

SURVIVAL FACTORS HIGHWAY

ATTACHMENT 11

OFD ENGINE 61 INTERVIEWS

HWY15MH006

(27 pages)

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * * * * * * * * * * * * * * * *

Investigation of:

METROLINK GRADE CROSSING ACCIDENT *
OXNARD, CALIFORNIA * Docket No.: HWY-15-MH-006
FEBRUARY 24, 2015 *

* * * * * * * * * * * * * * * * * *

Interview of: ENGINEER 1

CAPTAIN 1

FF 1

Oxnard, California

Wednesday,

February 25, 2015

The above-captioned matter convened, pursuant to notice.

*

BEFORE: NTSB INVESTIGATOR, Ph.D.

Survival Factors Investigator

APPEARANCES:

NTSB INVESTIGATOR, Ph.D., Railroad Accident Investigator

National Transportation Safety Board

INTERVIEW

NTSB INVESTIGATOR: Okay, so this is Engine 61, and what I'll first do is just have each of you guys tell me what your position on the truck was and whether you're a firefighter EMT or, you know, what your level of training is, and I guess we'll start with the driver.

> ENGINEER 1: Okay. ENGINEER 1. I'm the engineer on Engine 61. It's -----. NTSB INVESTIGATOR: Okay, and firefighter EMT or --ENGINEER 1: EMT. But engineer, not the firefighter. NTSB INVESTIGATOR: Engineer? ENGINEER 1: Yeah.

NTSB INVESTIGATOR: Okay, and then --CAPTAIN 1: I'm Captain CAPTAIN 1, ------, B as in boy, EMT. NTSB INVESTIGATOR: Okay. FF 1: I'm firefighter FF 1. NTSB INVESTIGATOR: Okay. UNIDENTIFIED SPEAKER: I wasn't here that day. I was (indiscernible). NTSB INVESTIGATOR: Oh, you're -- gotcha. All right.

INTERVIEW OF ENGINEER 1

NTSB INVESTIGATOR: Okay, so we'll start with the driver, and you can just describe what you -- how you were dispatched, if there were any issues getting to the scene and, you know, how you got everything to the scene.

ENGINEER 1: We were dispatched and I think the initial dispatch was just a vehicle versus a train, which we've had the luxury of doing multiple times with our crew. We seem to be always be on duty with the -- when the train hits the vehicles.

UNIDENTIFIED SPEAKER: Were you given the right address and everything, the right information?

ENGINEER 1: Yes, Rice and 5th, the right address and everything. And then on the way, as we responded, we kept getting updates about a possible fire and multiple calls for multiple train cars that had flipped or been derailed. So, as we're driving in, we're getting more and more updates from dispatch, so then we knew we had a big scene that we were driving to.

That morning, traffic was normal morning commutes, it seemed like. We were driving our normal route, which is 5th Street from our station. We're right there off of 5th Street, pretty much.

UNIDENTIFIED SPEAKER: What station are you coming from?

ENGINEER 1: Station 1.

UNIDENTIFIED SPEAKER: Station 1?

ENGINEER 1: Yeah, 61, Station 1. And so, we took 5th Street all the way until we ran into the incident at Rice.

UNIDENTIFIED SPEAKER: Was there a build up of traffic in front of you?

ENGINEER 1: There was not, no.

NTSB INVESTIGATOR: Oh, I just figured that out, 61.

ENGINEER 1: Yes.

NTSB INVESTIGATOR: Hanging over the engine, okay.

ENGINEER 1: Um-hum. UNIDENTIFIED SPEAKER: I've seen that before. NTSB INVESTIGATOR: Right. UNIDENTIFIED SPEAKER: Were you staged right there on 5th? ENGINEER 1: What's that? UNIDENTIFIED SPEAKER: Were you staged right there on 5th intersection? ENGINEER 1: We staged -- we saw 65 come down Rice --UNIDENTIFIED SPEAKER: Rice? Okay.

ENGINEER 1: They kind of slowed down where the fire was, gave their initial report of the incident, and then they went ahead and they gave us fire attack, which we stopped, then we pulled up next to the fire.

UNIDENTIFIED SPEAKER: The fire was completely across the pavement there, both sides of the pavement, or could you get through at least one lane of traffic?

ENGINEER 1: We were able to drive through the entire intersection. The fire was to the left, north of the intersection, just south of the tracks.

UNIDENTIFIED SPEAKER: So you had complete access from both sides?

ENGINEER 1: Complete access, yes.

NTSB INVESTIGATOR: And so, you through -- you drove through the intersection that the -- this isn't the intersection where the gates are at --

ENGINEER 1: We drove from 5th going eastbound towards Rice.

NTSB INVESTIGATOR: Okay. And then once you got on scene, then what happened? Are you --

ENGINEER 1: When we got on the scene, I got orders from the captain saying that we're going to be taking fire attack. So, for me, that means I'm going to stop the engine in the appropriate spot, which you can see in the pictures we never moved the engine after we stopped it. So all the images you see on TV or the pictures is our initial and final stopping point.

FEMALE SPEAKER: So, which one is here?

UNIDENTIFIED SPEAKER: We might need to get a different photo.

NTSB INVESTIGATOR: Or, in that front photo, if you could -- if it's off --

FEMALE SPEAKER: Or (indiscernible) --

NTSB INVESTIGATOR: -- if it's off a page from about --

ENGINEER 1: We're right here.

NTSB INVESTIGATOR: Right there?

ENGINEER 1: About right here, yeah. NTSB INVESTIGATOR: So, just to the --ENGINEER 1: So we're west of the train. NTSB INVESTIGATOR: West of the -- most west of the car?

ENGINEER 1: We're pretty much at the intersection, just slightly east of the intersection. Because I drove past the fire, because the way the wind was smoking -- or the wind was blowing, I didn't want our crews or the engine to be in the path of the smoke. Drove past the incident so that the crews could pull the bed line off the -- or the booster off the back of the vehicle, and stayed out of the way of the smoke.

NTSB INVESTIGATOR: So that's the east end of the intersection?

ENGINEER 1: Yes. I drove past --

NTSB INVESTIGATOR: So the smoke was falling to the west?

ENGINEER 1: Yes. So we drove past, and then, for me, that means to put the vehicle into pump. I get the hoses and the water and the pump ready to give to the firefighter and I initiated foam. Because it did appear when they started putting water on the fire that they were getting not the feedback that they wanted from water application, so they asked for foam. I gave them foam from our engine, and that was doing a better job because it ended up being a fuel fire that was on the ground from all the, I guess, the gasoline and maybe other -- a couple of products that were on board of that vehicle.

