

It lives!!!!! LRC 6917 at speed! Photo by Mark Kaluza.



# The HO Scale LRC - pre-production sample

## HO Scale LRC Locomotive Order Deadline: 31 July

I think the <u>LRC Locomotive</u> might win the award for the most-delayed model in our hobby's history. I first announced it when Rapido was barely out of diapers... In September 2005, I launched the LRC as a resin kit. Then in 2008 we (I say we because Dan was on board by then) relaunched the LRC as a ready-to-run model. Then the economy fell apart.

Consequently, orders for the LRC were quite low. I say quite low, but I really mean it was winning a Limbo contest. I say it was winning a Limbo contest, but I really mean that an ant could jump over it. I say an ant could jump over it...

So we decided to postpone the project while we focused on more profitable models. As it was the height of the worst recession in 80 years, the goal of "more profitable" models may have been somewhat quixotic. While that did not bode well for Rapido at the time, at least it gave me the opportunity to use the word "quixotic" in a sentence five years later. In late 2012 we decided to relaunch the LRC project with a fabulous, Trek-inspired marketing campaign that was Bill's brainchild:



The orders arrived in spades. The trouble was... where were the moulds? They were made in 2008 and were sitting at Mr. Wang's factory. Then Mr. Wang went out of business. Then they went to Mr. Jiang's factory. Then Mr. Jiang went out of business. We discovered them at the back of a room in our assembly workshop. No paperwork, no electronic files, nothing. The assembly workshop guys have spent the last 18 months piecing them back together and rebuilding them to 2014 standards. As a result, our LRC locomotive will have:

- Rapido's proven FP9A-style silky-smooth drive system
- Working number boards
- Working ditch lights, class lights, backup light and STEP LIGHTS
- Accurate LRC details This is not an F7 painted in LRC colours!

- Full cab interior
- ESU LokSound decoder with accurate sounds recorded from the real LRC UNDER LOAD!
- Optional Doppler horn just like our FP9A
- Full underframe detail! Hang on there is no underframe detail. Right The lack of underframe detail is included.
- See-through roof grills and amazing rad shutter detail
- Carbody interior detail visible through the roof grills
- Macdonald-Cartier metal knuckle couplers
- Several paint schemes and road numbers available
- Working blast shutters automatically operate when travelling through subspace compression anomalies
- Ion engine and deflector shields sold separately

The best news for LRC fans is that the tooling modifications are finished and **PRODUCTION STARTS NEXT MONTH!** Hence this LRC-themed email.



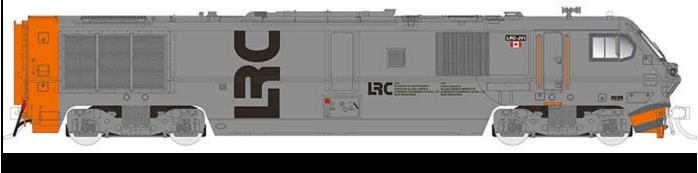
Gorgeous lighting, including ditch lights and step lights! Pre-production sample shown. (The crooked number board costs extra.)

The MSRP for the LRC locomotive is still only \$199.95 for DC and \$329.95 for DCC/Sound. Please place your order by next Thursday, 31 July 2014, to ensure that you don't miss this unique model. If you've been procrastinating for **SIX YEARS**, now it is time to get off your butt and order your fleet. <u>Click here</u> for product number and ordering info.

The LRC will be available in: VIA, Amtrak, Demonstrator silver and orange, VIA blue, and undecorated. The demonstrator scheme was used in the 1970s and operated in both the United States and Canada. VIA blue was an experimental scheme applied in the 1990s to #6922. We are also producing a fundraiser model of VIA LRC #6917 for the **TRHA**. Click on an image below to order.

