

---

## COMPANION GUIDE

### **Guidelines for Submitting Accident/Incident Reports by Alternative Methods**

#### Introduction

The FRA allows electronic and magnetic data submissions for updating Accident/Incident Reports. Railroads have the option of submitting magnetic media to the FRA in lieu of the monthly submission of the Rail Equipment Accident/Incident Report (F 6180.54), Railroad Injury and Illness Summary (Continuation Sheet) (F 6180.55a), and the Rail-Highway Crossing Accident/Incident Report (F 6180.57). Railroads can submit reports, updates, and amendments on magnetic media, or electronically, for Forms FRA F6180.55 (Railroad Injury and Illness Summary), F6180.54, F6180.55a, and F6180.57. Electronic data files can be submitted over e-mail systems or via the Internet as e-mail attachments.

With magnetic media and electronic submissions, the entire year-to-date files are submitted.

**If the magnetic media or electronic submission does not strictly follow the rules set forth below then the entire submission will be returned and the paper forms will be required.**

In 1997, database structure changes were made for some of the reporting forms. The resulting database layouts were included in the previous version of this Companion Guide. Several new fields are being added (in 2003) as a result of the Notice of Proposed Rulemaking, Federal Register, Vol. 67, No. 196 October 9, 2002, Part II, DOT, FRA, Docket No. FRA-2002-13221, Notice No. 1) (see Final Rule, Notice No. 2). The data file layouts in this document include the added fields and updated input specifications, and these file layouts will take effect May 1, 2003.

#### **Notarized Railroad Injury and Illness Summary (F 6180.55)**

The notarized Railroad Injury and Illness Summary form, signed by the railroad's Reporting Officer will still be required to be submitted monthly (the hard copy must be sent regardless of whether or not the magnetic or electronic version is submitted). The report contains the counts of reported casualties that occurred that month and the number of FRA forms attached.

#### **Batch Controls**

The FRA Batch Control for Magnetic Media form (F 6180.99) contains information on the number of records submitted and other data which is used for batch control purposes. Form FRA F 6180.99 must be sent with each magnetic submission.

The Railroad Injury and Illness Summary form (F 6180.55) is used as a control sheet for the other forms that are submitted, so that missing forms can be detected. Each Rail Equipment

## Companion Guide - Continued

Accident/Incident Report and Rail-Highway Grade Crossing Accident/Incident Report requires a signature at the bottom of the form. With electronic file submission, the entire year-to-date files are to be submitted.

Batch controls for each file are required to insure that no records are lost or damaged during the submission process. **Therefore, strict rules for batch controls will be enforced to guarantee quality control of each data base.**

### Acceptable Magnetic Media

3 1/2 inch diskettes (that can be read by PC with Windows Operating System)  
CD ROM (Compact Disk)

### Acceptable Formats

dBase (xBASE)/.dfb format, see Exhibits 1, 2, 3, and 4  
ASCII format, see Exhibits 5, 6, 7, and 8

### Program Available through the FRA

The FRA has a PC based program to enter and submit accident/incident and injury/illness data on a personal computer. This program is the Accident/Incident Report Generation (AIRG) System. AIRG generates several reporting forms<sup>1</sup> and generates a data upload file that can be submitted on magnetic media or as an e-mail attachment, or an upload file that is submitted over the Internet. AIRG can be run either as a standalone, single-user application, or as a multiuser system (with database on Network Server, and application running from each client). An AIRG request form is attached to this Companion Guide. For further information on the AIRG System, contact:

FRA Project Office, (888) 372-9393, [Support@FRA-safety.net](mailto:Support@FRA-safety.net)

### Year-To-Date Submission

In previous years railroads had the option of providing updates to the regular monthly submission using magnetic media. With the option of providing monthly reports to the FRA the entire year-to-date file must be submitted monthly. Therefore any corrections or revisions must be made to

---

<sup>1</sup> Report Forms Generated by the AIRG System: FRA Forms F 6180.99, F 6180.97, F 6180.98, F 6180.55, F 6180.54, F 6180.55a, F 6180.57, F6180.78, F 6180.81, and F 6180.107 (form F6180.107 scheduled to be in AIRG in 2003)

---

## **Companion Guide - Continued**

the railroad's existing databases. Each month, all the records on the railroad's annual data bases will be submitted, this includes all new records, previously submitted records that have been changed and previously submitted records that have not be changed. Only current year records should be submitted. It is recommended that final submissions (e.g., late reports, corrected reports) be sent to the FRA by April 15 to close out the previous year; however FRA's database will remain open until December 1 to accept final submissions.

### **Paper Copy of Reports**

The paper copy (regular forms) must be submitted monthly, along with the year-to-date machine readable files until a complete verification of the machine readable files is made. A minimum of three months will be required to insure that the files submitted electronically or on magnetic media reflect exactly the same information on the paper copy. The reporting officer will receive written notice that the paper copy of the forms, except for the notarized Railroad Injury and Illness Summary, will not be required.

### **Error Correction**

Every record submitted is checked for errors. When an error on a paper form is found the FRA will contact the railroad and try over the phone to correct the problem. This is not possible with electronic or magnetic media submission, because an entire year-to-date file is submitted monthly, replacing the previous year-to-date file; correcting an error made by a railroad on the current file will be negated with the next monthly year-to-date submission. When an error occurs the railroad will be requested to fix their database(s) and resubmit the entire file. The record in error will not be added to the database. The railroad will be subject to a violation for failure to report in a timely manner.

The regulation 49 CFR 225 allows a railroad 30 days, after the end of the month in which the accident/incident occurred, before submitting the accident/incident reports. A railroad does not have to wait 30 days after the month before making an electronic or magnetic media submission; each month the files will be updated with the most current information. Early submission of electronic or magnetic media will allow a railroad sufficient time to correct any errors and resubmit the report(s) to the FRA within the allowed time period.

### **Auxiliary Files**

The FRA has posted on the FRA Office of Safety Analysis web site, files with codes used in accident/incident reporting. The following files can be accessed by going to <http://safetydata.fra.dot.gov/OfficeofSafety> and clicking on **Download**:

**Companion Guide - Continued**

1. Train Accident Cause Code
2. Employee Job Codes
3. Injury and Illness Codes
4. Circumstance Codes
5. Casualty Codes
6. Railroad Codes
7. Location Codes: State, County, City
8. Data File Structures and Field Input Specifications

**Where to send Electronic Files:**

Send electronic files submissions to:

Support@FRA-Safety.net

Specify in e-mail Subject: Railroad Name, "RAIRS UPDATE", and Reporting Month

For technical support, contact:

FRA Project Office  
(888) 372-9393  
Support@FRA-Safety.net

---

Companion Guide - Continued

dBase (.DBF) Format for  
Railroad Injury and Illness Summary  
Form 6180.55

Exhibit 1

Refer to appropriate section of guide for instructions.

C = Character; N = Numeric

Structure for database: **RRSUM.DBF**

| Field       | Field Name  | Type | Width            | Dec | Comments  |
|-------------|-------------|------|------------------|-----|---|
| 1           | RAILROAD*   | C    | 4                |     | Reporting Railroad Code.                              |
| 2           | YEAR*       | C    | 2                |     | Report Year.  |
| 3           | MONTH*      | C    | 2                |     | Report Month.   |
| 4           | STATE*      | C    | 2                |     | State where notarized.                                |
| 5           | COUNTY*     | C    | 20               |     | County where notarized.                               |
| 6           | FRTTRN_MI*  | N    | 10               |     | Number of Freight Train Miles Operated.               |
| 7           | PASSTRN_MI* | N    | 10               |     | Number of Passenger Train Miles Operated.             |
| 8           | YDSW_MI*    | N    | 10               |     | Number of Yard Switching Miles Operated.              |
| 9           | OTHTRN_MI*  | N    | 10               |     | Number of Other Train Miles Operated.                 |
| 10          | RRWRK_HR*   | N    | 10               |     | Number of Railroad Hours Worked.                      |
| 11          | PASSMI_OP   | N    | 10               |     | Number of Passenger Miles Operated.                   |
| 12          | PASS_TRNS   | N    | 10               |     | Number of Passengers Transported.                     |
| 13          | REMARKS     | C    | 250              |     | Operational, environmental comments for report month. |
| ** TOTAL ** |             |      | 351 <sup>2</sup> |     |   |

---

<sup>2</sup> Includes extra byte required in the .DBF format

## Companion Guide - Continued

### Notes

\***Mandatory Field** - A valid entry must be provided for each field identified as mandatory (\*), otherwise the entire record will be rejected.

All character information must be upper case, left justified, blank filled, unless otherwise stated.  
All numeric information must be right justified, zero filled, unless otherwise stated.

Each field that is not applicable ("N/A") should be blank.

