Data Summary: Line-Of-Road Failure – Air Hose Separation

Table of Contents

© 2018 Railinc Corporation. All Rights Reserved.

Last Updated: September 2018

Synopsis

Purpose
The Line-Of-Road Failure – Air Hose Separation (LORF-AHS) data summary provides information on equipment involved in trains that experience a line-of-road emergency brake application where the cause was identified as Air Hose Separation.

Background
A LORF-AHS event occurs when a train goes into emergency brake application that is not induced by the operator and the cause is identified to be an Air Hose Separation.
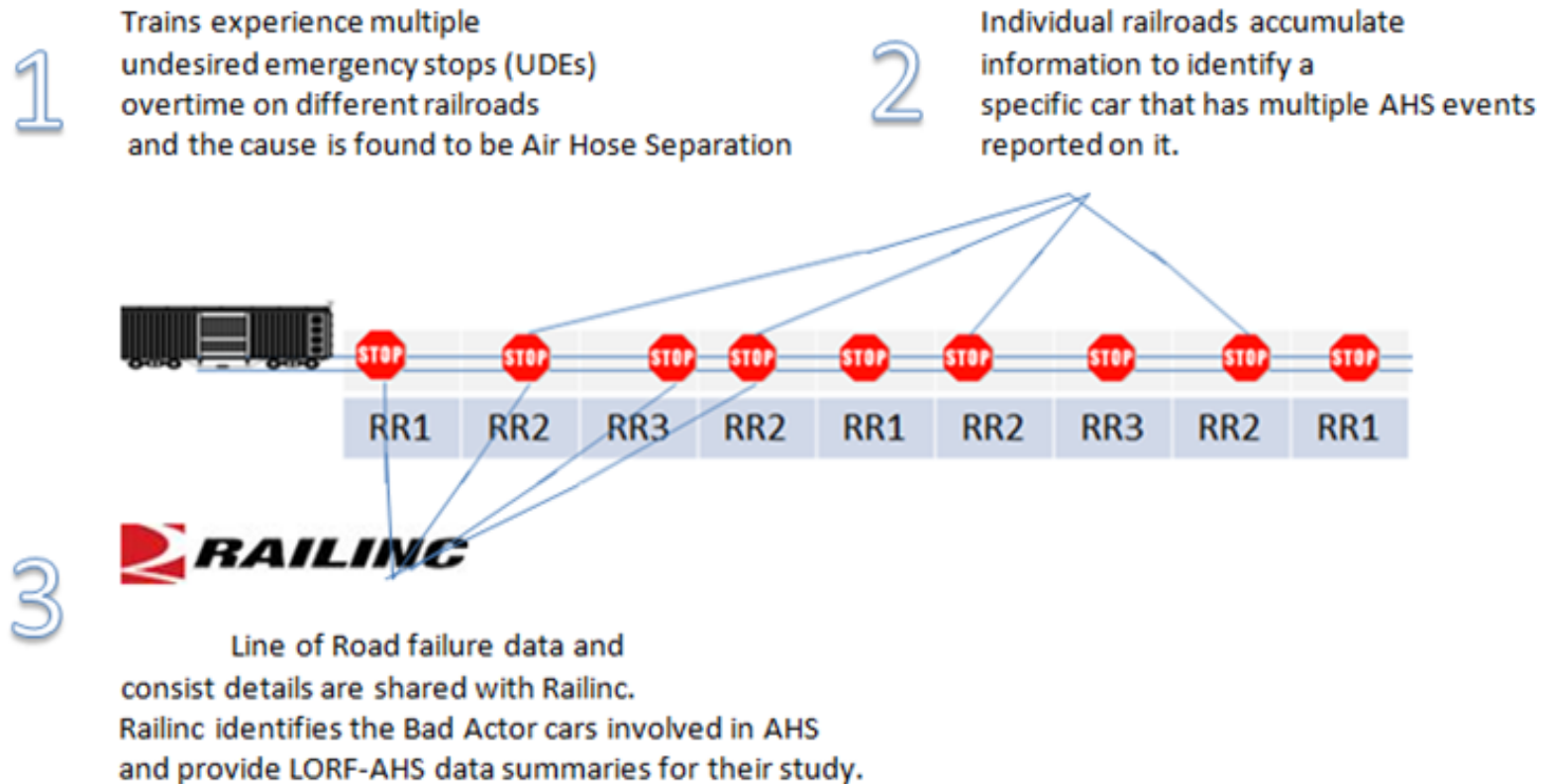This condition exists when a train goes into emergency because the air hose separates between two cars. In this case, roads would report the cars involved in the air hose separation.