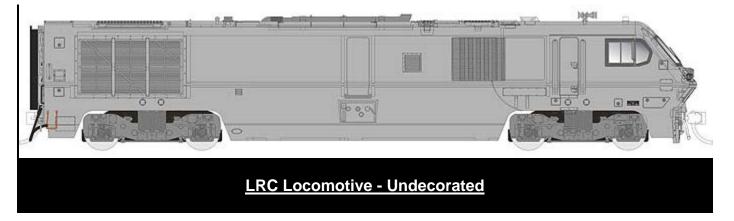


# LRC Locomotive - Amtrak



# LRC Locomotive - Demonstrator Scheme





Here's that general LRC page link again: click here

Before you ask, we will not likely be bringing out the LRC locomotive in N scale any time soon. The passenger cars may be a different story.

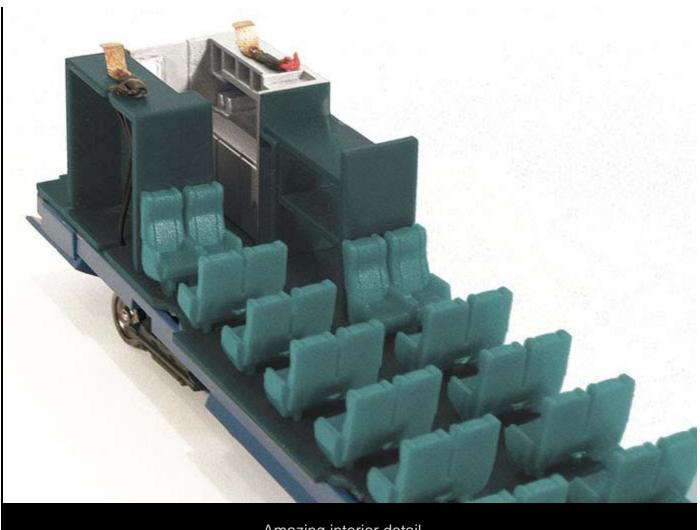


Unmatched end of car detail on the Rapido LRC Coach

## HO Scale LRC Coaches Order Deadline: 31 July

Your LRC train would not be complete without a whole bunch of <u>LRC Coaches</u>. The LRC coaches were first released several years ago, and like most Rapido products have been sold out at most hobby shops since shortly after their release. This new run features new paint schemes and, most importantly, wheels that actually turn!

A big headache with our first LRC coaches was that the inside-bearing trucks exerted quite a lot of friction on the axles. This could be fixed with some washers and lubricant, but it's a bit of a pain in the rear! So this time we're fixing the rollability of the coaches for you at the factory. Your LRC locomotive will easily pull a five-car train, which is what the prototype was designed to do.

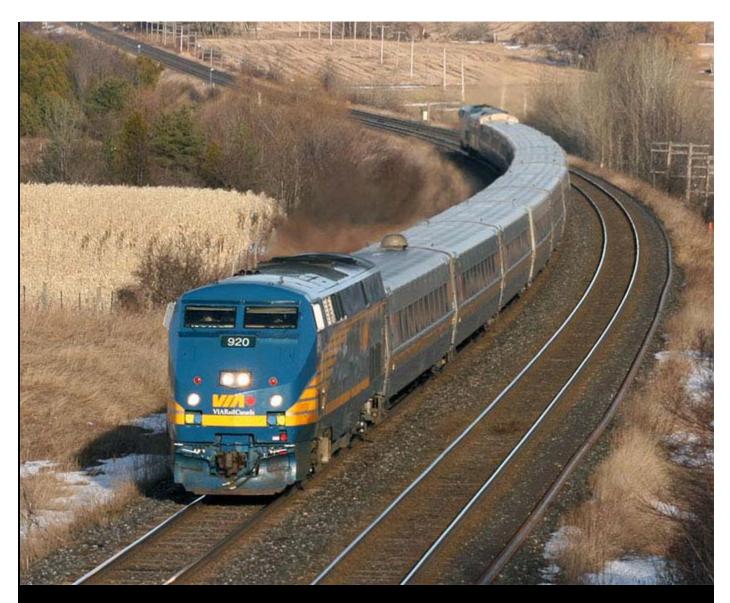


Amazing interior detail... Who wants to paint the seat edges beige? Anyone?

