

n Traxx has a few Bowser San Francisco F-line PCC cars, #12550 Muni 1950's and #12561 Pacific El

The Con-Cor HO scale Pre-War PCC arrives!

Early last month, these cars finally arrived at the hobby distributors. We initially acquired three of them from GHB in the Los Angeles Railway (93001), Philadelphia, PRT/PTC (93002) and Pacific Electric (93008) versions for review. Later in the month, we acquired two more in the Brooklyn (93003) and Pittsburgh (93005) schemes.



Figure 1 - Con-Cor PCCs

Air-electric PCC cars of the 1938 vintage were simply worn out by the end of World War II and started to vanish from cities in the 1950's. Brooklyn abandoned their 100 cars in 1956 while Philadelphia scrapped their 20 cars in 1960. The Los Angeles cars were gone by 1963 with the 3001 being saved by the Orange Empire Railway Museum. San Diego abandoned their 28 cars in 1948 when the cars were barely ten years old. Several cars were sold to El Paso, Texas and two of these cars, 508 and 528, also reside at the Orange Empire Railway Museum. Later air-electric cars built in 1942-1944 lasted longer but almost all were gone by the 1990s.

REVIEW:

The quality of the painting and lettering on all three models is superb. This is no surprise to us since the cars were made at the same facility in China that produced the Bowser F-line PCC cars. The Los Angeles Railway model was selected for the initial evaluation and was taken to the Southern California Traction Club test track to test their running qualities. The car was also operated on the huge layout of the Golden Empire Historical & Modeling Society (GEHAMS) in Bakersfield CA and taken to the Orange Empire Railway Museum. We took the car out to Orange Empire Railway Museum to compare it and our custom painted brass model to the real 3001. After noting the differences in colors between our brass model and the Con-Cor PCC, we wanted to see which paint scheme, was closer to the real thing.



Both the light yellow and the darker yellow on the 3001 model seems brighter when compared to the actual car. But in the normal indoor lighting present on most model railroads, this car appears to have the same brilliant colors as the prototype car 3001. A lot of model railroad equipment is painted somewhat dark so this was a little refreshing. So the colors on the Con-Cor model were actually closer to the prototype 3001 than the colors on our brass model (see Figure

New Trolley Models announced at the National Train Show!

The National Train Show was held in conjunction with the NMRA Convention in Milwaukee this year on July 16-18. During this show the following new trolley car models were announced:

1. Birney Safety Car (HO scale) from Bachmann.



The Times obtained this photo of the engineering test shot car shown at the National Train Show:



The Bachmann catalog states that this car will be available in Baltimore, Sacramento, Philadelphia and New York City area paint schemes. No more details are available at this time.

2. 1930 Peter Witt (N scale) from Bachmann:



3. All-Electric PCC (HO scale) from Bowser:

The Times obtained this photo of one of two test shot cars, due later this year, which clearly shows the new windshield wipers.



There will be three different versions of this car. The A-car with the plain roof as used by Philadelphia, the C-car with the two roof ventilators as used by Johnstown, Toronto and others and the B-car with the full roof fan shroud, as used by Cleveland, Toronto and Pittsburgh. The test shot C-Car is equipped with very hard to see clear plastic test shots of the [Toronto Advance Light and SEPTA "Gumball" Light](#) and is shown in the next photo. Bowser is considering attempting to make both lights illuminate with the use of a DCC decoder. The M4T will

2). The 3001 had not been refurbished and painted at the time our brass model 3001 was finished.

The Los Angeles Railway model was selected to evaluate the body of the car as this was the car on which the model was based. The Pacific Electric Railway model was selected for installation of the TCS M4T and operational tests. The Philadelphia car along with the Los Angeles car were used for testing running qualities. The cars ran flawlessly and had great flywheel action resulting in very smooth operation. Despite the relatively light weight, 3.5 ounces, there were no problems in trolley pole operation. But this weight, being less than the 4.172 ounces required of rolling stock per NMRA RP 20.1, seemed to cause the car to derail on irregular track.

