

# **RAILROAD SAFETY ADVISORY COMMITTEE (RSAC)**

## **Minutes of Meeting April 27, 2004**

The twenty-third meeting of the RSAC was convened at 9:35 a.m., in the National Hall of the Washington Plaza Hotel, 10 Thomas Circle, N.W., Washington, D.C. 20005, by the RSAC Chairperson, the Federal Railroad Administration's (FRA) Acting Associate Administrator for Safety, Grady C. Cothen, Jr.

As RSAC members, or their alternates, assembled, attendance was recorded by sign-in log. Sign-in logs for each daily meeting are part of the permanent RSAC Docket. Nine of the forty-eight voting RSAC members were absent: The American Association of Private Railroad Car Owners (1 seat), The American Short Line and Regional Railroad Association (ASLRRRA) (1 of 3 seats), The Association of Railway Museums (1 seat), The Brotherhood of Locomotive Engineers Teamsters (BLET)(1 of 3 seats), The Brotherhood of Maintenance of Way Employees (BMWE) (1 of 2 seats), The International Association of Machinists and Aerospace Workers (1 seat), Safe Travel America (1 seat), and The Transport Workers Union of America (TWU) (2 seats). Three of seven non-voting/ advisory RSAC members were absent: The Federal Transit Administration (FTA), The Labor Council for Latin American Advancement, and The League of Railway Industry Women. Total meeting attendance, including presenters and support staff, was approximately 80.

Chairperson Cothen welcomes RSAC Members and attendees. He asks Patricia Butera (FRA Office of Safety) to give a hotel meeting room safety briefing.

Ms. Butera identifies the hotel meeting room's fire and emergency exits. She asks for volunteers with cardiopulmonary resuscitation (CPR) qualification to identify themselves. A large number of RSAC attendees acknowledge having completed this training. Ms. Butera advises that a large number of RSAC attendees have cellular telephones, but volunteers Cindy Gross (FRA Office of Safety) to call the emergency telephone number, 911, should an emergency occur.

Chairperson Cothen acknowledges the attendance of today's meeting by the representatives from Mexico's Secretary of Communications and Transportation, Antonio Lozada Bautista, and from Canada's Transport Canada, Donald D. Pulciani. He asks FRA Administrator Allan Rutter to make opening remarks.

Administrator Rutter welcomes RSAC attendees. He thanks them for their ongoing commitment to improving railroad safety. Mr. Rutter announces that the Railroad Safety Advisory Committee has been re-chartered for another two years.

Next, Administrator Rutter outlines the content of his opening remarks. He will: (1)

Offer thanks to the work of this Committee; (2) Mention a few things that are before the Committee; (3) Talk briefly about security, another important priority that can either work in harmony with our safety objectives or greatly distract us from them; (4) Encourage RSAC attention to the forthcoming Secretarial Action Plan for Highway-Rail Crossing Safety; and (5) End with a small pitch for investment in America's transportation system.

He begins by thanking the Committee for its work. Preliminary statistics show that from 1994 to 2003:

- Total accidents / incidents decreased by 39 percent.
- Total highway-rail incidents decreased by 41 percent.
- Total fatalities decreased by 30 percent.
- Total casualties decreased by 47 percent.

He asserts that these statistics demonstrate that significant progress is being made and that everyone in this room can claim a stake in that legacy. However, keeping this progress going over the long term requires a clear focus on safety results and efficient use of limited resources. At the December 2003 RSAC Meeting, Mr. Rutter talked about FRA's desire for RSAC to show continued success. He recalled the Department of Transportation's interest in moving regulations more expeditiously and taking on only what makes sense in terms of our capacity to get things done. His remarks were either tremendously effective, or perhaps they were unnecessary. But in any event, the work of RSAC has been going well. In November 2003, RSAC approved a Notice of Proposed Rulemaking (NPRM) for more crashworthy Event Recorders, following from last summer's approval of the Cab Noise NPRM. Both of those proposals are presently in the final stages of clearance before publication.

Just this month, RSAC approved an NPRM for Locomotive Crashworthiness. Mr. Rutter expects that document will be submitted for clearance within the next week. Further, RSAC has enthusiastically supported the initial activities of the new Passenger Safety Working Group; FRA's Charlie Bielitz will have a report on that group's activities today.

In thanking RSAC for another productive period, Administrator Rutter requests that the Committee keep its efforts going, despite the issues that divide, and despite the degree of difficulty involved in fashioning consensus recommendations.

But FRA has been busy with other regulatory work, as well. For instance, the Agency published a final rule on applicability of alcohol/drug rules to foreign-based crews that attempted to accommodate concerns raised by Canadian railways and the Canadian Government. FRA appreciates the helpful comments in that proceeding, and will now work with the railroads to make implementation of these rules a smooth transition.

In other regulatory work, the Agency will schedule a workshop on locomotive inspection

issues this summer, taking a theme from the American Short Line and Regional Railroad Association (ASLRRA) and the Association of American Railroads (AAR). Mr. Rutter hopes that RSAC members that attend that meeting will come prepared to discuss what is working well and what might work better in that arena. He believes that if workshop participants have some data and a viable idea or two in hand, that could be a good beginning for the review of the Locomotive Safety Standards. Next, FRA has an obligation to review its standards periodically, and will begin this process. In addition, comment periods have closed for the interim final train horn rule and for a proposed rule for Reflectorization. Back at the office, the Agency has a lot of work left to determine the next steps in those proceedings. Finally, as the Agency gets some of these pending rulemakings behind it, FRA will need to think as a group what priorities for regulation, and for regulatory review, should command its attention in the future.

Today, FRA's Ron Ries will give RSAC a sneak peak at the Secretary of Transportation's (Secretary) 2004 Action Plan for Highway-Rail Crossing Safety and Trespass Prevention (Action Plan). This Action Plan will replace the 1994 document that has served so well, giving us a fresh start. Although the Secretary will submit the Action Plan to Congress this week, this is really a plan that belongs to all of us. Many of you took time to provide valuable input. He thinks that RSAC members will find that the themes in this plan are both familiar and forward-looking. As the Agency makes copies of the Action Plan available to RSAC members over the coming days, please spend a little time with the report and think about how it can be kept a living document. Please carry the Action Plan with you to the cities and counties, to the schools and the chambers of commerce—keep up the momentum; find ways to help do it together.

