

RAILROAD SAFETY ADVISORY COMMITTEE (RSAC)

Minutes of Meeting March 24, 1997

The fourth meeting of the RSAC was convened at 8:35 a.m., in the Monticello Room of the Westin Hotel (City Center) (formerly the Washington Vista Hotel), 1400 M Street, N.W., Washington, D.C. 20005, by the RSAC Chairperson, the Federal Railroad Administration's (FRA) Associate Administrator for Safety, Bruce M. Fine.

As RSAC members, or their alternates, assembled, attendance was recorded by sign-in log. Sign-in logs for each daily meeting are a permanent part of the RSAC Docket. Four of the forty-eight voting RSAC members were absent: The Hotel Employees & Restaurant Employees International Union (1 seat), The International Brotherhood of Boilermakers and Blacksmiths (1 seat), The National Conference of Firemen & Oilers (1 seat), and Safe Travel America (1 seat). One of three non-voting RSAC members was absent: Secretaria de Comunicaciones y Transporte (Mexico).

Chairperson Fine began with housekeeping and administrative items. It was announced that, due to meetings affecting senior FRA staff, some of the working group presentations would occur out of the sequence listed on the Meeting Agenda.

**CHAIRPERSON FINE INTRODUCED FRA ADMINISTRATOR
JOLENE M. MOLITORIS.**

Administrator Molitoris welcomed RSAC members to the fourth meeting. In describing the RSAC process, Administrator Molitoris described "consensus" as an idea in which no side involved in the negotiation process would receive 100 percent of what they want to achieve. Administrator Molitoris also reassured the committee that the pending personnel retirements in FRA's Office of Safety were not expected to impact the RSAC process. She assured the RSAC that the "new" team that guides the Office of Safety would increase, not decrease, FRA's commitment to RSAC. RSAC members were also congratulated for all the work they had done to support rail safety.

**FOLLOWING THE DEPARTURE OF ADMINISTRATOR MOLITORIS,
CHAIRPERSON FINE CONTINUED WITH HOUSEKEEPING AND
ADMINISTRATIVE MATTERS.**

Chairperson Fine announced that the Radio Communications Working Group presentation would be switched with the Locomotive Engineer Certification Working Group presentation to accommodate schedules. Chairperson Fine announced that there would be a Symposium on Corporate Culture, presented by the National Transportation Safety Board (NTSB). Chairperson Fine said he hoped that all RSAC

members would attend the Symposium on Corporate Culture and that NTSB representative Robert Lauby (RSAC non-voting member) would be making some comments about the Symposium during the meeting.

Chairperson Fine requested RSAC approval of the "Minutes" from the second and third RSAC Meetings. The "Minutes" had been circulated to RSAC members in advance of the March 24, 1997 meeting.

A MOTION TO APPROVE THE MINUTES OF THE SECOND RSAC MEETING, JULY 24-25, 1996, WAS MADE AND SECONDED. THE MOTION WAS CARRIED BY UNANIMOUS VOICE VOTE.

A MOTION TO APPROVE THE MINUTES OF THE THIRD RSAC MEETING, OCTOBER 31-NOVEMBER 1, 1996, WAS LAID ON THE TABLE. AT LEAST ONE RSAC MEMBER HAD NOT REVIEWED THE MINUTES.

Chairperson Fine announced that status reports on tasks accepted by RSAC would be presented. As the facilitator for the Power Brake Rule, Chairperson Fine presented the first status report on RSAC Task No. 96-1, Revision of Power Brake Regulations.

Due to the current impasse between Power Brake Working Group members, Mr. Fine explained, FRA is unilaterally working on a Notice of Proposed Rulemaking (NPRM) for revisions of Power Brake Regulations. He said that FRA was hopeful that consensus would be reached without agency action. Assuming that the parties agreed to meet again on April 2, he indicated, two additional meetings would be scheduled in April. The Chief Operating Officers of most Class I railroads would be present at the April 2nd session. Mr. Fine said that he believes that the negotiated Power Brake Rule could be concluded shortly. He said a rule produced by the working group would be a better rule than one produced without the RSAC process. He explained that FRA had reached the same stage in mere months, that previously it had taken the agency years to attain. Mr. Fine encouraged the parties to send representatives to the April 2nd meeting and allow the RSAC process to conclude the rule formulation. He cautioned the Committee, however, that FRA would issue the regulations if the parties could not reach consensus.

Ray Lineweber (UTU) indicated that April 2nd was a bad time for labor.

Henry B. Lewin (BRC) said he believed that the Power Brake Working Group had reached an impasse.