Air Hose Separation - An uncoupling of two air hoses at the gladhand not attributable to other causes (such as a train separation).
Specific equipment types and end hose repairs result in repeated Line of Road Failures.

When a LORF-AHS event occurs, the roads send the list of equipment on the train involved in the LORF-AHS event, to the Railinc E-Train system. A LORF-AHS data summary is created on the listed equipment and sent to the EHMS system. The higher the counts of LORF-AHS events reported on an equipment in a 12 month and up to 36 month period; the greater the likelihood that a particular car is experiencing Air Hose Separation related issues that leads to a line-of-road emergency brake application.

Figure 1 – Bad Actor Identification for LORF-AHS

1 Trains experience multiple undesired emergency stops (UDEs) overtime on different railroads and the cause is found to be Air Hose Separation

2 Individual railroads accumulate information to identify a specific car that has multiple AHS events reported on it.

STOP	STOP	STOP	STOP	STOP	STOP	STOP	STOP	STOP
RR1	RR2	RR3	RR2	RR1	RR2	RR3	RR2	RR1

RAILINC

3 Line of Road failure data and consist details are shared with Railinc. Railinc identifies the Bad Actor cars involved in AHS and provide LORF-AHS data summaries for their study.

Data Summary Elements

Element Name	Element Text	Element Description	Format	Aggregation Method	Correlation Based On	Action
Type	Type	Data Summary	TEXT			
Format Version	Format Version	Version of the data summary definition	NUMBER [1.0-999.99]			
CreationTMST	Date Opened	GMT timestamp for when the data summary was created and the time zone offset of the originating data location.	TIMESTAMP	Earliest		Update when data summary created
RR_DB_Key	Key from originating railroad	Database key from the originating railroad (or detector owner)	NUMBER [0 - 999999999]			
LastUpdateTMST	Date of last update	GMT timestamp for when the data summary was last updated (any change other than closing) and the time zone offset of the originating data location.	TIMESTAMP	Last		Update every time data summary is updated, including when it is opened.
DSType	LORF_AHS	Data summary type	TEXT			
DS_Owner/Reporting_System	Who created the Data Summary	Company ID (from Railinc) of the owner/creator of data summary	TEXT			
EquipmentMark	Equipment Mark	Current equipment initial	TEXT			
EquipmentNumber	Equipment Number	Current equipment number	NUMBER [0 - 999999999]			
Location	Location	Location on equipment per EMIS nomenclature				
ComponentType	Component type	BASE	TEXT			
ComponentName	Part of the component location	BASE	TEXT			
ComponentValue	Value for the component location		TEXT			

State	Data Summary state	Current status of Open	TEXT			
TWELVE_MONTH_RAW_COUNT	12mo Raw Count	12 month Count of Unique LORF-AHS events	NUMBER	Sum		Update every time data summary is updated, including when it is opened for those LORF- AHS events that are sent with 1 up to 4 cars only. Based on a window of time from current date to the earliest reported event or 12 month window. 12 month window can be changed based on continuing data analysis.
THIRTYSIX_MONTH_RAW_COUNT	36mo Raw Count	36 month Count of Unique LORF-AHS events	NUMBER	Sum		Update every time data summary is updated, including when it is opened for those LORF- AHS events that are sent with 1 up to 4 cars only. Based on a window of time from current date to the earliest reported event or 36 month window.36 month window can be changed based on continuing data analysis.
TWELVE_MONTH_DISTINCT_PAIR_COUNT	12mo Distinct Pair Count	12 month count of distinct equipment connected to the end of equipment where the AHS occurred	NUMBER	Max		Update every time data summary is updated, including when it is opened. Based on a window of time from current date the earliest reported event or 12 month window for distinct pair counts only. 12 month window can be changed based on continuing data analysis.
THIRTYSIX_MONTH_DISTINCT_PAIR_COUNT	36mo Distinct Pair Count	36 month count of distinct equipment connected to the end of equipment where the AHS occurred	NUMBER	Max		Update every time data summary is updated, including when it is opened. Based on a window of time from current date to the earliest reported event or 36 month window for distinct pair counts only. 36 month window can be changed based on continuing data analysis.
LAST_LORF_AHS_INSPECT_DT_1	Last LORF-AHS Inspection Date	Date on which the most recent Inspection was performed after an LORF-AHS event occurred.	DATE	Latest		Update each time a LORF- AHS Inspection is performed on the car
LAST_LORF_AHS_INSPECT_REASON_1	Last LORF-AHS Inspection Reason	Last LORF-AHS Inspection Reason	STRING	Latest	LAST_LORF_AHS_INSPECT_DT_1	Update each time a LORF- AHS Inspection is performed on the car
LAST_LORF_AHS_INSPECT_REASON_CODE_1	Last LORF-AHS Inspection Reason Code	Last LORF-AHS Inspection Reason Code	STRING	Latest	LAST_LORF_AHS_INSPECT_DT_1	Update each time a LORF- AHS Inspection is performed on the car
LAST_LORF_AHS_INSPECT_DT_2	2nd to Last LORF-AHS Inspection Date	Date on which the 2nd to Last Inspection was performed after an LORF-AHS event occurred	DATE	Latest		Update each time a LORF- AHS Inspection is performed on the car

