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Rail & Transit



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Features this month

- TTC SUBWAY ACCIDENT 3
♦ Dave Irwin reports on the findings of the coroner's jury and provides his comments.
REGIOSPRINTER IN CALGARY 6
♦ Calgary Transit tests a German diesel-powered light rail car. Bob Sandusky reports.
WHITHER THE QUÉBEC BRIDGE? 8
♦ Debate from the House of Commons on the state and future of the Québec Bridge.

Research and Reviews

- RAILWAY ARCHAEOLOGY 9
♦ Railway car ferries on the St. Lawrence
♦ A steam locomotive in the Arctic
♦ Station notes from Ontario and Québec
♦ Transit history in Cornwall
BOOKS 13
♦ Books on railways in Alaska and Oshawa
INFORMATION NETWORK 13
♦ Transit history in London

Transcontinental

- THE RAPIDO 14
♦ VIA changes in northern Québec
THE PANORAMA 16
♦ SP 4-8-4 4449 visits Vancouver
IN TRANSIT 17
♦ Bus service changes in Ontario cities
MOTIVE POWER 18
ROLLING STOCK 18
♦ Recent changes to the CN freight car fleet

Summer events

Summer train-watching day

UCRS members are invited to an informal day watching VIA, CN, and CP trains at Bayview, the junction of the CN Dundas and Oakville subdivisions just outside Hamilton, on Saturday, July 20. The main vantage point will be the pedestrian overpass leading to the Royal Botanical Gardens' Laking Garden. The bridge extends from a small parking lot on the south side of Highway 2, just to the east of the Highway 6 exit from Highway 403.

UCRS weekend excursion planned

August 17 and 18 will be the dates of a UCRS weekend trip from Toronto to Montréal, to see the recent changes in commuter train operations and other points of railway interest. More details will be in the next issue.

West Coast Railway Heritage Park

The West Coast Railway Heritage Park, 40 miles north of Vancouver at Squamish, will be open daily from May 1 until October 31, from 10:00 to 16:30. The museum is operated by the West Coast Railway Association.

CPR John Street Roundhouse

The John Street roundhouse in Toronto, a CPR locomotive facility for about sixty years until closed in the mid-1980s, is currently surrounded by construction of an underground extension to a nearby convention centre. When the construction is completed, the roundhouse and much of its surrounding site will become a public park. While the future use of the roundhouse building itself has not been decided, a longstanding possibility has been the creation of a railway museum at the site, which would make use of the roundhouse and other railway struc-

tures that have been preserved nearby.

The UCRS has an interest in these developments, as our business car *Cape Race* is stored inside the roundhouse, along with several other preserved cars and locomotives.

Recent proposals by CN Tower management to build a development at the base of the tower threaten the future construction of a spur that would connect the museum with active railway lines to the north, near Union Station. A viable spur would be a significant asset to a future railway museum, both as a way of ensuring easy access for railway equipment, and to allow, when feasible, excursions to operate from the museum. The concept of a railway museum itself is far from assured, as competing interests for the park space, limited funds, and perceived lack of interest in railway heritage all threaten the railway museum concept.

It is as a result of concerns over the possible future railway museum itself, and a railway connection with the outside world, that an ad hoc body, The Friends of the John Street Roundhouse, as been formed in Toronto. It will be both a support group and an advocacy organisation which will monitor developments affecting the roundhouse site, and take necessary steps to protect the site. The group is especially concerned over the potential negative impact of the proposed CN Tower development.

The Friends are organising a petition regarding the roundhouse issue, which urges the Toronto City Council to reaffirm its support of an operating railway museum at the roundhouse, and reinstate the requirement that there be railway access to the roundhouse. The participation and assistance of

UCRS members is encouraged by the Friends, and UCRS members can indicate their support for the aims of the Friends, or inquire further about roundhouse developments, by writing to J. Christopher Kyle of the Friends of the John Street Roundhouse, care of the C.R.H.A. Toronto and York division, P.O. Box 5849, Station A, Toronto, Ontario M5W 1P3, or fax to (416) 921-7298.

UCRS meetings

The next meetings in Toronto will be at 7:30 p.m. on Friday, June 21, and Friday, July 19, both at the Toronto Hydro offices, 14 Carlton Street, just east of College subway station. The June meeting will feature a short presentation by Scott Haskill on his recent trips to the United Kingdom and France.

The Hamilton meetings will be at 8:00 p.m. on Friday, June 28, and Friday, July 26, both at the Hamilton Spectator auditorium, 44 Frid Street, just off Main Street at Highway 403. The meetings will feature recent news and members' current and historical slides.

Cover photos

The front cover photo is from CP Rail, and shows a container being loaded onto a double-stack car at the Mayfair terminal in Vancouver in 1993.

On the back cover, the top photo is of the RegioSprinter in service for Calgary Transit, at Anderson Station on April 12, 1996, by Bob Sandusky. The lower photo, by Paul Bloxham, is of VIA Train 73 leaving Toronto on October 15, 1995, in the last months of the ex-CN steam-heated equipment.

This issue completed on June 9, 1996

Editor

Pat Scrimgeour
250 Queens Quay West #1607
Toronto, Ontario M5J 2N2
E-Mail: 73112.1037@compuserve.com

Please send news items to the address shown with each news section. Articles and photos should be sent to the editor.

Contributing Editors

John Carter, Art Clowes, Scott Haskill,
Sean Robitaille, Gray Scrimgeour,
Chris Spinney, Gordon Webster.

