



The Beltline

On the Web at www.nattrackers.org

Official Newsletter of the National Capital Trackers

2022, no. 3, issued March 2022

Contents:

- **Club News**
 - Next Meeting, Thursday, March 17
 - Membership Report
 - York 2022
 - Club Cars
- **Cats Smash Trains!**
- **Photo Gallery, by Regis Harkins**
- **Navy's Nuclear Security Car**
- **Field Trip to MTH, by Mike Fistere**
- **Cumbres & Toltec to Restore K-37 Steamer**
- **Train Movie Update**

NCT Club News

Tracker Membership Report - March, 2022

We thank those who recently have paid their 2022 dues. Please pay your dues for the 2022 if you wish to participate in club shows this year. You have until the end of March to do so, otherwise you will become an inactive member. . We rely on dues payments to cover expenses each month, This includes maintenance of our two trailers and club assets.

Dues for Passengers are \$30; dues for Partners are \$20. There are no dues for Junior members but the Junior's parent pays as a Passenger.

Please pay your dues to: John Masiyowski, NCT Treasurer, either in person at the monthly meetings OR send a check or money order made out to NCT / National Capital Trackers. Send to John at the address:

John Masiyowski, 13607 Brass Harness Ct. Oak Hill, VA 20171-3364

A new roster was distributed to members in February reflecting updates received since last November.

Upcoming Shows:

Mar 26-27 Marine Corps Museum Quantico, VA

May 14-15 Chantilly Regional Library

York 2022

[NOTE: This news may be stale by now. Listen for updates at the next meeting.]

As mentioned at the last Tracker meeting, we have been invited to provide a layout at the October 2022 York show. The invite is for the Black Hall, probably because our previous displays have always been in the Black Hall.

Per the TCA Eastern Division coordinator: They are focusing on vendor participation in the Orange Hall and have not allocated any space for layouts at this time. It is early in the process though and I assume there will be layouts in the Orange Hall based on the October 2021 York show. I have indicated the National Capital Trackers are very interested in the Orange Hall as an alternative to the Black Hall and would like to be considered if space becomes available.

No matter which hall is finalized a lot of effort is required to actually make it happen. Solicit member participation, assign a Trackmaster, design a layout, coordinate the logistics for starters. All time-consuming efforts.

First in line is member participation. Please let me know if you are supporting a York show this Fall and if so, how many modules. Use my email address harkinsrj@aol.com

As far as I know at this time the show should be a Thursday, Friday, Saturday event with setup on Wednesday,

I do need to respond to (TCA Eastern Division's Invitation) in the near future so a timely response is appreciated.

Thanks, Regis

Club Cars

NCT club cars are back in the conversation. There are still 14 MTH Premier Line 100T covered hoppers available, in two different road numbers, at \$52 each.

Contact Mike Fistere at 88michael@verizon.net to get yours.

You may also contact Mike with ideas for new club cars. Specify what kind of car, Premier or RailKing, O or standard gauge, tinplate, or whatever.

WMSRR Outing

Anyone interested in an outing to the Western Maryland Scenic Railroad, now running the restored #1309 Mallet picture last month, should contact Regis.

Cats Smash Trains! (from Google News)

These “adorable” cats provide the entertainment at a train-themed restaurant in Japan. Apparently customers enjoy watching the cats go Godzilla!



Photo Gallery: Manassas Candy Factory Show, 2017

Photos by Regis Harkins





Galloping Goose 1.0, from Silverton, CO, by Regis



Santa Fe Doodlebug – A Warbonnet only its mother could love



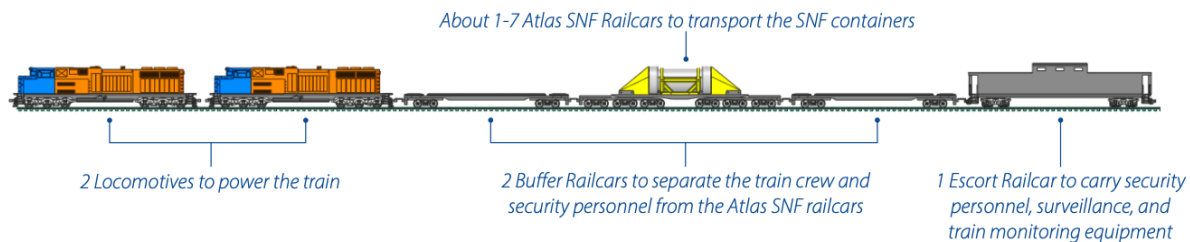
THE NAVY’S NEW TRAIN CAR HAS ALL THE FIREPOWER AND TECH YOU NEED FOR NUCLEAR SECURITY (Sandboxx article forwarded by Tom Hargis)

By Hope Seck | January 27, 2022

Major train heists aren’t as common now as they were in the Wild West, but railways still carry some highly sensitive cargo that demands heavy-duty, specialized protection. That’s why the U.S. Navy, better known for aircraft carriers, submarines and fighter jets, is adding a sleek new armored train caboose to its arsenal, designed to protect shipments of radioactive waste and house mission-relevant security personnel.