NTSB INVESTIGATOR: Did you hear any explosions from the -- or anything like that secondary during the fire?

ENGINEER 1: I did not, no.

NTSB INVESTIGATOR: Okay. Okay, so then you basically were operating the vehicle --

ENGINEER 1: Um-hum.

NTSB INVESTIGATOR: -- the engine, helping set up everything, and then you just -- is that the role that you followed through?

ENGINEER 1: Yeah, that's the role. My role was make sure that the crew didn't run out of water. Because we only had 500 gallons on our engine, and we went through that in about 10 minutes, 5 to 10 minutes. And so, then I had to grab water off of the engine that was parked next to us, which was Engine 63, and I grabbed all their water from their engine. And once we ran out of another tank of water, I had to pull a hose over to a third engine, which was Engine 64, which is about 150 feet east of our vehicle -- because that's how much hose it took to get there -- and took their water from their take too. So we never -- we pretty much, we were --

UNIDENTIFIED SPEAKER: You never accessed water from --

ENGINEER 1: No. We were able to put out the fire with --

UNIDENTIFIED SPEAKER: With Engine ---

ENGINEER 1: -- our tank water, yeah, from three engines, so 1500 gallons.

UNIDENTIFIED SPEAKER: And the closest hydrant is?

ENGINEER 1: Closest hydrant was north of the scene, on Rice, on the west side of the street. So, we would have had to pull hose quite a ways -- it looked like it was maybe 4- to 500 feet -- and we would have had to go near the fire, cross the path of the fire. So, instead of doing that, we just -- I just decided to take the water from the vehicles.

UNIDENTIFIED SPEAKER: And did you tap out or were you close to tapping out on all your tanks?

ENGINEER 1: We were. We probably had about a quarter to half left, and then we filled it up right before we left with another engine and we were fine. It took --

UNIDENTIFIED SPEAKER: So you lucked out basically?

ENGINEER 1: Yeah. Well, we --

UNIDENTIFIED SPEAKER: You had enough water?

ENGINEER 1: Otherwise, we were going to have to stop the operation, send the engine to the hydrant, which would be a delay of firefighting for about 7 minutes, 5 to 7 minutes, till we filled it up, drove back --

UNIDENTIFIED SPEAKER: You guys don't have tankers you bring in, if needed?

ENGINEER 1: For us, we do have access through --

UNIDENTIFIED SPEAKER: Mutual aid?

ENGINEER 1: -- other agencies, mutual aid, but our department does not have a

water tanker.

UNIDENTIFIED SPEAKER: So did you have in the back of your mind tactically to bring them in if needed?

ENGINEER 1: No, because the fire was small and with the first tank that we used, we seemed like we had a head on it. And it just started, every once in a while -- I don't know -- FF 1 could tell you more information because he was actually on the nozzle, but it looked like the fire was out with our first tank and we still had about half to a quarter left. And then they were using the foam just to make sure that the foam application on the fuels was staying solid, so a flare-up didn't happen from the heat of the steel and vehicle.

NTSB INVESTIGATOR: Okay. Other questions before I move on to Captain?

Okay.

INTERVIEW OF CAPTAIN 1

NTSB INVESTIGATOR: So, CAPTAIN 1, why don't you just describe your actions

on scene?

CAPTAIN 1: Well, what ENGINEER 1 kind of alluded to as far as responding to the scene is completely accurate in my recollection as well. Pulled up on scene. I was waiting for ----- in -- on 65, the Captain, to move forward and go onto the train car because the firewall -- drawing a lot of attention is kind of not really that critical to the importance of what was happening further up the road. But I was assigned to deal with the fire, and so that's where we stayed, okay?

ENGINEER 1 pulled into a position.

NTSB INVESTIGATOR: And you were assigned by Captain --

CAPTAIN 1: By Captain 65.

NTSB INVESTIGATOR: Yep, got it.

CAPTAIN 1: ENGINEER 1 put us in a position of safety. We pulled the booster line because we only had a few -- you know, 500 gallons of water in, and at the beginning quite a bit of fire to deal with. I wanted to make sure we didn't run out of water before we had knockdown. We could have pulled the larger lines and had more -- our application quicker, but we could have run the risk of finishing not all the fire attack and then being out of water, so we chose to go with the booster line with some foam. FF 1 is on the nozzle with another firefighter, ----- (ph.), who's not here. He was working at the time on our crew.

I did notice, as I was doing my circle of safety, walking around looking at the hazards, noticing parts of the vehicle were done in the gully off to the east. What we were dealing with was what appeared to be some type of a work trailer. Looking at what was burning, it appeared to be large volumes of maybe diesel, maybe some type of fuel oil or something like that. There were high-pressure cylinders strewn about the fire that we pulled out of the fire.

NTSB INVESTIGATOR: About how many cylinders did you notice?

CAPTAIN 1: Three. One, it appeared that it may have exploded before we got on scene.

UNIDENTIFIED SPEAKER: These were like acetylene cylinders rather than propane tanks?

CAPTAIN 1: Yes. Yeah, acetylene style with a screw-on bonnet. There were --

UNIDENTIFIED SPEAKER: That's dicey to deal with.

CAPTAIN 1: Yeah. Yeah, well -- yeah, those are -- you know, we could have gotten hurt easily.

UNIDENTIFIED SPEAKER: Yeah.

CAPTAIN 1: Yeah. Sometimes we don't even see them, so -- there -- one was on -- was being impinged on by flames. I decided --

UNIDENTIFIED SPEAKER: It hadn't vented yet?

CAPTAIN 1: I don't know.

UNIDENTIFIED SPEAKER: I mean, you would have seen a flare, a huge flare, a bunch of flares --

CAPTAIN 1: Well, I mean, if it would have -- it could have flared before we got there. I wasn't --

UNIDENTIFIED SPEAKER: You didn't see anything?

CAPTAIN 1: I didn't -- it didn't flare when we were there. So I had him kind of knock the fire down around that thing. I drug it out of the flames and kind of put it up against a curb. There was also another -- a red high-pressure flammable cylinder that was down in the gully by the cab of the truck, and that seemed to be intact, although sheered from its plumbing. The foam op struggled just because of how we were applying the foam without an aerating nozzle. We tried several fire extinguishers, dry chems and CO2s, to try to hasten the knockdown.

