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but the major model railroad manufacturers are still not interested!! - Volkmar Meier is continuing his work on

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CURRENT EVENTS.....

Urban Commuter / Light Rail / Modern Streetcar News!

by Edward Havens

BETHESDA, MD - The U.S. Circuit Court of Appeals at Washington, D.C., cleared the way on July 19 for Maryland Transit Administration to begin construction of the 16-mile Bethesda to New Carrollton light rail Purple Line on an east-west alignment in the suburbs just north of the nation's capital. The appellate court reinstated the Purple Line's environmental approval which had been revoked last year by a federal District Court judge, The Washington Post reported. Congress had appropriated \$325 million for the project but the funding won't be available until a Full Funding Agreement is signed with the U.S. Department of Transportation.



DETROIT, MI - A four-door Jeep turned in front of a Detroit Q Line streetcar on Woodward Avenue July 24, resulting in the first notable streetcar-auto collision since the 3.3-mile, \$187 million car line opened May 12, "crain's detroit business" reported. Damage was minor to the Brookville Equipment streetcar, one of six used on the line. The motorist was cited after the collision No one was injured. The streetcar damage appeared to be mainly cosmetic. The car was moved to the car house for repairs.



QLine 290 shortly after the incident.

EAST HAVEN, CT - The "patch dot com" site reported July 10th that Shore Line Trolley Museum at East Haven, Connecticut, not far from Connecticut's largest city at New Haven, was slated to hold its second annual Trolley Festival July 29th. The event was to include morning and afternoon rail-in-service parades including passenger streetcars and utility cars intended only for work service... such as snowplows. Tickets ranged from \$6 to \$10. There were to be all-day photo opportunities, a very popular attraction at most street railway museums, as most visitors love seeing the colorful cars.



A collage of some of the colorful vehicles that can be seen at the East Haven Museum.

KANSAS CITY, MO - Clay Chastain, a rail transit advocate who no longer lives or is a registered voter in Kansas City, western Missouri's largest city, still is pushing a hybrid light rail-streetcar plan on the August 8 ballot, the Kansas City Star reported July 7.



Artists rendering of Siemens S70 looking vehicle.

He is proposing a 3/8-cent sales tax over 25 years for a car line that would link downtown with Swope Park. Chastain, who lives at Bedford, Virginia, has submitted 10 light rail tax proposals to Kansas City voters over the years but only one was approved and it was rejected by the City Council as unworkable.

LOS ANGELES, CA - The downtown Los Angeles modern streetcar line project has been delayed until a 2021 debut, seven months later than recently projected, the "LAist" site reported on June 27th. The revised cost estimate including pay back of finance charges is \$290.7 million. Projected costs have taken a huge spike since voters approved the car line back in 2012.



Artists concept of CAF-type modern low floor streetcar.



Map of proposed LA Streetcar!

The revised schedule includes a hoped-for Federal Transit Administration "Small Starts" program grant of \$100 million but it's unclear if the White House administration of President Donald Trump will continue that program.

NEW ORLEANS, LA - On July 24th, the New Orleans Regional Transit Authority shut down its new Rampart-St. Claude streetcar line skirting the tourist-oriented French Quarter so the local utility could make electrical repairs along the corridor, the Times-Picayune newspaper reported.



Car 2018 under tow after suffering a serious problem.

When the car line was built, electric lines were moved to permit track construction and now they are being put back the way they were. The work, which had been delayed by storms, was expected to last a week or less with shuttle buses substituting for streetcars between Canal Street and Elysian Fields. This line is unique in New Orleans in that the streetcar stops are built to light rail standards as opposed to typical simple concrete platforms.

OTTAWA, ONTARIO, CANADA - Progressive Railroading reported on June 30th that the City of Ottawa, Ontario, officials have signed a \$349 million variation agreement with Rideau Transit Group Partnership (RTG) for the rolling stock and onboard equipment needed for extensions to the city's O-Train light-rail system.



Proposed extensions add 23 miles and 38 more vehicles to the existing system.

The pact extends existing contractual arrangements, according to a press release issued by SNC-Lavalin, which is part of RTG. RTG is a consortium composed of SNC-Lavalin, ACS Infrastructure Canada Inc. and EllisDon. The group currently is delivering the first phase of the Confederation Line and will extend its existing contractual agreement for the second phase. In March, RTG and Ottawa ratified a memorandum of understanding for a portion of the second phase of the O-Train's Confederation Line. Signed contracts for the project to be delivered by SNC-Lavalin and its partners include delivery of 38 additional light-rail vehicles to be assembled at the Belfast maintenance, administration and storage facility, as well as assistance to Ottawa during the procurement process. "We are proud that the city of Ottawa has extended our scope to ensure the growth of the project and has entrusted us to maintain the Confederation Line's core assets until 2048," said Chantal Sorel, managing director of capital at SNC-Lavalin.

NEW YORK CITY, NY - An MTA New York City Transit (NYCT) "A" subway train derailed on June 27th and injured at least 34 people. None of the injuries were life-threatening, according to the New York City Fire Department's Twitter account. The derailment marked the latest incident in a string of mishaps and delays for NYCT's subway system. Earlier this month, an "F" train lost power in Manhattan and left passengers stranded in overheated cars, The New York Times reported. The cause of yesterday's A train derailment stemmed from an improperly secured piece of replacement rail that was stored on the tracks, MTA Chairman Joe Lhota and Interim Executive Director Ronnie Hakim said in a joint statement. The issue appeared to be human error, not a track defect, they added. "NYCT is inspecting every inch of rail to ensure that each and every replacement part is properly stored and secured," Lhota and Hakim said. "The investigation into this incident continues." Following overnight emergency repair work, "A" train service resumed with "extensive delays," NYCT tweeted this morning.



Joseph J. Lhota, former Deputy New York Mayor, currently Chairman, New York MTA.

However, on June 29th Metropolitan Transportation Authority (MTA) Chairman Joseph Lhota yesterday announced he will conduct a top-to-bottom audit to overhaul MTA New York City Transit's (NYCT) subway system. The agency will work with transit experts and management consultants to perform the audit, which will examine NYCT's challenges and limitations to identify strategies for short- and long-term changes. Within 60 days, Lhota will present a plan to modernize the subway system. The plan will include changing and training personnel, implementing and executing "processes that work," improving customer communication, and engaging and implementing new technology, MTA officials said in a press release. Lhota made the announcement at the agency's Genius Transit Challenge Conference held yesterday.

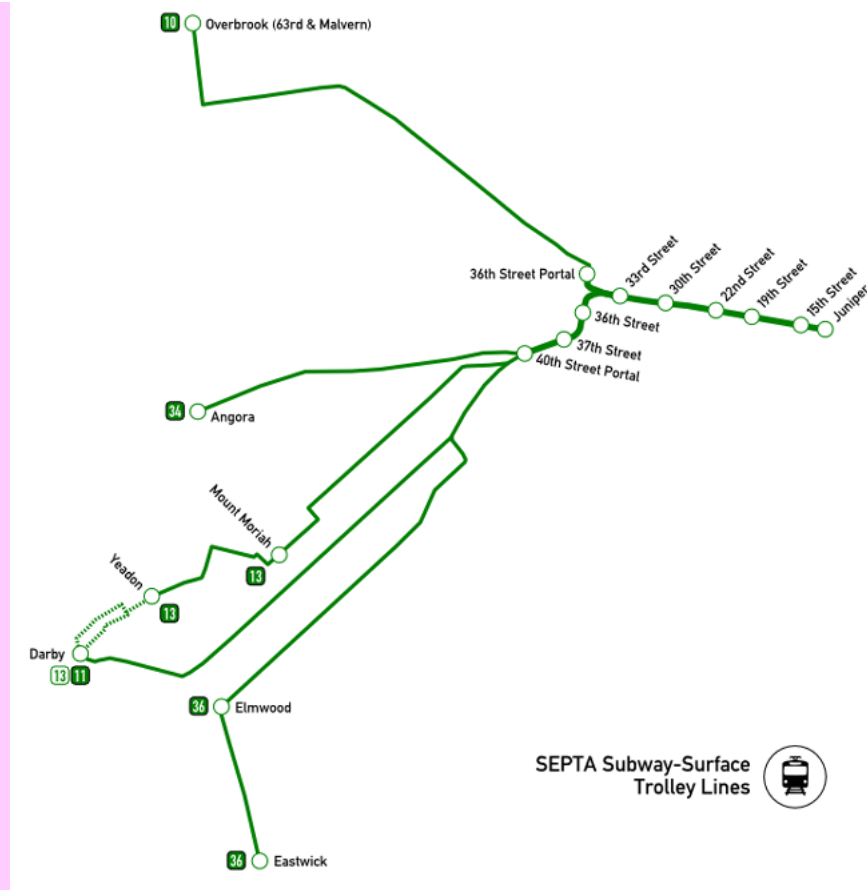
The conference examined ways to fix and improve New York City's subways. New York State is offering three \$1 million "genius" awards for the best ideas across three categories: improving NYCT's subway system, deploying modernized rail cars and increasing communications infrastructure in the system. "It is our responsibility to transport people as safely, quickly and efficiently as possible, and the current state of the subway system is unacceptable. In tandem with the Genius competition proposals, we will deploy a multifaceted plan to restore confidence to the MTA and prove that we can deliver for our customers," Lhota said. The MTA Genius Transit Challenge judging panel includes former Federal Railroad Administrator Sarah Feinberg, MTA Interim Executive Director Ronnie Hakim, and Cornell Tech Dean and Vice Provost Daniel Huttenlocher. Yesterday at the conference, New York Gov. Andrew Cuomo declared a state of emergency for the MTA. Within recent weeks, the subway system has been dogged by recurring delays and operational issues, including that derailment that injured dozens of riders earlier the same week.