A "0" should be used in a field to represent an entry of "None".

---

**Companion Guide - Continued**

**dBase (.DBF) Format for  
Rail Equipment Accident/Incident Report  
Form 6180.54**

Exhibit 2

The following fields have been added:

- 95 (Item 30a.) RCL  
Acceptable Input Values are: 0, 1, 2, 3  
Refer to Form 6180.54 for meaning of Input values.
- 96 (Item 50.) LATITUDE
- 97 (Item 51.) LONGITUD

The following values have been added to existing fields:

- 31 (Item 25.) TYPEQ  
A (Acceptable Input Values are: 1 through 9, or A)  
Refer to Form 6180.54 for meaning of Input values.
- 25 (Item 30.) METHOD  
p (Acceptable Input Values are: a-p)  
Refer to Form 6180.54 for meaning of Input values.
- 34 (Item 22) TRKCLAS  
7-9 (Acceptable Input Values are: 1-9, X)

Refer to appropriate section of guide for instructions.

Records in each file must be sorted in YEAR/MONTH/RAILROAD/INCDTNO order.

C = Character; N = Numeric

Structure for database: **ACCIDENT.DBF**

| Field | Field Name | Type | Width | Dec | Comments   |
|-------|------------|------|-------|-----|--|
| 1     | RAILROAD*  | C    | 4     |     | Reporting Railroad Alpha Code.   |
| 2     | INCDTNO*   | C    | 10    |     | Accident/Incident Number of Reporting Railroad (no embedded blanks, punctuation or special characters).      |
| 3     | RR2        | C    | 4     |     | Other Involved Railroad Alpha Code.  |
| 4     | INCDTNO2   | C    | 10    |     | Accident/Incident Number of Other Involved Railroad (no embedded blanks, punctuation or special characters). |

---

**Companion Guide - Continued**

|    |           |   |    |   |
|----|-----------|---|----|---|
| 5  | RR3*      | C | 4  | Railroad Responsible for Track Maintenance Alpha Code.  |
| 6  | INCDTNO3* | C | 10 | Accident/Incident Number of Railroad Responsible for Track Maintenance (no embedded blanks, punctuation or special characters). |
| 7  | GXID      | C | 7  | DOT-AAR Crossing Number, if Type Accident is Hwy-Rail Crossing. If a number has not been assigned, enter NOTASGN.               |
| 8  | YEAR*     | C | 2  | Year of Accident.   |
| 9  | MONTH*    | C | 2  | Month of Accident, include leading zero, i.e. 05.   |
| 10 | DAY*      | C | 2  | Day of Accident, include leading zero, i.e. 08.   |
| 11 | HRMIN*    | N | 4  | Hour and minute of Accident in HHMM, include leading zero, i.e. 0305.   |
| 12 | AMPM*     | C | 2  | AM or PM of Time of Accident.   |
| 13 | TYPE*     | C | 2  | Type of Accident, must be 01 through 13. If "Other," code 13, then include type of accident in the Narrative.                   |
| 14 | CARS      | N | 3  | Cars in train carrying Hazardous Materials.   |
| 15 | CARSDMG   | N | 3  | Cars in train carrying Hazardous Materials that were damaged or derailed.   |
| 16 | CARSHZD   | N | 3  | Cars in train carrying Hazardous Materials that released some Haz. Mat. product.  |
| 17 | EVACUATE  | N | 6  | Number of people evacuated as a result of the accident, even as a precaution.   |
| 18 | DIVISION  | C | 20 | Division of Railroad Reporting.   |
| 19 | CITY_TWN  | C | 20 | Nearest City/Town to accident   |
| 20 | MILEPOST  | C | 6  | Milepost of accident, include decimal point.  |
| 21 | STATE*    | C | 2  | State Alpha Code, see Appendix B.   |
| 22 | TEMP*     | N | 3  | Temperature at time of accident (Fahrenheit), if below zero include minus sign.   |

---

---

**Companion Guide - Continued**

|    |            |   |    |  |
|----|------------|---|----|--|
| 23 | VISIBILTY* | C | 1  | Visibility, must be 1 through 4.                         |
| 24 | WEATHER*   | C | 1  | Weather, must be 1 through 6.                            |
| 25 | METHOD     | C | 20 | See Notes Below <sup>3</sup> . Valid values are a-p.     |
| 26 | SPEED      | N | 3  | Speed of train.  |
| 27 | TYPSPD     | C | 1  | Estimated or recorded, enter E or R.                     |
| 28 | TRNNBR     | C | 4  | Train number.  |
| 29 | TRNDIR     | C | 1  | Train direction, must be 1 through 4.                    |
| 30 | TONS       | N | 5  | Trailing tons.   |
| 31 | TYPEQ      | C | 1  | Type of equipment, must be 1 through 9, or A.            |
| 32 | EQATT      | C | 1  | Equipment Attended, must either 1 or 2.                  |
| 33 | TRKNAME    | C | 20 | Track name or number.                                    |
| 34 | TRKCLAS    | C | 1  | FRA track classification. 1-9, X                         |
| 35 | TRKDNSTY   | N | 6  | Annual track density.                                    |
| 36 | TYPTRK     | C | 1  | Type track, must be 1 through 4.                         |
| 37 | RRCAR1     | C | 4  | Initials of first car (or locomotive) involved.          |
| 38 | CARNBR1    | N | 6  | Number of first car (or locomotive) involved.            |
| 39 | POSITON1   | N | 3  | Position in train of first car (or locomotive) involved. |
| 40 | LOADED1    | C | 1  | Car loaded, enter Y or N (for first car involved).       |
| 41 | RRCAR2     | C | 4  | Initials of causing car (or locomotive) involved.        |
| 42 | CARNBR2    | N | 6  | Number of causing car (or locomotive) involved.          |

---

<sup>3</sup> METHOD      Include all methods of operation, ATCS is A, Auto train control is B, Auto train stop is C, etc. Each method is 1 position long, with no commas separating methods. The letters should be in sequence. If the methods were Auto train control, Auto train stop, and Special instructions, then the METHOD would be BCM.

---

**Companion Guide - Continued**

|    |          |   |   |  |
|----|----------|---|---|--|
| 43 | POSITON2 | N | 3 | Position in train of causing car (or locomotive) involved. |
| 44 | LOADED2  | C | 1 | Car loaded, enter Y or N (for causing car involved).       |
| 45 | HEADEND1 | N | 1 | Number of head end locomotive units in train.              |
| 46 | MIDMAN1  | N | 1 | Number of mid train manual locomotive units in train.      |
| 47 | MIDREM1  | N | 1 | Number of mid train remote locomotive units in train.      |
| 48 | RMAN1    | N | 1 | Number of rear end manual locomotive units in train.       |
| 49 | RREM1    | N | 1 | Number of rear end remote locomotive units in train.       |
| 50 | HEADEND2 | N | 1 | Number of head end locomotive units derailed.              |
| 51 | MIDMAN2  | N | 1 | Number of mid train manual locomotive units derailed.      |
| 52 | MIDREM2  | N | 1 | Number of mid train remote locomotive units derailed.      |
| 53 | RMAN2    | N | 1 | Number of rear end manual locomotive units derailed.       |
| 54 | RREM2    | N | 1 | Number of rear end remote locomotive units derailed.       |
| 55 | LOADF1   | N | 3 | Number of loaded freight cars in consist.                  |
| 56 | LOADP1   | N | 3 | Number of loaded passenger cars in consist.                |
| 57 | EMPTYF1  | N | 3 | Number of empty freight cars in consist.                   |
| 58 | EMPTYP1  | N | 3 | Number of empty passenger cars in consist.                 |
| 59 | CABOOSE1 | N | 3 | Number of cabooses in consist.                             |
| 60 | LOADF2   | N | 3 | Number of loaded freight cars derailed.                    |
| 61 | LOADP2   | N | 3 | Number of loaded passenger cars derailed.                  |
| 62 | EMPTYF2  | N | 3 | Number of empty freight cars derailed.                     |
| 63 | EMPTYP2  | N | 3 | Number of empty passenger cars derailed.                   |
| 64 | CABOOSE2 | N | 3 | Number of cabooses derailed.                               |