Readers should be aware that no two operators ever had identical cars. There were differences in roof lights, anti-climbers, placement and size of side destination signs and door types. This complicates the task of trying to make an accurate model. Cost considerations eliminate the ability to make each and every version.

The model exhibits all the correct major dimensions for the 1938 Air-Electric PCC, that is, 46' 0" long, 8' 4" wide at the belt rail and 10' 1/8" high. The model sits at the prototype 12" above the rails. This car has eight-wheel drive and runs smoothly with a very slight amount of gear noise. Both of our test cars ran between 19 to 27 mph at 7 volts DC. The drive train is somewhat similar to that found in the Bachmann Peter Witt. It handled the nine-inch radius curves of the Southern California Traction Club test track with ease but would not take the six-inch radius curves. Perhaps one of the expert East Penn Traction Club guys will come up with a method to modify the car just as they did for the Bachmann Peter Witt. Each car has an illuminated interior along with one row of seats along each side and a mirrored rectangular box which makes the car appear to have a double row of seats. Like the Bowser PCC, this car has a motorman figure at the motorman's position.

The car is DCC-ready and can be operated either two-rail or from the operational trolley pole. Disassembly is not required to change from rail to overhead as there is a rail-overhead power switch located under the rear truck. Instructions with illustrations are provided in case removal of the shell from the chassis is required. The Con-Cor PCC disassembles in a manner similar to the Bowser PCC. Removing the shell from the chassis is required to remove the trolley pole. Because this trolley pole swivels in the plastic body, care will have to be taken to ensure enough freedom to properly negotiate overhead frogs and sharp curves. A small drop of a plastic compatible lubricant freed up our sample trolley pole and it worked flawlessly after that. The trolley pole, which contains an NMRA-compliant contact at the end of the pole is a little short for this car. We would have preferred to see a trolley pole about two feet longer. The LARy 3001 was operated in both the two-rail and overhead wire modes without incident.

For the record, in support of this project, in December 2007 Custom Traxx obtained an MTS Imports, Inc. brass shell of an air-electric PCC car similar to that shown in Figures 2, 3 and 4 with the permission of MTS Imports, Inc., and provided that shell to Con-Cor.



Figure 2 - Con-Cor PCC with MTS Brass Model.

In February 2008 Custom Traxx provided Con-Cor with detailed data about air-electric PCC paint schemes on seven different operators, for which they were recognized on the Con-Cor web site. The road names and paint schemes selected were those that had cars that were 95% accurate to the model being produced. These operators and schemes included Philadelphia - PRT Silver & Blue* and PTC Green & Cream; Pittsburgh - Red and Cream*; Brooklyn - BRT Pachyderm Gray and Red* and NYCTA Green & Silver; Los Angeles - LARy Two-tone Yellow*, L.A.T.L. "Fruit Salad" and LAMTA Green and White; San Diego, Toronto - Red and Sand*; Baltimore - Original Green and Gray and Final Yellow and Gray.

**schemes currently announced by Con-Cor.*

Trolleyville policy is to assist any bona fide manufacturer of traction products with any information that we have to support the production of an accurate traction model. This includes photographs, plans, specifications from the Trolleyville Library and the Custom Traxx decal source files. There is normally no charge for this service unless expenses must be incurred in the production or transmission of such data.

Upon opening the boxes, we can state that the car captures the look and feel of the 1936 Air-Electric PCC especially when viewed from the side. The shell seems to have errors to three areas. The curves in the front and rear are a little "off" and the rear windows are too large. Each of the two windows is [21.5" high](#) and [25" wide](#) as shown below:

handle one more function. For the SEPTA cars with a Gumball and a Subway Light, we might have to make an M5T available:



The B-car is shown next. This is the shell that would be used for Cleveland/Toronto/Pittsburgh cars. It also had a test shot of the Toronto Advance Car light.



