<u>CHAPTER 7</u> - FORM FRA F 6180.54 Rail Equipment Accident/Incident Report

A. <u>REQUIREMENT</u>

Collisions, derailments, fires, explosions, acts of God, or other events involving the operation of railroad on-track equipment (standing or moving) and causing reportable damages greater than the reporting threshold for the year in which the accident/incident occurred must be reported using Form FRA F 6180.54. The reporting threshold for calendar year 2003 is \$6,700.

Note: Additional form(s) must be completed whenever an employee's act, omission, or physical condition is identified as the primary or contributing cause of a rail equipment accident; see instructions for employee notification (forms 6180.81 and 6180.78). Here, "employee" includes persons classified as Worker on Duty--Employee, Employee not on Duty, Worker on Duty--Contractor, or Worker on Duty--Volunteer. See § 225.5 ("Employee human factor").

B. <u>GENERAL INSTRUCTIONS AND INTERPRETATIONS</u>

An accident is frequently the culmination of a sequence of related events, and a variety of conditions or circumstances may contribute to its occurrence. A complete record of all of these would be beneficial in accident prevention analysis. However, it is not practical, even if it were possible, to develop forms and codes that would capture every detail that may be associated with the causes and resulting consequences of each accident. Therefore, the most appropriate combination of available codes that best identifies the likely primary and any contributing cause, and other factors, is to be used.

The limitations imposed by standardized reporting forms make it critical that the narrative portion of the report provide additional information concerning those items that cannot be adequately described on the coded portions of the form. The wide variation in the causes and circumstances of accidents limits our ability to prepare a comprehensive list of items to include in your discussion. We have attempted to identify some of these in the instruction for completing the narrative portion of the report (item 52). In addition to these, you should include any information that increases our knowledge of the underlying reasons why the accident occurred and its consequences.

If the property of more than one railroad is involved in an accident/incident, the reporting threshold is calculated by including the damages suffered by all of the railroads involved. When total reportable damage to all railroads directly involved in an accident/incident exceeds the reporting threshold, you must make a report even though your railroad's damages were below the threshold.

A form must be completed for each consist (see Chapter 2 for definition) involved in an accident. The railroad responsible for the on-track equipment at the time of the accident, and only that railroad, will report the consist. See § 225.23(c).

In joint operations, if the railroad having track maintenance responsibility did not also have ontrack rail equipment involved, a report containing the track information must be forwarded. The items concerning the equipment consist are to be marked "N/A". See § 225.23(c).

Any railroad indicating the involvement of another railroad in the accident on its report must promptly notify the other carrier (FRA may be contacted to obtain telephone numbers). You must exchange information concerning the accident and verify, at a minimum, that:

- 1. the other railroad has a reporting responsibility;
- 2. total reportable damage exceeded the threshold; and,
- 3. information contained in both reports is consistent.

When there is disagreement concerning the items being reported, particularly the cause of the accident, each railroad will include a discussion of these in the narrative portion of its report. The back of the form or a separate sheet of paper is to be used when the front of the form is not adequate for this purpose.

Track information for accidents occurring on industry track of a non-reporting company is to be reported by the railroad operating the on-track equipment. Damages to industry track and on-track equipment are included in reportable damage. The word "Industry" is to be entered in item 3b to identify an accident of this type.

A railroad need not report the following:

- 1. Cars derailed on industry tracks by non-railroad employees or nonrailroad employee vandalism, providing there is no involvement of railroad employees;
- 2. Damage to out-of-service cars resulting from high water or flooding, e.g., empties placed on storage or repair track. This exclusion does not apply if such cars are placed into a moving consist and as a result of this damage, a reportable rail equipment accident results.

When final cost figures are not available, estimated values are to be used. If an estimated value was significantly in error, a corrected report must be forwarded. A significant difference is a 10% variance between the damage amount reported to FRA and current cost figures.

Enter "N/A" for those items that do not apply to an accident, or for those items describing ontrack equipment that is the reporting responsibility of another railroad. All items must have an entry; do not leave items blank. If "none" is the proper response to an item (for example, the number of cars releasing hazardous material), then enter "0", not "N/A".

