DCA16MR011
NJT
Collision of Train 1614
Hoboken Station
Hoboken, NJ
September 29, 2016

Attachment 7

Cab Car 6036 Translator Test Report

NJ TRANSIT The Way To Go. **Technical Services**	**Report Type:**	*Translator Functionality Testing Report*
	Subject:	*Cab Car 6036*
	Location:	*S&I Shop*
	Date:	10/08/2016

Background:

On October 8th 2016, the Translator from the 6036 was removed and installed onto a fully functional cab car that was coupled to, and connected electrically to, the consist involved in the Hoboken incident.

The Translator serves many important functions which include: processing door commands, acting as a vital link in the Local Operating Network (LON), and most importantly, in regards to this incident, processing requests from the throttle and sending those throttle requests trainline to the locomotive. Without a properly functioning Translator, throttle commands would be incapable of reaching the locomotive. Because the Translator plays such a vital role in processing and transmitting throttle requests, it was essential that it be tested. The following testing procedure was performed with the goal of verifying that the Translator was working as originally designed. Present at the time of testing were representatives from the NTSB, FRA, NJT Technical Services Department, and NJT Mechanical Department employees.

Test procedure performed to qualify Translator on fully functional Cab Car:

1.) Installed Translator onto fully functional cab car.
2.) Observed LED indicators located on the front of the Translator to ensure that no fault lights were on.
3.) Observed the vehicle's Maintenance Display Unit (MDU) to ensure that no faults existed in regards to the Translator.
4.) Moved Reverser handle to the reverse position.
5.) Verified that the reverse signal transmitted to the locomotive via a traction test box installed in the F-End traction receptacle on the locomotive.
6.) Moved Reverser handle to the forward position.
7.) Verified that the forward signal transmitted to the locomotive via trainline.
8.) Moved Throttle handle slowly through all 8 traction notches ensuring that the throttle commands and their associated throttle valve requests were being transmitted to the locomotive. A representative from the NTSB observed the MDU during this process to ensure that the throttle commands were leaving the Translator and were being picked up by the MDU.
9.) Moved Throttle handle to the Idle position.
10.) Moved Reverser to the Isolate position.
11.) Conclusion of test

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Conclusion

The Translator was tested using the preceding procedure and it passed all tests with no exceptions or abnormalities being noted. All throttle commands and directional commands were received by the locomotive verifying that the Translator was working as intended. Further, no faults were seen either on the Translator itself or on the MDU.

It should also be noted that the Translator was used during the testing of the Master Controller and Alerter system. At no point did the Translator exhibit any abnormal symptoms. It passed all tests and was deemed to be working as designed.

Translator removed from the 6036

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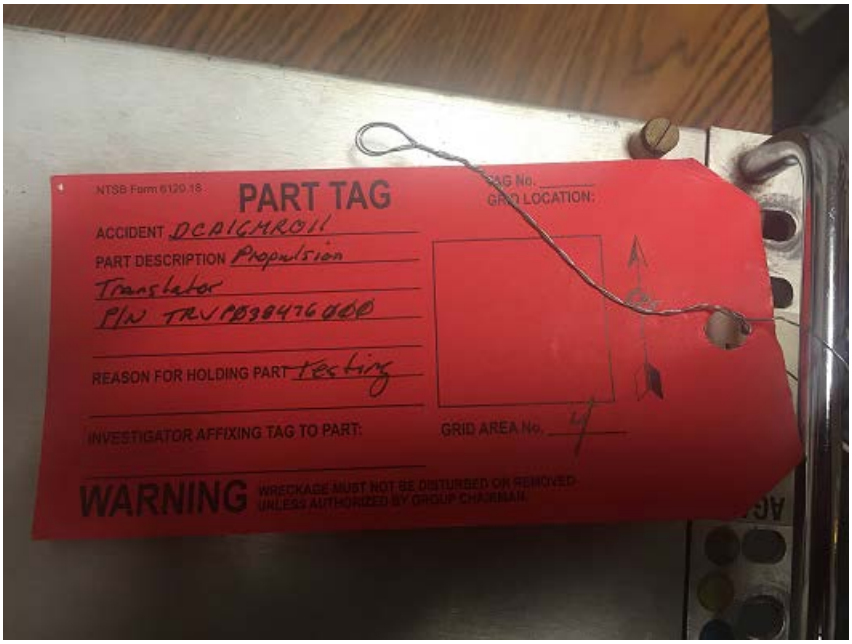

Translator ID Tag