The LRC coaches feature:

- Coach or First Class (VIA 1) interior layout, as appropriate
- Interior painted in appropriate colours
- Wheels that really spin! Woo-hoo!
- Constant, track-powered interior lighting
- Working marker lights, turned on and off by magnetic wand
- Accurate LRC details This is not a Budd Coach painted in LRC colours!
- Super-detailed ends with accurate 480V HEP cables (Sorry they don't work.)
- Operating rubber diaphragms
- All of the tiny writing, including HEP diagrams and retention tank emptying instructions (The retention tanks don't work either. That's 0 for 2. Sorry again.)
- Macdonald-Cartier metal knuckle couplers
- Several paint schemes and road numbers available

• Operating long-range transporter pad in the accessible bathroom, but you have to be less than 1" tall to use it.



#### You need more LRC cars!

In this fabulous photo, a train of 13 LRC cars and one ex-UP HEP baggage car is bracketed by a pair of P42DC locomotives. Thanks to Dan Garcia (our very own) for capturing this awesome train!

The paint schemes for the LRC passenger cars are:

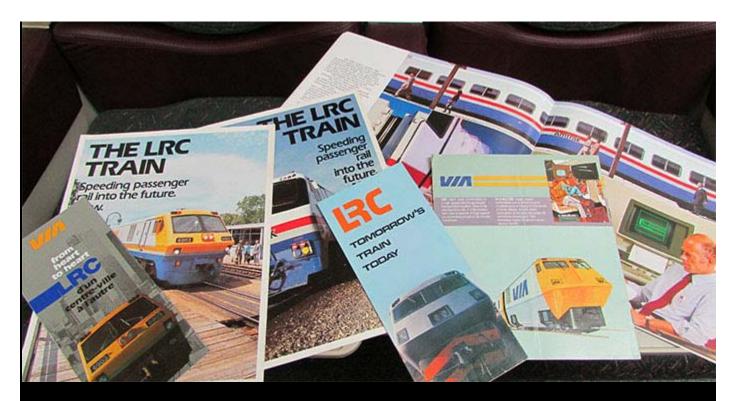
- VIA "Canada" Coach
- VIA "Canada" VIA 1 First Class
- VIA Original Scheme Coach (1990s interior colours)
- VIA Original Scheme VIA 1 First Class (1990s interior colours)

- <u>Amtrak</u>
- Demonstrator Scheme
- VIA Blue test scheme

We hadn't planned to do undecorated but if you want to order some (minimum of six), please get in touch.

Full product number and ordering information can be found <u>here</u>. Remember - you need to order by the end of this month (that's next Thursday!) if you want any of these. We are sending our production numbers to the factory next Friday.

If you ordered your LRC locomotives and coaches a long time ago, please check that the shop you ordered from is still in business!



A selection of early LRC publicity material poses on my LRC seats.

#### A Brief History of the LRC

The LRC (Light, Rapid, Comfortable) was developed between 1970 and 1976 by a consortium of three companies, none of which exists any more in its original form. They were Montreal Locomotive Works, Dofasco and Alcan - a railway equipment manufacturer, a steel manufacturer and an aluminum manufacturer, respectively.

After the Turbo was rushed into service and then withdrawn for modifications, the Canadian government was looking for another Canadian passenger rail panacea - a train that could increase speeds and ridership with no major investment in infrastructure.

The LRC was to be that cure-all, and its development was funded by the federal Department of Industry, Trade and Commerce and the Ministry of Transport.

(As an aside, it is interesting to note that when the Turbo returned to service it achieved reliability and on-time-performance statistics unmatched before or since, but by then it was too late and the die had been cast in favour of the LRC.)



The LRC demonstrator train crosses the Ottawa River west of Montreal in 1974.

Demonstrator LRC locomotive #LRC-JV1 was ready for testing in 1974. In the last three months of 1974 the LRC operated over 30,000 miles in test running. These included the 2500-mile run from Montreal to the US DOT's High Speed Ground Test Center at Pueblo, Colorado; 20,700 miles of testing in Pueblo including a 1096-mile run over 11 hours for an average speed of 98.6 MPH; and four runs between Calgary and Edmonton.