Rail security is an issue that is taking an increasing amount of my time and energy. FRA is working closely with the Department of Homeland Security's Transportation Security Administration, and many other agencies, to plan and implement a variety of strategies. Before 9-11, the railroad industry had been addressing aspects of rail security for years more or less alone. After 9-11, government and industry have been working together to improve the overall security of the rail network. In the aftermath of the Madrid bombings last month, there is a new focus on both passenger and freight rail security.

The primary role of FRA with this issue has been to provide safe rail transport of hazardous materials. The Agency does this by administering and enforcing a regulation from our sister agency at the Department of Transportation—the Research and Special Programs Administration—that requires shippers and carriers to develop and implement security plans. The plans must describe plans for shipments in transit as well as in storage. In addition, employees must be appropriately trained. FRA's Bill Fagan will provide an outline of those requirements today. FRA's hazardous materials inspectors will be around to assist in review of those plans. FRA is also participating in joint efforts to conduct a review and security risk assessment of hazardous materials shipments through major metropolitan areas. The first such review is presently ongoing for Washington, D.C. Administrator Rutter hopes this will yield useful information and be a

model for risk assessment in other parts of the country. And while almost the entire focus has been on the physical security of the rail network, other work has been going on. For example, FRA testified before Congress in support of legislation to upgrade the 'wrecking trains' statutes so they address the needs of the new security environment. The proposed changes increase the penalties so that doing harm to freight railroads is the same as doing harm to passenger railroads. In addition, the legislation expands the type of rail infrastructure and equipment covered by the law and included modern methods of attack such as bio-terrorism. It seems that we will have to deal with the threat of terrorism for many years to come, but our blanket of security should not be so heavy as to restrict our breathing or range of motion. FRA will strive to balance the need for security of the nation's railroad system with maintaining its functionality.

Finally, Administrator Rutter concludes with a pitch for the Bush Administration's pending legislative package for the transportation industry. The legislative proposal is built on the premise that a healthy transportation system is a safer one. Major railroads and the short line industry report strong demands for rail transportation services. All signs indicate that the economy is indeed growing at a healthy pace. For example, last month's robust job creation figure—308,000 new jobs—is just the latest in a series of good economic news. However, another thing that will contribute to the continued revitalization of the economy is passage of a transportation infrastructure bill.

The President's SAFETEA proposal—the Safe, Accountable, Flexible, and Efficient Transportation Equity Act—is a \$256 billion investment program. It represents a 21 percent increase over the previous funding levels and it maintains a focus on improving the movement of freight. The transportation industry is currently operating under a second extension of the previous program and that extension expires at the end of April. The lack of a new transportation investment program impedes planning, construction, and opportunities for economic growth around the nation. Passage of SAFETEA is long overdue. The Administration wants Congress to pass a six-year reauthorization plan consistent with President Bush's desire to maintain fiscal discipline.

Administrator Rutter again thanks RSAC Members for attending today's meeting and for working together for safety. He asks if there are any questions?

Fran Hooper (American Public Transportation Association (APTA)) asks for an endorsement of the U.S. Senate version of SAFETEA?

Mr. Rutter responds that members can endorse any Congressional measure they want.

With no additional questions, Chairperson Cothen reviews the meeting agenda. He asks Christopher F. Schulte (FRA Office of Safety) for a presentation on Safety Advisory 2004-01, which addresses recommended safety practices for the protection of roadway workers from traffic on adjacent tracks and to heighten awareness to prevent the inadvertent fouling of track when on track safety is not provided.

Mr. Schulte uses a Microsoft PowerPoint presentation, projected onto a screen. Copies of the Microsoft PowerPoint viewgraphs, and FRA's Notice of Safety Advisory 2004-01 were distributed to meeting attendees. All meeting handouts will be entered into the RSAC Docket and are not excerpted in their entirety in the RSAC Minutes.

Showing a bar and line chart on Roadway Worker Fatalities, Mr. Schulte explains that there has been a downward trend in roadway worker fatalities since regulations became effective. The data used in the bar and line chart includes only roadway worker fatalities that can be specifically linked to roadway worker protection regulations. However, in calendar year 2003, there was an unexpected increase in roadway worker fatalities, which FRA hopes Safety Advisory 2004-01 will address. Mr. Schulte noted that 4 of the 5 roadway worker fatalities reported in 2003 occurred on commuter railroad properties and that most occurred in the 4<sup>th</sup> quarter. Through April 27, 2004, there have been no roadway worker fatalities. Continuing with a statistical analysis of roadway worker fatalities, there have been 20 fatalities since the inception of the regulations in 1997. Six fatalities were caused by employees walking into trains; four fatalities occurred by employees struck by trains while working; four fatalities occurred by employees struck by trains on adjacent tracks; four fatalities occurred by employees struck by maintenance of way equipment; one employee was struck by a free rolling car; and one employee was struck by equipment that had exceeded its limit of authority. Through a series of additional pie and bar charts, involving "pre-rule" (1986-1996) and "post-rule" (1997-2003) periods, Mr. Schulte's analysis confirms that the largest increase of post-rule fatalities is occurring on commuter railroad properties, that the majority of the post-rule fatalities are occurring in the 4<sup>th</sup> quarter, and that FRA Region 1, the region with the largest number of commuter railroads, is the location for the majority of the roadway worker fatalities. Finally, the raw data (pre-rule and post-rule) for the average number of roadway worker fatalities per year and reportable engineering injuries per year shows that the regulations are working.

In explaining the purpose for Safety Advisory No. 2004-01, Mr. Schulte says that the focus on heightened safety awareness brought about by roadway worker protection rules appears to have deteriorated, causing increased occurrences of inadvertent and careless fouling of the track. The difficulty in determining when certain types of work should be classified as "large-scale," i.e., noise and distraction, and the concern for potentially unsafe small-scale activities prompted rail labor to request a regulation change mandating on-track safety for all roadway work groups on adjacent track, regardless of the scope of the work. Although FRA has decided not to pursue a regulation change at this time, the Agency believes it is prudent for railroads and contractors to evaluate whether the work has the potential to foul the adjacent track. Consideration should be given for adjacent track on-track safety even if there is the potential for intrusion for other than large-scale activities. The concept of not fouling the track unless necessary for the performance of duties is a core element of the regulation. It is imperative that roadway workers refrain from purposefully encroaching on the fouling space, unless absolutely necessary to perform their duties (49 Code of

Federal Regulations (CFR) § 214.313). Mr. Schulte adds that one of the key elements of Safety Advisory No. 2004-01 is for roadway workers not to have coffee breaks while they are standing in tracks. Roadway workers should only be on tracks if they have to be there. For adjacent tracks, roadway work groups can utilize a train approach warning (49 CFR § 214.329), i.e., a lookout, and working limits (49 CFR § 214.319). The watchman/lookout will be provided by the employer with the equipment necessary for compliance with the on-track safety duties that they will perform.

