



THE WCR PRESS

VOLUNTEER & STAFF EDITION



Issue No. 7 - Saturday, July 25, 2020

SEVENTH EDITION

This is our Seventh Edition of the WCR Press. Through this publication we hope to stay in touch with our volunteers, neighbours and partners during the temporary shut down of our operations and showcase the initiatives being undertaken that are required to keep the WCR safe and ready for the time we can commence our operations once again.

We enjoy providing a history of our operating heritage rail collection as well as reminiscing about other railway operations that have served this area over the years.



1001 in its new WCR livery with Chris Corrigan at the controls and Russ Deacon as Conductor heads north to Elmira with the redesigned Elmira passenger shelter.

Photo by Beverly Brenneman

No. 9 Ten Year Boiler Inspection – Dave Banks

Each year the boiler of No. 9 is inspected by TSSA (Technical Standards and Safety Authority). If it meets the inspection requirements is issued a certificate to operate for 1 year. The inspections alternate each year, one year it is a visual inspection by the TSSA inspector, outside and inside the firebox and smokebox. In the alternate years a “hydrostatic” is performed where the boiler is filled with water and pressurized to 10 percent over the registered operating pressure. It is held at pressure for a period of time and the inspector will check for leaks.

This year No. 9 is undergoing the 10-year inspection as prescribed by TSSA. This is a much more extensive procedure. As you can see from the pictures all the fittings and accessories must be removed and then the boiler cladding and insulation must be removed. The boiler, inside the firebox and smokebox must be meticulously cleaned, for the next step.



No. 9 is brought outside to remove the exterior boiler sheeting, insulation and parts.



No. 9 is stripped to allow the cleaning and testing of the boiler. These pieces of equipment are in storage until the boiler work is complete.

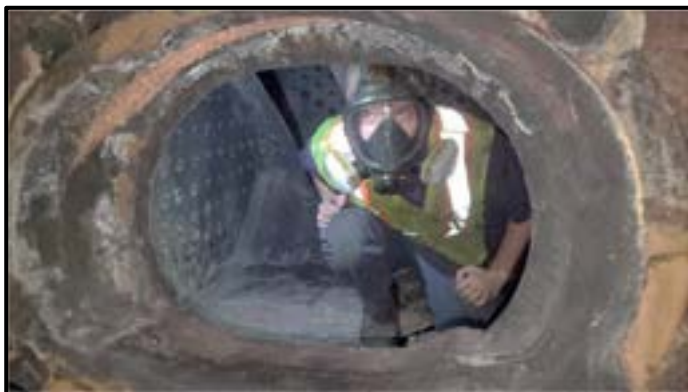




This next step is to measure the thickness of the boiler shell. The boiler must have a grid of 4-inch squares marked all over and a "D" meter is used to measure the thickness at the intersection of lines on the grid.

The readings are recorded and will have to be thicker than a specified minimum. This must be done by a certified technician.

Once completed the Inspector will review the results and inspect the boiler and a Hydrostatic test will be performed in the TSSA Inspectors' presence. If all is well the boiler will be certified and return to the annual inspections for another 10 years. If a problem is discovered the area in question will have to be repaired by a certified boiler welder and re-inspected by TSSA. This process ensures that the boiler is safe to operate.



This year as No. 9 is not running, we will be doing further maintenance and improvements. One will be the installation of a rebuilt air compressor donated to us from our friends at the Bytown Railway Society, in Ottawa. Our volunteers will be redoing all the copper piping, making new boiler cladding which we hope to have powder coated, and polishing up the valve gear among many other tasks. When completed No. 9 will look just as she came out of the Montreal Locomotive Works in 1923.

Once upon an S3 – Greg McDonnell

Reflections from 2014

I spent time with a couple old friends the other day in Waterloo. Following a delightful pub lunch with my friend Mike, I dropped by the Waterloo Central station for a visit with former Canadian Pacific S3 No. 6593. I've known Mike since I was about 14, and CP 6593 — the youngest of the three of us — for almost as long. In fact, my first photographs of CP 6593 were taken in Montreal on a trip Mike and I made in his new MGB in the summer of 1969.



Cruising the backstreets of Montreal in Mike's blue MG, we happened upon CP 6593 and S2 7012 at the small industrial yard in Cote St. Paul.

