

Early Warning Rewrite Webinar

May 28, 2020



Early Warning Rewrite

- The Early Warning System will be retired on December 31, 2020
- The New Equipment Advisory System will go live on January 1, 2021
- Revised Field and Office Manuals Rule 125 will be effective January 1, 2021



Equipment Advisory Agenda

- Primary Benefits
- Mapping of functionality of the current Early Warning System to the new Equipment Advisory System
- Additional functionality of the Equipment Advisory System
- Update on Early Warning Rewrite Project
- Timeline



Equipment Advisory System

- Primary benefits include:
 - Enhanced usability of the create process, reducing supplements
 - The ability to view all cars on an advisory
 - Removal of the need for duplicate advisories
 - Simplified severity and activity codes
 - The ability to prioritize/escalate individual equipment on a single advisory
 - Improved equipment handling with new advisories types
 - The ability to refresh Equipment Advisory messages



Existing Early Warning System Functionality

- Two types of notices
 - Maintenance Advisory
 - Early Warning
- Severity Codes
 - Assigned at the Notice level
- Escalation
 - Assigned at the Notice level
 - All equipment escalates simultaneously
- Multiple notices released for the same issue
- Messaging
 - TRAIN II messaging is difficult to change and maintain
- Large number of equipment
 - Manual process of throttling equipment onto notices



Proposed Equipment Advisory Functionality

- Three types of notices
 - Equipment Instructions (EI)
 - Informational Notice (IN)
 - Special Handling (SH)
- Severity Codes
 - Assigned to equipment
- Escalation
 - Identified in Advisory
 - Each equipment escalates independently
- No need for multiple notices released for the same issue
- Messaging
 - XML, allows for expanded capabilities
- Large number of cars
 - Automate processes to throttling cars onto notices



- Location on car
- AAR streamlined workflow
- Private Advisories
- On-Demand Advisory and/or Equipment message refresh

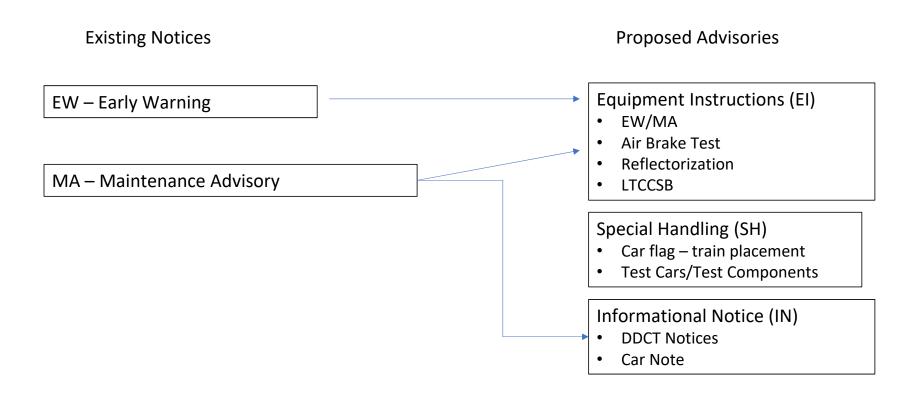


Proposed Field Manual Rule 125.A Equipment Advisories

- Equipment Advisories created by AAR/TTCI with input from industry
 - Equipment Instructions (EI)
 - ABT, Reflectorization
 - Most current EW/MAs
 - Special Handling (SH)
 - Car flag, Bad actor before alert
 - Test Cars requiring action, approved waiver
 - Informational Notice (IN)
 - DDCT
 - Test cars requiring no action