All casualties resulting from a rail equipment accident, in addition to being recorded on Form FRA F 6180.54, must be reported individually on Form FRA F 6180.55a. If the accident was a highway-rail crossing impact, a Form FRA F 6180.57 must also be completed by the railroad responsible for the consist.

Each accident/incident must have an identifying number unique within the reporting month. All forms used by a carrier to report a single event must use the same accident/incident number. Do not append additional numbers or letters on different forms for the same accident/incident. For example, if a railroad has two consists involved in an accident, do not report one consist using the reporting number "12345", and the other consist using the reporting number "12345-A". The reporting number must be exactly the same on both reports.

C. INSTRUCTIONS FOR COMPLETING FORM FRA F 6180.54

Item Instruction

- 1. <u>Name of Reporting Railroad</u> Enter the full name of the reporting railroad.
- 1a. <u>Alphabetic Code</u> Enter the reporting railroad's alphabetic code found in Appendix A.
- 1b. <u>Railroad Accident/Incident No.</u> Enter a unique identifying number for the accident/incident being reported. All reports prepared in connection with this accident/incident must use the same reporting number. The report number may contain up to 10 numbers or alphabetic characters.
- 2. <u>Name of Other Railroad Involved in Train Accident/Incident</u> If an equipment consist operated by another railroad was involved in the accident, enter the full name of that railroad. If more than one other railroad had a consist involved, list only one name; include in the narrative portion of the form a reference to all railroads and

the extent of their involvement. Be sure that any other railroad identified in the report is notified.

- 2a. <u>Alphabetic Code</u> Enter the alphabetic code of the railroad identified in item 2, as found in Appendix A..
- 2b. <u>Railroad Accident/Incident No.</u> Enter the reporting number used by the railroad shown in item 2 to identify this accident/incident.
- 3. <u>Name of Railroad Responsible for Track Maintenance</u> Enter the name of the railroad responsible for maintaining the track on which the accident/incident occurred.
- 3a. <u>Alphabetic Code</u> Enter the alphabetic code of the railroad identified in item 3.
- 3b. <u>Railroad Accident/Incident Number</u> Enter the reporting number used by the railroad shown in item 3 to identify this accident/incident.
- 4. <u>U.S. DOT Grade Crossing Identification Number</u> If the event being reported is a highway-rail crossing impact, enter the DOT crossing identification number. (Note: the railroad responsible for the on-track equipment involved in the impact must also complete a Form FRA F 6180.57. This report must have the same report number as that used on Form FRA F 6180.54.)
- 5. <u>Date of Accident/Incident</u> Enter the date of the accident/incident.
- 6. <u>Time of Accident/Incident</u> Enter the time the accident/incident occurred and check the appropriate ("am" or "pm") box. Do not use military time.
- 7. <u>Type of Accident/Incident</u> Identify the first event in the accident/incident from the list of codes on the form. The same code is used for all reports filed for the accident.
- 8. <u>Cars Carrying HAZMAT [Hazardous Material]</u>

If the equipment consist for which this report is being prepared contained cars which are designated as transporting hazardous material, enter the total number of these cars, including residue cars. If there were no such cars in the consist, enter a "0". If the report is for track involvement only, enter "N/A". The entry in this item cannot be greater than the total number of freight cars shown on line 1 of item 35.

9. HAZMAT Cars Damaged/Derailed

If the entry in item 8 is greater than or equal to 1, enter the total number of hazardous material cars that were damaged or derailed. If none, enter "0"; otherwise, enter "N/A". The number of cars in item 9 cannot exceed the number of cars listed in item 8.

10. Cars Releasing HAZMAT [Hazardous Material]

If any of the hazardous material cars counted in item 8 released any portion of its contents, including fumes, enter the count of these cars. If none, enter "0"; otherwise, enter "N/A". This number cannot be greater than that shown in item 8. Describe the hazardous material released in the narrative by name or the Standard Transportation Commodity Code (STCC). (Note: Any release of hazardous material must also be reported on DOT form F 5800.1--see 49 CFR 171.15 and 171.16 for requirements.)

11. <u>People Evacuated</u>

If the accident/incident resulted in an evacuation of the area because of an actual or a potential exposure to hazardous material, enter the number of persons evacuated. This number is to be reported only by the railroad responsible for the equipment consist involved.