The S2 was notable for having one as-built Blunt truck and one AAR Type A truck; No. 6593 was just one of the seemingly ever-present maroon-and-grey S-series switchers that abounded in the Montreal Terminals. In retrospect, I'm surprised that I expended a precious frame of Plus-X on a run-of-the-mill S3, but so very pleased that I did.

(Would that I'd spent another frame of Plus-X on the MG, a wonderful car that Mike had picked up at the factory in Abingdon, Oxfordshire; driven around England and Europe, and had shipped home. If I recall correctly, the car had arrived from overseas just in time for our trip, and still carried its UK plates when we set out for Montreal.)



I encountered CP 6593 on subsequent visits to Montreal: switching passenger cars at the Glen, and peering from the shop at St. Luc while I concentrated on FA1 4019 leading an FB1 and leased B&M RS3. But I didn't frame the little S3 in the viewfinder again until January 1975 in North Bay, Ontario, on another trip with Mike. We'd come north in search of FAs and other 244-powered rarities, but the 6593, fresh from overhaul and glistening in newly applied CP Rail action red in the late-day sun, was just too pretty to resist.

A Quebecer by birth and assignment since its delivery from the Montreal Locomotive Works on August 16, 1957, CP 6593 moved to Ontario about 1977 and was sent to the yard at Quebec Street in London. Assignment of an Alco switcher to Quebec Street broke with a longstanding CP tradition. London, home of MLW's archrival General Motors Diesel, was customarily the domain of locally built 6700-series GMD SW8s. For whatever reason, 6593 took up residence in London, and remained there for several years.



On a cold December '77 afternoon, I watched the little S3 put on one of its most impressive performances. In the wake of a massive blizzard, the 20-year-old MLW was put to work plowing the yard. The throaty call of a normally aspirated McIntosh & Seymour 539 cut the frigid air as 6593 shouted and shoved for all its worth to advance the ancient wooden-cab spreader through axle-deep snow. Six hundred and sixty horsepower never sounded so good.

Work at Quebec Street was hardly glamorous, but on a regular basis, London yard engines were called to GMD to pick up new locomotives for delivery to CP or other customers. There was something particularly satisfying about watching Montreal-built 6593 strolling past the back gates of GMD and venturing deep into the opposing team's home turf.

November 15, 1983 was one of those days. I stood in the back lot behind GMD and watched 6593 come rattling and churling through the back gate. A roll-up door of the main building opened and the little S3 wandered right in. Moments later, the aging MLW emerged towing brand new British Columbia Railway GF6C electric No. 6001 and EMD's stainless steel test car.



I followed the entourage back to Quebec Street where railroaders and CP and GMD people enthusiastically examined the brightly painted electric: the latest in locomotive technology, the face of the future, bound for BC Rail's new Tumbler Ridge electrification. No one paid any mind to the humble S3. And no one would have thought for a moment that the little MLW switcher would outlast the husky 6,000-hp electric *and* the factory that produced it.

But that's exactly what happened.

CP 6593 finished out its career assigned to John Street roundhouse in Toronto, hanging on to become the last active 539-powered locomotive in the CP fleet. Still serviceable, the S3 was retired on October 26, 1986 donated to the National Research Council for use at its test facility in Ottawa. It served there until being replaced by an ex-Lehigh Valley SW8 in 2010.



The Southern Ontario Locomotive Restoration Society purchased the S3 in 2012 and moved it to its shop in St. Jacobs where it was repaired and returned to service hauling Waterloo Central excursion trains between Waterloo and Elmira.

BC Rail's celebrated Tumbler Ridge electrification was de-energized in 2001 and the GF6C electrics — save for No. 6001 preserved a museum piece — were cut up for scrap.

Caterpillar closed the GMD plant in 2012, ending 62 years of locomotive production at the London facility.

And little 6593 rolls on.

The 1957-vintage S3 is in remarkable condition inside and out, and SOLRS hopes to restore the locomotive to CP maroon and grey as time and finances permit.

A long way from our first encounter at Cote St. Paul, 6593 is an absolute treasure.

(Photos by Greg McDonnell)

Notes from the Firebox of No. 9 - Episode 1 – *Kim Martin*

(Musings of a pyromaniac)

What goes into the starting of a vintage diesel locomotive: set a few switches and press a button, wait 20 seconds and, voila!