Under “Recommended Actions” for Safety Advisory No. 2004-01, Mr. Schulte outlines the following: (1) Through training and daily job briefings individual roadway workers should be instructed that it is critical not to foul a track except in the performance of duty and only when on-track safety has been established; (2) Institute peer-intervention measures by which workers are encouraged to intervene when observing another roadway worker engaging in potentially noncompliant and unsafe activity; (3) Develop and implement basic risk assessment procedures to determine the likelihood of adjacent track intrusion prior to initiating work activities (whether large-scale or small-scale activities); (4) use working limits for activities where equipment could foul adjacent track (whether large-scale or small-scale activities); (5) Install and utilize, as appropriate, rotation stops, i.e., “pinstops,” on roadway maintenance machines to prevent equipment from inadvertently fouling adjacent tracks; (6) review procedures for directing trains through adjacent track working limits, and enhance such procedures when necessary; (7) Install adjacent track warning signs/devices in the operating cab of on-track machines to remind roadway maintenance machine operators to not inadvertently exit the cab onto a track where there may be trains and other on-track equipment passing; and (8) Provide additional training and monitoring to employees, emphasizing the need to cross tracks in a safe manner.

Mr. Schulte concludes his presentation with three diagrams showing “Sample Adjacent Track Procedures” employing the FRA recommended actions under Safety Advisory No. 2004-01. The diagrams show the recommended positions for “flagmen” and “watchmen,” however, Mr. Schulte reminds his audience that watchmen do not have the ability to stop a train when, for example, a tie handler boom is in use and fouling the adjacent track.

Mr. Cothen asks if there are any questions?

Timothy DePaepe (Brotherhood of Railroad Signalmen (BRS)) asks when FRA’s Technical Review Committee (TRC) expects to complete its review of Safety Advisory No. 2004-01, and queries if the Safety Advisory is on FRA’s Internet Web Site.

Mr. Schulte responds that the Safety Advisory, which was just signed and issued at today’s meeting will undergo its TRC review and show-up on FRA’s Internet Web Site within the next couple of weeks.

Chairperson Cothen announces a change in the order of the Agenda presentations. He

asks Charles Bielitz (FRA Office of Safety) and Cynthia Gross (FRA Office of Safety) for a progress report on the Passenger Safety Working Group.

Ms. Gross and Mr. Bielitz use a Microsoft PowerPoint presentation, projected onto a screen. Copies of the Microsoft PowerPoint viewgraphs were distributed to meeting attendees. All meeting handouts will be entered into the RSAC Docket and are not excerpted in their entirety in the RSAC Minutes.

Under "Overview," Ms. Gross explains that Task Statement No. 2003-1, Amendments to the Passenger Equipment Safety Standards and the Passenger Train Emergency Preparedness, was accepted by the full RSAC on May 20, 2003. The Working Group held its initial meeting September 9-10, 2003. Issues and task forces were formed at the November 6-7, 2003, meeting. Under "Task Forces," there are four. They are: (1) Mechanical Issues and Safety Appliances, (2) Crashworthiness and Glazing, (3) Emergency Preparedness, and (4) Track-Vehicle Interaction.

Mr. Bielitz continues the presentation. He explains that each task force attempted to organize issues into "main," and "priority 2," to help maintain focus and move each agenda forward. Under "Mechanical and Safety Appliance Issues," the "main" issues include: (1) safety appliance materials and attachment techniques, (2) class 1A brake tests for railroads with 24 hour/day operations, (3) reconciliation of cab signal inspection requirements (49 CFR § 236 and 238), (4) regulatory allowances for multiple unit (MU) trains with redundant equipment, i.e., several air compressors (49 CFR Part 229), (5) combining calendar day and blue card inspection records, and (6) review of the requirements for brake inspections on low slung equipment, which is proving to be a challenge for task force members. The "priority 2" issues include cab ergonomics, baggage car standards, and alerter or deadman features.

Under "Crashworthiness and Glazing Issues," the "main" issues are: (1) cab car/MU front end optimization, including collision post and weld strength, (2) seating for engineers in cab cars and MU's, (3) improvements to seat rotation locking system for coach seats, (4) glazing test criteria revisions, (5) Tier II glazing revisions, and (6) cab side window glazing standards. The "priority 2" issues include enhanced passenger protection in cab cars and MU's, requirements for remanufactured or rebuilt equipment, fuel tank compartmentalization, Diesel Multiple Units (DMU) (i.e., self-propelled passenger cars) fuel tanks, auxiliary fuel tanks, side strength of passenger equipment, and consist configuration based on passenger occupancy and speed.

Under "Emergency Preparedness Issues," the main issues are: (1) illumination, signage, exit path marking, (2) durability of photoluminescent signs, and (3) exterior marking for rescue crew access to windows. The "priority 2" issues include emergency communication, emergency exits, emergency response for disabled passengers, qualified crewmember (49 CFR Part 238), emergency power requirements, egress capacity, doors, and kick panels (note: when equipment is on its side, roof access is important), (crew) readiness for medical emergencies, and passenger manifest

accountability (note: this last item will be very difficult to achieve).

Under "Track-Vehicle Interaction Issues," the group is considering the following issues: (1) flange angle, tread conicity and truck equalization, elimination of instrumented wheelset test for Tier 1 cars, consolidation of 49 CFR Parts 213 and 238 requirements, track safety standards revisions, and cant deficiency requirements.

Mr. Bielitz concludes his presentations by saying that all task forces have held meetings. The full Working Group will meet next on May 11-12, 2004, in Chicago. At that meeting, the task forces will report milestones and first recommendations. Finally, the Working Group hopes that recommendations on some of the issues will be made to the full RSAC at the September 2004 meeting.

Ms. Gross and Mr. Bielitz ask if there are any questions?