Correspondents

Paul Bloxham, Tom Box, Alex Campbell,
Richard Carroll, Calvin Henry-Cotnam,
Bill McGuire, Don McQueen, John Reay,
Denis Taylor.

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Directors

Scott Haskill, President 604-2071
Paul Bloxham 905 770-6916
Art Clowes 514 934-5549
Calvin Henry-Cotnam 287-9396
Al Maitland 921-4023
George Meek 532-5617
Pat Scrimgeour 260-5652
Pat Semple WA3-9123
Chris Spinney 281-8211

TTC Russell Hill subway accident, August 11, 1995

The results of the Coroner's inquest

By Dave Irwin

The Toronto Transit Commission's first subway accident resulting in passenger fatalities occurred on August 11, 1995, when a southbound train collided with a train that was stopped in the tunnel ahead. The collision occurred on the Spadina subway line, at signal SP53, just north of Dupont Station and south of the Russell Hill emergency exit. Three passengers were killed, and many others were injured.

In the weeks immediately following the accident, the specific causes of the incident were determined. The train that caused the collision, Run 35, passed at least one stop signal south of St. Clair West Station. The trip arm at the stop signal failed to automatically activate the train brakes, because of a design flaw in the trip arm mechanism. Other factors – the level of training for subway operators, communications and organisation within the TTC, and the design of the signal system – were identified by the investigations as contributing to the accident.

As required by law, a coroner's inquest was held, to determine the cause of death, the reasons for the accident, and appropriate responses to prevent future accidents. The inquest was presided over by Coroner Dr. R. Huxter, and included a jury of five people. The inquest began in November 1995, and concluded on March 8, 1996. The inquest was open to the public, and present at each day of the proceedings was Dave Irwin, a retired TTC employee. Dave kept a journal of each day's proceedings, which included his own personal comments, and printed below are some of his comments from the last days of the inquest.

The following is a report of the inquest into the subway accident in August. Before you read any further, I should declare my biases. After a four-year apprenticeship and subsequent drawing-office experience with the Signal and Telecommunication Department, Southern Region of British Railways, I joined the Toronto Transit Commission in November 1964 in the Signal Design section of Subway Construction. I was involved with signal design of various parts of the subway. I left this section to get involved with computers full time just before the detailed design work for the Spadina Subway.

My involvement with the subway was rekindled by the Computerized Train Despatch and Information System which is in use today to help the route supervisors keep track of individual run numbers on the subway. It was also the precursor of the Intermediate Point Headway Control computer system which was added in the last few years. This record is going to be filled with my own personal biases and comments. It is designed for those who might like a slightly different insight into the proceedings than that offered by the Fourth Estate. If you want accuracy, see the court record!

On Day 26 of the inquest, March 1, 1996, Dr. Huxter gave his charge to the jury. He described this inquest as long, difficult but interesting. He reviewed the evidence and the recommendations given by others. He told the jury that they were the final authority on all matters of

fact. The jury must answer five questions of law for each death and he gave them the details for that.

When it came to determining the cause of the accident, Dr. Huxter told the jury it started with the failures at signal SP53GT and continued on from there. But the root cause, in his opinion, was that there was a subtle decay in morale, a lack of preventative maintenance, distrust, complacency, lack of communications, riding on a trust envelope, lack of critical self analysis and appropriate actions taken as a result.

Finally, Dr. Huxter asked the jury members to keep an open mind when they entered the jury room for their deliberations.

The 27th day of the inquest was March 8. Courtroom A was filled with most of the players – Robert Jeffrey [the driver of Run 35], union representatives, lawyers, many media, members of the deceased's families, and various and assorted spectators.

The jury found that the deaths of Hui Xian Lin, Christina Munar Reyes, and Kinga Klara Szabo were accidental death as a result of the subway crash. The jury then made 18 recommendations as follows:

1. Reform of the Railways Act (1950) to provide oversight of the Toronto Transit Commission.
2. The TTC should submit to an independent safety audit every two years, beyond that done by the American Public Transit Association. This independent agency will be set up under the revised Railway Act.
3. Completion of the "due diligence checklist" of deficiencies identified by the TTC.
4. The province and Metro:
 - Commit to a "state of good repair" funding policy
 - Repair to take precedence over new works (in other words, the Sheppard Subway!)
 - Future capital funding based on the state of good repair.The jury indicated that underfunding since the mid-1980s has contributed to the deterioration of the system and had jeopardised the safety of the Toronto Transit Commission.
5. Improvements to the Operations Training Centre starting with the hiring of an accredited adult training specialist. The updated training package should include:
 - realistic pass-fail grading
 - annual refresher for all operators
 - emphasis on the meaning of the signal system
 - route supervisory accompaniment for at least one day of complete runs after training completion
6. An updated Operations Training Centre to include a suitable subway simulator.
7. A comprehensive review of the signal system with emphasis in the following areas:
 - lunar white usage
 - removal of signal identification markers
 - consistent placement of signal aspects
 - progressive speed control
 - expansion of IPHC to identify headway and train separation
 - all trip valves activated and relocation of reset
8. Elimination of auto key-by facility and implementation of raised trip arm immediately train has passed.

