



MAINE 3 RAILERS

M3R CLUB NEWSLETTER FIRST SPECIAL EDITION FOR AUGUST 2016

AMTRAK TRAIN DAY, BRUNSWICK, MAINE, JUNE 11, 2016

While it technically was not another national "Train Day" as we have had in the past, the AMTRAK Exhibit Train paid a visit to Brunswick Station earlier this year on June 11. The four-car consist headed at each end by an engine rolled into Brunswick around 10am with a pumped-up crew ready to receive and entertain a huge crowd of over 540, eager Central Maine visitors. Here is a selection of photos from the event showing the train, inside and out, the M3R display, Jeff Jacob's speeder and the packed crowds marveling over the M3R display.



The M3R Display awaits the crowds, and . . .



the AMTRAK National Exhibit Train rolls in.



Tony Masulaitis on the platform with the first car.



Inside, a display of standard signals



Horn Model: K5LA

Manufacturer: Nathan-Airchime, Inc.
 Chord: D[#], F[#], G[#], B, D[#] (B Major 6)
 Year Developed: 1976
 Application: F40PH (except first order), AEM-7, P4 and P42 Locomotives

Motive Power Development Manager Deane Ellsworth ended his search for the "Sound of Amtrak" with what became the K5LA. On his vacation, Ellsworth went to Vancouver, British Columbia to meet with Robert E.

An Operating display of the evolution of the AMTRAK Horn Sound, and the notes of the currently used chord.

Predecessor Railroads

In the late 1960s, the end of intercity passenger rail in the United States seemed near. The popularity of the automobile and airplane for personal travel, combined with the railroads' loss of federal postal contracts, increasing labor costs and backlog of delayed capital improvements, contributed to Congress passing the Rail Passenger Service Act of 1970. In creating the National Railroad Passenger Corporation, better known as Amtrak, the act allowed privately-owned railroads to divest themselves of revenue-losing passenger services that caused severe financial hardships for their operators. Railroads were allowed to "buy in" to Amtrak by means of cash or by giving equipment (both engines and cars) to the newly formed company.

The twenty railroads that initially joined were the Atchafalaya, Topeka and Santa Fe (Santa Fe), Baltimore and Ohio (B&O), Burlington Northern, Central of Georgia, Chesapeake and Ohio (C&O), Chicago, Milwaukee, St. Paul and Pacific (Milwaukee Road), Chicago and Northwestern (CNW), Delaware and Hudson (D&H), Grand Trunk Western, Gulf, Mobile and Ohio (GMO), Illinois Central (IC), Louisville and Nashville (L&N), Missouri Pacific (MoPac), Norfolk and Western, Northwestern Pacific, Penn Central, Richmond, Fredericksburg and Potomac (RF&P), Seaboard Coast Line, Southern Railway, Union Pacific (UP), and the Union Pacific Railroad. Only a few railroads decided to maintain their passenger services. Of note were the Southern Railway, the Reading Railroad, and the Denver & Rio Grande Western Railroad. Eventually, they too were absorbed by Amtrak or another government entity.

In return for transferring passenger operations to Amtrak, the railroads were expected to allow Amtrak trains to operate on their tracks for a fee.

Catenary

How Electric Trains Get Their Power

Amtrak trains operating on the Northeast Corridor get their electricity from a wire over the tracks that is part of an Overhead Catenary System. On the roof of the electric locomotive, or power car, is a pantograph that is raised by air pressure against the wire to collect the current. Electric current is returned through the train wheels and into the rails to complete the electric circuit back to the substation.

Three different voltages are used on the Northeast Corridor:

- 12,000 Volts AC 25 Hz: Washington, D.C. to New York, NY
- 12,500 Volts AC 60 Hz: New York, NY to New Haven, CT
- 25,000 Volts AC 60 Hz: New Haven, CT to Boston, MA

In this display, the wire on the left is an example of wire technology first introduced in 1907 on the Northeast Corridor by one of Amtrak's predecessor railroads, the New York, New Haven and Hartford Railroad. The wire is stiff and is hung tight between the poles to keep it in place above the tracks.

The wire on the right is newer technology that is used between New Haven, CT and Boston, MA where train speeds reach up to 150 mph. This wire is flexible, but it is also hung in one-mile sections on pulleys with weights so that it will always be at a constant tension. This helps keep the wire in place even when it gets hot outside or breaking when it gets too cold, providing for better reliability.

Logos of first 20 lines to form AMTRAK in 1970. Catenaries described, noting 25,000 volts AC at Boston.



Jeff with his trusty speeder, and . . .



the curious.

And, then, best of all, there were kids galore, all excited about the M3R display layout.





And then the AMTRAK Exhibit Train left town.

For those of you who could not make it, you missed a very interesting day and a lot of fun with a great learning opportunity. For those of you who were there, you know what I mean. We hope that the AMTRAK Exhibit Train will make another stop in Brunswick someday soon. M3R will be there again when they do. You can, too.

Visit our website and our Facebook page for all the latest breaking news. www.maine3railleurs.org & <https://www.facebook.com/maine3railleurs>

Ken Thorson
M3R Secretary
kenthorson@comcast.net