



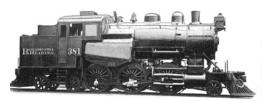
# The Reading Gas-Electric Rail Car

BY T. H. MURPHY, GENERAL ENGINEER, WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY ORIGINALLY PUBLISHED IN RAILWAY AGE MAGAZINE, VOL. 80, No. 2 - JANUARY 9, 1926

A Gas-Electric car with a luggage compartment and seats for 55 passengers was recently placed in service on the Trenton Branch of the Reading. It is capable of high operating speeds with or without trailers. Since being placed in service it has been run approximately 16,000 miles. It gives frequent service between Trenton and the main line connection of this branch of the Reading with New York-Philadelphia trains at Trenton Junction. The total run is 3.7 miles. The service is severe; four station stops are made and operating at times is with a standard trailer. There are grades up to 1.1 per cent on this line. No auxiliary power unit is needed since the car was designed for this service.

The average schedule time for the one-day trip (Trenton to Trenton Junction) is ten minutes. Layovers at each terminal are from 4 to 10 minutes in duration, giving a maximum round trip of 24 minutes. Without layovers the average schedule speed is 22 miles an hour. A total of 21 round trips are made on week days and 23 on Saturdays, giving an average daily mileage of 170. A 110,000-lb. standard steel coach is hauled on three of the round trips. This *[Gas-Electric]* rail car is also used for the switching of express cars at Trenton and the transferring of one 73-ton express car from Trenton to a main line train at the Junction.

#### Mechanical Structure



This one gas-electric car has replaced two Class Q-1, 2-6-4 type steam locomotives and one coach. The locomotives were of a special design for operation in either direction and in normal service ran around the cars as the layover time at each terminal was inadequate for turning on a wye. For normal operation of the car no extra movement is necessary as the control is arranged for operation from the rear end and, unless a trailer is hauled, the operator can run the car from the rear end.

The car was constructed to meet the exacting demands for a smooth riding, high-speed

unit. The weight without load, but with all necessary equipment, is 90,000 lbs. For operating weight, approximately 10,000 lbs. should be added for the average live load.

The car body is of the light-weight steel type, and has straight sides, round ends, arched-type roof, single sash (windows) arranged to raise, and is equipped with post castings of spring brass. The underframe consists of a center sill of two 12-inch channels on which the engine generator is mounted longitudinally. Heavy cross members riveted to the center sill support the car body frame. The car body is 60 feet long over the end sills and 9 ft. 6 in. wide over the posts. The height from the floor to the roof of the car is 7ft. 10 in. The overall height is 12 ft. 3½ in. The engine room, 10 ft. 8 in. long, houses a gasoline engine-generator unit and the control apparatus. A baggage room is provided which is 11 ft. long and 9 ft. wide, giving a floor area of almost 100 sq. ft., of which about 16 sq. ft. is occupied by a hot water heater. The main section is a passenger compartment which is 35 ft. 10 in. long and has seats for 50 passengers. The seats are of dark brown imitation leather, 40 in. long, and are spaced 2 ft. 7 in. Steel partitions, with a swing-type door, separate the engine room from the baggage room from the passenger compartment.

The trucks have a fixed wheelbase of 6 ft. 6 in. With 33-inch wheels and are spaced 44 ft. 6 in. between centers. The front pair under the engine-generator set support approximately 60 percent of the car weight. The long wheelbase and truck center distance and extra heavy trucks were used to give good riding qualities, which are added to by the steel construction used in the underframe post and side sheeting.

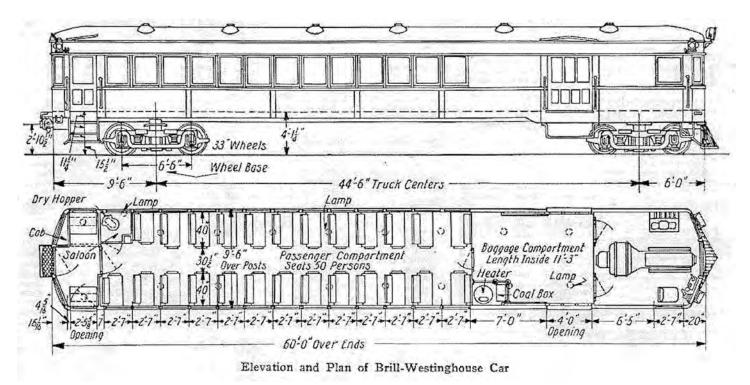
#### MOTIVE POWER EQUIPMENT

The motive power equipment consists of a gasoline engine driven generator, two motors, and suitable control apparatus for reversing the direction of the car and controlling its speed. All units were designed with the idea of obtaining simplicity, reliability, and economy in operation. The car weight and service dictated that an engine capable of delivering 250 hp. be used with electrical equipment capable of utilizing the total engine power. The generator and motors are capable of utilizing the full engine power and the flexibility of the control

is such that high speeds without trailers or medium speeds with trailers can be obtained.

The engine power output having been determined from the car weight and service conditions to be met, it was a simple matter to design a gasoline engine capable of delivering the desired power at a reasonably low speed along the lines of standard design. The engine has a 7<sup>1</sup>/<sub>4</sub>-in. Bore and 8-in. Stroke, and delivers 250 hp. at 1,000 r.p.m. This speed was determined from an engineering standpoint by considering the low weight necessary for such a unit, and also the low maintenance costs that go with low engine speeds. The low speed permits an especially sturdy construction.

The engine has six cylinders, with removable liners and dual heads. It is of the valve-in-head type with two exhaust and two intake valves to each cylinder. The water cooling space around the cylinders is adequate to maintain proper temperature at all speeds and loads. Trunk type pistons are used with four rings above the wrist pin and one scraper ring. The crankshaft is supported by seven main bearings. It is hollow and arranged so that oil is forced through it to all the main bearings, insuring ample lubrication.



Two complete ignition systems are provided, by means of two high-tension magnetos with impulse starters used with two complete sets of spark plugs. The magnetos are driven independently and are of the single spark type with manual advance and retard regulation. A centrifugal water pump is used for circulating the cooling water. The oil pump discharges oil to the lubricating oil header. Fuel is supplied by vacuum feed to the carburetor from tanks located under the car.

