

RAILROAD SAFETY ADVISORY COMMITTEE (RSAC)
RSAC Initiatives Update as of November 30, 2001

The **RSAC** will hold its eighteenth full Committee meeting on February 13, 2002. Since its first meeting in April of 1996, the RSAC has accepted seventeen tasks. The following is a review of RSAC initiatives to date:

Task 96-1: Revision of Freight Power Brake Regulations - The 1992 Rail Safety Enforcement and Review Act of 1992 required FRA to revise the power brake regulations. FRA did complete the portion of the rule involving two-way end-of train devices (EOTs) and it became effective on July 1, 1997. FRA published a Notice of Proposed Rulemaking (NPRM) on September 16, 1994, and conducted six days of public hearings. Additional options were requested from passenger interests and freight interests. Passenger power brake provisions were included in the Passenger Equipment Standards NPRM published September 23, 1997, and a final rule is in preparation. Revision of the freight power brake regulations was tasked to RSAC on April 1, 1996. After a period of over a year of intense efforts, a consensus between railroad labor and management could not be reached on several contentious issues. FRA formally withdrew the freight power brake task at the June 24, 1997, RSAC meeting. FRA published an NPRM on September 9, 1998, reflective of what FRA has learned through the collaborative process. Public hearings were conducted on October 26, 1998, in Kansas City, Missouri, and on November 13, 1998, in Washington, DC. A technical conference was held in Walnut Creek, California, November 23-24, 1998. The final date for the submission of written comments was extended to March 1, 1999. A public meeting to discuss FRA's collection of inspection data was conducted on May 27, 1999. The final rule was published in the Federal Register on January 17, 2001 (66 FR 4104). An amendment extending the effective date of the final rule until May 31, 2001 was published on February 12, 2001, (66 FR 9905). FRA is reviewing petitions for reconsideration and has published amendments to Subpart D of the final rule (66 FR 36983; August 1, 2001). FRA is preparing responses to the remaining issues. Contact: Thomas Hermann (202) 493-6036.

Task 96-2: Revision of Track Safety Standards - The 1992 safety authorization act required FRA to issue revised track rules. FRA published an Advanced Notice of Proposed Rulemaking (ANPRM) on November 6, 1992, and conducted workshops during the period January-March 1993. The RSAC accepted the task of preparing an NPRM on April 2, 1996. In November 1996, the RSAC voted to recommend issuance of the NPRM and FRA published an NPRM on July 3, 1997. A public hearing was held on September 4, 1997, with comments due by December 22, 1997. The final rule was published on June 22, 1998. The effective date of the rule was September 21, 1998.

Although the subject of much discussion, the Track Safety Working Group could not reach consensus about how the revised Track Safety Standards should address GRMS technology. The RSAC therefore recommended that a small task group continue evaluating the possibility of developing GRMS standards for broader application within the industry. The task group drafted a standard providing for the use of this technology within the industry and FRA prepared an amendment to the final track rule providing for the use of GRMS technology. A package containing the proposed GRMS amendment and the proposed Safety Standards for Roadway Maintenance Machines was prepared and sent to the Track Working Group for a mail ballot. Following the Track Working Group ballot, additional deliberations were conducted to resolve the remaining issues. The GRMS final rule amendment was forwarded to the RSAC for a mail ballot on July 24, 2000 and approved by the full RSAC in the mail ballot during August. The final rule amendment was published January 10, 2001 (66 FR 1894). On January 31, 2001, FRA published a notice extending the effective date of the GRMS amendment to April 10, 2001 (66 FR 8372). On February 8, 2001, FRA published a notice delaying the effective date until June 9, 2001, in accordance with the Regulatory Review Plan (66 FR 9676). The GRMS final rule was reviewed and has been finalized. Contact: Al MacDowell (202) 493-6236.

Task 96-3: Railroad Communications - FRA, in submitting a report to Congress on Railroad Communications and Train Control on July 13, 1994, noted the need to revise existing Federal standards for radio communications in concert with railroads and employee representatives. The RSAC accepted the task of preparing an NPRM, including consideration of communication capabilities required in railroad operations, on April 1, 1996. The RSAC voted to recommend issuance of an NPRM. The NPRM was published on June 11, 1997. A final rule was published on September 4, 1998, and became effective on January 2, 1999 (63 FR 47182). Contact: Gene Cox: (202) 493-6319.

