

FINAL REPORT OF INVESTIGATION A&I E18417

September 24, 2018

Red Signal Overrun

Adopted by the Metrorail Safety Commission at its meeting on April 8, 2019.

Washington Metrorail Safety Commission
777 North Capitol Street, NE, Suite 402
Washington, DC 20002



FINAL REPORT OF INVESTIGATION A&I E18417**SMS 20180924#74547**

Date of Event:	9/24/2018
Type of Event:	Red Signal Overrun
Incident Time:	01:31 hrs.
Location:	Farragut North (A02), Switch 7
Time and How received by SAFE:	15:25 hrs., SAFE-On-Call Phone
Safety Officer Response:	Yes
Time of Safety Officer Arrival:	19:30 hrs.
Time of Safety Officer Departure:	21:00 Hrs.
Rail Vehicle:	Rail Roadway Maintenance Machines (RMM), JR01
Injuries:	None
Damage:	Throw Rod and Operating Bar damaged
Emergency Responders:	None

Executive Summary

On Monday, September 24, 2018 at approximately 19:30 hrs. Department of Safety & Environmental Management (SAFE) notified the Rail Operations Control Center (ROCC) and reported an incident that occurred at approximately 01:31 hrs., earlier that morning. Initially, SAFE was notified from ROCC at 06:15 hrs. of a switch malfunction that subsequently required a medium speed restriction due to a damaged switch. Upon further investigation, it was determined that work equipment unit, Jet Rooter (JR) 01, proceeded past both A02-42 Signal and A02-32 Signal displaying red signal aspects and subsequently operated past trailing point A02-07 Switch which was laying in the "reverse" position resulting in damage to the switch. Just prior to the incident, ROCC granted permission for the Roadway Worker in Charge (RWIC - Unit 6015) to set up the work area between the protected area as identified in the General Orders Track Rights System (GOTRS) between Chain Markers (CM) A2-030+00 and A2-065+00.

There were no injuries reported at the time of the incident. Damage to throw rod and operating bar was identified by ATC responders. Roadway Worker In-Charge (RWIC – Unit 6015), Equipment Operator (E/O), and ROCC Radio Rail Controller were removed from service and interviewed by SAFE personnel.