My citing all of this info may sound impressive, but I'm just regurgitating an LRC press package from January 1975 that tells it all. Thanks to my friend, Michel Belhumeur, for giving me the press package because he knew how much I love the LRC. What a great guy.



Early LRC cardboard trains, activity book, and timetables.

The LRC cardboard trains with the cartoon characters are the rarest Canadian cardboard trains. They were replaced after only a few months by LRC trains with plain grey windows. If anyone has an animal set still in its original cardboard frame, I will pay \$50 for it. Please give me a shout!

The LRC hauled numerous Tempo services between Toronto and southwestern Ontario starting in February 1975. <u>Here</u> is a photo of it in Sarnia in September 1975. On 12 March 1976, LRC-JV1 achieved the Canadian speed record of 129 MPH - which lasted just over a month until Turbo CN1 achieved 140.6 MPH on 22 April. Ah... Those were the days!

By that time, Bombardier had purchased a majority share of MLW, and the LRC was to be its first mainline passenger railway initiative. Just think... Bombardier Transportation is probably the world's largest provider of passenger trains, and it all started with the LRC. The LRC can honestly be called one of the founding fathers of the global high-speed train industry. That's pretty awesome.

An excellent Wikipedia article on the early days of the LRC project can be found here.



The production LRC models were delivered in three shipments. LRC-1 was the Amtrak LRC train set comprising two locomotives (38 and 39) and ten passenger cars (eight coaches and two cafe-business class cars). The LRC-1 passenger car window and interior arrangements reflected the recent Amfleet deliveries. The Amtrak LRC tested in the Northeast Corridor and the Midwest between 1980 and 1982, and then was returned to Bombardier.

In Amtrak service you could see LRC locomotives pulling other equipment, and it was common to see LRC coaches tacked onto the end of Amfleet trains.



Amtrak LRC coach interior. The business class seats had green upholstery and winged headrests.

All but one of the ten LRC-1 passenger cars were repainted into VIA colours and entered service on the International between Toronto and Chicago following the retirement of the last Tempo cars in 1988. They were retired again in the 1990s and put into storage at Montreal Maintenance Centre. They were just cut up recently.



6901 leads a 1+6+1 consist at Burlington Station, September 1981. Photo courtesy Kaluza-Mueller Collection.

VIA placed two orders for LRC locomotives and passenger cars. The LRC-2 locomotives (6900 to 6920) were delivered between 1980 and 1982 and the LRC-3 locomotives (6921 to 6930) were delivered in 1983 and 1984.

The LRC-2 coaches, numbered 3300-3349, were delivered at the same time as the LRC-2 locomotives. The LRC-3 coaches, 3350-3399, were delivered along with the LRC-3 locomotives. LRC-2 and LRC-3 coaches are almost identical electrically and cosmetically, with the main difference to passengers being that the LRC-3 interior doors are manually operated. And they are very, very..... very heavy.

In 1985, 25 LRC-3 coaches were reconfigured as VIA 1 first class cars and renumbered 3451-3475. These cars feature more generous legroom and a large galley for preparing the at-your-seat hot meal service. Coaches and VIA 1 cars both received interior refurbishments in the early 1990s; the VIA 1 cars again received an interior refurbishment in 2002.

I could go on and tell you about how some coaches swapped back and forth between VIA 1 and coach, or about the "sort of" VIA 1 cars 3600 and 3601 that crews hate because of their small galley, but I won't as that would make this history too long.

The significant feature of the LRC cars as designed was their active banking (tilting) system. This provided a remarkably smooth ride at higher speeds on tight curves. Speaking from personal experience, there are few train services in the world as smooth as a properly-operating LRC with the banking turned on. You really felt like you were gliding over the rails on a cushion of air. Unfortunately the banking system proved to be too expensive to maintain and prone to failure so it was disabled, first for winter service and then year-round.

The LRC locomotive is a powerful little beast, generating 3750 horsepower from its 16-cylinder, Alco 251F prime

mover stuffed into its 12-foot-tall, streamlined body. Of that power, 2700 HP is used for traction, with the balance mostly used for providing 480V HEP to the coaches (head end power, pronounced "hep" as in "hep cat"). Saying "aich ee pee" when talking about HEP is a horrendous faux-pas and will result in your immediate ejection from any decent society dinner party.