PHILADELPHIA, PA - The Philadelphia-based Southeastern Pennsylvania Transportation Authority (SEPTA) closed its subway-surface trolley tunnel from 10 p.m. Friday, July 7 to 5 a.m. Monday, July 17 for a nine-day maintenance blitz, the "philly dot com" site reported. Work included replacement of wooden boards on the ceiling to hold trolley wire and various rail renewal projects including installation of new crossing "frogs" at the 40th Street Portal in West Philadelphia.



1981 Kawasaki car #9023 at the Juniper Street station of the Surface Car Subway.

Work crews were scheduled to work 24/7 to complete the maintenance of the 2-1/2 mile tunnel to Center City. Riders on Routes 10, 11, 13, 34 and 36 had to transfer to the Market-Frankford-Subway-Elevated line at 40th Street subway station using diversion trackage left from the former 14 and 40 streetcar lines, abandoned in the 1950s.



PITTSBURGH, PA - Pittsburgh's Port Authority ran its last PCC streetcar through Mt. Lebanon in the South Hills area on the 38/42 car line April 14, 1984 (see below left) but on its way to Dormont it derailed (see below right), ending service, the "observer-reporter" newspaper web site posted in an historical feature story July 4th.



The PCC, car 1758, apparently split a switch and had to be re-railed. For the next three years, a 3,000 foot tunnel was bored with a new light rail station built at Mt. Lebanon. That village's officials wanted tracks removed from Washington Road, the main business street. The \$17.2 million tunnel was completed in time for new light rail service to begin to South Hills, May 22, 1987. Retired Port Authority employee George Gula recalls that a ceremonial first day event was held with remaining PCCs and new LRVs running over the rebuilt line.

SAINT LOUIS, MO - There has been yet another delay in the public service roll-out of the Delmar Loop heritage streetcar line at the St. Louis inner ring suburb of University City, the "riverfront times dot com" blog reported on July 10th Only two of three trolleys for the two-mile car line are in operator's possession and each requires 300 miles of break-in testing. But only 20 to 25 miles of testing have taken place.



Kevin Barbeau, chief executive of Loop Trolley Company, says the system now has a date in mind to begin service on the \$52 million car line but it won't be announced until the line really is ready to run. However, it is unlikely to be this summer. Delmar has two Gomaco-built ex-Portland TriMet replica semiconvertibles and Gomaco is overhauling an ex-Melbourne "W" class tram.

SALT LAKE CITY, UT - In a move reminiscent of the early days of the San Diego "Tijuana Trolley", Progressive Railroading reported on July 5th that the Utah Transit Authority (UTA) has received \$4.5 million from the Salt Lake County Council to double track a portion of its S-Line streetcar route. The move will enable UTA to run streetcars every 15 minutes along the 2-mile route, agency officials said in a press release.



Two of the Siemens S70 UTA Sugarhouse streetcars.

The total cost of the double-track project is \$6 million. Coupled with funds allocated through the federal Congestion Mitigation Air Quality program, the Salt Lake County money will provide enough financial support to get the project off the ground and provide for at least four years of extra operational and maintenance costs. S-Line streetcars currently run on a single track from the Central Pointe TRAX station in South Salt Lake to the Fairmont Station in Salt Lake City's Sugar House neighborhood. If streetcars need to pass one another, one unit must pull onto a side track and stop while the other car moves past it. The agency now runs streetcars every 20 minutes. Ridership on the S-Line route is up 8 percent in 2017's first quarter compared to the same period last year. "This is such a vibrant area of our community and with development increasing at a fast pace, going to 15-minute frequency should provide increased ridership," said Jerry Benson, UTA's president and chief executive officer. Although some approvals for the double-track project are still pending, construction could begin in early 2019.

SAN DIEGO, CA: Three people were injured and heritage PCC 529 was heavily damaged when a van collided with the streetcar on the downtown loop service on July 18, City News Service reported in a story posted by KSWB-TV. The collision, apparently caused by an illegal turn on the part of the van driver, damaged one of two PCCs used on the downtown service and caused one car side to be crumpled and the pantograph damaged. The PCC had been restored at a cost of \$880,000. It will take months to repair the PCC, leaving only one in service until a third can be fully renovated and put into operation. Each of the PCCs used is little different. The first, car 529, came from San Francisco which had acquired it second-hand from Saint Louis. The second, car 530, came from Newark which had acquired it from Minneapolis after just six years of service. San Diego Metropolitan Transit System (MTS) began operating the PCCs on the Silver Line in 2011.



Car 529, formerly San Francisco 1170, the first PCC to enter service on the Silver Line in 2011 and the one involved in the accident!



Car 1088, one of the 62 environmentally friendly low floor vehicles delivered from KinkiSharyo to Seattle between 2006 and 2014.

SEATTLE, WA: July 18 marked the **eighth anniversary** of the Seattle-based Sound Transit Link light rail. It operates on a north-south alignment and with its latest extensions links the University of Washington with downtown, Tukwila, SeaTac Airport and the city of SeaTac south of the airport. The Platform, an online transit agency news update service, reports that during May 2017, the route carried 73,000 weekday riders and topped two million riders for the entire month. Ultimately Sound Transit LRT will be five times larger than today, reaching Everett, Tacoma and other Puget Sound destinations.

TORONTO, ONTARIO, CANADA - The American Public Transportation Association (APTA) has named the Toronto Transit Commission (TTC) its "outstanding public transportation system" for 2017, as reported by Progressive Railroading on June 28th. The award recognizes the Toronto agency's "transformative change" over the past five years, TTC officials said in a press release.



Award (left) with photo (right) of the first of Toronto's new Bombardier "Flexity" five-unit streetcars.

The TTC's efforts have included developing a five-year plan aimed at putting customers first. The plan featured a new station management model, customer charter, and fleet and infrastructure renewal programs. The award winner is selected by transit system peers across North America. The TTC last received the honor in 1986. "We set out to deliver a transit system that makes Toronto proud. This honor reflects the hard work we've done for our customers and the people of Toronto," said TTC Chief Executive Officer Andy Byford. The TTC will be officially recognized at APTA's annual conference in fall. By passenger volume, the TTC is North America's third largest transit system after New York City and Mexico City, according to the Toronto agency.

CBC News reported on July 21 that Metrolinx, the regional transit planning and funding agency in southern Ontario, has decided to give up its legal battle with Bombardier Transportation over late delivery of standard gauge LRVs for various project cities. The Toronto-based agency will instead attempt to negotiate a solution. As a result, Metrolinx will not appeal a judge's ruling that it could not cancel a CAD \$770 million (USD \$614.1 million) contract for LRVs. Bombardier failed to deliver a prototype and 182 LRVs for the rail expansion in southern Ontario cities including Mississauga just south of Toronto.