---

---

**Companion Guide - Continued**

|    |            |   |   |  |
|----|------------|---|---|--|
| 65 | EQPDMG     | N | 8 | Equipment Damage this Consist, in dollars.   |
| 66 | TRKDMG     | N | 8 | Track, Signal, Way & Structure Damage, in dollars.   |
| 67 | CAUSE*     | C | 4 | Must be acceptable cause code, see Appendix C.   |
| 68 | CAUSE2     | C | 4 | Must be acceptable cause code, see Appendix C.   |
| 69 | A_D_1      | C | 4 | The first two positions in this field should store the number of positive alcohol tests. If an alcohol test was conducted with no positive results, enter "00". If no test was conducted, leave blank.<br><br>The last two positions in this field should store the number of positive drug tests. If a drug test was conducted with no positive results, enter "00". If no test was conducted, leave blank. |
| 70 | A_D_2      | C | 4 | Data field not currently used--leave blank.  |
| 71 | A_D_3      | C | 4 | Data field not currently used--leave blank.  |
| 72 | A_D_4      | C | 4 | Data field not currently used--leave blank.  |
| 73 | PASS_ON_TN | C | 1 | Must be Y if passengers are being transported, otherwise must be N.  |
| 74 | COUNTY*    | C | 3 | County code.   |
| 75 | ENGRS      | N | 1 | Number of engineers in crew.   |
| 76 | FIREMEN    | N | 1 | Number of firemen in crew.   |
| 77 | CONDUCTR   | N | 1 | Number of conductors in crew.  |
| 78 | BRAKEMEN   | N | 1 | Number of brakemen in crew.  |
| 79 | ENGTIME    | N | 4 | Number of Hours and Minutes of Engineer/Operator, in HHMM format.  |
| 80 | CDTRTIME   | N | 4 | Number of Hours and Minutes of Conductor, in HHMM format.  |
| 81 | RR_EMP_KD  | N | 3 | Number of railroad employees killed. Enter 0 if none.  |
| 82 | RR_EMP_IN  | N | 3 | Number of railroad employees injured. Enter 0 if none.   |

---

---

**Companion Guide - Continued**

|             |          |   |                   |  |
|-------------|----------|---|-------------------|--|
| 83          | PASS_KD  | N | 3                 | Number of passengers killed. Enter 0 if none.  |
| 84          | PASS_IN  | N | 3                 | Number of passengers injured. Enter 0 if none.   |
| 85          | OTHER_KD | N | 3                 | Number of others killed. Enter 0 if none.  |
| 86          | OTHER_IN | N | 3                 | Number of others injured. Enter 0 if none.   |
| 87          | SSB1     | C | 20                | Special Study Block. Enter according to written instructions provided by FRA or Federal Register; otherwise leave blank. |
| 88          | SSB2     | C | 20                | Special Study Block. Enter according to written instructions provided by FRA or Federal Register; otherwise leave blank. |
| 89          | NARRAT1  | C | 250               | Part 1 of the Narrative.   |
| 90          | NARRAT2  | C | 250               | Continuation of the Narrative.   |
| 91          | NARRAT3  | C | 250               | Continuation of the Narrative.   |
| 92          | NARRAT4  | C | 250               | Continuation of the Narrative.   |
| 93          | NARRAT5  | C | 250               | Continuation of the Narrative.   |
| 94          | NARRAT6  | C | 250               | Continuation of the Narrative.   |
| 95          | RCL      | C | 1                 | Remotely Controlled Locomotive. 0, 1, 2, 3   |
| 96          | LATITUDE | N | 10 6              | Latitude, in decimal degrees, explicit decimal, explicit +/- (WGS 84) (e.g., +35.301486)                                 |
| 96          | LONGITUD | N | 11 6              | Longitude, in decimal degrees, explicit decimal, explicit +/- (WGS 84)(e.g., -085.280201)                                |
| ** TOTAL ** |          |   | 1900 <sup>4</sup> |  |

Notes

**\*Mandatory Field** - A valid entry must be provided for each field identified as mandatory (\*), otherwise the entire record will be rejected.

---

<sup>4</sup> Includes extra byte required in the .DBF format

**Companion Guide - Continued**

All character information must be upper case, left justified, blank filled, unless otherwise stated.  
All numeric information must be right justified, zero filled, unless otherwise stated.

Each field that is not applicable ("N/A") should be blank.

A "0" should be used in a field to represent an entry of "None".

**Companion Guide - Continued**

**dBase (.DBF) Format for  
Railroad Injury and Illness Summary  
(Continuation Sheet)  
Form 6180.55a**

Exhibit 3

The following fields have been added:

26 COVERDATA  
Acceptable Input Values are: A, R, P  
27 (Item 5s.) LATITUDE  
28 (Item 5t.) LONGITUD

Records in each file must be sorted in YEAR/MONTH/RAILROAD/INCDTNO order.  
Refer to appropriate section of guide for instructions.

C = Character; N = Numeric

Structure for database: **CASUALTY.DBF**

| Field | Field Name | Type | Width | Dec | Comments  |
|-------|------------|------|-------|-----|---|
| 1     | YEAR*      | C    | 2     |     | Year of Accident/Incident.  |
| 2     | MONTH*     | C    | 2     |     | Month of Accident/Incident, include leading zero, i.e. 05.  |
| 3     | RAILROAD*  | C    | 4     |     | Reporting Railroad Alpha Code.  |
| 4     | INCDTNO*   | C    | 10    |     | Incident Number of Reporting Railroad (no embedded blanks, punctuation or special characters).      |
| 5     | TYPERS*    | C    | 1     |     | Type of Person (Letter A through J).  |
| 6     | JOBCODE*   | C    | 3     |     | Must be acceptable job code, see Appendix D.  |
| 7     | ICODE*     | C    | 4     |     | Must be acceptable Injury or Illness code, see Appendix E.  |
| 8     | AGE        | C    | 2     |     | Age of the individual at the time of the incident.  |
| 9     | STATE*     | C    | 2     |     | State Alphabetic Code, see Appendix B.  |
| 10    | DAYSABS    | N    | 3     |     | Number of days away from work. If there were no such days or a fatality is being reported, enter 0. |

---

**Companion Guide - Continued**

|    |            |   |   |  |
|----|------------|---|---|--|
| 11 | DAYSRES    | N | 3 | Number of days of restricted activity. If there were no such days or a fatality is being reported, enter 0.  |
| 12 | DRUG_ALCOH | C | 4 | The first two positions in this field should store the number of positive alcohol tests. If an alcohol test was conducted with no positive results, enter "00". If no test was conducted, leave blank.<br><br>The last two positions in this field should store the number of positive drug tests. If a drug test was conducted with no positive results, enter "00". If no test was conducted, leave blank. |
| 13 | DAY*       | C | 2 | Day of Accident/Injury   |
| 14 | TIME*      | C | 6 | Time of Accident/Injury. The first four positions are the time and the last two positions are for either am or pm.   |
| 15 | COUNTY*    | C | 3 | County Code where Accident/Injury occurred   |
| 16 | PHY_ACT*   | C | 2 | Physical Act Circumstance Code -- See Appendix F   |
| 17 | LOC1*      | C | 2 | Location Circumstance Code, Part I -- See Appendix F   |
| 18 | LOC2*      | C | 2 | Location Circumstance Code, Part II -- See Appendix F  |
| 19 | LOC3*      | C | 2 | Location Circumstance Code, Part III -- See Appendix F   |
| 20 | EVENT*     | C | 2 | Event Circumstance Code -- See Appendix F  |
| 21 | RESULT*    | C | 2 | Result Circumstance Code; Tools, Machinery, Appliances, Structures, Surfaces, etc. -- See Appendix F   |
| 22 | CAUSE*     | C | 2 | Cause Circumstance Code; Probable Reason for Injury/Illness -- See Appendix F  |
| 23 | EXPOSURE   | C | 1 | If the injury is a result of a direct exposure to HAZMAT, enter Y for yes, otherwise enter N for no.   |
| 24 | TERMINATIO | C | 1 | Termination or permanent transfer? Enter Y for yes or N for no.  |

---

---

**Companion Guide - Continued**

|             |           |   |                  |  |
|-------------|-----------|---|------------------|--|
| 25          | NARRATIVE | C | 250              | Narrative  |
| 26          | COVERDATA | C | 1                | If it is Covered Data Case, enter A, R, or P   |
| 27          | LATITUDE  | N | 10 6             | Latitude, in decimal degrees, explicit decimal, explicit +/- (WGS 84) (e.g., +35.301486)   |
| 28          | LONGITUD  | N | 11 6             | Longitude, in decimal degrees, explicit decimal, explicit +/- (WGS 84) (e.g., -085.280201) |
| ** TOTAL ** |           |   | 340 <sup>5</sup> |  |

Notes

**\*Mandatory Field** - A valid entry must be provided for each field identified as mandatory (\*), otherwise the entire record will be rejected.

All character information must be upper case, left justified, blank filled, unless otherwise stated. All numeric information must be right justified, zero filled, unless otherwise stated.

Each field that is not applicable ("N/A") should be blank.

A "0" should be used in a field to represent an entry of "None".

