

Test Date Tuesday, December 19, 2023
Test Time 07:00CT
General Conditions 24F, Clear
Test trainset 5525(Head)-5526

For all runs:
Notes:

Snow Fighter was 250' after entrance to 9T (simulated at incident location using a track shunt)
 Cells show in red indicate collision with snow fighter
 Cells shown in green indicate train stopped safely short of the 9T track circuit ahead

Test Run Number	Simulated occupancy of 9T	Max Speed (mph)	Distance to full stop before (-)/beyond (+) entrance to 9T (feet)	Total braking distance	Time for train to trigger steady red after entering 26T (seconds)	Time to reach zero after zero-command (seconds)	Collision with Simulated Snow Fighter?	Wet Track?	Test	Comments
1		55	172	2070		42.1	N		Operator acts normally; full service brake at 26T bond	
2		55	-119	1779			N		Operator acts normally; full service brake at 26T bond	
3		55	-479	1419			N		ATC bypass; ~75% service brake at 26T bond	Operator applied brakes ~1-2 seconds early
4		55	18	1916		39.6	N		ATC bypass; ~75% service brake at 26T bond	Invalid test --Train came out of ATC bypass and applied full service brake towards end
5		55	122	2020		37.9	N		ATC bypass; ~75% service brake at 26T bond	
6		55	-583	1315		31.5	N		ATC bypass; ~50% service brake at 26T bond	Excellent braking performance
7		55	-705	1193		29.1	N		ATC bypass; ~50% service brake at 26T bond	Excellent braking performance
8		55	320	2218		42.7	Y		Repeat of run 1--operator acts normally; full service brake at 26T bond	
9	Y	55	396	2294	3.6	37.2	Y	Y	Incident recreation: operator reacts to ATC; full service brake; "Emergency brake" upon sight of snow-fighter	Freshly wet track
10	Y	55	-461	1437	4.3	26.4	N	Y	Incident recreation: operator reacts to ATC; full service brake; "Emergency brake" upon sight of snow-fighter	Emergency brake never required: train stopped well in advance
11	Y	55	-169	1729			N	Y	Incident recreation: operator reacts to ATC; full service brake; "Emergency brake" upon sight of snow-fighter	Invalid test --Operator applied emergency brakes early
12	Y	55	-263	1635	3.9	25.6	N	Y	Incident recreation: operator reacts to ATC; full service brake; "Emergency brake" upon sight of snow-fighter	
13		55	-620	1278	3.7	20.3	N		Full emergency at 26T bond	Wheels locked during the entire braking event
14		55	-650	1248	3.9	19.7	N		Full emergency at 26T bond; track brake featured turned ON	

SK1 track segments, towards Howard: 44T, 26T, 15T, 9T
 "Zero-speed command point (26T bond)" is transition between 44T and 26T, before Custer x-over