**The first of 14 Bombardier Ion LRVs intended for Waterloo, Ontario!
Bombardier claims at this time that they will have all 13 cars delivered by the end of 2017.**

TUCSON, AZ - Sun Link was scheduled to mark the third anniversary of their 3.9 mile modern streetcar line on July 22 with free rides all day, KVOA television reported. The \$196 million car line was opened July 25, 2014 with \$69 million in federal "TIGER" economic recovery grant funding along with other sources including Pima County-wide sales taxes approved by voters for highways, pedestrians, bicycles and transit. RATP North America, which operates the streetcar, will take over all of Tucson's bus system September 1, 2017.



Siemens and Bombardier to Merge? Truth or Rumor?

by A. J. Staley

In the June 2017 Tramways & Urban Transit, an article appeared regarding a potential merger between Bombardier and Siemens. The publication stated in part, that during the month of April 2017 worldwide financial press had reported that discussions were underway between the two entities. The speculation for the driving force for the merger was to create a larger company to be able to compete with CRRC's strength to secure finance for major infrastructure projects in developing countries, as well as offer extremely competitive bids to gain market shares.

In truth, Siemens and Bombardier began "secret" talks as far back as July 2015 according to an article in the Wall Street Journal dated July 29, 2015. Earlier this year in January 2017 "secret" talks were again mentioned in various publications worldwide and since April 25, 2017, no decision has been made.

On May 16, 2017, in the International Railway Journal, it was reported by Bombardier, CEO Mr. Laurent Troger, at the UITP Global Summit in Montreal that the **rumors were not true**. Troger stated, "We have two shareholders, Bombardier and Caisse de Depot et Placement du Quebec (CDPQ), those two shareholders are today managing the future of the company, and I cannot comment on what their intentions are for the future." He further stated, "However, I don't think they have any intention to change the structure."

The reports emerged in April and cite concern at both Bombardier and Siemens at competing with CRRC, China, which is rapidly gaining market share around the world. Creating a much larger company with greater financial resources could be one way of doing this while a potential merger would allow some rationalization of manufacturing plants to reduce costs and improve competitiveness.



The Siemens Avenio Vehicle, shown in the Netherlands, the basis for the S70 now sold in the United States.

However, Mr. Troger says that Bombardier considers its strategy of emphasizing reduced total cost of ownership rather than up front capital cost in its offerings, as well as its technological expertise, as the best way to compete in an increasingly competitive marketplace.

"We have to understand that the Chinese are looking to compete outside of China and they will bring their specific dynamics to this market," Troger said. "As far as we are concerned, we will keep positioning ourselves as the leading-edge provider that will optimize the total cost of ownership for our customers. We consider that we have the best technology, and the best products, and we want to maintain our leadership in delivering the highest value for our customer."

Mr. Troger said that since becoming CEO in December 2016, he has instituted a transformational strategy. This emphasizes five key pillars:

- Improving flexibility to meet customer needs all over the world;
- A greater emphasis on securing success in systems and service contracts rather than relying predominately on rolling stock orders • Improving the performance and execution of projects and reducing costs;
- Optimizing the capacity of the company to provide better services, and;
- Greater standardization in offering to customers moving away from customized solutions.

Anyone in the business world who has dealt with mergers or acquisitions knows that with any merger, especially when sizable international companies are involved, many issues are to be considered.

Logically, companies and their higher-ranking executives are required to sign “non-disclosure statements” during the time of ALL negotiations to iron out all the issues and problems that arise in a move of this type and the due-diligence period of which both can take many months and in some cases, years.

In the case of Siemens and Bombardier, a merger of this size and type would require clearance from antitrust authorities and the concerns facing the two Europe-centered companies could be an obstacle to the deal, according to investment Securities.

The two companies both have plants in some of the same countries, and some of the products overlap or are similar in nature. In this case the two firms were reported to be merging their train-building and signal technology operations into a joint venture to compete with Asia, above all China, in the important export markets. The consolidated corporation could achieve estimated annual revenues of €13 billion. Decisions need to be made on which to keep and which to eliminate. China Railway Rolling Stock Group (CRRC) reportedly has an annual revenue of \$34.5 billion, more than double the revenue of Bombardier and Siemens put together in this branch of operation.

Thousands of jobs would hang in the balance if there were a merger, since the range of products manufactured by the two corporations overlap in many areas. While thousands of jobs at both corporations as well as supply industries are in danger, shareholders of both companies would rejoice over the prospects “IF” the merger succeeded. Bombardier produces various regional and high speed train models in its plants in Görlitz, Bautzen and Henningsdorf, and Siemens Mobility produces a similar model in the plants in Krefeld and Munich.

Siemens and Bombardier would face potential opposition from unions. Unions are integrated into the merger talks at the highest level, but usually maintain a policy of absolute silence with their own members. This local patriotism of the unions is totally reactionary and only serves to play the workers against one another at a time when the growing cooperation and the merger of the corporation urgently requires an international collaboration of employees in all locations. Bombardier has already been engaged in negotiations with IG Metal and the works councils to cut 2,500 jobs at its German Plants this year alone. The largest layoffs would take place at the Görlitz and Henningsdorf locations.

However, one must ask, does Siemens really want to take the risk of acquiring Bombardier? Bombardier has a reputation of not delivering completed vehicles on a timely basis, as has been facing legal problems because of it.

It was also reported in the June 2017 Tramways & Urban Transit that Metrolinx had been blocked from terminating a major Bombardier LRV Contract. The 2010 contract for 182 LRV’s from Bombardier had not delivered and the pilot cars for Toronto’s Eglinton Crosstown were not delivered in 2015 as specified. And they were not delivered in 2016 either. The contract was to be completed by 2021. It had been argued that the delays by Bombardier would result in delays for the overall project. Justice Glenn Hainey ruled against these arguments, however his ruling is conditional in that Bombardier is to take “all reasonable steps to expedite” based on a decision by the dispute resolution board; the injunction would also be lifted if the board agreed that Bombardier was in default.



**A partial prototype of the Bombardier LRV that will eventually be delivered to Metrolinx for the Eglinton (Canada) Crosstown Line!
These were ordered in 2010 with pilot cars to be delivered in 2015 and have not yet been delivered.
The contract was for 182 vehicles and period of performance was 2009-2018.**



Metrolinx had unveiled the Bombardier Flexity Freedom LRV, shown at left, for the light rail project in the city of Toronto at the Canadian National Exhibition.

A total of 204 were ordered in 2009 but only about 40 have been delivered to date. The period of performance for this contract was 2009-2018.

Another Bombardier contract that is just as, if not more, controversial is the 2009 contract the company signed with Toronto’s Transit Commission (TTC). The \$1.2 billion deal was signed nearly a decade ago to replace the aging fleet of Toronto CLRV streetcars with 204 new ones by the end of 2018. The Finance News, on July 17, 2017, reported that Bombardier had only delivered 40 cars despite the pledge to deliver up to 70 this year. Bombardier noted that it would be a “challenge” to meet the order for 70 streetcars promised for delivery this year. The contract is on its fifth revision since it was signed and the latest Bombardier promise is to deliver 70 cars this year 76 in 2018, and the balance of 58 to be delivered in 2019. The original contract was to end in 2018.

This modification schedule pales in comparison to the original one, which had called for upwards of 130 new vehicles to be in service by now. As a result, Metrolinx has beefed up penalties in the 61 Light Rail Vehicle contract with Alstom based on the Bombardier dispute. Forty-four of the \$528-million deal with Alstom will end up in service on the Eglinton Crosstown line. The Alstom deal is confidential; however, it is estimated that Alstom will pay a penalty of \$55,000 a day for each vehicle that is late with a total cap of penalty fees of 13 percent of the value of the contract. That’s more than 35 times greater than the late penalties in the Bombardier contract.



Artists rendering of one of the 61 Alstom vehicles that will end up on the Eglinton Crosstown Line.

So, the questions remain: Siemens and Bombardier to Merge?
Truth or Rumor?
Would Siemens really want to take on the risks involved with Bombardier's reputation?
We wait and see.

Muni (San Francisco) Moments!

By now, it is common knowledge that San Francisco put the heritage trolley program on the front page worldwide with their F-line in 1995, starting with 14 cars obtained from Philadelphia and three of their own, the F-line became an instant success. Eventually more cars from Milan, Italy and Newark, New Jersey rounded out the fleet. Museums were the source of a few other cars.

After such continuous service, the ex-Philadelphia cars needed attention. It was time for a mid-life rebuild, a common task with rail vehicles around 15 to 20 years service. These cars had been rebuilt just before service at San Francisco and had been rebuilt and refurbished one or two times while in service in the City of Brotherly Love.