9. Advanced implementation of the new subway communications system.
10. Improved communication within the organisation.
11. A new Transit Control Centre including the updating of the skills of TCC staff.
12. The current Transit Control Centre should only be responsible for operations. Such things as intrusion alarms, facility maintenance, public information, media relations, and other related concerns should be handled by an adjacent facility.
13. Emergency response exercise every five years with "everybody." Yearly reviews by the safety department.
14. Improved predictive and preventative maintenance with computer assist where applicable.
15. Review of equipment procurement with respect to quality control. The procurement of cheap equipment (the Ericsson train stops) is a misuse of resources and a serious safety issue.
16. Traceable design criteria and standards for track, signal and subway cars. No modifications without approval of design review authority
17. Train operators and the Transit Control Centre must identify signal malfunctions by signal identification numbers. Review of the discipline system to allow for signal malfunctions. Operators reporting for duty to meet an inspector so that "state of the road" information can be passed on. Rookie operators not to be scheduled together.
18. The office of the Chief Coroner is to convene a press conference one year hence to provide all parties with an update on the implementation of these recommendations.

Dr. Huxter thanked and excused the jury.

My comments on the recommendations:

These recommendations are going to mean a complete upheaval of the Toronto Transit Commission if they are embraced as totally as has been indicated by the various participants. The major change, which in my experience will be the most difficult to implement, is the one asking the TTC to improve its internal communications. The TTC is staffed by an enormous number of people who have existed very successfully in an environment of knowing just that little bit more information than the next guy . . . to expect that people are all of a sudden going to become paragons of communication's virtue is dreaming in Technicolour.

Despite all the effort that has been made to make it clear to Metro and the province that any future capital expenditure must be on bringing the system up to and maintaining a "state of good repair," there are no baby-kissing photo opportunities in cleaning ballast at Union Station. We are in a time of an extreme funding crisis. We will be arguing this point for decades to come.

A few comments on Recommendation 7, which deals exclusively with a comprehensive review and re-examination of the existing signal system with comparison to other transit authorities in North America. I herewith apply for the job. I don't come cheap!

This recommendation is so serious in its scope that I am going to deal with it in some detail. I caution anyone at the TTC from doing anything to the signal system

without a very complete and thorough understanding of what is there now and what is expected to be achieved as a result of any changes proposed.

The recommendations with respect to the signal system made by this Coroner's jury is the result of a lot of people over the last two months completely misunderstanding the function of the signal system. I include in this "lot of people" the Coroner, the jury, the investigating police, the lawyers and, sadly, many TTC employees who should know better. An explanation of the signal system was not forthcoming. As we sit with the jury's recommendations in hand, 26 days of testimony, piles of documents many feet high and months of investigation behind us, this lack of knowledge on something so crucial to an understanding of what happened on August 11 is appalling.

R7i) "The use of the lunar white in conjunction with a red aspect. Red is to be seen as absolute."

Enormous amounts of lawyer time have been spent over the last two months on the meaning of a red signal with a lunar white. The phrase "counter-intuitive" has been used quite often to describe a train approaching a signal displaying a red aspect at speed. Dr. Huxter even suggested at one point that the signal system design be so simple that someone coming off the streets should have no difficulty recognising what was expected of him. The signal systems we have today on all forms of railroad are the result of spending the last 150 years or so killing people in train accidents. A considerable amount of effort has been expended in designing the shapes and colours used in displaying information to the operators of railway equipment. For those wishing to understand this vital form of communication, I recommend highly Rolt's *Red For Danger*.

We have trained many thousands of motormen on our system over the last 40 years and all have managed to operate without killing passengers.

The accident in Toronto was *not* caused by a driver misinterpreting a signal aspect. It was caused by a faulty train stop design and Mr. Robert Jeffrey learning how to break the rules too soon after the end of his training. By his own evidence, Mr. Jeffrey has been in love with the job of motorman for some years and has always wanted to be a motorman in our subway. He described how he rode the line and talked to operators whilst owning a restaurant in the Eglinton Division area. He obviously knew all about running grade time areas without seeing clear signals. He knows, as others also described, about running to train stops rather than signal aspects – why else would the recommendation by some be that the train stop arms be painted white? Not so that we can see if anyone hit them, but so we can see them going down before the signal clears.

There may be many reasons to tighten up our system but I don't believe fiddling around with the signal system is going to prevent one more incident. As the lunar white is peculiar to only a few properties, there may be a reason to find a replacement but this requires a lot of study and thought before anything is done.

R7ii) "Removal of the signal identification markers from the signal trees."

This recommendation should be considered in light of Recommendation 17i – "The train operators and TCC

must identify signal malfunctions by signal identification numbers (markers)."

There was no hard evidence presented to suggest that there was confusion between the signal identification markers and lunar whites. The signal identification marker is back-illuminated by a low-light-emitting bulb with a distinct yellow quality to it. On the other hand the lunar white is a high-light-emitting lamp with colour correction filters which produce a concentrated bright white light.

If there is any confusion of lights in the tunnels, it is with the blue lights associated with the power control system. These take on a distinct green aspect when viewed from a distance. They are also placed on the same side of the tunnel as the signals and are in *direct* line with the signal aspects. They do not appear anywhere in the jury's recommendations.

R7iii) "Consistent placement of signal aspects on signal and repeater trees."

Along with the approval of a bad train stop design at the time of the Spadina line construction, this was another example of approval of a bad design and should be corrected as soon as possible.

R7iv) "Consistent placement of wayside markers and signals with respect to performance characteristics for all train types."