Notice to Advisory Conversion



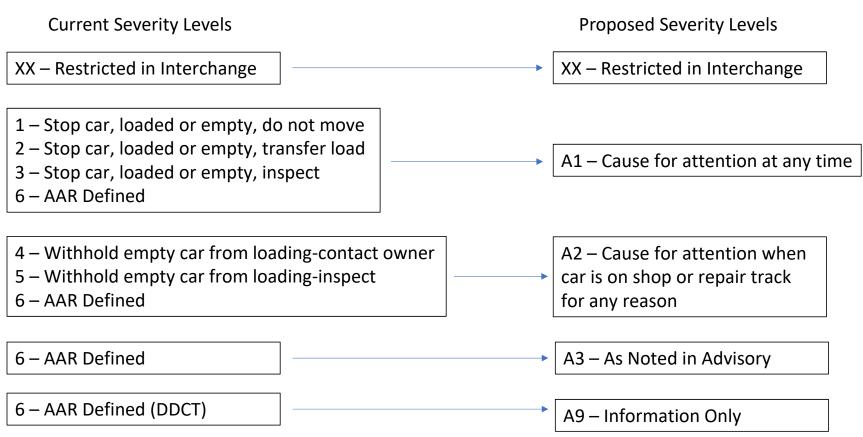


Proposed Field Manual Rule 125.B Severity Levels

- Advisory can hold multiple severity levels
 - XX Restricted at Interchange
 - A1 Cause for attention at any time
 - A2 Cause for attention when car is on shop or repair track for any reason
 - A3 As Noted in Advisory
 - A9 Information only



Simplified Severity Levels





Advisory Categories with Severities

- Equipment Instructions (EI)
 - XX Restricted at Interchange
 - A1 Cause for attention at any time
 - A2 Cause for attention when car is on shop or repair track for any reason
 - A3 As Noted in Advisory
- Special Handling (SH)
 - XX Restricted at Interchange
 - A1 Cause for attention at any time
 - A2 Cause for attention when car is on shop or repair track for any reason
 - A3 As Noted in Advisory
- Informational Notice (IN)
 - A9 Informational only, see notice for details



Simplified Activity Codes

Current

Activity Code		Definition EW			
MB	Early Warr	ning cancelled by the AAR.	Final		
MC	Car inspect required.	eted; return car to service; continued inspections	Open		
ME	Car inspec	eted and moving to shop.	Open		
MF	prior sever	respection MH or MR was reported in error; revert car to rity code. MF can only be reported by the reporter of the ty code or the AAR.	Open		
MH	Activity		<u> </u>	⊸ МА	
MI	Code	Definition		Status	
MN	(MC	Car inspected; return car to service; continued inspections required.			
MP	1 ME	Car inspected and moving to shop.		Open	
MR	r MF The final inspection MH or MR was reported in error; revert car to prior severity code. MF can only be reported by the reporter of the prior activity code or the AAR.				
IVIIX	r MH	Car repaired; return to service.			
MW	(MI	Car deleted from Umler; reported by the AAR.		Final	
	r MK	Maintenance Advisory cancelled by the AAR		Final	
MY	MN Car incorrectly added to MA or upgraded to another EW; reported by the AAR.				
MZ	(MP	The prior preliminary inspection ME/MC was reported in error revert car to prior severity code. MP can only be reported by reporter of the prior activity code or the AAR.		Open	
	MR	Car inspected; return car to service; no continued inspection required.	1	Final	
	MY	Car moved from MA to EW. MY can only be reported by the	AAR.	Final	

Proposed

Activity Code	Definition		
МН	Car inspected, defect found, repaired and returned to service.	Close	
MR	Car inspected, no defect found, and returned to service.	Close	
МО	Car inspected, does not meet the requirements of the Advisory.	Close	
ME	Car inspected, defect found, and owner contacted for disposition through DDCT. Moving to shop for attention.	Open	
MW	Car inspected; defect found; to be dismantled.	Open	
MZ	Car inspected; moving unrepaired for unloading.	Open	
MP	An Activity Code was reported in error. The Activity Code is nullified, and the car is reverted to prior severity code. A nullification can only be reported by the reporter of the prior activity code or the AAR.	Open	
Activity			
Code	Definition (AAR Use Only)		
MB	Advisory cancelled by AAR.	Close	
MI	Car deleted from Umler.	Close	
MN	Car incorrectly added to Advisory.	Close	

• Proposed Field Manual Rule 125.C



Proposed Field Manual Rule 125.D-H

- D. Equipment Alerts (See Office Manual Rule 89)
- E. Severity Code Escalation Process. (See Office Manual)
- F. Prioritizing Cars For Escalation (See Office Manual)
- G. Advisory Format (In Progress)
- H. Advisory Updates (In Progress)



Proposed Office Manual Rule 125.A-D

- A. Equipment Advisory (See Field Manual)
- B. Equipment Advisory Initialization (See Field Manual)
- C. Equipment Advisory Action (See Field Manual)
- D. Equipment Alerts (See Office Manual Rule 89)



Proposed Office Manual Rule 125.E Severity Code Escalation Methods

- 3 Methods of Escalation
 - Duration
 - Cars may escalate based on specified time period. In this case all cars will escalate individually based on the date assigned a Severity Code.
 - Interval
 - A specified number of cars may be escalated at defined intervals.
 - Replenish
 - Cars may be escalated based on a specified number of cars allowed to be assigned to a Severity Code.