Car 1056, dressed for Kansas City, was the first car completed in the Brookville refurbishment and in back in service. Car 1051 was the second back. Because it is in the San Francisco 1960's paint scheme worn by the streetcars when Harvey Milk rode to work each day, it was dedicated in June 2017 to the late Supervisor and strong transit advocate, who was assassinated along with Mayor George Moscone by another Supervisor, Dan White in 1978. To complete the tragedy, Dan White committed suicide in 1985. Both of these cars have re-entered service according to the Market Street Railway.



(Photo from Market Street Railway)

Here is a close-up of the decal over the front door honoring Harvey Milk:



(Photo from Market Street Railway)

Muni car 1059 is came back from Brookville in late May with a more prototypically correct Boston orange color beneath the belt rail. The Muni shop forces had just applied the Boston Elevated Railway decal when this photo was taken.



Car 1060 has already worn two paint schemes in San Francisco. It arrived in 1995 wearing the colors of Newark's Public Service Coordinated Transport (PSCT). However, when ex-Newark car 1070 arrived, car 1069 was repainted in the 1938 Philadelphia PCC scheme replacing 1054 which had been wrecked. It is in the midst of its 1000 mile burn-in testing phase prior to being released for service.



1060 at the 17th & Castro F-line Western Terminal (Photo from Market Street Railway).

Car 1062, which since 1995 has worn the colors of Louisville Railway, now wears the colors of Pittsburgh Railways, a city and company that actually ran the cars in service. Car 1062 was spotted in Nevada, see below photo, at a truck stop in Mill City in late June on the way back to San Francisco from Brookville (Pennsylvania). After it arrives in San Francisco and is unloaded, Car 1053, NYCTA(Brooklyn), will be loaded on it for its ride back to Pennsylvania for the Brookville refurbishment. After that car 1061, Pacific Electric will then head to Pennsylvania.



(Photo from Market Street Railway)

Car 1055 should return from Brookville soon, still representing Philadelphia in 1955.

More Urban Rail Happenings!

BALTIMORE, MD - The Maryland Transit Administration (MTA) has awarded a \$400.5 million contract to Hitachi Ansaldo Baltimore Rail Partners LLC to provide 78 new subway cars and a communications-based train control (CBTC) system.

Each bi-directional vehicle has a total seating capacity of 196 passengers. In addition, all interiors, seat layouts, arrangements of accessories, and heating and lighting systems are designed to meet the requirements for access, travel and movement under the Americans with Disabilities Act (ADA).



Artists conception of new Hitachi vehicle.

The car heads (front ends) will be made of fiberglass. The fleet will be assembled at Hitachi Rail's facility in Miami, where the company is currently manufacturing rail cars for Miami-Dade Transit. The first trainset for MTA is slated to enter revenue service in 2021. For its part, Ansaldo STS will integrate the new CBTC system into the agency's 15.5-mile subway line. "This landmark contract builds on the strong presence Ansaldo STS has in North America and represents our commitment to the improvement of MTA's transit system," said Ansaldo General Manager and Chief Executive Officer Andy Barr. Hitachi Ansaldo Baltimore Rail Partners is a combination of Hitachi Rail Italy SpA and Ansaldo STS USA Inc.

Original cars used on the Baltimore Subway were manufactured by the Budd/TransitAmerica Red Lion plant in Northeast Philadelphia, the same facility that built the now gone but once instantly-recognizable Market street Elevated "Almond Joys" that ran in that city from 1960 to the year 2000. The original cars were almost identical to those used by Miami and they were among the last to be built by that company before it shut down. The entire 100 car fleet was overhauled between 2002 and 2005.

Proposed light-rail line

A proposed 8.7-mile light-rail line could connect McCarran International Airport to downtown Las Vegas by 2023, largely running along Maryland Parkway.



Source: Regional Transportation Commission of Southern Nevada

Wes Rand Las Vegas Review-Journal

LAS VEGAS, NV - As we also reported in our July 2017 issue, the Regional Transportation Commission of Southern Nevada (RTC) has been enabled to seek funding for an 8.7 mile light rail line in this city. We have obtained a map of the proposed route of this line which would run mainly along Maryland Parkway:

LOS ANGELES, CA - As we also reported last month, Los Angeles METRO P865 car 105 left Metro RAILS for the last time on June 19th for the scrap yard in Carson. By June 26th, this was the remains of that 1989 era workhorse:





Car 105 in more glamorous times.

Earlier the afternoon the same day, June 19th, Car 129 derailed in the Blue line yard due to a faulty track switch. It was selected as the next car to be scrapped after being stripped for all useable parts. Two young rail fans, Charles Grayson, a Blue Line Operator, and Perias Pillay posted these photos of car 129 on July 14 on Facebook!



The left photo in the top row above shows some of the damage done by the derailment. Right now, METRO is planning to have all 54 of these cars out of service by the end of 2018. Efforts are underway to save many of them, including one for a California railway museum.

While the LA Streetcar project continues, LA Metro continues to hold Funeral Trains for the 54 venerable NipponSharyo cars that ushered in the new age of electric rail transit in the same city in 1990. Once numbering 54, the numbers but the end of July had shrunk to 51. Cars 105 (June 19th), Car 129 (July 25th) and Car 147 (July 26th) have had their funeral trains. More about these "Funeral" trains in our next issue.

SAN DIEGO , CA: We obtained some photos of the second PCC car operable on the Silver Line on San Diego. This car, now their 530, was Newark #10 for many years. However , the car started life in Minneapolis, Minnesota as TCRT #319 starting in January 1947. It was hardly "broken

in" when sent to Newark in September 1953 where it ran until 2001. Eleven of her sisters are in San Francisco in various paint schemes. Note that the doors used on this car are from scrapped San Diego Metropolitan Transit System (SDMTS) Siemens-DueWag 1981 LRVs. We suppose that the SDMTS maintenance folks have lots of experience with these doors and their mechanisms. Note these doors in the photos of car 530 and on car 1003 in the third photo below:



We show one of the original 14 Siemens cars that revived urban electric service in San Diego in 1981, incidentally, the car shows, 1003, just may be heading for the museum in Southern California.



SAN FRANCISCO, CA: - In Late 2016, Muni riders got a preview of the new third-generation Light Rail Vehicles (LRV) that will be replacing the Breda LRVs that have been in service since 1996.



August 2016 Ferry Building Mock-up of the new Siemens LRV with two PCCs in the background.

Earlier this year, San Francisco Municipal Railway's (MUNI) new light-rail vehicles (LRVs) started arriving and undergoing testing on city streets.



Siemens LRV 2001 being unloaded late at night at Muni after trip from plant near Sacramento.

The plan is for them to go into revenue service by the end of this year. While testing has been ongoing for months, none of it has been in the subway system. That is about to change as underground services are set to close down on weeknights and weekends for a month so this crucial step of rigorous testing can take place. The testing requires the Muni subway to close early on weeknights and over the weekends for four weeks. Testing began with the start of service on Saturday, July 22 (approximately 7 a.m.) and continue until the end of regular service on Sunday, August 20 (approximately 1 a.m., Monday). The agency was taking the closures as an opportunity to also upgrade the blue light emergency phone system in the subway. The first five Siemens LRVs arrived in January 2017 for testing. Muni will entirely replace its current fleet of 151 LRVs and expand the fleet by 64 units.



A full view of MUNI Siemens LRV 2001.

For those of you rail fans that may be in San Francisco during this time,

BART (Bay Area Rapid Transit) service will not be affected.

During subway shutdowns, surface train service will be in operation:

* **J Church:** Between Balboa Park Station and Church/Duboce.

Note: Northbound J trains will continue as N Judah trains to Ocean Beach.

* **K Ingleside:** Between Saint Francis and Sloat (or St. Francis Circle) and Balboa Park

* **L Taraval:** Between SF Zoo and West Portal Ave. and Ulloa.

Note: Eastbound L trains will continue as M Ocean View trains to San Jose and Geneva.

* **M Ocean View:** Between San Jose at Geneva and West Portal Ave. and Ulloa.

Note: Eastbound M trains will continue as L Taraval trains towards the Zoo.

* **N Judah:** Between Ocean Beach and Church at Duboce.

Note: Eastbound N trains will continue as J Church trains to Balboa Park Station.

* **T Third:** Between Embarcadero Station and Sunnysdale.