Thomas Peacock (APTA) comments that APTA's focus will be on (1) brake tests on low slung equipment, and (2) safety appliances.

Tim DePaepe (BRS) comments that the task forces have been working very hard.

With no further questions, Chairperson Cothen mentions that Cindy Gross is an RSAC Working Group Facilitator, who works directly for him.

Chairperson Cothen asks Ron Ries (FRA Office of Safety) to introduce the new Highway-Rail Grade Crossing Safety and Trespass Prevention Action Plan (Action Plan).

Mr. Ries uses a Microsoft PowerPoint presentation, projected onto a screen. Copies of the Microsoft PowerPoint viewgraphs were distributed to meeting attendees. All meeting handouts will be entered into the RSAC Docket and are not excerpted in their entirety in the RSAC Minutes.

Mr. Ries explains that Department of Transportation (DOT) issued its initial Action Plan in June 1994. Four DOT Agencies, FRA, the Federal Highway Administration (FHWA), the National Highway Traffic Safety Administration (NHTSA), and the Federal Transit Administration (FTA) were involved in addressing 55 specific items. For example, the Action Plan made highway-rail grade crossing violations a serious offense for commercial driver license holders and provided incentives to States and communities for closing highway-rail grade crossings. The goal of the 1994 Action Plan was to reduce collisions and fatalities by 50 percent in 10 years. Preliminary FRA statistics for calendar year 2003 show that fatalities declined from 579 in 1994 to 324 in 2003, a drop of 44 percent and highway-rail grade crossing incidents declined from 4,633 in 1994 to 2,919 in 2003, a decrease of 37 percent.

Mr. Ries next describes the "Approach to the Update." The 2004 Action Plan will:



(1) continue existing themes and add new ideas, (2) include opportunities to promote the importance of crossing safety, (3) include success stories, and (4) expand the outreach to safety partners. The “Format” of the 2004 Action Plan will be more generalized, use illustrative examples, and while some action items may have target dates for completion, many objectives will be ongoing.

The 2004 Action Plan includes the following items. During the 1<sup>st</sup> quarter of 2006, a series of public workshops will be held to gather information to “Establish Responsibility for Safety at Private Crossings.” To “Advance Engineering Standards and New Technology,” the 2004 Action Plan will (1) provide guidance information on the use of traffic channelization devices at grade crossings (end of 2006), update the existing technical working group guidance document on when to use four quadrant gates versus gates with traffic channelization (end of 2007), and undertake an investigation to determine the effect of system age and technical characteristics of existing crossing devices on crossing safety program planning (end of 2007). To “expand Educational Outreach,” the 2004 Action Plan will develop Internet-based interactive grade crossing safety educational tools for use by commercial vehicle drivers (end of 2005). To help “Energize Enforcement,” FRA will publish a report on the trespass prevention initiative at Pittsford, New York (cameras trigger an audible warning, when trespassing is detected) (end of 2005). Under its ongoing initiatives to “Close Unneeded Crossings,” FRA will update its grade crossing consolidation and closure manual (end of 2004), and make available a compilation of pedestrian safety devices in use at grade crossings (end of 2005). To “Improve Data, Analysis, and Research, FRA will perform an analysis of demographic information related to trespass incidents (end of 2005). Under “Emergency Notification Systems,” a report documenting the benefits realized from the software developed to manage the ENS system will be published (end of 2004). Under “Issue Safety Standards,” the rulemaking that would require retro-reflective material on the sides of freight rolling stock will be completed (end of 2005). Finally, an effort will be made to determine the “best practices” that are leading to effective grade crossing collision mitigation (end of 2006).

Under “Progress,” the 2004 Action Plan has been finalized. It should be delivered to Congress soon and will be available on FRA’s Internet Web Site shortly thereafter. Mr. Ries thanks RSAC members who have participated in drafting the 2004 Action Plan. It is a better document for these efforts. For “Further Information,” please contact Brian Gilleran, (202) 493-6276, [Brian.Gilleran@fra.dot.gov](mailto:Brian.Gilleran@fra.dot.gov) or Ron Ries, (202) 493-6285, [Ron.Ries@fra.dot.gov](mailto:Ron.Ries@fra.dot.gov).

Mr. Ries (FRA) asks if there are any questions?

Kathryn Waters (APTA) comments that APTA requested that FRA consider the inclusion of “bridge strikes” in the Action Plan. She asks was this done?

Mr. Ries responds that this is an activity that is on the “table,” and is being investigated.

Chairperson Cothen comments that the 2004 Action Plan includes a broad range of items. It is intended to be a “living” document. It will address safety at private crossings and continue to close unneeded highway-rail grade crossings.

With no additional questions, Mr. Cothen announces a morning break.

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M O R N I N G   B R E A K   10:55 A.M. - 11:20 A.M.

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Mr. Cothen calls the meeting to order. He comments that the National Transportation Safety Board (NTSB) has issued a recommendation to prohibit cellular telephone use while a locomotive is underway. FRA will be surveying inspection records of large and small railroads to determine what sorts of rules exist concerning cellular telephone use and whether this should become an RSAC Working Group activity. This is an issue that appears in all forms of transportation. FRA’s Douglas Taylor (Office of Safety Operating Practices Division Staff Director) and Dennis Yachechak will be analyzing the data collected by the Agency’s inspectors. Mr. Cothen announces that at the next RSAC meeting, there will be a discussion as to whether cellular telephone use while a locomotive is underway should be added as a Working Group item.

Chairperson Cothen asks Christopher Schulte (FRA) for comments on whether a Track Forces Terminal (TFT) tied into a PTC system might be able to prevent roadway worker injuries.

Mr. Schulte explains that TFTs are portable terminals, which can: (1) request authority digitally to occupy track, or release track, and (2) receive digital authority. In the area of track forces productivity, the use of a Track Forces Terminal (TFT) should enable track forces to get more accurate “lineups” (expected train arrivals). Both an RSAC Working Group and the NAJPTC project are working on TFT issues, which is a new concept, not fully developed. Presently, CSX Transportation Company and the North American Joint PTC project are funding TFT projects.

With no questions of Mr. Schulte, Chairperson Cothen asks Frank Roskind (FRA Office of Safety) for an update on PTC. He comments that two weeks ago (i.e., April 13, 2004), there was a PTC Workshop to provide a forum for input to FRA’s Letter Report to Congress on PTC. This is not an RSAC project.