If there were multiple consists involved in the accident, the total number of people evacuated is to be shown on the report for the consist most directly responsible for the evacuation. Precautionary evacuations and instances where it was later established that a release of hazardous material did not occur are to be reported.

12. <u>Division</u>

Enter the full name of the division on which the accident occurred. If the railroad is not so divided, enter the word "System". In the event of a joint accident involving AMTRAK, the host railroad's division will apply.

- 13. <u>Nearest City/Town</u> Enter the name of the nearest City/Town.
- 14. <u>Milepost</u>

If the accident occurred on a main line, branch line, or siding, enter the milepost number, to the nearest tenth of a mile, at the location of the accident. If mileposts are not used, enter "N/A".

15. <u>State Abbr.</u> Enter the appropriate State abbreviation and code, from Appendix B.

16. <u>County</u>

Enter the full name of the county or parish in which the accident occurred.

17. <u>Temperature</u>

Enter the temperature (Fahrenheit) at the accident site at the time of the accident. If the temperature was below zero, preface the temperature number with a minus (-) symbol.

18. <u>Visibility</u>

Select the most appropriate entry, and place in the code box. Make sure this entry does not contradict the time given in item 6. For example, if the time of the accident was 1:30 pm, it would be incorrect to code the visibility as "Dawn".

19. <u>Weather</u>

Select the most appropriate weather condition at the time and location of the accident, and enter the code in the box provided.

20. <u>Type of Track</u>

Select the code that identifies the type of track on which the accident occurred, and enter it in the box provided. Branch lines should be reported as main line, code "1".

21. <u>Track Name/Number</u>

Enter the name or number used to identify the track on which the accident occurred. If it is a main track of a single-track line, enter "single main track".

22. FRA Track Class

Enter the class of track on which the reported consist was located at the time of the accident. Classes of track are defined in the Federal Track Safety Standards (49 CFR Part 213). Excepted track should be entered as Class "X".

Maximum Speed			
Track	Freight	Passenger	
<u>Class</u>	<u>Trains</u>	Trains	

Х	10	Prohibited
1	10	15
2	25	30
3	40	60
4	60	80
5	80	90
6	110	110
7	125	125
8	160	160
9	200	200

23. <u>Annual Track Density</u>

If an accident occurred on a main track, enter the annual gross tonnage (in millions) over this track; otherwise, enter "N/A".

24. <u>Time Table Direction</u>

If the consist identified on this report was either moving or temporarily stopped, enter the code which describes the time table or schedule direction. If the equipment consist was a car or a cut of cars standing on the track, enter "N/A".

25. <u>Type of Equipment Consist</u>

Select the code that best identifies the consist for which this report is being prepared, and enter in the box provided. Be sure that this entry is consistent with the values given in items 34 and 35.

For example: the codes "1", "2", "3", "7", and "8" are used for consists that contain a locomotive unit. Therefore, line 1 of item 34 must show at least one locomotive in a box. If the code for a freight train is used, then line 1 of item 35 must show loaded and/or empty freight cars. If the consist is a single car or cut of cars, there cannot be locomotives shown in item 34, and there must be a car count shown in item 35. Many such comparisons exist; be sure to check the interrelationship of information contained in all items related to the equipment consist.

26. <u>Was Equipment Attended?</u> If the equipment consist was attended by an employee enter "1"; otherwise, enter "2".

27. <u>Train Number/Symbol</u>

If the equipment consist can be identified by means of a train number, enter that train number. Otherwise, enter the number of the locomotive unit from which the engineer

was controlling the consist. If the consist for which this report is being prepared did not contain a locomotive, enter "N/A".

28. <u>Speed</u>

List the speed (mph) at which the consist was travelling at the time of its involvement in the accident. Enter "E" in the code box to indicate if this is estimated; or enter "R" for a recorded speed. If this consist was stopped, enter a speed of "0".

29. <u>Trailing Tons</u>

If the equipment consist reported on this form is a freight train, work train, etc., enter the gross tonnage, excluding locomotives, of the train. Enter "N/A" if the consist was a passenger train, light locomotive(s), car(s), or a locomotive handling cars in switching operations.