LAST_LORF_AHS_INSPECT_REASON_2	2nd to Last LORF-AHS Inspection Reason	2nd to Last LORF-AHS Inspection Reason	STRING	Latest	LAST_LORF_AHS_INSPECT_DT_2	Update each time a LORF- AHS Inspection is performed on the car
LAST_LORF_AHS_INSPECT_REASON_CODE_2	2nd to Last LORF-AHS Inspection Reason Code	2nd to Last LORF-AHS Inspection Reason Code	STRING	Latest	LAST_LORF_AHS_INSPECT_DT_2	Update each time a LORF- AHS Inspection is performed on the car
LAST_LORF_AHS_INSPECT_DT_3	3rd to Last LORF-AHS Inspection Date	Date on which the 3rd to Last Inspection was performed after an LORF-AHS event occurred	DATE	Latest		Update each time a LORF- AHS Inspection is performed on the car
LAST_LORF_AHS_INSPECT_REASON_3	3rd to Last LORF-AHS Inspection Reason	3rd to Last LORF-AHS Inspection Reason	STRING	Latest	LAST_LORF_AHS_INSPECT_DT_3	Update each time a LORF- AHS Inspection is performed on the car
LAST_LORF_AHS_INSPECT_REASON_CODE_3	3rd to Last LORF-AHS Inspection Reason Code	3rd to Last LORF-AHS Inspection Reason Code	STRING	Latest	LAST_LORF_AHS_INSPECT_DT_3	Update each time a LORF- AHS Inspection is performed on the car
EVENT_TS_1	Last Event Timestamp	Date and Time of Last Event	Date Time	Descending 2		Update each time a new LORF-AHS event occurs
LE_INDICATOR_1	Last Event Load/Empty Indicator	Last Event Load/Empty Indicator	STRING	Correlated	EVENT_TS_1	Update each time a new LORF-AHS event occurs
EVENT_PARTNERING_EQUIPMENT_1	Last Event Partnering Equipment	The ID of the partnering equip connected to the equipment involved in the latest LORF-AHS	STRING	Correlated	EVENT_TS_1	Update each time a new LORF-AHS event occurs and exactly two equipment are reported in the event.
EVENT_A_END_OF_EQUIPMENT_1	Last Event End of Equipment 'A'	Last Event End of Equipment 'A'	STRING	Correlated	EVENT_TS_1	Update each time a new LORF-AHS event occurs and the end 'A' of that equipment is reported as being involved in the AHS.
EVENT_B_END_OF_EQUIPMENT_1	Last Event End of Equipment 'B'	Last Event End of Equipment 'B'	STRING	Correlated	EVENT_TS_1	Update each time a new LORF-AHS event occurs and the end 'B' of that equipment is reported as being involved in the AHS.
EVENT_TS_2	2nd to Last Event Timestamp	Date and Time of 2nd to Last Event	Date Time	Descending 2		Update each time a new LORF-AHS event occurs