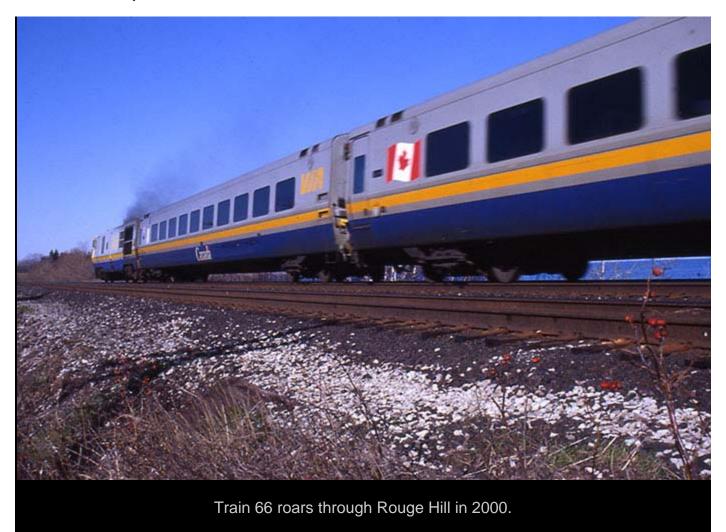


The rear of our model illustrates the MU and HEP connections. The blue receptacles are for communication. The yellow receptacles are for locomotive MU. The black cables with red plugs are for HEP. The receptacle to the right of the door is the 75V trainline receptacle.

The LRC works much like an F40PH-2D locomotive in that the prime mover always operates at high RPM when in RUN mode (1050 RPM for the LRC vs. 893 RPM for the F40PH-2D). As you notch up the throttle, more fuel is provided to the prime mover. The rest is best quoted from the manual, because I'll be darned if I understand it: "The traction motors are connected in full field parallel and the tractive power is varied by altering the traction alternator field current. The power is developed in stages corresponding to the position of the throttle."

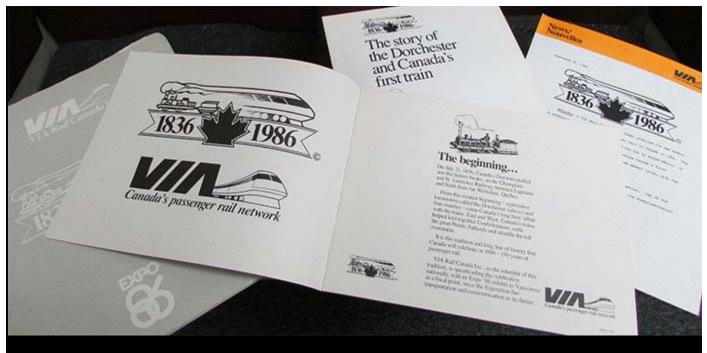
In layman's terms: you pull the throttle. LRC goes. LRC makes pretty loud noise and big smoke while going.

The locomotive is capable of 125 MPH but was restricted to 100 MPH maximum speed in service - Canada still doesn't have any 125 MPH tracks!



The LRC entered service in 1981 and the bug swatting began as it tends to do with any new technology. By summer 1982 the LRC was reliably operating the fast afternoon Rapido service between Toronto and Montreal. As a child growing up in the 1980s and travelling between those two cities, the LRC was everywhere. By 1985 most services between Toronto and Montreal were LRC as well as services between Montreal and Quebec, Montreal and Ottawa, and Ottawa and Toronto. Several services west of Toronto were also LRC.

Significantly, the LRC was a symbol of modernity for VIA. In 1985, VIA updated its logo to include the LRC, and the LRC similarly played a large role in VIA branding for the Expo86 celebration of 150 years of passenger train travel in Canada.



