



NTSB National Transportation Safety Board

Office of Research and Engineering

Safety Culture

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Ineffective Safety Culture at WMATA

- Management focused on operations
- General Manager did not provide adequate information about critical safety issues
- Board of Directors did not seek information about critical safety issues
- Management placed responsibility for safety on individual employees

Ineffective Safety Culture at WMATA

- Organizational structure did not ensure effective communication
- Management focus influenced employee behaviors
 - Problems not reported effectively
 - Rosslyn near-collisions
 - Employees acted on perceived safety concerns or threats of discipline
 - Trains operated in manual mode

Previously Identified Safety Culture Deficiencies Within WMATA

- FTA and TOC audits found:
 - No process to identify and analyze hazards
 - Reactive, not proactive, approach
 - Lack of inter-departmental communication
- Previous NTSB recommendations
- Many of these safety problems were also identified in this accident

Failure to Recognize and Correct Safety Issues

- AIM system track circuit alarms
 - False occupied ~5,000 per week
 - False vacant ~3,000 per week
- Track circuit alarms designated as minor, requiring no action

Accident Precursor - Rosslyn (2005)

- Not recognized as an unaddressed hazard in the fail-safe design
- Severity of risk not adequately assessed
- Corrective actions not communicated or uniformly applied
 - Enhanced track circuit test
 - Loss of shunt software tool

Need for an Effective Safety Culture

- A safety culture is a/an:
 - Informed culture
 - Reporting culture
 - Just culture
 - Flexible culture
 - Learning culture

Monitoring System Safety

- Data analysis programs have improved safety in other modes
- Recorded system data
 - Early indications of safety problems
 - Trend monitoring
- Voluntary, non-punitive reporting
 - Provide information that is otherwise unavailable



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