## SUPPORTING JUSTIFICATION RAILROAD COMMUNICATIONS

1. EXPLAIN THE CIRCUMSTANCES THAT MAKE THE COLLECTION OF INFORMATION NECESSARY. IDENTIFY ANY LEGAL OR ADMINISTRATIVE REQUIREMENTS THAT NECESSITATE THE COLLECTION. ATTACH A COPY OF THE APPROPRIATE SECTION OF EACH STATUTE AND REGULATION MANDATING OR AUTHORIZING THE COLLECTION OF INFORMATION.

This collection of information is a request for an extension of a currently approved submission. The Federal Railroad Administration (FRA) has revised the information in this collection – where appropriate and necessary – to reflect the most current data, and FRA's experience over the past three years in implementing the requirements of this rule.

#### **Background**

On October 16, 1970, Congress enacted the Federal Railroad Safety Act of 1970. This Act gave the Secretary of Transportation authority to ... "Prescribe, as necessary, appropriate rules, regulations, orders and standards for all areas of railroad safety." As a result of increasing human-factor related accident rates, including those accidents attributed to misuse of radios in railroad operations, the Federal Railroad Administration (FRA) determined that there was a need for stricter rules governing the use of radios in railroad operations. Many unsafe practices in the use of radios in railroad operations were occurring routinely. The National Transportation Safety Board (NTSB), citing two accidents where misuse of the radio was involved, expressed concern that an undesirable trend was developing. On August 11, 1975, the FRA published in the Federal Register (40 FR 33682) a Notice of Proposed Rulemaking (NPRM) considering the issuance of a new Part 220 (Radio Standards and Procedures) which would prescribe mandatory procedures governing the use of radio communications in connection with railroad operations. The required rulemaking procedures were followed, and the final rule was published on January 27, 1977, (42 FR, No. 18) to take effect on August 1, 1977.

In 1992, in Section 11 of the Rail Safety Enforcement and Review Act (RSERA), Public Law No. 102-365, 106 Stat. 972, Congress required the Secretary of Transportation to conduct an inquiry into the Department's railroad radio standards and procedures (49 CFR Part 220). As part of its inquiry, FRA conducted a field investigation of current voice communications technology and practice; held three Roundtable discussions on advanced train control technologies; published a notice of special safety inquiry (59 FR 11847, March 11, 1994); conducted a public hearing on voice radio communications; contracted with the Department of Commerce's Institute for Telecommunications Sciences for a technical evaluation of advanced train control systems; and consulted with other agencies within the Department of Transportation (DOT) and with staff of the

Federal Communications Commission (FCC).

After completing its inquiry, FRA concluded that railroad radio communications were generally good and had steadily improved since FRA's last major study of the area in 1987. Several issues arose, however. Compliance with the standards and procedures in Part 220 was poor, possibly due to the inflexibility of FRA's regulations. Employees continued to report problems with radio equipment.

In July 1994, therefore, FRA published its **Report to Congress on Railroad Communications and Train Control** (Report). At page xi of the Report, based on the findings of its inquiry, FRA committed to the following:

- o Revising the Radio Standards and Procedures to make the regulations more flexible to promote improved compliance.
- o Propose, as part of that rulemaking, including in the revised rule requirements that railroads provide suitable communication links between trains and dispatchers, and between locomotive engineers and ground employees, and that back-up systems be established for safety critical functions.
- o Propose, as a part of that rulemaking, that each lead locomotive be equipped with an operative radio or suitable alternate communication equipment.
- o Work with a major railroad and its employees to implement transmission of movement authorities by digital data radio, in lieu of voice radio communications.

In June 1996, FRA convened a working group comprised of rail industry and labor representatives to recommend revisions to FRA's radio standards and procedures (49 CFR Part 220). The working group examined extensive data and debated how to make the regulations more flexible, thereby improving compliance, and whether to mandate radios and other forms of wireless communications to convey emergency and need to know information.

After studying these issues, the working group recommended requiring wireless communications devices, including radios, for specified classifications of railroad operations and roadway workers. This part has been re-titled to reflect its recommended coverage of other means of wireless communications such as cellular telephones and data radio terminals. The amendments in the final rule, which are based upon both FRA and working group recommendations, serve to accommodate changing technologies while continuing to ensure sound safety practices.

2. INDICATE HOW, BY WHOM, AND FOR WHAT PURPOSE THE INFORMATION IS TO BE USED. EXCEPT FOR A NEW COLLECTION, INDICATE THE ACTUAL USE THE AGENCY HAS MADE OF THE INFORMATION RECEIVED FROM THE CURRENT COLLECTION.

The information is used by FRA to promote safety in rail operations and to ensure compliance by railroads and their employees with the requirements of this Part. Specifically, FRA reviews waiver petitions to determine whether it is appropriate and in the public interest to grant exceptions to any of the requirements of this regulation. The instruction, re-instruction, and operational testing of railroad employees is used by FRA and railroads to ensure that employees are thoroughly familiar with the proper use of radio communication and the railroad's operating rules governing the use of radio communication in daily railroad operations, and to ensure that these employees can quickly and effectively respond to any situation, particularly emergencies that might arise, which would jeopardize the health and safety of train crews, roadway workers, passengers, and others working/traveling in the rail environment.

FRA's Office of Safety personnel have reviewed and continue to review railroads operating rules records concerning radio communications to determine that the minimum standards established by the regulation are being met. The information collected enables both the railroads and FRA to focus attention on and improve those procedures which are unique to radio-train operations. FRA's analysis of the information collected is used to identify unsafe operating practices in the use of radio communications in railroad operations, and to ensure that railroads take corrective measures concerning any unsafe operating practices. If the information were not collected, accidents would then be the primary method of identifying unsafe practices, and prevention efforts would be severely hampered.

Radio and all primary and redundant wireless communication equipment are required to be tested by railroad employees to ensure that they are functioning properly. The information is used by railroads to repair or replace malfunctioning equipment and to ensure that railroad employees — train crews, dispatchers, roadway workers, signalmen, flagmen, etc. — can communicate with one another and railroad management regarding daily railroad operations, work assignments, and other issues that may arise impacting train movements.