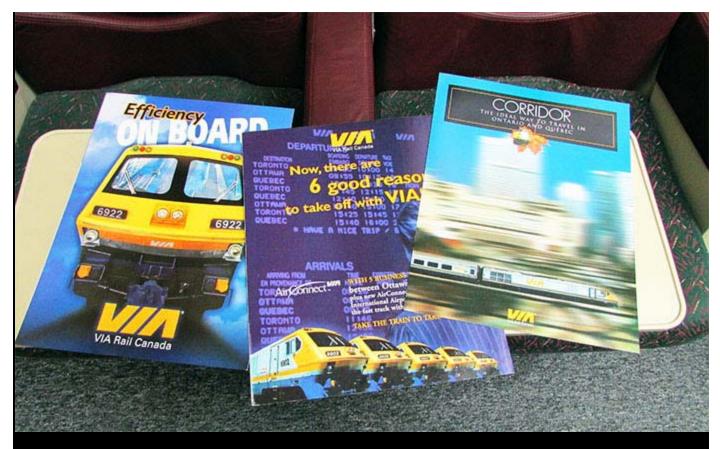
The LRC became an integral part VIA's logo and the modern side of VIA's Expo86 visual identity.

The LRC locomotives developed reliability issues, mainly due to their complex electrical systems. One mechanic who worked on them complained that they were too powerful for their tiny little bodies! In the 1990s, the fleet was slowly whittled down to seven units, with the balance of the units providing parts. F40PH-2D locomotives began to displace the LRC locomotives on most services.

Despite this, the LRC locomotive was still pulling VIA's flagship Corridor train, the Metropolis, which travelled non-stop between Montreal, Dorval and Toronto in under four hours. It was the only locomotive in the fleet capable of 100 MPH operation. As such, it was still a symbol of speed and modernity for VIA, and was used to advertise VIA's Corridor services right up to retirement in 2001.

My favourite train-related video of all time is <u>3:59</u>. Produced by Sean Ropchan's Chandos Television Productions, <u>3:59</u> follows the operation of the Metropolis from before it leaves Montreal to after it arrives in Toronto. It is, without a doubt, the best train DVD I have ever seen. If you are interested in the LRC at all, it is worth ordering a copy.

You can order it directly from Chandos by clicking <u>here</u>. You can watch a preview of 3:59 on YouTube by clicking <u>here</u>. My kids wore out our first copy of 3:59 because they watched it so many times. Imagine if Sean had been making videos like this when the Turbo was in service...



## LRC used on VIA brochures. From left: 1997/98, January 1999 and April 1999.

The LRC passenger cars have been a vital asset to VIA from day one. As the various teething issues were ironed out they became a fleet that VIA could depend on for reliable operation in the Corridor, especially in the lean years following the service cuts of 1990. They are regularly marshalled with HEP2 and HEP1 cars in the same consist. As now-retired VIA publicity officer Dianne Graham told me back in 1996: "Thank God for the LRC."

The LRC passenger cars are in the middle of a rebuild program which will extend their service life by another 15-20 years. The best feature of the rebuild is the snazzy 2+1 seating in the LRC coaches which reminds me so much of the old Club Galley cars operated from 1971 to 1996. I love the new interiors.

The LRC is an integral part of Canada's passenger railway history. Should the Canadian government decide to invest in long-sought-after new VIA fleet, a couple of hundred LRC-4 coaches and locomotives using Bombardier's latest high-speed rail design advancements would be a brilliant next chapter for this important train.



Two-year-old Boaz examines 6921 at Exporail back in 2007. What you can't hear in this photo is the story he was telling about the LRC and Thomas. (I could hear it at the time. Couldn't understand it. But I could hear it.)

#### **Modelling Tips and Photo Gallery**

We often get asked "What LRC equipment should I buy?"

Basically, it depends on what you want to run. Anything is possible, but the general rule is one LRC locomotive for up to five cars. For six to ten cars you want two locomotives. Most importantly for us modellers, VIA regularly ran two units on three- and four-car trains. So you don't need a long train to justify having two locomotives.



Perfect train for a layout: 6914 and a friend top and tail three cars.