Mr. Roskind uses a Microsoft PowerPoint presentation, projected onto a screen. Copies of the Microsoft PowerPoint viewgraphs were distributed to meeting attendees. All meeting handouts will be entered into the RSAC Docket and are not excerpted in their entirety in the RSAC Minutes.

In “Study Required by Congress,” Mr. Roskind explains that the Conference Report on House Joint Resolution 2, Consolidated Appropriations Resolution, 2003 – (House of

Representatives-February 12, 2003) (Public Law 108-7), provided in pertinent part as follows: "Positive Train Control.—The conferees direct FRA to submit an updated economic analysis of the costs and benefits of positive train control and related systems that takes into account advances in technology and system savings to carriers and shippers as well as other cost savings related to prioritized deployment of these systems, as proposed by the Senate. This analysis must be submitted as a letter report to the House and Senate Committees on Appropriations by October 1, 2003." In this third instance, the Agency is taking a stab at the benefits to railroads, shippers and the public.

Under "FRA Intent," Mr. Roskind explains that FRA's letter report on PTC will go to Congress by itself. Additional documents, including comments received from RSAC organizations may be sent to the Congressional Committee staff. FRA intends to submit the letter report for Office of the Secretary of Transportation clearance by May 15, 2004.

Under "Study Methodology," Mr. Roskind outlines the following: (1) A contractor, Zeta-Tech Associates, studied business benefits in a report prepared for FRA, *Quantification of the Business Benefits of Positive Train Control*, (2) the Volpe National Transportation Systems Center used existing databases to estimate accident cost reduction, (3) FRA's Office of Policy estimated truck traffic diversions from highway to rail, and (4) FRA's Office of Safety coordinated the studies and is compiling the letter report to Congress.

There are two "Key Assumptions" in the study. The first key assumption is that railroad rates stay constant. However, in the past, railroads have only been able to capture about 20 percent of productivity improvements because of lower rates. Also, lower rates would mean more traffic diversions from highways, leading to more shipper and highway user benefits, but lower returns to railroads. The second key assumption is that PTC will be implemented on all Class I railroads plus some of the busier lines on Class II railroads such that approximately 100,000 miles of track will have PTC coverage.

Under "What Are We Attempting to Measure," Mr. Roskind explains that on one hand, the estimate for total societal benefits from PTC will include benefits to railroads, shippers, highway users, and the general public, but will not be affected by who pays or who benefits. However, at the same time, FRA is attempting to measure and discuss the distributional effects, i.e., who pays and who benefits.

At the "Peer Review Workshop (held on) 4/13/04," a forum was provided to: (1) review the Zeta-Tech analysis and its components for obvious errors, (2) discuss alternative assumptions, (3) clarify the study where needed, and (4) provide the basis for comments which do not concur with the study results.

Under "FRA's Commitment," Mrs. Roskind explains that FRA will: (1) reevaluate its assumptions as they are challenged, (2) make a final determination as to the agency's

position, i.e., a draft options paper, (3) summarize dissenting opinions and prepare a summary for Congress, (4) prepare any dissenting written opinions for presentation in full to Congress, and (5) not submit without approval from DOT, OMB, and other executive agencies, the comments and dissenting opinions, i.e., if the comments and dissenting opinions do not go through “clearance,” they will not go to Congress.

Under “Preliminary Results,” (1) if PTC can support improved transit times and service reliability, the benefits to railroads, shippers, and the public could be substantial, (2) diversion of intermodal traffic to rail would drive a large portion of the benefits, (3) direct safety benefits would be a very small proportion of total benefits, and (4) highway safety benefits would be much greater.

Under “Not Measured,” Mr. Roskind explains there was no way to accurately measure the reduced highway congestion benefit to highway users and the labor savings to railroads. So these benefits were not included in the analysis.

Under “Can Business Benefits be Achieved Other Ways?”, Mr. Roskind comments that a key assumption of the September 8, 1999, report to Congress, *Report of The Railroad Safety Advisory Committee to The Federal Railroad Administration, Implementation of Positive Train Control*, was that the business benefits of PTC could be achieved more economically through other technologies. However, some of those other technologies have not been adopted, and the location system and data channels needed for PTC may be prerequisites for achieving those benefits.

Under “Why Railroads Have Not Adopted PTC—Per Zeta Tech Associates,” Mr. Roskind cites the following: (1) restrained competition (among different railroads), (2) technological risk, (3) financial risk, and (4) railroad organization.

The “Principal Comments” received during the April 13, 2004, PTC Workshop were as follows: (1) there are system capacity restraints in rail yards and terminals which will act to limit the claimed velocity and reliability improvements under PTC operations; (2) PTC may not be able to ease over-the-road capacity constraints, e.g., actual testing of flexible (moving) block operations (a feature possible under PTC operations) is showing that this type of operation is slower than current fixed block operations; (3) asset utilization estimates used in the Zeta-Tech analysis may be in error; and (4) there is a need to finish the North American Joint PTC project to build confidence in the technology.

Finally, under “Where We Go From Here,” Mr. Roskind explains that FRA has received comments from three PTC Workshop participants. However, more are expected today, April 27, 2004, the deadline given PTC Workshop participants to submit comments to the Agency.

Mr. Roskind asks if there are any questions?

Robert VanderClute (AAR) comments that the AAR strongly supports the PTC Program. The AAR, along with railroad suppliers, has spent more than \$250 million on PTC. The AAR met with Zeta-Tech Associates. Concerning the Zeta-Tech Associates analysis, the AAR believes: (1) the data is flawed, (2) the savings proposed in the study have already been captured other ways, (3) from a New Jersey Transit project, line capacity is being decreased in actual operation, not “theoretically” increased, after employing PTC technology, (4) the cash flow analysis is in error, and (5) the railroad industry is 2-3 years away from being able to accommodate “moving block” technology. Therefore, the AAR takes exception to the conclusions drawn in the Zeta-Tech analysis.

Robert Harvey (BLET) comments that the BLET disagrees with the “through put” in the analysis.

Fran Hooper (APTA) comments in support of Mr. VanderClute and Mr. Harvey that when you have actual data like that being gathered in the New Jersey Transit project, it is showing that with a positive train stop system, the carrier has been unable to increase its “through put.”

With no additional questions, Chairperson Cothen thanks RSAC members for their comments. He announces the lunch break.

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LUNCH BREAK 11:55 P.M. - 1:10 P.M.