As long as the *red* aspect is properly positioned, all other lights can wander within tolerances. The placement of the wayside markers is generally consistently high on the tunnel wall and all the rules in the world will not prevent operators operating by paint splashes, cross passages, puddles of water and whatever. As long as we have motormen operating trains we will have variations in the operation and the signal system catches any that are out of tolerance. The accident on August 11 was caused by a design fault in the signal system which, had it not been there, would have stopped Run 35 due to operator operation outside tolerance.

R7vii) "Trip valve activation on cars three and five of subway trains and relocation of trip valve reset to a more accessible location."

Part A: No evidence was offered in court or hinted at as being present in the mountain of documents tabled that there was anything wrong with the trip valve on Run 35. Or any other train for that matter. Trains are going to trip. That's what a train stop is for. To put so much emphasis on not tripping, as has been done since August 11, is to emulate ostriches as nearly as we can. It has led to the current atmosphere that the subway is not a place to operate in any more and large numbers of experienced operators are reported to be leaving the subway for bus operation where the control of management is not as intrusive.

I handled the suspect bolt. It is obvious to me that this bolt had been preventing the trip mechanism at SP71GT from functioning correctly for some time. If there was demonstrated wear on the rail and wheel, there is definitely demonstrated wear on this bolt and it is obvious that it has been "attacked" by an extremely large number of train wheels before Run 35 hit it on August 11. It is also obvious from the evidence that if the trip valves on cars three and five were in operation, no emergency braking would have been applied as the

same wheel-rail-train stop scenario takes place each time a wheel passes the trip arm, i.e., it is driven down so that the trip valve lever passes over. Therefore this recommendation would *not* have prevented the accident on August 11.

Part B: It has always been my understanding that the idea of putting the trip cock reset rope outside was to reinforce to the motorman that you can trip if you like but if you do you are going to get dirty in getting the train operating again and therefore there is an incentive to not trip even though it is *safe* to do so. Moving the trip cock reset to a more "convenient" position removes this incentive not to trip. We want drivers to trip periodically. It helps them to maintain a faith in the system. If they operate so that they don't trip for fear of repercussions etc., they will operate the line at three miles an hour and we might as well shut down.

We cannot let this accident make motormen fear tripping and any management move in this direction is plainly ridiculous. A total misunderstanding of the signal system has already been demonstrated beyond belief. To reinforce this stupidity is criminal.

When I heard that we had had a subway accident on August 11 of such a serious nature that we had killed three passengers and that this accident was likely to be laid squarely at the door of the signal system for which I worked and have an intimate knowledge, I was determined that I would be present at any public review of the accident as I know that the media is incapable of reporting anything approaching the truth. This is very evident in this accident and was particularly drawn to my attention in its reporting of my own testimony.

The last few months have been very instructive to me in the operation of a coroner's inquest. It is not the sort of review that I have experienced before when railway accidents happen. I have seen the result of the British and American systems in such cases. In this case, I believe we have had a much better outcome than the British and American systems and I am therefore a little fearful about the call for permanent review which is one of the recommendations of this inquest and which tends to gloss over some details. I believe we have accomplished much more than just determining that a signal system design fault caused the accident, which would have been the only report of the British and American systems. We are so safe here that we have not had to set up permanent review – there is nothing for them to review! We got so much more from this process. Despite my concerns about some of the recommendations, the overall tone of the recommendations is to do something about the state of the TTC which led to the accident other than just poor signal design. The analysis and evaluation of our management and budgeting system is very healthy in my view – even though not much is likely to come from it. We have had the opportunity to clearly identify where the areas of difficulty lie and it is up to us as an organisation to fix ourselves. We are not likely to get much help from outside and we must therefore do something that is not too common around the TTC and that is to do some self-starting.

As an outside observer now, I wish Mr. David Gunn and the whole TTC staff success in this improvement effort. Go to it. You have only your pensions to lose! ■

Siemens *RegioSprinter* trial in Calgary



By Bob Sandusky

Additional information from Donald Bain and the *Calgary Herald*

On April 12, daily passenger railway service returned to Calgary, albeit temporarily, with the inauguration of the RegioSprinter commuter train. A diesel-powered car, built by Düwag and on loan from Siemens Electric, runs over CP Rail's Macleod Subdivision between the Calgary Transit Anderson Station and a temporary halt just south of 162nd Avenue SE. From 06:07 to 09:06 and from 14:58 to 18:27 the car has exclusive use of this section of line, which has no sidings apart from the Calgary Transit interchange at Anderson and the storage tracks at Midnapore. The public opening followed a period of crew familiarisation and private operation for invitees on April 11. The train is operated by CP Rail employees with technical staff from the supplier available for assistance if needed.

Publicity leading to this pilot test began in April 1995 when the city council's transit committee gave tentative approval for a trial commuter train service (over a year after having been asked to investigate it by Alderman Johnston). Initial talks involved CP Rail and apparently VIA Rail Canada, with the city figuring it could provide the service for

about \$280 000 (less insurance which was independently pegged at \$80 000). Transit superintendent John Chaput asked the committee for a year to develop the test, during which time details could be worked out on equipment availability, track leasing, insurance, and other matters.

Pressure was on to do something because of community expansion south of Midnapore and no viable, near-term options for new highways exiting from the south end of the city. Construction of a new highway interchange at Canyon Meadows and Macleod Trail promised to add to rush-hour ennui for an extended period of time.