What goes into the starting of No. 9 steam locomotive: 5 hours of toil by a team of dedicated individuals with a myriad of skills.

As you may already know No. 9 is a vintage steam locomotive, circa 1923, built in the Montreal Locomotive works. She is 97 years old and needs TLC (Tender Loving Care) when it comes to operation and maintenance. However, to put a steam locomotive “under steam” is a long process that has a number of essential steps. In fact, WCR has developed a comprehensive checklist to ensure that all the critical systems are checked and serviced during the start-up phase.



It is not simply light a fire and wait. Since the entire boiler is filled with cold water at the start of the day you must gently bring the water up to temperature. Too fast a gradient in the temperature change can stress the boiler, as the area over the firebox is hot and the rest of the boiler tube is cold. Stressing a boiler in this fashion will reduce the effective life of the boiler.



I want to pause and tell you why it would not be a good idea to stress a steam boiler.

Imagine a cubic foot of water at room temperature, the amount of energy in the water is low and you can place your hand in it comfortably: 2,488 BTU (British Thermal Units). In a boiler, the steam used for the locomotive is at the top in a confined space and the water creating the steam is under pressure. In No. 9 the operating pressure is approximately 180 pounds per square-inch.

At that pressure, the water temperature is near 380 degrees Fahrenheit (193.3 Celsius) and the contained energy in the water is 76,672 BTU.

The expansion ratio of steam is 1700:1 and if that much energy was in a single cubic foot of water then how much energy is in the entire boiler? ... (1,600 cubic feet) 121,399,580 BTU. Needless to say, that is a lot of energy and you would not put your hands anywhere near it.

The individuals in control of the boiler are the Firemen and they have had extensive training and certification to understand the dangers and execute proper control of the steam engine boiler.

There are specific items that need to be serviced before steam pressure is present in the boiler: the lubrication of the air compressor (for the train brakes) and the brake stands. Items that can be done anytime: the lubrication of all the wheels, linkages, and sliding plates, including the journals on the tender.





The tender must be filled with water. The coal bin must be stocked for the day.

The fire is lit.



Generally kindling wood is used to start the fire and once steam is being produced above 15 psi a qualified Fireman is **"always"** in attendance.

Their job is to balance the fire, keep the water level safe and keep a constant eye on all aspects of the boiler operation.

A Fireman is the most important person on the footplate of a steam locomotive, they must retain their focus on their job the entire time the train is operational.

Slowly the fire is changed from wood to coal and the job of shoveling then also falls to the Fireman.



Five hours have passed, and steam locomotive No. 9 is ready to assume her position at the head of the passenger train. The great lady makes her first gentle moves toward the mainline. KLM

My Adventures with LNER 4472, "Flying Scotsman" - David Banks

One of the most famous steam locomotives in the world, London & North Eastern Railway's *Flying Scotsman* holds the records as the first locomotive in the UK to officially reach a speed of 100 mph. and the first locomotive to circumnavigate the globe.

A Gresley-design A1 4-6-2 Pacific, the locomotive was completed as LNER 1472 in the company shops at Doncaster U.K. in February 1923, the same month and year as our No. 9. Initially unnamed, No. 1472 was renumbered LNER 4472 and christened *Flying Scotsman*, and featured on display at the British Empire Exhibition in London in 1924.

On May 1, 1928, *Flying Scotsman* worked the first-ever non-stop service between London and Edinburgh. It set the 100-mph speed record on a special test run in 1934.

The locomotive was modernized to class A3 configuration in 1947 and retired in January 1963 as British Railways No. 60103, having operated an estimated 2,076,000 miles.

That same month, Alan Pegler purchased the locomotive from British Railways for its scrap value of 3,000 U.K pounds. A complete overhaul was included as part of the purchase deal.



Here we are waiting to cross over, recognize the guy in the cab, yes I had hair then.





In 1969 LNER 4472 and a special train of passenger equipment embarked on a British trade promotional tour of Canada and the United States. It arrived in Boston by ship and worked trips to Texas, up the East Coast and into Canada, spending time at the Canadian National Exhibition in Toronto.

