in at a slower speed.

Q. Okay.

A. And there's also, for the bridge close circuit, there's two proximity switches.

Q. That are separate from the creep switches?

A. Yes.

Q. And they indicate that the bridge has swung to its fully closed position for rail traffic?

A. Well, it's closed to the position before the bridge can actually seat on the seats, lower to the seats.

Q. Thank you. Is there, in addition to that, is there a seating limit switch?

A. There is a seating limit switch that runs off of the gear, which was in this trouble ticket here.

Q. And that's --

A. That's right here.

Q. -- you're referring to trouble ticket --

A. 59098, page 1.

Q. 59098, where you cleared debris. That limit switch is located back on -- you said at the gear, so it's on the common shaft that --

A. It's on this --

Q. -- that causes the north end of the bridge to lift or lower?

A. Yes.

Q. Okay. But it is not -- it's not physically detecting the seating of the bridge at the seat; it's inferring it by the position of --

A. The gear.

Q. -- the gear. Okay. One last question. On log item 62619, in the notes, it says north side pumping, or that Inspector Greiner found the north side rail pumping under train. I've heard the term "pumping" used in signal circles to indicate a rail -- or not a rail, excuse me, a relay that was pumping under the passage of trains. Is there any way to ascertain whether this note means that the maintainer physically saw one of the rails or both of the running rails pumping at the north end of the bridge or was looking at the relay for the prox switches on the north end?

A. By reading this here, the notes?

Q. Yes.

A. I'm assuming that he was talking about the miter rail itself and not the relay. I don't think he would see the relay

pumping up and down from the prox switch under that piece of rail.

Q. Okay.

A. No, I'm saying on the rail here.

Q. Okay. If it had been -- if he had been at the cabinet or the bungalow, whatever happens to be there, while the train was passing, and the north end, one or both prox switches were opening and closing, would that bridge lock relay -- is that the proper term -- for the north end of the span, would it pump up and down or would it not move?

A. Not move.

Q. Because the circuit's occupied?

A. The track circuit?

Q. Yes.

A. No.

Q. Then is the swing span itself -- is there a track circuit that detects the presence of train -- of a train on the swing span or only on the approach?

A. There's four track circuits there. There's a -- is it a ring type? No, (indiscernible) circuit. There's a overlay there.

MR. DEPAEPE: This is Tim DePaepe with the NTSB. I'm going to interrupt this line of questioning for a second. Mr. Ohr, this is a print of that circuit --

MR. OHR: That section.

MR. DEPAEPE: -- so I think after looking at it, you can

better answer the question. According to the print, it appears there's a approach circuit on each end and then a short circuit in front of the signal and then I believe it's a 56-foot dead section over the bridge itself. Would that be an accurate description of what that print is showing?

MR. OHR: Yes.

MR. DEPAEPE: Does that answer your question, Mr. Killingbeck?

MR. KILLINGBECK: Yes, it does. Thank you very much.

MR. DEPAEPE: Okay.

MR. KILLINGBECK: I have no further questions.

MR. DEPAEPE: All right, this is Tim DePaepe with the NTSB. I have just a follow-up question and I may have asked it already and I apologize if I did.

BY MR. DEPAEPE:

Q. You had stated earlier that you went out to the accident scene after the accident. Do you have any knowledge of anything leading up to any failures with that bridge of the day of the accident that you have not learned since then? I mean, did you have prior knowledge of any bridge failures there in the last 24 hours?

A. Twenty-four hours, no.

Q. Okay.

A. I was unaware of any failures.

Q. So you were not privy to any information or bridge

failures or any conditions that may have existed at that bridge leading up to that accident?

A. We had -- I was out there one day where we did find the bridge lined but not locked, where I'd dispatched a -- I called the bridge and repairmen department to investigate. And other than that, that's the only knowledge that I had.

Q. Okay. Again, I don't remember if I asked this and I apologize. The prox switches, if they are out of position and they're down, can the signal there clear?

A. No.

Q. According to design, do both proximity detector relays have to be in the up position for the signal to clear?

A. Yes.

Q. If the signal does not clear and displays a red signal due to the proximity relays being down, is that how that circuit is designed? Is that the normal function of that design?

A. Yes.

Q. Thank you.

MR. DEPAEPE: I'm going to go around the table for any follow-up questions. Mr. Gura?

BY MR. GURA:

Q. Yes. A quick, couple few questions. Who is the maintainer that you sent out about the rail pumping? What was his name again?