Eventually, it just came to just cooling of water and some foam and the fire finally died down on us. We had to come back to it a few times because it just kind of flared up a little bit. And that smoke drift was going into the command post and they were getting cranky, so we came back and hit again.

At some point when the fire was knocked down, or when the -- during the fire was knocked, I made a walk down to the gully to look at the wreckage, assuming that I'd find somebody in that.

UNIDENTIFIED SPEAKER: A body?

CAPTAIN 1: Yeah.

UNIDENTIFIED SPEAKER: In the compressed cab?

CAPTAIN 1: Yeah. Yeah, that's usually how it goes.

UNIDENTIFIED SPEAKER: How did you make out?

CAPTAIN 1: I got in there. It took a little bit to figure out what we were dealing with. I'm sure you guys have seen the wreckage.

UNIDENTIFIED SPEAKER: Yep.

CAPTAIN 1: I was -- I did -- looked on the side of the thing and it was -- I can't remember -- Crop Management or something, Harvest Management. And so I was like, oh, okay, it might one of those farm trucks that has a single cab.

UNIDENTIFIED SPEAKER: Yeah.

CAPTAIN 1: And I go, well, maybe he was pulling some type of a utility trailer or something, that he's servicing farm equipment or something like that. I went in there, I found the cab, and I'm like, okay, this is definitely the cab. Got in, pulled some of the stuff back a bit, stuck

my head in there with a flashlight. No indications that there was somebody in there during the time of the collision, no blood, no anything, no body.

UNIDENTIFIED SPEAKER: There wasn't any fire impingement in the cab area?

CAPTAIN 1: No, there was not.

UNIDENTIFIED SPEAKER: Okay.

CAPTAIN 1: So the engine had removed itself and was sitting in front of it. That was the only hot thing that was there, but it wasn't on fire at all. I -- there was some clothing and some work uniforms that were in there in a bundle like he had -- the person who was driving had received a uniform delivery of some type. I pulled one of the uniforms out that had his name on it.

CAPTAIN 1: Just in case.

UNIDENTIFIED SPEAKER: Yeah, just so I can take up to the command post because I wasn't sure where he was. So I walked around and little bit and then came back towards the scene, walking west, walked back, checked on those guys, and then started walking westbound on the tracks looking for a body. I wasn't totally convinced that he had exited --

UNIDENTIFIED SPEAKER: An ejection?

CAPTAIN 1: Yeah. So I walked up, and then I noticed some peculiar things about the crash scene as the fire was being knocked down. Like the railroad crossing, that was in the median or possibly even west of the median, was involved in the wreck. There was rocks from the tracks.

UNIDENTIFIED SPEAKER: Track rocks? Ballast?

CAPTAIN 1: Okay, ballast. There was --

UNIDENTIFIED SPEAKER: It's called ballast, yeah.

CAPTAIN 1: There was ballast west of the intersection -

UNIDENTIFIED SPEAKER: West of the intersection?

CAPTAIN 1: -- which led me to believe that maybe the contact of the vehicle had been not in the intersection. I walked the tracks westbound --

UNIDENTIFIED SPEAKER: Walking west, okay.

CAPTAIN 1: -- and I'm seeing damage to the ties. I find a brake --

UNIDENTIFIED SPEAKER: Creasing along the top beam? Okay.

CAPTAIN 1: -- I find a brake rotor. I found a drive axle.

UNIDENTIFIED SPEAKER: Drive shaft?

CAPTAIN 1: Yeah, a drive shaft.

NTSB INVESTIGATOR: And approximately how --

CAPTAIN 1: Forty-five feet.

NTSB INVESTIGATOR: -- how many feet from the intersection total did you see

debris?

CAPTAIN 1: About 35 to 45 feet, I would say, upon my recollection, and then it ended. There was also a seemingly, to me, at that hour of the night, maybe like a dampening of that area, like there was some type of a liquid that was cast out in that track area.

UNIDENTIFIED SPEAKER: And it hadn't been burning or anything like that? CAPTAIN 1: No. No, no, no. UNIDENTIFIED SPEAKER: It was just a wet fluid or some sort? CAPTAIN 1: Something that had -- yeah, that looked like it was kind of concentrated

--

UNIDENTIFIED SPEAKER: Sprayed out?

CAPTAIN 1: -- in that area.

UNIDENTIFIED SPEAKER: Okay.

CAPTAIN 1: I walked another hundred feet just -- I don't know. I just wanted to

check.

UNIDENTIFIED SPEAKER: Sure.

CAPTAIN 1: I didn't see anything else.

UNIDENTIFIED SPEAKER: Nothing else?

NTSB INVESTIGATOR: To the west?

CAPTAIN 1: Yeah. I turned around and came back, walked back. I was looking in the trees. I was looking in the yard to the north just -- I saw some stuff up to the west. It was a pile of garbage, but I wasn't sure what it was.

UNIDENTIFIED SPEAKER: Were the crossing lights still illuminating, flashing or whatever?

ENGINEER 1: Um-hum. They were -- they were whole time we were there, they were flashing, yeah.

UNIDENTIFIED SPEAKER: Flashing?
CAPTAIN 1: I remember hearing -UNIDENTIFIED SPEAKER: Was there a bell ringing, a bell?
UNIDENTIFIED SPEAKER: From the train?
ENGINEER 1: The only bell I heard was the train bell.
UNIDENTIFIED SPEAKER: Train bell.

UNIDENTIFIED SPEAKER: Yeah.

ENGINEER 1: Not the crossing arm bell, but the lights were flashing.

UNIDENTIFIED SPEAKER: But the flashing lights, so they're normal, were all still illuminating --

ENGINEER 1: Yes.

UNIDENTIFIED SPEAKER: -- and such? Okay.

CAPTAIN 1: Came back. I went over to the command post with my shirt and what my knowledge was of the damage to the west of the intersection and found my battalion chief, who was running the -- Chief ------, and when he had a half a second, I just said what my observations were, that I believed that the vehicle was actually on the tracks westbound or west of the intersection

UNIDENTIFIED SPEAKER: Not on the pavement?

CAPTAIN 1: -- not on the pavement -- and I was concerned that that was either by error or by purpose. And so I wanted to -- or wanted to pass that information on, along with the identifying shirt of what the person might be wearing, to law enforcement, who was --

UNIDENTIFIED SPEAKER: Good observation.