Mandatory directives transmitted by radio, which are required to be copied down in writing and then immediately repeated after receipt by the receiving employee, are used by railroads and railroad employees to ensure the safe operation of trains and other ontrack equipment, as well to enhance on-track safety for roadway workers and other railroad employees. In particular, before a mandatory directive is acted upon by a train crew, the conductor and locomotive engineer must have a written copy of the mandatory directive and make certain that the mandatory directive is read and understood by all members of the crew who are responsible for the operation of the train. Thus, all train crew members will have a clear understanding of the nature of the train movement and will act accordingly. Mandatory directives, which have been fulfilled or cancelled, must be marked with an "X" or in accordance with the railroad's operating rules, and retained for the duration of the train crew's work assignment. Train crews effect these markings

to ensure that they are not operating with a track warrant or mandatory directive that is no longer in effect. Train crews use this information or follow this operating procedure to ensure that only current mandatory directives are executed and that trains are moved in an authorized, appropriate, and safe manner. Thus, by reducing the likelihood of movement errors, railroad safety is considerably enhanced.

3. DESCRIBE WHETHER, AND TO WHAT EXTENT, THE COLLECTION OF INFORMATION INVOLVES THE USE OF AUTOMATED, ELECTRONIC, MECHANICAL, OR OTHER TECHNOLOGICAL COLLECTION TECHNIQUES OR OTHER FORMS OF INFORMATION TECHNOLOGY, E.G. PERMITTING ELECTRONIC SUBMISSION OF RESPONSES, AND THE BASIS FOR THE DECISION FOR ADOPTING THIS MEANS OF COLLECTION. ALSO DESCRIBE ANY CONSIDERATION OF USING INFORMATION TECHNOLOGY TO REDUCE BURDEN.

Over the years, FRA has strongly encouraged and highly endorsed the use of advanced information technology, wherever possible, to reduce burden. In keeping with the Government Paperwork Elimination Act (GPEA), the minimum standards imposed by this regulation are sufficiently broad to permit a railroad to comply through the use of improved technology, represented by closed circuit television or other advances in microcircuitry transmission in the communication of train orders.

Given the current state of radio and wireless communication, it should be noted that the information collection requirements presented by this rule involve the minimal use of paper. Where written paper requirements are specified, such as the manual copying of mandatory directives, FRA has done so to improve safety in the daily railroad environment by reducing the likelihood of misunderstandings or miscommunication between dispatchers/operators and train crews, and dispatchers/operators and other railroad employees before a mandatory directive is acted upon.

4. DESCRIBE EFFORTS TO IDENTIFY DUPLICATION. SHOW SPECIFICALLY WHY ANY SIMILAR INFORMATION ALREADY AVAILABLE CANNOT BE USED OR MODIFIED FOR USE FOR THE PURPOSES DESCRIBED IN ITEM 2 ABOVE.

The information collection requirements to our knowledge are not duplicated anywhere.

Similar data are not available from any other source.

5. IF THE COLLECTION OF INFORMATION IMPACTS SMALL BUSINESSES OR OTHER SMALL ENTITIES (ITEM 5 OF OMB FORM 83-I), DESCRIBE ANY METHODS USED TO MINIMIZE BURDEN.

Small entities that are not subject to this rule include railroads that do not operate on the

"general railroad system of transportation" due to FRA's current exercise of its jurisdiction (*See* 49 CFR Part 209, Appendix A). FRA's jurisdictional approach greatly reduces the number of tourist, scenic, historic, and excursion railroads which are subject to this rule and its associated burdens. FRA estimates that approximately 180 small entities will be exempted from the requirements of this regulation, since they do not operate on the general system of transportation.

Most information collection impacts are not on small entities due to the fact that the majority of the collection burdens result from requirements involving radios. Most small entities, however, will only be required to have a cellular phone, depending on their operating environment. For example, very few small railroads will be impacted by section 220.61 which involves transmission and copying of mandatory directives by radio. This requirement comprises the majority of the burden hours. In total, approximately 435 small entities will be impacted. The actual burden on most of these railroads will vary because of their different operating characteristics; however, overall this burden will not be large. Moreover, recognizing that smaller railroads have unique concerns, FRA effected both a longer implementation period for them and, as mentioned above, different communication equipment standards. FRA's purpose is to ease cost burdens and paperwork burdens, and also to allow small railroads more flexibility without compromising safety.

# 6. DESCRIBE THE CONSEQUENCE TO FEDERAL PROGRAM OR POLICY ACTIVITIES IF THE COLLECTION IS NOT CONDUCTED OR IS CONDUCTED LESS FREQUENTLY, AS WELL AS ANY TECHNICAL OR LEGAL OBSTACLES TO REDUCING BURDEN.

If FRA did not collect this information or collected it less frequently, railroad safety would be directly and adversely impacted. Specifically, FRA would be significantly hindered in detecting unsafe or undesirable trends in railroad operations and in taking the necessary timely action to correct/eliminate actual or potential problems. Such hindrance could lead to increased numbers of accidents/incidents with corresponding casualties — injuries and deaths — to train crews, railroad passengers, roadway workers, and others operating on or near the rail environment.

Without this collection of information, FRA would have no way of determining whether it is safe, appropriate, and in the public interest to grant exceptions to railroads concerning any of the requirements of this part. By having the ability to review and evaluate waiver petitions, FRA can make informed decisions and thus ensure that railroads adhere to and maintain high levels of safety.

Clear and accurate communication is essential for the safe movement of trains in this country. Without this collection of information, mandatory directives might not be copied down in writing and repeated in their entirety to train dispatchers or operators. Without this method of verifying the accuracy and completeness of a mandatory

directive, train crews might engage in improper, unauthorized, or unsafe train movements leading to increased numbers of accidents/incidents and corresponding casualties.

Clear communication will not occur if the equipment is not working properly. Without this collection of information and the requirement that each radio, and all primary and redundant wireless communication used under § 220.9 and § 220.11 be tested prior to the commencement of the work assignment to ensure proper functioning, FRA would have no way to verify that these tests were completed and no way to know that the equipment works as intended. Malfunctioning radios could lead to improper, unsafe, or unauthorized train movements, which could result in increased numbers of accidents/incidents and greater numbers of train crew and roadway worker injuries and fatalities.