Task 96-4: Tourist, Excursion, Scenic and Historic Service - The Swift Railroad Development Act of 1994 required FRA to submit a report to Congress regarding FRA's actions to recognize the unique factors associated with these generally small passenger operations that often utilize historic equipment. The report was submitted to the Congress on June 10, 1996. The RSAC authorized formation of a Working group on Tourist and Historic Railroads on April 1, 1996, to promote the safe operation of tourist and historic rail operations. The Working group monitored and assisted completion of the steam locomotive regulations task and will continue its oversight of task force activities, including the possible development of requirements for the training of steam locomotive operators and maintenance personnel. Planned future activities involve the review of other regulations, such as track safety, emergency preparedness, and passenger

equipment safety standards for possible adaptation to the safety needs of tourist and historic railroads. Contact: Grady Cothen: (202) 493-6302.

Task 96-5: Revision of Steam-Powered Locomotive Inspection Standards - A committee of steam locomotive experts from tourist and historic railroads have sought a partnership with FRA to revise the steam locomotive regulations. Revision of the regulations was tasked to the RSAC on July 24, 1996. The Tourist and Historic Railroads Working Group created a Steam Task Force to address this task. The full Committee voted to recommend issuance of an NPRM. The NPRM was published in the Federal Register on September 25, 1998. A public hearing was held on February 4, 1999. The Task Force's recommendations in response to the comments received were accepted by the Working group and the full Committee voted to incorporate the recommendations in the final rule. The final rule was published on November 17, 1999, and became effective January 18, 2000 (64 FR 62828). Contact: George Scerbo: (202) 493-6349.

Task 96-6: Revision of Qualification and Certification of Locomotive Engineer Regulations - The final rule for locomotive engineer certification became effective in 1991, but certain issues were left unresolved. Experience under the rule also raised additional issues. An interim final rule amendment was published on October 12, 1995. The RSAC accepted a task to revise the regulations on October 31, 1996. The full Committee voted at the May 14, 1998, meeting to recommend issuance of the NPRM forwarded by the Working group. An NPRM was published in the Federal Register on September 22, 1998. The Working group met to resolve issues presented in the public comments. At the January 28, 1999, meeting, the RSAC recommended issuance of a final rule with the Working group modifications. The final rule was published on November 8, 1999 (64 FR 60966). Contact: John Conklin (202) 493-6318.

Task 96-7: Safety Standards for Roadway Maintenance Machines (On-Track Equipment) - During deliberations of the Working Group on Track Safety Standards, the issue of proposing standards relating to the safety of persons riding or operating maintenance-of-way equipment was raised. On October 31, 1996, the RSAC accepted a task of drafting proposed rules for safety of this equipment. A Task Force was formed to address the issue, and the Task Force reached a consensus agreement in principle on what should be included in the proposed rule. A proposed rule based on the working group consensus was forwarded to the full RSAC for a mail ballot on July 24, 2000. The NPRM was approved by the full RSAC in the mail ballot during August and was published January 10, 2001 (66 FR 1930). The Task Force is to meet in the near future to review the comments. Next steps include Working Group and Full RSAC approval. Contact: Al MacDowell: (202) 493-6236.

Task 96-8: Locomotive Crashworthiness and Working Conditions Planning

Task - The Rail Safety Enforcement and Review Act of 1992 required FRA to conduct a proceeding regarding locomotive crashworthiness and working conditions and issue regulations or submit a report. FRA conducted research, outreach, and a survey of locomotive conditions and finalized a report to the Congress entitled *Locomotive Crashworthiness & Working Conditions*, transmitted by letter of September 18, 1996. The report conveyed data and information developed by FRA, closed out those areas of investigation for which further action is not warranted, and defined issues that should be pursued further in concert with industry parties, either for voluntary or regulatory action. The RSAC accepted a planning task on October 31, 1996, to evaluate the need for action responsive to recommendations contained in the report. A Planning Group reviewed the report and grouped issues into categories, and prepared drafts of the task statements. FRA presented the task statements addressing locomotive crashworthiness and cab working conditions to the RSAC on June 24, 1997.

Task 97-1: Locomotive Crashworthiness - On June 24, 1997, the RSAC voted to accept a task addressing locomotive crashworthiness issues. The Working Group on Locomotive Crashworthiness established a Task Force on engineering issues that reviewed collision history and design options. The Working group reviewed the results of research that was commissioned and is drafting performance-based standards for freight and passenger locomotives to present to the RSAC for consideration. An accident review task force has evaluated the potential effectiveness of suggested improvements. An NPRM has been prepared and circulated, and the Working Group met to review the draft on October 9 - 10, 2001 in Washington, DC. The next meeting is scheduled for January 17 - 18, 2002 to go over the proposed redrafts. The Full RSAC will review after approval by the Working Group. Contact: Sean Mehrvazi: (202) - 493-6237.