It is still possible to see 12-, 13- and 14-car LRC trains hauled by two our three locomotives (F40PH-2D and P42DC). These are usually for special events such as an Alouettes game, a theatre tour to Stratford, etc. Until some operational changes were made at VIA in 2012, you could often see monster LRC consists on busy scheduled trains. Hopefully we will see them again soon.

As for a mix of coaches and VIA 1 cars, you generally need at least one VIA 1 car per train. If modelling the afternoon express or the early morning train, you could have two VIA 1 cars, either both at one end or one at either end if there are two locomotives.

Amtrak guys have it easy. Buy both engines and eight coaches. You're good.

There is a lot more to tell about the LRC and its history. If you want to find out more, please join the discussion on the <u>CanModelTrains</u> or <u>Canadian Passenger Rail</u> Yahoo! groups. Once again, product and ordering info can be found <u>here</u>. Below are a few interesting photos, followed by an update on preserved LRC locomotive #6917. Remember that order deadline: next Thursday, 31 July!







...often with the help of conventional 1950s locomotives! Here 6904 and an F9B haul a 10-car train which includes a CN-painted Balloon Top built in 1937! Photo courtesy Kaluza-Mueller Collection.



6903 helms the early morning J-Train to Montreal and Ottawa at a misty Guildwood Station in 1999. The second section is led by an F40PH-2D and has my fiancée on board!



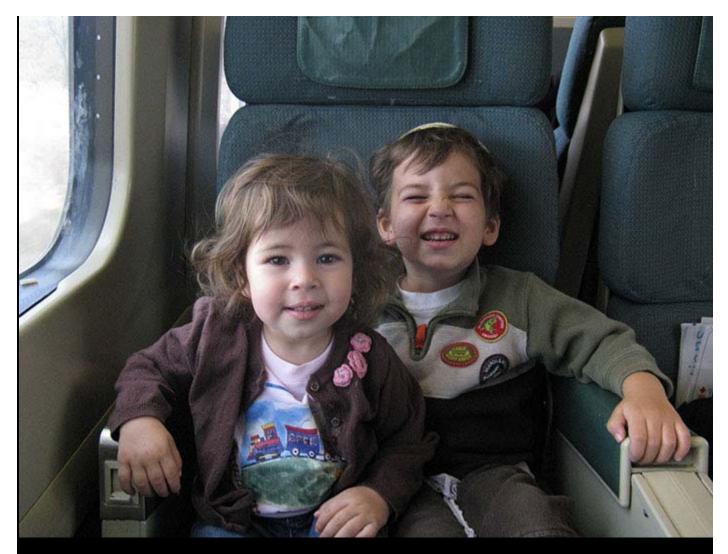
6921 leads the Metropolis through Rouge Hill at speed.



6915 and a friend top and tail six cars along Lake Ontario. Photo courtesy Kaluza-Mueller Collection.



The Amtrak LRC races through Beacon Hill, MA in 1980.



I can't believe how they've grown... Dalya and Boaz on an LRC in 2008. (I'm choking up right now. Boaz is now nine and Dalya is seven.) (Just give me a pillow case to cry into at their bar/bat mitzvahs and weddings.)



A fitting image after that last photo... The LRC fades into the sunset. (I'm still crying.)



LRC 6917 poses with its train. Photo by Mark Kaluza.

#### The Real LRC #6917 Update - We Got It Running!

Your eyes do not deceive you. For the first time in over ten years, an LRC locomotive has pulled an LRC train! And for the first time in history, an LRC locomotive has pulled a rebuilt LRC coach!

With the generous help of our friends at VIA Rail Canada, the Toronto Railway Historical Association's preserved LRC #6917 hauled three LRC cars for testing purposes and for ESU to record the sounds for Rapido's upcoming model.



Our mechanic, Chris Fox, and master electrician John Carey have devoted much of the last two months to working on 6917 and chasing out all of the gremlins that moved in since the locomotive was stored in 2001. They have been helped by numerous people along the way, such as Brendan Frisina, Dan Garcia, Justin King and David Vincent. The hundreds of hours these guys have put into 6917 have been entirely on a voluntary basis because, simply, they wanted to see this piece of Canadian railway heritage come back to life. And that it did...