Two motors are used for engine starting duty. A ring-gear is mounted on the flywheel, and the motors, with Bendix drive, are mounted one on each side of the engine to mesh properly with the ring-gear. The motors are connected in parallel across the terminals of a 32-volt battery when used to turn the engine over. One motor is capable of bringing the engine up to sufficient speed for firing. The engine cooling water has its temperature regulated by a radiator of the ordinary fin and tube type mounted on the left side of the car. Air is forced through the radiator by a fan, driven by a motor that is connected across the generator whenever the engine is in operation. The quantity of air can be regulated by shutters placed in the radiator.

The generator and engine are mounted as a unit on a common bedplate. A flexible disc coupling with four 16-in. discs is used for connecting them together. The complete power unit is mounted longitudinally in the engine room on the center line of the car. The bedplate is mounted on rubber blocks supported from the center sills of the car body.

The generator is of a special type, designed for service with a gasoline engine in a rail car. An exciter, mounted directly on the shaft of the main engine, is used for exciting the main shunt-field winding and also for supplying power at a low voltage for the car lighting circuits and for charging the battery. The shunt field of the exciter receives its excitation from the 32-volt battery.

Each machine has six poles. The main machine operates at 600 volts with a normal load at 1,100 r.p.m. and the exciter at voltages up to 600. The principal feature of design is the constant output characteristic of the generator to prevent overloading the engine. With this design of generator the engine runs at constant speed over a wide range of current values, i.e., a wide variation in car tractive effort. The constant output characteristic was obtained by placing a differential series winding on the poles of the exciter and passing the motor current

through it. This gives variations in field strength that are inversely proportional to the current load. The voltage, therefore, drops off in proportion to increases in current demand and the engine can deliver its full power to the motors at any car speed.

The space and weight limitations imposed by this application demanded that the greatest possible ventilation be obtained with a minimum of extra apparatus. The type of application greatly aided in this, as a one-directional fan could be used on the generator shaft, by which large quantities of cooling air are drawn through the machine. It is located at the engine end of the generator and draws the air in over the commutator which is located next to the outer bearing. The location of the commutator facilitates brush inspection.

The generator supplies power to two 140-hp. motors located on the forward truck of the car. These are standard 600-volt, direct current type. They are constructed with solid frames and have openings to permit circulation of air by means of a fan located on the motor shaft. Commutating poles insure good commutation over a wide current range. The motors are axle hung and drive through solid helical gears, having a 16:61 ratio, which are totally enclosed and run in grease. This large gear reduction was used to give the high tractive effort necessary with trailer operation.

#### Control

The control for the Reading car is simple. Two unit switches are employed for connecting the motors to the generator, and also a reverser for changing the direction of current flow through the motor fields, and hence the direction of car operation. These are of the electropneumatic type ordinarily used for equipment of this size. Their operation is governed by a master controller located conveniently to the operator.

The car speed varies with the generator voltage. This is regulated by governing the engine speed, i.e., the engine throttle setting. A sequence drum with a cam is located on the generator with the necessary push rods to the throttle. The position of the cam determines the throttle setting and hence the engine speed. The movement of the drum is regulated by the same master controller that operates the unit switches and reverser. The operator, therefore, has only one control to use for operating the car. The first movement of the master controller closes the unit switches and also a relay that energizes the exciter field. Further movement of the master controller only causes further rotation of the sequence drum, i.e., opening of the engine throttle. All the control apparatus, including a number of knife switches for the motors, generator fields and battery circuits, are located on a rack and panel on the generator.

A battery charging regulator is placed between the variable voltage exciter and the 32-volt battery. An additional regulator is placed between the battery and all 32-volt load circuits. A two-directional ammeter is placed convenient to the operator to indicate battery charge and discharge. An oil gauge and an engine tachometer are located on the engine. These are readable from the operator's position.

As the sequence drum determines only the engine speed, it is a very easy matter to operate two or more of these cars from one position. It is but a matter of placing the control wires in parallel and notching up the two drums together. A master controller is on the rear end of the Reading car to permit double-end operation. Where continuous operation of a two-car train is desired, a master controller can be placed on the rear end of the trailing car and eliminates the necessity of turning the whole unit.

#### AUXILIARIES

Two air-storage tanks under the car provide compressed air for the air brakes, whistles, bells, sanders and the electro-pneumatic switches and reverser. They are kept charged by a motor-driven compressor having a capacity of 20 cubic feet per minute. This air compressor cuts in and out automatically. Fuel tanks are also located under the car.

The lighting is furnished by a 160 ampere-hour, 32-volt storage battery which is kept charged by the exciter mounted on the engine generator set. This storage battery also actuates two electric starting motors on the engine. Standard regulators hold the lighting and charging voltage constant.

#### PERFORMANCE

The car is capable of speeds up to 51 miles an hour and is able to handle a standard railway coach in regular service. The gear ratio on this type of car determines the maximum speeds that can be attained. The balancing speed on the level with the 16:61 gear ratio is 45 miles an hour. A speed of 55 miles an hour is possible with smaller reductions between the motors and wheels.

Orders for similar equipment have recently been placed by the Boston & Maine, New York, Ontario & Western, Pennsylvania, Great Northern, New York, New Haven & Hartford and Erie railroads.

#### Reading Company Brill Motor Car No. 80 in January, 1930 - Kim Piersol Collection

This article also appeared in *The Observation Car* - newsletter of the Delaware Valley Chapter, N.R.H.S.







# THE POWER DIRECTOR

#### "NEWS FROM THE RAILROAD WIRES"



#### Moving K-4 Steam Engine Still The Goal



Locomotion is still in the works for the Railroaders M e m o r i a l Museum's historic K-4 steam engine, despite recent reports to the c o n t r a r y, according to the m u s e u m ' s executive director.

Larry Salone said that it's true the museum board recently approved a plan that calls for the K-4 to be assembled for display at the museum in Altoona. But it's not true he's given up on making the locomotive run after about \$1.6 million and 13 years of promises, problems, restarts, fitful progress and frustration.

Salone doesn't intend to settle for making the K-4 a static display, or even a static display with fire in the firebox and enough steam to blow the whistle, as board member Rudy Husband (*also a Media Contact for Norfolk Southern Corp. in Plymouth Meeting, Pa. - Ed.*) suggested last week.

Instead, Salone will present a plan to the board that calls for the famous locomotive to be running by early next year - not necessarily fast or on the open tracks pulling excursions - but under its own steam, at least.

"If that's the case, I think that's fantastic," said Dick Charlesworth, a former board member who was dismayed about last week's news.

"Blame it on me," Salone said of the misunderstanding.

"We all want the K-4 to come back and operate," Husband said Monday. "If he has a plan to do that, I'm sure it will be welcome."