Task 97-2: Locomotive Cab Working Conditions - On June 24, 1997, the RSAC voted to accept a task addressing cab working conditions issues. The Working Group on Locomotive Cab Working Conditions established task forces on noise and temperature. The full working group met several times to develop recommendations for locomotive sanitation standards.

Sanitation. The working group developed a draft sanitation NPRM, which was transmitted to full committee members and approved at the December 7, 2000, RSAC meeting. The NPRM was published January 2, 2001 (66 FR 136). The working group is evaluating comments from the public hearing held April 2, 2001. A meeting was held August 21, 2001, to discuss comments in response to the NPRM. Agreement was reached on resolution of the comments to the NPRM, subject to review of meeting minutes capturing these agreements. The Working Group gave concurrence to the send the recommendations to the full RSAC for ballot vote. The ballot votes are due back by December 10, 2001.

Noise Exposure. The Cab Working Group met in October and November of 2000 and in April of 2001 in an effort to complete development of a noise exposure standard, reaching tentative agreement on most of the significant issues. FRA circulated draft rule text for the April meeting, and the group incorporated refinements and substantive changes to that language during the April meeting. A full draft NPRM will be circulated to the working group for consideration.

Temperature. The working group has also considered issues related to cab temperature, and is expected to consider additional issues (such as vibration) in the future. Contact: Jeff Horn (202) 493-6283.

Task 97-3: Revision of Event Recorder Requirements - In issuing final rules for event recorders which became effective May 5, 1995, FRA noted the need to provide more refined technical standards. The National Transportation Safety Board (NTSB) noted the loss of data from event recorders in several accidents due to fire, water and mechanical damage. NTSB proposed performance standards and agreed to serve as co-chair for an industry/government working group that would define technical standards for next-generation railroad event recorders. FRA conducted a meeting of an informal working group comprised of railroad labor and management and co-chaired by NTSB on December 7, 1995, to consider development of technical standards. At the July 24-25, 1996, RSAC meeting, the Association of American Railroads (AAR) agreed to continue the inquiry and on November 1, 1996, reported the status of work on proposed industry standards to the RSAC. On March 5, 1997, the NTSB issued recommendations regarding testing and maintenance of event recorders as a result of finding in the investigation of an accident on February 1, 1996, at Cajon Pass, California. On March 24, 1997, the RSAC indicated its desire to receive a task to consider the NTSB recommendations with respect to crash survivability, testing and maintenance. A task was presented to, and accepted by, the RSAC on June 24, 1997. The Working Group on Event Recorders was formed and a Task Force established. The Working group and Task Force have conducted meetings. The draft NPRM went to the Working Group May 01, 2001, for comment and FRA has reviewed the comments. A new draft of the NPRM is under final review within FRA. It will be circulated to the Working Group, which will be asked to meet to consider it. Contact: Ed Pritchard (202) 493-6247.

Tasks 97-4, 97-5 and 97-6: Positive Train Control (PTC) Systems - On September 30, 1997, the RSAC accepted three tasks involving defining PTC functionalities, describing available technologies, evaluating costs and benefit of potential systems, and considering implementation opportunities and challenges, including demonstration and deployment. Accomplishments of the PTC Working Group to date include the following:

Report to the Administrator / Report to the Congress: The Swift Rail Development Act of 1994 required FRA to submit a status report on the implementation of positive train control as a follow-up to the July 1994 report entitled *Railroad Communications and Train Control*. The Data and Implementation Task Force of the PTC Working Group prepared a Report to the Administrator entitled *Implementation of Positive Train Control Systems* which was approved by the full committee on September 8, 1999. This RSAC report has been widely disseminated, and FRA has referred to its findings and recommendations in responses to questions from the Congress. FRA obtained clearance of a letter report to the Congress which enclosed the RSAC PTC report, and that letter report was signed by the Administrator on May 17, 2000.

Notice of Proposed Rulemaking for Performance Standards: The Standards Task Force prepared an NPRM on performance standards for processor-based signal and train control systems. The Task Force held a final meeting on the NPRM on June 28, and the full PTC Working Group considered and approved the NPRM on June 29, with amendments. The PTC NPRM was approved by consensus at the full RSAC meeting held on September 14, 2000. The NPRM was published August 10, 2001 in the Federal Register (66 FR 42352). The comment period was extended to November 8, 2001.