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Chairperson Cothen reconvenes the meeting. He asks Michael Coplen (FRA Office of Research and Development) and Tom Raslear (FRA Office of Research and Development) for presentations on Critical Incident Stress Debriefing (CISD) and the Close Call Pilot Project.

Mr. Coplen and Mr. Raslear use Microsoft PowerPoint presentations, projected onto a screen. Copies of the Microsoft PowerPoint viewgraphs were distributed to meeting attendees. All meeting handouts will be entered into the RSAC Docket and are not excerpted in their entirety in the RSAC Minutes.

Mr. Coplen remarks that CISD is an intervention program. Under “CISD Best Practices Study: Background,” Mr. Coplen explains that in 1995, there was a Grade Crossing Research Needs Workshop in which concern was raised about Post Traumatic Stress Disease (PTSD) among locomotive engineers and train crews following traumatic exposure to grade crossing and trespasser incidents. PTSD is a clinical diagnosis characterized by a traumatic event, persistent re-experiencing, persistent avoidance, symptoms of arousal, duration of more than one month, and anxiety distress or impairment. Under “Studies on Impact of PTSD,” people affected by PTSD (1) have lower levels of productivity, (2) avoid trauma circumstances and work areas, (3) have

increased stress, (4) have less desire to continue working, (5) have disproportionate use of medical/mental services, (6) higher use of Employee Assistance Programs (EAPs), (7) have more marital difficulties, financial and health problems, and (8) are reluctant to seek help. Under "Prevalence of PTSD," (1) between 7.4 - 12 percent of the adult population has experienced PTSD, (2) it is estimated that 6.3 percent of persons who experience trauma will develop PTSD, and (3) up to 45 percent of motor vehicle accident victims experience PTSD. Under "CISD Current Practices," Mr. Coplen lists the following. They are: (1) peer counseling, (2) employees referred to EAPs, (3) informal supervisor counseling, and (4) no counseling. There are no industry standards. Under "History of CISD Study," funding was budgeted in July 1999 and a grant was authorized to the University of Denver for the study. In late 1999, an informal working group was formed. In 2000-2001, the CISD Study was designed and redesigned (to address industry concerns). The focus is on grade crossing and trespasser incidents. The "CISD Best Practices Study: Project Goals," are (1) establish benchmarks for CISD programs, (2) establish prevalence and incidence, and (3) evaluate effectiveness of CISD intervention components. Under "CISD Best Practices Study: Current Study," Mr. Coplen explains that work is underway to finalize the data analysis plan and implementation protocols. Soon data collection will begin. He asks if there are any questions?

Jeffrey Moller (AAR) comments that carriers are very concerned about building a case that will backfire later. It is important to look into issues. However, Industry is not looking into having it backfire. After an accident, sometimes it may be better for someone to "get back up in the saddle right away."

Mr. Coplen responds that discussions are continuing on how to deal with CISD.

Robert Harvey (BLET) says that the study group is looking for a way to recognize that PTSD can and does occur.

Peter Cannito (APTA) asks for a copy of the study findings.

Mr. Coplen asks that Mr. Cannito give him a "business card" so that the study findings can be sent to him.

James Stem (United Transportation Union (UTU)) comments that he is aware of the sensitivity of this issue. However, he is looking for something useful from the study.

With no further questions for Mr. Coplen, Mr. Raslear continues with a presentation on the "Close Call Reporting System. He says that a Workshop on this topic was held a year ago. Under "What is a Close Call System?", Mr. Raslear give the following description; (1) it is a voluntary and confidential safety reporting system, (2) it is a proactive program to prevent accidents and save lives, (3) it notes that accidents are often preceded by close calls, (4) it provides a method for identifying and managing risk, (5) it allows more information to be collected and shared, and (6) data will be

collected by a third party. While Mr. Raslear explains that it will take several years to put the system in place, the “Estimated Minimum Yearly Savings in the Railroad Industry” are substantial in the areas of (1) repairs savings, (2) fatalities and injury reductions, (3) reductions to damage to cargo, and (4) reduction in sick leave/lost work days. Under “Proposed Close Call Reporting System,” Mr. Raslear announces that there will be a pilot study in which several railroads (Class I, commuters, etc.) will be asked to participate. Accidents and efficiency tests will be excluded. There will be a 48-hour period to report the “close call” without penalties. For the pilot program, there will be an agreement (between FRA, railroad management, and railroad labor) that the system will be non-punitive. The pilot study will be modeled after several successful systems (aviation industry, United Kingdom Rail System, etc.). Finally, DOT’s Bureau of Transportation Statistics (BTS) will host the system because there is a high degree of confidence that data turned over to BTS will remain confidential. There will be no direct access to the raw data by FRA. Under “anticipated Near-Term Accomplishments,” i.e., one-two years, there will be a memorandum of understanding (an agreement) between FRA, BTS and the Volpe Transportation Systems Center to conduct the study. Then, there will be a memorandum of understanding between FRA, rail management and rail labor. BTS will contract the study. Finally, data collection will begin. FRA will fund the Proposed Close Call Reporting System.

Mr. Raslear asks if there are any questions?

With no questions, Chairperson Cothen thanks the RSAC industry colleagues who are participating in the CISD and Close Call Pilot Projects.

Chairperson Cothen comments that the McCain and Hollings Report on Remote Control Operations has not been released. FRA hopes to have a briefing on the Status Report on Implementing Remote Control Locomotive Operations at the next RSAC meeting. Mr. Cothen continues with other RSAC Working Group activities. The PTC Working Group reached accord on some items, but could not agree on others. Therefore, FRA issued its own rules which are in clearance at the Office of Management and Budget. Likewise, rules on locomotive cab noise are undergoing review and clearance. There was a successful ballot on locomotive crashworthiness. All ballots were affirmative. The rules are undergoing FRA review and will soon move forward to the Office of the Secretary of Transportation for clearance.

Chairperson Cothen asks Joe Gallant (FRA Office of Safety) to present the final Switching Operations Fatality Analysis (SOFA) Report.