CAPTAIN 1: -- who was sitting there. And so the sergeant who was running the operation for OPD was there and I gave him my information and I gave him the shirt.

UNIDENTIFIED SPEAKER: Had PD arrived on the scene yet?

CAPTAIN 1: By that time, there was a quite a presence of PD. They were there probably before we were in the squad car level.

UNIDENTIFIED SPEAKER: And was PD in the command post, represented in the command post?

CAPTAIN 1: At the point when I walked up and handed the shirt and made my observations known to Chief ------, he immediately turned to the sergeant and asked for there to be a unified command.

UNIDENTIFIED SPEAKER: Perfect. Go ahead. That, to me -- I'm an ex-firefighter myself. That, to me, would have immediately elevated your observation there to a higher unified command level as well.

CAPTAIN 1: Yeah, um-hum.

UNIDENTIFIED SPEAKER: Yeah, I agree.

CAPTAIN 1: So I gave him my stuff, I went back to my guys, and finished supervising their efforts. Fire knocked down. We continued to look around the scene just in case we were missing, you know, the gentleman that was in the vehicle. Never found anything.

NTSB INVESTIGATOR: Do you -- and -- I'm sorry.

CAPTAIN 1: You're fine.

NTSB INVESTIGATOR: Yeah, go ahead. Yeah.

CAPTAIN 1: Oh, okay. So we never found anything. And at some point the fire had pretty much knocked down. I went over to the command post to talk to CAPTAIN 1 again, just because there's so much radio traffic and he was only a few steps away -- that was Chief ------ and he was just a few steps away, so I just walked up and just said, hey, we're -- we have this thing kind of knocked down; we can be reassigned. I wanted to get over to the train and assist the other guys at what they were doing. He then assigned me to hazard control, which kind of broadened our scope, and now instead of just working on that one incident at the intersection, now we were in charge of hazards throughout the entire incident.

There was also a safety officer, Battalion Chief ------, who was already assigned to safety, but we were kind of working under operations at that point for hazard control.

UNIDENTIFIED SPEAKER: Did you need SCBA at any time?

CAPTAIN 1: Yes, for sure. The firefighters were on SCBA during the firefighting.

I was not.

UNIDENTIFIED SPEAKER: Because you were roving?

CAPTAIN 1: Because I was outside of that area. I'm within a few steps of where they are, but I'm outside of the smoke.

UNIDENTIFIED SPEAKER: And you had a safety guy monitoring all the time?

CAPTAIN 1: Yeah. Battalion Chief ------ had been just doing -- just roving in circles around the --

UNIDENTIFIED SPEAKER: Any need for an RIT?

CAPTAIN 1: There was no RIT team established.

UNIDENTIFIED SPEAKER: None established?

CAPTAIN 1: There was no interior IDLH environment that we were going into, and so nobody established an RIT.

UNIDENTIFIED SPEAKER: Okay.

CAPTAIN 1: So we made our way down to the train. We were looking for hazards. We noticed that the bells on the lead car were still operating, as well as the lights were still flashing. We had received reports that --

UNIDENTIFIED SPEAKER: Headlights?

CAPTAIN 1: Yes, the headlights. We had already received reports that power had been secured, and so that led me to have a concern over that being true.

UNIDENTIFIED SPEAKER: Power, meaning diesel locomotive?

CAPTAIN 1: Yes. And I -- this is where --

NTSB INVESTIGATOR: You mean you had heard that the power had been secured

CAPTAIN 1: To the train.

NTSB INVESTIGATOR: -- so, but because there's still lights on, you're wondering -

CAPTAIN 1: Yes.

NTSB INVESTIGATOR: -- is that really true? Yeah.

CAPTAIN 1: Right. And so, I mean, it -- I guess it depends on what definition of "power is secure" to know what degree and what's important. I mean --

UNIDENTIFIED SPEAKER: It is a diesel electric locomotive --

CAPTAIN 1: Right.

UNIDENTIFIED SPEAKER: -- so there's electric involved. So is that where you're thinking --

CAPTAIN 1: Yes. I mean, I have a significant, you know, clanging bell and, you know, incandescent lights

that are shining to some degree. I don't know if that's a very small circuit. I know trains carry significant voltage --

UNIDENTIFIED SPEAKER: True.

CAPTAIN 1: -- and I had a concern. I didn't want my guys unplugging or touching or pulling plugs.

UNIDENTIFIED SPEAKER: Otherwise getting zapped?

CAPTAIN 1: Yeah. I called up to the IC and asked for a representative from Union Pacific to come to that location and secure the front car, and then they said that they would be working on it. We continued on our walk. We noticed that the locomotive and the car in front of it was not on the tracks and it had a list to it.

UNIDENTIFIED SPEAKER: Was the locomotive still idling or operating or then shut down entirely?

CAPTAIN 1: No. I think -- I did not notice that that was ever running when we were there.

UNIDENTIFIED SPEAKER: It was quiet?

CAPTAIN 1: It was quiet.

UNIDENTIFIED SPEAKER: It would have obvious that it was idling?

CAPTAIN 1: Oh, I think I would have noticed, yeah. That was a concern of ours. I was -- on our way back, I was going to have our firefighter flag that area just to make sure that people weren't walking back and forth underneath it.

We continued around and went into -- they were still working on -- well, actually, they had finished removing all of the victims out of the area. There were -- we had walked around the back and just -- I think they were finishing secondaries on some of those cars, and the guys were working and I asked has this car been secondaried? And they were like, well, if you guys want to go do it, we can -- you can do it. I wanted to get these guys to see what an interior of a train car looked like on its side and how we would be able to move back and forth and just an opportunity for training.

UNIDENTIFIED SPEAKER: Training opportunity, sure. CAPTAIN 1: So, we entered the first car and we walked --FEMALE SPEAKER: Can you point which ones -- first three? CAPTAIN 1: This car right here. So we entered in --FEMALE SPEAKER: 645.

CAPTAIN 1: -- in the rear. We were on SCBA, but we weren't on air. And we walked along the floor or the side of the car, at that point, all the way to the conductor or the engineer's chair.

UNIDENTIFIED SPEAKER: All the way through?

CAPTAIN 1: We did find a backpack that was in the passenger space and we did find a set of what appeared to be conductor keys.

UNIDENTIFIED SPEAKER: In the ignition?

CAPTAIN 1: No, on the ground.

UNIDENTIFIED SPEAKER: On the floor?

CAPTAIN 1: On the floor.