Without this collection of information, FRA would have no means of assuring that railroad employees were properly trained in the use of radios and wireless communications. Such initial training and re-instruction serve to enhance rail safety by fostering more knowledgeable and better trained railroad employees on railroad current operating practices. In particular, railroads must provide the following training: (1) All railroad employees authorized to operate a radio are required to have a copy of the railroad's operating rules governing radio communication in railroad operations; (2) All railroad employees authorized to operate a radio are required to be instructed in the proper use of radio communication; (3) All railroad employees authorized to operate a radio are required to undergo periodic operational testing; and (4) All train crews are required to read and understand mandatory directives which must be marked when fulfilled or canceled. More knowledgeable and better trained railroad employees will promote reliable, high quality radio communications. These improved communications will help ensure that movement authorities are clearly understood and implemented, and. will also facilitate the transmission of emergency and security warnings, thereby helping to expedite emergency assistance in the event of a serious accident/incident. The overall net result is likely to be the authorized, appropriate, and safe movement of trains as well as a reduction in the number and severity of rail accidents/incidents and corresponding casualties experienced by train crews, railroad workers, motor vehicle operators, and the traveling public.

In sum, this collection of information assists FRA in fulfilling its primary mission, which is to promote and enhance national rail safety throughout the United States..

7. EXPLAIN ANY SPECIAL CIRCUMSTANCES THAT WOULD CAUSE AN INFORMATION COLLECTION TO BE CONDUCTED IN A MANNER:

-REQUIRING RESPONDENTS TO REPORT INFORMATION TO THE AGENCY MORE OFTEN THAN QUARTERLY;

-REQUIRING RESPONDENTS TO PREPARE A WRITTEN RESPONSE

TO A COLLECTION OF INFORMATION IN FEWER THAN 30 DAYS AFTER RECEIPT OF IT;

- -REQUIRING RESPONDENTS TO SUBMIT MORE THAN AN ORIGINAL AND TWO COPIES OF ANY DOCUMENT;
- -REQUIRING RESPONDENTS TO RETAIN RECORDS, OTHER THAN HEALTH, MEDICAL, GOVERNMENT CONTRACT, GRANT-IN-AID, OR TAX RECORDS FOR MORE THAN THREE YEARS;
- -IN CONNECTION WITH A STATISTICAL SURVEY, THAT IS NOT DESIGNED TO PRODUCE VALID AND RELIABLE RESULTS THAT CAN BE GENERALIZED TO THE UNIVERSE OF STUDY;
- -REQUIRING THE USE OF A STATISTICAL DATA CLASSIFICATION THAT HAS NOT BEEN REVIEWED AND APPROVED BY OMB;
- -THAT INCLUDES A PLEDGE OF CONFIDENTIALITY THAT IS NOT SUPPORTED BY AUTHORITY ESTABLISHED IN STATUTE OR REGULATION, THAT IS NOT SUPPORTED BY DISCLOSURE AND DATA SECURITY POLICIES THAT ARE CONSISTENT WITH THE PLEDGE, OR WHICH UNNECESSARILY IMPEDES SHARING OF DATA WITH OTHER AGENCIES FOR COMPATIBLE CONFIDENTIAL USE; OR
- -REQUIRING RESPONDENTS TO SUBMIT PROPRIETARY TRADE SECRET, OR OTHER CONFIDENTIAL INFORMATION UNLESS THE AGENCY CAN DEMONSTRATE THAT IT HAS INSTITUTED PROCEDURES TO PROTECT THE INFORMATION'S CONFIDENTIALITY TO THE EXTENT PERMITTED BY LAW.

All information collection requirements are in compliance with this section.

8. IF APPLICABLE, PROVIDE A COPY AND IDENTIFY THE DATE AND PAGE NUMBER OF PUBLICATION IN THE FEDERAL REGISTER OF THE AGENCY'S NOTICE, REQUIRED BY 5 CFR 1320.8(d), SOLICITING COMMENTS ON THE INFORMATION COLLECTION PRIOR TO SUBMISSION TO OMB. SUMMARIZE PUBLIC COMMENTS RECEIVED IN RESPONSE TO THAT NOTICE AND DESCRIBE ACTIONS TAKEN BY THE AGENCY IN RESPONSE TO THOSE COMMENTS. SPECIFICALLY ADDRESS COMMENTS RECEIVED ON COST AND HOUR BURDEN.

DESCRIBE EFFORTS TO CONSULT WITH PERSONS OUTSIDE THE AGENCY TO OBTAIN THEIR VIEWS ON THE AVAILABILITY OF DATA,

FREQUENCY OF COLLECTION, THE CLARITY OF INSTRUCTIONS AND RECORDKEEPING, DISCLOSURE, OR REPORTING FORMAT (IF ANY), AND ON THE DATA ELEMENTS TO BE RECORDED, DISCLOSED, OR REPORTED.

CONSULTATION WITH REPRESENTATIVES OF THOSE FROM WHOM INFORMATION IS TO BE OBTAINED OR THOSE WHO MUST COMPILE RECORDS SHOULD OCCUR AT LEAST ONCE EVERY 3 YEARS--EVEN IF THE COLLECTION OF INFORMATION ACTIVITY IS THE SAME AS IN PRIOR PERIODS. THERE MAY BE CIRCUMSTANCES THAT MAY PRECLUDE CONSULTATION IN A SPECIFIC SITUATION. THESE CIRCUMSTANCES SHOULD BE EXPLAINED.

In accordance with the Paperwork Reduction Act of 1995, Public Law No.104-13, § 2, 109 Stat. 163 (1995) (codified as revised at 44 U.S.C. §§ 3501-3520), and its implementing regulations, 5 C.F.R. Part 1320, FRA published a notice in the <u>Federal Register</u> on July 20, 2007 (*See* 72 FR 39886) soliciting public comments on these information collection requirements. FRA received no comments in response to this notice.

#### **Background**

In 1994, FRA established its first formal regulatory negotiation committee to address roadway worker safety. This committee successfully reached consensus conclusions and recommended an NPRM to the Administrator, persuading FRA that a more consensual approach to rulemaking would likely yield more effective and more widely accepted rules. Additionally, President Clinton's March 1995 Presidential Memorandum, titled "Regulatory Reinvention Initiative," directed agencies to expand their efforts to promote consensual rulemaking. FRA therefore decided to move to a collaborative process by creating a Railroad Safety Advisory Committee (RSAC or the Committee).