30. <u>Method(s) of Operation</u>

Identify the method(s) of railroad operation at the accident location by entering the appropriate code(s) in the boxes. If an entry cannot be made using codes a through n, or p, put an "o" in the first code box and specify the operational method used in the narrative. The back of the form may be used if necessary.

- 30a. If this consist is NOT a part of a remote controlled operation or is NOT being controlled by a remote control locomotive (RCL), enter code "0". For accidents involving consists controlled by RCL, enter one of the following three available codes that best describes the type of remotely controlled operation involved:
 - 1 Remote control portable transmitter
 - 2 Remote control tower operation
 - 3 Remote control portable transmitter more than one remote control transmitter.

The use of codes "1", "2" or "3" is not dependent upon whether the RCL operation caused or contributed to the accident, only that the RCL was in use. Further explanation can be provided in the narrative.

31. <u>Principal Car/Unit</u>

31a. Initial and Number

In the upper box ("First Involved"), list the initial and number of the first locomotive or car in the consist being reported.

If the consist was moving at the time of the accident, and the accident was caused by a mechanical or an electrical failure on this consist (cause codes beginning with "E"), enter the initial and number of the car or locomotive having the defective equipment in the lower box ("Causing"). If a mechanical or electrical failure on a locomotive or car in this consist did not cause the accident, enter "N/A".

The same entry will frequently appear in both upper and lower boxes, since the locomotive or car with the mechanical or electrical failure will also be the first involved. If the locomotive or car that caused the accident was contained in a different consist than the one described in this report, do not identify it on the report for this consist. A reference to the unit causing the accident may be made in the narrative portion of the report.

31b. Position in Train

In the upper box, enter the position within the consist of the locomotive unit or car identified in the upper box of item 31a. When the consist contains a locomotive, count from and include the first locomotive unit. If the consist was a moving cut of cars, count from the leading end of the consist. If the consist was a single locomotive or moving car, enter "1". If the consist was a standing car or a standing cut of cars, enter "N/A".

If a locomotive unit or a car is identified in the lower box of item 31a, enter its position in the lower box. Use the procedure described above.

Note: When entering the position of the car or locomotive in either box, be sure that this value does not exceed the total length of the consist. This is determined by adding the total number of locomotives in line 1 of item 34 to the total number of cars shown in line 1 of item 35.

31c. Loaded

When the entry in the upper box of item 31a identifies a car, indicate if this car was loaded or unloaded by entering "Yes" or "No" in the upper box. If a car is not identified in item 31a, enter "N/A".

If a car is identified in the lower box of item 31a, indicate if this car was loaded or unloaded by entering "Yes" or "No" in the lower box. Otherwise, enter "N/A".

32. <u>Railroad employees tested for drug or alcohol impairment.</u> If any employee was tested for alcohol usage in connection with this accident, enter the number of positive tests, in the first block. If any employee was tested for drug usage in connection with this

accident, enter the number of positive tests, in the second block. If testing was performed and the results were negative, enter "0." **If there were positive tests, but impairment is not reported as a cause of the accident, then provide a brief explanation in the narrative of the basis for this determination.** You are required to identify all accidents/incidents where either Federal or employer-authorized tests were performed.

- 33. Was this consist transporting passengers? Enter "y" (for "yes") if the consist being reported on was transporting passengers; otherwise enter "n" (for "no").
- 34. Locomotive Units [Number of]

On line 1 ("Total in Train"), enter in the appropriate box(es) the number of locomotive units in this consist. If there were no locomotives in this consist, enter "0" in each of the boxes.

For the locomotives shown in line 1, list on line 2 ("Total Derailed") the number of these that were derailed in the accident. Include locomotives that derailed following a collision, explosion-detonation, etc., as well as those accidents identified as derailments in item 7.

35. <u>Cars [Number of]</u>

On line 1 ("Total in Equipment Consist"), enter in the appropriate box(es) the number of cars contained in the consist. A passenger car is considered loaded if it contains one or more passengers. Enter "0" in all boxes if the consist did not contain cars.

For the cars shown in line 1, list on line 2 ("Total Derailed") the number of these that were derailed in the accident.

Special Instruction:

When the consist contains articulated car(s), the count for these is to be the number of platforms/units in such a car. This is necessary in order to maintain comparability of train lengths. The narrative is to contain a reference that articulated cars were included in the consist.