Salone has been working on the K-4 problem since he took over the museum in fall 2007, he said.

A prerequisite will be completion of the long-delayed quarterroundhouse in the yard to house the reassembly and to shelter the locomotive after it's put back together, he said. Other prerequisites include hiring a steam locomotive expert to finish and test the boiler at his shop and to supervise the reassembly in Altoona. The museum should have enough money.

The museum will cover the cost of the quarter roundhouse with a \$2.1 million Redevelopment Assistance Capital Program grant obtained a year ago by state Rep. Rick Geist, R-Altoona, after a long battle.

It will comply with a 50-50 match by using about \$2 million in matcheligible money it had previously spent above and beyond the required match for an earlier \$1.6 million RACP grant. That comprised \$1.4 million for museum yard work and \$590,000 for the K-4.

The museum will pay for the additional work with \$300,000 in unspent K-4 money, matched with museum income and donations already in hand and donation commitments. The grant money must go for labor in Altoona and getting the locomotive running again, Salone said. Most

of the K-4 is in pieces in eight trailers in Altoona. The boiler, frame and tender remain in Steamtown, where it has been since the start of the project in 1996.

The museum hopes to begin the roundhouse construction in two or three months and complete it by early fall, Salone said. Then it can get to work reassembling the K-4, which museum-goers can witness. The K-4 will start out chugging in the yard, going back and forth, to show it can go, he said.

"We don't want to have a debacle again," Salone said, referring to the 1988 breakdown that ended the last run of the K-4.

If the yard runs are successful, the museum can negotiate with track owners like the Everett or the Nittany & Bald Eagle railroads for permission to run an excursion, Salone said. Norfolk Southern may be out, because it has a policy of not allowing steam locomotives run under their own power on its mainline tracks, Husband said. There are also insurance issues, Salone said.

After it's running, experts can help the museum evaluate what additional improvements it would need to bring the K-4 up to Class I railroad standards, so it could travel fast, like it used to in its heyday, Salone said. A static display isn't good enough, especially for younger people who never saw a steam engine run, Charlesworth said.

"When you see that thing operating - steam and smoke coming out of it, and you see it moving down the tracks," he said. "It's self-explanatory."

People were upset about last week's announcement, but it had a positive side, Salone said. "It shows you there's still a lot of love and passion," he said. [WILLIAM KIBLER, ALTOONA MIRROR - APRIL 20, 2010]

## AMTRAK

#### Amtrak Positive Train Control On The Fast Track

WASHINGTON – Amtrak is moving ahead aggressively to expand and build out its existing and proven train collision prevention safety

technology—commonly known as Positive Train Control (PTC)—to cover all of the tracks it owns along the Northeast Corridor (NEC) and on its Michigan Line by the end of 2012, three years ahead of a federal deadline.

"Amtrak has long been a leader in the development and operation of PTC safety technology and we are extending it to cover all of the tracks we own," said President and CEO Joseph Boardman, noting federal law requires PTC on most tracks where passenger trains operate by the end of 2015.

PTC technology can control train movements to prevent train-to-train collisions, derailments caused by excessive speed and certain humancaused incidents such as misaligned track switches. It can also protect roadway workers by slowing or stopping trains from entering work zones.

To accomplish the self-imposed and accelerated timeline, Boardman said America's passenger railroad is moving forward on a number of fronts. Amtrak will submit a PTC Implementation Plan to the Federal Railroad Administration by April 16 as required by law, is now designing the build out of its existing PTC system along the NEC, and will begin to expand the PTC system on all of its Michigan Line in 2010. In addition, Amtrak has established a new Deputy Chief Engineer

position responsible for PTC implementation and other special projects.

Amtrak also is working with freight and commuter railroads that operate on Amtrak-owned tracks as well as with the host railroads on whose tracks Amtrak trains operate to ensure PTC systems being deployed across the country are interoperable. Interoperability is essential to maintain safety as freight and passenger trains pass from one PTC system to another.

Boardman explained Amtrak presently has two PTC systems that have been successfully operated for years. The Advanced Civil Speed Enforcement System (ACSES) is installed on many sections of track along the NEC between Washington, D.C. and Boston and will be built out so all remaining Amtrak-owned sections are equipped with it. Also, Amtrak is working with its partners that own other portions of the NEC to assist them with their PTC plans so they are compatible with ACSES.

The Incremental Train Control System (ITCS) is currently installed on most of the Amtrak-owned Michigan Line between Kalamazoo, Mich., and Porter, Ind. In 2010, ITCS will be installed on the last two remaining sections of track located on the western and eastern ends of the line between New Buffalo, Mich., and Porter, Ind., and between Oshtemo and Kalamazoo. *[Amtrak]* 

#### Amtrak Ridership On Record-Breaking Pace

WASHINGTON – Amtrak is on pace to break its annual ridership record carrying a best ever 13,619,770 passengers during the first six months of fiscal year 2010 with the historically busier summer travel season still ahead.

The 13.6 million passengers who rode on Amtrak trains during the first two quarters of FY 2010 (October 2009 - March 2010) contributed to a 4.3 percent increase over the same period the prior year. It also is about 100,000 more riders than the 13.5 million posted in FY 2008, which turned out to be Amtrak's best ridership year in company history when America's passenger railroad carried 28.7 million passengers.

Comparing March 2010 to March 2009, ridership increased by 13.5 percent to a record 2.47 million passengers for the month. In addition, every single Amtrak route carried more passengers with several experiencing double-digit growth.

The Northeast Corridor experienced strong ridership growth in March with Amtrak's high-speed train, *Acela Express*, seeing a 14.3 percent increase and *Northeast Regional* trains up 12.9 percent. For the first six months of FY 2010, *Acela* service increased 2.9 percent and *Northeast Regional* service grew by 4.7 percent.

Ridership on long-distance trains increased by 16 percent in March and is up 5.2 percent for the first two quarters of FY 2010. Long-distance trains posting strong six-month numbers include *City of New Orleans* (Chicago – New Orleans ) up 16.4 percent, *Sunset Limited* (New Orleans – Los Angeles) up 15.1 percent, *Silver Star* (New York – Raleigh – Tampa - Miami) up 8.3 percent and *Coast Starlight* (Los Angeles – Seattle) up 7 percent.