---

<sup>5</sup> Includes extra byte required in the .DBF format

**Companion Guide - Continued**

**dBase (.DBF) Format for  
Highway-Rail Grade Crossing Accident/Incident Report  
Form 6180.57**

Exhibit 4

The following values have been added to existing fields:

- 22 (Item 17) RREQUIP  
A, B, C (Acceptable Input Values are: 1- 8 or A, B, or C)  
Refer to Form 6180.57 for meaning of Input values.
- 29 (Item 24) TYPTRN  
A (Acceptable Input Values are: 1- 9 or A)  
Refer to Form 6180.57 for meaning of Input values.
- 32 (Item 27) TRKCLAS  
7-9 (Acceptable Input Values are: 1-9, X)

Records in each file must be sorted in YEAR/MONTH/RAILROAD/INCDTNO order.  
Refer to appropriate section of guide for instructions.

C = Character; N = Numeric

Structure for database: **GXIR.DBF**

| Field | Field Name | Type | Width | Dec | Comments  |
|-------|------------|------|-------|-----|---|
| 1     | RAILROAD*  | C    | 4     |     | Reporting Railroad Alpha Code.  |
| 2     | INCDTNO*   | C    | 10    |     | Accident/Incident Number of Reporting Railroad (no embedded blanks, punctuation or special characters).                         |
| 3     | RR2        | C    | 4     |     | Other Involved Railroad. Railroad Alpha Code.   |
| 4     | INCDTNO2   | C    | 10    |     | Accident/Incident Number of Other Involved Railroad (no embedded blanks, punctuation or special characters).                    |
| 5     | RR3*       | C    | 4     |     | Railroad Responsible for Track Maintenance Alpha Code.  |
| 6     | INCDTNO3*  | C    | 10    |     | Accident/Incident Number of Railroad Responsible for Track Maintenance (no embedded blanks, punctuation or special characters). |
| 7     | GXID*      | C    | 7     |     | DOT-AAR Crossing Number. If a number has not been assigned, enter NOTASGN.  |
| 8     | YEAR*      | C    | 2     |     | Year of Accident/Incident.  |

---

**Companion Guide - Continued**

|    |             |   |    |   |
|----|-------------|---|----|---|
| 9  | MONTH*      | C | 2  | Month of Accident/Incident, include leading zero, i.e. 05.  |
| 10 | DAY*        | C | 2  | Day of Accident, include leading zero, i.e. 08.   |
| 11 | HRMIN*      | N | 4  | Hour and minute of Accident in HHMM, include leading zero, i.e. 0305.                               |
| 12 | AMPM*       | C | 2  | AM or PM of Time of Accident/Incident.  |
| 13 | RSTATION    | C | 20 | Nearest Railroad Station.   |
| 14 | COUNTY*     | C | 3  | County code.  |
| 15 | STATE*      | C | 2  | State Alphabetic Code, See Appendix B.  |
| 16 | CITY        | C | 20 | City.   |
| 17 | HIGHWAY     | C | 20 | Highway Name or Number, if a private crossing enter PRIVATE.  |
| 18 | TYPVEH*     | C | 1  | Highway User, must be between A and M, excluding I and L.   |
| 19 | VEHSPD      | N | 3  | Speed of Highway User involved. If Field 13 (TYPVEH) is K for Pedestrian, then leave blank for N/A. |
| 20 | VEHDIR      | C | 1  | Highway user direction, must be between 1 and 4.  |
| 21 | POSITION*   | C | 1  | Position, must be between 1 and 4.  |
| 22 | RREQUIP*    | C | 1  | Railroad equipment involved, must be between 1 and 8 or A, B, or C.                                 |
| 23 | RRCAR       | N | 3  | Position of car/unit in the train.  |
| 24 | TYPACC*     | C | 1  | Circumstance, must be 1 or 2.   |
| 25 | HAZARD      | N | 1  | Was hazardous material being transported, must be between 1 and 4.                                  |
| 26 | TEMP*       | N | 3  | Temperature at time of accident (Fahrenheit), if below zero include leading minus sign.             |
| 27 | VISIBILITY* | C | 1  | Visibility, must be between 1 and 4.  |
| 28 | WEATHER*    | C | 1  | Weather, must be between 1 and 6.   |

---

---

**Companion Guide - Continued**

|    |           |   |    |   |
|----|-----------|---|----|---|
| 29 | TYPTRN    | C | 1  | Type of Equipment Consist, must be between 1 and 9 or A.  |
| 30 | TYPTRK    | C | 1  | Type track, must be between 1 and 4.  |
| 31 | TRKNAME   | C | 20 | Track number or name.   |
| 32 | TRKCLAS   | C | 1  | FRA track classification. (1-9, X)  |
| 33 | NBRLOCOS* | N | 2  | Number of locomotive units.   |
| 34 | NBRCARS*  | N | 3  | Number of cars.   |
| 35 | TRNSPD    | N | 3  | Speed of train.   |
| 36 | TYPSPD    | C | 1  | Train Speed is estimated or recorded, enter E or R.   |
| 37 | TRNDIR    | C | 1  | Time Table. Direction, must be between 1 and 4.   |
| 38 | CROSSING* | C | 24 | Type of crossing warning <sup>6</sup> .   |
| 39 | SIGNAL    | C | 1  | Signaled Crossing Warning, must be between 1 and 7.   |
| 40 | LOCWARN   | C | 1  | Location of Warning, must be between 1 and 3.   |
| 41 | WARNSIG   | C | 1  | Crossing warning connected with highway signals, must be 1, 2 or 3.   |
| 42 | LIGHTS    | C | 1  | Crossing illuminated by street lights, must be 1, 2 or 3.   |
| 43 | STANDVEH  | C | 1  | Motorist passed standing highway vehicle, must be 1, 2 or 3. If Field 13 (TYPVEH) is K for Pedestrian, then leave blank for N/A.        |
| 44 | TRAIN2    | C | 1  | Motorist struck, or was struck by, second train, must be 1, 2 or 3. If Field 13 (TYPVEH) is K for Pedestrian, then leave blank for N/A. |

---

<sup>6</sup> CROSSING      Include all crossing types, Gates is 01, Cantilever is 02, Standard FLS is 03, etc. Each warning is 2 positions long with no commas separating the crossing types. If the warning devices are Standard Flashing Lights, and Crossbucks then CROSSING would be 0307.

---

**Companion Guide - Continued**

|    |            |   |    |  |
|----|------------|---|----|--|
| 45 | MOTORIST   | C | 1  | Motorist action, must be between 1 and 5. If Field 13 (TYPVEH) is K for Pedestrian, then leave blank for N/A.    |
| 46 | VIEW       | C | 1  | View of track obscured by, must be between 1 and 8.  |
| 47 | VEHDMG     | N | 6  | Highway vehicle property damage in dollars. If Field 13 (TYPVEH) is K for Pedestrian, then leave blank for N/A.  |
| 48 | DRIVER     | C | 1  | Driver was, must be 1, 2 or 3. If Field 13 (TYPVEH) is K for Pedestrian, then leave blank for N/A.               |
| 49 | INVEH      | C | 1  | Was driver in the vehicle?, must be 1 or 2. If Field 13 (TYPVEH) is K for Pedestrian, then leave blank for N/A.  |
| 50 | TOTOCC     | N | 4  | Total number of highway-rail crossing users.   |
| 51 | INCDRPT*   | C | 1  | Was the Rail Equipment Accident/Incident Report filed? Enter 1 or 2.   |
| 52 | DIVISION   | C | 20 | Division of Reporting Railroad   |
| 53 | PUB_PRIV*  | C | 1  | Public or Private Highway-Rail Grade Crossing? Enter 1 for Public or 2 for Private.                              |
| 54 | HAZ_REL    | N | 1  | HAZMAT released? Enter 1-4.  |
| 55 | HM_NAME    | C | 30 | Name of Primary HAZMAT released.   |
| 56 | HM_QUANTY  | C | 4  | Quantity of Primary HAZMAT released.   |
| 57 | HM_MEASURE | C | 4  | Units of Measurement used for Field 56 (HM_QUANTY) (gross mass, weight or volume). For example: LBS, TONS, GALS. |
| 58 | SIG_WARN_X | C | 1  | If Field 39 (SIGNAL) is 5, 6, or 7, enter explanation code A-S, excluding I, O, and Q.                           |
| 59 | WHISLE_BAN | C | 1  | Whistle Ban? Enter 1, 2 or 3.  |
| 60 | DRIV_AGE   | N | 2  | Driver's (or pedestrian's) age.  |
| 61 | DRIV_GENDR | C | 1  | Driver's (or pedestrian's) gender (1 or 2).  |