The slate-blue Rail Escort Vehicle, or REV, a collaboration between the Navy and the U.S. Department of Energy, departed its assembly site at Vigor Industrial in Portland, Oregon this month for a testing location at the Transportation Technology Center, Inc. in Pueblo, Colorado, where it will undergo a final slate of tests. When it enters service as soon as 2024, REV will get hooked up to

DoE's [new Atlas railcar](#), built to hold hundreds of tons of spent nuclear fuel. For the Navy, the trains will carry spent fuel rods from shipyards and propulsion facilities on the East and West Coasts to the Naval Reactors Facility in Idaho Falls, Idaho, for inspection and temporary storage before final disposal in dry casks underground.



Atlas Railcar (Dept. of Energy)

Many details about the new caboose are classified, but DoE says it will provide *“enhanced security, communication and surveillance capabilities,”* compared with the smaller yellow escort cabooses currently used for the mission.

A spokesman for the Navy Nuclear Propulsion Program (NNPP), Lee Smith, said the final two-year phase of testing will involve multiple [train cars](#) and demonstrate compliance with the Association of American Railroads’ S-2043 regulation governing the transport of radioactive material.

“As part of multiple-car testing, these railcars will be coupled together in a prototypic train setup and tested together. The majority of multiple-car testing will occur on closed test track loops at the Transportation Technology Center near Pueblo, CO but will also include testing on commercial rail track, culminating in a DOE demonstration run,” Smith said in an email.

“The specific sequence and timing of multiple-car testing is currently being finalized.”



Atlas SNF rail car (Dept. of Energy)

Tests that have already been completed, he said, include demonstrations for each railcar design, including a “cask” car to carry the nuclear waste and a “buffer” car to accompany it.

Once the REV hits the rails after testing, it will hold a complement of specially trained security personnel, providing them “a comfortable living and working environment,” according to a fact sheet, for rail trips that can span thousands of miles – from the Portsmouth, Maine, Naval Shipyard to Idaho, for example. The solid REV, windowless except for small apertures [The Drive](#) describes as firing ports, stretches nearly 69 feet long and weighs 185,000 pounds fully loaded. While the total cost of the caboose isn’t clear, DoE contributed \$10 million to its development. Ultimately, the Navy plans to procure five of the railcars, Smith confirmed. The Department of Energy will buy its own similarly designed escort vehicle for commercial shipments.



DOE Rail Escort Vehicle



NNPP Rail Escort Vehicle (under construction)