36. Equipment Damage This Consist

Enter the amount of reportable damage sustained by the equipment consist for which this report is being prepared. If this consist did not have reportable damage, enter "0". When multiple forms are being used, do not show the damage to this consist on other reports.

When estimating damage costs, the labor costs to be reported are only the <u>direct labor</u> <u>costs</u> to the railroad, <u>e.g.</u>, hourly wages, transportation costs, and hotel expenses. The cost of fringe benefits is <u>excluded</u> when calculating direct labor costs. Overhead is also <u>excluded</u> when calculating damage costs due to the unacceptable non-uniform treatment of overhead under the current process.

For services performed by a contractor, a direct hourly labor cost is calculated by multiplying the contractor's total labor hours charged to the railroad by the applicable direct hourly wage rate for a railroad worker in that particular craft. However, if a railroad cannot match the equivalent craft to the labor hours spent by a contractor, then the railroad must use the loaded rate, <u>i.e.</u>, the cost by hour for labor, fringe benefits, and other costs and fees for services charged by the contractor for the tasks associated with the repair of the track, equipment, and structures due to the train accident.

The current method used to calculate material costs, <u>i.e.</u>, depreciated value estimates, will continue to be used by all railroads.

37. Track, Signal, Way & Structure Damage

The railroad responsible for maintaining the track on which the accident/incident occurred will enter the cost of damages to the track, signals, roadbed, track structures, etc. (A report must be provided even when the track damage is zero (0).) Other railroads will enter "N/A". If the railroad responsible for the track maintenance is filing reports for multiple consists involved in the accident, only one of these reports will contain the total damage incurred.

38. <u>Primary Cause Code</u>

Proper entry of the correct primary cause code is of critical importance, not only for the accident being reported, but also for FRA's analyses conducted for accident prevention purposes. Because of the extensive use made of primary cause code entries, careful attention must be given to making correct entry for all accidents.

From the cause descriptions found in Appendix C, enter the cause code that best describes the primary cause of the accident. All reports by a single railroad for a single accident must use the same cause code. When multiple railroads are reporting the same accident, they should attempt to resolve any differences concerning the cause prior to reporting. When this cannot be accomplished, each railroad will identify what it considers to be the primary cause of the accident.

If none of the more specific available cause codes are appropriate, you may enter cause code M599, "Other Miscellaneous Causes," and fully describe the circumstances in the narrative. By its very nature, M599 is a vague cause code that is intended to allow for a cause code entry for accidents that involve extremely unusual circumstances, and thus are not described elsewhere in Appendix C. Railroads should avoid unnecessary usage of this vague cause code as it detracts from FRA's ability to accomplish proper train accident cause trend analysis for accident prevention purposes. Often, the use of cause code M599 can be avoided by using both the primary and contributing cause fields to enter the most appropriate specific available cause codes. (Example: For an accident caused by a worn flange (E64C) and a worn switch point (T314), rather than using M599, the railroad should make a determination which was the primary cause, and which was the contributing cause, and make entry of these specific cause codes.)

If the cause of the accident is still under active investigation by the railroad when the report is due, you may enter M505. Active investigation by the railroad means that the railroad's investigation of the accident is still ongoing, and the cause has not been fully determined. An example of an accident still under active investigation by the railroad would be that the railroad is still awaiting metallurgical results for a suspected broken rail. Often, FRA and/or the National Transportation Safety Board (NTSB) may also be performing their own independent investigations of this same accident, and their final reports may not be published for a considerable time period after the accident. The railroad must not wait for either the FRA or the NTSB to publish their findings and their assessment as to cause(s) of the accident to amend cause code M505. Once the railroad has completed its active investigation and determined the probable cause(s), the best available appropriate cause code(s) must be provided to FRA on an amended report for the accident. This must be accomplished in all cases no later than April 15 of the year following the year in which the accident occurred, unless the railroad's investigation of the accident is still active. The fact that NTSB or any other governmental agency has not released their findings as to probable cause is not a valid reason for railroads to allow cause code M505 to remain assigned to an accident.