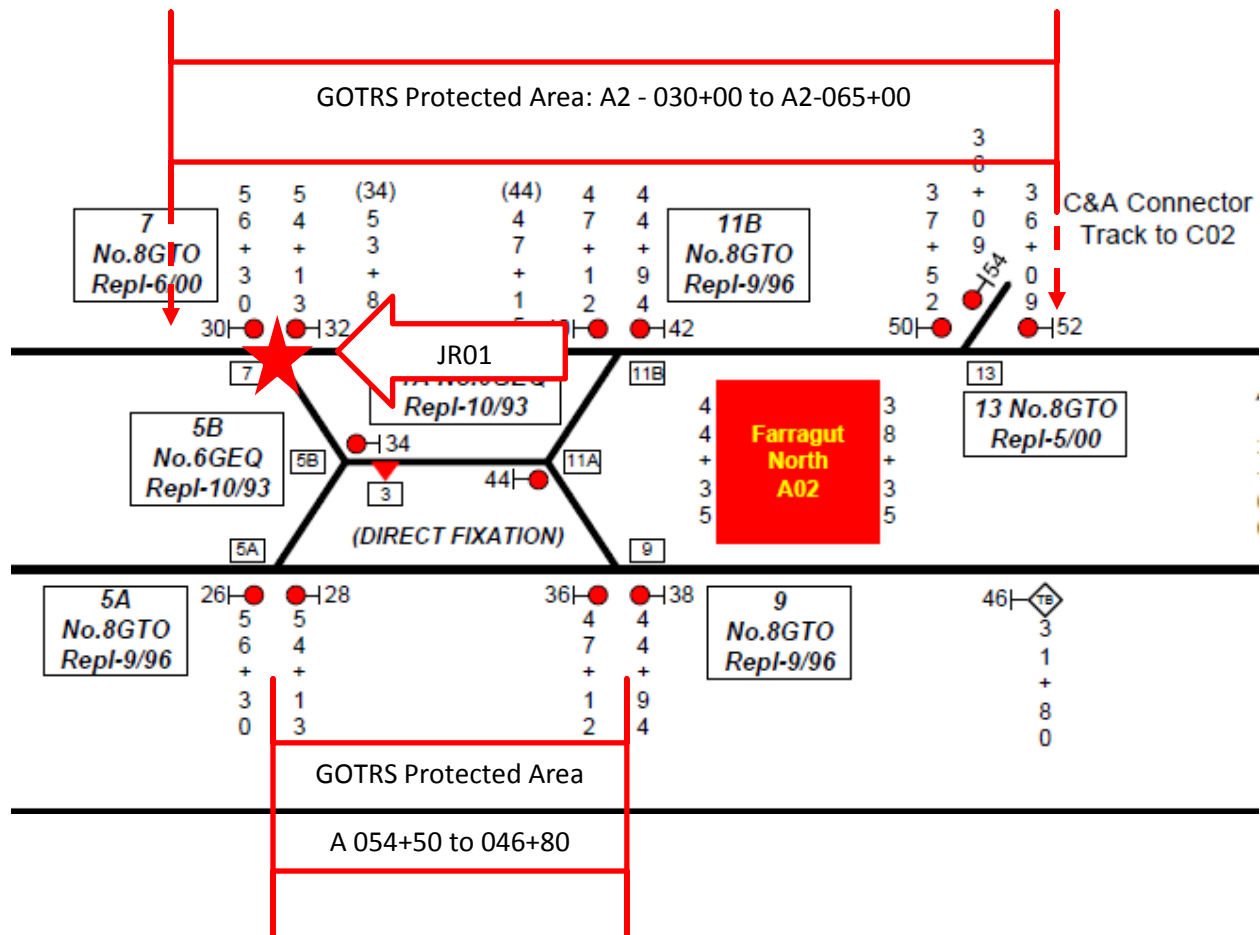
Notification

Title	Time	Comment:
FTA	15:25 hrs.	FWSO Email
TOC	15:25 hrs.	FWSO Email

Incident Site

Farragut North (A02), A02-32 Signal - Switch 7

Field Sketch/Schematics



Investigation

On Sunday Evening, September 23, 2018 at approximately 23:18 hrs. per the Audio Recording System (ARS) Ops 1, RWIC (Unit 6015) requested 3rd rail power de-energized protected work area between A2-030+00 and A2-065+00 (Track 2) for a supervisory outage to support an Exclusive Track Occupancy (ETO) protected area for the purpose of drain cleaning. JR01 was dispatched from Brentwood Yard where it held on the A02 station platform until required for safety equipment track set up.

At 01:31 hrs., ROCC granted the RWIC permission to hot stick and to confirm third rail power was de-energized prior to transferring control of the work area from ROCC to the RWIC and work commencing within the requested protected work area between A2-030+00 and A2-065+00 (Track 2). A02 interlocking was within the confines of the protected work zone. The RWIC repeated instructions and requested to clamp A02-11B Switch in the normal position for which ROCC granted permission. At 01:40 hrs., the RWIC informed ROCC that power was de-energized at the work location and further reported A02-11B Switch was clamped normal and the switch point was tucked. ROCC acknowledged transmission and gave the RWIC permission to set up work location by installing shunts, lamps and end of work mats at the boundaries of the work area in accordance with Exclusive Track Occupancy – WMATA Roadway Worker Protection procedures on Track 2.

At 01:45 hrs. per the Advanced Information Management System (AIMS) Playback, the display showed JR01 in approach of A02-42 Signal displaying a red aspect and subsequently proceeding past signal displaying a red aspect; however, A02-11B Switch, associated with A02-42 Signal was in the normal position resulting in no adverse event i.e. Trained switch. Additionally, AIMS further displayed A02-07 Switch laying in the reverse position as JR-01 shunted beyond A02-42 Signal and subsequently triggered a red signal alarm in addition to operating past A02-32 displaying a red signal aspect. (See AIMS Playback Screenshots 1 and 2 below)