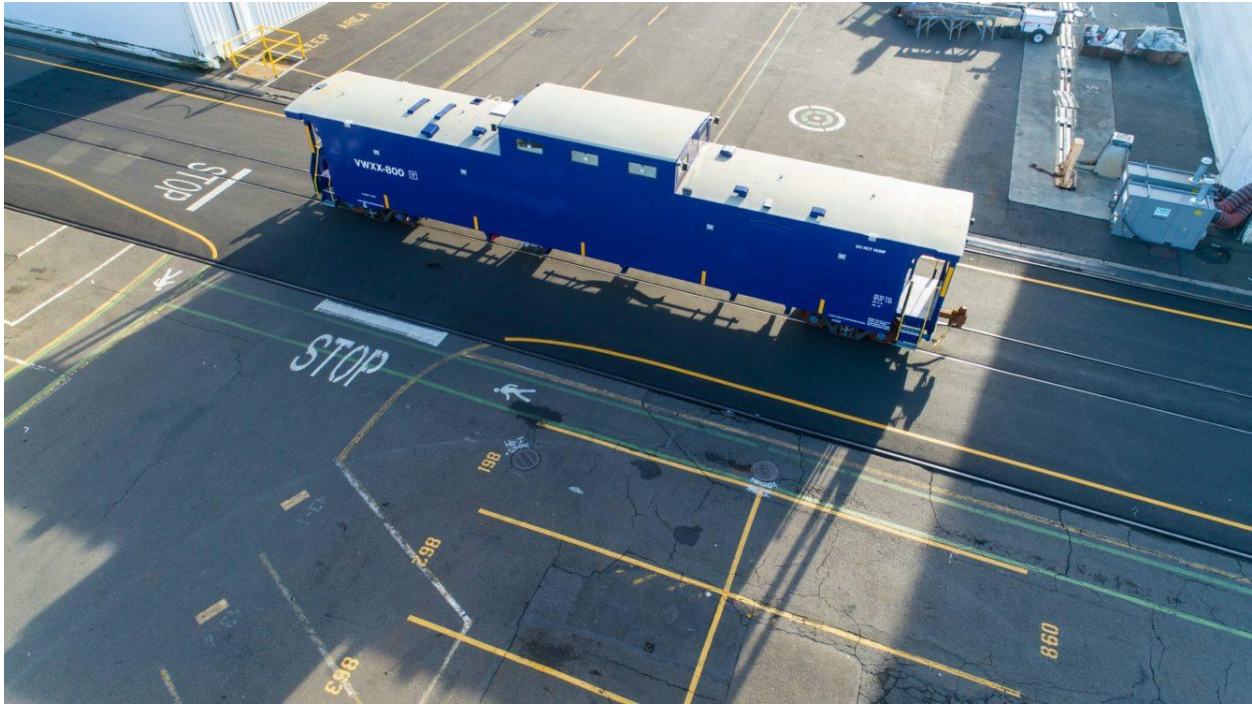
Rail Escort Vehicle General Characteristics	
Manufacturer	Vigor Works LLC.
Truck Design	Two Truck Sets (four axles per railcar) Amsted Rail 100 Ton Swing-Motion™ Custom Spring Package with Vertical Dampers 36" Wheel Diameter
Overall Length	68' 10-9/16" Over Pulling Faces
Overall Width	10' 4-25/32" Maximum
Clearance Diagram	Meets Plate E Equipment Diagram (AAR Standard S-2031)
Maximum Weight	185,000 Pounds

(Dept. of Energy)

Smith confirmed that Navy waste shipments would be accompanied by “Navy personnel that are specially trained, armed, and have access to extensive and redundant communications capabilities.” He did not specify, however, what job rating these sailors would come from, or what weapons they and the REV would carry. He did note that security regulations limited what he could say about some aspects of the caboose’s operation.

“The REV is the last piece of the puzzle in completing a railcar system to safely transport the nation’s spent nuclear fuel,” Patrick Schwab, Atlas project manager for DOE’s Office of Nuclear Energy, said in a January release.

“This project is a prime example of the great collaboration between DOE and the Navy and will further serve the nation’s naval nuclear propulsion program, as well as our civilian reactors which currently supply more than half of our nation’s clean energy.”



Rail Escort Vehicle (Vigor Industrial)

The Navy has more than 100 nuclear reactors, most of which power its fleet of carriers and [submarines](#). Nuclear reactor cores are a long-lasting, zero-emission fuel source, and the Navy prides itself on its perfect record of safety to date in its employment of nuclear propulsion. But when nuclear fuel is spent, the disposal process is both delicate and laborious. The fuel in a Nimitz-class aircraft carrier lasts about 25 years, about half the carrier's service life. The nuclear core in an attack submarine can last between 20 and 30 years.

"The first nuclear-powered submarine, USS NAUTILUS (SSN 571), was refueled after her first two years of operation having steamed about 62,000 miles," a [NNPP brief from 2017](#) stated.

"Today's nuclear-powered attack submarine will not require refueling during its 33-year life and will steam over one million miles."

Rail transport has been the Navy's go-to option for spent nuclear fuel for over six decades, according to NNPP. The safety requirements for shipping radioactive waste cross-country are so demanding, and the waste containers themselves so massive, that trains are the practical option. The Navy's M-290 Spent Fuel Shipping Container, which looks like a gigantic horizontal Shake Weight, encases its load with 10 to 11 inches of solid stainless steel. Another model, the dome-like M-140, features 14 inches of stainless steel and weighs up to 350,000 pounds when loaded.



M-290 Naval Spent Fuel Shipping Container
(10-11" solid stainless steel)

These containers have to withstand a brutal beating, according to federal regulations.

According to [NNPP briefing slides](#), the containers must be able to withstand any combination of the following events:

- 30-foot drop onto an unyielding surface;
- 40-inch drop onto a 6-inch diameter vertical metal rod;
- Fully-engulfing 1475 degree Fahrenheit fire for at least 30 minutes;
- Immersion in 50 feet of water.

Radioactive material is a massive public health hazard, as anyone who watched the HBO miniseries Chernobyl knows. The Navy spends substantial time and resources on shipment accident exercises, [conducting mishap drills in 11 locations](#) across the U.S. between 1996 and 2017, according to briefing slides. These exercises simulate various disasters that could threaten the shipment or train, and involve extensive communication with local authorities and civilian emergency personnel.