RSAC is comprised of 48 representatives from 27 member organizations, including railroads, labor groups, equipment manufacturers, state government groups, public associations, and two associate non-voting representatives from Canada and Mexico. The Administrator's representative (the Associate Administrator for Safety or that person's delegate) is the Chairperson of the Committee. RSAC's purpose is to provide recommendations and advice to the Administrator on development of FRA's railroad safety regulatory program, including issuance of new regulations, review and revision of existing regulations, and identification of non-regulatory alternatives for improvement of railroad safety.

FRA has tasked RSAC with a variety of safety issues to address, among them railroad communications. To address specific tasks, RSAC formed standing or temporary subcommittees, or working groups comprised of knowledgeable persons from the

organizations represented on RSAC. The composition of each working group was approved by the full committee. The Railroad Communications Working Group (Working Group or Group) was comprised of representatives from the following organizations:

American Public Transit Association (APTA)

The American Short Line and Regional Railroad Association (ASLRRA)

Association of American Railroads (AAR)

Brotherhood of Locomotive Engineers (BLE)

Brotherhood of Locomotive Engineers, American Train Dispatchers Department (ATDD)

Brotherhood of Maintenance of Way Employees (BMWE)

Brotherhood of Railroad Signalmen (BRS)

Burlington Northern Santa Fe (BNSF)

Canadian Pacific Rail System (CP)

Consolidated Rail Corporation (Conrail)

CSX Transportation, Inc. (CSX)

Federal Railroad Administration (FRA)

International Brotherhood of Electrical Workers (IBEW)

National Railroad Passenger Corporation (Amtrak)

Norfolk Southern Corporation (NS)

Railway Progress Institute (RPI)

Transportation Communications International Union (TCU)

United Transportation Union (UTU).

In its Task Statement (Task No. 96-3) to the Working Group, RSAC charged the Group to report back on the following issues:

- 1. all matters relating to revision of the existing standards, including data required for regulatory analysis;
- 2. communications needs in support of train operations;
- communications needs in support of switching operations; and
- 4. the role of communications capability in emergency preparedness, including passenger service.

The Working Group's goal was to produce a preamble and proposed rule text recommending revisions to the Radio Standards and Procedures contained in 49 CFR Part 220 that are warranted by appropriate data and analysis. The Group's recommendations would then be sent to RSAC for review. FRA would, in turn, utilize the consensus recommendations of RSAC as the basis for proposed and final agency action whenever possible, consistent with applicable law and Presidential guidance. The Group could also

recommend specific safety policies and procedures that the group considered relevant but inappropriate for regulatory action.

To accomplish this goal, the Working Group held ten meetings that were all open to the public. Summary minutes were taken, and have been placed in a docket available for inspection upon request. FRA worked in concert with the Group to develop the final rule. After considerable debate, the Working Group agreed to recommend that Part 220 be amended as follows: First, more communications equipment would be required on trains operated by large railroads than on those operated by small railroads. Large railroads, defined as those with 400,000 or more annual employee work hours, would be required to equip each train with a working radio in each occupied controlling locomotive and with some means of redundant working wireless communications. For small railroads, each train's communication equipment requirements would be determined by a variety of factors, including whether the train transports passengers, hauls hazardous materials, engages in joint operations with large railroads, or operates above specified speeds.

Second, for roadway workers, the working group also recommended that communication equipment requirements vary according to the size of the railroad. Large railroads would be required to equip maintenance of way equipment, operating without locomotive assistance, with a working radio. If multiple units are traveling together, only one of the units needs to be equipped; however, the operators of each unit would have communications capability with each other. Each employee designated by the employing railroad to provide on-track safety for a roadway work gang or gangs, and each lone worker would maintain immediate access to a working radio. Each maintenance of way work gang would also have to be provided intra-gang communications capability. Small railroads, in most cases, would have to provide each designated employee in charge, and each lone worker with immediate access to working wireless communications, unless the railroad did not operate in excess of 25 miles per hour. The foregoing communication requirements would not apply to roadway work locations that are inaccessible to trains.

Third, this part would also be re-titled to reflect its proposed coverage of other means of wireless communications, such as cellular telephones and data radio terminals with keypads, that comply with the proposed communications redundancy requirements. The Working Group also recommended additional smaller changes, which are detailed in the section-by-section analysis portion of the attached final rule.

At a meeting on March 24, 1997, RSAC voted to recommend that the Administrator issue this document as a proposed Federal regulation and continue the rulemaking procedures necessary to adopt its principles in a final rule. The NPRM was published on June 26, 1997, and the final rule was published in the <u>Federal Register</u> on September 4, 1998 (63 FR 47182).

#### 9. EXPLAIN ANY DECISION TO PROVIDE ANY PAYMENT OR GIFT TO

### RESPONDENTS, OTHER THAN ENUMERATION OF CONTRACTORS OR GRANTEES.

There are no monetary payments or gifts made to respondents associated with the information collection requirements contained in this regulation.

10. DESCRIBE ANY ASSURANCE OF CONFIDENTIALITY PROVIDED TO RESPONDENTS AND THE BASIS FOR THE ASSURANCE IN STATUTE, REGULATION, OR AGENCY POLICY.

Information collected is not of a confidential nature, and FRA pledges no confidentiality.

11. PROVIDE ADDITIONAL JUSTIFICATION FOR ANY QUESTIONS OF A SENSITIVE NATURE, SUCH AS SEXUAL BEHAVIOR AND ATTITUDES, RELIGIOUS BELIEFS, AND OTHER MATTERS THAT ARE COMMONLY CONSIDERED PRIVATE. THIS JUSTIFICATION SHOULD INCLUDE THE REASONS WHY THE AGENCY CONSIDERS THE QUESTIONS NECESSARY, THE SPECIFIC USES TO BE MADE OF THE INFORMATION, THE EXPLANATION TO BE GIVEN TO PERSONS FROM WHOM THE INFORMATION IS REQUESTED, AND ANY STEPS TO BE TAKEN TO OBTAIN THEIR CONSENT.

