



# Railroad Safety Advisory Committee

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## **Fatigue Working Group Update**

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## **The 48<sup>th</sup> Railroad Safety Advisory Committee Meeting**

Washington, DC  
June 14, 2013

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# Background

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- Established December 8, 2011
  - Purpose: To provide advice regarding development of implementing regulations for Fatigue Management Plans and their deployment under the Rail Safety Improvement Act of 2008 (Act).
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# Meetings

- March 27, 2012
    - Highlights presented at April 2012 RSAC meeting
  - June 12, 2012
  - July 10, 2012
  - August 28, 2012
- Highlights presented at  
September 2012 RSAC  
meeting
- January 24 and 25, 2013
  - April 2 and 3, 2013
  - June 11 and 12, 2013



# January 24 and 25, 2013 Meeting Highlights

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- AAR presentation on Scheduling
  - FRA presentation on Sleep Disorders
  - Union Pacific presentation on their fatigue management program
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# April 2 and 3, 2013 Meeting Highlights

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- Discussion of Regulatory Framework
  - Definitions
  - Program requirements
  - Plan requirements



# June 11 and 12, 2012 Meeting Highlights

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- Presentation by David Nash on PRISM: predictive risk intelligent safety module
  - Draft rule text
  - Discussion of economic impacts
  - Task Force Reports and deliverables
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# Training and Education TF Highlights

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- Focus: Safety related employee education
  - Scope (approved by WG June 12, 2012)
    - Determine industry and scientific resources available
    - Dissemination strategies
  - Deliverables: (dates presented to WG in parentheses)
    - “Fatigue 101” training (July 10, 2012)
    - Training Topics paper (June 11, 2013)
    - Dissemination and evaluation strategies (June 11, 2013)
    - Fatigue mitigation toolkit (June 11, 2013)
    - Summary of existing railroad & external resources (TF review June 7, 2013)
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# Infrastructure and Environment Task Force Highlights

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- Developed Consensus Guidelines for two of 3 focus areas
  - Effects on employee fatigue of responses to emergency situations.
  - Conditions associated with lodging facilities selected by carriers for employee rest.
    - Consensus Guideline for dispute resolution process for this subject also developed
- Developed White paper discussing issues for third focus area, presented at WG meeting on June 12.
  - The effects of vibration and temperature extremes on fatigue.





# Scheduling TF Highlights

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- Developed proposed list of deliverables
  - Developed draft table of contents
    - Presented to WG on 7/10 and 8/28
  - Further TF activities suspended while full WG addresses major issues of concern
  - FRA submitted draft scheduling document for WG discussion June 12, 2013
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# Upcoming Activities

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- Next WG meeting September 10 & 11

**COMMENTS? QUESTIONS?**

# **BACKGROUND SLIDES**

# Task Statement Description

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- Review the mandates and objectives of the Act related to the development of Fatigue Management Plans
  - Determine how medical conditions that affect alertness and fatigue will be incorporated
  - Review available data on existing alertness strategies
  - Consider the role of innovative scheduling practices
  - Review the existing data on fatigue countermeasures
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# Task Statement Issues Requiring Specific Report

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- How will compliance and program efficacy be evaluated and monitored?
  - How will training and educational requirements be determined?
  - What processes should be in place in the event a Fatigue Management Plan is not approved?
  - What processes will be used to periodically audit Fatigue Management Plans after they have been approved?
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# Training and Education Task Statement

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- Employee education and training on the physiological and human factors that affect fatigue
  - Medical and scientific research-based fatigue mitigation strategies
  - Opportunities for identification, diagnosis, and treatment of any medical condition that may affect alertness or fatigue, including sleep disorders
  - Methods to minimize accidents and incidents during circadian low periods
  - Alertness strategies
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# Scheduling Task Statement

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- Innovative scheduling practices
  - On duty call practices
  - Work and rest cycles
  - Increased consecutive days off
  - Other aspects of employee scheduling that would reduce employee fatigue and cumulative sleep loss
  - The increase of the number of consecutive hours of off-duty rest
  - Avoidance of abrupt changes in rest cycles for employees
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# Infrastructure and Environment Task Statement

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- Effects on employee fatigue of an employee's short term or sustained response to emergency situations
  - Opportunities to obtain restful sleep at lodging facilities
  - Effects of environmental conditions (e.g. temperature, vibrations, etc.) on employee fatigue
  - Effects on fatigue of requiring very long commutes on rest days
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