The engine crew were all "Brits" of course. In conversation with the head man, I mentioned that my grandfather was a driving for the LNER out of Lincoln. It turned out he was good mates with him.

During the winter of 1970-71 *Flying Scotsman* was stored in CN's Spadina roundhouse in downtown Toronto, along with the Pullman cars *Lidia* and *Isle of Thanet* which had been used by Sir Winston Churchill and General Eisenhower during World War II.

The rest of the train, including a beautiful observation car that was about 2/3 large glass windows and set up as a British pub "The Fireman's Rest," was stored at Procor in Oakville. The plant manager, David Goyder, had become a good friend of mine as we belonged to a model railway club in Oakville.



Backing in to Joliet, David Goyder on the ground.

The plan was to move the loco Buffalo, N.Y., in late August and then the following week to Joliet, Ill., via Fort Wayne Ind., on its way to San Francisco. David G. and I were invited to go as far as we wanted with the train.

The first move was from Spadina Roundhouse to Oakville, pick up the coaches, run to Fort Erie, and across the Niagara River on the International Bridge at Fort Erie, and on into Buffalo. Note 4472 was fitted with a bell from the Southern railway, headlight, American whistle, cow catcher and N/A couplers.

We arrived at Erie Lackawanna's Bison Yard on the east side of Buffalo, where the train was stored for a few days. Imagine the look we got from the Canadian customs agent when he asked how we came over and we told by steam locomotive. We returned to Bison on 2nd September, 1971, and departed for Fort Wayne at 0935 hrs. Somewhere outside Buffalo an axle box cover was lost and injector problems started. Injector repairs were attempted during a crew change and water stop at Conneaut, Ohio.

The situation deteriorated as we rolled west, arriving at Fort Wayne at midnight with continuing injector trouble as well as issues with coal. On the positive side, I was invited to operate locomotive as we cut off the train, ran through the yard and into the shops. With no steam guys around, I was elected to go in the pit and remove the injector. Talk about hot and wet!



In Toronto dwarfed by 6218, big difference in the loading gauge

We discovered that the combining cone had moved, reset it, put back on and all was well. New coal was coming in the morning so David G. and I set to shovelling all the bad coal out of the tender. With a good head of steam up, handed the engine over to a grateful fireman. Les Richards, an ex London, Midland and Scottish Railway man, took over while we showered and got some sleep in one of the coaches.

The train departed Fort Wayne at 0945 hrs, routed on the Norfolk & Western to Hobart, and then onto the Elgin, Joliet & Eastern to East Joliet.

Somewhere in Indiana, waiting in a siding to meet a freight on the former Nickel Plate Road, we were awakened and informed that our presence was requested on the footplate. Making use of No. 4472's two corridor tenders (specially designed in the 1930s for engine crews to change on the run on non-stop trains), we worked our way through the passage ways and into the cab. David G. was instructed to take the drivers seat and get ready to go. The N&W pilots let us get up to 70 mph on track that was dead-straight track for about 70 miles, I believe. Then it was my turn for the thrill of a life time.

On arrival at East Joliet we had to reverse the train for more than a mile. A tight curve at one point threatened to derail the train. But didn't. The train was then set up for display. That evening Alan Pegler's daughter Penny arrived from England and took the crew out for dinner. We headed for home the following day.

Unfortunately, in San Francisco the tour ran into financial issues and Alan went bankrupt in 1972. British businessman William McAlpine stepped in and made sure the Flying Scotsman and its train were returned to the U.K. The National Railway Museum purchased No. 4472 in 2004 it has been meticulously restored for main line service.

Ours was truly a trip of a lifetime, one that neither of us will ever forget. I just wish I had taken many more pictures.

Next time will talk about my week in Poland driving steam

Our Heritage Fleet – CC&F Coaches 5506 & 5628 - *Matthew Schilling*

WCR Coaches 5506 and 5628 were built in 1954 by Canadian Car & Foundry (CC&F) for the Canadian National Railway as coaches 5506 and 5628. This series of coaches was used across Canada on the CNR including on the Super *Continental* passenger train, which operated between Montreal and Vancouver.

In March 1978, the Canadian National Railway sold coaches 5506 and 5628, along with the majority of their other passenger equipment, to the newly founded VIA Rail Canada.