LE_INDICATOR_2	2nd to Last Event Load/Empty Indicator	2nd to Last Event Load/Empty Indicator	STRING	Correlated	EVENT_TS_2	Update each time a new LORF-AHS event occurs
EVENT_PARTNERING_EQUIPMENT_2	2nd to Last Event Partnering Equipment	The ID of the partnering equip connected to the equipment involved in the 2nd to last LORF-AHS	STRING	Correlated	EVENT_TS_2	Update each time a new LORF-AHS event occurs and exactly two equipment are reported in the event.
EVENT_A_END_OF_EQUIPMENT_2	2nd to Last Event End of Equipment 'A'	2nd to Last Event End of Equipment 'A'	STRING	Correlated	EVENT_TS_2	Update each time a new LORF-AHS event occurs and the end 'A' of that equipment is reported as being involved in the AHS.
EVENT_B_END_OF_EQUIPMENT_2	2nd to Last Event End of Equipment 'B'	2nd to Last Event End of Equipment 'B'	STRING	Correlated	EVENT_TS_2	Update each time a new LORF-AHS event occurs and the end 'B' of that equipment is reported as being involved in the AHS.
EVENT_TS_3	3rd to Last Event Timestamp	Date and Time of 3rd to Last Event	Date Time	Descending 2		Update each time a new LORF-AHS event occurs
LE_INDICATOR_3	3rd to Last Event Load/Empty Indicator	3rd to Last Event Load Empty Indicator	STRING	Correlated	EVENT_TS_3	Update each time a new LORF-AHS event occurs
EVENT_PARTNERING_EQUIPMENT_3	3rd to Last Event Partnering Equipment	The ID of the partnering equip connected to the equipment involved in the 3rd to last LORF-AHS	STRING	Correlated	EVENT_TS_3	Update each time a new LORF-AHS event occurs and exactly two equipment are reported in the event.
EVENT_A_END_OF_EQUIPMENT_3	3rd to Last Event End of Equipment 'A'	3rd to Last Event End of Equipment 'A'	STRING	Correlated	EVENT_TS_3	Update each time a new LORF-AHS event occurs and the end 'A' of that equipment is reported as being involved in the AHS.
EVENT_B_END_OF_EQUIPMENT_3	3rd to Last Event End of Equipment 'B'	3rd to Last Event End of Equipment 'B'	STRING	Correlated	EVENT_TS_3	Update each time a new LORF-AHS event occurs and the end 'B' of that equipment is reported as being involved in the AHS.

EVENT_TS_4	4th to Last Event Timestamp	Date and Time of 4th to Last Event	Date Time	Descending 2		Update each time a new LORF-AHS event occurs
LE_INDICATOR_4	4th to Last Event Load/Empty Indicator	4th to Last Event Load/Empty Indicator	STRING	Correlated	EVENT_TS_4	Update each time a new LORF-AHS event occurs
EVENT_PARTNERING_EQUIPMENT_4	4th to Last Event Partnering Equipment	The ID of the partnering equip connected to the equipment involved in the 4th to last LORF-AHS	STRING	Correlated	EVENT_TS_4	Update each time a new LORF-AHS event occurs and exactly two equipment are reported in the event.
EVENT_A_END_OF_EQUIPMENT_4	4th to Last Event End of Equipment 'A'	4th to Last Event End of Equipment 'A'	STRING	Correlated	EVENT_TS_4	Update each time a new LORF-AHS event occurs and the end 'A' of that equipment is reported as being involved in the AHS.
EVENT_B_END_OF_EQUIPMENT_4	4th to Last Event End of Equipment 'B'	4th to Last Event End of Equipment 'B'	STRING	Correlated	EVENT_TS_4	Update each time a new LORF-AHS event occurs and the end 'B' of that equipment is reported as being involved in the AHS.
EVENT_TS_5	5th to Last Event Timestamp	Date and Time of 5th to Last Event	Date Time	Descending 2		Update each time a new LORF-AHS event occurs
LE_INDICATOR_5	5th to Last Event Load/Empty Indicator	5th to Last Event Load/Empty Indicator	STRING	Correlated	EVENT_TS_5	Update each time a new LORF-AHS event occurs
EVENT_PARTNERING_EQUIPMENT_5	5th to Last Event Partnering Equipment	The ID of the partnering equip connected to the equipment involved in the 5th to last LORF-AHS	STRING	Correlated	EVENT_TS_5	Update each time a new LORF-AHS event occurs and exactly two equipment are reported in the event.
EVENT_A_END_OF_EQUIPMENT_5	5th to Last Event End of Equipment 'A'	5th to Last Event End of Equipment 'A'	STRING	Correlated	EVENT_TS_5	Update each time a new LORF-AHS event occurs and the end 'A' of that equipment is reported as being involved in the AHS.