Chairperson Fine noted these concerns but again reminded the Power Brake Working Group participants that FRA was working on a NPRM. He told the RSAC that FRA was prepared to put out a rule if the Power Brake Working Group could not reach consensus.

CHAIRPERSON FINE INTRODUCES MARK MCKEON (FRA), WHO PRESENTED A BRIEFING ON RSAC TASK, NUMBER 96-6, REVISION OF THE QUALIFICATION AND CERTIFICATION OF LOCOMOTIVE ENGINEERS REGULATIONS.

Mr. McKeon described Working Group activities, saying the Working Group had met three times since the beginning of the year. An Agenda of 24 items had been established during that time. He said that some work had begun on 19 of the 24 items. He said that tentative agreement in principle had been reached on a large number of items, pending receipt of draft language from FRA. The 24-item Agenda and status of each Agenda item are inserted at TAB 9 of Notebooks given to each RSAC member. These materials are part of the permanent RSAC Docket and are not excerpted in detail in the RSAC Minutes. After discussing each Agenda item, Mr. McKeon concluded that the Working Group was well on its way to meeting target release objectives for the rule as scheduled.

CHAIRPERSON FINE INTRODUCED JAMES PHELAN (FRA) AND RICHARD MCCORD (FRA), WHO PRESENTED A BRIEFING ON RSAC TASK, NUMBER 96-3, RAILROAD COMMUNICATIONS.

A BALLOT IS CIRCULATED FOR RSAC MEMBER VOTE ON RADIO COMMUNICATIONS WORKING GROUP RECOMMENDATIONS TO RSAC. FRA REQUESTED THAT THIS BALLOT BE RETURNED BY APRIL 14, 1997, (MAIL OR FACSIMILE) TO THE RSAC COORDINATOR, VICKY MCCULLY, FEDERAL RAILROAD ADMINISTRATION, 400 7TH STREET, S.W., WASHINGTON, D.C. 20590. FACSIMILE NUMBER IS (202) 632-3877.

Mr. Phelan described the Working Group consensus negotiating process, which culminated with the voting ballot in circulation to RSAC members. Mr. Phelan identified materials inserted at TAB 7 of Notebooks given to each RSAC member. Included is a draft NPRM on Railroad Communications (49 CFR Part 220). These materials are part of the permanent RSAC Docket and are not excerpted in detail in the RSAC Minutes.

Mr. McCord gave a brief overview of existing railroad communications rules and what the NPRM will require. Railroad communications regulations came into existence in 1977. The Railroad Communications Working Group used the existing regulations as a starting point in their assessment process. During the assessment process, the only premise guiding the Working Group was that "railroad radio use was here to stay." Initially the working group considered limiting speech to train crews to dispatchers only. Gradually, the working group changed this stance to include all users along a railroad right-of-way.

Using overhead viewgraphs, Mr. McCord showed visual depictions of how the proposed NPRM will affect the requirement for train crew communications, based on the size and type of operations. Much of the working group's deliberations concerned the treatment

of communications requirements for small railroad operations. Four broad categories of railroad operations and proposed communication requirements follow:

1. For railroads having 400,000 or more annual employee work hours, i.e., Class I railroads, the NPRM proposes that each occupied controlling locomotive have a working radio, and some form of wireless communications redundancy. The proposed rules do not specify the type of redundancy, i.e., additional radio, or cellular telephone. This omission provides flexibility to accommodate future communication technologies.
2. Any train transporting passengers shall have a working radio on the lead unit of the train and some form of wireless communications redundancy.
3. For railroads having fewer than 400,000 annual employee work hours:
 - [A] If freight train operations exceed 25 mph, or if there are joint operations on a track where the maximum authorized speed exceeds 25 mph, or if there are operations within 30 feet of a track where the maximum authorized passenger speed exceeds 40 mph, the occupied controlling locomotive shall have a working radio. However, communications redundancy is not required.
 - [B] If a freight train is transporting hazardous material, or the freight train is in joint operations on a track where the maximum authorized speed is less than 25 mph, wireless communications on the controlling locomotive is required, unless a working radio is present.
4. For railroads with 400,000 or more annual employee work hours, a working radio is required on at least one unit in each multiple piece of maintenance of way equipment traveling under the same movement authority. Operators of each additional piece of maintenance of way equipment are required to have communication ability with each other.

For Roadway Workers, the proposed NPRM requires each employee designated by the employer to provide on-track safety for a roadway work group or groups and each lone worker to have immediate access to a working radio.

Finally, the proposed NPRM makes minor revisions to the existing regulations. For example, the traditional “over and out” salutation is retained.

Ray Linewebber (UTU) asked when the “repair” to the radio that breaks en route would occur.