Mr. Gallant announces the completion of the SOFA Update Report. Since the release of the 1<sup>st</sup> SOFA report in October 1999, which introduced the five SOFA life savers to the railroad industry, much effort and attention have been directed toward reducing fatalities and severe injuries to railroad operating crafts by emphasizing those railroad operating and safety rules that mirror the five SOFA safety recommendations. The five SOFA life savers are: (1) Secure equipment before action is taken; (2) Communicate

before action is taken; (3) Protect employees against moving equipment; (4) Discuss safety at the beginning of a job or when a project changes; and (5) Mentor less experienced employees to perform service safely. Mr. Gallant believes that the efforts of the SOFA Working Group are bearing fruit. Over the last three years, fatalities were down seven percent in 2003 versus 2002 and severe, career-ending injuries were down nineteen percent in 2002 versus 2001 for employees involved in yard switching operations. However, over the intervening years, the SOFA Working Group became concerned about the types of fatalities that continued to occur and decided to combine the fatalities used in the original report with those occurring subsequently. The result is the SOFA Update Report. Today's handouts contain the index from the SOFA Update Report. After the report is edited, it will be published sometime this summer. When the report is released, FRA will place it on its Internet Web Site. Mr. Gallant recognizes members of the SOFA "working group." They are David Brickey (UTU), David Skinner (Volpe National Transportation Systems Center), William M. Browder (AAR), George Last (BLET), Thomas J. Perkovich (BLET), Robert Svob (BLET) Matthew Reilly (ASLRRA), Danny Boyles (UTU) and John Smullen (UTU). He thanks the leadership of these organizations to devote the time and resources to this project.

The above members of the SOFA Working Group used Microsoft PowerPoint presentations, projected onto a screen. Copies of the Microsoft PowerPoint viewgraphs were distributed to meeting attendees. All meeting handouts will be entered into the RSAC Docket and are not excerpted in their entirety in the RSAC Minutes.

Mr. Skinner (Volpe) relates that the SOFA Working Group (SWG) was formed in February 1998. SWG reviewed the causes of 76 fatalities that occurred to railroad employees engaged in switching operations from January 1, 1992, through July 1, 1998. SWG released its findings and recommendations in the October 1999 report, *Findings and Recommendations of the SOFA Working Group*. Subsequently, SWG reviewed additional switching fatalities that occurred between July 1, 1998, and December 2003. S.G. activities are being directed towards achieving the goal of zero switching fatalities by the following: (1) drawing attention of those engaged in switching operations to the Five SOFA Life Savers, (2) identifying "special switching hazards," such as close clearance, being struck by mainlining trains, and shoving that resulted in switching fatalities that were not necessarily preventable by one or more of the Five SOFA Life Savers, (3) studying severe injuries, such as amputations, that cause harm to employees engaged in switching operations, and (4) publicizing information about the number and types of switching fatalities and severe injuries.

Mr. Reilly (ASLRRA) continues the presentation with a summary of the Final SOFA Report's Table of Contents. There are five sections. They are: (1) Introduction to SOFA Update, (2) SOFA Working Group Activities, (3) Switching Fatalities, (4) Switching Fatalities—Understanding and Prevention, and (5) SOFA-Defined Severe Injuries.



Mr. Browder (AAR) shows photographs, explaining sources of data that were used in the analysis.

Mr. Last (BLET) explains that of the 124 switching fatalities between January 1, 1992, and December 2003, 64 (52 percent of the total) involve more than one of the Five SOFA Life Savers. He says that SWG firmly believes those switching fatalities directly related to the Five SOFA Life Savers will be reduced when all the parties accept and operate according to these recommendations.

Mr. Smullen (UTU) shows the distribution of sixty switching fatalities involving “special switching hazards.” They are: close clearance (10), struck by mainline trains (8), employee tripping, slipping or falling (6), free rolling railcars (6), unsecured cars (6), equipment (4), struck by motor vehicle or loading device (4), and unexpected movement of railcars (4). He explains that the special switching hazard with the largest number of fatalities is “close clearance.”

Mr. Brickey (UTU) discusses shoving as a special switching hazard. Sixty-one fatalities involved shove moves. Shove movements clearly create an exposure to greater risk than pulled train movements. Whenever feasible, efforts should be made to avoid shoved movements, especially where light engines are involved. Finally, greater use of procedures such as running around cars and changing ends should be utilized. He thanks Mr. Skinner of the Volpe National Transportation Systems Center for all the work he did.

Mr. Boyles (UTU) comments on Job Briefing and Mentoring—SOFA Life Savers Number 3 and 5. After examining the 124 fatality cases, it became apparent to the SWG that many of the diverse events that lead to the death of employees may have been mitigated through effective “job safety briefing.” Likewise, mentoring programs that address improving crew coordination and communications can heighten safety awareness and focus on the serious implications of unexpected train movement. The initial on duty and subsequent job safety briefings afford an opportunity to focus the message and further the common goal of a safe working environment. All crewmembers should be briefed on how to make safety briefings. Crewmembers with less than five years service should receive additional training. There can never be too much communication on the topic of safety.

Mr. Perkovich (BLET) concludes the SOFA Working Group presentation by identifying the Internet Web Site locations for the three SWG reports on switching casualties. They are:

*Findings and Recommendations of the SOFA Working Group, October 1999*  
[http://www.fra.dot.gov/pdf/sofa\\_rep.pdf](http://www.fra.dot.gov/pdf/sofa_rep.pdf)

*Findings and Recommendations of the SOFA Working Group, Appendix–Volume II, August 2000*

[http://www.fra.dot.gov/pdf/safety/sofa\\_vol2.pdf](http://www.fra.dot.gov/pdf/safety/sofa_vol2.pdf)

*Severe Injuries to Train and Engine Service Employees: Data Description and Injury Characteristics, July 2001.*

[http://www.fra.dot.gov/pdf/safety/sofa/SOFA\\_Injury.pdf](http://www.fra.dot.gov/pdf/safety/sofa/SOFA_Injury.pdf)

Joe Gallant asks if there are any questions?

Ross Capon (National Association of Railroad Passengers (NARP)) comments that he saw a caboose in service in a shoving move just yesterday.

Chairperson Cothen asks RSAC to acknowledge the efforts of the SOFA Working Group with a round of applause.

Robert Harvey (BLET) also acknowledges the SWG efforts.

Chairperson Cothen adds that FRA's Associate Administrator for Safety, George Gavalla, was instrumental in getting SOFA started and for the ongoing efforts that took place every day at railroads. He asks for RSAC assistance to help carry the SOFA message forward.

Chairperson Cothen asks William Fagan (FRA Chief of Security) for a presentation on the Hazardous Materials Security Program.