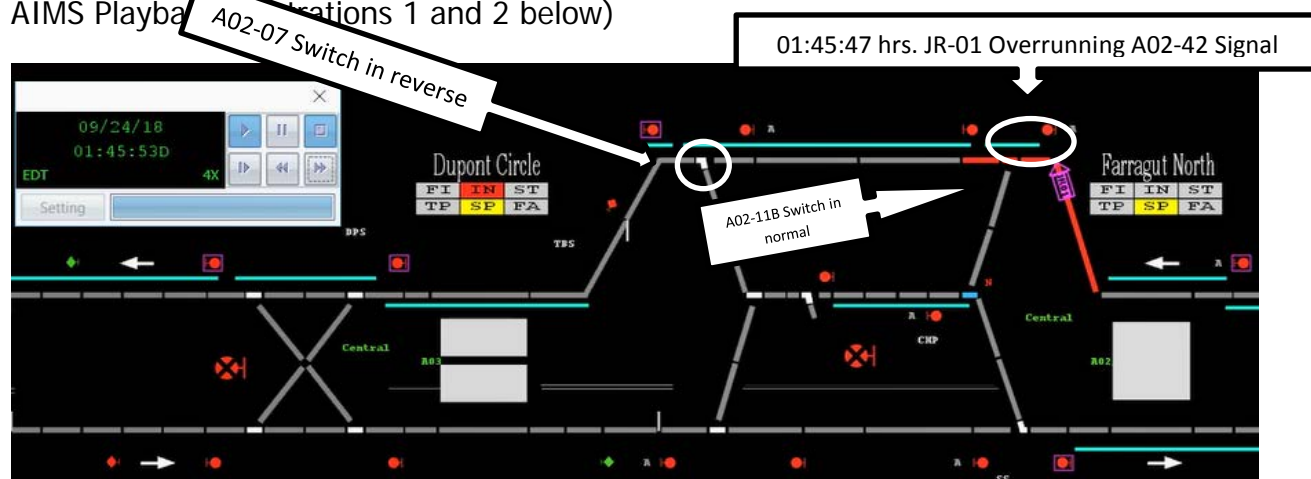


Illustration 1

At 02:04:30 hrs., the RWIC requested authorization from ROCC via radio to clamp A02-07 Switch in the normal position. Permission was granted by ROCC. This communication exchange was captured by the radio recording playback system.

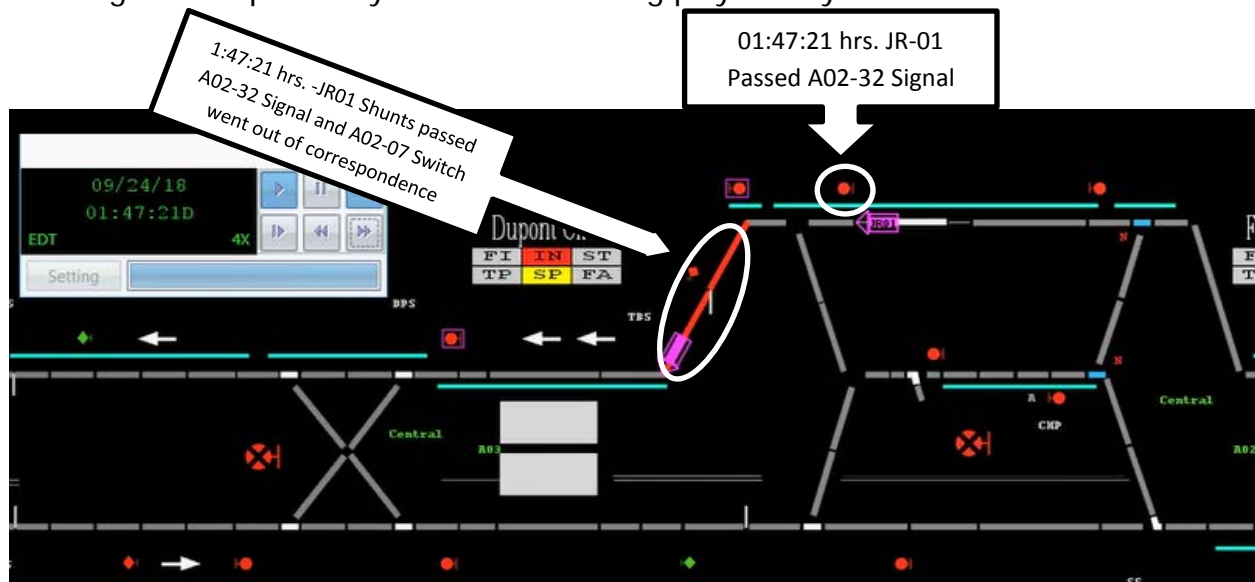


Illustration 2

At 06:15 hrs., SAFE was notified from ROCC of a switch malfunction that subsequently required a medium speed restriction due to a damaged switch. Upon further investigation, it was determined that work equipment unit, JR01, proceeded past both A02-42 Signal and A02-32 Signal displaying red signal aspects and subsequently operated past trailing point A02-07 Switch which was laying in the "reverse" position resulting in damage to the switch.