Mr. McCord responded that if a radio fails en route, the controlling locomotive could proceed until the earlier of the next calendar day inspection or the nearest repair point

where the equipment could be repaired or replaced. Mr. McCord added that, under certain circumstances, the defective radio would not be required to be removed from the locomotive.

Ross Capon (NARP) asked if Mr. Phelan could give a page reference to the “over and out” communication termination salutation.

Mr. Phelan responded that the “over and out” issue is in the “Preamble.” The Working Group believed there should be a clear beginning and ending of the conversation. Page 34 is the reference.

Mr. Linewebber asked what the time frame for implementation would be.

Grady Cothen (FRA) responded that FRA was treating the NPRM as a “non-significant” rule. He added that the agency may be permitted to go forward within a week or two after balloting is complete.

M O R N I N G B R E A K (9:45 A.M.--10:15 A.M.)

Chairperson Fine announced the pending retirement of Philip Olekszyk, Deputy Associate Administrator for Safety Compliance and Program Implementation. RSAC members were encouraged to wish Mr. Olekszyk well in his retirement.

Chairperson Fine announced that an additional Agenda item on Hazardous Materials would be added.

CHAIRPERSON FINE INTRODUCED LISA LEVINE (FRA) AND GEORGE SCERBO (FRA), WHO PRESENTED A BRIEFING ON RSAC TASK, NUMBER 96-5, STEAM-POWERED LOCOMOTIVES, REVISION OF INSPECTION STANDARDS

Ms. Levine announced that the Steam Standards Working Group hoped to conclude its work on steam standards rules in April. At that time, RSAC would be asked to approve the standards for transmittal to the Administrator. Using overhead viewgraphs, Ms. Levine traced the history of steam-powered locomotive inspection standards from the first legislation addressing steam locomotives in 1908 (Ash Pan Act) through current recommendations of the National Transportation Safety Board. The overhead viewgraphs are part of the materials inserted at TAB 8 of Notebooks given to each RSAC member. These materials are part of the permanent RSAC Docket and are not excerpted in detail in the RSAC Minutes.

Also using overhead viewgraphs, Mr. Scerbo continued the presentation by summarizing major changes to steam-powered locomotive inspection standards

(49 CFR Part 230). Mr. Scerbo covered the topics of inspection frequency, movement of non-complying locomotives, welded repairs and alterations, riveted repairs and alterations, and provided definitions for service day, daily inspection, and the 1472 service day inspection. The overhead viewgraphs are part of the materials inserted at TAB 8 of Notebooks given to each RSAC member. These materials are part of the permanent RSAC Docket and are not excerpted in detail in the RSAC Minutes.

Mr. Scerbo announced that one Steam Standards Working Group agenda item not fully addressed was the use of alarms to indicate low water in steam locomotive boilers.

Mr. Lewin asked if there was any significance in the number of days selected for certain inspection intervals. Why is 368 days specified for a 1 year inspection, instead of 365?

Mr. Scerbo responded that there is no particular significance to the 368-day period other than it is a carryover from the existing regulation. It denoted a 1-year inspection requirement. In addition, Mr. Scerbo added that the 1472 service day inspection is simply a four-year inspection requirement, i.e., $4 \times 368 = 1472$.

Chairperson Fine revisited RSAC Task No. 96-1, Revision of Power Brake Regulations. He said that this rule is viewed as a break-through rule. He said that it is important that the working group resolve this issue through the RSAC process, rather than have FRA issue a rule. Chairperson Fine intended to use all of his persuasive powers to get the working group parties back together to resolve these issues.

CHAIRPERSON FINE INTRODUCED MICHAEL HUNTLEY (FRA), WHO PRESENTED A BRIEFING ON RSAC TASK NUMBER 96-8, LOCOMOTIVE CRASHWORTHINESS AND WORKING CONDITIONS (PLANNING TASK ONLY).

Mr. Huntley described the progress of the "planning" group's review of *Locomotive Crashworthiness and Cab Working Conditions, A Report to Congress*. This report was distributed at the 3rd RSAC Meeting. The working group task statement and membership composition is inserted at TAB 10 of Notebooks given to each RSAC member. These materials are part of the permanent RSAC Docket and are not excerpted in detail in the RSAC Minutes. The report is divided into three broad categories: (1) locomotive crashworthiness, (2) cab working conditions, and (3) cab ergonomics. Mr. Huntley reported that the working group was considering a number of scenarios concerning locomotive crashworthiness. Also under consideration are scenarios involving locomotive cab noise, sanitary facilities, vibration (i.e., how does vibration affect safety and crew safety?), temperature--the upper temperature range is not currently addressed, and standardized cab layout and seat design as they relate to safety. Mr. Huntley said he believed that by the next RSAC meeting, a consensus among the planning task members may be reached on how RSAC should approach locomotive crashworthiness and cab working condition issues.