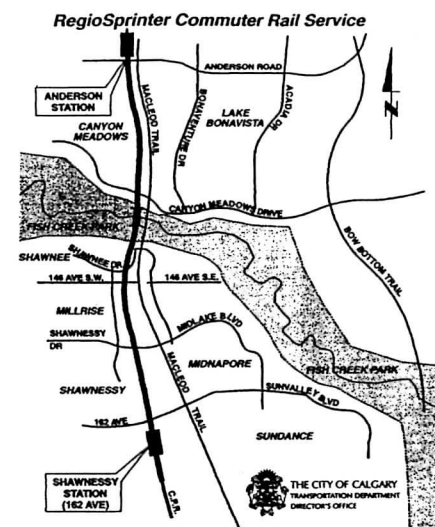
On November 22, 1995, a more conclusive article appeared in the *Calgary Herald* announcing a five-month service beginning in April. This was illustrated with an accurate drawing of Düwag's RegioSprinter, already in local service on German lines. The article quoted the city budget for the service as \$300 000, which was to be funded from Calgary Transit's projected \$1.4-million surplus. The feeling expressed in several news clips was that LRT expansion would be very expensive and was still well off in the future. By using existing facilities, this would be a useful and low-cost experiment.

Finally, on March 22, 1996, another article appeared, accompanied by the same drawing. It announced delivery for the last week of March, when testing would begin with CP Rail employees. Operation would begin on April 12. A final illustrated article

on April 10 said that operators had been on training runs for about a week. (An on-site CP employee reported that the unit had arrived at an eastern U.S. port and had moved by flatcar over CSX and Soo Line to Calgary.)

The Calgary Transit System (CTS) Anderson Road shops provides storage space for the RegioSprinter when it is not in service. A spur line at the southeast corner of the property has a trailing interchange with CP which doesn't have to cross any LRT tracks.

Access to the train is via the north end of the Anderson Station C-Train platform. Pas-



Top - The RegioSprinter at the 162 Avenue station on the first day of public service, April 11. (Bob Sandusky)

sengers walk down the emergency exit ramp to track level. A temporary boardwalk leads from there, across the northbound CTS line to a narrow wooden platform beside the CP track. A CTS guard is normally present to regulate a sliding gate when C-Trains arrive and depart. (Self-serve level crossings exist at other LRT stations such as Banff Trail and Lions Park but this location is a bit more hectic.) The edge of the RegioSprinter platform juts out to meet the train doorways and is hinged to fold back and lock down when not in use, as it would otherwise foul freight trains. On the last trip of each rush hour a CTS guard rides down to 162nd Avenue to close the station. The guard disassembles a platform safety barrier and puts it away in a small shed/washroom, retrieves 10 padlocks, folds back the sets of platform sections, then locks them together with the outer ones fastened to the top surface. The CP driver often assists, to save time.

Service began on schedule. It parallels bus route 52/152 which also runs from Anderson Road to 162nd Avenue SE but meanders through the subdivisions enroute. At the 162nd Avenue end the bus connects with the RegioSprinter on Shawville Way near a new mini-mall. The adjacent street has been posted on both sides with signs designating "Commuter Rail Parking" and on a typical day there can be around 100 vehicles parked here. This access is much handier than the larger, congested Anderson Station parking facility. Where the 52/152 bus trip takes 13 minutes southbound and about 25 northbound, the RegioSprinter's time is only seven minutes. The train ride is free, but anyone disembarking at Anderson has to pay a fare before boarding a C-Train. Anyone boarding the RegioSprinter there has presumably already paid their fare.

Let's look at the train itself. The unit is 25 metres in length and consists of two long sections articulated to a short third centre one. A single, powered axle is under each of

the outer segments while the middle one rides on two unpowered axles. Two engines combining to give almost 500 horsepower are under the floor of each end. The prime movers are two 198 kW, five-cylinder MAN diesel engines driving through five-speed gear boxes. The MAN diesels are quiet and, when idling give a low rumble similar that of the AEC AH470 – a sound not heard in Calgary since the Canadian Car and Foundry CD52 and TD51 buses were sold in 1980. As MAN has no nearby agent, the car was supplied with a spare engine just in case problems arose.

The unit (numbered 6.001.1, Düwag No. 91345, 1995) is white with blue trim and decorated with credits to Siemens, Düwag, DKB, and the Rurtalbahn. Front and side destination signs are visible with the name "Discotrain" displayed. This doesn't appear in any advertising, so the meaning is obscure.

Inside, seating for 74 is a combination of fixed, molded, transverse positions arranged three-and-two and groupings of longitudinal flip-up seats. For the designed capacity of up to 100 standees are ample stanchions and handstraps. Near the doors at one end is a wheelchair section and at the other is a ticket vending machine similar to those at C-Train stations. (Destinations offered on this machine are Köln, Harrem, Langerwehe and Aachen.) A low-level floor extends down the unit to encompass the two pairs of side doors, then three steps at each end lead to a raised level to clear the engines and support the buffers and continental couplers. The picture windows are truly generous and lend to the feeling of "grossraum" from the inside. Another impressive feature is the width of the vehicle, which measures approximately three metres. Sliding side plug doors are actuated by passengers, using a prominent yellow button mounted in the glass. An extra lower-level button is located at the handicapped entrance.



The operator's compartments are large fishbowls with great visibility, including the glass partition and doorway leading from the public area. The right-hand controls are not unlike those of a C-Train with several actuator buttons, levers for throttle and brake, and a speedometer (calibrated in miles per hour). A two-way radio sits at the centre of the console and by the driver's position is a public address system for announcements.