A. It's the C&S Inspector Richard Greiner.

Q. Richard, spell the -- Greiner?
A. Yes.
Q. Okay.
A. It's G-r-e-i-n-e-r.
Q. Okay. And who is the B&B person you notified about the bridge lined but not locked?
A. That would be Ryan Hill.
Q. Ryan Hill. And you mentioned about the debris floating down. The name that you mentioned was Hurricane Irene. Did you mean Hurricane Sandy, the most recent one?
A. No, the -- this is previous. This was -- the date was 12 -- or last year, last summer.
Q. Oh, last summer?
A. Yes.
Q. So it was Irene then. You were not --
A. No.
Q. -- referring to Hurricane Sandy, which was the most recent one?
A. That's correct.
Q. Okay. And then you mentioned a timeout, a timing out. Is that for the hydraulic pump or for the slide lock motors?
A. As far as?
Q. You mentioned that the timeout is to protect the hydraulic and I'm just wondering, is it a hydraulic pump that drives that cylinder --

A. Yes.

Q. -- or is there a timeout also for the drive motors for the slide locks?

A. I would say for the hydraulic.

Q. Okay. And you mentioned about the logbook for these fault codes. Who maintains the logbook?

A. They're really -- what it is, it's just a piece of -- a paper book, like notebook paper?

Q. Yeah.

A. And if there's an issue, you write it down and describe what happened. I mean, it's not per se a logbook.

Q. Yeah.

A. It's not a detailed description of, you know, 5 years of history there. It's just a random piece of paper, this is what we have, this is -- you know, so we can go back and check.

Q. Okay, where is that piece of paper located?

A. It should be in the shanty. In the operator's room.

Q. At the bridge?

A. Yes.

Q. And the bridge has a quarterly inspection where you had C&S, the B&B, and what have you. Did you participate in the last quarterly inspection?

A. No, I did not.

Q. That's all I have.

MR. DEPAEPE: Mr. Bilson?

BY MR. BILSON:

Q. Yes, Thomas Bilson. Just a follow-up, David. You were asked about where the most trouble is and it's on the north end. Reading back beyond the 27th, a lot of proximity switch issues here. Does that include -- and that's for the whole year. I mean, is it mostly proximity switch issues, rail sliders? The only reason I ask is the difference in the two mountings; one is mounted through the rail, the other is mounted on a bracket and the bracket tends to be looser, so --

A. Proximity issues, the most calls would be prior to the milling of the miter rails from the rail kicking back on the traction of the train.

Q. Uh-huh.

A. Especially with, say, you run a 6-axle on it, be more evident.

Q. Right.

A. The -- there was issues where we were having some colder weather, rails contracting or running.

Q. Okay.

A. And that would be a cause of adjustment for proximity switches. But pretty much that's about it for the switches.

Q. But the mounting didn't make a difference?

A. No, the mounting -- I mean, it has to be mounted that way because of the upfitted miter rails --

Q. Right.

A. -- where you can't mount -- the south end, you can mount through the rail; it's fixed. I mean, it's possible someone could kick the bracket, put it out of whack, but --

Q. Which do you think is the best?

A. The fixed.

Q. The fixed, which is --

A. On the south end.

Q. -- through the rail? Okay. I kind of agree with you.

The second question is, if the bridge times out, no signal, right? It stays red?

A. No signal. Yeah, red signal.

Q. Okay. That's all I have.

MR. DEPAEPE: Thank you. Mr. Noon?

MR. NOON: Thomas Noon, N-o-o-n.

BY MR. NOON:

Q. I have a question about the keypad, okay. The engineer comes up in the engine and punches a keypad. The bridge doesn't move or it doesn't operate, right. Waits a minute or whatever, punches it in again. If that doesn't work, he goes outside and punches it again. Does the machine, like a computer, get jammed up? I mean, if you punch it in too fast or you punch it in too many times, does it just say forget about it, you know, no request? There's a technical term, forget about it. It's Jersey.

Do you understand what I'm saying?

A. I understand.

Q. Does it -- how many times does it -- do you have to punch it in where it just says that this does not accept the punch or --

A. Yeah, I'm not sure of the exact amount of times, but with any -- I mean, I can see it definitely happen. I mean, if it's locked -- if it's not going to work, it's not going to work.

Q. Right.

A. I mean, you need to go -- you have to reset the code for it to work.

Q. Right.

A. If there's -- I mean --

Q. It's not always easy. Let me ask you this, okay. He punches in a code and it doesn't work, okay?

A. He'll get an announcement.

Q. He'll get an announcement it doesn't work, right? On the PLC it shows that?

A. It will issue a code failure.

Q. Yes.

A. Failure to open, failure to close, whatever.

Q. Whatever it does, right. So if he does it again, it will record again that it failed. So is there a limited number of times?

A. I'm not clear on the times.

Q. Oh, okay. What was it up there, I had one other question. Speaking -- oh, a bridge question. For some reason,

the slide rails attempt to drive and they're obstructed. Does the motors that control those, do they have overloads?

A. Yes.

Q. So it would have to be a fairly good obstruction to create a overload? I mean, you know, if it's just a little off, will it have enough juice -- enough power to power in or does it, you know, that's it, it doesn't fit right? I mean, what is the pressure on the overload?