---

**Companion Guide - Continued**

|             |            |   |                  |  |
|-------------|------------|---|------------------|--|
| 62          | HR_USER_KD | N | 3                | Total number of highway-rail crossing users killed, a casualty report (55a) must be filled for each person.              |
| 63          | HR_USER_IN | N | 3                | Total number of highway-rail crossing users injured, a casualty report (55a) must be filled for each person.             |
| 64          | RR_EMP_KD  | N | 3                | Total number of railroad employees killed, a casualty report (55a) must be filled for each person.                       |
| 65          | RR_EMP_IN  | N | 3                | Total number of railroad employees injured, a casualty report (55a) must be filled for each person.                      |
| 66          | PASS_KD    | N | 3                | Total number of passengers killed, a casualty report (55a) must be filled for each person.                               |
| 67          | PASS_IN    | N | 3                | Total number of passengers injured, a casualty report (55a) must be filled for each person.                              |
| 68          | PEOPLE_TRN | N | 4                | Number of people on the train.   |
| 69          | SSB1       | C | 20               | Special Study Block. Enter according to written instructions provided by FRA or Federal Register; otherwise leave blank. |
| 70          | SSB2       | C | 20               | Special Study Block. Enter according to written instructions provided by FRA or Federal Register; otherwise leave blank. |
| 71          | NARRATIVE1 | C | 250              | Narrative  |
| 72          | NARRATIVE2 | C | 250              | Narrative  |
| ** TOTAL ** |            |   | 849 <sup>7</sup> |  |

Notes

**\*Mandatory Field** - A valid entry must be provided for each field identified as mandatory (\*), otherwise the entire record will be rejected.

All character information must be upper case, left justified, blank filled, unless otherwise stated.  
All numeric information must be right justified, zero filled, unless otherwise stated.

---

<sup>7</sup> Includes extra byte required in the .DBF format

**Companion Guide - Continued**

Each field that is not applicable ("N/A") should be blank.

A "0" should be used in a field to represent an entry of "None".

---

**Companion Guide - Continued**

**ASCII and Magnetic Tape Format for  
Railroad Injury and Illness Summary  
Form 6180.55**

Exhibit 5

Refer to appropriate section of guide for instructions.

C = Character; N = Numeric

Structure for database: **RRSUM.SDF**

| Field | Field Name  | Type | Begins | Ends | Comments  |
|-------|-------------|------|--------|------|---|
| 1     | RAILROAD*   | C    | 1      | 4    | Reporting Railroad Code.                              |
| 2     | YEAR*       | C    | 5      | 6    | Report Year.  |
| 3     | MONTH*      | C    | 7      | 8    | Report Month.   |
| 4     | STATE*      | C    | 9      | 10   | State where notarized.                                |
| 5     | COUNTY*     | C    | 11     | 30   | County where notarized.                               |
| 6     | FRTTRN_MI*  | N    | 31     | 40   | Number of Freight Train Miles Operated.               |
| 7     | PASSTRN_MI* | N    | 41     | 50   | Number of Passenger Train Miles Operated.             |
| 8     | YDSW_MI*    | N    | 51     | 60   | Number of Yard Switching Miles Operated.              |
| 9     | OTHTRN_MI*  | N    | 61     | 70   | Number of Other Train Miles Operated.                 |
| 10    | RRWRK_HR*   | N    | 71     | 80   | Number of Railroad Hours Worked.                      |
| 11    | PASSMI_OP   | N    | 81     | 90   | Number of Passenger Miles Operated.                   |
| 12    | PASS_TRNS   | N    | 91     | 100  | Number of Passengers Transported.                     |
| 13    | REMARKS     | C    | 101    | 350  | Operational, environmental comments for report month. |

Notes

**\*Mandatory Field** - A valid entry must be provided for each field identified as mandatory (\*), otherwise the entire record will be rejected.

All character information must be upper case, left justified, blank filled, unless otherwise stated.  
All numeric information must be right justified, zero filled, unless otherwise stated.

**Companion Guide - Continued**

Each field that is not applicable ("N/A") should be blank.

A "0" should be used in a field to represent an entry of "None".

---

**Companion Guide - Continued**

**ASCII and Magnetic Tape Format for  
Rail Equipment Accident/Incident Report  
Form 6180.54**

Exhibit 6

The following fields have been added:

- 95 (Item 30a.) RCL  
Acceptable Input Values are: 0, 1, 2, 3  
Refer to Form 6180.54 for meaning of Input values.
- 96 (Item 50.) LATITUDE
- 97 (Item 51.) LONGITUD

The following values have been added to existing fields:

- 31 (Item 25.) TYPEQ  
A (Acceptable Input Values are: 1 through 9, or A)  
Refer to Form 6180.54 for meaning of Input values.
- 25 (Item 30.) METHOD  
p (Acceptable Input Values are: a-p)  
Refer to Form 6180.54 for meaning of Input values.
- 34 (Item 22) TRKCLAS  
7-9 (Acceptable Input Values are: 1-9, X)

Records in each file must be sorted in YEAR/MONTH/RAILROAD/INCDTNO order.  
Refer to appropriate section of guide for instructions.

C = Character; N = Numeric

Structure for database: **ACCIDENT.SDF**

| Field | Field Name | Type | Begins | Ends | Comments   |
|-------|------------|------|--------|------|--|
| 1     | RAILROAD*  | C    | 1      | 4    | Reporting Railroad Alpha Code.   |
| 2     | INCDTNO*   | C    | 5      | 14   | Accident/Incident Number of Reporting Railroad (no embedded blanks, punctuation or special characters).      |
| 3     | RR2        | C    | 15     | 18   | Other Involved Railroad Alpha Code.  |
| 4     | INCDTNO2   | C    | 19     | 28   | Accident/Incident Number of Other Involved Railroad (no embedded blanks, punctuation or special characters). |

---

**Companion Guide - Continued**

|    |           |   |     |     |   |
|----|-----------|---|-----|-----|---|
| 5  | RR3*      | C | 29  | 32  | Railroad Responsible for Track Maintenance Alpha Code.  |
| 6  | INCDTNO3* | C | 33  | 42  | Accident/Incident Number of Railroad Responsible for Track Maintenance (no embedded blanks, punctuation or special characters). |
| 7  | GXID      | C | 43  | 49  | DOT-AAR Crossing Number, if Type Accident is Hwy-Rail Crossing. If a number has not been assigned, enter NOTASGN.               |
| 8  | YEAR*     | C | 50  | 51  | Year of Accident.   |
| 9  | MONTH*    | C | 52  | 53  | Month of Accident, include leading zero, i.e. 05.   |
| 10 | DAY*      | C | 54  | 55  | Day of Accident, include leading zero, i.e. 08.   |
| 11 | HRMIN*    | N | 56  | 59  | Hour and minute of Accident in HHMM, include leading zero, i.e. 0305.   |
| 12 | AMPM*     | C | 60  | 61  | AM or PM of Time of Accident.   |
| 13 | TYPE*     | C | 62  | 63  | Type of Accident, must be 01 through 13. If "Other," code 13, then include type of accident in the Narrative.                   |
| 14 | CARS      | N | 64  | 66  | Cars in train carrying Hazardous Materials.   |
| 15 | CARSDMG   | N | 67  | 69  | Cars in train carrying Hazardous Materials that were damaged or derailed.   |
| 16 | CARSHZD   | N | 70  | 72  | Cars in train carrying Hazardous Materials that released some Haz. Mat. product.  |
| 17 | EVACUATE  | N | 73  | 78  | Number of people evacuated as a result of the accident, even as a precaution.   |
| 18 | DIVISION  | C | 79  | 98  | Division of Railroad Reporting.   |
| 19 | CITY_TWN  | C | 99  | 118 | Nearest City/Town to accident   |
| 20 | MILEPOST  | C | 119 | 124 | Milepost of accident, include decimal point.  |
| 21 | STATE*    | C | 125 | 126 | State Alpha Code, see Appendix B.   |
| 22 | TEMP*     | N | 127 | 129 | Temperature at time of accident (Fahrenheit), if below zero include minus sign.   |