The big news about this car is the improved wheel and truck frame details. Those wheels are really unbelievable.



Bowser is also looking at sound! More information on all these models will be forthcoming as they are released by the manufacturers.

Fabricating an HO scale San Francisco "Torpedo"!

With the success of the initial release of the HO scale San Francisco Municipal Railway (Muni) F-line PCC cars, there has some been interest in getting a model of the San Francisco "Torpedoes". The "Torpedoes" are 10 double-end PCC cars that were bought by San Francisco in 1948 and were the first true PCC cars ever to run in that city. Consideration was given to making an injection-molded model of this car but due to the limited numbers of cars and the limited number of road names in which this car could be offered, it did not seem like a profitable venture.

When Muni decided to send the four remaining Torpedoes back to Pennsylvania for rebuilding and released the road names and paint schemes, there was even more interest but still nowhere near the number of road names to justify an injection-molded model. Of the ten cars, eight will be spared the torch with 1006 through 1011 and 1015 operating in San Francisco and 1014 in Australia. 1012 and 1013 were scrapped prior to their importance being recognized.

In 2007, the Southern California Traction Club acquired an Imperial Hobby Productions (IHP) HO scale resin-cast shell and floor of the Illinois Terminal (IT) 450-457 series PCC. In assembling that kit, we discovered a problem with the shell which required hogging out of the roof using a milling machine just to get the Bowser motor to fit inside the car and have the body sit at the required 12" above the railhead.



The windows of the model measured 24" high and 25" wide. This small error combined with the incorrect roof curve along with the too-flat anticlimber spoiled the rear end of the model for those familiar with the 1938 Air-electric PCC. See the photos of the Con-Cor model front and rear below when compared to the brass model.

When we noted one of the IHP IT PCC shells available on eBay in late June, we decided to get one to convert it to a San Francisco 1016-1015 series "Torpedo" PCC. The two cars were so similar that converting a IT PCC to the Muni PCC seemed worth considering. The eight IT PCCs were built on Saint Louis Car Company order 1672 in 1949 while the ten Muni Torpedoes were built on SLCC order 1667 in 1948 so it is not surprising that they would have many similarities. Both groups of cars were equipped with General Electric electrical equipment and B-3 trucks.

For this car, we decided to use the running gear from an F-line PCC which had some electronic problems. We also decided to use the Custom Traxx 125164 pewter floor instead of the floor provided by IHP as we experienced [warping problems with the resin floor](#) provided with the original kit.



Figure 3 - Front End Comparisons.



In the previous photograph, from top to bottom are (1) the IHP IT PCC shell as obtained, (2) the IHP ITPCC floor, (3) the Bowser 125XX series PCC chassis from which the power train was obtained, and (4) the power train mounted on a Custom Traxx 125164 pewter floor. In this photo you can clearly see the six rubber isolators that AFFA Technologies inserted into their floor, making a great unit even greater. For those of you familiar with U.S. fabricated Bowser drives, you will note the flywheel and the revised Stewart-type drive train. [For the complete story on this conversion, click here.](#)



Figure 4 - Rear End Comparisons.

One adjustment that can improve the look of the rear end of the car is with the rear window. The top of the rear window protrudes too far toward the outside of the car. We gently pushed the top of the rear window of the Pacific Electric car into the shell a little (See the red arrow in the photo below) and secured it a little cement. With the results shown below.