Escalation Method - Duration

Example: 1 year at A2, 90 days at A1

Equipment ID	Initial Assignment to A2	Escalation to A1	Escalation to XX
ABC 12345	February 1, 2021	February 1, 2022	May 1, 2022
ABC 34567	February 14, 2021	February 14, 2022	May 14, 2022
XYZ 25689	April 22, 2021	April 22, 2022	July 22, 2022



Escalation Method - Interval

• Example: 500 equipment escalated to A1 every 2 weeks

	Number of Cars Allowed to be Escalated to Severity Code A1	Number of Cars to be Escalated to Severity Code A1 Every 2 Weeks
Initial load	500	
Week 2		500
Week 4		500
Week 6		500
Week 8		500
•••		



Escalation Method - Replenish

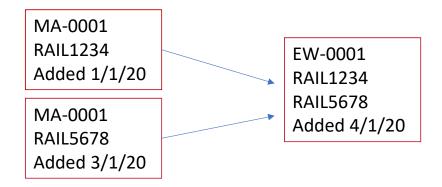
• Example: A1 limit set to 100 equipment

	Maximum Number of Cars Assigned Severity Code A1	Cars Remaining with Severity Code A1	Cars Escalated to Severity Code A1 (Maximum cars allowed – cars remaining)
Initial Ioad	100	-	-
Week 1	100	85	15
Week 2	100	95	5
Week 3	100	55	45
Week 4	100	100	0
Week 5	100	96	4
•••			

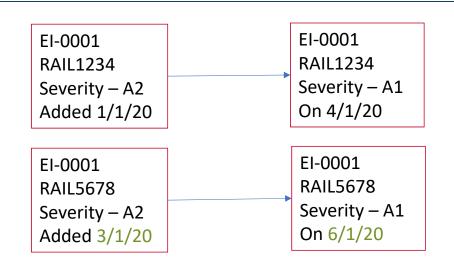


Old vs New Car Flow on an Advisory

- Current Process
 - MA Created on 1/1/20
 - Cars Escalate to EW
 - 90 days from notice creation



- New Process
 - El Created on 1/1/20
 - Cars Escalate to A1
 - 90 days after advisory is assigned to the car





Proposed Office Manual Rule 125.F Prioritizing Cars For Escalation

F. Prioritizing Cars for Escalation

1. Cars may be prioritized for escalation based on but not limited to location, commodity, car type, and/or frequency of movement.



Early Warning Rewrite Project Update

- 2020
 - Railinc internal coordination with other applications
 - DDCT, Umler, EHV, EHMS
 - Implement new XML messaging
 - Add location on car to Advisories
 - Private Advisories
 - Revise application website



Messaging Improvements

- Moving to XML based messaging
- Enhanced messaging to allow for expanded capabilities
 - Location on Car
 - Escalation Dates at car level
 - PDF of Advisory
 - Ability to add additional data fields quickly
- On-Demand Advisory and/or Equipment message refresh
 - Allow for customer to refresh their system as needed
 - Car Level
 - Advisory Level



Location on Car

- Adding the ability to relay location related information in the following steps
 - Create Advisory
 - Location on car is optional when creating an advisory
 - CRB Locations
 - Component Tracking
 - Report Inspection
 - Multiple locations inspected/repaired may be reported for an individual car
 - Advisory will remain assigned to equipment until all mandatory locations are reported
- Example:
 - EW-5325 Removal of Maanshan Wheels 2005-2006

