NTSB National Transportation Safety Board

Leading Organizations Safely

94th Annual Railway Tie Association Symposium & Technical Conference

Robert L. Sumwalt
NTSB Board Member

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NTSB is an independent federal agency, charged by Congress to investigate transportation accidents, determine probable cause, and issue safety recommendations.

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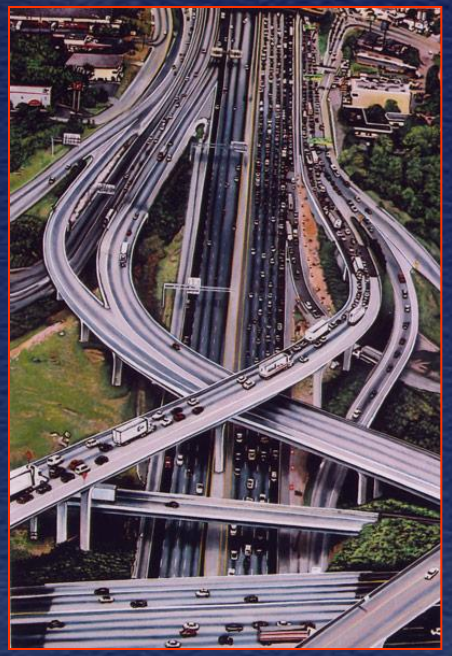

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What is Safety Culture?

"Safety culture is the core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment."

Source: US Nuclear Regulatory Commission

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Do you have a good safety culture?

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Do you have a good safety culture?

- "… it is worth pointing out that if you are convinced that your organization has a good safety culture, you are almost certainly mistaken."
- " … a safety culture is something that is striven for but rarely attained…"
- "…the process is more important than the product."

- James Reason, "Managing the Risks of Organizational Accidents."

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What is Leadership?

"Leadership is about influence. Nothing more. Nothing less."

- John Maxwell

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As a leader …

- You can negatively influence safety.
- You can positively influence safety.

Which influence will you provide?

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Negatively influencing safety

WARNING: DO NOT TRY THIS AT WORK!

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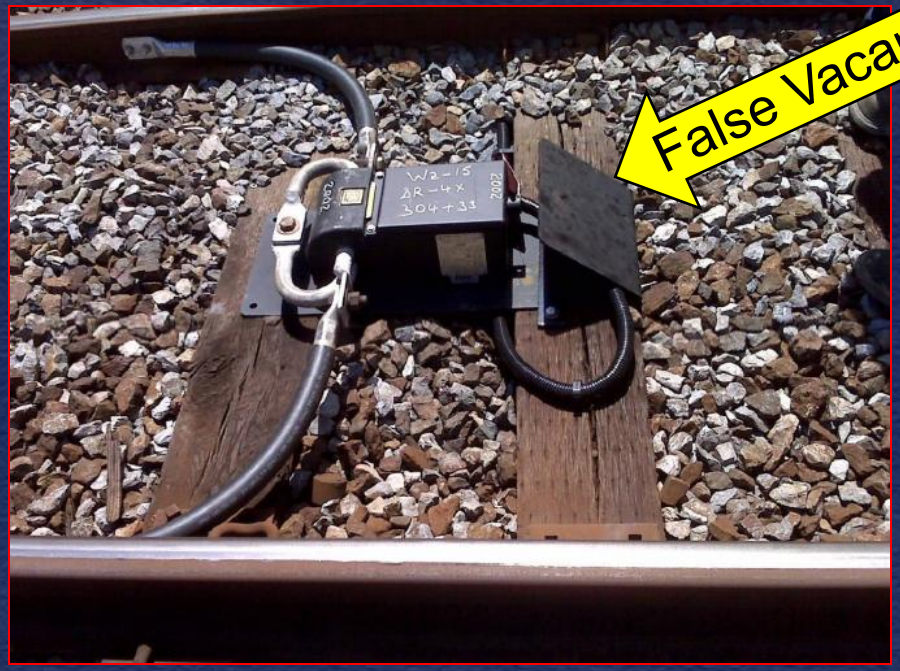
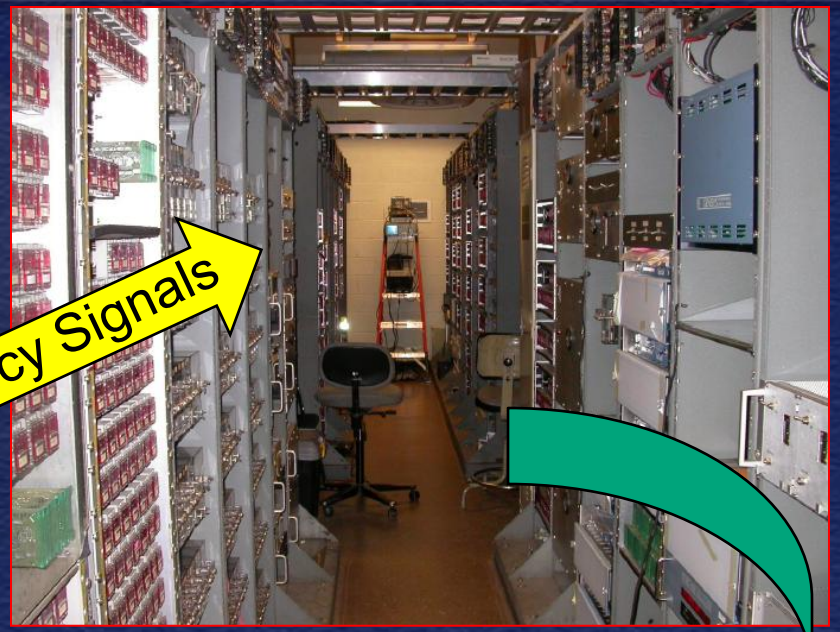
Washington DC Subway (WMATA)