(Con-Cor, from column 1)



Figure 5 - Rear Window Comparison



Figure 8B - PRT/PTC 2013 Left Side

The lettering seems to be correct except for the placement of the numbers and the PTC herald on the left side (See Figure 8B above). The numbers should be located under the third window and the herald should be located under the fourth window from the left rather than under the second one. Data provided to Con-Cor did contain the photo shown as Figure 8C:



Figure 8c - Prototype PTC Air-Electric PCC 2010

While working with the design and development of the Bowser San Francisco F-line PCC, we learned how difficult it is to get the compound curves of a PCC, which was designed before before the age of computers, translated into a 3D program so that a correct shell can be made. But another problem is getting the 3D program used by the engineers to totally translate to the program used to cut molds by the Computer Numerically Controlled (CNC) machines. Thousands of dollars and many months were consumed in

This was the first car that we attempted to make corrections. On our car we removed the left side herald by masking as close as we could around the herald. We dipped a cotton swab used for cleaning tape recorder heads in Polly S #552144 E-L-O Easy Lift Off, squeezed away the excess fluid and rubbed gently over the herald until it disappeared. Then we immediately cleaned the

getting the 3D program for the Bowser car correct at the final point. Custom Traxx has examples of rejected shells to prove it. Correcting the problems shown on these shell delayed the Bowser PCC car for almost a year.

The Trolleyville policy in reviewing products is to inform readers of three aspects of traction products. First, is the product and how it performs. Second, is how the product is supported by the manufacturer and finally the warranty and repair procedures This also includes the attitude and cooperation of manufacturers in assisting customers with warranty and repair problems. Manufacturers are always contacted prior to the review as a courtesy so they do not feel "blind-sided"!



Figure 7A - LARy 3001 Right Side

Our Los Angeles Railway 3001 model arrived without a side destination sign (see Figure 7A above) or without numbers on the left side (See Figure 7B below and the prototype photo 7C).



Figure 7B - LARy 3001 Left Side

The EXIT signs adjacent to the center doors and the ENTER FRONT signs adjacent to the front doors are also missing. We will eventually correct all of this with like items from a Custom Traxx CN-3001 decal set.



Figure 7C - LARy 3001 at the Museum

The front destination sign, **P PICO TO RIMPAU**, was correct for the car.

The Philadelphia "Cream Cheese" version represents the first two orders of PCC cars delivered to PRT in 1938 and PTC in 1940.

The front destination sign, **53 WAYNE & CARPENTER** was correct for this car, but there was no side route number sign on this car (See Figure 8A below).



Figure 8A - PRT/PTC 2013 Right Side

area to remove all traces of the E-L-O. If not done, it will continue to work and eventually remove the silver paint.



Figure 8d - Con-Cor PRT/PTC 2013 as delivered.

We decided to replace both heralds with the PRT winged heralds that the cars wore from 1938 to 1940. We placed the left side herald in the correct place and placed the other PRT herald directly over the one on the right side. We used the same technique on the cream numbers on the left side but this is much more tricky. These very small numbers were much more stubborn and we started to get blue paint on our swab just before the numbers gave up and vanished. This is a slow process that must be accomplished using great patience. Again, before removing the masking tape, ensure that all traces of the E-L-O are gone or you may not like what you find the next morning. Philadelphia Air-Electric PCC cars continued the practice adopted by the Philadelphia Rapid Transit with the Nearside cars by placing only the route number on the pillar adjacent to the front door or in the upper left corner of the first window adjacent to the front door. Full side route number and destination signs were not forthcoming until the All-Electric PCC cars arrived in 1947. Although the 2001-2020 series PCC were not initially delivered with these signs, they received them prior to being repainted green in the early to mid 1940s. So we used some backgrounds and numbers from the same CN-2001 decal set to create our side route number sign. We are quite sure that these signs were not on the car while it had PRT markings but since this car has provided the location for a side destination sign and would be extremely difficult to remove, we decided to go ahead and install our route numbers.



Figure 8e - Con-Cor PRT/PTC 2013 as modified .

The above photos show the car after we made our modifications. In retrospect, we must state how much we enjoyed the challenge of making these little changes. We will probably have a lot more to do.

We cannot say too much about the Pacific Electric version, shown in Figures 9A and 9B below, since no prototype for this car in Pacific Electric livery especially with San Francisco destination signs ever existed.



