Articles in support of Assembly Bill 138

(This article appeared in the LA Times on October 2, 2008)

Train engineer sent text message just before crash

A Metrolink engineer sent a text message from his cellphone 22 seconds before he collided with an oncoming freight train in an accident that killed 25 people last month, according to preliminary information released Wednesday by federal authorities.

Engineer Robert M. Sanchez sent the message at 4:22 p.m., just before he slammed into the Union Pacific train Sept. 12 in Chatsworth, the National Transportation Safety Board said in a statement. He also received a message about a minute earlier, the agency said.
In all, Sanchez received or sent 57 text messages while on duty the day of the catastrophic collision.

The findings fill in key gaps regarding the moments before the crash and indicate that Sanchez was conscious and feeling well enough to text, even though the practice is strictly prohibited by Metrolink policy. Officials didn't say whom Sanchez was messaging. A Metrolink official said an engineer on another commuter rail train was suspended for sending text messages about the time of the crash.

The safety board cautioned that additional research was necessary to develop a more complete picture. Determination of "the precise timing and correlation of these events is still underway," the NTSB said.

Two USC academics said Wednesday that judging by what is known about the train's speed after it left the Chatsworth station, the last text message would have been sent shortly after Sanchez passed a signal that should have warned him of the freight train. But it remains to be conclusively determined whether Sanchez had left the station when he sent that message and how close he was to the point of impact.

NTSB spokesman Terry Williams said Wednesday that the agency would not comment beyond the preliminary information in the statement.

Rail experts said they were alarmed that Sanchez was operating his cellphone along a critical segment of the train's downtown L.A.-to-Ventura County run. The area, a mile north of the Chatsworth station, is where Metrolink trains must regularly stop so freight trains can pull off the main track onto a siding.

"For me, it just gives me heart palpitations thinking about it," said Tim Smith, a former train engineer and California chairman of the Brotherhood of Locomotive Engineers and Trainmen, the union that represented Sanchez. "The last thing you want to be doing is something that takes your eyes off the road."

Sanchez's brother, John, said he is still waiting for the NTSB and Metrolink to finish probing whether faulty safety equipment or interference with radio and cellphone communications contributed to the crash. He said the agency seemed more interested in trying to "reinforce what they've said in the past two weeks."

Federal investigators said Sanchez was supposed to stop at a red signal just before a switch mechanism intended to guide the Union Pacific train onto the sidetrack. Instead, Sanchez barreled over the switch at 42 mph, bending it badly, before slamming into the southbound train on a sharp curve about a quarter-mile farther, according to federal investigators. They said Sanchez never hit his brakes.

The safety board said Wednesday that it was continuing to pore over other records at the agency laboratory in Washington, D.C., including computer data from the signal system and the Metrolink train's recorder boxes, which will be synchronized with the times of the text messages.

The data recorder information is critical, experts said, because it will allow investigators to pinpoint the train's location at different moments and show where Sanchez revved up and throttled down his engine.

Investigators have not said whether they think the text messages played any role in the crash or affected Sanchez's ability to operate the train. But the two USC academics calculated for The Times what may have happened just before the crash. Using the NTSB figures that Sanchez's train was traveling 42 mph in the area from the red signal to the collision point and correlating the times of his text messaging, Najmedin Meshkati, a USC engineering professor and veteran transportation safety expert, estimated that the last text message would have been sent about five seconds after Sanchez sped past the signal.

Gokhan Esirgen, laboratory director for instructional physics at USC, also calculated that Sanchez would have sent the last message just after the light. He believes this timetable provided little or no time for Sanchez to react after he saw the oncoming train.

Even if Sanchez wasn't sending a text message at the exact moment of the crash, he may have had "inattention blindness," said David Strayer, a University of Utah psychology professor who's studied cellphone use's effect on motorists.

"If you're busy text messaging and you're taking a minute or so to key in a message, you're obviously not going to see the things that go by when you're looking at the keyboard and screen," said Strayer, adding that it often takes motorists five to 10 seconds to readjust their focus to the road.

The NTSB subpoenaed Sanchez's phone records after CBS radio and TV affiliates in L.A. reported that he had been exchanging text messages with teenage rail fans seconds before the crash. Sanchez sent 24 texts and received 21 while operating the train on his morning shift and sent five and got seven messages in the approximately 80 minutes he was responsible for train No. 111 from 3:03 p.m. until the crash at 4:22 p.m., according to the NTSB.

Metrolink board member Richard Katz said the agency's directors have been advised by staff that the second engineer who was suspended had been text messaging "at the same time" as Sanchez's accident.

He said Metrolink hasn't obtained detailed records of the text messaging histories of the two engineers, "but one theory that is being examined is they were texting each other."

A spokeswoman for Veolia Transportation, which employs all Metrolink engineers, said the firm could not comment on personnel matters but noted that it has a clear policy that prohibits engineers from even possessing a cellphone while operating a train.

Smith, of the engineers union, said he suspects freight and commuter railroad systems have "kind of been looking the other way" on cellphone use in locomotives. He said wireless phones provide an additional means of communication between train operators and dispatchers, who can be "bombarded" with radio traffic.

In the wake of the crash, the U.S. Senate on Wednesday overwhelmingly approved sweeping new rail safety rules, which would require installation, by 2015, of technology that can stop passenger trains headed toward a collision. The legislation would also put a cap on the hours that freight railroad crews can work.