The coaches retained their original numbers and continued to operate in many different parts of Canada.

These coaches worked across the VIA Rail Canada system until 1994 when the British Columbia Railway purchased them for use on their Royal Hudson steam excursions with former Canadian Pacific Railway Royal Hudson No. 2860.

They were repainted into the BCR's Royal Hudson paint scheme and renumbered to BCOL 155060 and BCOL 156280 respectively.



Both coaches also received names with 5506 being named *Exeter* and 5628 being named *Sunset Beach*, which were named after towns along the route of the Royal Hudson excursion train.

In 2003, the Orangeville-Brampton Railway (OBRY), operated by Cando Rail Services at the time, purchased coaches 5506 and 5628 for use on their new *Credit Valley Explorer* tour train and renumbered them to CCGX 1978 and CCGX 2003 respectively.



In 2018, the Waterloo Central Railway purchased 1978 and 2003 from the OBRY. The coaches became WCRX 1978 and WCRX 2003 and were repainted into the WCR's CP-inspired maroon and gold paint scheme.



In early 2020, the coaches were renumbered back to their original numbers by the WCR as part of a new series of changes which reflect the WCR's motto, *Bringing History to Life*, and became WCRX 5506 and WCRX 5628.

Engineering - Track Work on the Spur

This summer CN is undertaking extensive engineering work on the Waterloo Spur consisting of a tie replacement program, new ballast along with lifting and straightening the track over the length of the spur except for the joint section with the LRT-ION system.

Along with this work they have completely replaced the grade crossing at Hawkesville Road.

Currently they are spreading ballast with a ballast train powered by a hi-rail truck and replacing ties at some switches. This will be followed in August with a full tie gang that will replace ties over the length of the spur which will also utilize a Mark IV Tamper to lift, level and straighten the track. (*shown here*)



Spreading Ballast



Switch Tie Replacement



Replacing Hawkesville Road Grade Crossing



New Passenger Shelter Look

Brian Ray and Grant Scheifele finished work on the redesigned shelter to emulate those used at the turn of the 19th century on many railways. Along with the redesign it is now painted in the colours used by the Grand Truck Railway at the time they operated the Waterloo Spur. This shelter is destined for Elmira and when we do start operating our scheduled passenger service again it will be ready to serve our passengers.

The completed shelter was recently transported to Elmira by special freight train to be stored until we are running again. Thank you to everyone involved with the undertaking.





WCR History

Our volunteers have many talents, one of which is shown here. On March 22, 2009 a group of volunteers are laying the shop tracks at the St. Jacobs Restoration & Shop Facility during its construction.





On The Spur

In the early years of the Elmira Maple Syrup Festival, the Kitchener Kiwanis Club chartered from CN a passenger train that ran from the Kitchener CNR station to Elmira and return as fund raiser for the club.

It was known as the Sugar Bush Express and ran each year to the festival for several years.

This photo shows it sitting at the Kitchener CNR station after arriving and getting ready to head to Elmira.





This photo was taken from the cab of 6536 in Elmira as the power was run around the train. It had been separated to allow for the trailing unit to lead south from Elmira for the trip home to Kitchener and then ultimately to Toronto. Much has changed in Elmira since this photo was taken.



At the time of this photo in the late 60's, early seventies two CNR Police Constables were stationed in Kitchener. On the left is CNR Constable Herb Garret and to the right CNR Police Constable Jack Bruce.

Local Railway Retrospective



On a Saturday morning in the late 1960's, Grand River Railway (CPR) No. 8161 switches out their Kitchener yard at Clarke Forwarding in Victoria Park.





These 3 photos show Grand River Railway (CPR) No. 8161 heading back to Victoria Park along the now abandoned line that took them to their Kitchener freight sheds on Linden Ave and further to Lang Tanning & Kaufman Rubber.



On a winter day in 1977, the view from the caboose cupola has GP-9's GTW 4436 and CNR 4505 heading north to Elmira through what is now Uptown Waterloo. It is notable that the bridge is no longer there, and the passing siding has been removed. This along with Schneiders Creek now being covered paints a very different picture compared to today.