It is no exaggeration to say that the test run of 6917 was a complete success. Our two locomotive engineers hooked up 6917 to three LRC cars provided by VIA, put it into RUN, turned on the HEP, and voila - all three cars had full electrical power and the lighting and air conditioning worked flawlessly. I changed the car line numbers to train 6701, 6703 and 6704. 6917 was now pulling train 67, the Metropolis, once again! The people at VIA - both at head office and on the ground - are amazing for helping us with our restoration efforts. They have been supportive since day one.



Hook up the HEP, turn it on, and we have a train! Photo by Brendan Frisina.

Matt Herman from ESU drove up for the event, and we are pleased to say that we have obtained all of the necessary recordings to recreate the LRC sounds in miniature. Most importantly, the LRC was operating under load. The HEP was running and it was pulling a train. This ensures that the sounds will be accurate.

This experience taught me a lot about how the real LRC works, and we will do our best to recreate that in the model for DCC users. For instance, if you just operate your throttle without going into RUN, you're in hostler mode and you can only go up to notch 2 just like the real thing. If you put it into STANDBY, the engine will rev up to 720 RPM but you can't move. You will need to put it into RUN to get going with your train.



Now that 6917 is running, there is some real work to be done. The first step is to prepare 6917 for certification so it can run on the mainline. Chris has that under way, with the help of numerous VIA employees assisting him during their days off. A lot of people want to see 6917 pulling trains in service again!

The next step is to prep 6917 for painting. This requires some significant elbow grease as we need to sand down a lot of the peeling paint (using orbital sanders) and fill the worn areas with Bondo. If you are handy with power tools and you want to play a role in the revival of 6917, please contact me as we could use your help. Our goal is to have 6917 prepped for painting by the middle of August.



What a beautiful sight: 6917 "in service." Photo by Matt Soknacki.

Finally, we will be painting 6917 after it leaves VIA's property, hopefully in September. I can't divulge where it's going yet, but rest assured you'll hear all about it when I can.

The TRHA needs your help to pay for the paint job. Please <u>click here</u> to donate to the restoration of 6917.

You can also order a model of 6917 from us or from your local hobby shop or from the TRHA directly. \$100 from the sale of each model will go to the TRHA.

<u>Click here</u> to order your sound-equipped model of 6917 from the TRHA. <u>Click here</u> to order 6917 from us. Or go ask for it from your dealer. The product numbers are 200014 (DC - \$250) and 200057 (DCC/Sound - \$400).

If you work in the paint industry and you are interested in donating the paint we need, the TRHA is a federallyregistered Canadian charity and can provide a tax receipt for your donation. You would be contributing in a big way to the restoration of this important piece of railway history. Please contact me if you can help.



#### And Now For Something Completely Different... Our Silliest Video Ever!

No matter what prototype, era, scale, gauge or planet you model, you will still think our new video is ridiculous.

If you have five minutes you will not regret **COMPLETELY WASTING**, please <u>click here</u> or on the image below to watch our new video, <u>Carry On APT-E</u>. No trains were harmed in the making of this video, but Bill was harmed. A lot. And then he was harmed again.



My next newsletter will be sent from China when I am there in August, with updates from the Rapido and MLW factories as well as our next HO scale Budd passenger car announcement. If you want to follow our British APT-E development, please subscribe to the UK newsletter by updating your profile, <u>here</u>.



Doing the things that matter... Isaac and Daddy in Hornepayne on our last trip on The Canadian in April.

Before I sign off, I'd like to comment on all the bad news happening on our planet right now. Hopefully we'll get past this crazy summer and people will calm down around the world. Otherwise we could be heading for an even scarier time.

If there was ever a moment to live our lives to the fullest, it's moments like these. Most of you reading this are fortunate to live somewhere safe and stable. Take as much time as you can to do the things that bring you joy and relaxation. Spend time with the people and the things that you love. Our lives can so easily be turned upside down.

I pray for all of the people affected by the tragedies gripping our planet and I pray for the continued safety and happiness of my family and the families of all of my friends and customers. God bless.

Jason

**Jason Shron** 

President Rapido Trains Inc.