I-GRAM

Army Dams & Transportation Infrastructure Program

Vol 7 13November 2020

ERIDS is a GPS field data application used by the ADTIP/Engineer Research and Development Center (ERDC) Railroad Track Evaluation Program during detailed visual and ultrasonic inspections. This system creates a RAILER geodatabase on-the-fly.

DEFCOM is an automated email notification system used to communicate critical findings daily during the ADTIP/ERDC inspections. DEFCOM was first deployed at Fort Polk in 2020. After feedback from several installations, improvements will be made to the system to include Latitude and Longitude location information in 2021.

MREST is a spinoff of ERIDS and is geared to installations to perform safety inspections as required by UFC 4-860-03. It also allows for the tracking of repairs to Close To Traffic (CTT) defects identified during the ADTIP/ERDC inspections. A centralized inventory and inspection database is in place at ERDC.

Electronic Railroad Inspection Database System (ERIDS)

Military Railroad Electronic Safety Tracking (MREST)

Defect Communication System (DEFCOM) sample automated notification email

1. As requested by Headquarters, Installation Management Command (HQIMCOM), personnel from the U.S. Army Engineer Research and Development Center (ERDC) are inspecting Army railroad track at Fort Knox. This inspection is part of the U.S. Army Dams and Transportation Infrastructure Program (ADTIP).

2. Critical findings are listed in Table 1. The inspection was completed in accordance with Unified Facilities Criteria (UFC) 4-860-03.

Thank you for your assistance and patience during this inspection process. We appreciate your time and help during this event. If you have any questions or concerns, I may be reached at 601-634-3472 or thomas.j.beasley@usace.army.mil.

Critical findings for this detailed track inspection are defects that place no operation closed-to-traffic operating restrictions on the track segment as specified by the UFC 4-860-03. These defects should be corrected immediately before operations over the tracks are allowed.

Please see attached file that lists the closed-to-traffic defects found at Fort Knox during the inspection.

Sample DEFCOM File

AG Mag 1					
Area: None					Track Category: B
Track: AG Mag 1					Report No.: 90
Defect	**Rail**	**Meas (in.)**	**Qty**	**Date Inspected**	**Notes**
OTM					
Bolts, Missing Or Broken, All on Rail End	L	--	1	17-Oct-2020	
Bolts, Missing Or Broken, All on Rail End	L	--	1	17-Oct-2020	
Bolts, Missing Or Broken, All on Rail End	L	--	1	17-Oct-2020	
Geometry					
Gauge	R	55.875	--	17-Oct-2020	
Ties					
Defective Jt Tie Cluster (3 Ties w/2 Jt Tie	--	--	1	17-Oct-2020	
Defective Jt Tie Cluster (3 Ties w/2 Jt Tie	--	--	1	17-Oct-2020	
Defective Jt Tie Cluster (4 Ties w/2 Jt Tie	--	--	1	17-Oct-2020	
Defective Jt Tie Cluster (5 Ties w/2 Jt Tie	--	--	1	17-Oct-2020	
Isolated Defective Tie Cluster (5 Ties)	--	--	1	17-Oct-2020	
Isolated Defective Tie Cluster (5 Ties)	--	--	1	17-Oct-2020	
Isolated Defective Tie Cluster (5 Ties)	--	--	1	17-Oct-2020	
Isolated Defective Tie Cluster (5 Ties)	--	--	1	17-Oct-2020	
Isolated Defective Tie Cluster (5 Ties)	--	--	1	17-Oct-2020	
					Total Critical Defects: 13