

Railroad System Safety Issues: Probabilistic Risk Assessment

Program Description:

- Analyzing the PTC Preventable Accidents (PPAs 2002-2006) and determining the primary causes/hazards on mainline railroad network
- Updating Volpe Rail Network with signaling, traffic flow, capacity, speed and other characteristics
- Calculating the probability and consequences of PPAs, and assessing safety benefits of PTC

Scope of Problem Addressed:

- Over 50 PPAs per year for 1988-2001. No RSAC/PTC Working Group review on data after 2001.

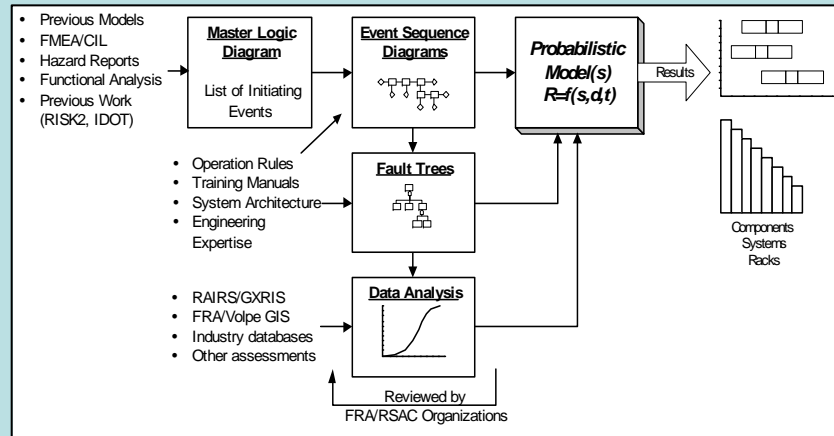
Planned Milestones/Deliverables:

- Interim Report on Volpe Rail Network (Signal Territory) Updates, 15-Mar-07
- Interim Report on New PTC Preventable Accidents (2002-2006), 31-May-07
- Report on Probabilistic Analysis of Current PTC Systems, 30-Sep-07

Lessons Learned:

No results yet.

Equipment and Operating Practices Research Division



Strategic Goals and Benefits:

- National Rail Safety Action Plan calls for accelerated research efforts that have the potential to mitigate the largest risks, May 2005.
- In 49-CFR-236-H (performance-based standard), FRA requires the railroads to measure their systems safety together with their productivity and system reliability, March 2005.
- AAR/TRB Workshop on Rail Research Needs calls for more quantitative risk assessment, July 2006