Exclusive Track Occupancy Form of Protection and Transfer of Authority from ROCC to RWIC

The form of On Track Protection used to protect the work group involved in this incident was Exclusive Track Occupancy (ETO). Based on Section 2 of the 2014 Roadway Worker Protection (RWP) Manual, Exclusive Track Occupancy (ETO) Protection for On Track safety is established when Shunt protection which clearly shows track occupancy to ROCC has been verified by the Rail Controller assigned to the respective Operation (OPS) console where the on-track work takes place. Based on review of Audio Recording System (ARS) Ops 1, ROCC granted permission to the RWIC to set up work location and verified shunts that revealed occupancy in the AIMS system. This is when the transfer of Authority took place from the ROCC to the RWIC and work commenced.

Interviews

Equipment Operator (E/O)

E/O stated permission was received from the RWIC to set up the work area and it was the E/O's understanding that it was ok to pass by A02-32 Signal displaying a red signal. Additionally, E/O stated being under the impression that both switches (11B and 7) had been clamped; however, the E/O did not visibly verify this. The E/O stated observing the damage on the switch point along with the RWIC but failed to report it to anyone.

Roadway Worker in Charge Track Unit (RWIC) 6015

The RWIC stated that he did not give JR01 permission to pass A02-32 Signal. Reportedly, the RWIC told JR01 not to pass 32 Signal at Switch 7. **Note:** This was not substantiated by radio transmissions. The RWIC indicated not being aware that JR01 went pass the switch because when the RWIC got down to where they were, the unit was on the A02 side of the Switch facing A02-32 Signal Red.

The RWIC stated that he was working at A02 for the past week and part of this work set required A02 switches 7, 5A and 5B had been already clamped. The only switch the RWIC had to clamp was 11B. The RWIC wasn't aware that switch 7, 5A and 5B were unclamped earlier this day and proceeded as with the previous days and only requested to clamp 11B. Based on the final statement by the RWIC, he stated that JR01 E/O assumed switch 7 was already clamped and proceeded through A02-32 Signal and operated over an improperly aligned switch.

Rail Operations Control Center Rail Controller

After JR01 cleared the work area, ROCC Controller attempted to set a route to ensure everything was ready for revenue. It was at this point, Switch 7 was found out of correspondence and ATC and ROCC Asst. Supt were notified. The Train Controller advised that no communication from the RWIC or JR01 was made that referenced the incident.

ATC

ATC verified that there was damage to interlocking. (See Attachment 1, 2, 3 and 4)

Human Factors

The RWIC and E/O's 30-day work history was reviewed, and it was determined that the RWIC and E/O work history was within the WMATA guidelines listed on the Fatigue Risk Management Policy 10.6 and Hours of Service Limitations for Prevention of Fatigue Policy 10.7.

Weather

At the time of the incident, the temperature was 48.0 °F, and overcast. SAFE has concluded that weather was not a contributing factor in this incident (Weather source: National Oceanic Atmospheric Administration (NOAA) – Location: Washington, DC.)

Findings

- Section 2.17.7 of the RWPM states in part, “If an interlocking is within the protected work area, the RWIC shall make sure that all switches are in the desired position.”
- There is no indication that the RWIC walked the extent of the protected work area, A02 Interlocking, to verify that all switches were in the desired position. Additionally, based on interviews and audio review, there is no evidence that the ROCC and RWIC discussed the position of A02-07 switch when the RWIC contacted ROCC to set up work zone.
- Although the transfer of control from ROCC to the RWIC had not taken place because shunt verification had not been performed at the time of the incident, the responsibility of setting up the work zone rest solely with the RWIC as defined by RWPM section 1.43 that states in part....the RWIC shall be solely responsible for verifying work zone set up complies with this manual (RWPM).
- At 01:45 hrs. per the AIMS Playback, AIMS display showed JR01 in approach of A02-32 Signal displaying a red aspect.
- Clamping of A02-07 switch was authorized by ROCC after switch was trailed.
- AIMS Playback displayed A02-07 Switch laying in the reverse position. The investigation revealed that JR01 proceeded past A02-32 Signal displaying a Red aspect and trailed the Switch 7. No action was taken by ROCC at the time of this event.
- AIMS Playback further displayed A02-07 showing an “out of correspondence” indication by the switch flashing on the AIMS screen. ROCC Controllers did not take immediate action by investigating the switch out of correspondence event.
- There is no indication that the RWIC walked the extent of the protected work area, A02 Interlocking, to verify that all switches were in the desired “normal” position.
- ROCC failed to identify that a red signal overrun had taken place and only when work was completed for the night and A02-07 Switch was unclamped by ATC personnel that there became an awareness from the Rail Controllers assigned to the OPS 1 desk that A02-07 Switch was out of correspondence. Further investigation revealed that a Red Signal overrun event occurred that resulted in a trailed switch event.
- JR01 worked at this location the previous 2 weeks prior to the incident and the unit passed A02-32 Signal displaying a red signal while setting up the work area various times. Additionally, A02-07 Switch was positioned in the normal position the previous weeks as the vehicle set up the work area and performed drain maintenance work.
- There were no reported issues with the radio system