UNIDENTIFIED SPEAKER: On the, on the -- okay.

CAPTAIN 1: We picked both of those up and we went into the conductor's area. We lifted the door because the door was on its side. It was now a trap door. I lifted that area and pinned it open with an ax and FF 1 went inside and gave that a secondary. Because there was a bit of clothing and stuff in there and we wanted to make sure that, obviously, there was nobody injured. We did not pull any equipment out of the conductor's -- or out of the engineer's area. Even though there was a backpack and some other equipment, we just left it, okay? I didn't know what kind of investigation you wanted to do with that.

UNIDENTIFIED SPEAKER: And the bell is still --

CAPTAIN 1: The bell is still intermittent, yeah, bing, bing, bing. So we backed out -

ENGINEER 1, you had the backpack? ENGINEER 1: I had the keys. CAPTAIN 1: You have the keys? ENGINEER 1: Um-hum. CAPTAIN 1: And did you have the backpack? FF 1: I handed it to -----.

CAPTAIN 1: Okay, and then ----- gave the backpack to somebody else who was collecting information. ENGINEER 1 had the keys. ENGINEER 1 then gave me the keys.

Did I give you the keys?

FF 1: Um-hum.

CAPTAIN 1: Okay. There, that's where the keys went.

FF 1: I gave you the keys a while later because they're on the Halligan and I was carrying that around.

CAPTAIN 1: Oh, okay. And you gave them back to ENGINEER 1?

FF 1: ENGINEER 1 gave them to me.

ENGINEER 1: I wanted to make sure we didn't lose them, so I hooked them on his

Halligan.

FF 1: Yeah, he hooked them on the Halligan.

UNIDENTIFIED SPEAKER: We already know who's got the keys.

CAPTAIN 1: Okay, yeah.

ENGINEER 1: Everyone touched them.

CAPTAIN 1: Yeah. So, anyways, I wanted to make sure that he --

UNIDENTIFIED SPEAKER: No lost keys.

CAPTAIN 1: You got the keys back and you're happy about that.

NTSB INVESTIGATOR: Okay.

CAPTAIN 1: And so that was kind of what we did.

INTERVIEW OF FF 1

NTSB INVESTIGATOR: So, let's go through with you. I mean, do you see anything else separate that you -- that we didn't say? Or describe your duties and what you did on the train.

FF 1: Same, dispatch information. It just seemed like the dispatcher was flustered and I had done a --

NTSB INVESTIGATOR: Oh, and your name is?

FF 1: Oh, Firefighter FF 1.

NTSB INVESTIGATOR: FF 1, okay. And for the tape, so I know who it is, FF 1.

Okay.

FF 1: Yes. And I had gone and sat along with her before and she's been a dispatcher for a long time, so I knew that if she was flustered with some information that there was a lot going on, so I just -- running that through my head. I think I remember hearing that there might have been one of the train cars on fire, so I'm thinking that there would have been a lot of people involved if that was the case. So I'm just kind of running things through my head how we would report on that. But then like everything else that Cap said was spot on, and ENGINEER 1 as well.

I pulled the booster line pretty quickly and went on air right away just because I saw what it was giving off. It was giving off a lot of smoke too. I made a mental note for cylinders down as I advanced towards the fire, and then probably 10 or 15 seconds later, Cap kind of gave a verbal like, hey, look out; there are cylinders down; they look flammable.

I called for water, and then I was like, hey, foam too. I just made it verbal. I'm sure that ENGINEER 1 had that thought in his head. I bled the nozzle a little bit to try to get some foam going, and then I hit what looked to be flammable liquids on fire and it gave the reaction that you expect if you hit water with a flammable liquid. So we wanted to wait a little more, so I bled the nozzle a little bit more to get better foam solution even though, like they say, we didn't have the right amount of agitation or aeration to give us a good foam solution.

And from there, it was just a really stubborn fire because it was so hot. And I was really close up in it and there were times that were a little interesting where I'd put a section of fire out and I'd get -- advance, I'd advance really close to like the cargo, and then it would kind of reignite a little bit and it would feel like -- it would start to circle behind me, which I would --

UNIDENTIFIED SPEAKER: Was it burning blue?

FF 1: It was not. I don't remember it burning blue, not much. I do remember it looked like maybe some metals were burning and one of -- and something bright was burning like in the actual, like, core of the fire, which was in this area. There was something burning really bright that looked like, I was thinking, like magnesium or something like that because it was putting off a really bright burn.

NTSB INVESTIGATOR: So it's the area of the trailer?

FF 1: Yeah. And then like we were just figuring farm equipment, and then it just like -- yeah, it just took a lot longer than I thought it would. Like these guys were saying, it was just really stubborn because it was burning so hot and the foam wasn't doing much for us until we got

some extinguishers on it that kind of helped knock it down and then we were able to cool it enough to the point that we felt like it had been knocked down.

I hit mainly from the engine side, and then once I had a decent knockdown on that side, I came around to the north of the fire and hit it from there. But for the most part, I was on the south side of the fire for the majority of the attack and then I came around at the end to finish putting it out. And then I think there was an overturned -- it looked like diesel was burning or something because it had like a red dye to it, and I know that they --

UNIDENTIFIED SPEAKER: Was it slippery when you walked on it when it was extinguished?

FF 1: I didn't have any slipping issues, but I know that -- I was careful of my footing because I knew that there was a lot of liquid on the ground.

UNIDENTIFIED SPEAKER: We're thinking hydraulic fluid.

FF 1: Hydraulic fluid, okay.

UNIDENTIFIED SPEAKER: Yeah. And if you haven't experienced putting that stuff out, it's a little tricky.

FF 1: Okay. Yeah, I've --

UNIDENTIFIED SPEAKER: Stubborn, but --

FF 1: Okay.

UNIDENTIFIED SPEAKER: -- you can do it.

FF 1: I've never put out hydraulic fluid burn, to the best my knowledge before, but --

CAPTAIN 1: That was in that rectangular looking --

UNIDENTIFIED SPEAKER: Yep, that's what I'm thinking. That's what you and I were thinking last night.

FF 1: Okay. Yeah, because we -- someone ----- turned that right side up because it was right -- it was tipped over and it was leaking fluid initially, and ----- tipped it very - pretty early so that it stopped giving off the fluid, so that helped. But he described it as red, and then I was thinking, okay, diesel, just because I had seen diesel dyed before. But, yeah, it makes sense, hydraulic fluid.