Note: There are several Giants baseball games scheduled during the testing period. On weekday evening games, Muni Metro trains will operate outbound (to and through the subway) from the ballpark for approximately 90 minutes after the games. Customers will **only be able to exit the stations.**

It was reported that during the first week of Muni subway closures to finalize tests on the next generation of Muni trains that so far, the tests have yielded some promising results and beautiful first glimpses of the new fleet on the streets. On Friday night July 21st, one of Muni's five new Siemens train cars left the Muni Metro East rail facility to begin automatic train control testing in the Muni Metro Subway and along the N Judah line. Over the weekend, Muni' team of train mechanics and other staff began the rigorous suite of mechanical tests and tweaks needed to make sure the new fleet is ready to start rolling out this year. The team completed all of the tests planned for the first weekend, which would have taken more than three weeks to conduct during the regular overnight subway closure hours, when crews do maintenance work in the tunnel. There were 391 tests in all! With longer windows of uninterrupted time to conduct tests, Muni engineers can review test results and troubleshoot any issues much more efficiently.



Top photo: View from inside the operator cab from the test train;
Bottom Photo: Muni train engineers and other staff aboard the test train.

The new trains are state-of-the-art vehicles that require continuous testing before they can be placed into revenue service. Muni operators and maintenance personnel will have to become very familiar with them in a very short time. Since the first train cars arrived in January 2017, Muni personnel have done the limited tests and prep work possible within the Muni Metro East facility. In the subway, these personnel can now conduct a range of new tests on the trains and the systems they interact with, including Muni's new communications and monitoring system and the subway's automatic train control system. Muni's light rail trains run on both city streets and in an automatic subway system, which they have to sync up with every time they head underground. *(That's why the trains always pause before they enter the subway, in case you are a rider that has wondered about that.)*



Test train 2002 at the Muni Metro East facility.

The weekend of July 22-23, Muni conducted about 75 percent of the subway tests needed for one-car trains. This coming weekend, we expect to finish fine-tuning the software programming to make sure they sync up properly with the subway control system. Muni also plans to start tests on two-car trains and make any adjustments needed to ensure that the subway system smoothly manages both new and older trains when they run together in service.

Their crews also took the opportunity of the weekend closure to do some deep cleaning in the stations, upgrade subway track switches to make them compatible with the new trains and install new light fixtures in the tunnels.



Test train 2003 at the Duboce Park stop, east of the Sunset Tunnel on the N Judah line.

It appears that Muni is on track to start rolling out the new Muni train fleet as soon as possible. As they arrive in phases, these trains will replace the current fleet of 151 Breda-built trains and expand it to more than 200 trains by 2028.

Meanwhile, BART's "Fleet of the Future" rail cars are scheduled to begin carrying passengers in late September 2017. The agency's 10 pilot cars have completed 42 weeks of testing on the main tracks during non-business hours. That was preceded by months of runs along the test tracks at BART's Hayward Maintenance Facility beginning in April 2016. During late July, BART began testing the first batch of new rail cars on mainline tracks during business hours. So in total the new cars have undergone more than 50,000 miles of qualification testing, agency officials said in a press release.



Shown above right are one of the new 310 'D' train cars being built by Bombardier, which can operate at the end and in the middle of trains. 310 units started arriving on 2012 and like the 'C' train cars shown at the left, they operate both at the end and the middle of trains. 230 'C' train cars were built by Alstom and Morrison-Knudsen between 1987 and 1996. 465 non-cab cars, which can not be used at the end of trains are also coming from Bombardier. These 'D'; and 'E' cars cannot couple to any other rolling stock on the line. Deliveries are scheduled through 2022.

BART was one of the first agencies created when reality started to "set in" and people started realizing that private automobile transit was not going to solve any transit problems, especially in larger cities.

The "powers" had so demonized the once beloved words "trolley" and "streetcar" that it would be almost a half-century before those terms would become favorable again. Those same forces even coined new words for the same cars, now calling them "Light Rail Vehicles". They may run on the same tracks and stop at the same places as they did in Boston and San Francisco but they are not trolleys or streetcars.....right?

So BART had to use many "gimmicks" to undo this "negative imagery" and try and convince the general public, now thoroughly brainwashed, that this new system was not the old stuff. So they resorted such as shovel nose aircraft looking end cars on the trains (called A cars) and wider than usual track gauge, like the 1960s TV show "Super Train".



One of the fifty-nine Rohr-1968-built 'A' cars for the ends of all trains. Note no couplers. This was a very inflexible design. They were accompanied by 389 'B' cars that were placed between two 'A' cars to form a train.

BART's track gauge is 5'6" versus the standard U.S., gauge of 4' 8.5". So most of the testing must be done on BART tracks.

MODELING INFORMATION.....

Lehigh Valley Transit Company Car 706 !

by Richard Allman

Lehigh Valley Transit Company Liberty Bell Limited car 706 has entered operation on my Main Line Transit operation. The prototype was one of 12 cars of the LVT 700 series (700-711) purchased from Southern Car Company of High Point, NC for \$12,000 each in 1916. The Liberty Bell Limited service from Allentown to Norristown, powered by overhead wire and by third rail from Norristown to 69th Street Terminal in Upper Darby over the Philadelphia and Western Railway, commenced in December, 1912.



The route initially was served by six Jewett combines of the 800 series; however the rider ship was such that LVT needed to order 6 more of the Jewett 800 series cars literally within weeks of the opening of the route. Additionally, car 999, a parlor car which later became car 812 was added to the Liberty Bell route roster. Even with the 13 car fleet, rider ship exceeded capacity, and the 700 series cars were ordered. They were delivered with center entrances which meant two-man operating crews. The reason for a total of 24 cars for the route was to provide service both to 69th Street and also over the original Liberty Bell route from Allentown to Chestnut Hill in Northwest Philadelphia, where the route connected to the trolleys of the Philadelphia Rapid Transit for the painfully slow trip to Center City.



Car 706 with 701 (above):

The Norristown branch left the original route at Wales Junction, south of Lansdale for the much faster journey over the P&W. Convenient transfer to the PRT Market-Frankford Elevated at 69th Street for a speedy trip to Center City Philadelphia was a further enticement. The new line would make the old route unattractive aside except for local travel between Wales Junction and Chestnut Hill on the Chestnut Hill branch. Subsequently, the branch was converted to bus operation in 1926 with little regret due to poor patronage.

The 700 series cars performed well, however the labor costs for two-man operation were impractical. By 1923, the LVT shop crews began enclosing the center entrances on several of the 700 series cars, including 706. It, along with 703 and 710 was converted to a straight side Chair Car. The Chair Cars had parlor-like seats. They were part of two car trains and for an extra fare of 50 cents, eventually reduced to 25 cents, passengers could travel more luxuriously. Chair Car service ended in 1930, a Depression-era casualty. Coach seats replaced the parlor seats. The remaining 700 series cars all had their center entrances removed by 1932. Several had been slated for conversion to one-man format and not completed and several had been damaged in accidents and fires.

By 1932, straight side conversions 702, 703, 704, 710 along with 706 were still in operation, along with cars 700, 701, and 711, which had their center entrances closed but retained their "fish belly" configuration with seats added where the stairwells had previously been located. Car 706 had a star-crossed history, having sustained considerable damage to its Number One end in a fire in 1936. It was rebuilt thereafter without the roof mat at the Number One end, the version I have modeled.



In the above photos, the sharp-eyed reader can see one end with a roof mat and the other without.

When the ex-Cincinnati and Lake Erie "Red Devil" high speed lightweight cars were purchased in 1938 and rebuilt and introduced into service in February, 1939, the plan was to keep car 812, the ex-parlor car, and four of the 700's for spares, including 702, 704, 706, and 710. The 800 series cars were to be retired or converted to freight motors, although they were only 27 years old.



The 700 cars frequently operated in two-car trains with either 800 series cars or with 812. Another fire in 706 resulted in a change of plans; car 706 was withdrawn from service and the body sold for use as a diner in Breinigsville, PA and the trucks placed under work car R3, an ignominious ending for a one-time high-end mode of transport! Instead, car 701 with the fish belly configuration was kept. Keeping the spare 700's and 812 turned out to be a wise move with the heavy rider ship experienced during World War Two. All of the surviving 700 series cars were scrapped at the Bethlehem Steel plant in 1952, after abandonment of the Liberty Bell route in 1951.

