

Early Warning Rewrite Webinar -New Equipment Advisory System

June 3, 2021



Equipment Advisory Agenda

- June 28, 2021
- High level primary benefits
- Mapping the functionality of the current Early Warning System to the new Equipment Advisory System
- Things to know for go live
- Timeline



Early Warning Rewrite

- June 28, 2021
 - The Early Warning System will be retired
 - The New Equipment Advisory System will go live
 - Revised Field and Office Manuals Rule 125 will be implemented and effective via circular



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



New 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



Additional Enhancements

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

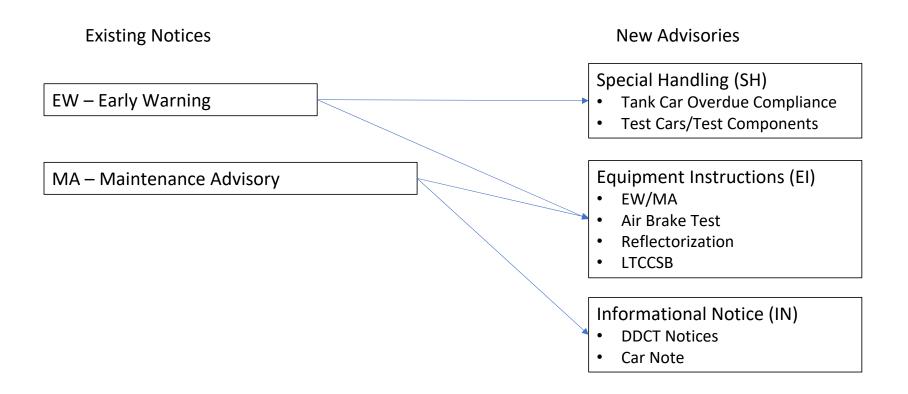


New Field Manual Rule 125.A Equipment Advisories

- Equipment Advisories created by AAR/TTCI with input from industry
 - Equipment Instructions (EI)
 - ABT, Reflectorization
 - Most current EW/MAs
 - Special Handling (SH)
 - Tank Car Overdue for compliance
 - Test Cars requiring action, approved waiver
 - Car Approaching End of Life status
 - Informational Notice (IN)
 - DDCT
 - Test cars requiring no action



Notice to Advisory Mapping





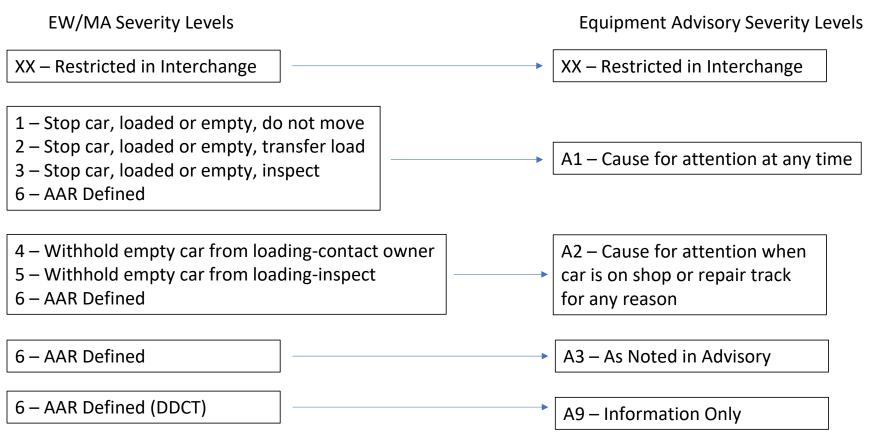
Field Manual Rule 125.B Severity Levels

- 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

- Equipment Instruction (EI): A3, A2, A1, XX
- Special Handling (SH):
 A3, A2, A1, XX
- Informational Notice (IN):
 A9



Severity Levels Mapping





Examples of Notice to Advisory Conversion

Existing Notices

MA-0063 Cars Overdue for Periodic Air Brake Testing as of November 1, 2000

EW-5171 Cars Overdue for Periodic Air Brake Testing as of February 1, 2001

EW-5299 Reflectorization

EW-5310 Cars Equipped with Grandfathered Reflective Material

EW-5313 Active Cars Not Equipped with Reflective Material

MA-0152 Reflectorization

New Advisories

Equipment Instructions (EI-0001)

- Cars Due or Overdue for Periodic Air Brake Testing
- Severity A2 and A1

Equipment Instructions (EI-0006)