There are no questions of a sensitive or private nature involving this regulation.

12. PROVIDE ESTIMATES OF THE HOUR BURDEN OF THE COLLECTION OF INFORMATION. THE STATEMENT SHOULD:

-INDICATE THE NUMBER OF RESPONDENTS, FREQUENCY OF RESPONSE, ANNUAL HOUR BURDEN, AND AN EXPLANATION OF HOW THE BURDEN WAS ESTIMATED. UNLESS DIRECTED TO DO SO, AGENCIES SHOULD NOT CONDUCT SPECIAL SURVEYS TO OBTAIN INFORMATION ON WHICH TO BASE HOUR BURDEN ESTIMATES. CONSULTATION WITH A SAMPLE (FEWER THAN 10) OF POTENTIAL RESPONDENTS IS DESIRABLE. IF THE HOUR BURDEN ON RESPONDENTS IS EXPECTED TO VARY WIDELY BECAUSE OF DIFFERENCES IN ACTIVITY, SIZE, OR COMPLEXITY, SHOW THE RANGE OF ESTIMATED HOUR BURDEN, AND EXPLAIN THE REASONS FOR THE VARIANCE. GENERALLY, ESTIMATES SHOULD NOT INCLUDE BURDEN HOUR FOR CUSTOMARY AND USUAL BUSINESS PRACTICES

-IF THIS REQUEST FOR APPROVAL COVERS MORE THAN ONE FORM, PROVIDE SEPARATE HOUR BURDEN ESTIMATES FOR EACH FORM AND AGGREGATE THE HOUR BURDENS IN ITEMS 13 OF OMB FORM 83-I.

-PROVIDE ESTIMATES OF ANNUALIZED COST TO RESPONDENTS FOR THE HOUR BURDENS FOR COLLECTIONS OF INFORMATION, IDENTIFYING AND USING APPROPRIATE WAGE RATE CATEGORIES. THE COST OF CONTRACTING OUT OR PAYING OUTSIDE PARTIES FOR INFORMATION COLLECTION ACTIVITIES SHOULD NOT BE INCLUDED HERE. INSTEAD, THIS COST SHOULD BE INCLUDED IN ITEM 14.

Based on the American Association of Railroads (AAR) 2006 publication <u>Railroad Facts</u>, FRA has used the following labor rates for railroad hourly wages in its cost calculations: \$43 per hour for professional/administrative staff, and \$44 per hour (avg.) for railroad employees, which includes maintenance of way workers. These rates incorporate an overhead cost of 40 %.

#### § 220.8 Waivers

Any person subject to a requirement of this part may petition the Administrator for a waiver of compliance with such requirement. The filing of such a petition does not affect that person's responsibility for compliance with that requirement while the petition is being considered. Each petition for waiver must be filed in the manner and contain the information required by Part 211 of this chapter.

FRA estimates that approximately one (1) waiver petition will be filed each year due to this requirement. It is estimated that it will take approximately one (1) hour to complete and send each petition letter. Total annual burden for this requirement is one (1) hour.

Respondent Universe:

685

railroads

Burden time per response: 1 hour Frequency of Response: annually Annual number of Responses: 1 petition letter

Annual Burden: 1 hour

Annual Cost: \$43

**Calculation:** 1 petition letter x 1 hr. = 1 hour 1 hr. x \$43 = \$43

§ 220.13 Reporting emergencies.

Employees must immediately report by the quickest means available derailments, collisions, storms, wash-outs, fires, obstructions to tracks, and other hazardous conditions which could result in death or injury, damage to property or serious disruption of railroad operations.

In reporting emergencies, employees must follow:

- (1) the procedures of § 220.47 of this part when using a radio; or
- (2) the procedures specified for reporting emergencies in the railroad's timetables or timetable special instructions, when using another means of wireless communications.
- (c) Employees must describe as completely as possible the nature, degree, and location of the hazard.

NOTE: The requirements resulting from the provisions of this section are the usual and customary practice as well as the railroad's legal obligation under "common law." Consequently, there is no burden affiliated with these requirements.

#### § 220.21 Railroad operating rules; radio communications; recordkeeping.

The operating rules of each railroad with respect to radio communications must conform with the requirements of this part.

Thirty days before commencing to use radio communications in connection with railroad operations, each railroad must retain one copy of its current operating rules with respect to radio communications at the locations prescribed in paragraphs (1) and (2) below. Each amendment to these operating rules must be filed at such locations within 30 days after it is issued. These records must be made available to representatives of the Federal Railroad Administration (FRA) for inspection and copying during normal business hours.

- (1) Each Class I railroad, each Class II railroad, each railroad providing intercity rail passenger service, and each railroad providing commuter service in a metropolitan or suburban area must retain such rules at each of its division headquarters and at its system headquarters; and
- (2) Each Class III railroad and any other railroad subject to this part but not subject to paragraph (1) above must retain such rules at the system headquarters of the railroad.

NOTE: The burden hours associated with these requirements are currently approved by OMB under paperwork package 2130-0035.

#### § 220.23 Publication of radio information.

Each railroad must designate where radio base stations are installed, where wayside stations may be contacted, and the appropriate radio channels used by these stations in connection with railroad operations by publishing them in a timetable or special instruction. The publication must indicate the periods during which base and wayside radio stations are operational.

NOTE: The requirements resulting from the provision of this section are the usual and customary procedure. Consequently, there is no burden associated with these requirements.

§ 220.25 Instruction and operational testing of employees.

Each employee who a railroad authorizes to use a radio in connection with a railroad operation must be:

- (a) Provided with a copy of the railroad's operating rules governing the use of radio communication in a railroad operation;
  - (b) Instructed in the proper use of radio communication as part of the program of instruction prescribed in § 217.11 of this chapter; and
  - (c) Periodically tested under the operational testing requirements in  $\S$  217.9 of this chapter.
- (A) NOTE: The burden hours associated with provision (a) of this section are currently approved by OMB under 2130-0035.
- (B) FRA estimates that approximately 70,000 railroad employees will be re-instructed annually as a result of the requirement of provision (b) of this section. It is estimated that each instruction session will take approximately 30 minutes. Total annual burden for this requirement is 35,000 hours.