Technical failure



False Vacancy Signals



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Probable Cause

- Failure of the track circuit modules
- WMATA's failure to ensure that an enhanced track circuit verification test was institutionalized and used system-wide after a 2005 precursor event (near-collisions)

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Contributing to the Accident

- WMATA's lack of a safety culture
- WMATA's failure to effectively maintain and monitor performance of the ATC system
- GRS/Alstom failure to provide a maintenance plan to detect spurious signals that could cause a malfunction
- Ineffective oversight by WMATA Board of Directors
- Ineffective oversight by State Safety Oversight agency and its lack of safety oversight authority
- FTA's lack of statutory authority to provide Federal safety oversight

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How leaders influence safety

"The safety behaviors and attitudes of individuals are influenced by their perceptions and expectations about safety in their work environment,

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How leaders influence safety

"The safety behaviors and attitudes of individuals are influenced by their perceptions and expectations about safety in their work environment, and they pattern their safety behaviors to meet demonstrated priorities of organizational leaders, regardless of stated policies."

– D. Zohar, as cited in NTSB report of WMATA accident

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What did employees perceive?

"the mentality now is move trains"

Post-accident statements made by the supervisor of the construction, installation, and testing crew were indicative of an emphasis on maintaining operations over safety.

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The environment at WMATA

- Punitive culture – employees feared retribution from management and co-workers for reporting safety-related problems
- WMATA managers were reactive rather than proactive in assessing and addressing the agency's most serious safety hazards
- WMATA did not learn from prior events
  - A loss of shunt detection procedure – one that could have detected the track circuit problem – was never institutionalized
- Widespread procedural non-compliance

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NTSB finding

"The WMATA Board of Directors did not exercise oversight responsibility for the system safety of the WMATA system."

- Viewed themselves solely as a "policy board"
- Relied on the General Manager to bring safety-related information to them
- Did not insist in following-up on prior audit findings, despite a requirement to do so
- Placed much of the blame for causing accidents on frontline personnel

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Positively influencing safety