EVENT_B_END_OF_EQUIPMENT_5	5th to Last Event End of Equipment 'B'	5th to Last Event End of Equipment 'B'	STRING	Correlated	EVENT_TS_5	Update each time a new LORF-AHS event occurs and the end 'B' of that equipment is reported as being involved in the AHS.
EVENT_TS_6	6th to Last Event Timestamp	Date and Time of 6th to Last Event	Date Time	Descending 2		Update each time a new LORF-AHS event occurs
LE_INDICATOR_6	6th to Last Event Load/Empty Indicator	6th to Last Event Load Empty Indicator	STRING	Correlated	EVENT_TS_6	Update each time a new LORF-AHS event occurs
EVENT_PARTNERING_EQUIPMENT_6	6th to Last Event Partnering Equipment	The ID of the partnering equip connected to the equipment involved in the 6th to last LORF-AHS	STRING	Correlated	EVENT_TS_6	Update each time a new LORF-AHS event occurs and exactly two equipment are reported in the event.
EVENT_A_END_OF_EQUIPMENT_6	6th to Last Event End of Equipment 'A'	6th to Last Event End of Equipment 'A'	STRING	Correlated	EVENT_TS_6	Update each time a new LORF-AHS event occurs and the end 'A' of that equipment is reported as being involved in the AHS.
EVENT_B_END_OF_EQUIPMENT_6	6th to Last Event End of Equipment 'B'	6th to Last Event End of Equipment 'B'	STRING	Correlated	EVENT_TS_6	Update each time a new LORF-AHS event occurs and the end 'B' of that equipment is reported as being involved in the AHS.
EVENT_TS_7	7th to Last Event Timestamp	Date and Time of 7th to Last Event	Date Time	Descending 2		Update each time a new LORF-AHS event occurs
LE_INDICATOR_7	7th to Last Event Load/Empty Indicator	7th to Last Event Load/Empty Indicator	STRING	Correlated	EVENT_TS_7	Update each time a new LORF-AHS event occurs
EVENT_PARTNERING_EQUIPMENT_7	7th to Last Event Partnering Equipment	The ID of the partnering equip connected to the equipment involved in the 7th to last LORF-AHS	STRING	Correlated	EVENT_TS_7	Update each time a new LORF-AHS event occurs and exactly two equipment are reported in the event.

EVENT_A_END_OF_EQUIPMENT_7	7th to Last Event End of Equipment 'A'	7th to Last Event End of Equipment 'A'	STRING	Correlated	EVENT_TS_7	Update each time a new LORF-AHS event occurs and the end 'A' of that equipment is reported as being involved in the AHS.
EVENT_B_END_OF_EQUIPMENT_7	7th to Last Event End of Equipment 'B'	7th to Last Event End of Equipment 'B'	STRING	Correlated	EVENT_TS_7	Update each time a new LORF-AHS event occurs and the end 'B' of that equipment is reported as being involved in the AHS.
EVENT_TS_8	8th to Last Event Timestamp	Date and Time of 8th to Last Event	Date Time	Descending 2		Update each time a new LORF-AHS event occurs
LE_INDICATOR_8	8th to Last Event Load/Empty Indicator	8th to Last Event Load/ Empty Indicator	STRING	Correlated	EVENT_TS_8	Update each time a new LORF-AHS event occurs
EVENT_PARTNERING_EQUIPMENT_8	8th to Last Event Partnering Equipment	The ID of the partnering equip connected to the equipment involved in the 8th to last LORF-AHS	STRING	Correlated	EVENT_TS_8	Update each time a new LORF-AHS event occurs and exactly two equipment are reported in the event.
EVENT_A_END_OF_EQUIPMENT_8	8th to Last Event End of Equipment 'A'	8th to Last Event End of Equipment 'A'	STRING	Correlated	EVENT_TS_8	Update each time a new LORF-AHS event occurs and the end 'A' of that equipment is reported as being involved in the AHS.
EVENT_B_END_OF_EQUIPMENT_8	8th to Last Event End of Equipment 'B'	8th to Last Event End of Equipment 'B'	STRING	Correlated	EVENT_TS_8	Update each time a new LORF-AHS event occurs and the end 'B' of that equipment is reported as being involved in the AHS.
EVENT_TS_8	8th to Last Event Timestamp	Date and Time of 8th to Last Event	Date Time	Descending 2		Update each time a new LORF-AHS event occurs
LE_INDICATOR_8	8th to Last Event Load/Empty Indicator	8th to Last Event Load/ Empty Indicator	STRING	Correlated	EVENT_TS_8	Update each time a new LORF-AHS event occurs