The Model: The shell is a resin casting, manufactured by John Kennedy of KND. John provides castings of the original 700 series cars with the center entrance, the closed center entrance car as with cars 700, 701, and 711, and the coach version, which I modeled this time. John provides detail castings including roof vents, marker lights, headlights (which were removable and which I purposefully omitted), steps, pilots and underbody details. The rear roof mat was crafted from styrene strips. I powered the car with a Bowser drive with 33 inch wheels. I am using a Rich Eaton pole which tracks beautifully. Purists will properly observe that the pilots should be closer to the trucks, but the location chosen allows for necessary turns. We fabricated the floor from 0.032 brass sheet. Bob Dietrich made the LVT logos. MicroScale gold striping and Railroad Roman numerals were used. The destination signs were from Custom Traxx, left over from my 701 project. I used Chair Car on the rear destination sign-indulge me a bit! I know that Chair Car service ended in 1930 and my car is the 1936-1939 scheme, but I suspect the sign was still on the roll sign box. Selecting the color: there is a story.



The book by my late friend Randy Kulp said that the 1936 scheme was dark red. Color photos of that era are non-existent. By sheer luck, on a DVD about the Liberty Bell Line edited and narrated by Doug Peters, there is one maybe 6 second color clip of car 706 at Quaker Siding, just north of the Quakertown station. It must have been shot on one of the first days of 1000 series lightweight operation on the Liberty Bell Line which entered operation on February 8, 1939. Car 706 was withdrawn from service after a fire in the switchboard on February 21, 1939, so there was at most a two week window during which the film could have been shot. Who knows how the film might have changed over the years and whether the colors were corrected and enhanced in creating the DVD (a DVD that I highly recommend).

With the DVD on Freeze-Frame, and color paint sticks in hand, my good faith guess is that the closest color is Caboose Red. As I said, it is a guess and it is the best we can do, 78 years later. The roof is Platinum Mist. Then there was all that one inch gold striping! Everyone knows my feelings about that. The current side frames are temporary. Bob Dietrich had made a bunch of the prototypical ones for his and my 701 cars, for both of our 812 cars, and for his 800 series car and freight motors. The mold for casting the side frames had worn out and he is in the process of making a new mold, which will have the third rail bars. More photos when the side frames are available. For now I have simply cemented some horizontal strips to the side frames to create the appearance of third rail bars. They are pretty good knock-offs of the Bowser side frames from their 800 series model. One other final touch I might try to add is the chain across the train doors at the ends. One great advantage of HO scale is the size is forgiving of the absence of such details, but you know me! I have some 80 links per inch HO chain and will brainstorm about how to do it. I won't obsess about it, although maybe I will! ...and the challenges that also resulted!



Our final photo from Rich Allman is LVT 706 on the lower level of his Keystone Junction in its final 1936 paint scheme, while 701 is on the upper level in the final 1947 paint scheme.

A Unique Car for My Layout!

...and the challenges that resulted...

by Custom Traxx

Ever since we started modeling trolleys in high school, we were always attracted to the "odd" cars. In Philadelphia this would have included car 2070, painted in the then GM bus orange, green and white; 2128, the "Safety" car; 2667, the "Zoo" car and later 2780, the "Training" car. Since Bowser made a reasonable model of the Philadelphia 2091-2200 class of 1948 all-electric PCC cars, Custom Traxx did produce a set of decals, set CN-2128, for the "Safety" car in HO scale. A finished car using that decal set is shown below left:



Having both lived in Los Angeles since 1981 and by now educated in their trolley history, I wanted to have one of their unique cars. That car was car 3002 the "Crying Trolley". This car was painted in early 1963 as such to mark the end of electric street railway in Los Angeles in 1963. Car 3002 was chosen for this honor because the

first PCC car, 3001, was already leased to a local museum and it also was the car parked adjacent to Los Angeles City Hall and Shirley Temple, famous child star of that era was on board the car at that time welcoming the public when she was 9 years old.

Custom Traxx considered a decal set for this car when the announcement of the Con-Cor air-electric PCC model was announced but that idea was dropped when the final model was released with all the inaccuracies in the final body shell (especially in the front and the rear), despite the fact that the model was based on car 3001, now resident and fully restored at a local Southern California museum. But when more prototypical shells started being 3D printed in not only HO scale but also N scale, we felt it was time to resurrect the plans. It was just at this time that RailGraphics announced their withdrawal from the decal-making field, prompting Custom Traxx to try Microscale in Fountain Valley, CA. The rest is history and those decals were produced in both HO (CN-3002) and N (NN-3002) scale by April 2017.

We took a different route for our LAMTA 3002. We started with an old Q-Car Brooklyn PCC shell and carefully using a file, merged the two halves of the destination sign to form one single one. Using now unavailable Floquil paint, the interior of the shell was airbrushed with Weathered Black (Floquil 17). Then Reefer White (Floquil 11) was airbrushed on the roof. A mixture of Scalecoat Penn Central Green (34) and Reefer White (11) was used for the light green below the belt rail and Pollyscale MEC Pine Green (404052) was used for the dark green window area.

Powering this car was going to be a challenge, once we decided not to take the easy way out and use the Con-Cor PCC and drive mechanism. Once upon a time (since 1999) Bowser made a 125141 mechanism with floor with their upgraded drive for their older PCC models and a 125142 mechanism with floor, intended for the Bachmann PCC and other resin, such as Q-Car, and plastic PCC shells, which could be adapted quite well to fit these shells. Bowser even provided mounts that were to be placed inside the shell under the roof at both the front and back of the shells to attach the shell to the floor. Most of our pre-2009 HO scale PCC models used one of these Bowser mechanisms in one form or another, always with the added A-line Bowser Trolley Flywheel kit. However, Bowser some years ago ceased their die-casting abilities, which brought the end to the #1283 metal floor used for these venerable PCC mechanisms.

The Custom Traxx partnership with Bowser in the development of both the HO scale PCC and New Orleans 900 series streetcars yielded some advantages. Due to the unacceptable failure rate of the early sound boards used in the original DCC-sound equipped trolleys, Custom Traxx obtained several of the floors, that are used with the RTR PCCs imported from overseas along with some motors, drive trains and power trucks used in those cars. These floors will be referred to as part #1361, but they are NOT available from Bowser!

Note: Although the #1361 floors are NOT available from Bowser, Custom Traxx does have a small supply of them.

So this would be a great time to try and fit the #1361 floor into the Q-car Chassis. Figure 1 shows the difference between the 1283 floor (silver), and the latest version of the PCC RTR floor (Green) with the mounts for a speaker. It looks like with a little filing we can make this floor work. There were several versions of this metal floor over the years starting with the elimination of the seat next to the front door to the inclusion of mounts for the speakers used in the models with DCC/Sound.

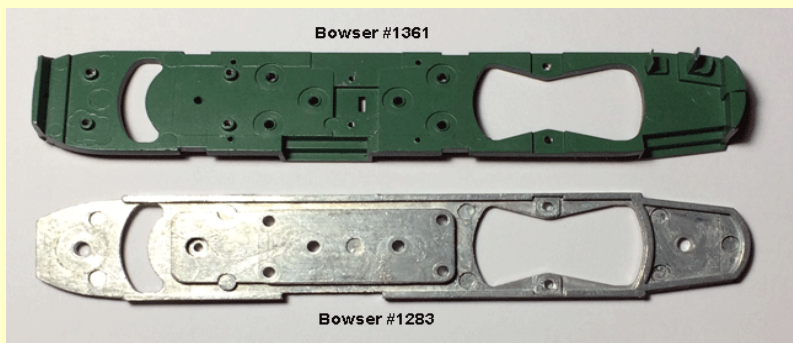


Figure 1 - Bowser 1283 and 1361 All-Electric PCC Floors.

Note: The Bowser PCC has undergone several modifications from the time the first cars were introduced in 2009. Some of these were in the wheels used, the axle and worm gear bearings, and the floors. With the #1283 floor no longer available, we thought that this would be a good time to see if the #1361 floor could be used in place of the #1283. We knew that the #1361 floor was wider because the plastic shell was thinner but when we actually measured the floors, we found the difference to be much smaller than anticipated (26.2 mm versus 25.4 mm, a difference of just .8 mm) but we still did not know how the ends would work and, of course, we would have to fit this into the resin Q-car shell.

So the first thing we did was to line up the openings in the floor for the power and trailing trucks for both floors and, using a #30 drill, drill the holes in the green #1361 floor for the screws that normally mount the floor to the body.