Amtrak's popular *Auto Train* saw significant growth in the month of March, increasing 25.1 percent over March 2009, and carrying nearly 25,000 passengers and their cars, motorcycles and other personal vehicles between Lorton, Va., and Sanford, Fla. For fiscal year to date, *Auto Train* ridership has increased by 8.6 percent.

The FY 2010 Amtrak ridership figures are consistent with the annual growth seen during the last several years that saw a 32 percent increase in passengers from FY 2002 to FY 2008. In order for Amtrak to continue to accommodate increasing demand for intercity passenger rail service it must replace, expand and modernize its fleet of aging locomotives and passenger rail cars. Mr. Boardman describes this as the railroad's "most urgent unfunded need" and recently requested \$446 million from Congress to fund its Fleet Acquisition Program. [Amtrak]



#### CSXT, Delaware and Hudson Propose Joint Use <u>Arrangement for Improved Service</u>

JACKSONVILLE, Fla. and CALGARY, Alberta, April 29, 2010 - CSX Transportation, Inc. (CSXT)

and Canadian Pacific subsidiary Delaware & Hudson Railway Company (D&H), have filed an application with the Surface Transportation Board (STB) for regulatory approval of a joint use arrangement that improves operating efficiency for both CSXT and D&H.

In their application, the companies said that the proposed transaction would strengthen the competitive capabilities of both CSXT and D&H by allowing them to operate more efficiently and to offer better service products. They also said it would create a more efficient corridor for traffic moving between eastern Canada and the eastern United States, reducing fuel consumption.

Under the proposed joint use agreement, CSXT and D&H would use jointly a north-south rail corridor linking the New York City metropolitan area with the international border at Rouses Point. The joint use corridor would include a line operated by the D&H between Rouses Point Junction (near the Canadian border) and Albany, N.Y., and CSXT's line between Albany and Fresh Pond, N.Y.

D&H would operate all trains between Saratoga Springs, N.Y., and Rouses Point. Both railroads would conduct their own train operations between Albany and Saratoga Springs. Some of this traffic now moves over CSXT's Massena Line, which runs from Syracuse, N.Y., to Huntington, Province of Quebec. The joint use arrangement would improve the transit time of this traffic to Albany by more than 45 percent, reduce transit miles by 35 percent and gross ton miles by 442 million.

The proposed joint use arrangement also calls for CSXT to handle certain D&H freight moving between Albany, N.Y., and the New York City boroughs of The Bronx and Queens, and enables D&H to offer significantly greater frequency of service between Montreal and metropolitan New York City. D&H also will retain previously STB approved trackage rights between Albany and Fresh Pond.

CSXT and D&H will continue to serve all customers that they serve today, including local shippers on CSXT along the Massena Line. No shipper will lose a rail competitive option as a result of the proposed transaction. *[CSX Corp.]* 



#### <u>Norfolk Southern Reports First-Quarter 2010</u> <u>Results</u>

NORFOLK, VA. – For the first quarter of 2010, Norfolk Southern Corporation (NYSE: NSC) reported net income of \$257 million, or \$0.68 per diluted share, 45 percent higher compared with \$177 million, or \$0.47 per diluted share, for the first quarter of 2009.

First-quarter 2010 results were impacted by a \$27 million, or \$0.07 per diluted share, deferred tax charge resulting from the enactment of recent healthcare legislation, which, effective in 2013, eliminates the tax deduction available for prescription drug expenses reimbursed under the Medicare Part D retiree drug subsidy program.

"Norfolk Southern delivered strong financial performance during the first quarter, reflecting positive trends in the economy," said Norfolk Southern CEO Wick Moorman. "Demand for rail transportation continues to grow in most sectors of our business. We remain confident that many of the cost efficiencies we have achieved will remain in place as we continue to invest in key projects and new business opportunities."

First-quarter railway operating revenues improved 15 percent to \$2.2 billion, compared with the first-quarter of 2009, primarily as the result

#### LANCASTER DISPATCHER

of a 9 percent increase in traffic volume.

General merchandise revenues were \$1.2 billion, 23 percent higher compared with the same period last year. Coal revenues increased 4 percent to \$629 million compared with first-quarter 2009 results. Intermodal revenues were \$410 million, up 12 percent compared with the first quarter of last year.

Railway operating expenses for the quarter were \$1.7 billion, up 8 percent compared with first-quarter 2009, primarily a result of higher fuel expenses, which rose by \$95 million or 60 percent, largely related to increased prices.

Income from railway operations for the quarter improved by 45 percent to \$555 million compared with the same period of 2009.

The railway operating ratio improved by 5.1 percentage points to a post-Conrail transaction first-quarter record of 75.2 percent, compared with 80.3 percent in first quarter 2009. *[Norfolk Southern Corp.]* 

#### NS, EMD Looking At Biodiesel

Norfolk Southern and Electro-Motive Diesel, Inc. have entered into a joint venture to test blended biodiesel locomotive fuel. In what both parties are describing as "one of the most extensive testing programs to date on the use of biodiesel fuel for locomotives, ten units—eight EMD SD70M-2 road units and two EMD MP15, all owned by NS, will run in regular service for up to 11 months to evaluate their performance over a wide range of operating and environmental conditions. Biodiesel's effect on emissions, fuel consumption, performance, and durability will be evaluated. The fuel blends will range from B10 (10% biodiesel) to B20 (20%).

"Biodiesel fuel, a renewable resource, has been shown to reduce emissions of greenhouse gases, hydrocarbons, and particulate matter, while essentially eliminating exhaust emissions of sulfur oxides and sulfates," said NS Vice President Real Estate and Corporate Sustainability Officer Blair Wimbush. "Norfolk Southern is committed to exploring ways to conduct our business using renewable resources. Our work with EMD will hopefully result in an environmentally sensitive, domestically-produced fuel option for the rail industry."

"This demonstration is a part of EMD's work in further reducing emissions and improving the efficiency of our locomotives and our environmentally friendly two-stroke engine." said EMD President and CEO John S. Hamilton. "We look forward to working with NS on efforts to positively impact the environment and decrease U.S. dependence on foreign oil." *[Railway Age Rail Group News]* 



#### <u>South Korean Railcars Being Built In South</u> <u>Philadelphia For SEPTA</u>

**SEPTA** In a refurbished factory tucked below Snyder Avenue in South Philadelphia, 48 naked railcars are being formally dressed for their public coming-out later this year.