The working group also established teams dealing with PTC-related operating rules and human factors issues, as well as a team assisting in the development of an Axiomatic Safety-Critical Assessment Process (ASCAP) designed to provide a risk assessment tool kit for use in applying new performance-based standards. The operating rules team completed their task in April 2000, and their work was approved by the PTC Working Group at its last meeting on June 29.

Meetings of the PTC Working Group were held on November 9, 2000, and March 28, 2001, to discuss reports from the Human Factors and ASCAP teams, and from the manager of the North American Joint PTC Project. Monitoring of implementation continues. The Working Group will meet December 4, 2001 through 6th in San Antonio, Texas. Contact: Grady Cothen (202) 493-6302.

Task 97-7: Definition of Reportable “Train Accident” - FRA identified the need to comprehensively revise the regulations governing accident/incident reporting, which had not been revised since 1974. FRA issued an NPRM on August 19, 1994, and a final rule on May 30, 1996. Technical amendments were published on November 22, 1996, and the FRA Administrator signed final rule amendments on December 16, 1996. The final rule became effective on January 1, 1997. On June 24, 1997, the RSAC reviewed a request by an RSAC member to clarify the means used by railroads to estimate railroad property

damage and improve the consistency of reporting. The RSAC accepted the task on September 30, 1997, limited to determination of damages qualifying an event as a reportable train accident. A working group was formed, held its initial meeting in February 1999, and has been conducting meetings to address this task. The working group has designed a survey form to collect specific data about damages to railroad equipment. The survey started on August 1, 2000 and ended January 31, 2001. The survey was voluntary; most of the large freight railroads and four passenger railroads participated. A complete statistical analysis will be done at the conclusion of the survey to determine if a method can be used to calculate property damages. The analysis of the pilot survey data by a statistician was completed, with a report the last week of April 2001. A meeting was held May 21-23, 2001, to review the report. Meeting was held November 14, 2001 through 15th in St. Louis. Future meeting is scheduled for January 23, 2002 through the 25th in Orlando, Florida. FRA is preparing options for consideration by RSAC. Working Group discussed new task, whether to conform to OSHA regulations. Contact: Robert Finkelstein (202) 493-6280.

Task 00-1: Blue Signal Protection - On August 16, 1993, FRA published a final rule permitting one or more utility employees to associate themselves with a train crew for the purpose of performing normal operating functions that require employees to go on, under or between rolling stock, without use of blue signal protection (which is ordinarily appropriate for mechanical duties). During the proceeding it was noted that rules for locomotive engineers working alone were not clearly defined. FRA published a final rule amendment governing single engineers working alone on March 1, 1995, but granted a requested suspension of the amendment on June 9, 1995, pending development of additional facts. Since that time, additional blue signal issues have continued to emerge, including application of the requirements to contractors performing the subject functions on railroad property. On October 31, 1996, the RSAC advised FRA that this project should not be proposed for early tasking, given conflicting demands on the resources of member organizations. RSAC accepted the task at the January 28, 2000 full Committee meeting. A working group has been formed and held its first meeting on October 16-18, 2000 in Washington, DC. The second meeting was held March 19-21, 2001. The next two meetings of the working group were held May 1-3, 2001 and June 19-21, 2001. No consensus on the issues. The next meeting was held October 23 - 25, 2001 in Orlando, Florida. Reached consensus on several issues. Next meeting scheduled for January 2002. Contact: Doug Taylor (202) 493-6255.

Task 01-01: Developing conformity of FRA's regulations for accident and incident reporting to revised regulations of the OSHA, and to make appropriate revisions to the FRA Guide for preparing accident/incident reports (Reporting Guide). The task was accepted by the full RSAC on April 23, 2001 and was assigned to the Accident/Incident Working Group. The Working Group met on May 21-23, 2001 and the task was discussed and four task forces were set to review changes and/or modifications. To date, these task forces have identified a series of minor modifications to the Reporting Guide/regulations for consideration that will be presented to the Working Group for approval. A target date of September 15, 2001 was set for reporting the recommended changes. The Working Group met September 11, 2001 in Chicago; meeting was dismissed due to the national emergency. A meeting was held November 14-15, 2001 in St. Louis, Missouri; the next meeting is scheduled for January 23-24 in Baltimore, Maryland. Contact: Robert Finkelstein (202) 493-36280.