Aug. 30, 2007

'LAS VEGAS DODGED A BULLET': Chlorine-hauling tanker rolls free

Workers able to board, activate brake

By LISA KIM BACH and BETH WALTON
REVIEW-JOURNAL

It could have gone either way.

For a brief slice of time Wednesday morning, the difference between disaster and a normal day in Las Vegas was hitched to a runaway train tanker loaded with hazardous chlorine gas.

The tanker, which escaped the Arden train yard, located south of state Route 160, picked up speed on the downhill and cut a 20-mile swath through the urban heart of Clark County, racing west of the resort corridor and past densely populated neighborhoods around the Union Pacific tracks.

It finally came to rest in North Las Vegas after Union Pacific maintenance workers boarded the tanker, activated the hand brake and ended the threat of an accidental release of poisonous gas.

"Las Vegas dodged a bullet there," said Steve Calanog, the Environmental Protection Agency's chief of emergency response for the Southwest region. "Had the train car released its contents in a residential area, the results could have been tragic."

Calanog said that mild exposure to chlorine gas can cause burning eyes and running noses. Serious exposure can cause lung damage and death.

The Federal Railroad Administration and the Public Utilities Commission of Nevada began an investigation of the incident Wednesday afternoon.

Warren Flatau, a spokesman for the federal agency, said that investigators will question workers and inspect the tanker for mechanical failure. Investigators will look into whether safety protocols were being followed as the tanker was being switched from one train to another.

"This could have been much worse," said Flatau, who works out of Washington, D.C. "Luckily, the worst didn't happen."

Union Pacific dispatchers in Nebraska were able to track the tanker's movement by computer. That information and data gathered by sensors on the railroad will be handed over to investigators.

Union Pacific spokesman Mark Davis, who flew from Omaha, Neb., to Las Vegas after the incident occurred, said such events rarely happen. The incident is being treated as an accident. Davis said that the preliminary information shows no indication of foul play. The tanker's speed reached 50 mph, he said.

Davis and other officials said it was too early to answer several questions:

- Exactly how the tanker broke free.

- How much chlorine gas the tanker was carrying.

- Where it was located when police were first notified.

- And whether other options existed besides allowing the railcar to run its course through the valley.

The Metropolitan Police Department got its first report on the out-of-control tanker at 8:49 a.m., spokesman Jose Montoya said. Five police units and a helicopter followed the path of the chlorine tanker and monitored railroad crossings. By 9:05 a.m., Montoya said, the episode was over.

The Clark County Fire Department's HAZMAT unit was not dispatched because no crash or spill occurred. There was little time to react, said Fire Department spokesman Scott Allison.

"We were aware of it," Allison said. "But the way it was rolling through ... it was going through everyone's jurisdiction pretty fast."

Railways classify chlorine as a toxic inhalation hazard. It and anhydrous ammonia account for 80 percent of all toxic inhalation hazards transported by train in the United States, according to the Association of American Railroads.

Because moving such chemicals is routine, Las Vegas Fire Department Spokesman Tim Szymanski said, railways are not required to alert local authorities when such types of hazardous materials are passing through.

"Those kinds of things go through here from California up to Utah every day," Szymanski said.

On rare occasions, local authorities are alerted when unusually hazardous materials are being moved through, he said, recalling a couple of instances when material was being transported between Los Alamos National Laboratory and the Nevada Test Site.

"You don't let a lot of that information out because you don't want terrorists listening in on it," Szymanski said.

Clark County Director of Emergency Management and Homeland Security Jim O'Brien said his first concern was for motorists at the railway crossings. He was unsure whether the runaway tank car would trip the warning lights.

O'Brien was relieved when police told him at 9:07 a.m. that officers had been stationed at the tracks. At that time, he was told that Union Pacific planned to let the tanker reach the incline at the valley's north end to slow it down. Workers then would board the car and apply the mechanical brake. Davis said that is what happened.

Had a leak occurred, O'Brien said he would have put out a notice on the Emergency Alert System. For the public, sheltering in place is the first option in an airborne release of chemicals, O'Brien said.

"With housing built as recently as ours, it's better to turn off the ventilation and put duct tape around the doors and windows," O'Brien said.

In 2006, the University of Nevada, Las Vegas Institute for Security Studies conducted a vulnerability assessment of threats to Nevada. It found that the most deadly of all natural or man-made disasters for the state was a chlorine gas accident.

Such a disaster would cause between 74,000 and 91,000 fatalities under the worst-case scenario, the report found. That would be triggered by a spill of 34,500 gallons of chlorine, the amount contained in an average railway tanker. The scenario for the worst case was a release of chlorine near the Union Pacific overpass on Charleston Boulevard.

Clark County's last experience with a massive leak of chlorine gas happened in 1991. A cloud of poison gas was released over Henderson after an accident at the Pioneer Chlor Alkali plant. About 70 tons of chlorine escaped, the Federal Emergency Management Agency said.

About 200 people were taken to hospitals to be treated for respiratory distress caused by inhalation. Thousands of people had to be evacuated as the gas cloud drifted before dissipating.

The EPA frequently deals with chlorine releases, Calanog said. Some are far worse than others. In 2005, two freight trains collided in Graniteville, S.C., releasing chlorine gas. The derailment killed several people and injured about 250 others. About 5,400 people had to be evacuated.

Davis said that once investigators determine the cause of Wednesday's accident, Union Pacific will revisit its rail yard regulations.

"The information will be shared industrywide," Davis said.

Review-Journal writers Francis McCabe and Alan Choate contributed to this report.