Cause code M507 is used to denote accidents/incidents in which the investigation is complete but the cause of the accident/incident could not be determined. If a railroad uses this code, the railroad is required to include in the narrative block an explanation for why the cause of the accident/incident could not be determined.

There is a five year limit on the railroads to send in an amended report to change a cause code. See "Close of the Calendar Year" in Chapter 1. Once the FRA or NTSB has

published their findings on an accident, the railroad may choose to send in another amended report to reflect the primary cause code as determined by FRA or NTSB. The railroad is not bound by the findings of either FRA or NTSB, as long as the railroad has made a "good faith" determination that the results of their investigation and analysis are accurate.

39. <u>Contributing Cause Code</u>

If there were one or more contributing causes, enter the code for the foremost contributing cause. Otherwise, enter "N/A". An accident is frequently the culmination of a sequence of related events, and a variety of conditions or circumstances may contribute to its occurrence. A complete record of all of these would be beneficial in accident prevention analysis. However, it is not practical, even if it were possible, to develop forms and codes that would capture every detail that may be associated with the causes and resulting consequences of each accident. Therefore, the most appropriate combination of available codes that best identifies the likely primary and any contributing cause, and other factors, is to be used. Railroads are encouraged to use the Contributing Cause Code. When the events cannot be adequately describe using the Primary and Contributing Cause the railroad must use the Narrative Block to complete the causes of the accident.

40-43. Number of Crew Members

Enter in the appropriate boxes the total number of crew members on the consist for which this report is being filed. If the item does not apply, enter "N/A".

The operator of on-track maintenance machines is to be included in the "Engineer" count.

A switch foreman is to be included in the "Conductor" count.

Switch helpers are to be included in the "Brakeman" count.

Utility employees who were attached to the crew at the time of the accident are to be included in the count for the most appropriate type of crew member (normally brakeman.)

If through contractual agreements, a railroad has eliminated the job title of conductor, and those responsibilities previously discharged by a conductor are being fulfilled by another job title on the consist, then an entry is to be included in the "Conductor" count.

44-45. Length of Time on Duty

Show the length of time that the engineer/operator and conductor in charge of the equipment consist had been on duty at the time the accident/incident occurred.

46-48. Casualties to:

Enter the total number of reportable casualties (fatalities and nonfatalities) on this consist. If none, enter "0".

Enter the total number of persons who sustained reportable injuries while on board, or as a result of striking, being struck by, or who are otherwise hurt in connection with the operation of this consist. This would include injuries to individuals who have jumped from the consist prior to the accident. Do not report employees of another railroad.

Note: All nonfatal casualties, including those being reported as occupational illnesses, in the case of hazardous material releases, are to be included.

Each casualty reported on this form, regardless of whether fatal or nonfatal, must be reported individually on Form FRA F 6180.55a using the same accident/incident report number in item 1b. Enter the number of fatal and nonfatal casualties to the railroad employees, train passengers, and others.

49. <u>Special Study Block</u>

A "Special Study Block" (SSB) is for collection of information on specific accident issues over a specified time period in response to particular hazards or associated railroad risks that are of safety concern. FRA will notify the railroads in writing or, if appropriate, through publication in the <u>Federal Register</u>, of the purpose and the type of information that is to be collected.

50-51. Latitude and Longitude

Block 50 and block 51 are for recording the latitude and longitude of the location where the accident occurred. These two blocks are optional.

FRA is using the World Geodetic System (WGS) 84 standard for recording the event's latitude and longitude. Even though this information is optional, it is requested that the information follow the WGS 84 standard.

Although FRA would prefer decimal degrees (on hard copy only, please follow value with ° to specify decimal degrees), FRA will accept latitude and longitude in degrees, minutes, and seconds (with °, ', " to indicate units used are degrees, minutes, seconds) if submitted on hard copy (electronic submissions should be in decimal degrees).

The latitude should use the following format +xx.xxxxx. The longitude should use the following format -xxx.xxxxx in decimal degrees. Use an explicit plus or minus sign and an explicit decimal point followed by six decimal places for both latitude and longitude.

Latitude, in decimal degrees: explicit decimal, explicit +/- (WGS 84) (e.g., +35.301486)

Longitude, explicit decimal, explicit +/- (WGS 84) (e.g., -085.280201)

52. <u>Narrative Description</u>

A detailed narrative is basic to FRA's understanding of the factors leading to, and the consequences arising from, an accident. While many minor accidents can be described in a few brief comments, others are more complicated and require further clarification.