---

---

**Companion Guide - Continued**

|    |           |   |     |     |  |
|----|-----------|---|-----|-----|--|
| 23 | VISIBLTY* | C | 130 |     | Visibility, must be 1 through 4.                         |
| 24 | WEATHER*  | C | 131 |     | Weather, must be 1 through 6.                            |
| 25 | METHOD    | C | 132 | 151 | See Notes Below <sup>8</sup> . Valid values are a-p.     |
| 26 | SPEED     | N | 152 | 154 | Speed of train.  |
| 27 | TYPSPD    | C | 155 |     | Estimated or recorded, enter E or R.                     |
| 28 | TRNNBR    | C | 156 | 159 | Train number.  |
| 29 | TRNDIR    | C | 160 |     | Train direction, must be 1 through 4.                    |
| 30 | TONS      | N | 161 | 165 | Trailing tons.   |
| 31 | TYPEQ     | C | 166 |     | Type of equipment, must be 1 through 9, or A.            |
| 32 | EQATT     | C | 167 |     | Equipment Attended, must either 1 or 2.                  |
| 33 | TRKNAME   | C | 168 | 187 | Track name or number.                                    |
| 34 | TRKCLAS   | C | 188 |     | FRA track classification. 1-9, X                         |
| 35 | TRKDNSTY  | N | 189 | 194 | Annual track density.                                    |
| 36 | TYPTRK    | C | 195 |     | Type track, must be 1 through 4.                         |
| 37 | RRCAR1    | C | 196 | 199 | Initials of first car (or locomotive) involved.          |
| 38 | CARNBR1   | N | 200 | 205 | Number of first car (or locomotive) involved.            |
| 39 | POSITON1  | N | 206 | 208 | Position in train of first car (or locomotive) involved. |
| 40 | LOADED1   | C | 209 |     | Car loaded, enter Y or N (for first car involved).       |
| 41 | RRCAR2    | C | 210 | 213 | Initials of causing car (or locomotive) involved.        |
| 42 | CARNBR2   | N | 214 | 219 | Number of causing car (or locomotive) involved.          |

---

<sup>8</sup> METHOD      Include all methods of operation, ATCS is A, Auto train control is B, Auto train stop is C, etc. Each method is 1 position long, with no commas separating methods. The letters should be in sequence. If the methods were Auto train control, Auto train stop, and Special instructions, then the METHOD would be BCM.

---

**Companion Guide - Continued**

|    |          |   |     |     |  |
|----|----------|---|-----|-----|--|
| 43 | POSITON2 | N | 220 | 222 | Position in train of causing car (or locomotive) involved. |
| 44 | LOADED2  | C | 223 |     | Car loaded, enter Y or N (for causing car involved).       |
| 45 | HEADEND1 | N | 224 |     | Number of head end locomotive units in train.              |
| 46 | MIDMAN1  | N | 225 |     | Number of mid train manual locomotive units in train.      |
| 47 | MIDREM1  | N | 226 |     | Number of mid train remote locomotive units in train.      |
| 48 | RMAN1    | N | 227 |     | Number of rear end manual locomotive units in train.       |
| 49 | RREM1    | N | 228 |     | Number of rear end remote locomotive units in train.       |
| 50 | HEADEND2 | N | 229 |     | Number of head end locomotive units derailed.              |
| 51 | MIDMAN2  | N | 230 |     | Number of mid train manual locomotive units derailed.      |
| 52 | MIDREM2  | N | 231 |     | Number of mid train remote locomotive units derailed.      |
| 53 | RMAN2    | N | 232 |     | Number of rear end manual locomotive units derailed.       |
| 54 | RREM2    | N | 233 |     | Number of rear end remote locomotive units derailed.       |
| 55 | LOADF1   | N | 234 | 236 | Number of loaded freight cars in consist.                  |
| 56 | LOADP1   | N | 237 | 239 | Number of loaded passenger cars in consist.                |
| 57 | EMPTYF1  | N | 240 | 242 | Number of empty freight cars in consist.                   |
| 58 | EMPTYP1  | N | 243 | 245 | Number of empty passenger cars in consist.                 |
| 59 | CABOOSE1 | N | 246 | 248 | Number of cabooses in consist.                             |
| 60 | LOADF2   | N | 249 | 251 | Number of loaded freight cars derailed.                    |
| 61 | LOADP2   | N | 252 | 254 | Number of loaded passenger cars derailed.                  |
| 62 | EMPTYF2  | N | 255 | 257 | Number of empty freight cars derailed.                     |
| 63 | EMPTYP2  | N | 258 | 260 | Number of empty passenger cars derailed.                   |
| 64 | CABOOSE2 | N | 261 | 263 | Number of cabooses derailed.                               |

---

---

**Companion Guide - Continued**

|    |            |   |     |     |  |
|----|------------|---|-----|-----|--|
| 65 | EQPDMG     | N | 264 | 271 | Equipment Damage this Consist, in dollars.   |
| 66 | TRKDMG     | N | 272 | 279 | Track , Signal, Way & Structure Damage, in dollars.  |
| 67 | CAUSE*     | C | 280 | 283 | Must be acceptable cause code, see Appendix C.   |
| 68 | CAUSE2     | C | 284 | 287 | Must be acceptable cause code, see Appendix C.   |
| 69 | A_D_1      | C | 288 | 291 | The first two positions in this field should store the number of positive alcohol tests. If an alcohol test was conducted with no positive results, enter "00". If no test was conducted, leave blank.<br><br>The last two positions in this field should store the number of positive drug tests. If a drug test was conducted with no positive results, enter "00". If no test was conducted, leave blank. |
| 70 | A_D_2      | C | 292 | 295 | Data field not currently used--leave blank.  |
| 71 | A_D_3      | C | 296 | 299 | Data field not currently used--leave blank.  |
| 72 | A_D_4      | C | 300 | 303 | Data field not currently used--leave blank.  |
| 73 | PASS_ON_TN | C | 304 |     | Must be Y if passengers are being transported, otherwise must be N.  |
| 74 | COUNTY*    | C | 305 | 307 | County code.   |
| 75 | ENGRS      | N | 308 |     | Number of engineers in crew.   |
| 76 | FIREMEN    | N | 309 |     | Number of firemen in crew.   |
| 77 | CONDUCTR   | N | 310 |     | Number of conductors in crew.  |
| 78 | BRAKEMEN   | N | 311 |     | Number of brakemen in crew.  |
| 79 | ENGTIME    | N | 312 | 315 | Number of Hours and Minutes of Engineer/Operator, in HHMM format.  |
| 80 | CDTRTIME   | N | 316 | 319 | Number of Hours and Minutes of Conductor, in HHMM format.  |
| 81 | RR_EMP_KD  | N | 320 | 322 | Number of railroad employees killed. Enter 0 if none.  |
| 82 | RR_EMP_IN  | N | 323 | 325 | Number of railroad employees injured. Enter 0 if none.   |

---

---

**Companion Guide - Continued**

|    |          |   |           |  |
|----|----------|---|-----------|--|
| 83 | PASS_KD  | N | 326 328   | Number of passengers killed. Enter 0 if none.  |
| 84 | PASS_IN  | N | 329 331   | Number of passengers injured. Enter 0 if none.   |
| 85 | OTHER_KD | N | 332 334   | Number of others killed. Enter 0 if none.  |
| 86 | OTHER_IN | N | 335 337   | Number of others injured. Enter 0 if none.   |
| 87 | SSB1     | C | 338 357   | Special Study Block. Enter according to written instructions provided by FRA or Federal Register; otherwise leave blank. |
| 88 | SSB2     | C | 358 377   | Special Study Block. Enter according to written instructions provided by FRA or Federal Register; otherwise leave blank. |
| 89 | NARRAT1  | C | 378 627   | Part 1 of the Narrative.   |
| 90 | NARRAT2  | C | 628 877   | Continuation of the Narrative.   |
| 91 | NARRAT3  | C | 878 1127  | Continuation of the Narrative.   |
| 92 | NARRAT4  | C | 1128 1377 | Continuation of the Narrative.   |
| 93 | NARRAT5  | C | 1378 1627 | Continuation of the Narrative.   |
| 94 | NARRAT6  | C | 1628 1877 | Continuation of the Narrative.   |
| 95 | RCL      | C | 1878      | Remote Control Locomotive. 0, 1, 2, 3  |
| 96 | LATITUDE | N | 1879 1888 | Latitude, in decimal degrees, explicit decimal, explicit +/- (WGS 84) (e.g., +35.301486)                                 |
| 96 | LONGITUD | N | 1889 1899 | Longitude, in decimal degrees, explicit decimal, explicit +/- (WGS 84) (e.g., -085.280201)                               |

Notes

**\*Mandatory Field** - A valid entry must be provided for each field identified as mandatory (\*), otherwise the entire record will be rejected.

All character information must be upper case, left justified, blank filled, unless otherwise stated. All numeric information must be right justified, zero filled, unless otherwise stated.

Each field that is not applicable ("N/A") should be blank.

**Companion Guide - Continued**

A "0" should be used in a field to represent an entry of "None".

**Companion Guide - Continued**

**ASCII and Magnetic Tape Format for  
Railroad Injury and Illness Summary  
(Continuation Sheet)  
Form 6180.55a**

Exhibit 7

The following fields have been added:

26 COVERDATA  
Acceptable Input Values are: A, R, P  
27 (Item 5s.) LATITUDE  
28 (Item 5t.) LONGITUD

Records in each file must be sorted in YEAR/MONTH/RAILROAD/INCDTNO order.

Refer to appropriate section of guide for instructions.