Immediate Mitigation to Prevent Re-Occurrence

1. E/O was removed from service and interviewed by SAFE.
2. Track Unit 6015 (RWIC) was removed from service and interviewed by SAFE.
3. Rail Operations Control Center Train Controller was removed from service and interviewed by SAFE.
4. Interlocking inspection was conducted by ATC.
5. TRST shall take the appropriate action to include, but not limited to, re-training and any other action deemed necessary to support prevention of repeated recurrence.
 - a. **Completion of reinstruction training of RWIC commenced and was completed on 10/16/2018.**
 - b. **Completion of reinstruction training of E/O commenced and was completed on 10/12/2018.**

Conclusion

The investigation revealed that JR01 proceeded past A02-42 Signal and A02-32 Signal both displaying a red aspect without permission from the RWIC or ROCC. JR01 trailed A02-07 Switch 7 which was laying in the reverse position. Based on interview with RWIC, it was stated that he did not give authorization for JR-01 Equipment Operator to pass A02-32 Signal displaying a red aspect; however, audio radio transmissions revealed that authorization from the ROCC was granted to the RWIC to set up work area. SAFE believes that due to JR01 working within the incident location the previous 2 weeks prior to the incident with A02-07 Switch clamped in the normal position, it was assumed by the RWIC and E/O that the switch was positioned in the normal position allowing for straight through movement and for JR01 to pass A02-32 Signal displaying a red signal without incident while setting up the work area due.

SAFE concludes based that Section 2.17.7 of the RWPM was not adhered to by the RWIC. The rule states in part, "If an interlocking is within the protected work area, the RWIC shall make sure that all switches are in the desired position. There is no evidence from video or any other data source that the RWIC walked the extent of the protected work area, A02 Interlocking, to verify that all switches were in the desired "normal" position. Additionally, although the transfer of control from ROCC to the RWIC had not taken place because shunt verification had not been performed at the time of the incident, the responsibility of setting up the work zone rest solely with the RWIC as defined by RWPM section 1.43 that states in part....the RWIC shall be solely responsible for verifying work zone set up complies with this manual (RWPM).

Based on the time stamp (01:47) from the AIMS playback revealing A02-07 Switch was laying in the reverse position, JR01 proceeded past A02-32 Signal displaying a Red aspect and subsequently trailing A02-07 Switch for which the AIMS system revealed A02-07 Switch going out of correspondence, SAFE believes that RWIC was aware of the damaged switch as revealed by the E/O during his interview with SAFE.

There was no evidence that any action was taken by ROCC Controllers at the time of the incident. However, during extensive playback of the overhead microphone room ambient recording, there was no evidence to indicate that the Controllers knew that A02-07 Switch was damaged due to a trailed switch event.

There is no evidence that the ROCC Controllers identified that a red signal overrun had taken place or A02-07 Switch was damaged as a result of the switch being trailed.

Based on the salient facts, SAFE has concluded that the incident was a result of improper operation by the RWIC and E/O. Based on interview statements, the RWIC stated that a visual track inspection was not performed of the work zone. This failure deviated from the rules stipulated within MSRPH. Section 2.17.7 of the RWPM states in part, "If an interlocking is within the protected work area, the RWIC shall make sure that all switches are in the desired position." Although the transfer of control from ROCC to the RWIC had not taken place because shunt verification had not been performed at the time of the incident, the responsibility of setting up the work zone rest solely with the RWIC as defined by RWPM section 1.43 that states in part....the RWIC shall be solely responsible for verifying work zone set up complies with this manual (RWPM).

There is no evidence that the E/O received permission from the RWIC to operate past a signal displaying a red aspect. However, the E/O entered the interlocking passing A02-32 signal that displayed a "red" aspect which resulted in JR01 trailing A02-07 Switch. By the E/O's own admission, the E/O was not attentive and lacked the situational awareness when he proceeded past the red signal as indicated by the AIMS display.