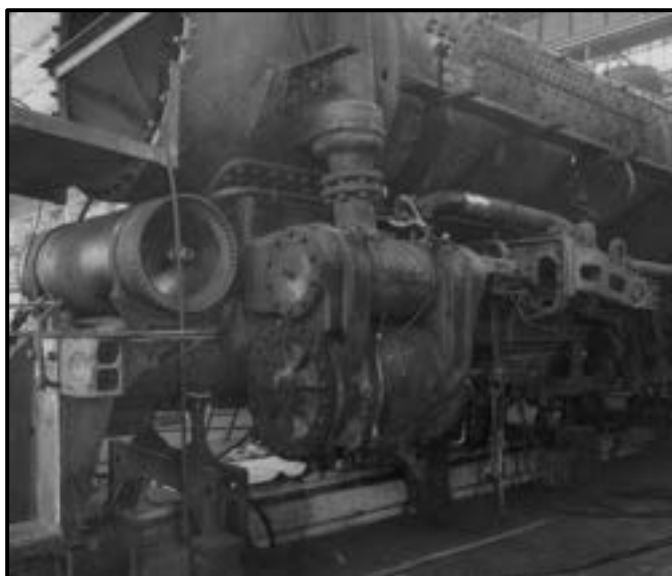
A typical day at the CNR yard at Lancaster Street in Kitchener. The day job switcher, an old MLW S-3 sits in the background while the day job to the Budd Plant returns powered by another MLW S-3 with an old wood sheath caboose as the afternoon Guelph Sub way freight returns home to Stratford. The switch and siding in the foreground have also been removed.

One last thing!

In the last edition we published several photos of CNR steam locomotive 6060 on one of its many excursions throughout this area of the province, many on track that no longer exists. We received many favourable comments about these photos and although they do not relate to the WCR directly they do show a different generation of railroading as well as a classic example of a made in Canada steam locomotive.



These black and white photos are from Glenn Thompson's father's collection who worked at the Pointe St. Charles Shops on this rebuild and restoration of 6060. We believe these are CNR company photos.







COVID-19 Operational Update

We have decided that although we can legally operate within certain parameters that it is still not safe to do so. As a result, we will not be operating any passenger trains during the months of July and August. We will revisit this decision at the end of August but even then, there are many challenges remaining. Our concern is both the safety of our passengers and our volunteers and at this time we are not confident we can provide a safe travelling environment for either of them

We have undertaken the gradual re-opening of Restoration & Maintenance Facility in St. Jacobs initiating strict COVID-19 guideline with restrictions on the number of people permitted to be there at any one time.

On behalf of the Board of Directors of SOLRS and the WCR Management Team we hope you and your families are safe and healthy during this time of uncertainty and thank you for your continuing interest. We look forward to the time when this is a memory and we are all doing again what we love and enjoy.

This issue compiled by Greg McDonnell, Dave Banks, Kim Martin, Beverley Brenneman, Matthew Whitely, Glenn Thompson, Matthew Schilling and Peter McGough.

Southern Ontario Locomotive Restoration Society

- President – Norm Etheridge
- Vice-President – Dave Banks
- Secretary – John Vieth
- Director – Aaron Schnarr
- Director – Irvon Weber
- Director – Chris Corrigan

Waterloo Central Railway

- General Manager – Peter McGough
- Assistant General Manager – Greg McDonnell
- Marketing & Communications Manager – Beverly Brenneman
- Shop Foreman, Scheduling & Volunteer Coordinator – Matthew Schilling
- Steam Team Manager – Irvon Weber
- Assistant Steam Team Manager – Dave Banks
- Manager of Safety Systems – Kim Martin
- Manager of Training – Dave Banks
- Assistant Manager of Training – Russ Deacon
- Ticketing & Customer Service – Anna Schnarr
- Accounts Payable & Bookkeeping – Claudia Dauria
- Systems Analysis – Ebu Siren
- Honourary Chief Mechanical Officer – Norm Gelinas
- Honourary Master Painter – Grant Scheifele
- Honourary Master Carpenter – Brian Ray



OUR ORGANIZATION

The Waterloo Central Railway is owned and operated by the Southern Ontario Locomotive Restoration Society; a non-profit charitable organization made up of largely volunteers dedicated to the preservation, restoration, and operation of vintage & historic railway equipment. The Waterloo Central Railway is a licensed shortline railway under Shortline Railway Act of Ontario.