Rick Inclima (BMW) asked if the Working Group was already meeting.

Mr. Huntley replied that the present group is simply involved in a planning task. He said that a Working Group had not been established.

CHAIRPERSON FINE INTRODUCED ALBERT J. REINSCHMIDT (AAR) AND ROBERT C. LAUBY (NTSB), WHO PRESENTED A STATUS REPORTS ON LOCOMOTIVE EVENT RECORDER DATA SURVIVABILITY

Dr. Reinschmidt reported the results of a survey involving 10,000 locomotives equipped with event recorders. Electronic event recorders are found in 53 percent of equipped locomotives and magnetic tape-based event recorders are found in 47 percent of equipped locomotives. All new locomotives are equipped with electronic event recorders. Magnetic tape-based event recorders are only available by special order and at additional cost. The data provided by typical event recorders consist of time, speed, distance, amperage, throttle position, reverse direction, independent brake, and automatic brake. Many event recorders have additional capabilities, particularly electronic event recorders.

Mr. Lauby presented the NTSB's position on locomotive event recorders. By letter dated March 5, 1997, from NTSB Chairman Hall to Administrator Molitoris, the NTSB recommended that FRA require that event recorders be tested during the quarterly inspections of the locomotive in such a manner that the entire event recording system is evaluated. In addition, he said, the NTSB believed that the placement of event recorders in the lead locomotive could provide more accurate and diverse data than one in a trailing locomotive. This letter is inserted at TAB 12 of Notebooks given to each RSAC member. These materials are part of the permanent RSAC Docket and are not excerpted in detail in the RSAC Minutes. Mr. Lauby explained that much of the NTSB's event recorder survivability research concerns aircraft event recorders. There had been very little study of standards for locomotive event recorder survivability other than to assume that criteria for locomotive event recorders do not have to be as rigorous as for aircraft operations. He cited the unlikelihood of locomotive event recorders being subject to deep submersion, or aircraft-like deceleration forces upon impact. However, fires, often resulting from the rupture of locomotive fuel tanks can burn for hours. Mr. Lauby cited a number of railroad accidents in which event recorders were burned beyond the ability to recover data.

Francis G. McKenna (Tourist Railway Association) observed that there appears to be a requirement for protection from fire and water damage, as well as maintaining memory after a power loss.

Mr. Cothen responded that there are four sets of requirements for locomotive event recorders as requested by the NTSB and others. These are: (1) what data should be recorded, (2) what are the crash survivability requirements under fire, water, and impact

conditions, (3) what inspection, testing, maintenance of event recorders should be required by FRA, and (4) should event recorders be required in the lead versus trailing locomotives.

Mr. Cothen also explained that items (3) and (4) may be a job that can appropriately be handled by FRA's Technical Resolution Committees. For items (1) and (2), there are two options: (A) Request that the AAR set standards, and (B) Request that RSAC establish a Working Group to resolve the matter.

Mr. Lewin asked Mr. Lauby if the NTSB has any idea of what a lead locomotive requires to keep data safe?

Mr. Lauby responded that the NTSB knows about aircraft event recorder survivability in aircraft. He said that the NTSB did not know about fire survivability in railroad accidents.

Clarence V. Monin (BLE) asks Mr. Lauby if the "aircraft standard" is a "FAA" standard, or an "industry" standard?

Mr. Lauby answers that he would have to check, but that he believed that it is an "FAA" standard. He added that in aviation there are also flight deck voice recordings, which may not be necessary for locomotives. For the worst accidents, there is less likelihood that the train crew will survive. Under this circumstance, the only data the NTSB will have is from the locomotive event recorder.

Mr. Monin stated that in the view of the 23 locomotive engineers, who have recently lost their lives, a locomotive event recorder could be the only testimony as to what happened.

Mr. Lewin stated that if the NTSB did not have any data about locomotive event recorder survivability criteria, than RSAC needs the Volpe National Transportation Systems Center, or other engineering consultant to look into this subject for a technical evaluation.

MR. MONIN ENTERED A MOTION BEFORE RSAC TO ESTABLISH A WORKING GROUP TO EXAMINE ALL ELEMENTS INVOLVING LOCOMOTIVE EVENT RECORDERS. THE MOTION IS SECONDED. A DISCUSSION FOLLOWS.

Mr. Linwebber requested that locomotive event recorders be combined as an agenda item with the future Locomotive Crashworthiness Working Group.