In conclusion, the RWIC failed in his duties by not inspecting the interlocking to ensure that A02-07 Switch was clamped in the normal position. This allowed JR01 to enter the interlocking, passing A02-32 signal that displayed a "red" aspect without having performed a visual track inspection of the work zone, which resulted in A02-07 Switch being trailed and damaged. by JR01 which was still in reverse position. After the RWIC learned of the trailed switch, the RWIC failed to report the incident to ROCC.

Additionally, ROCC Controllers failed to identify that a red signal overrun had taken place and only when work was completed for the night and A02-07 Switch was unclamped by ATC personnel was there an awareness from the Rail Controllers assigned to the OPS 1

desk that A02-07 Switch was out of correspondence and a trailed switch event had occurred.

Based on additional information, there was no reported issues with the radio system that contributed to this incident.

Considering all the facts gathered from this investigation, SAFE has no further concerns regarding this incident and recommends E18417 for closure.

Corrective Action

1. ROCC Management shall take the appropriate action to include, but not limited to, re-training of Rail Controllers involved, a lesson learned training opportunity shared with all Rail Controller staff and respective supervisors, and any other action deemed necessary to support prevention of repeated recurrence.

Attachments



Washington Metropolitan Area Transit Authority Maintenance and Material Management System Work Order Details

Page 1 of 2
MX76PROD

Work Order #: 14544687
Type: CM

14544687

Status: CLOSE
09/27/2018 13:53

Work Description: A02 SWITCH 7 OOC
Job Plan Description:

Work Information									
Asset: 59687	SWITCH 7, 55E, ALSTOM, RH, A02	Owning Office: ATCS-TSSM-ARFO	Parent:						
Asset Tag:		Maintenance Office: ATCS-TSSM-SWSH	Create Date: 09/24/2018 03:33						
Asset S/N: A02.SW.7		Labor Group: ATCSD1B99	Actual Start: 09/24/2018 05:45						
Location: 4342	A02, FARRAGUT NORTH, STATION, PLATFORM, ROOM 102, TRAIN CONTROL ROOM (A02 IB BT)	Crew:	Actual Comp: 09/27/2018 13:52						
Work Location:		Lead:	Item: M57540001						
Failure Class: ATCS001	SWITCH MACHINES	GL Account: WMATA-02-33530-50499270-042-*****-OPR**	Target Start:						
Problem Code: 2581	OUT OF CORRESPONDENCE	Supervisor:	Target Comp:						
Requested By:		Requestor Phone:	Scheduled Start:						
Chain Mark Start:		Chain Mark End:							
Create-Mileage: 0.0		Complete-Mileage: 0.0							
Task IDs									
Task ID									
10	mids 09/24 0530.... responded to report of switch 7 ooc. by the time foul time was granted and visual inspection and hard crank to normal was done and found nothing obvious, it was minutes until first revenue train passed in which decision to clamp normal was made per ooc/moc and clearing roadway was mandatory.								
Component:	Work Accomp:	Reason:	Status: CLOSE	Position:	Warranty?: N				
20	Day 09/24/18 Tried to adjust basket & lock rod of switch 7 for in in Normal so that OCC can set the route. We need a full adjustment of this switch; train back to back and needing more time to do it. Switch 7 is clamped in normal, lock & blue tag.								
Component:	Work Accomp:	Reason:	Status: CLOSE	Position:	Warranty?: N				
30	MID 9/27/18 REPLACED DAMAGED PIECES REPLACED THROW ROD AND OPERATING BAR. ADJUSTED AND OBSTRUCTED. SW REMAINS CLAMP NORMAL UNTIL RAIL GUAGE INSPECTED. OPEN TRACK TICKET # 14551775.								
Component:	Work Accomp:	Reason:	Status: CLOSE	Position:	Warranty?: N				
Actual Labor									
Task ID	Labor	Start Date	End Date	Start Time	End Time	Approved?	Regular Hours	Premium Hours	Line Cost
		09/27/2018	09/27/2018	01:00	04:30	Y			
		09/27/2018	09/27/2018	01:00	04:30	Y			

WT_plust_woprint.rptdesign

10/30/2018 02:27

Attachment 1 – ATC work order Page 1 of 2

Date: 9/24/2018 Time: 01:31 hrs.
Final Report – Red Signal Overrun
E18417

Rev. 01 Drafted By: SAFE 803 – 1/30/2019
Rev. 01 Reviewed By: SAFE 701 – 1/30/2019
Rev. 01 Approved By: SAFE 70 – 2/12/2019
Rev. 02 Reviewed By: SAFE 803 – 2/15/2019
Final Report Approved By: SAFE 70 – 3/25/2019