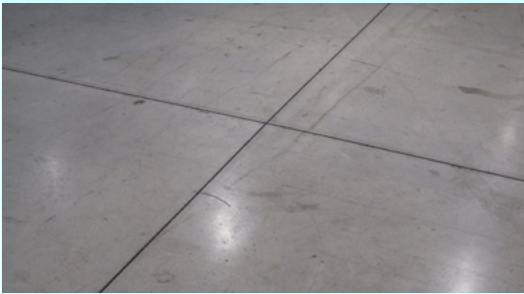
Figure 9A - Pacific Electric 1061 Right Side

The Great Train Expo and the Southern California Traction Club return to Pomona Fairplex

After an absence of over five years, the Southern California Traction Club returned to Pomona-Fairplex to display operating traction. This time is was the Great Train Expo, the excellent model train show that replaced the Great American Train Show (GATS).

Our files were filled with complaints about Pomona-Fairplex from condition of facilities to security and outrageous parking costs and conditions. See the February 2005 Trolleyville Times for that review. Recently, Fairplex management convinced Bill Grove, owner of the Great Train Expo, that they had "mended their ways". The managers of the Ontario Convention Center have been making a big push in recent years to bring shows to their facility but their rather ridiculous limitations on vehicle entrance into the facility for set-up and teardown make their facility somewhat undesirable. The club did appear at the Ontario facility last year and concurred with the decision to attempt Pomona-Fairplex again!

We were assigned Building 9, formerly named 7A, which has undergone quite a face lifting. Gone is the asphalt floor, replaced with smooth concrete with 10' by 10' squares that make it easier to determine your location on the floor plan.



This smooth floor replaced an asphalt floor that emitted a distinctively unpleasant odor. All security and administrative staff seemed friendly and eager to assist us. Security was consistent and pleasant to deal with. The facility was immaculate when we entered.

On a whim, we visited the concession stand in front of Building 9, R's-n-R's Concession, owned by Tom and Mary Lee Ricketts, who was working with her daughters Flo & Darcy. Flo's daughter Stephanie was the cashier. Tom was not present due to illness. Shown in the lower left photo is Mary Lee, showing her normal happy face, and Darcy while Stephanie and Flo are shown in the lower right photo.



They served us a Breakfast Sandwich on both days of the show with some quality bacon in it. The coffee was also top-quality. Mary Lee stated that she had been working at Fairplex for 30 years. Darcy could not stop praising the current Fairplex CEO. She stated that he was a pleasure to work with and that he had an open-door policy with all Fairplex employees and he really listens. But that Breakfast Sandwich was really great. We also enjoyed the Steak & Cheese sandwich we had for lunch. For once someone put Steak and Cheese together on a bun and did not erroneously call it a Philly Cheese steak. On the second day, after we had their signature Meatloaf sandwich, we knew that this was clearly the best food concession at any Fairgrounds that we have encountered in the history of club appearances.

As can be expected with the Great Train Expo, Bill Grove regularly manages his shows personally. He was the show manager for the Pomona-Fairplex show. We were glad to hear that the Great Train Expo is returning to Pomona Fairplex in December 2010. We would not be more pleased and we would have never said that five years ago. It was great to be back there...now!

Bowser was displaying pre-production models of the next six San Francisco F-line PCC cars at this show. Shown below are cars 1051 (San Francisco Muni 1960s), 1056 (Kansas City) and 1062 (Louisville).



Figure 9B - Pacific Electric 1061 Left Side

It is colorful but does not accurately represent any Pacific Electric prototype, especially with the numbers and destination signs chosen. It also does not accurately represent San Francisco car 1061 for which it is signed. We can only wonder why Con-Cor chose this number complete with a San Francisco destination sign when a much more prototypically correct model was just released last November. The car also has the next car light above the headlight. This Next Car light was used on the Brooklyn cars, one Boston car but no where else, including Pacific Electric. Shown below is the actual San Francisco F-line PCC car 1061, the Bowser model of the same car (Figure 10) and an actual Pacific Electric PCC car, which operated from 1940 through 1955 (Figure 11). The Con-Cor car represents none of them.