Operating speed is 50 m.p.h., which pinches down to 30 m.p.h. at public crossings. A pneumatic bell sounds for all of those, supplemented by the use of a horn. (The unit is allowed to run without a regulation 30-lb. railway bell.) As the speed limit is 10 m.p.h. above freight train speed, some adjustments were required to level crossing circuits. The ride is comfortable, with a sound level perhaps a bit less than an RDC.

The car has functioned with no serious problems. A troublesome brake caliper and the breakdown of a CP freight train have caused the car to miss two trips, and during warm weather in April, the car became very hot while it sat at Anderson Shops during the middle of the day. (Air-conditioning is to be installed in the car before it moves on to its next demonstration in California.)

Sampling the service around 08:00 one weekday revealed a surprising 30 or so southbound customers, followed by a return load of perhaps 65 commuters. There is a great satisfaction in being able to gaze through the picture windows at rush-hour traffic crawling along the parallel Macleod Trail. It is almost impossible for an auto to better the time of the RegioSprinter over the same journey, due to the proliferation of traffic lights along the Trail.

Some long-range opportunities resulting from this project were stated last year by the Calgary Transportation Authority: "recycling" railway freight lines; increasing public transit alternatives to autos; and extending the LRT with interim lines. The possibility of Expo 2005 happening here also brings other interesting special-event alternatives to mind.

The future notwithstanding, the present service is worth sampling for anyone finding themselves in Calgary this summer. ■

Top – A CP Rail train passes the RegioSprinter platform at Anderson Station on April 11. (Donald Bain)

Left – The interior of the RegioSprinter, showing the ticket vending machine. (Bob Sandusky)



Is the Québec Bridge falling down?

Questions and answers in the House of Commons

One of the best-known landmarks on Canadian railways is the Québec Bridge, which carries CN and VIA trains across the St. Lawrence River, just upstream from Québec City. The cantilevered structure, which collapsed twice during construction, was built for the National Transcontinental Railway and was opened in September 1917. In recent months in Québec a lobby group, la Coalition pour la sauvegarde et la mise en valeur du pont de Québec, has been active in publicising the current state of the bridge and the need for repairs and rehabilitation. The coalition has also suggested that the bridge not be privatised along with CN, but be retained under public ownership. The condition of the bridge, and responsibility for repairs, was recently the subject of partisan debate in the House of Commons in Ottawa.

Below are edited excerpts from Hansard for March 29, 1996:

PRIVATE MEMBERS' BUSINESS

[Translation]

Mr. Philippe Paire (Louis-Hébert, Bloc Québécois) moved:

That, in the opinion of this House, the government should, in conjunction with the Canadian National, carry out repairs to the Pont de Québec.

He said: Mr. Speaker, as the mover of the motion, I welcome this opportunity to speak to this motion. One day in June, the Coalition pour la sauvegarde du Pont de Québec appeared before the committee to support an amendment put forward by the Bloc Québécois, which was designed to exclude the Québec bridge from the [CN] privatisation bill.

They made their case, then the government members spoke, and the attitude they displayed was an absolute disgrace. They started by saying: "Look, one bridge cannot be excluded from the privatisation process; there are 6000 bridges in the Canadian railway system," which was like saying that the Québec bridge had no more value than any of the 6000 small bridges crossing over gullies, brooks and small rivers. This is the first indication of the government's absolute ignorance.

Why are we submitting motion M-202? We do so out of despair, because the Québec City bridge is in such a deplorable and preoccupying condition. Let us not forget that when the Québec bridge was built to span the St. Lawrence River – until the day it collapses – it was the easternmost bridge, all the others being located in Montréal. At the time, trains could not cross the St. Lawrence when travelling from the maritime provinces to Montréal.

Consequently, the Québec bridge was a very important addition to the economic development of the Québec region. This is still true today. Today's motion is important because it reminds the Canadian government and the CN that they have a duty to maintain this monument, because it is indeed a monument, which is also an essential component for the economic development of the Québec region.

To give you an idea of the state the Québec bridge is now in, I have decided to read you a few paragraphs from an article by Louis-Guy Lemieux that appeared in *Le Soleil* on September 10, 1995. It is entitled: "Bridge of Shame."

The article reads as follows: "It is possible for a person to lift off shovel-sized chunks of rusted iron with their bare hands. Motorists are treated to pieces falling on their hoods and windshields. Pleasure boats do not like to pass under the bridge – for fear of falling debris, of course. It is going to crumble into the river one day, and sooner than you think. You do not need to be an expert to see that the Québec bridge is on its last legs. It is in such a decrepit state that traffic should not be allowed on it."

The article continues: "After the alarm sounded by the coalition to save the bridge, and the on the whole comforting conclusions of the study by CN's experts, I went to see it up close, this marvellous old bridge I remember from my youth. I did not recognise it. The old bridge, this heap of rusted iron, abandoned to the elements, cannot be the longest cantilever bridge in the world, the triumph of civil engineering, the eighth wonder of the world. These were the glowing terms used in all the newspapers at its inauguration on September 20, 1917. Today we would have to call it the first cantilever bridge no longer fit for use, an embarrassment to local civil engineering, a perfect example of the inertia of government."