Page 10



Washington Metropolitan Area Transit Authority
Maintenance and Material Management System
Work Order Details

Page 2 of 2
MX76PROD

Work Order #: 14544687
Type: CM

14544687

Status: CLOSE
09/27/2018 13:53

Work Description: A02 SWITCH 7 OOC
Job Plan Description:

Actual Labor														
Task ID	Labor	Start Date	End Date	Start Time	End Time	Approved?	Regular Hours	Premium Hours	Line Cost					
		09/24/2018	09/24/2018	14:30	16:30									
		09/24/2018	09/24/2018	10:00	16:30									
		09/24/2018	09/24/2018	10:00	16:30									
		09/24/2018	09/24/2018	10:00	16:30									
		09/24/2018	09/24/2018	10:00	16:30									
		09/27/2018	09/27/2018	01:00	04:30									
		09/27/2018	09/27/2018	01:00	04:30									
		09/27/2018	09/27/2018	01:00	04:30									
		09/27/2018	09/27/2018	01:00	04:30									
		09/27/2018	09/27/2018	01:00	04:30									
		09/27/2018	09/27/2018	01:00	04:30									
		09/24/2018	09/24/2018	04:30	05:30									
		09/24/2018	09/24/2018	04:30	05:30									
Total Actual Hour/Labor:														
Related Incidents														
Ticket	Description	Class			Status		Relationship							
8358949	A02, MEDIUM SPDR FROM A2-54+83 TO A2-56+00 DUE TO DEFECTIVE BASKET ON SWITCH 7.	SR			CLOSED		RELATED							
8358746	SWITCH #7 OUT OF CORRESPONDENCE IN NORMAL. CLAMPED BY ATC UNIT 2028 IN NORMAL.	SR			INPROG		RELATED							
Failure Reporting														
Cause	Remedy			Supervisor			Remark Date							
3453	TRAILED SWITCH	2825	REPAIRED				09/27/2018							
Remarks:	REPLACED PARTS, THROW ROD AND OPERATING BAR. AM Shift (9/27/18): Went road way with track personnel for inspection & obstruction switches 5 (A, B) & 7. All switches are working normally at this time and putting back in service. Notified MOC & OCC.													

Attachment 2 – ATC work order page 2 of 2

Date: 9/24/2018 Time: 01:31 hrs.
Final Report – Red Signal Overrun
E18417

Rev. 01 Drafted By: SAFE 803 – 1/30/2019
Rev. 01 Reviewed By: SAFE 701 – 1/30/2019
Rev. 01 Approved By: SAFE 70 – 2/12/2019
Rev. 02 Reviewed By: SAFE 803 – 2/15/2019
Final Report Approved By: SAFE 70 – 3/25/2019

Page 11



Washington Metropolitan Area Transit Authority
Maintenance and Material Management System
Work Order Details

Page 1 of 2
MX76PROD

Work Order #: 14544756
Type: CM

14544756

Status: CLOSE
09/27/2018 13:54

Work Description: A02 SWITCH 7 CLAMPED NORMAL
Job Plan Description:

Work Information			
Asset: 59687	SWITCH 7, 55E, ALSTOM, RH, A02	Owning Office: ATCS-TSSM-ARFO	Parent:
Asset Tag:		Maintenance Office: ATCS-TSSM-SWSH	Create Date: 09/24/2018 05:11
Asset S/N: A02.SW.7		Labor Group: ATCSD1B99	Actual Start: 09/24/2018 05:46
Location: 4342	A02, FARRAGUT NORTH, STATION, PLATFORM, ROOM 102, TRAIN CONTROL ROOM (A02 IB BT)	Crew:	Actual Comp: 09/27/2018 13:54
Work Location:		Lead:	Item: M57540001
Failure Class: ATCS001	SWITCH MACHINES	GL Account: WMATA-02-33530-50499270-042-*****OPR**	
Problem Code: 1163	BLOCKED/CLAMPED	Supervisor:	Target Start:
Requested By:		Requestor Phone:	Target Comp:
Chain Mark Start:		Chain Mark End:	Scheduled Start:
Create-Mileage: 0.0		Complete-Mileage: 0.0	