C = Character; N = Numeric

Structure for database: **CASUALTY.SDF**

| Field | Field Name | Type | Begins | Ends | Comments  |
|-------|------------|------|--------|------|---|
| 1     | YEAR*      | C    | 1      | 2    | Year of Accident/Incident.  |
| 2     | MONTH*     | C    | 3      | 4    | Month of Accident/Incident, include leading zero, i.e. 05.  |
| 3     | RAILROAD*  | C    | 5      | 8    | Reporting Railroad Alpha Code.  |
| 4     | INCDTNO*   | C    | 9      | 18   | Incident Number of Reporting Railroad (no embedded blanks, punctuation or special characters).      |
| 5     | TYPERS*    | C    | 19     |      | Type of Person (Letter A through J).  |
| 6     | JOBCODE*   | C    | 20     | 22   | Must be acceptable job code, see Appendix D.  |
| 7     | ICODE*     | C    | 23     | 26   | Must be acceptable Injury or Illness code, see Appendix E.  |
| 8     | AGE        | C    | 27     | 28   | Age of the individual at the time of the incident.  |
| 9     | STATE*     | C    | 29     | 30   | State Alphabetic Code, see Appendix B.  |
| 10    | DAYSABS    | N    | 31     | 33   | Number of days away from work. If there were no such days or a fatality is being reported, enter 0. |

---

**Companion Guide - Continued**

|    |            |   |    |     |  |
|----|------------|---|----|-----|--|
| 11 | DAYSRES    | N | 34 | 36  | Number of days of restricted activity. If there were no such days or a fatality is being reported, enter 0.  |
| 12 | DRUG_ALCOH | C | 37 | 40  | The first two positions in this field should store the number of positive alcohol tests. If an alcohol test was conducted with no positive results, enter "00". If no test was conducted, leave blank.<br><br>The last two positions in this field should store the number of positive drug tests. If a drug test was conducted with no positive results, enter "00". If no test was conducted, leave blank. |
| 13 | DAY*       | C | 41 | 42  | Day of Accident/Injury   |
| 14 | TIME*      | C | 43 | 48  | Time of Accident/Injury. The first four positions are the time and the last two positions are for either am or pm.   |
| 15 | COUNTY*    | C | 49 | 51  | County Code where Accident/Injury occurred   |
| 16 | PHY_ACT*   | C | 52 | 53  | Physical Act Circumstance Code -- See Appendix F   |
| 17 | LOC1*      | C | 54 | 55  | Location Circumstance Code, Part I -- See Appendix F   |
| 18 | LOC2*      | C | 56 | 57  | Location Circumstance Code, Part II -- See Appendix F  |
| 19 | LOC3*      | C | 58 | 59  | Location Circumstance Code, Part III -- See Appendix F   |
| 20 | EVENT*     | C | 60 | 61  | Event Circumstance Code -- See Appendix F  |
| 21 | RESULT*    | C | 62 | 63  | Result Circumstance Code; Tools, Machinery, Appliances, Structures, Surfaces, etc. -- See Appendix F   |
| 22 | CAUSE*     | C | 64 | 65  | Cause Circumstance Code; Probable Reason for Injury/Illness -- See Appendix F  |
| 23 | EXPOSURE   | C | 66 |     | If the injury is a result of a direct exposure to HAZMAT, enter Y for yes, otherwise enter N for no.   |
| 24 | TERMINATIO | C | 67 |     | Termination or permanent transfer? Enter Y for yes or N for no.  |
| 25 | NARRATIVE  | C | 68 | 317 | Narrative  |

---

---

**Companion Guide - Continued**

|    |           |   |         |  |
|----|-----------|---|---------|--|
| 26 | COVERDATA | C | 318     | If it is Covered Data Case, enter A, R, or P   |
| 27 | LATITUDE  | N | 319 328 | Latitude, in decimal degrees, explicit decimal, explicit +/- (WGS 84) (e.g., +35.301486)   |
| 28 | LONGITUD  | N | 329 339 | Longitude, in decimal degrees, explicit decimal, explicit +/- (WGS 84) (e.g., -085.280201) |

Notes

**\*Mandatory Field** - A valid entry must be provided for each field identified as mandatory (\*), otherwise the entire record will be rejected.

All character information must be upper case, left justified, blank filled, unless otherwise stated. All numeric information must be right justified, zero filled, unless otherwise stated.

Each field that is not applicable ("N/A") should be blank.

A "0" should be used in a field to represent an entry of "None".

**Companion Guide - Continued**

**ASCII and Magnetic Tape Format for  
Highway-Rail Grade Crossing Accident/Incident Report  
Form 6180.57**

Exhibit 8

The following values have been added to existing fields:

- 22 (Item 17) RREQUIP  
A, B, C (Acceptable Input Values are: 1- 8 or A, B, or C)  
Refer to Form 6180.57 for meaning of Input values.
- 29 (Item 24) TYPTRN  
A (Acceptable Input Values are: 1- 9 or A)  
Refer to Form 6180.57 for meaning of Input values.
- 32 (Item 27) TRKCLAS  
7-9 (Acceptable Input Values are: 1-9, X)

Records in each file must be sorted in YEAR/MONTH/RAILROAD/INCDTNO order.  
Refer to appropriate section of guide for instructions.

C = Character; N = Numeric

Structure for database: GXIR.SDF

| Field | Field Name | Type | Begins | Ends | Comments  |
|-------|------------|------|--------|------|---|
| 1     | RAILROAD*  | C    | 1      | 4    | Reporting Railroad Alpha Code.  |
| 2     | INCDTNO*   | C    | 5      | 14   | Accident/Incident Number of Reporting Railroad (no embedded blanks, punctuation or special characters).                         |
| 3     | RR2        | C    | 15     | 18   | Other Involved Railroad. Railroad Alpha Code.   |
| 4     | INCDTNO2   | C    | 19     | 28   | Accident/Incident Number of Other Involved Railroad (no embedded blanks, punctuation or special characters).                    |
| 5     | RR3*       | C    | 29     | 32   | Railroad Responsible for Track Maintenance Alpha Code.  |
| 6     | INCDTNO3*  | C    | 33     | 42   | Accident/Incident Number of Railroad Responsible for Track Maintenance (no embedded blanks, punctuation or special characters). |
| 7     | GXID*      | C    | 43     | 49   | DOT-AAR Crossing Number. If a number has not been assigned, enter NOTASGN.  |
| 8     | YEAR*      | C    | 50     | 51   | Year of Accident/Incident.  |

---

**Companion Guide - Continued**

|    |             |   |     |     |   |
|----|-------------|---|-----|-----|---|
| 9  | MONTH*      | C | 52  | 53  | Month of Accident/Incident, include leading zero, i.e. 05.  |
| 10 | DAY*        | C | 54  | 55  | Day of Accident, include leading zero, i.e. 08.   |
| 11 | HRMIN*      | N | 56  | 59  | Hour and minute of Accident in HHMM, include leading zero, i.e. 0305.                               |
| 12 | AMPM*       | C | 60  | 61  | AM or PM of Time of Accident/Incident.  |
| 13 | RSTATION    | C | 62  | 81  | Nearest Railroad Station.   |
| 14 | COUNTY*     | C | 82  | 84  | County code.  |
| 15 | STATE*      | C | 85  | 86  | State Alphabetic Code, See Appendix B.  |
| 16 | CITY        | C | 87  | 106 | City.   |
| 17 | HIGHWAY     | C | 107 | 126 | Highway Name or Number, if a private crossing enter PRIVATE.  |
| 18 | TYPVEH*     | C | 127 |     | Highway User, must be between A and M, excluding I and L.   |
| 19 | VEHSPD      | N | 128 | 130 | Speed of Highway User involved. If Field 13 (TYPVEH) is K for Pedestrian, then leave blank for N/A. |
| 20 | VEHDIR      | C | 131 |     | Highway user direction, must be between 1 and 4.  |
| 21 | POSITION*   | C | 132 |     | Position, must be between 1 and 4.  |
| 22 | RREQUIP*    | C | 133 |     | Railroad equipment involved, must be between 1 and 8, or A, B, or C.                                |
| 23 | RRCAR       | N | 134 | 136 | Position of car/unit in the train.  |
| 24 | TYPACC*     | C | 137 |     | Circumstance, must be 1 or 2.   |
| 25 | HAZARD      | N | 138 |     | Was hazardous material being transported, must be between 1 and 4.                                  |
| 26 | TEMP*       | N | 139 | 141 | Temperature at time of accident (Fahrenheit), if below zero include leading minus sign.             |
| 27 | VISIBILITY* | C | 142 |     | Visibility, must be between 1 and 4.  |
| 28 | WEATHER*    | C | 143 |     | Weather, must be between 1 and 6.   |