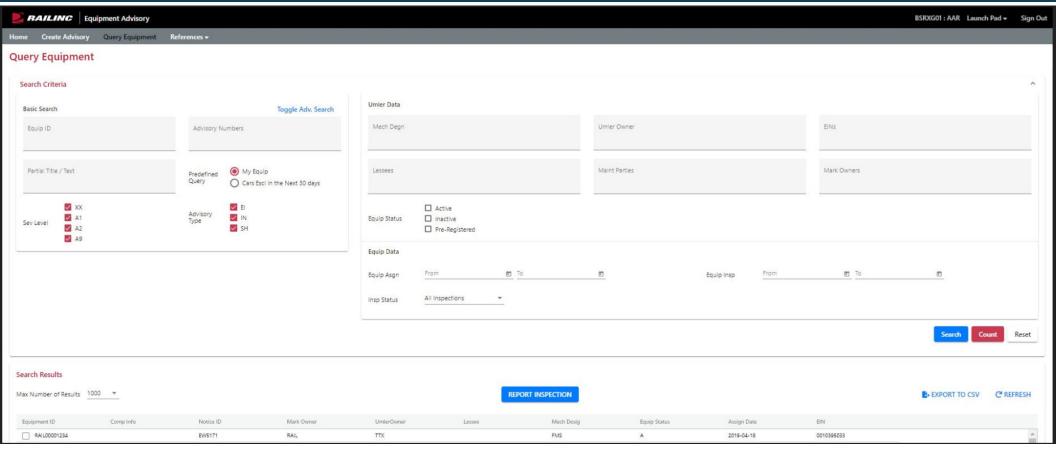


Private Advisories

- Railroads can create advisories for their specific railroad
- Only viewable by railroad that created it
- Internal tracking of program work
- Ability to escalate private advisory to AAR's attention
- Private advisory still being designed by TAG



Equipment Advisory System Query Screen





Equipment Advisory System Website

Equipment List Sorted by Equipment ID

EI-0008 Equipment List as of: 12:35:33 on May 26, 2020

Equipn	nent ID	Sev	Esc Date	
BNSF	89	A1	2020-07-02	
BNSF	4402	A1	2020-06-21	
CBFX	352788	A1	2020-06-29	
CRDX	300222	A2	2021-03-27	
FBOX	506853	A1	2020-06-30	
RAIL	2	XX		
RAIL	3	A1	2020-06-21	
RAIL	5	A1	2020-06-21	
RAIL	8	A2	2021-03-27	
RAIL	16	A2	2021-03-23	
RAIL	21	A2	2021-03-31	
RAIL	37	A1	2020-06-30	
RAIL	43	A2	2021-03-31	
RAIL	50	A2	2021-03-30	
RAIL	65	A2	2021-03-30	
RAIL	109	A1	2020-06-29	



Equipment Advisory System Website

Equipment List Sorted by Severity Code

EI-0008 Equipment List as of: 12:33:03 on May 26, 2020

Equipn	nent ID	Sev	Esc Date
RAIL	2	XX	
RAIL	292118	XX	
UMXU	884892	XX	
BNSF	89	A1	2020-07-02
BNSF	4402	A1	2020-06-21
CBFX	352788	A1	2020-06-29
FBOX	506853	A1	2020-06-30
RAIL	3	A1	2020-06-21
RAIL	5	A1	2020-06-21
RAIL	37	A1	2020-06-30
RAIL	109	A1	2020-06-29
RAIL	24402	A1	2020-06-21
RAIL	100001	A1	2020-06-21
TBOX	638582	A1	2020-07-02
WFRX	875156	A1	2020-06-21
CRDX	300222	A2	2021-03-27



Timeline for January 1, 2021 Implementation

- Q2 2020
 - Proposed Field and Office Manuals Rule 125 went out for comment
 - Overview Webinar
- Q3 2020
 - Review any revisions to proposed Field and Office Manuals Rule 125
- Q4 2020
 - Additional Webinar(s)
 - Project committee testing
 - Industry testing
 - User interface and XML
 - Circulars
 - Any revisions to proposed Field and Office Manuals Rule 125
 - Implementation
 - Equipment Advisory User Guide
 - Equipment Advisory Procedures Manual



Questions from Attendees

- Why use severity codes A1, A2, A3, A9 instead of 1, 2, 3, 9?
 - For consistency with the existing 2 character severity code and to follow to the Field Manual format
- Will XX be the only severity code that can zero rate a car and restrict it from interchange?
 - Yes, XX will continue to be the only severity to zero rate a car or restrict a car from interchange
- How do I get the new XML format?
 - Contact csc@railinc.com
- Will cars be updated when they become inactivated or destroyed?
 - Inactivated No, Destroyed Yes
- Will the current email notification continue with the new system?
 - Yes
- Will the .csv columns in the download be changed?
 - Yes, the .csv will include new fields such as location on car and Component ID







Thank You!