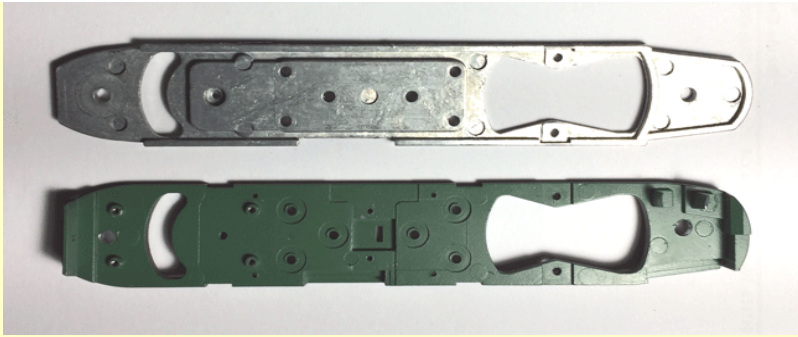


Figure 2 - Bowser 1361 floor after mounting holes drilled in the ends to match the Bowser 1283 floor.

To be successful in any modeling project, it is mandatory to have most of the following three things:

1. Some modeling skills.
2. Most if not all of the tools needed, or,
3. An associate with #1 and #2!

Most of us fortunately have some of #1 and some of #2 but I have #3 in the form of John McWhirter, the current Director of the 22 year old Southern California Traction Club. He has a garage full of various tools in his home and after looking at the project decided the the first thing to do is to use his belt sander to remove the .4 mm from each side. So we did that and since we had the PCC body with us, we could precisely shape the ends to fit our shell.



At the completion of our visit, our modified green 1361 shell looked as shown in the next photo. Bear in mind that the silver 1283 floor below to it fit perfectly in our Q-Car shell.

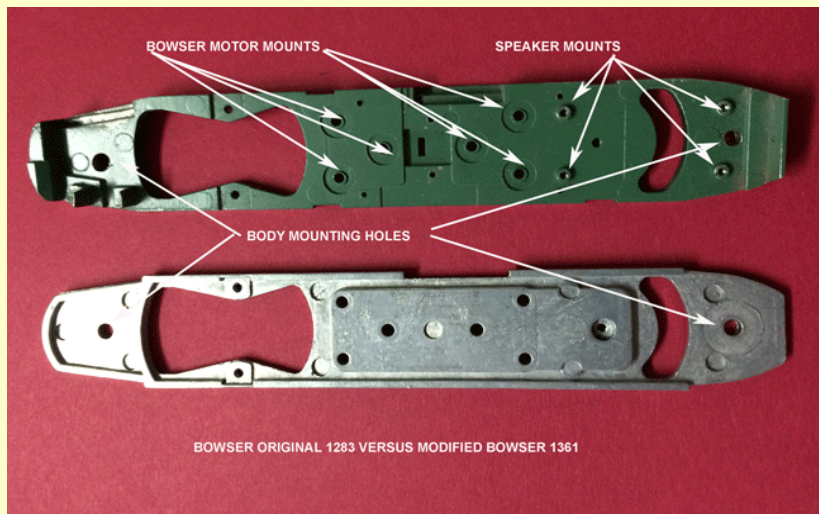


Figure 3 - Bowser 1361 after material removed from sides and ends to fit inside the Q-Car shell.

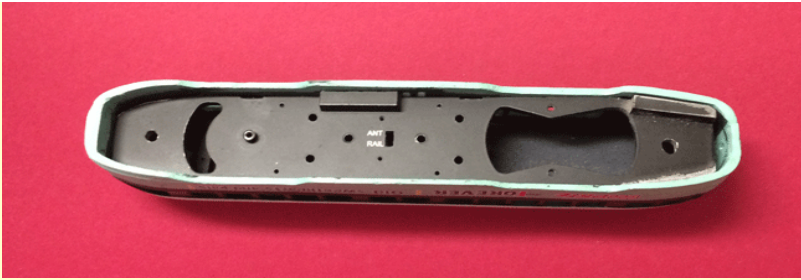


Figure 4 - Modified Bowser 1361 floor in Q-Car Shell.

Before we started to assemble the drive unit and install it on the #1361 floor, we touched up the bare metal with tru-color TCP-256 Light Primer and then with TCP-067 BN Cascade Green, which seemed to be a close match to the original green used by the manufacturer.

We had been able to strip one of the ANT-RAIL switches from one of the bad Bowser PCCs and after John McWhirter studied the switch, he deduced that the four wires, (from left to right) should be wired as shown in Figures 5 and 6:

Wire 1 (extreme left)	Right Rail and Motor/Decoder
Wire 2	Left Rail
Wire 3	Motor/Decoder
Wire 4 (extreme right)	Pantograph/Pole

Figure 5- ANT RAIL Switch Wires (Left to Right).

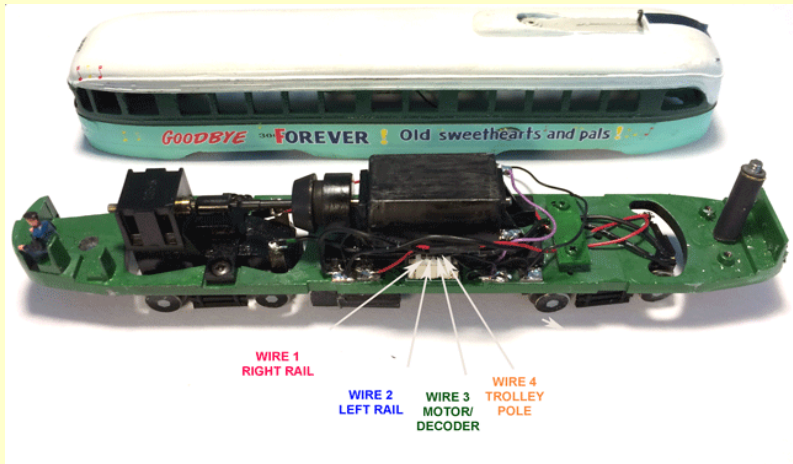


Figure 6: LAMTA 3002 with Bowser ANT-RAIL switch wires marked.

Another advantage of our relationship with Bowser is our ability to get some of the dynamically balanced motor-flywheel combinations used in the HO scale Bowser RTR PCC and New Orleans trolleys. These units are from damaged or returned RTR trolleys and unavailable separately. We snagged one for this project. We also used the basic Bowser nickel silver wheels and applied the resilient wheel decals from our CT-995 decal set.

So we installed the power and trailing trucks along with our balanced motor-flywheel combination and wired it to the ANT-RAIL switch in accordance with Figure 5 above, tested the car and it ran as expected.

There were only two tasks left on this project, installation of a DCC/Sound Decoder and Speaker and the headlights/taillights. The DCC items recommended for this project by Kevin Honda, Arnie's Model Trains, were the Soundtraxx #886001 Tsunami2 TSU-1100 Sound decoder for Electric Models along with the Soundtraxx #810154 Mini-cube Speaker (16.0 x 12.0 x 11.25mm). *(This would be our first rechassis / re-motor /DCC - Sound installation!)*

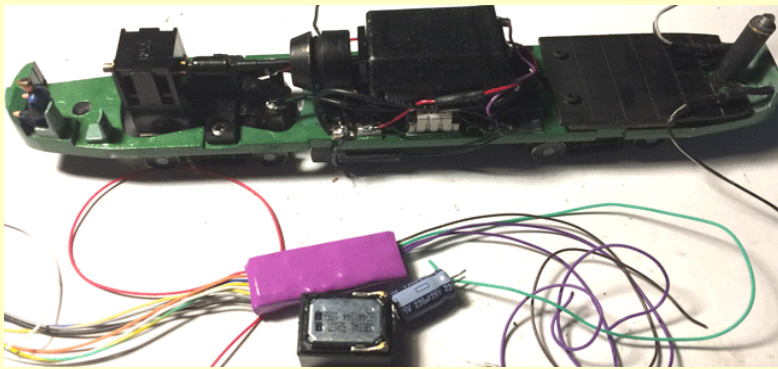


Figure 7 - LAMTA 3002 Chassis with Tsunami 2 Decoder, Mini Cube Speaker and Capacitor prior to installation.

So we moved on to the lights. immediately we discovered that the 1361 chassis has vertical walls at the front and back of the chassis. These would be perfect for the mounting of the lights. However, up to this time, we had mounted all lights on the body shell itself, making it simpler to mount the decoder on the underside of the roof. This minimized the number of wires that connected from the body shell to the chassis. With the lights now mounted on the chassis, we would have to create a space on the chassis for the decoder and speaker. The most space in the car body was behind the motor which had been used for the ESU speaker and we would have to make the best of that.