Gleaming stainless-steel bodies are slowly being filled with wiring harnesses, heating covers, lights, doors, and seats. Soon they'll be adorned with the familiar SEPTA logo and rolled out the back door to try out their new wheels on a test track. Then they'll get their real baptism of fire -carrying commuters who have been clamoring for years for relief from overcrowded, outdated, worn-out Regional Rail cars. These are the first of 117 Silverliner V cars being assembled for SEPTA at the South Philadelphia plant by Hyundai Rotem USA Corp., a division of South Korea auto manufacturer Hyundai Motor Group. Three pilot Silverliner Vs were built in South Korea, delivered earlier this year, and are now being tested by SEPTA.

The 120 new Silverliners will replace 73 railcars built in the 1960s. SEPTA's rail fleet now has about 350 cars; with the retirement of old cars and the addition of new ones, the authority will have about 400 by next year.



Technicians fit out the interior of a Silverliner V railcar under construction at the Hyundai Rotem plant on Weccacoe Avenue in South Philadelphia. Photo by Laurence Kesterson.

After years of delays, SEPTA passengers are about to get their new rides. And Hyundai is getting a foothold in the United States, hoping to use the Philadelphia plant to build cars for transit agencies around the nation.

Hyundai Rotem has a contract to assemble 75 cars for Boston's MBTA at the refurbished Weccacoe Avenue factory in South Philadelphia. Plans to assemble 121 bilevel railcars for the Southern California Regional Rail Authority's Metrolink have been scratched; most of those cars will be assembled in Colton, Calif., to save time and money, said Doug S. Dan, senior vice president of sales and marketing.

With a total price tag of \$274 million, each SEPTA car costs nearly \$2.3 million. But Dan said Hyundai Rotem was losing money on the deal. "This is our first project in the U.S.," Dan said. "We made the pricing to cover the costs at the time, but certain costs were underestimated." Dan said the South Korean firm expected the investment here to pay off by giving the company a chance to tap into the vast U.S. market.

"We're committed long-term," he said, noting that the company had leased the South Philadelphia site till 2017. "This is a very important strategic location for Hyundai Rotem. We need a volume of work to maintain the workforce here."

He said the factory had the capacity to assemble about 200 vehicles at a time. The plant now employs about 110 workers, including 20 administrators from South Korea. The American workers include engineers, electricians, mechanics, and laborers.

The steel car shells were made in South Korea. As required by law, the cars must be assembled in the United States and 60 percent of the components must come from U.S. sources. In this case, that includes brakes from Spartanburg, S.C., batteries from Cherry Hill, wheels and axles from Morton, and heating and cooling systems from West Chester.

The new cars will have wider doors, wider aisles, larger windows, electronic destination signs, automatic voice announcements of station stops, and public-address systems that can be accessed from SEPTA's control center. However, they won't have restrooms, and they will not eliminate the three-passenger seats that rankle many riders now. A still-unresolved issue is the design of the engineer's compartment. The new cars are being built with cabs similar to those in many subway cars - extending halfway across the front of the train. SEPTA engineers want bigger cabs that extend all the way across the front of the train, similar to those in the current cars. Dan said the Silverliners would be delivered with half-cabs. But he said they could be modified later to accommodate full cabs if that's what SEPTA decides it wants.

Behind the plant, Hyundai Rotem has leased 1,500 feet of CSX track to test its cars. The Silverliners are designed to accelerate and brake more quickly than the cars they replace.

The first cars will be ready for the test track by June, Dan said. Once SEPTA accepts the three pilot cars, the first production cars can begin to go into service.

By late this year, commuters may be riding in the cars now being outfitted on the South Philadelphia assembly line. As the first cars roll out the door, Dan said, Hyundai Rotem will be looking for new opportunities in the efforts by the Obama administration to develop a high-speed rail industry.

The company builds high-speed trains in South Korea for that country's rail network and it could bring the same design to production here, he said. *[Paul Nussbaum, Philadelphia Inquirer]* 



#### PRR, PRSL & LIRR EVENTS IN JUNE

June 11, 1905 - Pennsylvania Special restored on 18-hour schedule between New York and Chicago; on first run westbound, E2 Class 4-4-2 No. 7002 hauls the train between Crestline and Fort Wayne at average 68 MPH in successful effort to recover lost time on June 12; Chicago press reports a world-record speed of 127.1 MPH over three miles near Ada, Ohio, but unsubstantiated and not now accepted, although PRR repeats claim for publicity purposes many years later; New York Times of June 14 notes actual speed does not exceed about 82 MPH; train is limited to four cars, with diner cut out at Altoona.

*June 28, 1909* - PRR establishes summer-only express with parlor car between Wilmington and Rehoboth Beach, Delaware leaving Wilmington at 3:44 PM and returning at 6:39 AM.

*June 25, 1913* - PRR Board appropriates \$6.9 million for South Philadelphia Track Elevation Project, less \$2.3 million to be realized by selling old Greenwich Yard to city.

*June 27, 1917* - PRR Board authorizes purchase of property for station improvements at Harrisburg, Pa.

*June 20, 1921* - PRR announces contract to remove train shed of Jersey City Terminal at Exchange Place.



June 11, 1923 - Fire begins under tracks of Broad Street Station shortly before 1:00 AM; spreads and destroys train shed as well as a large quantity of the company's older records stored underneath tracks; about 30 trains are in the shed at the time, and most are pulled to safety; around 3:00 AM, a locomotive and two

cars crash through the weakened floor of the shed; total of eight coaches, three MU cars and three locomotives damaged; fire is brought under control about noon but continues to burn for over two days; trains are turned at North Philadelphia, West Philadelphia and the West Philadelphia Produce Yard; beginning before daylight, while the fire is still at its peak, temporary wooden platforms and stairs are built one block west of the train shed; Paoli and Chestnut Hill trains resume using the temporary platforms at 6:00 PM.

*June 24, 1925* - PRR Board authorizes "Philadelphia Improvements," including new 30th Street Station, Suburban Station, and elimination of Broad Street Station and "Chinese Wall."

*June 26, 1929* - PRR Board approves purchase of real estate for new, larger Pittsburgh Station in area bounded by Liberty & Penn Avenues and 11th & 20th Streets.

June 25, 1933 - PRR and Reading Company lines in southern New Jersey consolidated; West Jersey & Seashore Railroad leased to Atlantic City Railroad; connections built to ACRR north of Harbor Branch Jct. and 51st Street, Ocean City; PRR Cape May terminals and PRR Ocean City track abandoned; most other duplicate lines continue to operate through the summer season; buses replace rail service between 51st

Street, Ocean City and Sea Isle City for the summer.