Mr. Monin said that he believed that a separate working group should be established for locomotive event recorders. He views the issues as separate.

Dr. Reinschmidt said that he does not believe a Locomotive Event Recorder Working Group will add anything to the knowledge already known.

Joseph Mattingly (BRS) said that he was in favor of the motion because signalmen are not currently involved in locomotive crashworthiness.

Mr. Cothen asked RSAC Members to consider the number of Working Groups and task forces already in progress.

Mr. Capon asked if RSAC had established a Working Group for Locomotive Crashworthiness.

Mr. Cothen responded that a working group was operating for planning purposes only. Their recommendation may be to suggest two or more Working Groups to handle the Locomotive Crashworthiness issues.

THE MOTION TO ESTABLISH A WORKING GROUP TO EXAMINE ALL ELEMENTS INVOLVING LOCOMOTIVE EVENT RECORDERS WAS REPEATED. IF A WORKING GROUP IS APPROVED, IT WILL EXAMINE: (1) WHAT DATA SHOULD BE RECORDED, (2) WHAT ARE THE CRASH SURVIVABILITY REQUIREMENTS UNDER FIRE, WATER, AND IMPACT CONDITIONS, (3) WHAT INSPECTION, TESTING, MAINTENANCE OF EVENT RECORDERS SHOULD BE REQUIRED BY FRA, AND (4) SHOULD EVENT RECORDERS BE REQUIRED IN THE LEAD VERSUS TRAILING LOCOMOTIVES?

THE MOTION TO ESTABLISH A WORKING GROUP ON LOCOMOTIVE EVENT RECORDER SURVIVABILITY WAS APPROVED BY UNANIMOUS VOICE VOTE.

CHAIRPERSON FINE INTRODUCED WILLIAM CLIFFORD (ATDD/BLE), WHO PRESENTED A STATUS REPORT FROM THE TRAIN DISPATCHER TRAINING TASK FORCE.

Mr. Clifford gave background material on the approach the task force is taking. He said that the group has met several times during the past three months. He said that FRA had been consulted to find out what would be acceptable standards to the agency. FRA hired a consultant, who has provided the task force with information on current dispatcher training and dispatcher workloads. It is intended that the work of the training task force, supported by the contractor, go forward as a non-regulatory activity, given the wide range of dispatcher duties on various railroads. An outline of Train Dispatchers Training Standards, and Train Dispatcher Training Elements is inserted at TAB 11 of Notebooks given to each RSAC member. These materials are part of the permanent RSAC Docket and are not excerpted in detail in the RSAC Minutes.

Charles Dettmann (AAR) asked for confirmation that there are no plans for the Train Dispatcher Training Task Force to become a RSAC Working Group.

Chairperson Fine confirmed that there are no plans for a working group.

Daniel D. Foth (APTA) would like a copy of what the task force is doing.

William E. Loftus (ASLRA) responded that ASLRA would also like to be brought into the process.

CHAIRPERSON FINE INTRODUCED EDWARD W. PRITCHARD (FRA), WHO PRESENTED A STATUS REPORT ON TANK CAR SAFETY.

Mr. Pritchard discussed a handout, "Ensuring Tank Car Safety." The article described a contract between FRA and the Transportation Research Board (TRB) to study railroad tank car design. Although TRB found government and industry procedures and activities sound, a number of recommendations had been made to improve partnership efforts in tank car safety. The handout and its recommendations are part of the permanent RSAC Docket and are not excerpted in detail in the RSAC minutes. RSAC Members are invited to attend a seminar on tank car safety in Houston, Texas on May 15, 1997.

CHAIRPERSON FINE INTRODUCED FRA DEPUTY ADMINISTRATOR DONALD M. ITZKOFF.

Mr. Itzkoff made generalized remarks to RSAC. He reminded RSAC Members that this was an important process. He said that he was pleased that RSAC members are continuing to work together towards the common goal of increased railroad safety.

CHAIRPERSON FINE OUTLINED THE TENTATIVE AGENDA FOR THE NEXT RSAC MEETING. HE SAID THAT A NUMBER OF WORKING GROUP TASKS WERE EXPECTED TO BE IN FINAL FORM FOR RSAC CONSIDERATION. HE REQUESTED A DATES FOR THE NEXT RSAC MEETING.

After a brief discussion, June 24th (Tuesday) was selected as the date for the next RSAC Meeting.

Mr. Clifford asked if the tentative April 9th meeting date would be canceled.

Mr. Fine said that it would.

M E E T I N G A D J O U R N E D 12:35 P.M.

Respectively submitted by John F. Sneed, Secretary.