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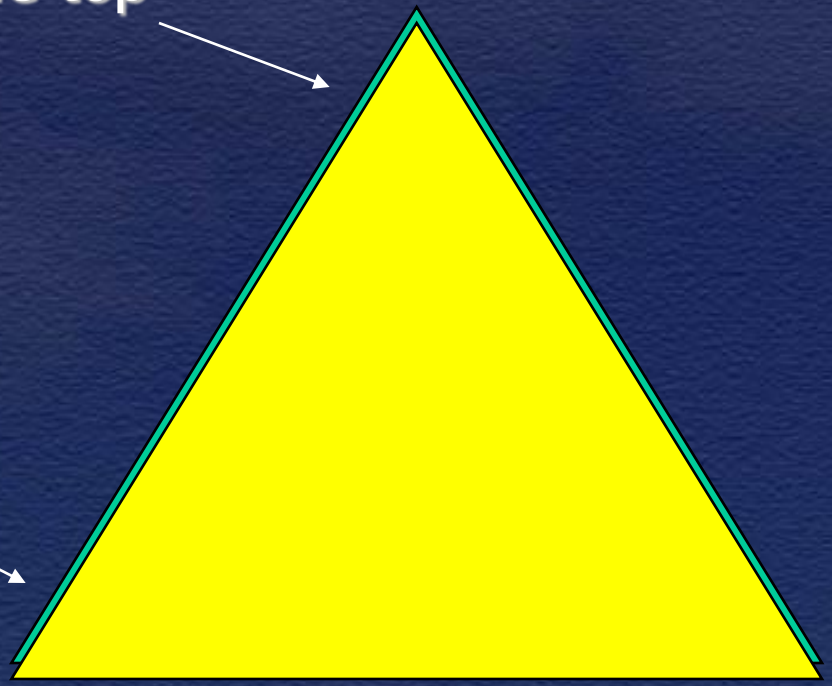
Safety Culture is:

Triggered at the top

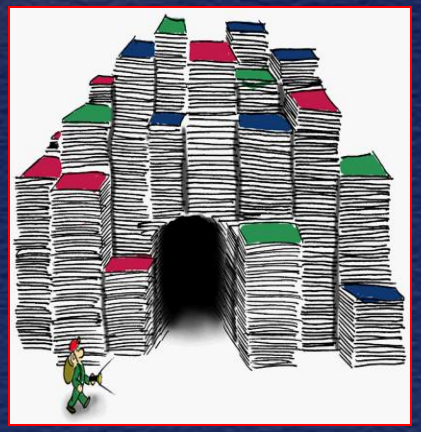
Measured at the bottom



Safety culture starts at the top of the organization and permeates the entire organization.

Be informed, stay informed

- Collect and analyze “the right kind of data” to stay informed of the safety health of the organization
  - Create a safety information system that collects, analyzes and disseminates information on incidents and near-misses, as well as proactive safety checks.



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How do you stay informed?

- Internal safety audits
- External safety audits
- Confidential incident reporting systems
- Employee feedback
- MBWA (Management By Walking Around)

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Open lines for reporting

- Employees are open and encouraged to report safety problems
  - Assurance that information will be acted upon
  - Confidentiality will be maintained or the data are de-identified
  - Assurance they will not be punished or ridiculed for reporting
    - Non-reprisal policy signed by CEO

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Non Reprisal Policy
December 2005

SCANA Aviation Department is committed to the safest flight operation possible. Therefore, it is imperative that we have uninhibited good faith reporting of any hazard, occurrence or other information that in any way could enhance the safety and efficiency of our operations. It is each employee's responsibility to communicate any information that may affect the integrity of flight safety.

We will not use this reporting system to initiate disciplinary proceedings against an employee who discloses in good faith a hazard or occurrence involving safety that is the result of conduct that is inadvertent, unintentional or not deliberate.

disciplinary proceedings against an employee who discloses in good faith a hazard or occurrence involving flight safety which is the result of conduct which is inadvertent, unintentional or not deliberate.

We urge all employees to use this program to help this Department be a leader in providing our passengers and our employees with the highest level of flight safety.

William B. Timmerman
Chief Executive Officer

Robert L. Sumwalt, III
Manager – Aviation

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Staying informed

1. How do you keep your finger on the pulse of your operations?

2. Are you taking proactive measures?

3. Do you have multiple data sources?

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Employees

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Create a "Just" Culture

- Basically, this means that employees realize they will be treated fairly
  - Not all errors and unsafe acts will be punished (if the error was unintentional)
  - Those who act recklessly or take deliberate and unjustifiable risks will be punished

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Just Culture

- "An atmosphere of trust in which people are encouraged (even rewarded) for providing safety-related information, but in which they are also clear about where the line must be drawn between acceptable and unacceptable behavior."

Source: James Reason

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Measure the right things

- Are you measuring the right things?
- Are they the most appropriate predictors of catastrophic events?

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