*June 15, 1937* - Demolition of Manhattan Transfer Station begins while still in service.

*June 18, 1941* - PRR announces \$23 million equipment order including 15 GG1's and 6,020 freight cars.

June 15, 1945 - PRR returns Class T1 steam locomotives to full Harrisburg-Chicago service, ending confinement to Fort Wayne Division.

*June 26, 1949* - PRR places re-equipped *General* in service on reduced 16-hour schedule; two trainsets; becomes an all-room train; Gen. Eisenhower is at throttle for first 100 yards leaving Penn Station.

*June 28, 1953* - "MEDIA" Interlocking placed in service, and tracks between Media and Wawa revised; Track No. 1 retired Media-Elwyn and "ELWYN" and "LENNI" Interlockings retired.

June 8, 1957 - K4s No. 1361 dedicated as memorial on Horseshoe Curve in Altoona, Pa..

*June 29, 1957* - Pennsy *AeroTrain* makes last run between Philadelphia and Pittsburgh.

*June 12, 1961* - First dedicated daily TOFC train of chilled Tropicana orange juice placed in service; runs Bradenton, Fla.-Kearny, NJ with second-morning delivery.

*June 4, 1965* - PRR completes "daylighting" the Radebaugh Tunnel near Greensburg, Pa.; increases clearance on main lines from 16'-2" to 17'-5".

*June 1967* - Marketing consultant Al Paul Lefton Company recommends "Metroliner" over "Speedliner" or "Railblazer" as name of high speed corridor trains and selects split teardrop-shaped logo based on tests of consumer word and image associations.

*June 21, 1970* - After special Board Meeting, *Penn Central Transportation Company* files for Chapter 77 bankruptcy at 5:35 PM; largest corporate bankruptcy up to that time.

[Christopher T. Baer, Hagley Museum and Library via Philadelphia Chapter, PRRT&HS - Used with permission]



## TIMETABLE 06-10

For Lancaster Chapter News, see "INSIDE THE BACK PAGE"

#### Through March 26, 2011

"ALMOST as fast as birds can fly: the railroad in Delaware history" includes documents, photos, artifacts and stories representing Delaware's railroad past and present. At the Delaware History Museum, 504 Market Street, Wilmington, De. Info: www.dehistory.org

#### Friday and Saturday, June 4-5, 2010

**"Spring Fling**" at the Museum of Bus Transportation, 161 Museum Drive (off of PA Route 39) and George M. Sage Annex, Hershey, Pa. Info: www.busmuseum.org.

Saturday and Sunday, June 5-6, 2010

**East Broad Top Railroad Opening Weekend & 50th Anniversary Celebration** - Many special events are planned for June 5th including an expanded operating schedule. Highlights include:

- Special guests will speak about our 50 year tourist history
- Special 7:00pm train to Colegate Grove with a catered meal to be served
- Slide show and movies will chronicle our rich, historic past

#### LANCASTER DISPATCHER

- Commemorative tickets
- Expanded souvenir selection including new, commemorative items
- Antique tractor show plus much more!

Purchase of a commemorative \$25.00 ticket includes one steam train ride, one speeder ride, one shop and roundhouse tour, plus a chance to win a framed EBT print! *[East Broad Top Railroad]* 

#### Saturday and Sunday, June 12-13, 2010

 $2^{nd}$  Ride the Rails for Cancer on the Middletown & Hummelstown Railroad sponsored by the Conrail Historical Society. Takes place at Hoffer Park in Middletown and benefits Vickie's Angel Walk, a non-profit organization based in New Cumberland, Pa. that helps cancer victims with financial burdens during cancer treatments. Info: www.thecrhs.org.

#### Sunday to Sunday, June 20-27, 2010

Train Collectors Association 56<sup>th</sup> National Convention in Baltimore, Md. hosted by The Washington, Baltimore and Annapolis Chapter. Info: www.tcabalt2010.org.

#### Monday thru Saturday, June 21-26, 2010

**"Endless Mountain Rails"** N.R.H.S. National Convention at Scranton, Pa. hosted by the Lackawanna & Wyoming Valley Chapter. Info: www.endlessmountainrails.com.

#### Wednesday thru Saturday, June 23-26, 2010

**South Jersey Rails 2010 Convention** by the Big Train Operator Club, South Jersey Garden Railroad Society at the Clarion Hotel, Atlantic City West. Info: www.bigtrainoperator.com.

#### Friday thru Sunday, June 25-27, 2010

Altoona Railfest at the Railroaders Memorial Museum. Info: www.railroadcity.com.

#### Friday thru Sunday, June 25-27, 2010

**West Virginia Rails - A Celebration of 100 Years of Rails**. The sound of steam whistles, the clickety-clack of steel wheels on rails and the smell of coal smoke will take over Petersburg, WV. Info: www.wvrails2010.com

#### Saturday and Sunday, June 26-27, 2010

**The Great Scale Model Train Show** at the Maryland State Fairgrounds, 2200 York Road, Timonium, Md. Info: www.gsmts.com.

#### Sunday to Friday, July 11-16, 2010

**Rail Camp** at Steamtown National Historic Site, Scranton, Pa. Info: www.railcamp.com.



Through Friday, December 31, 2010Trains In Motion Pictures ExhibitFriday thru Sunday, June 4-6, 2010Pennsy DaysSaturday, June 12, 2010MA and PA Railroad DayWednesday thru Monday, June 30 - July 5, 2010Reading Railroad DaysMonday through Friday, July 12-16, 2010Barons & Builders Day Camp for ages 9 and 10.

Monday thru Friday, July 26-30, 2010

Barons & Builders Day Camp for ages 11 and 12.

Wednesday thru Saturday, August 11-14, 2010

**Railroad Family Days** 

Friday and Saturday, August 13-14, 2010

Hogwarts Express Parties



#### **RIDING THE READING...**

READING COMPANY EVENTS IN JUNE

*June 16, 1879* - Reading begins routing coal trains to Elizabethport docks via CNJ; had made overtures to lease CNI

June 11, 1909 - New ticket office opened at North Carolina Avenue in Atlantic City, NJ.

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June 16, 1909 - Philadelphia & Reading Board of Directors approves construction of an office building at 9<sup>th</sup> & Spring Garden Streets in Philadelphia.

June 11, 1921 - U.S. District Court places Reading Company's Coal & Iron Company and CNJ stock with trustees pending segregation; Reading stockholders appeal.

June 25, 1933 - Pennsylvania-Reading Seashore Lines merger made effective.