EVENT_PARTNERING_EQUIPMENT_8	8th to Last Event Partnering Equipment	The ID of the partnering equip connected to the equipment involved in the 8th to last LORF-AHS	STRING	Correlated	EVENT_TS_8	Update each time a new LORF-AHS event occurs and exactly two equipment are reported in the event.
EVENT_A_END_OF_EQUIPMENT_8	8th to Last Event End of Equipment 'A'	8thto Last Event End of Equipment 'A'	STRING	Correlated	EVENT_TS_8	Update each time a new LORF-AHS event occurs and the end 'A' of that equipment is reported as being involved in the AHS.
EVENT_B_END_OF_EQUIPMENT_8	8th to Last Event End of Equipment 'B'	8th to Last Event End of Equipment 'B'	STRING	Correlated	EVENT_TS_8	Update each time a new LORF-AHS event occurs and the end 'B' of that equipment is reported as being involved in the AHS.
EVENT_TS_9	9th to Last Event Timestamp	Date and Time of 9th to Last Event	Date Time	Descending 2		Update each time a new LORF-AHS event occurs
LE_INDICATOR_9	9th to Last Event Load/Empty Indicator	9th to Last Event Load/ Empty Indicator	STRING	Correlated	EVENT_TS_9	Update each time a new LORF-AHS event occurs
EVENT_PARTNERING_EQUIPMENT_9	9th to Last Event Partnering Equipment	The ID of the partnering equip connected to the equipment involved in the 9th to last LORF-AHS	STRING	Correlated	EVENT_TS_9	Update each time a new LORF-AHS event occurs and exactly two equipment are reported in the event.
EVENT_A_END_OF_EQUIPMENT_9	9th to Last Event End of Equipment 'A'	9th to Last Event End of Equipment 'A'	STRING	Correlated	EVENT_TS_9	Update each time a new LORF-AHS event occurs and the end 'A' of that equipment is reported as being involved in the AHS.
EVENT_B_END_OF_EQUIPMENT_9	9th to Last Event End of Equipment 'B'	9th to Last Event End of Equipment 'B'	STRING	Correlated	EVENT_TS_9	Update each time a new LORF-AHS event occurs and the end 'B' of that equipment is reported as being involved in the AHS.
EVENT_TS_10	10th to Last Event Timestamp	Date and Time of 10th to Last Event	Date Time	Descending 2		Update each time a new LORF-AHS event occurs

LE_INDICATOR_10	10th to Last Event Load/Empty Indicator	10th to Last Event Load/Empty Indicator	STRING	Correlated	EVENT_TS_10	Update each time a new LORF-AHS event occurs
EVENT_PARTNERING_EQUIPMENT_10	10th to Last Event Partnering Equipment	The ID of the partnering equip connected to the equipment involved in the 10th to last LORF-AHS	STRING	Correlated	EVENT_TS_10	Update each time a new LORF-AHS event occurs and exactly two equipment are reported in the event.
EVENT_A_END_OF_EQUIPMENT_10	10th to Last Event End of Equipment 'A'	10th to Last Event End of Equipment 'A'	STRING	Correlated	EVENT_TS_10	Update each time a new LORF-AHS event occurs and the end 'A' of that equipment is reported as being involved in the AHS.
EVENT_B_END_OF_EQUIPMENT_10	10th to Last Event End of Equipment 'B'	10th to Last Event End of Equipment 'B'	STRING	Correlated	EVENT_TS_10	Update each time a new LORF-AHS event occurs and the end 'B' of that equipment is reported as being involved in the AHS.

Data Summary Roll Up Example

	Element Name	Aggregation	RR1	RR2	RR3
HEADER	Type	DS	DS	DS	DS
	Format Version	1	1	1	1
	CreationTMST	08-04-2015 13:01	08-04-2015 13:01	08-06-2015 13:21	08-07-2015 13:40
	RR_DB_Key		772762	657646	346545
	LastUpdateTMST	08-08-2015 13:40	08-05-2015 13:01	08-06-2015 13:40	08-08-2015 13:40
	DSType	LORF_AHS	LORF_AHS	LORF_AHS	LORF_AHS
	DS_Owner/Reporting_System		RR1	RR2	RR3
	Equipment Mark	UP,NS,CSXT	UP	NS	CSXT
	EquipmentNumber (ID)	MAXL1234	MAXL1234	MAXL1234	MAXL1234
	Location				
	ComponentType	BASE	BASE	BASE	BASE
	ComponentName	BASE	BASE	BASE	BASE
	ComponentValue	BASE	BASE	BASE	BASE
	State	O	O	O	O
	12mo Raw Count	7	3	2	2
	36mo Raw Count	7	3	2	2
	12mo Distinct Pair Count	1	1	1	1
	36mo Distinct Pair Count	1	1	1	1
	Last LORF-AHS Inspection Date	08-07-2015	08-07-2015	08-07-2015	08-07-2015
	Last LORF-AHS Inspection Reason	LORF-AHS Inspected and Released	LORF-AHS Inspected and Released	LORF-AHS Inspected and Released	LORF-AHS Inspected and Released
	Last LORF-AHS Inspection Reason Code	AI	AI	AI	AI
	2nd to Last LORF-AHS Inspection Date	08-06-2015	08-06-2015	08-06-2015	08-06-2015
	2nd to Last LORF-AHS Inspection	LORF-AHS Inspected and Released	LORF-AHS Inspected and Released	LORF-AHS Inspected and Released	LORF-AHS Inspected and Released