Respondent Universe: 685 railroads

Burden time per response: 30 minutes Frequency of Response: Annually

Annual number of Responses: 70,000 instruction sessions
Annual Burden: 35,000 hours

Annual Cost: \$1,540,000

**Calculation:** 70,000 sessions x 30 min. = 35,000 hours

35,000 hrs. x \$44 = \$1,540,000

#### **Subsequent Years**

In subsequent years, FRA estimates that there will be approximately an additional 12,540 roadway workers trained as a result of the requirement of provision (b) of this section. It is estimated that each instruction session will take approximately 30 minutes. Total annual burden for this requirement is 6,270 hours.

Respondent Universe: 685 railroads

Burden time per response: 30 minutes Frequency of Response: Annually

Annual number of Responses: 12,540 instruction sessions
Annual Burden: 6,270 hours
Annual Cost: \$275,880

**Calculation:** 12,540 sessions x 30 min. = 6,270 hours 6,270 hrs. x \$44 = \$275,880

(c) FRA estimates that periodic operational tests will affect approximately 100,000 railroad employees every year. It is estimated that each test will take approximately five (5) minutes. Total annual burden for this requirement is 8,333 hours.

Respondent Universe: 685 railroads

Burden time per response: 5 minutes
Frequency of Response: Annually
Annual number of Responses: 100,000 tests/records
Annual Burden: 8,333 hours

Annual Cost:

\$366,652

**Calculation:** 100,000 tests/records x 5 min. = 8,333 hours 8,333 hrs. x \$44 = \$366,652

Total annual burden for this entire requirement is 49,603 hours. (35,000 + 6,270 + 8,333)

#### § 220.27 Identification.

- (a) Except as provided in paragraph (c) of this section (below), the identification of each wayside, base or yard station must include at least the following minimum elements, stated in the order listed:
  - (1) *Name of railroad*. An abbreviated name or initial letters of the railroad

may be used where the name or initials are in general usage and are understood in the railroad industry; and

- (2) Name and location of office or other unique designation.
- (b) Except as provided in paragraph (c) of this section (below), the identification of each mobile station must consist of the following elements, stated in the order listed:
  - (1) *Name of railroad*. An abbreviated name or initial letters of the railroad may be used where the name or initial letters are in general usage and are understood in the railroad industry;
- (2) Train name (number), if one has been assigned, or other appropriate unit designation; and
- (3) When necessary, the word "locomotive", "motorcar", or other unique identifier which indicates to the listener the precise mobile transmitting station.
- (c) If positive identification is achieved in connection with switching, classification, and similar operations wholly within a yard, fixed and mobile units may use short identification after the initial transmission and acknowledgment consistent with applicable Federal Communications Commission regulations governing "Station Identification".

NOTE: The requirements resulting from the provisions of this section are the usual and customary procedure. Consequently, there is no burden connected with these requirements.

#### § 220.31 Initiating a radio transmission.

Before transmitting by radio, an employee must: (a) Listen to ensure that the channel on which the employee intends to transmit is not already in use; (b) Identify the employee's station in accordance with the requirements of § 220.27; and (c) Verify that the employee has made radio contact with the person or station with whom the employee intends to communicate by listening for an acknowledgment. If the station acknowledging the employee's transmission fails to identify itself properly, the employee shall require a proper identification before proceeding with the transmission.

NOTE: The requirements resulting from the provisions of this section are the usual and customary procedure. Consequently, there is no burden associated with these requirements.

#### § 220.33 Receiving a radio transmission.

Upon receiving a radio call, an employee must promptly acknowledge the call, identifying the employee's station in accordance with the requirements of § 220.27, and stand by to receive. An employee need not attend the radio during the time that this would interfere with other immediate duties relating to the safety of railroad operations.

An employee who receives a transmission must repeat it to the transmitting party unless the communication: (1) relates to yard switching operations; (2) is a recorded message from an automatic alarm device; or (3) is general in nature and does not contain any information, instruction or advice which could affect the safety of a railroad operation.

NOTE: The requirements resulting from the provisions of this section are the usual and customary procedure. Consequently, there is no burden affiliated with these requirements.

#### § 220.35 Ending a radio transmission.

- (a) Except for transmissions relating to yard switching operations, at the close of each transmission to which a response is expected, the transmitting employee must say "over" to indicate to the receiving employee that the transmission is ended.
- (b) Except for transmissions relating to yard switching operations, at the close of each transmission to which no response is expected, the transmitting employee must state the employee's identification followed by the word "out" to indicate to the receiving employee that the exchange of transmissions is complete.

NOTE: The requirements resulting from the provisions of this section are the usual and customary procedure. Consequently, there is no burden connected with these requirements.

#### § 220.37 Testing radio and wireless communication equipment.

Each radio, and all primary and redundant wireless communication equipment used under §§ 220.9 and 220.11, must be tested as soon as practicable to ensure that the equipment functions as intended prior to the commencement of the work assignment.

The test of a radio must consist of an exchange of voice transmissions with another radio. The employee receiving the transmission shall advise the employee conducting the test of the clarity of the transmission.

FRA estimates that approximately 3,000 devices will be tested an average of five times per week as a result of this requirement. As a result, approximately 780,000 tests will be conducted annually. It is estimated that each test will take approximately 30 seconds. Total annual burden for this requirement is 6,500 hours.

Respondent Universe: 685 railroads

Burden time per response: 30 seconds Frequency of Response: Annually Annual number of Responses: 780,000 tests

Annual Burden: 6,500 hours
Annual Cost: \$286,000

**<u>Calculation</u>**: 780,000 tests x 30 sec. = 6,500 hours

6,500 hrs. x \$44 = \$286,000

#### § 220.38 Communication equipment failure.

Any radio or wireless communication device found not to be functioning as intended when tested pursuant to § 220.37 must be removed from service and the dispatcher or other employee designated by the railroad must be so notified as soon as practicable.

*NOTE:* The requirements resulting from the provision of this section are the usual and customary procedure. Consequently, there is no burden linked to these requirements.

#### § 220.47 Emergency radio transmissions.

An initial emergency radio transmission must be preceded by the word "emergency," repeated three times. An emergency transmission shall have priority over all other transmissions and the frequency or channel shall be kept clear of non-emergency traffic for the duration of the emergency communication.