June 1, 1959 - Main Street station building in Norristown sold for \$1.00.

June 28, 1960 - Roy White resigns Chairmanship of Reading Company Board of Directors.

#### <u>MAY, 2010</u> CHAPTER MEETING MINUTES

*CALLED TO ORDER:* The Regular Membership Meeting of the Lancaster Chapter, National Railway Historical Society, was held at the Christiana Freight Station, Christiana, Pa. on Monday, May 17, 2010. In the absence of President Tom Shenk, the meeting was called to order at 7:30 p.m by First Vice President Fred Kurtz with 39 members and 6 guests present. First Vice President Fred Kurtz led those assembled in the Pledge of Allegiance.

**MINUTES:** First Vice President Fred Kurtz asked for a motion to approve the April Meeting Minutes. Steve Himpsl approved the motion and Marlyn Geesey seconded the motion. The April membership minutes were approved as printed in the *Lancaster Dispatcher*.

**MEMBERSHIP:** First Vice-President Fred Kurtz reported this year's membership numbers are 193 regular basic memberships and 112 family memberships. Fred announced that new chapter member Steven Leonard was sponsored by chapter member Mark Hoffman. Fred reported that William Moedinger, who recently passed away, was a founding member of the Lancaster Trolley Club and joined with members of another group to form the Lancaster Chapter. Jim Shuman is the last surviving founding chapter member of the Lancaster Chapter. He will be 95 years old in August. Guests at tonight's chapter membership meeting: Frank Tatnall, Walter Koob, Paul Herr, Dave Hefner, Bruce Manning, and Charlie Woomer.

**CHAPLAIN:** Chaplain Doris Geesey read a poem to the chapter membership titled "God's Love can't be Measured." Doris also had some words of wisdom "What a world this would be if we could forget our troubles as easy as we forget our Blessings." Doris announced that William Moedinger passed away on April 24. He was a charter member of the Lancaster Chapter. Virginia Irvin continues to have serious health problems. If any chapter members have information on Richard Brenner's recent hip replacement surgery, contact Doris. If anyone has any information concerning chapter members (illnesses, birthdays, anniversaries), please pass it along to our Chaplain.

**TREASURER:** Treasurer Toady Kennel gave the Treasurer's Report for the month of April. The report will be accepted for future audit.

**BOARD OF DIRECTOR'S REPORT:** In the absence of Tom McMaster, Fred Kurtz reported that there was a Planning Meeting held after the Chapter Board Meeting on Monday, May 10. Some assignments handed out at that meeting were in preparation for the National Board of Directors' meeting, which the Lancaster Chapter is hosting in November. A speaker has been chosen for the Chapter Banquet, which will be held on Saturday, November 6 in conjunction with the National Board of Directors' meeting. Discussed at the Chapter Board Meeting was permission to give Cindy Kendig full authority to manage and increase the rates for the rentals at the Christiana Freight Station. Fred also thanked Cindy for her time and effort in handling the Station's rentals.

*NATIONAL DIRECTOR'S REPORT:* Smoke Shaak reported that he will be attending the National N.R.H.S. Convention in Scranton on June 21-26.

**TRIPS:** In Ron Irwin's absence, Fred Kurtz announced that there are 32 people signed up for the August cruise to the Baltic Capitals of Europe. If anyone is interested in going on the cruise, space is still available. Contact Tom Shenk.

ANNOUNCEMENTS: Glenn Kendig announced that he would like to thank everyone who came to the spring clean up day at the Christiana Freight Station on Saturday, May 15. Fred announced that the Kitchen Committee will be headed up by Joan Shearer and Eileen Stoll. If any chapter members would like to help in the kitchen, see Joan or Eileen for monthly sign ups. Toady Kennel and Lou Hauck provided the snacks for tonight's chapter meeting. Fred announced that June's membership meeting will be held at the New Freedom Station. There will be "Speeder Rides" available starting at 5:00 p.m. The rides will be \$5.00 per person. Speakers from the York County Park Services and from the Friends of the Stewartstown Railroad will speak at the meeting. Fred thanked Linda Himpsl for preparing the Heritage Grant application and submitting it before the deadline. Steve Himpsl announced that Harmony Painting Company will be painting on the caboose. Glenn has loaned the chapter a coal stove to be used in the caboose. Harmony Painting will paint the exterior and the under carriage of the caboose. The roof will be painted silver to reflect heat. The painting will be done the last two weeks of August and into the beginning of September. All the glass will be replaced on the caboose. The caboose will be water blasted and wire brushed as neccessry, with one or two coats of primer, and then painted. Peggy Sweigart had two comments: Tuesday, May 18th is Election Day and also her husband John's birthday. Frank Tatnall announced that there is an exhibit at the Delaware Historical Society in Wilmington, Delaware entitled "Railroads In Delaware." It will be open Wednesday, Thursday, Friday, Saturday, 11:00 a.m. to 4:00 p.m. and will cost \$6.00(senior citizens \$5.00). The exhibit will be open until March, 2011. Fred reminded chapter members to contact him if they would like to receive the Dispatcher by e-mail. Fred announced that he is also working on a new Membership Roster. If anyone has any changes (new address or e-mail address) to be made from the previous roster, contact him. Walter Pogue announced that Dave Williamson, President of the Stewartstown Railroad, suggested the speeder rides for the June meeting at New Freedom Station. Dave is working on ways to save the Stewartstown Railroad. Ed Mayover introduced Frank Tatnall, who is Ed's longtime friend and President of the Philadelphia Chapter of the National Railway Historical Society. Frank has been involved in documenting the railroad scene and history for 56 years and is retired from Conrail.

**ADJOURNMENT:** The Chapter Meeting was adjourned at 8:10 p.m. The chapter program was a slide presentation by Frank Tatnall entitled "How the PRR Moved Commuters In The Waning Years -1955-1968." Next month's meeting and program will be held at the New Freedom Station inYork County.

#### Respectfully Submitted: Donetta M. Eberly - Secretary

#### THIS MONTH'S BANNER PHOTO

Alco Locomotive Works Builder's Photo of Reading Company Century 630 No. 5309 at Schenectady, New York in1967.



#### **OPERATION LIFESAVER REMINDS YOU...**

Turn your cell phone and MP3 players off when you're near train tracks. Forget texting, as it could be a deadly distraction near the tracks.