From there, after we had knocked down, ENGINEER 1 kept giving me an update on our water supply, which was good. He would just make a verbal because, like I said, radio traffic was really tied up. And then we got reassigned into hazard control. We left all our equipment as is and then we took -- we just loaded up with the equipment we figured we might need. We took monitors, because if we had any leaking liquids, we wanted to see if they were combustible or what we were dealing with. We -- on one of them, on this car, there was a leaking liquid, but we think it was -- UNIDENTIFIED SPEAKER: Which car?

FF 1: 206.

UNIDENTIFIED SPEAKER: It was a 206.

FF 1: There was leaking liquid.

UNIDENTIFIED SPEAKER: Leaking liquid from where?

FF 1: From about here.

CAPTAIN 1: Yeah, right, right --

UNIDENTIFIED SPEAKER: What would be leaking there? There's nothing there

that could --

CAPTAIN 1: Right in this area, there's a little bit of leaking.

UNIDENTIFIED SPEAKER: Batteries or something. I don't know.

UNIDENTIFIED SPEAKER: Batteries. Acid.

FEMALE SPEAKER: Air conditioning.

CAPTAIN 1: I took my ax, got some of the liquid, smelled it, and it smelled like --

UNIDENTIFIED SPEAKER: Sulphur?

CAPTAIN 1: -- like anti-gunk. So I don't know if that's where the bathrooms are --

UNIDENTIFIED SPEAKER: Was it blue?

CAPTAIN 1: I didn't look at the --

UNIDENTIFIED SPEAKER: It was a toilet.

UNIDENTIFIED SPEAKER: Toilet?

UNIDENTIFIED SPEAKER: It was. It was blue. It was --

CAPTAIN 1: Okay. It's definitely --

(Simultaneous conversation.)

UNIDENTIFIED SPEAKER: It had to be.

UNIDENTIFIED SPEAKER: Yeah, that's what it was. When we (indiscernible). That's what it was.

CAPTAIN 1: And then I thanked FF 1 for making me smell the liquid and I said thanks.

UNIDENTIFIED SPEAKER: Yeah.

UNIDENTIFIED SPEAKER: Yeah, it was the toilet.

CAPTAIN 1: Because he, FF 1, he did think --

UNIDENTIFIED SPEAKER: It could have been worse.

UNIDENTIFIED SPEAKER: That's right.

CAPTAIN 1: Yeah. Exactly. But that's why I didn't touch it. I just wanted to check it, put it on the head of the ax and put it next to my nose. I could --

UNIDENTIFIED SPEAKER: That's right.

CAPTAIN 1: -- like a anti-gunk type smell.

FF 1: That was after we had made entry into whatever it was -- 240 -- or, 645. After we had made entry in the back car, that's when I noticed the leaking liquid on that. That was the only leaking liquid I had seen, though.

And then I was the one that did -- we ended up flagging -- this is 263 -- a lot later on, just because it was -- it looked unstable so Cap wanted to just keep people away from it.

And just to reiterate what they said, I did see the lights still on, on the railroad crossing, and I did hear the bell, but I guess -- but thinking about it later, it probably wasn't coming from those actual arms; it was probably coming from the train up there because we did -- when we went and looked at it, it sounded exactly like that.

UNIDENTIFIED SPEAKER: Yeah, there's actually two bells involved. There's a bell at the crossing itself that will -- when the gate's coming down, but then it's supposed to stop. Then it's quiet and you just hearing the clicking maybe of the lights, okay?

FF 1: Right.

UNIDENTIFIED SPEAKER: And then there's a bell, of course, on the -- in the train itself, and that's activated when you're in a station or whatever.

FF 1: Because I know I heard the bell while -- early on hitting the fire, I heard the bell, but I can't tell you if it was that one or which bell it was. But I -- it just gave me, just kind of had a safety concern.

UNIDENTIFIED SPEAKER: Yeah. There's a bell, of course, a locomotive and a bell on the cab car, and you might not have differentiated between the two.

UNIDENTIFIED SPEAKER: Right. Exactly.

UNIDENTIFIED SPEAKER: The cab car being further on down, so you may not have heard that one.

ENGINEER 1: Yeah. I had looked at the crossing arms because I was kind of looking at it and I'm like, oh, wow, the light are still blinking. And at the time, I noticed for sure that the bell was off on the crossing arms because I was looking - because my son plays with a Thomas the Train. And I'm like, oh look, the lights are still on and it looks like everything's stopped. I was surprised that the lights were still blinking, so --

NTSB INVESTIGATOR: Okay. All right, shall we go on to you then?

UNIDENTIFIED SPEAKER: I wasn't there.

ENGINEER 1: He wasn't there.

NTSB INVESTIGATOR: Oh, that's right. Yeah, we're -- sorry.

ENGINEER 1: He wishes he was there.

UNIDENTIFIED SPEAKER: I had a question. Nobody hurt?

CAPTAIN 1: Nobody from our crew was injured.

UNIDENTIFIED SPEAKER: Anybody in the fire department hurt at all that you've

heard?

CAPTAIN 1: I haven't heard of anything.

UNIDENTIFIED SPEAKER: You would have heard probably.

CAPTAIN 1: Usually.

UNIDENTIFIED SPEAKER: Okay, good. There's a high-pressure gas main according to the gas markers. Are you aware of those?

CAPTAIN 1: No. I am aware of the high-pressure gas line, but I was not thinking of that on the incident.

UNIDENTIFIED SPEAKER: And there was nothing that was breaching the soil there, so that wouldn't necessarily have come to mind? Is that what you're thinking maybe?

CAPTAIN 1: Mainly maybe just the incident being the size of -- that it was, I just did not -- occur to me to consider it.

UNIDENTIFIED SPEAKER: The reason I ask is that we've had situations before where heavy locomotives or whatever will -- what we call plow ballast, where they slide along the soil, and we've had situations where they've actually ruptured a gas main, or come close to it. Here, there was obviously no evidence of that, of plowing down at that that area, but the ballast was all plowed further on down where there's no pipe marker. I wanted to see if you were aware of it. Thank you.

UNIDENTIFIED SPEAKER: And you guys were over the hazards, correct?

ENGINEER 1: We were what?

UNIDENTIFIED SPEAKER: Were you guys on hazard duty or was it the other --

CAPTAIN 1: We were.

ENGINEER 1: We were.