Now I shall offer a description, not by a journalist, but by an American company. It appears that no Canadian company was capable of offering an expert opinion on the true condition of the bridge. The results of the study are fairly alarming. The bridge has reached a point where it is rusting at a much faster rate than it ever did in past decades. Repair and maintenance work are needed to extend the useful life of the bridge well into the 21st century. The bridge, therefore, is in real danger. While the structure shows no signs of falling apart, if it is to remain intact and irreversible damage avoided, work must be done within the next five years. The price tag is a big one, we have to agree. The company expects that full repairs, including architectural lighting will cost \$63-million.

This is the funny part. The federal government says it is washing its hands of it, because it handed the bridge over to Canadian National in 1993. However, the government fails to recognise that, over the previous 10 or 15 years, maintenance of the bridge was seriously neglected. It is, therefore, not true that CN alone is responsible for getting the work done. The state of the bridge reflects the negligence of Transport Canada over the past 15 years. Who then should pay the \$63-million? The answer is very clear: Canadian National and the Government of Canada.

The Government of Canada claims that Québec has significant responsibility. Québec only leases the bridge.

In spite of the fact that it is only the leaseholder, the Government of Québec has shown incomparable magnanimity in offering to tear up [its] \$25 000 per year lease agreement if the CN and the Canadian government promptly commit to initiating the work called for in the agreement entered into by Transport Canada and CN in 1993. The Government of Québec is prepared to pay \$1.5-million per year.

If the federal government and CN had the wits to realise what the Québec government is offering, they would jump at the offer. While under no obligation to do so, the Government of Québec is putting \$24-million on the table, and all the Canadian government has to do is to agree, especially since the repairs, which will take between seven and ten years to complete, will create 400 to 500 summer-long jobs for many years to come. But when a contribution is requested, the federal government does not want to have anything to do with it and says: "No. The government has handed over responsibility to CN."

CN's privatisation does not change a thing. CN must do the work and the Canadian government must pay its share, since it has a direct responsibility after 15 years of neglect. The taxes Québécois everywhere have paid since the bridge was built should have gone to its maintenance, but nothing was done. Let those who had a duty to maintain the bridge do it now.

[English]

Mr. Jim Jordan (Leeds-Grenville, Liberal):

Mr. Speaker, I am pleased to continue the debate on the motion presented by the hon. member for Louis-Hébert who would like to see the federal government in conjunction with CN carry out repairs on the Québec bridge.

I reiterate the Québec bridge is a safe structure. The bridge is inspected regularly by CN to ensure it is reliable and will remain a safe structure. An in-depth inspection on critical aspects of the bridge is undertaken on an annual basis and every five years a detailed inspection takes place on the railway section of the bridge.

Originally built for \$25-million, the first train crossed the bridge in 1917. In 1923 the Government of Canada entrusted the bridge to CN. In 1949 the federal government removed one rail line from the bridge and moved the second rail line and widened the highway section. In 1993 as a result of an agreement between Canada and CN on Canadian Government Railway lands, CN became the sole owner of the bridge.

The bridge is recognised as a masterpiece in bridge engineering. It spans a total of 3239 feet. It has a clear centre span of 1800 feet. In 1987 the American Society of Civil Engineers and the Canadian Society of Civil Engineering jointly designated the bridge a historic monument. It is a very historic structure. In addition, the bridge was recently declared a national historic site. Steps have been taken to have UNESCO designate the Québec bridge an international historic monument.

CN has long recognised this fact and has been spending more than \$700 000 per year on the bridge's maintenance. I reiterate the inspection of the bridge revealed that its overall condition is remarkably good

given its age and the operating environment of the structure. It is fully capable of handling projected traffic for years to come. Nevertheless, as with any structure which is nearly 80 years old with a very complex design, a major maintenance program must from time to time be undertaken in order to ensure the structure's long term use.

I understand the bridge is now at this stage. To achieve this goal, CN plans a major maintenance program to begin this summer. CN expects to invest between \$1.5-million and \$2-million per year on the bridge over the next 15 years, in other words \$22-million to \$30-million. That planned expenditure is there. An expenditure of this magnitude confirms CN's commitment to maintain this important structure. The hon. member is recommending that the federal government, in conjunction with CN, participate in the repairs to the Québec bridge.

I advise the hon. member that as of 1993 the federal government is no longer a player, no longer the owner of the bridge and is under no obligation to share in the maintenance. In 1993 Canada and CN entered into an agreement stating in part that the Québec bridge and Canadian Government Railways [including National Transcontinental Railway] lands were to be conveyed to CN. By this arrangement, CN agreed to fund a major maintenance program on the bridge ensuring its long-term viability and maintaining it in the current state.

The 1993 Canada-CN agreement also transferred to CN the lease between Canada and Québec. [The] annual payment, negotiated decades ago, no longer comes even close to contributing to CN sufficient funds to reverse the deterioration that has been caused by roadway de-icing and other things used in maintaining a road. Roads come under provincial jurisdiction. The predominant users of the structure, motor vehicles, represent approximately 75 per cent of the bridge's volume now. It has become more of a roadway than a railway.

I have already stated CN's commitment to the bridge. It also is prepared to participate in a more complete restoration program if the Québec department of transport agrees to financing half the cost of a major maintenance program. The former government made the transfer of Canadian government railway lands contingent on CN's assuming full responsibility for the Québec bridge. The federal government's contribution was made at that time. This responsibility is now clearly CN's.