An adequate description of most accidents cannot be made in the limited space available in block 52. The narrative can be continued on a separate sheet of paper attached to the report. Because of the variety of factors associated with accidents, it is not possible to give a comprehensive list of items you should include in your discussion. However, the following are to be covered when appropriate:

<u>Drug/alcohol involvement</u> - Include a discussion of any drug/alcohol use connected with this accident. If positive tests were made, but usage/impairment was not determined to be a causal factor, explain the basis of this determination.

<u>Cause</u> - Discuss any event(s) or circumstance(s) occurring prior to the accident that has relevance to the accident. Provide additional information concerning the reasons(s) for the accident when the causes found in Appendix C do not sufficiently explain why the accident occurred.

<u>Diesel Fuel Tank</u> - Identify any leakage of locomotive diesel fuel resulting from the accident. Identify the unit(s) by initial and number, the manufacturer and model designation, the capacity of the fuel tank, the quantity of fuel released, and any consequence of the release. (Were there a fire, environmental consequences, etc.?)

<u>Hazardous Materials</u> - Identify the initial and number of any car releasing hazardous material. List the name and indicate the quantity of hazardous material released. Report the number of fatalities and injuries resulting from a direct exposure to the released substance. If there was an evacuation, estimate the size of the affected area and the length of the evacuation.

<u>Train Information</u> - Identify any special characteristics of the consist being reported, e.g., unit coal train, comprised of articulated cars.

<u>Other Railroads</u> - Describe how and to what extent the on-track equipment of other railroads became involved in the accident.

Do not record personal identifiers, e.g., names, Social Security Numbers, payroll identifications.

- 53. <u>Typed/Printed Name and Title of Preparer</u> Type or print the name and title of the person responsible for preparing this report form.
- 54. <u>Signature</u> Signature of the person shown in item 53.
- 53. <u>Date</u> Date the signature was made in item 54.

D. <u>QUESTIONS AND ANSWERS</u>

- Q1. Another railroad derailed some cars on our track. The damage to our track did not exceed the threshold; however, their cars had extensive damage and the cost to repair/replace these exceeded the threshold. Does our railroad need to complete a report since we did not have significant damage to the track?
- A1. Yes. The criterion for reporting is whether or not the total reportable damages for all railroads having on-track equipment, track, signals, etc. involved in the accident exceeded the threshold. You indicated that the equipment damage by itself exceeded this amount. Therefore, you must complete a report, but limit the damage you record to the amount required to repair/replace your damaged track. The FRA uses the information

received from all railroads to obtain a clearer picture of what caused the accidents and what the consequences were.

- Q2. A passenger train was en route between stations. A component failure and the resulting electrical arching between the third rail and a collector plate caused a traction motor to burn out. The train came to a stop as smoke and fumes entered the passenger compartment. The passengers were evacuated; however, there were no reports of injury. The repair and replacement of damaged components will exceed the threshold. Is this a reportable train accident?
- A2. Yes. The regulation requires that any event involving the operation of on-track equipment and resulting in damage above the reporting threshold is to be reported. However, a component failure is not reportable when the physical damage is confined to the component and there are no other consequences of a reportable nature. For example, a traction motor problem is detected by the engineer. She is able to cut out that motor and proceeds to the next terminal where the unit is removed from service and the traction motor replaced at a cost exceeding the threshold.

Crankcase explosions, turbo charger failures, and incidents involving catenaries must meet this same general criterion to be reportable. For example, a crankcase explosion extensively damages the block, crankshaft, and oil pan. A subsequent fire causes additional damage to other components in the engine compartment. The train is unable to proceed, and crew members suffer from smoke inhalation. An event such as this, or a turbo charger explosion with similar consequences, will generally be reportable. Incidents involving catenaries are generally accountable, since they result in a disruption of service. Because of this, and the fact that the pantograph is frequently damaged, many of these are also reportable.