A. I'm not sure the -- it's electric. It's not pressure.

Q. It's electric?

A. Yes.

Q. So in other words, if it's obstructed and it can't move, you hope the motors overload right off the bat and it stops, right, it stops in its position?

A. Yes.

Q. It's not withdrawn?

A. No.

Q. Okay. That's all I have.

MR. DEPAEPE: Mr. Tracy?

MR. TRACY: I'm good, thank you.

MR. DEPAEPE: Mr. Killingbeck?

BY MR. KILLINGBECK:

Q. Yes, this is David Killingbeck again. A couple follow-up questions. On the PLC, these DTC error codes, how are they displayed? Does the display just show one code at a time or does

it show a list?

A. It's one code at a time.

Q. The listing that was given to Mr. Gura in the e-mail, are those codes listed in the order that they display as reviewed on the PLC?

A. Yes.

Q. Do you happen to know whether the PLC accumulates those codes in the order that the faults occurred?

A. Yes, it does.

Q. It does accumulate them in the order that they occurred?

A. (No audible response.)

Q. Okay. Thank you. One other question. Mr. Noon asked you about the overload feature on the motor that drives the slide locks. We'll talk specifically on the north end. Is there -- do you know, is there a clutch between the motor and the gear reduction?

A. Yeah, I've seen -- there would have to be a clutch. I don't know off -- I mean, yes. I'd say, yes, there is.

Q. So that if the slide lock is obstructed from operating to the point where the motor's told to stop, the motor -- the rotor of the motor can continue to turn while the gears are not? Or does it stop the motor right now and that's what causes the motor overload to trip?

A. It stops the motor immediately.

Q. Okay. Earlier you had indicated that prior to re-

profiling the top surface of the slide locks, that locomotives traveling, I assume, northbound were tending to kick these slide locks to the south and lose proximity indication. Where would the play or the slack in the system come in that would allow that slide lock to kick to the south?

A. What would happen is the locomotive would go north, apply traction, kick back the rail, not only losing the proximity detector, but also the possibility of breaking the cam switch position for the link extend/retract circuit, which is located inside the motor.

Q. And that's what I'm trying to get at is where could that loss motion, that slack, come from? Is it possible that that force being exerted on the link rod that connects back to the operating motor for the rail -- or the slide locks, can that cause the motor to spin backwards?

A. I --

Q. Is there a motor brake on the motor?

A. No brake. There's --

Q. Let me ask that question.

A. No, there's no brake on the motor.

Q. What type of gear reduction is it?

A. I'm not sure of the reduction of it.

Q. I was asking the design as opposed to the ratio.

A. Oh, okay. It's pretty much half horsepower, direct drive motor, which -- you know, it's armature turns out, in or

out, just throws a rod, which then throws a lock.

Q. Okay, thank you.

MR. DEPAEPE: All right, Mr. Ohr, I want to appreciate your time here.

MR. OHR: Thank you.

MR. DEPAEPE: Do you have any additional questions, Mr. Gura?

BY MR. GURA:

Q. Yes, I just have one quick one. David, when you talked about the DTC codes from the PLC, you said they come in order. In the e-mail that you sent out, Code 45 was at the top and Code 44 was at the bottom. Which one would have been the last to display?

A. I'm sorry, you said 44 was at the top?

Q. Yeah, it says, Code 45. It says, hydraulic tank, low-level trip. Okay. Then the next one was Code 78, bridge failed to open. Then Code 78 -- or 79, bridge failed to close. In, I'm going to call a hierarchy, were -- is this a listing of the codes that were last -- you know, like that Code 45 prior to the bridge failed to open, was that the last thing -- or the first thing to occur since the PLC codes were cleared? So that -- and then the last thing that would happen would be position switch fault and the limit switch creeps and the hydraulic tank code. That would have been the one that happened either during the derailment or at that time of the derailment; is that correct?

A. Yes.

Q. Okay. That's all I wanted to make sure.

MR. DEPAEPE: Mr. Noon, do you have any additional questions?

BY MR. NOON:

Q. One quickie question. Does the -- is there an error code for a motor overload?

A. For a motor overload, yes.

Q. Okay.

MR. DEPAEPE: Again, Mr. Ohr, I wanted to thank you for your participation here, but I'd also like to give you the opportunity if there's anything you may want to add or anything you may know of or think of that may help us figure out what happened on the day of the accident?

MR. OHR: No. No, I'm good, thank you.

MR. DEPAEPE: All right. Well, again, thank you and this will conclude the interview with Mr. David Ohr. It is currently 12:17 p.m. and we are going to go off the record at this point.

(Whereupon, at 12:17 p.m., the interview was concluded.)

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 David Ohr
DOCKET NUMBER:	DCA-13-MR-002
PLACE:	Paulsboro, New Jersey
DATE:	December 4, 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.

_____
Vanita Tildon
Transcriber