Reason				
2nd to Last LORF-AHS Inspection Reason Code	AI	AI	AI	AI
3rd to Last LORF-AHS Inspection Date	08-05-2015	08-05-2015	08-05-2015	08-05-2015
3rd to Last LORF-AHS Inspection Reason	LORF-AHS Repaired and Released	LORF-AHS Repaired and Released	LORF-AHS Repaired and Released	LORF-AHS Repaired and Released
3rd to Last LORF-AHS Inspection Reason Code	AR	AR	AR	AR
Last Event Timestamp	08-09-2015 13:40	08-09-2015 13:40		
Last Event Load/Empty Indicator	L	L		L
Last Event Partnering Equipment	NS28458	NS28458		
Last Event End of Equipment 'A'	Y	Y		
Last Event End of Equipment 'B'		Y		Y
2nd to Last Event Timestamp	08-08-2015 13:40	08-04-2015 13:01	08-06-2015 13:21	08-08-2015 13:40
2nd to Last Event Load/Empty Indicator	L	L	L	L
2nd to Last Event Partnering Equipment	UP0000281239			UP0000281239
2nd to Last Event End of Equipment 'A'		Y		Y
2nd to Last Event End of Equipment 'B'				Y

3rd to Last Event Timestamp	08-06-2015 13:40	08-06-2015 13:01		
3rd to Last Event Load/Empty Indicator		L		
3rd to Last Event Partnering Equipment		UP28458		
3rd to Last Event End of Equipment 'A'		Y		
3rd to Last Event End of Equipment 'B'				
4th to Last Event Timestamp	08-04-2015 13:01	08-04-2015 13:01		
4th to Last Event Load/Empty Indicator	L	L		
4th to Last Event Partnering Equipment				
4th to Last Event End of Equipment 'A'				
4th to Last Event End of Equipment 'B'				
5th to Last Event Timestamp	08-03-2015 13:01			
5th to Last Event Load/Empty Indicator				
5th to to Last Event Partnering Equipment				
5th to Last Event End of Equipment 'A'				

5th to Last Event End of Equipment 'B'			
6th to Last Event Timestamp	08-02-2015 13:01	6th to Last Event Timestamp	08-02-2015 13:01	6th to Last Event Timestamp
6th to Last Event Load/Empty Indicator		6th to Last Event Load/Empty Indicator		6th to Last Event Load/Empty Indicator
6th to Last Event Partnering Equipment		6th to Last Event Partnering Equipment		6th to to Last Event Partnering Equipment
6th to Last Event End of Equipment 'A'		6th to Last Event End of Equipment 'A'		6th to Last Event End of Equipment 'A'
6th to Last Event End of Equipment 'B'		6th to Last Event End of Equipment 'B'		6th to Last Event End of Equipment 'B'
7th to Last Event Timestamp	08-01-2015 13:01	7th to Last Event Timestamp	08-01-2015 13:01	7th to Last Event Timestamp
7th to Last Event Load/Empty Indicator		7th to Last Event Load/Empty Indicator		7th to Last Event Load/Empty Indicator
7th to Last Event Partnering Equipment		7th to Last Event Partnering Equipment		7th to Last Event Partnering Equipment
7th to Last Event End of Equipment 'A'		7th to Last Event End of Equipment 'A'		7th to Last Event End of Equipment 'A'
7th to Last Event End of Equipment 'B'		7th to Last Event End of Equipment 'B'		7th to Last Event End of Equipment 'B'
8th to Last Event Timestamp	08-02-2015 13:01	8th to Last Event Timestamp	08-02-2015 13:01	8th to Last Event Timestamp
8th to Last Event Load/Empty Indicator		8th to Last Event Load/Empty Indicator		8th to Last Event Load/Empty Indicator
8th to Last Event Partnering Equipment		8th to Last Event Partnering Equipment		8th to Last Event Partnering Equipment