- Reflectorization
- Severity XX



Simplified Activity Codes

EW/MA

Activity Code	Definition EW Status								
MB	Early Warning cancelled by the AAR. Final								
MC	Car inspected; return car to service; continued inspections Open required.								
ME	Car inspec	cted and moving to shop.	Open						
MF	prior sever	nspection 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			⊸ MA					
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	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.								
IVIT	r MH	Car repaired; return to service.		Final					
MW	d MI	Car deleted from Umler; reported by the AAR.		Final					
10100	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.	or; the	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					

Equipment Advisory

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			

• New Field Manual Rule 125.C



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)



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)



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

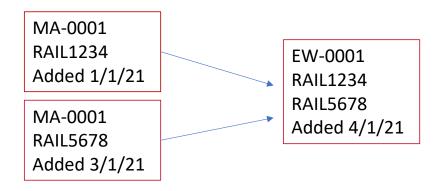
• Example: 1 year at A2, 90 days at A1

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

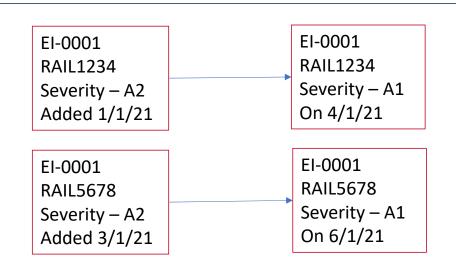


Old vs New Car Flow on an Advisory

- 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





Escalation Method - Interval

• Example: 500 equipment escalated to A1 every 2 weeks

	Number of Cars Allowed to be Escalated to Severity	Number of Cars to be Escalated to Severity Code
	Code A1	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



New 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.

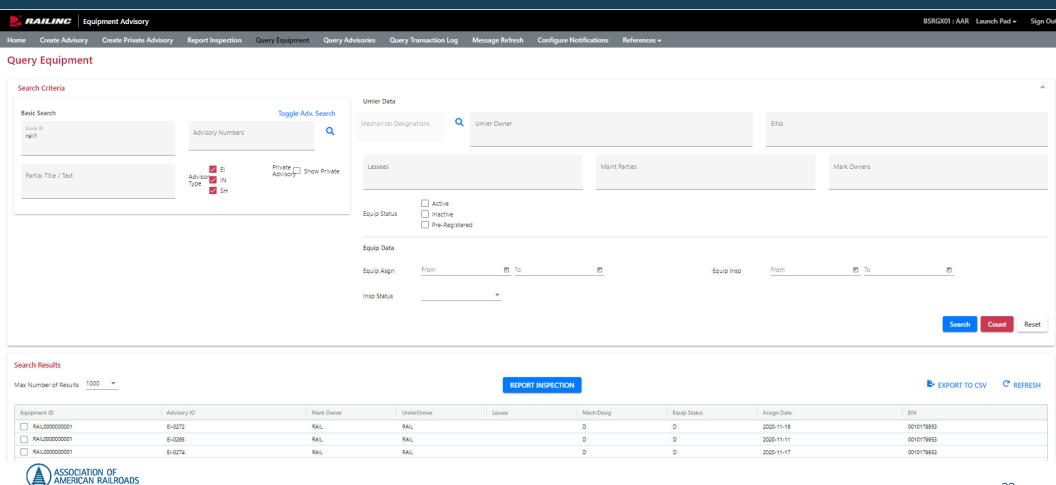


Location on Car

- 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



Equipment Advisory System Query Screen



Equipment Advisory System Website

Equipment List Sorted by Equipment ID

EI-0954 Equipment List as of: 16:48:26 on May 27, 2021

Equipment ID		Sev	Esc Date	Equipm	nent ID Sev		Esc Date
DTTX	469883	Al	2021-05-27	RAIL	32	XX	
DTTX	469884	Al	2021-05-27	RAIL	37	XX	
DTTX	469886	Al	2021-05-27	RAIL	43	XX	
DTTX	469895	Al	2021-05-27	RAIL	901	XX	
DTTX	469898	Al	2021-05-27	RAIL	964	XX	
DTTX	469915	Al	2021-05-27	RAIL	999911	XX	
DTTX	469916	Al	2021-05-27	RBOX	30001	XX	
DTTX	469918	Al	2021-05-27	TBOX	638087	XX	
DTTX	469928	Al	2021-05-27	TFWX	850306	Al	2021-05-27
DTTX	469930	Al	2021-05-27	TPDX	190286	Al	2021-05-27
DTTX	469932	Al	2021-05-27	TTAX	79528	Al	2021-05-27
DTTX	469934	Al	2021-05-27	TTAX	554027	Al	2021-05-27
DTTX	469940	Al	2021-05-27	TTAX	554051	Al	2021-05-27
DTTX	469944	Al	2021-05-27	TTAX	554400	Al	2021-05-27
DTTX	469945	Al	2021-05-27	TTCX	98145	Al	2021-05-27
DTTX	469946	Al	2021-05-27	TTGX	157237	Al	2021-05-27