Mr. Fagan begins by saying that while there are no specific threats targeting hazardous material shipments, the threats are out there.

Under "Hazardous Material Inspection Areas," the most important action a shipper or carrier should consider is the development and implementation of a security plan. Carriers can use a risk management model to assess security risks and develop appropriate measures to reduce or eliminate risk. Risk management modeling steps include: (1) identify areas of concern and partners that may be affected or with whom coordination may be appropriate, (2) assemble detailed information on system operations, (3) identify control points where intervention can reduce or eliminate risk, (4) select and prioritize options to meet identified security goals, (5) take action to implement the strategy, (6) verify implementation of the strategy, and (7) evaluate the effectiveness of the strategy to determine whether additional actions are necessary.

Under "Security Planning," Mr. Fagan suggests that carriers first list the materials they transport and identify those materials with the potential for use as weapons of mass destruction or targets of opportunity. Then, consider a review of current activities and operations from a transportation security perspective, i.e., What are we doing now? What could go wrong? What can we do differently? The next step is to consider how to

reduce the risks that have been identified. For hazardous materials transportation, a security plan likely will focus on personnel, facilities, and en route security issues. To assist in performing appropriate risk assessments, DOT has posted a Risk Management Self-Evaluation Framework on the Internet Web Site: <http://hazmat.dot.gov>.

Under "Personnel Security," Mr. Fagan says that employee can be one of the most critical assets in improving the security of transportation operations. Carriers should ensure that employees are familiar with the company's security plan and properly "trained" in its implementation. Training should include company security objectives, specific security procedures, employee responsibilities, and organizational security structure. Carriers should (1) encourage employees to report suspicious incidents or events, (2) implement routine security inspections, (3) convene regular employee/management meetings on security measures and awareness, (4) communicate facts, trends, updates, etc. to employees, and (5) because Internet communications may be accessed by others, carriers should consider alternative methods for communicating sensitive information. But some employees may be a security risk. Mr. Fagan encourages carriers to consider establishing a process to verify the information provided by applicants on application forms or resumes, including checking with former and current employers and personal references provided by job applicants. Under "Facility Security," access to carrier facilities should be a major security concern. Carriers are the first line of defense in protecting the transportation system. Carriers should consider taking one or more of the following steps to prevent unauthorized access to facilities or shipments: (1) Establish partnerships with local law enforcement officials, emergency responders and other public safety agencies; (2) Request a review of the facility and security program by local law enforcement officials; (3) Restrict the availability of information related to facilities and the materials transported; (4) Encourage authorities in possession of information about the facility to limit disclosure of that information; (5) add security guards and increase off-hours patrols by security or law enforcement personnel; (6) improve fencing around facilities; (7) check the adequacy of locks and other protective equipment; and (8) consider equipping access gates with timed closure devices. Under "Upgrading Security Procedures for Handling Pick-Ups and Deliveries at Your Facilities," carriers should (1) verify all paperwork and require that pick-ups and deliveries be handled only by appointment with known vendors, (2) require vendors to call before a delivery and to provide the driver's name and vehicle number, and (3) accept packages and deliveries only at the facility gate. Other security measures include: (1) secure valves, man-ways, and other fixtures on transportation equipment when not in use, (2) lock all vehicle and delivery trailer doors when not in use, (3) secure all rail, truck, and barge containers, (4) use tamper-resistant or tamper-evident seals and locks on cargo compartment openings, (5) periodically inventory the quantity of hazardous materials in order to recognize if a theft has occurred, (6) keep records of security incidents, (7) review records to identify trends and potential vulnerabilities, and (8) report any suspicious incidents or individuals to law enforcement officials. Under "En Route Security," Mr. Fagan explains that shippers and carriers can work together to assure the security of

hazardous materials shipments from origin to destination. Shippers should assess transportation modes or combinations of modes available for transporting specific materials and select the most appropriate method transportation to ensure efficient and secure movement of products from origin to destination. Under "Know Your Carriers," Mr. Fagan says shippers should know their carriers. Does the shipper have a system for qualifying the carriers used to transport hazardous materials? Shippers should ask the carrier to provide information on the security measures it has implemented. Shippers should verify that the carrier has an appropriate employee hiring and review process, including background checks, and an ongoing security-training program. Finally, shippers should verify the identity of the carrier and/or driver prior to loading a hazardous material.

Mr. Fagan concludes by outlining the "DOT Security Mission." It is (1) ensure public safety, (2) reduce vulnerabilities, (3) improve response to security issues, and (4) keep the transportation system operating—shutting-down hazardous materials shipments are not an option.

Mr. Fagan asks if there are any questions?

Fred Mallar cites the mainline track that runs through the District of Columbia. He asks if there has been any voluntary re-routing of hazardous material traffic from this route or any other route?

Mr. Fagan responds that he knows of none.

Mr. Reilly (ASLRRA) comments that a number of small railroad members of ASLRRA have sought and received assistance from Class I railroads on security issues. He thanks the Class I railroads for this help.

With no additional questions of Mr. Fagan, Chairperson Cothen asks that RSAC approve the Minutes for the 22<sup>nd</sup> Meeting.

Pat Ameen (AAR) asks that three spelling corrections be made, but that he would submit those changes at the end of the meeting.

A MOTION IS MADE AND SECONDED THAT THE MINUTES FOR THE 22<sup>ND</sup> RSAC MEETING BE APPROVED WITH THE CHANGES AS NOTED ABOVE.

BY UNANIMOUS VOICE VOTE THE MINUTES FOR THE 22<sup>ND</sup> RSAC MEETING ARE APPROVED.

Chairperson Cothen asks for a date for the next RSAC Meeting. After a brief discussion, Chairperson Cothen announces that FRA will try to arrange the next RSAC Meeting on either September 21 or 22, 2004 in Washington, D.C.

With no further business, Chairperson Cothen adjourns the 23<sup>rd</sup> RSAC Meeting at 3:05 p.m.

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MEETING ADJOURNED 3:05 P.M.

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*These minutes are not a verbatim transcript of the proceedings. Also, Microsoft PowerPoint overhead view graphs and handout materials distributed during presentations by RSAC Working Group Members, FRA employees, and consultants, generally become part of the official record of these proceedings and are not excerpted in their entirety in the minutes.*

Respectively submitted by John F. Sneed, Contractor.