UNIDENTIFIED SPEAKER: You were. Okay, the poles -- was the ever an issue? It looks like at 206 or one of the cars actually sheared off half the --

CAPTAIN 1: The pole was noticed. The pole was -- it appeared to holding fiber optic com lines.

UNIDENTIFIED SPEAKER: Gotcha.

CAPTAIN 1: And it was -- probably half of it was sheared, and then it just, under its own weight, dropped back down --

UNIDENTIFIED SPEAKER: Dropped and (indiscernible).

CAPTAIN 1: -- and just sat. We notified Verizon for their response.

UNIDENTIFIED SPEAKER: That's all I wanted to know.

CAPTAIN 1: That was part of our hazard assessment.

UNIDENTIFIED SPEAKER: Gotcha.

UNIDENTIFIED SPEAKER: You noted that you entered car 645 to let everybody get a view of what's actually -- what the interior looks like. Have you ever been involved in a full-scale drill or been invited by the railroad to participate in a full-scale drill? Or have you ever received any material or equipment familiarization, paperwork for the equipment out there, railroad cars, things like that?

UNIDENTIFIED SPEAKER: SOPs and that kind of stuff from the railroad?

CAPTAIN 1: We have received training from the railroad on a few occasions during

my career.

UNIDENTIFIED SPEAKER: This is Metrolink?

CAPTAIN 1: We had an Amtrak train and --

ENGINEER 1: We had both together come, Amtrak and Metrolink.

UNIDENTIFIED SPEAKER: A joint training (indiscernible) exercise?

UNIDENTIFIED SPEAKER: ------ always and (indiscernible) too.

ENGINEER 1: Um-hum, yes.

CAPTAIN 1: And --

UNIDENTIFIED SPEAKER: How about the Union Pacific freight trains? No? Just passenger trains?

CAPTAIN 1: Yeah.

UNIDENTIFIED SPEAKER: Okay.

CAPTAIN 1: Obviously, you know, training like that is great and we always welcome. And if there's any opportunities we have to get training from something as, you know, as impactful as trains to our city, it would be greatly appreciated.

UNIDENTIFIED SPEAKER: Do you have access to that information if you need -- for the equipment familiarization or anything like that?

CAPTAIN 1: No, just the -- it was just what the class was and what folks can remember from the class. There's not a -- I don't think we have a reference for --

UNIDENTIFIED SPEAKER: When was the last class roughly? Do you remember?

CAPTAIN 1: We just had one.

ENGINEER 1: It was recent; within the last 6 months to a year.

UNIDENTIFIED SPEAKER: Six months -- okay.

ENGINEER 1: Yeah.

UNIDENTIFIED SPEAKER: Yeah, it was just this year.

ENGINEER 1: Yeah. Because we just recently had another --

UNIDENTIFIED SPEAKER: And was that class exercise or did they bring in a real -

- a train to --

CAPTAIN 1: No, it was --

ENGINEER 1: No, train, just a class.

CAPTAIN 1: A class.

UNIDENTIFIED SPEAKER: A tabletop?

CAPTAIN 1: Tabletop.

UNIDENTIFIED SPEAKER: Slide show? PowerPoint?

ENGINEER 1: Slide show.

FF 1: They gave us copies of the PowerPoint as well.

UNIDENTIFIED SPEAKER: How many guys do you recon in your crews or other crews have actually been on one of these trains before?

CAPTAIN 1: Well, I mean, we've all been on these trains. As a passenger --

UNIDENTIFIED SPEAKER: So you have a working knowledge of these as passengers at least?

CAPTAIN 1: As passengers.

ENGINEER 1: One time.

CAPTAIN 1: Yeah.

UNIDENTIFIED SPEAKER: One time?

ENGINEER 1: Well, it's expensive. I only went from Gabriel (ph.) to Santa Barbara to Zune. That's my last time.

Oxnard, CA Survival Factors Highway Attachment 11

CAPTAIN 1: But, you know, as far as like, you know, the procedure for starting it or shutting it down or securing the power, securing different utilities on the thing, I don't think any of us have that firm of an understanding that we would undertake that on our own without having been (indiscernible) --

UNIDENTIFIED SPEAKER: You wouldn't know how to find the shutoff button for the diesel locomotive, for example?

CAPTAIN 1: No, some of us are capable of doing that, but --

UNIDENTIFIED SPEAKER: Not everybody?

CAPTAIN 1: -- not everybody.

UNIDENTIFIED SPEAKER: Okay. Is that something you're going to add to the training regiment, maybe?

CAPTAIN 1: Sure.

ENGINEER 1: Yeah, that'd be great.

UNIDENTIFIED SPEAKER: Okay. I'll give you that opportunity.

ENGINEER 1: Yes.

UNIDENTIFIED SPEAKER: Last question for me, in retrospect, hindsight -everybody is a Monday-morning quarterback -- is there anything you would have done differently to kind of pass along and share with the professional firefighting community, rescue, whatever? Not that you did anything wrong here. The idea is that sometimes you see things you would never see unless you were actually in the suck, so to speak.

CAPTAIN 1: Yeah. I mean, we just did a couple of hours of training today on a very specific thing that we found that lacked for us --

UNIDENTIFIED SPEAKER: What was that?

CAPTAIN 1: -- and that was the production of high-quality foam in a low GPM rate.

UNIDENTIFIED SPEAKER: What kind of foam do you carry?

CAPTAIN 1: We carry an AB foam.

UNIDENTIFIED SPEAKER: AB? Okay.

FF 1: FireAde 2000.

CAPTAIN 1: And for us, when we apply a low GPM, it's usually out of our booster line, which is a small red attack line that we use for car fires and things like that.

UNIDENTIFIED SPEAKER: And you mentioned it wasn't mixing --

UNIDENTIFIED SPEAKER: Wasn't aerating correctly?

UNIDENTIFIED SPEAKER: -- aerating correctly?

CAPTAIN 1: Right. It was -- the mixing is done at the pump by ENGINEER 1, but the aeration is done at the nozzle.

UNIDENTIFIED SPEAKER: Is that a --

CAPTAIN 1: It's a longer tube nozzle that lets air in through the back by a Venturi.

UNIDENTIFIED SPEAKER: Right. And there's two different valves they use. One's an angle valve and the other one's kind of a slide valve.

CAPTAIN 1: We -- ours are, they're just over-nozzles that clip over the bale, and then have a cam, and then that entrains air into the stream. Well, our boosters are -- have a bale that's too small.

UNIDENTIFIED SPEAKER: These are 1-inch boosters?