8th to Last Event End of Equipment 'A'		8th to Last Event End of Equipment 'A'		8th to Last Event End of Equipment 'A'	
8th to Last Event End of Equipment 'B'		8th to Last Event End of Equipment 'B'		8th to Last Event End of Equipment 'B'	
9th to Last Event Timestamp	08-01-2015 13:01	9th to Last Event Timestamp	08-01-2015 13:01	9th to Last Event Timestamp	
9th to Last Event Load/Empty Indicator		9th to Last Event Load/Empty Indicator		9th to Last Event Load/Empty Indicator	
9th to Last Event Partnering Equipment		9th to Last Event Partnering Equipment		9th to Last Event Partnering Equipment	
9th to Last Event End of Equipment 'A'		9th to Last Event End of Equipment 'A'		9th to Last Event End of Equipment 'A'	
9th to Last Event End of Equipment 'B'		9th to Last Event End of Equipment 'B'		9th to Last Event End of Equipment 'B'	
10th to Last Event Timestamp	07-05-2015 13:01	10th to Last Event Timestamp	07-05-2015 13:01	10th to Last Event Timestamp	
10th to Last Event Load/Empty Indicator		10th to Last Event Load/Empty Indicator		10th to Last Event Load/Empty Indicator	
10th to Last Event Partnering Equipment		10th to Last Event Partnering Equipment		10th to Last Event Partnering Equipment	
10th to Last Event End of Equipment 'A'		10th to Last Event End of Equipment 'A'		10th to Last Event End of Equipment 'A'	
10th to Last Event End of Equipment 'B'		10th to Last Event End of Equipment 'B'		10th to Last Event End of Equipment 'B'	

Opening Criteria

A LORF-AHS data summary will be created for equipment involved in a line-of-road failure emergency brake application event where the cause is identified as Air Hose Separation.
Once opened, the LORF- AHS data summary will continue to aggregate event timestamps from subsequent line-of-road failures where the cause is identified as Air Hose Separation.

Closing/Reset Criteria

1. A LORF-AHS data summary will reset for the following actions:

o A predetermined period of time passes without subsequent LORF - AHS events being reported on an equipment.
Currently this time period is 36months.

2. LORF-AHS Inspections:

o LORF-AHS Inspections reported on an equipment do not close or reset the Counts of the data summary.
Inspections are used to indicate that an equipment has been reviewed for LORF-AHS related issues.

o When a LORF-AHS inspection of types 'AI' or 'AR' is reported on the equipment, the LORF- AHS data summary will remain open.
The counts on an LORF-AHS data summary will NOT be reset by a LORF-AHS inspection

A LORF-AHS inspection is reported to EHMS. The inspections are listed below.
  ➢ AI - LORF AHS Inspected and Released
  ➢ AR- LORF AHS Repaired and Released

Additional Information

Note 1:
EVENT_TS_n, LE_INDICATOR_n, EVENT_PARTNERING_EQUIPMENT_n ,
EVENT_A_END_OF_EQUIPMENT and EVENT_B_END_OF _EQUIPMENT are cascaded
(when a more recent event is found, it takes #1 position and #1 moves to #2, etc.). Once all
timestamps for a group are populated, the oldest timestamp for that group rolls off.
As of Q4 2016, the LORF-AHS data summary will allow for the 10 most recent LORF-AHS
events data to be populated.

Note 2:
- o LORF-AHS events that are submitted with more than FOUR equipment will NOT affect
  the Counts of the LORF-AHS data summary and will only be populated in the Last 10
  events section of the LORF- AHS data summary

- o LORF-AHS events that are submitted with ONE up to FOUR equipment will affect the
  Counts of the LORF-AHS data summary and will be populated in the Last 10 events
  section of the LORF- AHS data summary.

- o LORF-AHS 12 month and 36 month counts will only increment when LORF-AHS events
  are reported with less than or equal to four equipment.

Appendix A – EHMS Display Information

Opening Criteria Display Text
Any LORF-AHS event when train is in an emergency braking condition that was not operator induced and the cause was identified as Air Hose Separation.

Closing Display Text
A LORF-AHS data summary will always remain open.