NOTE: The requirements resulting from the provision of this section are the usual and customary procedure. Consequently, there is no burden associated with these requirements.

#### § 220.61 Transmission of mandatory directives.

- (a) Each mandatory directive may be transmitted by radio only when authorized by the railroad's operating rules. The directive must be transmitted in accordance with the railroad's operating rules and the requirements of this part.
  - (b) The procedure for transmission of a mandatory directive by radio is as follows:
  - (1) The train dispatcher or operator must call the addressees of the mandatory directive and state the intention to transmit the mandatory directive.
    - (2) Before the mandatory directive is transmitted, the employee to

receive and copy must state the employee's name, identification, location, and readiness to receive and copy. An employee operating the controls of moving equipment must not receive and copy mandatory directives. A mandatory directive must not be transmitted to employees on moving equipment, if such directive cannot be received and copied without impairing safe operation of the equipment.

- (3) A mandatory directive must be copied in writing by the receiving employee in the format prescribed in the railroad's operating rules.
- (4) After the mandatory directive has been received and copied, it must be immediately repeated in its entirety. After verifying the accuracy of the repeated mandatory directive, the train dispatcher or operator must then state the time and name of the employee designated by the railroad who is authorized to issue mandatory directives. An employee copying a mandatory directive must then acknowledge by repeating the time and name of the employee so designated by the railroad.
  - (5) (i) For train crews, before a mandatory directive is acted upon, the conductor and engineer must each have a written copy of the mandatory directive and make certain that the mandatory directive is read and understood by all members of the crew who are responsible for the operation of the train. Mandatory directives which have been fulfilled or canceled must be marked with an "X", or in accordance with the railroad's operating rules, and retained for the duration of the train crew's work assignment.
  - (ii) For on-track equipment, before a mandatory directive is acted upon, the employee responsible for on-track safety must have a written copy of the mandatory directive and make certain that the mandatory directive is acknowledged by all employees who are responsible for executing that mandatory directive. The employee responsible for on-track safety must retain a copy of the mandatory directive while it is in effect.
- (6) A mandatory directive, which has not been completed or which does not comply with the requirements of the railroad's operating rules and this part, may not be acted upon and must be treated as though not sent. Information contained in a mandatory directive may not be acted upon by persons other than those to whom the mandatory directive is addressed.
- (A) FRA estimates that in order to comply with Part 220.61 requiring the manual copying of mandatory directives approximately 600,000 mandatory directives will be copied each

month by the Nation's railroads (or a total of 7,200,000 mandatory directives per year). It is estimated that it will take an average of 1.5 minutes to copy each directive. Total annual burden due to this requirement is 180,000 hours.

Respondent Universe: 685 railroads

Burden time per response: 1.5 minutes Frequency of Response: Annually

Annual number of Responses: 7,200,000 copied directives
Annual Burden: 180,000 hours
Annual Cost: \$7,920,000

**Calculation:** 7,200,000 copied directives x 1.5 min. = 180,000 hours 180,000 hrs. x \$44 = \$7,920,000

(B) FRA estimates that approximately 624,000 fulfilled or canceled mandatory directives will be marked annually with an "X" by train crews. This is because railroad operating rules specify a great number of directives only have to be retained until the end of the trip, permitting directives pertaining to parts or "legs" of the trip to be discarded. Also, many railroads have unique forms that account for multiple directives with one mark. It is estimated that it will take an average of 15 seconds to mark each directive. Total annual burden due to this requirement is 2,600 hours.

Respondent Universe: 685 railroads

Burden time per response: 15 seconds Frequency of Response: Annually Annual number of Responses: 624,000 marks

Annual Burden: 2,600 hours
Annual Cost: \$114,400

**Calculation:** 624,000 marks x 15 sec. = 2,600 hours

2,600 hrs. x \$44 = \$114,400

Total annual burden for this entire requirement is 182,600 hours (180,000 + 2,600).

Total annual burden for this entire information collection is 238,704 hours.

13. PROVIDE AN ESTIMATE OF THE TOTAL ANNUAL COST BURDEN TO RESPONDENTS OR RECORDKEEPERS RESULTING FROM THE COLLECTION OF INFORMATION. (DO NOT INCLUDE THE COSTS OF ANY HOUR BURDEN SHOWN IN ITEMS 12 AND 14).

-THE COST ESTIMATES SHOULD BE SPLIT INTO TWO COMPONENTS: (A) A TOTAL CAPITAL AND START-UP COST COMPONENT (ANNUALIZED OVER IT EXPECTED USEFUL LIFE);

AND (B) A TOTAL OPERATION AND MAINTENANCE AND PURCHASE OF SERVICES COMPONENT. THE ESTIMATES SHOULD TAKE INTO ACCOUNT COSTS ASSOCIATED WITH GENERATING, MAINTAINING, AND DISCLOSING OR PROVIDING THE INFORMATION. INCLUDE DESCRIPTIONS OF METHODS USED TO ESTIMATE MAJOR COSTS FACTORS INCLUDING SYSTEM AND TECHNOLOGY ACQUISITION, EXPECTED USEFUL LIFE OF CAPITAL EQUIPMENT, THE DISCOUNT RATE(S), AND THE TIME PERIOD OVER WHICH COSTS WILL BE INCURRED. CAPITAL AND START-UP COSTS INCLUDE, AMONG OTHER ITEMS, PREPARATIONS FOR COLLECTING INFORMATION SUCH AS PURCHASING COMPUTERS AND SOFTWARE; MONITORING, SAMPLING, DRILLING AND TESTING EQUIPMENT; AND RECORD STORAGE FACILITIES.

-IF COST ESTIMATES ARE EXPECTED TO VARY WIDELY, AGENCIES SHOULD PRESENT RANGES OF COST BURDENS AND EXPLAIN THE REASONS FOR THE VARIANCE. THE COST OF PURCHASING OR CONTRACTING OUT INFORMATION COLLECTION SERVICES SHOULD BE A PART OF THIS COST BURDEN ESTIMATE. IN DEVELOPING COST BURDEN ESTIMATES, AGENCIES MAY CONSULT WITH A SAMPLE OF RESPONDENTS (FEWER THAN 10), UTILIZE THE 60-DAY PRE-OMB SUBMISSION PUBLIC COMMENT PROCESS AND USE EXISTING ECONOMIC OR REGULATORY IMPACT ANALYSIS ASSOCIATED WITH THE RULEMAKING CONTAINING THE INFORMATION COLLECTION, AS APPROPRIATE.