CAPTAIN 1: Yeah.

UNIDENTIFIED SPEAKER: Okay.

CAPTAIN 1: And so, what we did today is we wanted to come up with something that could provide low-GPM high-quality foam, so we fished around and found that one of our nozzles has the ability to select a gallonage down to 30. And it does fit the foam aeration nozzle. And we tested it --

UNIDENTIFIED SPEAKER: And it works?

CAPTAIN 1: -- today and it produced a very nice blanket of foam --

UNIDENTIFIED SPEAKER: Great. Wonderful.

CAPTAIN 1: -- at very low GPM so we would be able to fight fire for a long period of time, which is important because we don't want to run out halfway.

UNIDENTIFIED SPEAKER: And you're thinking maybe put one of these on each engine with a booster line?

CAPTAIN 1: We have them. We already have them.

UNIDENTIFIED SPEAKER: Oh, good.

CAPTAIN 1: So it's just --

UNIDENTIFIED SPEAKER: It's a done deal.

CAPTAIN 1: -- a different way of looking at the toolbox. We found a tool within our toolbox that we could modify and that would work beautifully.

UNIDENTIFIED SPEAKER: And prior to this, you just never would have discovered it --

ENGINEER 1: Exactly.

UNIDENTIFIED SPEAKER: -- because you never had an episode that exposed this type of challenge.

ENGINEER 1: We never need low-GPM foam before. Usually, we just do it on the end of our hotline, which is 125 GPM, and that's just to let down whatever products inside of --

UNIDENTIFIED SPEAKER: Car fires you just use, what, inch and three-quarter or -

ENGINEER 1: Yes. CAPTAIN 1: No, we just use the booster. ENGINEER 1: The booster. UNIDENTIFIED SPEAKER: Booster? Okay. CAPTAIN 1: Yeah. ENGINEER 1: But we really needed a nice --UNIDENTIFIED SPEAKER: Water, volumes of water.

ENGINEER 1: Yes, yeah. And we just really needed at that time low-GPM really good quality foam. Because when I was watching FF 1 apply the foam, I started at 3½ percent foam on the gauge, saw that that was still not adequate so I bumped it up to 5 percent. He was still struggling with getting the foam to stay on the fuel. I bumped it up to 6½ percent just to give it a crazy amount of foam in the product. But the issue wasn't how much solution was going into the water stream, it was the --

UNIDENTIFIED SPEAKER: Aeration.

ENGINEER 1: -- aeration part. That was the main thing. Because with the test we did today, same GPM, one with the aeration device, one without.

UNIDENTIFIED SPEAKER: How many tubs of foam to you carry, in general?

ENGINEER 1: We carry 15 gallons of -- in containers, three containers, and then we also carry -- I believe we have a 20-gallon tank on board.

UNIDENTIFIED SPEAKER: Okay. And there's plenty of other engines around that would carry a like amount?

ENGINEER 1: And that's what we did. We ended up going through -- I think I went through either 11 buckets of foam and I used our -- I initially used our entire tank, and then as I saw the light going down, I'm like, okay, I'm going to need more foam. I was starting to change over into my drafting situation and started lining up my buckets. Put the drafting in before I ran out my tank. I'm like I'll just start drafting now so if I run out here, I can go off the tank again. And then at that time I just left the pump panel, because everyone's busy, and I start pumping the second engine, grabbing their --

UNIDENTIFIED SPEAKER: Grabbing their --

ENGINEER 1: -- foam.

UNIDENTIFIED SPEAKER: Yep. Okay.

ENGINEER 1: And I grabbed foam from probably four different engines, just the containers, 5-gallon containers.

UNIDENTIFIED SPEAKER: And there was more available, if need be? You could have called in more?

ENGINEER 1: We -- I believe we do have -- our station 4 contains all the foam and we could --

UNIDENTIFIED SPEAKER: Is that a trailer --

ENGINEER 1: I mean, everyone was there.

UNIDENTIFIED SPEAKER: -- or they can bring it on a trailer then?

ENGINEER 1: It's just a shed and --

Do we have a trailer, trailer of foam still or --

UNIDENTIFIED SPEAKER: A lot of times companies will have a foam trailer that they haul out.

ENGINEER 1: Do we still have that Steve or --

UNIDENTIFIED SPEAKER: There's a trailer (indiscernible).

ENGINEER 1: We're still given access to ---

CAPTAIN 1: We have access to crash 50s, which is out of the airport, which is a crash truck that carries a ton of --

UNIDENTIFIED SPEAKER: Oh, that's right. You've got the airport crash truck.

ENGINEER 1: Right down the street.

UNIDENTIFIED SPEAKER: Right, right.

CAPTAIN 1: A ton of foam right down the street ---

UNIDENTIFIED SPEAKER: Right, right, right.

CAPTAIN 1: -- and that was going to be a phone -- that was going to be a call I was going to make if we had --

UNIDENTIFIED SPEAKER: If needed. Good.

CAPTAIN 1: -- had a significant problem. But we -- it doesn't appear that we were going to need it, so --

ENGINEER 1: Yeah.

UNIDENTIFIED SPEAKER: Anything else hindsight, retrospect, you can think

about?

ENGINEER 1: I think we discussed the way we went into the train, the actual train car, about, you know, we were expecting it to be difficult to walk through and have all the seats down and everything. It was actually very simple to walk along the ceiling side, which became floor

UNIDENTIFIED SPEAKER: Right.

ENGINEER 1: -- the ceiling edge, and have great visibility of all the rows, all the seats. And that's what I was shocked about, just the visibility, being able to recognize where patients would be immediately. There wasn't like a wreckage of seats being blown out. So we kind of discussed and decided like, wow, this was actually held together quite well. Because we all saw the incident, which we were expecting it to be more like the incident near Simi. What was that one?

UNIDENTIFIED SPEAKER: Chatsworth?

ENGINEER 1: The Chatsworth incident. That's what I was expecting.

UNIDENTIFIED SPEAKER: Yeah, Chatsworth was entirely different. I worked that myself and that was the severe telescoping. That's where you actually had one car --

(Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:	METROLINK GRADE CROSSING ACCIDENT
	OXNARD, CALIFORNIA
	FEBRUARY 24, 2015
	Interview of ENGINEER 1, CAPTAIN 1,
	and FF 1
DOCKET NUMBER:	HWY-15-MH-006
PLACE:	Oxnard, California
DATE:	February 25, 2015

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.