



NTSB National Transportation Safety Board

*Office of Railroad, Pipeline and
Hazardous Materials Safety*

**Collision of Metrolink Train 111
with Union Pacific Train LOF65-12
Chatsworth, California
September 12, 2008**

Operations Presentation

Efficiency Testing

- Each railroad, under Title 49 CFR Part 217 must carry out a program of operational tests and inspections – efficiency testing.
- Connex provided this testing for Metrolink.
 - Tests were spread out over different times and days of the week.
 - Tests included foreign line crews and Metrolink crews operating on Metrolink's railroad.



The Testing Methods

- Visual observations of crews actions
- Monitoring live and recorded radio and telephone conversations
- Scrutiny of event recorder data
- Use of a radar device for speed monitoring

Prohibited Acts

- Operating rule violations were test failures
- Use of wireless devices would have constituted a test failure
- Unauthorized personnel on the locomotive would have been a test failure

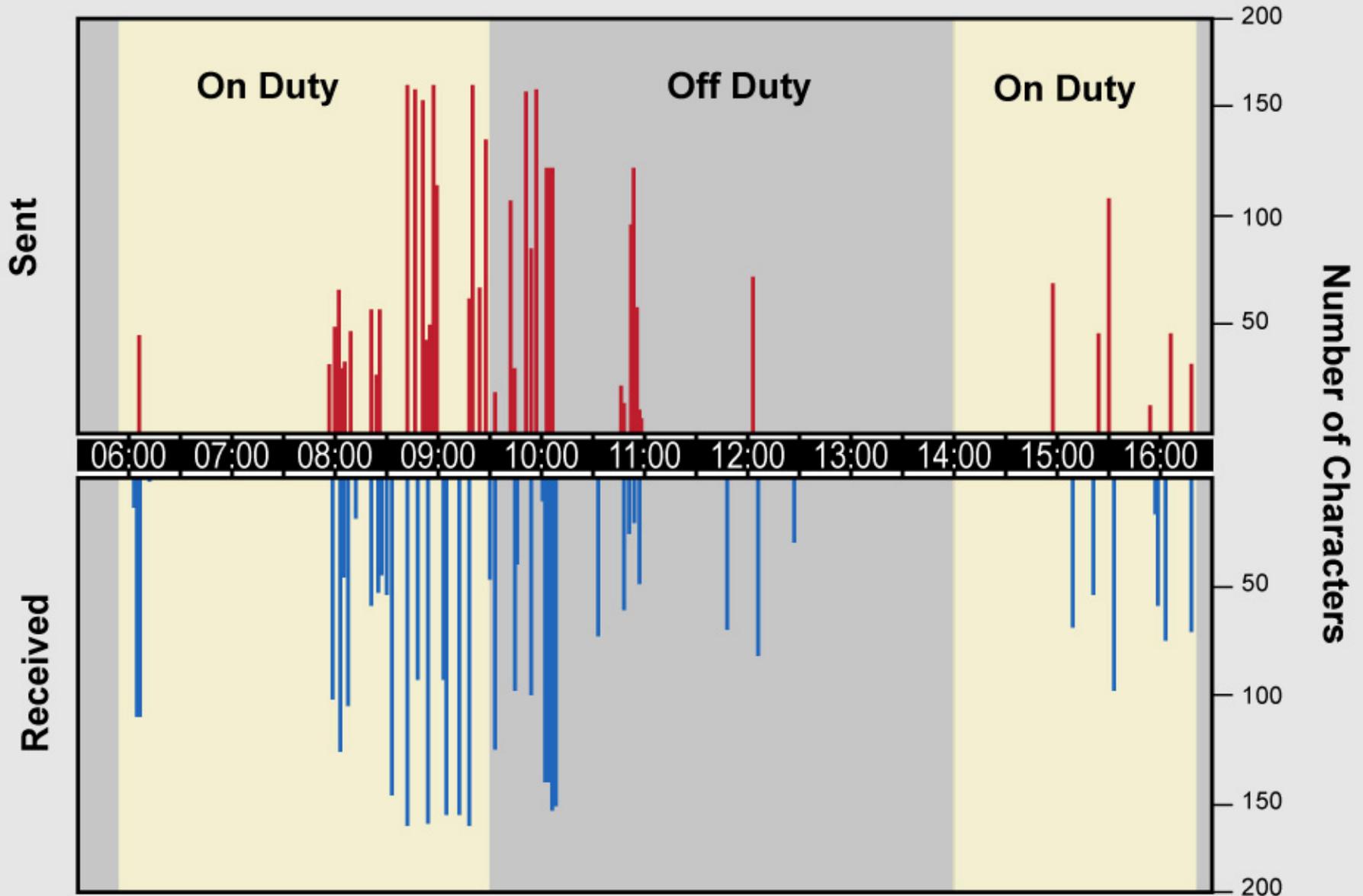
Cell Phone Use

- A significant issue in this accident was cell phone usage by train crews
- Metrolink rule at the time of the accident stated that employees must not use cell phones when operating the controls of moving equipment, except in emergencies

Cell Phone Use

- Metrolink engineer's cell phone calls and text messages collected from the service provider
- Records show the Metrolink engineer sent and received numerous text messages while on duty
- Metrolink engineer's last text message was sent shortly before the accident while the train was in motion

Metrolink Engineer's Text Messages



Engineer's Cell Phone Activity (On Duty)

Weekday	Total Messages Sent	Total Messages Received
Tuesday	19	13
Wednesday	67	59
Thursday	50	42
Total	136	114

Text Message Records

- Indicate engineer had previously allowed unauthorized persons into the locomotive cab and one person sat at the controls while the train was operating
- Indicated an offer for another unauthorized person to ride in cab and operate the train the day of accident
- Rules prohibit these activities

The Accident Engineer

- Twice the accident engineer was counseled about the use of his cell phone
 - Neither instance suggested the extensive use of his phone found post accident
- Metrolink did not have access to the engineer's phone records
- Metrolink was unaware of and unable to determine the extent the engineer used his cell phone

Conclusion

The Metrolink engineer was aware that he was violating company safety rules when he used his cell phone to make calls or to send and receive text messages while on duty, but he continued the practice.

Cab Observations

- When alone in the locomotive, which is normal practice, the engineer cannot be observed.
- When asked how to enforce the prohibition against texting at the Public Hearing held in March 2009, a Connex supervisor said, "...you'd almost have to see a cell phone up to their ear."
- The FRA representative at the Public Hearing said, "...[texting by engineers] is virtually unenforceable."





862

862



METROLINK

Passenger
Information
Telephone
?

2

STAY OFF YELLOW LINE



8484

8484

8484

UNION
PACIFIC

864

Conclusion

Because of the privacy afforded by a locomotive cab or train operating compartment, routine efficiency testing and performance monitoring practices are inadequate to determine whether or to what extent engineers or other crew members may not be complying with safety rules such as those regarding use of wireless devices or allowing access by unauthorized persons.



Conclusion

A train crew performance monitoring program that includes the use of in-cab audio and image recordings would serve as a significant deterrent to the types of noncompliant practices engaged in by the Metrolink engineer and the Union Pacific Leesdale Local conductor in this accident and would provide railroads with a more comprehensive means to evaluate the adequacy of their safety programs.



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