Equipment Advisory System Website

Equipment List Sorted by Severity Code

EI-0954 Equipment List as of: 16:47:34 on May 27, 2021

Equipment ID		Sev	Esc Date	Equipm	Equipment ID		Esc Date
FBOX	506853	XX		TTGX	157237	A1	2021-05-27
FBOX	506857	XX		TTGX	157281	A1	2021-05-27
FBOX	506858	XX		TTGX	157295	A1	2021-05-27
JAIX	860418	XX		TTGX	157353	A1	2021-05-27
RAIL	9	XX		TTGX	157444	A1	2021-05-27
RAIL	17	XX		TTGX	157473	A1	2021-05-27
RAIL	25	XX		TTZX	86441	A1	2021-05-27
RAIL	31	XX		TTZX	87002	A1	2021-05-27
RAIL	32	XX		TTZX	862353	A1	2021-05-27
RAIL	37	XX		TTZX	862934	A1	2021-05-27
RAIL	43	XX		TTZX	863563	A1	2021-05-27
RAIL	901	XX		VTTX	97556	A1	2021-05-27
RAIL	964	XX		VTTX	97613	A1	2021-05-27
RAIL	999911	XX		VTTX	97645	A1	2021-05-27
RBOX	30001	XX		XTTX	137202	A1	2021-05-27
TBOX	638087	XX		XTTX	137332	A1	2021-05-27
DTTX	469883	Al	2021-05-27	XTTX	137338	Al	2021-05-27
DTTX	469884	Al	2021-05-27	XTTX	137353	A1	2021-05-27
DTTX	469886	Al	2021-05-27	XTTX	137388	A1	2021-05-27



What To Do To Get Ready For The Equipment Advisory System?

- BE AWARE
- Make sure your company is AWARE
- Review mapping of Early Warnings/Maintenance Advisories to Equipment Advisories (sample below)

N. 1. 11	N. C.	A 1 1	A 1 :	Severity	6 "	
Notice	Notice	Advisory	Advisory	of cars at	Severity on	
Type	Number	Type	#	Go Live	Advisory	Notice Title
EW	5171	El	1	A1	A2, A1, XX	Cars Overdue for Periodic Air Brake Testing November 1, 2000
MA	63	El	1	A2	A2, A1, XX	Cars Overdue for Periodic Air Brake Testing as of February 1, 2001
	Reserved	El	2		A2, A1, XX	ABT - Inactive and Pre-registered cars
	Reserved	El	3		XX	ABT - Over Age YA Cars
EW	5340	El	4	A1	A2, A1	Inspection and Replacement of Service Portion Brake Valves at age 14 Plus
MA	195	El	4	A2	A2, A1	Inspection and Replacement of Service Portion Brake Valves at age 13
EW	5341	El	5	A1	A2, A1	Inspection and Replacement of Emergency Portion Brake Valves at age 14 Plus
MA	196	El	5	A2	A2, A1	Inspection and Replacement of Emergency Portion Brake Valves at age 13
EW	5299	El	6	XX	XX	MA-0152 Elevated to EW-5299 - Reflectorization

- Watch for and print out the Field and Office Manual Implementation circular for Rule 125 and various related Rules
- Plan to hold reporting of inspections on June 28th until Railinc sends out notification that the Equipment Advisory system is live



Items of Note

- Early Warning permissions will automatically transfer to the Equipment Advisory System
- Deltas
 - Early Warnings addressed during the time cars are being loaded to Equipment Advisories
 - Manual process to sync is expected to be completed late on 28th
- Inspections/repairs on Monday June 28th must be reported to the Equipment Advisory system



Timeline to Implementation

- June 2021
 - AAR will issue Rule changes via circular, effective June 28, 2021
 - Railinc will send notification that the Early Warning System is being shut down
- Morning of June 28th
 - Early Warning System will be shut down
 - Migration of notices and cars from Early Warning System to Equipment Advisory System
 - Turn on Equipment Advisory System
 - Railinc will send out notification that the new Equipment Advisory System is live







Questions?