Task IDs
Task ID

10	mids 9/24 0530 per ooc clamped normal after no obvious defects found with minutes remaining until first train passed for rush hour. will have to let day shift work on after morning rush.
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Component:	Work Accomplish:	Reason:	Status: CLOSE	Position:	Warranty?: N
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20	Day 9/24/18 Tried to adjust basket & lock rod of switch 7 for in in Normal so that OCC can set the route. We need a full adjustment of this switch; train back to back and needing more time to do it. Switch 7 is clamped in normal, lock & blue tag.
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Component:	Work Accomplish:	Reason:	Status: CLOSE	Position:	Warranty?: N
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30	EVE 09/24/2018 22:30 B99 Crew went down to see about switch 7. Crew was working with safety on this matter call # SAFE #204. During inspection we came to a conclusion that the point detector rod, lock rod, and basket rod were all bent and also switch 7 also needs a new cover. Crew also cranked 7 in REV and after completing throw there was a 1/4" gap between the point and stock rail. We also seen grease shaving on the inside of NOR point opening and after all the inspection crew re-clamped switch 7 back in NOR & switch is out of service
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Component:	Work Accomplish:	Reason:	Status: CLOSE	Position:	Warranty?: N
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Task ID	Labor	Start Date	End Date	Start Time	End Time	Approved?	Regular Hours	Premium Hours	Line Cost
		09/24/2018	09/24/2018	17:30	19:00				
		09/24/2018	09/24/2018	17:30	19:00				

WT_plust_woprnt.rptdesign 10/30/2018 02:25



Washington Metropolitan Area Transit Authority
Maintenance and Material Management System
Work Order Details

Page 2 of 2
MX76PROD

Work Order #: 14544756
Type: CM

14544756

Status: CLOSE
09/27/2018 13:54

Work Description: A02 SWITCH 7 CLAMPED NORMAL
Job Plan Description:

Task ID	Labor	Start Date	End Date	Start Time	End Time	Approved?	Regular Hours	Premium Hours	Line Cost
		09/24/2018	09/24/2018	17:30	19:00				
		09/24/2018	09/24/2018	17:30	19:00				
		09/24/2018	09/24/2018	04:30	05:30				
		09/24/2018	09/24/2018	04:30	05:30				
Total Actual Hour/Labor:									

Cause	Remedy	Supervisor	Remark Date
3227	TRACK PROBLEM	1470 CORRECTED	09/27/2018
Remarks: See... AM Shift (9/27/18): Went road way with track personnel for inspection & obstruction switches 5 (A, B) & 7. All switches are working normally at this time and putting back in service. Notified MOC & OCC.			

Attachment 3 – ATC work order page 1 and 2

Date: 9/24/2018 Time: 01:31 hrs.
Final Report – Red Signal Overrun
E18417

Rev. 01 Drafted By: SAFE 803 – 1/30/2019
Rev. 01 Reviewed By: SAFE 701 – 1/30/2019
Rev. 01 Approved By: SAFE 70 – 2/12/2019
Rev. 02 Reviewed By: SAFE 803 – 2/15/2019
Final Report Approved By: SAFE 70 – 3/25/2019

Page 12



Washington Metropolitan Area Transit Authority
Maintenance and Material Management System
Work Order Details

Page 1 of 1
MX76PROD

Work Order #: 14551775
Type: CM

14551775

Status: WAPPR
09/27/2018 05:11

Work Description: A02 - A2 7 SWITCH - INSPECT RAIL GAUGE
Job Plan Description:

Work Information			
Asset: TRST-A	A-LINE EQUIPMENT PARENT 000-947+80	Owning Office: TRST	Parent:
Asset Tag:		Maintenance Office: TRST-TRAK	Create Date: 09/27/2018 05:11
Asset S/N:		Labor Group: TRST-TRAK-SGMR	Actual Start:
Location: A	ORIM, A Line, Shady Grove	Crew:	Actual Comp:
Work Location:		Lead:	Item:
Failure Class:		GL Account: WMATA-02-33640-50499360-042-*****-OPR**	
Problem Code:		Supervisor:	Target Start:
Requested By:		Requestor Phone: 42991	Target Comp:
Chain Mark Start:		Chain Mark End:	Scheduled Start:
Create-Mileage: 0.0		Complete-Mileage: 0.0	
Failure Reporting			
Cause	Remedy	Supervisor	Remark Date

Attachment 4 – ATC work order

Photos



Photo 1 – Shows bent rod



Photo 2 – Shows bent rod from track bed



Photo 3 – Shows bent operating bar



Photo 4 – Shows bent throw rod