-GENERALLY, ESTIMATES SHOULD NOT INCLUDE PURCHASES OF EQUIPMENT OR SERVICES, OR PORTIONS THEREOF, MADE (1) PRIOR TO OCTOBER 1, 1995, (2) TO ACHIEVE REGULATORY COMPLIANCE WITH REQUIREMENTS NOT ASSOCIATED WITH THE INFORMATION COLLECTION, (3) FOR REASONS OTHER THAN TO PROVIDE INFORMATION OR KEEP RECORDS FOR THE GOVERNMENT, OR (4) AS PART OF CUSTOMARY AND USUAL BUSINESS OR PRIVATE PRACTICES.

Additional costs to respondents outside of the burden hour costs above are as follows:

\$ 2,000	Supplies (paper, etc.)
8,000	Miscellaneous (batteries, chargers, training
	materials, etc.)
	\$ 10,000 Total

14. PROVIDE ESTIMATES OF ANNUALIZED COST TO THE FEDERAL GOVERNMENT. ALSO, PROVIDE A DESCRIPTION OF THE METHOD USED TO ESTIMATE COSTS, WHICH SHOULD INCLUDE QUANTIFICATION OF HOURS, OPERATIONAL EXPENSES SUCH AS EQUIPMENT, OVERHEAD, PRINTING, AND SUPPORT STAFF, AND ANY OTHER EXPENSE THAT WOULD NOT HAVE BEEN INCURRED WITHOUT THIS COLLECTION OF INFORMATION. AGENCIES ALSO MAY AGGREGATE COST ESTIMATES FROM ITEMS 12, 13, AND 14 IN A SINGLE TABLE.

There is no cost to the Federal Government in connection with these information collection requirements. The carrier records are examined on a routine basis as part of the regular enforcement activities that monitor carrier compliance. The information on the records is not compiled.

## 15. EXPLAIN THE REASONS FOR ANY PROGRAM CHANGES OR ADJUSTMENTS REPORTED IN ITEMS 13 OR 14 OF THE OMB FORM 83-I.

This information collection submission reflects a <u>decrease</u> of 16,667 burden hours from the previous submission. The decrease results from an **adjustment** in the estimate of one of the information collection requirements. Specifically, under § 220.25(c), FRA revised its average time estimate to conduct periodic operational tests (from 15 minutes to five (5) minutes). This change in estimate *decreased* the burden by *16,667 hours* (from 25,000 hours to 8,333 hours). The current OMB inventory reflects a total burden of 255,371 hours, while this revised submission exhibits a total burden of 238,704 hours. Hence, there is a burden <u>decrease</u> of 16,667 hours.

There is no change in costs to respondents from the previous submission.

16. FOR COLLECTIONS OF INFORMATION WHOSE RESULTS WILL BE PUBLISHED, OUTLINE PLANS FOR TABULATION, AND PUBLICATION. ADDRESS ANY COMPLEX ANALYTICAL TECHNIQUES THAT WILL BE USED. PROVIDE THE TIME SCHEDULE FOR THE ENTIRE PROJECT, INCLUDING BEGINNING AND ENDING DATES OF THE COLLECTION OF INFORMATION, COMPLETION OF REPORT, PUBLICATION DATES, AND OTHER ACTIONS.

FRA has no plans to publish this information.

17. IF SEEKING APPROVAL TO NOT DISPLAY THE EXPIRATION DATE FOR OMB APPROVAL OF THE INFORMATION COLLECTION, EXPLAIN THE REASONS THAT DISPLAY WOULD BE INAPPROPRIATE.

Once OMB approval is received, FRA will publish the approval number for these information collection requirements in the <u>Federal Register</u>.

## 18. EXPLAIN EACH EXCEPTION TO THE CERTIFICATION STATEMENT IDENTIFIED IN ITEM 19, "CERTIFICATION FOR PAPERWORK REDUCTION ACT SUBMISSIONS," OF OMB FORM 83-I.

No exceptions are taken at this time.

#### Meeting Department of Transportation (DOT) Strategic Goals

This information collection supports the top DOT strategic goal, namely transportation safety. FRA's rules and resulting information collections are designed to promote and enhance national rail safety. This collection of information furthers national rail safety by reducing the likelihood of accidents/incidents – and corresponding injuries/deaths – involving train movements due to mis-communication or poor communication between railroad companies and their employees. Specifically, this collection of information enables FRA to monitor the railroad environment to ensure that railroad employees are familiar with their railroad's operating rules governing radio communication in railroad operations, and that they have been instructed in the proper use of radio communication. As a result of this collection of information, FRA can confirm that railroad employees authorized to use radios have undergone periodic operational testing and that train crews have read, understood, and marked mandatory directives. If FRA detects an unsafe/undesirable trend developing, it can take timely corrective action before an accident/incident occurs.

This collection of information also promotes safety by ensuring that railroad employees immediately report to FRA (by the quickest means available) derailments, collisions, storms, wash-outs, fires, obstructions to tracks, and other hazardous conditions which could result in death or injury, damage to property or serious disruption of railroad operations. Upon receipt of the report, FRA can then coordinate an appropriate response to the emergency so as to mitigate the harm that might come to railroad employees, train crews, passengers, and surrounding communities.

This collection of information also promotes rail safety by providing a record of mandatory directives. In the event of an accident/incident, these records can be used by FRA, the National Transportation Safety Board (NTSB), and railroads to ascertain whether the directive was fully complied with. These records can assist FRA and NTSB investigators in determining the cause(s) of the accident/incident and help prevent similar accidents/incidents from occurring in the future. This collection of information is another tool which helps FRA to fulfill its mission which is to promote and enhance rail safety throughout the United States.

In this information collection, as in all its information collection activities, FRA seeks to do its utmost to fulfill DOT Strategic Goals and to be an integral part of One DOT.