- Q3. Sometimes damage to equipment is discovered during an inspection, but it cannot be determined how the damage occurred, or it may simply be the result of routine wear and tear. If the cost of repairing or replacing the component(s) exceeds the threshold, do we need to make a report?
- A3. No. The equipment in this example was not in operation when the damage was detected. In addition, it is unlikely that a factual report could be prepared that would adequately describe how the damage occurred. Such a report, missing vital information, would be of little use in accident analysis.
- Q4. A shipment of cars was dropped off and secured at an industry siding. Employees of the industry were attempting to move one of the cars when it got away from them, struck a

derail, rolled over on its side, and sustained substantial damage. The industry's railroad operations are confined to its own installation, which is completely off general system. The car did not leave the industry's property or foul the track maintained by my railroad. Do we need to report this event?

- A4. No. The event described was not caused by, nor did it involve, the operation of your railroad. The industry does not have to report the event to FRA because the industry is considered a plant railroad that operates entirely off the general system. Part 225 does not apply to plant railroads that operate entirely off the general system. See § 225.3.
- Q5. A unit coal train was returning with 115 empties when it was delayed due to a heavy downpour that stopped all rail operations. The crew was removed from the train because of the extreme weather conditions. Heavy flooding from the rain washed out a portion of the main line track that the train was occupying. The next morning 28 cars were on their side. The preliminary estimate of equipment damage alone is over \$100,000. Is this a reportable train accident?
- A5. Yes. The regulation requires that any event, including acts of God, involving the operation of on-track equipment (standing or moving), and causing damage above the threshold for train accidents must be reported.
- Q6. Our switch crew was switching an industry when the wind blew the industry gate into the side of a car being shoved. The industry gate was destroyed. Would this be considered as a track structure? Please elaborate more specifically concerning what structures would, or would not be included in railroad track damage?
- A6. The damages to an industry-owned gate would not be considered as railroad track damage. Additionally, if an accident resulted in damages to the door of a roundhouse, diesel shop, or repair shop, none of these would be considered as track structures, and thus would not be considered as track damage. Should a train strike and damage a platform used for loading and unloading passengers, this type of structure is not an integral part of the track structure, and also would not be considered as track damage.

On the other hand, should a derailment result in damages to a signal bungalow located adjacent to a track, this would be considered as track damage as it is an adjunct to the track. For this same reason, damage to tunnels, bridges, snowsheds, or other track-related structures would be considered as track damage.

E. <u>COMMON REPORTING ERRORS</u>

Duplication of Information.

A railroad whose involvement in an accident is limited to track maintenance responsibility, should mark all items relating to the equipment consist "N/A". These items are 8, 9, 10, 11, 24, 25, 26, 27, 28, 29, 31, 33, 34, 35, 36, 40, 41, 42, 43, 44, 45, and 47. This information will be reported by the railroad responsible for the individual consist(s). A railroad that did not have track involved in the accident must not list the damage to the track.

Do not send in reports concerning a consist for which another railroad has reporting responsibility.

Missing or Incomplete Reports.

Do not leave blank items on the form. If the value is unknown, an estimate should be used. If the item does not apply, "N/A" should be entered. If the correct response is "none", a "0" should be inserted in the item.

An accident report must be made by all railroads involved, regardless of the extent of damage sustained by individual railroads.

When filing multiple reports for a single accident/incident be sure to verify that the information contained on the various reports does not contradict itself. Of particular importance are such items as:

Item Contents

- 5. Date of Accident/Incident
- 6. Time of Accident/Incident
- 7. Type of Accident/Incident
- 15. State Abbr. [where the accident occurred]
- 16. County [where the accident occurred]
- 38. Primary Cause Code

If a Form FRA F 6180.55a or Form FRA F 6180.57 is also required for the accident, be sure to compare similar items between these additional forms.

If there were reportable casualties resulting from the accident, a line entry must be made on Form FRA F 6180.55a for each casualty. In highway-rail crossing accidents, the railroad responsible

for the equipment consist that struck or was struck by the highway user must file a Form FRA F 6180.57.

Avoid contradictions on a single form by comparing related items. For example, it would be incorrect for a report to show more locomotives or cars derailed in a consist than were actually contained in that consist, as shown in items 34 and 35. Similarly, if the report showed no conductors in item 42, it would be inconsistent to show the conductor's time on duty in item 45.