Placing the body shell on the chassis, we marked the locations of the lights by inserting a #61 drill through the holes in the body shell and then drilled the holes for the fiber optics. Because of prior experience, we would be using the Woodland Scenics NANO LED lights (JP5743-Warm White for the headlight; JS5745-Red for the rear brake lights). Each light was placed in series with a 470 ohm resistor. The almost completed chassis is shown next:

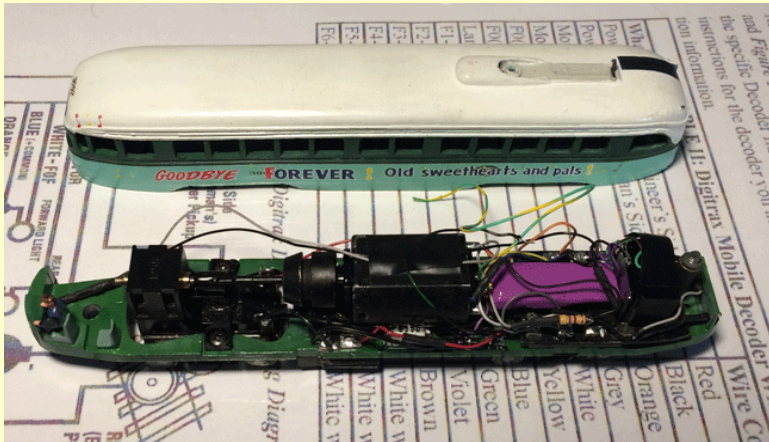


Figure 8 - LAMTA 3002 with DCC installed.

Kevin also chastised us for not installing the small capacitor that came with the unit. We had been led to believe that it was merely a "Keep Alive" type of addition but it is required to ensure the smooth operation of the decoder. Kevin checked the chassis out, installed the capacitor, changed the rear lights from Button F0r to Button 3 and used CV117 to set up our brake light function which operates on Button 11.

At the end of the day, the decoder worked on address 03 with default sounds. We could not wait to get to our workbench and get a JMRI/DecoderPro printout so that we could understand all the facets of this decoder. But JMRI/DecoderPro would not read the decoder. It would only give us the "Timeout...(306)" error, so we stopped at this point as we could not make some of the changes we desired. We also placed a question on the JMRI Users Group about this issue.

Note: It was at this point in this article we intended to mention JMRI/DecoderPro as a great help to setting up DCC decoders and learning the capabilities of both DCC and the specific decoder at hand. JMRI (Joint Model Railroad Interface) is a project that has built tools for the model railroader. Such modelers can manage locomotive rosters and program their decoders with DecoderPro, build control panels and control their layouts with PanelPro and use OperationsPro to create manifests that route cars across their model railroads. JMRI is an ALL-VOLUNTEER GROUP of extremely knowledgeable Information Technology (IT) people.

But we had problems with JMRI/DecoderPro which started on June 29 when we tried to readdress our LAMTA 3002, equipped with a Tsunami 2, TSU-1100 and all we got is the "...timeout error... (306)...". We were initially told that the JMRI-DecoderPro folks had not yet gotten around to allow the program to recognize the Tsunami2 line of decoders but had been furnished the information. Meanwhile, we asked the JMRI Users Group for help and they claimed otherwise. In fact, we talked with one of the persons who wrote the code for those computers some time previously so he felt the problem must be elsewhere. Some members gave advice, but none of which unfortunately none seemed to solve our issue.

We contacted one member directly who had helped us before, which turned out to be our first mistake. He gave directions that we did not fully understand since we are hardly IT people and when we did not respond, he eventually called us ignorant, uninformed and insulting and eventually ranted about how many hours in the day he spends solving problems caused by exterior hardware that had nothing to do with JMRI.

Then one of then more mature members contacted us and we worked the problem. By process of elimination, we had eliminated the computer and the JMRI/DecoderPro program but not the PR3. So it was suggested that this may be the problem so we decided to try and talk with Digitrax. This is when we found out that just to talk to technical support, we have to set up an account and develop a password. So we did that and we got a response that started off on a somewhat negative note, telling us what they would not or could not do before they even discussed our issues:

"...JMRI was on our web site as a courtesy but we never provided support. If you call in for assistance, we won't be able to sport support for JMRI or your Mac. There are just some things that are beyond the scope of tech support..."

Of course, none of this solved our problems except that making it plainly obvious that we may not get any help from these folks. But they did eventually ask us to send the PR3 to them for repair along with \$17.00. And on July 17th, digitrax acknowledged receipt of the unit. But as of July 31st, we still could not use JMRI/DecoderPro, as our PR3 was still in the hands of Digitrax. We even tried with another computer/PR3/program track combination. We tested the power supplies and they all produced 18 volts D.C. under no load.!!

So we started evaluating for another interface to us. We investigated SPROG and a USB interface from NEC. By this time it had been suggested to us that we abandon our Macs and get a Windows computer. So here we were in that argument again. The NEC USB interface required an extraordinary amount of activity to set it up so it was rejected outright. As of July 31st, we have not yet tried SPROG, and do not have our PR3 back from Digitrax, so we still can not use JMRI.....

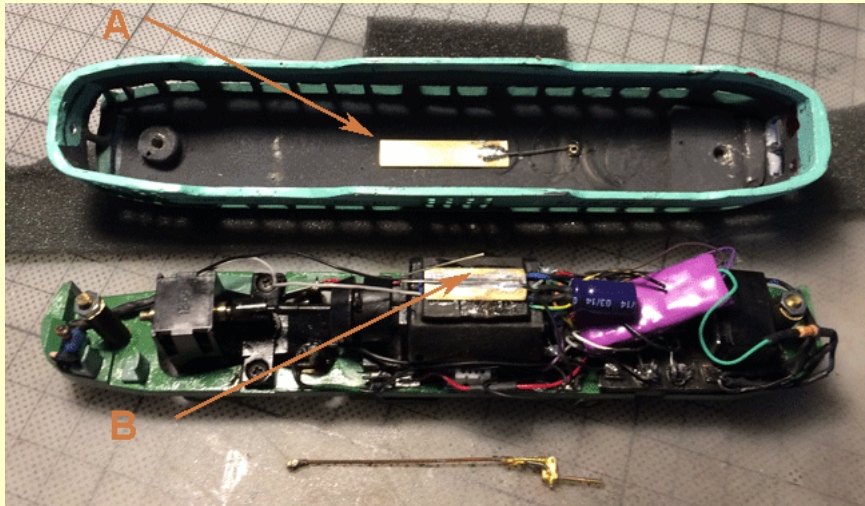
JMRI/DecoderPro is a fantastically useful program.....when the user can get it to work.....and it did for over ten years with the same PR3 and two different MAC computers! But when it stops working, look out! The fingers point every direction but the location of a solution. Looks like it is may be time to abandon an old friend we have been using since 2006 and find something that WORKS for ignorant and uninformed users! We finally readdressed the car with our Digitrax Zephyr and moved on with our project.

With the shell secured to the chassis, our completed car now waited for testing. It ran beautifully. Rest assured that as soon as there is an HO scale 3D printed version of the LARy P-1 PCC available, we will be painting and lettering another shell. But for now, this was the prototype test for Custom Traxx decal set CN-3002 and it will do:



So off we went to display this car in operation at the Pomona Great Train Show on July 8-9, 2017! It ran perfectly two-rail but for some reason would not budge using overhead wire.

Since this was our first DCC/Sound installation and also our first with lights mounted on the chassis, we had to rethink a lot of our practices, some of which pre-date the use of DCC. Now that the decoder and the lights were mounted on the chassis, the only required connection to the chassis would be the trolley pole. So we adopted an old method and created a spring wire connection from the chassis to the shell.



A piece of brass was cut and cemented to the underside of the roof directly over the motor (See A in the photo above). A piece of wire was soldered to it and the trolley pole pivot. We fashioned a platform from styrene and mounted it on top of the Bowser motor. The headlight wires were passed under the platform (See B in the photo above). A piece of brass was cemented to the top of the platform and a piece of spring wire was soldered to it. It should contact the piece of brass on the underside of the roof when the chassis and shell are assembled.

We also found the trolley pole along shown in the above photo, which was a former MTS PCC trolley pole, had some issues passing current so it was also replaced.

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