---

---

**Companion Guide - Continued**

|    |           |   |         |   |
|----|-----------|---|---------|---|
| 29 | TYPTRN    | C | 144     | Type of Equipment Consist, must be between 1 and 9 or A.  |
| 30 | TYPTRK    | C | 145     | Type track, must be between 1 and 4.  |
| 31 | TRKNAME   | C | 146 165 | Track number or name.   |
| 32 | TRKCLAS   | C | 166     | FRA track classification (1-9, X)   |
| 33 | NBRLOCOS* | N | 167 168 | Number of locomotive units.   |
| 34 | NBRCARS*  | N | 169 171 | Number of cars.   |
| 35 | TRNSPD    | N | 172 174 | Speed of train.   |
| 36 | TYPSPD    | C | 175     | Train Speed is estimated or recorded, enter E or R.   |
| 37 | TRNDIR    | C | 176     | Time Table. Direction, must be between 1 and 4.   |
| 38 | CROSSING* | C | 177 200 | Type of crossing warning <sup>9</sup> .   |
| 39 | SIGNAL    | C | 201     | Signaled Crossing Warning, must be between 1 and 7.   |
| 40 | LOCWARN   | C | 202     | Location of Warning, must be between 1 and 3.   |
| 41 | WARNSIG   | C | 203     | Crossing warning connected with highway signals, must be 1, 2 or 3.   |
| 42 | LIGHTS    | C | 204     | Crossing illuminated by street lights, must be 1, 2 or 3.   |
| 43 | STANDVEH  | C | 205     | Motorist passed standing highway vehicle, must be 1, 2 or 3. If Field 13 (TYPVEH) is K for Pedestrian, then leave blank for N/A.        |
| 44 | TRAIN2    | C | 206     | Motorist struck, or was struck by, second train, must be 1, 2 or 3. If Field 13 (TYPVEH) is K for Pedestrian, then leave blank for N/A. |

---

<sup>9</sup> CROSSING      Include all crossing types, Gates is 01, Cantilever is 02, Standard FLS is 03, etc. Each warning is 2 positions long with no commas separating the crossing types. If the warning devices are Standard Flashing Lights, and Crossbucks then CROSSING would be 0307.

---

**Companion Guide - Continued**

|    |            |   |     |     |  |
|----|------------|---|-----|-----|--|
| 45 | MOTORIST   | C | 207 |     | Motorist action, must be between 1 and 5. If Field 13 (TYPVEH) is K for Pedestrian, then leave blank for N/A.    |
| 46 | VIEW       | C | 208 |     | View of track obscured by, must be between 1 and 8.  |
| 47 | VEHDMG     | N | 209 | 214 | Highway vehicle property damage in dollars. If Field 13 (TYPVEH) is K for Pedestrian, then leave blank for N/A.  |
| 48 | DRIVER     | C | 215 |     | Driver was, must be 1, 2 or 3. If Field 13 (TYPVEH) is K for Pedestrian, then leave blank for N/A.               |
| 49 | INVEH      | C | 216 |     | Was driver in the vehicle?, must be 1 or 2. If Field 13 (TYPVEH) is K for Pedestrian, then leave blank for N/A.  |
| 50 | TOTOCC     | N | 217 | 220 | Total number of highway-rail crossing users.   |
| 51 | INCDRPT*   | C | 221 |     | Was the Rail Equipment Accident/Incident Report filed? Enter 1 or 2.   |
| 52 | DIVISION   | C | 222 | 241 | Division of Reporting Railroad   |
| 53 | PUB_PRIV*  | C | 242 |     | Public or Private Highway-Rail Grade Crossing? Enter 1 for Public or 2 for Private.                              |
| 54 | HAZ_REL    | N | 243 |     | HAZMAT released? Enter 1-4.  |
| 55 | HM_NAME    | C | 244 | 273 | Name of Primary HAZMAT released.   |
| 56 | HM_QUANTY  | C | 274 | 277 | Quantity of Primary HAZMAT released.   |
| 57 | HM_MEASURE | C | 278 | 281 | Units of Measurement used for Field 56 (HM_QUANTY) (gross mass, weight or volume). For example: LBS, TONS, GALS. |
| 58 | SIG_WARN_X | C | 282 |     | If Field 39 (SIGNAL) is 5, 6, or 7, enter explanation code A-S, excluding I, O, and Q.                           |
| 59 | WHISLE_BAN | C | 283 |     | Whistle Ban? Enter 1, 2 or 3.  |
| 60 | DRIV_AGE   | N | 284 | 285 | Driver's (or pedestrian's) age.  |
| 61 | DRIV_GENDR | C | 286 |     | Driver's (or pedestrian's) gender (1 or 2).  |

---

---

---

**Companion Guide - Continued**

|    |            |   |     |     |  |
|----|------------|---|-----|-----|--|
| 62 | HR_USER_KD | N | 287 | 289 | Total number of highway-rail crossing users killed, a casualty report (55a) must be filled for each person.              |
| 63 | HR_USER_IN | N | 290 | 292 | Total number of highway-rail crossing users injured, a casualty report (55a) must be filled for each person.             |
| 64 | RR_EMP_KD  | N | 293 | 295 | Total number of railroad employees killed, a casualty report (55a) must be filled for each person.                       |
| 65 | RR_EMP_IN  | N | 296 | 298 | Total number of railroad employees injured, a casualty report (55a) must be filled for each person.                      |
| 66 | PASS_KD    | N | 299 | 301 | Total number of passengers killed, a casualty report (55a) must be filled for each person.                               |
| 67 | PASS_IN    | N | 302 | 304 | Total number of passengers injured, a casualty report (55a) must be filled for each person.                              |
| 68 | PEOPLE_TRN | N | 305 | 308 | Number of people on the train.   |
| 69 | SSB1       | C | 309 | 328 | Special Study Block. Enter according to written instructions provided by FRA or Federal Register; otherwise leave blank. |
| 70 | SSB2       | C | 329 | 348 | Special Study Block. Enter according to written instructions provided by FRA or Federal Register; otherwise leave blank. |
| 71 | NARRATIVE1 | C | 349 | 598 | Narrative  |
| 72 | NARRATIVE2 | C | 599 | 848 | Narrative  |

Notes

**\*Mandatory Field** - A valid entry must be provided for each field identified as mandatory (\*), otherwise the entire record will be rejected.

All character information must be upper case, left justified, blank filled, unless otherwise stated.  
All numeric information must be right justified, zero filled, unless otherwise stated.

Each field that is not applicable ("N/A") should be blank.

A "0" should be used in a field to represent an entry of "None".

---

---

**Companion Guide - Continued**

**ATTACHMENT**

**AIRG REQUEST FORM  
(ACCIDENT/INCIDENT REPORT GENERATOR)**

The Federal Railroad Administration's AIRG (Accident/Incident Report Generator) Application is a "Windows-based computer program which facilitates the processing of all monthly reports and logs required under 49 CFR part 225. With AIRG, railroads can record and maintain their accident/incident data, and submit their FRA-required monthly reports electronically. Fully-installable copies of the application are provided, free of charge, to interested railroads who regularly submit accident/incident reports to FRA.

---

Please read the following and complete the Request Form below to receive a copy of AIRG.

- C In order to install and use AIRG, you will need an IBM PC or compatible, 30 MB of available hard disk space, and Windows 95, 98, 2000, or NT
  
- C The current version of AIRG can be set up either as a stand-alone, single-user application which requires no external data base product in order to run, or as a multiuser system (with the database residing on a network server, and the application running from each client). This turnkey system, designed primarily for railroads that do not currently have a computerized accident/incident reporting system, allows users to enter, edit and maintain the required FRA reports and logs. AIRG will NOT permit accident/incident data prepared externally to be loaded into it.
  
- C AIRG incorporates data security and system integrity checks which will block access by the user when any of the principal data bases or program files are tampered with or when extraneous data is introduced into the system.
  
- C AIRG is provided to qualified users at no cost and its use is purely voluntary on the part of the railroad. Neither FRA nor INDUS Corp. assumes any liability for hardware damage or data loss resulting from improper use of this product.

***Complete the form below and fax back to the FRA Project Office at (703) 548-6856  
(For Assistance, Contact the FRA Project Office Help Desk: (888) 372-9393)***

**AIRG REQUEST FORM**

**Requestor's Name:** \_\_\_\_\_ **Tel:** \_\_\_\_\_  
**Title:** \_\_\_\_\_ **Fax:** \_\_\_\_\_  
**e-Mail:** \_\_\_\_\_

**Mailing Address:** \_\_\_\_\_ **Railroad Name(s):** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**I have read the requirements and conditions above and would like to receive a complete AIRG Installation Set.**

\_\_\_\_\_