Figure 10A - Prototype San Francisco 1061



Figure 10B - Bowser Muni 1061 PCC



Figure 11- Actual Pacific Electric PCC car

So if the object was to attract either Northern California or Southern California traction fans, they may have missed the boat here. We feel that a 5000 through 5029 number and a **GLENDALE-BURBANK** destination sign would have been a better choice. The Pittsburgh car 1110, one of the better looking variants, unfortunately has a Pittsburgh Railways Co (PRC) herald on the left side that was not present on the prototype. Pittsburgh placed their herald only on the door side of PCC cars. See Figure 12A below:



These three cars along with 1053 (Brooklyn), 1054 (Philadelphia 1938) and 1060 (Newark) should be at your dealers by late summer or early fall. Shown below are the 1054 and 1053.



All of the Bowser PCCs are show stoppers when an M4T decoder is installed. The realistic brake light which comes on just before the car starts to slow down and stays on while the car is stopped is an attention grabber. Custom Traxx had one running on their display layout (See next photo),



The Southern California Traction Club ran two of them on their City Streetcar Line for most of the show.



We estimated about 3,000 people visited the show and for a summer train show, this is great attendance. It was great to enjoy the Pomona-Fairplex again!



Figure 12A - Pittsburgh 1110 - Left Side

We will attempt to use the same procedure that we used to remove the misplaced PTC herald on the Philadelphia Car to remove the PRC herald on the left side. Everything else on the car except for a lack of a side destination sign appears accurate. The paint scheme used on this car, namely the red "cheeks" on the front dasher minimize the errors in the curves in that area so for some, this will be the best car to obtain.



Figure 12B - Pittsburgh 1110 - Right Side

The Brooklyn car has no numbers on either side of the car. We intend to correct them with numbers from the Custom Traxx CN-8111 Brooklyn PCC decal set.



Figure 13A - Brooklyn 1001 Left Side



Figure 13B - Brooklyn 1001 Right Side

We have concluded that none of the Con-Cor cars have side destination signs. Most of these errors and omissions can be corrected with decals. All Con-Cor PCC cars have rear brake lights that operate in the DC mode. When the car has been running and stops, the brake lights illuminate for a while and then go out. On the prototype the brake lights illuminate as soon as the brake pedal is depressed and stay on as long as the brake pedal is depressed. We installed a Train Control Systems M4T decoder in the Pacific Electric car and found that no function would control the lights in our sample car. All lights, including the interior lights, operate on DC right out of the box. In the DC mode, the brake lights come on after the car comes to a complete stop and eventually go out. Function F6 did stop and start the car. But this car when operated under DCC, it ran in reverse when it should have run forward. The car ran in the DC mode correctly. We are sending this car to Train Control Systems (TCS) for a more in-depth evaluation and to see if there is a modification that can be performed can allow the Con-Cor car to enjoy the full range of effects in the TCS M4T decoder. We have been provided some

additional input about this car from [Richard Allman](#) and [Bob Dietrich](#), both members of the East Penn Traction Club.

CONCLUSION:

This is a great running model that should add to any 1930 through 1960's era layout. It runs smoothly at prototypical speeds. At 7 volts, the cars ran steadily between 19 and 27 scale miles per hour. Although some PCC cars have operated at 50 mph, most cars were comfortable around 35 mph. While the wheel and truck detail of the Con-Cor PCC rivals that of much more extensive brass models, there were finishing errors on two of the three models that we acquired. The Philadelphia car ran backwards in DC when it should have run forward but the Los Angeles car ran as it should. That is why the Philadelphia car is facing opposite the others in figure 2. These models will complement the Bowser PCC cars, the Bachmann Peter Witt and the soon to be released Bachmann Birney. It appears that traction modeling is on the rise so do not get left behind. Make sure that your source for these models is a good one! And this may not be the end of this. We have not heard from Walthers or Athearn.....yet!