#### A MILESTONE OF SORTS

This issue of the *Lancaster Dispatcher* marks the  $60^{\text{th}}$  issue published by your Editor. It has been a very rewarding five years! I hope that you enjoy the color, enhanced graphics and content of our newsletter - more exciting changes are on the way!

#### LAST RUN - - - AND THEN THERE WAS ONE....



**B** ill Moedinger liked trains: little trains, big trains, trolleys - anything that ran on rails. He took photographs of trains from the time he was old enough to hold a camera. Bill passed away on April 24 in his 97th year leaving a photographic and life legacy interwoven with railroading.

Bill worked for his dad in the tombstone business until 1943 when he got a job as a Pullman conductor. Being compelled to serve his country and being physically unacceptable to the military or the

railroads, he applied with the Pullman Company because their physical requirements deemed it only necessary to survive the interview in order to get a job. Thus began a twelve-year career that he rated as the best job in the world. Following a short stint at the John F. Weaver Insurance Company, Bill and his wife, Marian each purchased a share of Strasburg Rail Road stock and joined a merry band of rail enthusiasts spearheaded by Henry K. Long and Donald E. L. Hallock. The rest, as they say, is history and Bill was enthusiastically involved with the Strasburg Rail Road to the end. He served as the first marketing director for about a decade, was one of the first engineers on the Plymouth and steam, and then became president for seventeen years until his retirement in 1975. Bill and Marian opened the first tourist gift shop in the county at the Rail Road in 1961. Bill also authored 'The Road to Paradise,' a snapshot pictorial history of the Strasburg Rail Road through many editions. After retirement he could be seen almost daily along the line taking pictures and videos until about ten years ago when Alzheimer's disease began to take its toll. Bill was the last survivor of the 1958 Strasburg Rail Road founders.

Throughout the years Bill stayed connected with trains as a hobby. He was a ghost writer as well as an author for Al Kalmbach's 'Trains magazine in the early 1940's. He was featured in 'Railroad' magazine in their 'Interesting Railfan' series. He wrote a series in 'Trains' in the early 1970's about his experiences as a Pullman Conductor as well as an article on the Colorado narrow gage railroads. His photographs are noted for their composition, and he developed and printed his own work. He shot movies since the 1930's, mostly of trains but he has a few gems of the national parks, building the Golden Gate Bridge, and the construction of Hoover Dam. Until the late 1980's, Bill could regularly be found taking photos and videos of preserved Colorado railroads.

With Bill Moedinger's passing, there remains only one member of the original Founding Fathers of the Lancaster Chapter and National Railway Historical Society - present Chapter Member James P. Shuman.

# June "Away" Chapter Meeting

# Monday, June 21, 2010

# New Freedom Station, York County, Pa. 17349



There will be "Speeder Rides" available starting at 5:00 p.m. The rides will be \$5.00 per person

Speakers from the York County Park Services and the Friends of the Stewartstown Railroad will speak at the meeting

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Directions to New Freedom Station - Take I-83 to old Exit #1 or new Exit #4 (Shrewsbury). Go West on Rt. 851 to Railroad Borough. Turn left onto Rt. 851 West to New Freedom. Turn left on Franklin Street. The parking lot is 1 block on the left corner of Front and Franklin Streets. There are approximately 40 Parking Spots. Mapquest/GPS address is: N. Front and E. Franklin Streets, New Freedom, Pa. 17349

Heritage Rail Trail County Park Friends of the Heritage Rail Trail Corridor



### **"INSIDE THE BACK PAGE"** UPCOMING LANCASTER CHAPTER ACTIVITIES

June 14, 2010 – No Board Meeting

June 21, 2010 - Monday 7:30pm -	York county meeting
	New freedom station
	Activities start at 5:00pm
	Meeting at 7:30pm

## **BRING YOUR LAWN CHAIR**

MORE INFORMATION PREVIOUS PAGE

July 12, 2010 - Monday 7:30 pm - Board Meeting - Christiana Freight Station

July 19, 2010 – Monday 7:30 pm - Christiana Freight Station

## Slide Presentation by Paul Kutta Local Railroads

August 09, 2010 – No Board Meeting

August 16, 2010 – Special Lancaster County Meeting – Watch your Newsletter

Lancaster Chapter is hosting the 75<sup>th</sup> Anniversary fall National Board Meeting Thursday November 04 – Sunday November 07, 2010 Our annual banquet will be held Saturday November 06<sup>th</sup> Eden Resort Inn – Lancaster

Your help will be needed

Mark your calendar – more information to follow

**Chaplain Contact Information** 

Doris Geesey Phone (717) 347-7637 Email – <u>rscooter2@comcast.net</u> *Please keep our chaplain informed!* 

### LANCASTER CHAPTER BOARD of DIRECTORS

President:	Tom Shenk	717-560-1186
Ist Vice President:	Fred Kurtz	717-625-1204
2ndVice President:	Glenn Kendig	610-593-6313
Secretary:	Donetta Eberly	717-866-5514
Treasurer:	Leora Kennel	610-593-6592
Editor:	Ed Mayover	302-834-3662
Historian:	Evan Russell	610-269-7054
Chaplain:	Doris Geesey	717-347-7637
Ist Director:	Cindy Kendig	610-593-6313
2nd Director:	Tom McMaster	717-274-5325
National Director:	Harold Shaak	717-484-4020

#### **MEMBERSHIP MEETING NOTICE**

The "Away" Membership Meeting of the Lancaster Chapter, NRHS will be held at the New Freedom Station in York County, PA on Monday, June 21, 2010, starting at 7:30 P.M. LANCASTER CHAPTER NATIONAL RAILWAY HISTORICAL SOCIETY 10 Railroad Avenue Christiana, PA 17509-1416 610-593-4968



The LANCASTER DISPATCHER is published monthly as the newsletter of the Lancaster Chapter, NRHS and is mailed to each member of the Chapter as one of the benefits of membership. Annual membership dues are \$56 (includes both Lancaster Chapter and National). Opinions and points of view expressed herein are those of the editor, staff or contributors and not necessarily those of the membership, officers, or the NRHS. <u>The deadline for all items submitted is the fourth Monday of the preceding month.</u> Address changes or corrections should be sent to: Fred Kurtz, 668 Snyder Hill Rd., Lititz, PA 17543-8945 or email: fkurtz@nrhs1.org

## FIRST CLASS MAIL !!! PLEASE DELIVER PROMPTLY !!!

LANCASTER DISPATCHER Editor 10 Railroad Avenue Christiana, PA 17509-1416

MAIL CLASS FIRST