In one [2015 exercise](#), Navy officials simulated a spent nuclear fuel transport train getting hit by a dump truck in Granger, Wyoming, causing the train to derail and

injure the driver. The exercise involved regional radiological surveys that confirmed radiation levels were normal, and the train ultimately was cleared to continue on to its destination.

The existence of an escort caboose packed with armed security personnel indicates preparation for a decidedly more nefarious scenario, however. Security experts have speculated about the possibility that terrorists could steal spent fuel rods for use in a radioactive “dirty bomb” or similar weapon. This was a topic of particular concern following the terror attacks of Sept. 11, 2001.



Shipping Practices

- Railcars frequently inspected and maintained at highest standard

- Location and status constantly monitored via satellite tracking

- Advance arrangements with railroad operations and railroad police

- Outreach with civilian authorities, e.g., accident exercises



- Escorted by specially trained NNPP shipment couriers
 - 24/7 surveillance
 - Immediate emergency response

The previous yellow Navy Rail Escort Vehicle train caboose (Dept. of Energy)

Field Trip to MTH, by Mike Fistere

MTH’s new offices and warehouse are located at 6660 Santa Barbara Road, Suite #20, Elkridge, MD, 21075. It is located in a warehouse complex with plenty with plenty of room for parking. The building has large front and rear rollup doors to accommodate freight deliveries.

The left half of the space accommodates very neat shelving for parts distributions. The right half of the building has technical services and Sales offices. The rear portion accommodates the movement of freight in and out of the building. All together it amounts to a well thought out design and use of the offices.

Communications is the best part of the new MTH. With the advent of the computer, a more effective system of dealing with customers' inquiries can be addressed quickly. sales@nth-railking.com.

Sales is separate from Parts—two different entities which leads to a better operation and more efficient services.

There is a daily newsletter produced by Sales to inform the customers of new products and services. Signup is: [www//nthtrains.com](http://nthtrains.com).

All repairs are done by the dealers. MTH sells parts to both customers and dealers online. You order it, you get it! : info@nthpartsandsales.com.

In summary, MTH has a smaller building footprint but still operates at full steam. Production of new products is alive and well in the annual sales and services offered by the train manufacturing company.

Reported by Mike Fistere's visit to MTH on January 24, 2022.

Cumbres & Toltec Scenic commission votes to restore Rio Grande K-37



Denver & Rio Grande Western K-37 No. 492 sits in Antonito, Colo., in July 2008. The locomotive is one of two candidates for restoration by the Cumbres & Toltec. (Trains: Jim Wrinn)

CHAMA, N.M. — We may yet see a Rio Grande K-37 climb Cumbres Pass once more.

The two-state commission that oversees the Cumbres & Toltec Scenic Railroad voted to restore a Rio Grande K-37 2-8-2, returning that model to the 64-mile narrow gauge railroad for the first time since 2002 when No. 497 ended service. The railroad has both No. 497, restored to operation in 1984, and No. 492, which hasn't steamed since the Rio Grande shut down regular freight operations on the narrow gauge in 1968.

C&TS President and Colorado Commissioner Scott Gibbs tells *Trains* News Wire that both locomotives will be evaluated to determine the best restoration candidate. The addition would give the railroad five large locomotives necessary to cover the regular schedule, engineer/fireman schools, and special events, he says. No timetable was established for the evaluation or overhaul.

The K-37 Rio Grande Mikados are unique because they were built as standard gauge Consolidations in 1902, with 10 converted to narrow gauge between 1928-1930. Of the eight survivors, two others are in operation. No. 491 at Colorado Railroad Museum in Golden was restored in 2014, and No. 493 was restored as an oil-burner at Durango & Silverton in 2020. It was the star of a *Trains* Magazine photo charter in September 2021.

In other CT&S commission news, Gibbs reported in a post to the Narrow Gauge Discussion Forum:

— Restoration on the Osier dining hall, damaged by fire in late 2021, will resume in the spring with the aim of being ready for the railroad's June 11 opening day. Restoration will cost more than \$1 million.

— The Commission approved a resolution to build a secure storage building for the railroad's newly restored historic-car consist and 4-6-0 No. 168 in Antonito. Plans call for construction this summer, with funding from the railroad's Historic Preservation Account. (Article courtesy of Trains magazine NewsWire)

Train Movie Update

“Bound for Glory,” a Woodie Guthrie biopic starring David Carradine.

The **Beltline** needs your articles **in MS Word format**, photos **as JPEG image files**, and links about trains and railroading, prototypical or scale, new or old. Send them to GilBaldwin3@gmail.com