The government recognises the uniqueness of the Québec bridge and that it was and still is one of the engineering marvels of the world. I am very confident that CN will fulfil its obligations agreed to in the 1993 Canadian government-CN agreement at which time the responsibility for the federal government's maintenance of the bridge ceased.

[Translation]

The Deputy Speaker:

The period for Private Members' Business has now expired and the order is dropped from the Order Paper.

(The House adjourned at 12.44 p.m.)

Research and Reviews



Just A. Ferronut's

Railway Archaeology

Art Clowes

1625 ouest, boul. de Maisonneuve, Suite 1600

Montréal (Québec) H3H 2N4

E-Mail: 71172.3573@compuserve.com

In our January-February column we spoke of some of the railway crossings along the St. Lawrence River. My lack of knowledge on the marine aspects of these river crossings left a number of gaps about the train-ferries used. Our members Dana Ashdown and Sandy Worthen have come to my rescue. So, based on their data, here are a few more lines to help round out the story of these railway crossings.

I had mentioned the steamer *Leonard* that had been operated by the National Transcontinental Railway between Québec City and Lévis prior to the opening of the Québec Bridge. Both gentlemen highlighted the oddities of this train ferry. In comparison with the common operating concepts used today by most railway ferry operators for railway car transfer, I would have to agree.

First, a little physics. Anyone who has paddled around in a canoe quickly learns the effects of moving around in the canoe while afloat. Well, moving railway cars on and off a train-ferry creates the same problems of balance or trim of the ship, and as well, the changing weight from adding or removing a car changes the draft, or for our purpose the height of the deck of the ship above the water level. Another problem the ferry operators face is changing water levels, and while in lakes and most rivers, changes are slow and seasonal, in places like Québec City and especially at ocean terminals, these changes occur twice a day as tides.

Railway cars for most train ferries are moved from land to the ship over a moveable transfer bridge. This bridge is fixed on the land end and is designed to move up and down at the outer end, the ship's end. The length of these bridges is proportional to the height of tides they operate in, i.e., the greater the tidal range the longer the transfer bridge needs to be. Railway car transfer bridges at terminals with large tides may have two or three spans, since the grade on the bridge cannot exceed that which the motive power can handle. These transfer bridges can be supported in different ways, suspended by cables with screw-type hangers from an overhead gantry and tower system, from shorter towers that simply cap pile clusters, or even on floats. The outer span

next to the ship is called an apron span. Should the transfer bridge be a multi-span structure, then the intermediate joints between the shore and the apron must be supported in a manner to both carry the weight of the span plus the live load of the train passing over it. In this type of operation, the train ferry is brought into the wharf. The apron is then lowered onto the car deck of the ferry. The transfer bridge operating machinery permits some of the weight of the apron to be carried by the ferry. Not only does this provide a support for the apron, but it permits the outer end of the apron to move up or down as the weights on the ferry change the ship's draft. If the apron was fixed, any movement up or down of the ferry would cause the rails to be at a different elevation on the apron from those on the ship. In practice when a string of cars is moved onto the ferry, the weight first starts to push the apron down, which starts to push the ferry down, and soon the ferry is carrying the weight of the cars.

When you were canoeing, any movement sideways caused it to roll or list. Well, the same thing happens with the ferry. The major effects of this are controlled by the sequence of transferring the cars. Working with a loaded multi-track ferry, it is normal to pull an outer string of cars and then replace it, repeat the same at the other side and work to the middle. This method keeps the amount of listing to a minimum. But regardless, there is list and this adds another dimension in the complicated life of a train-ferry operation. To overcome this, the de-

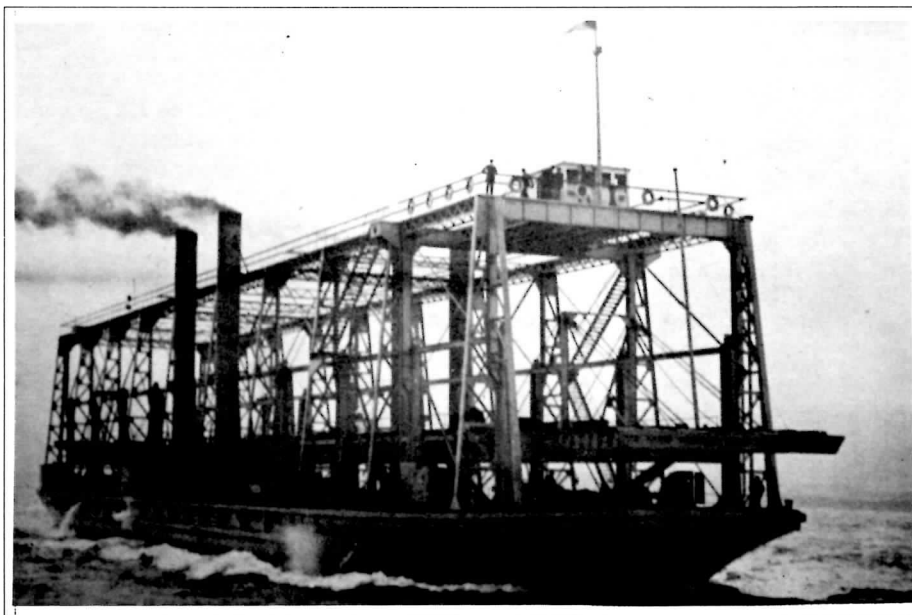
signers of the transfer bridge basically omit much of the bracing normally used in fixed bridges. This permits the bridge to remain horizontal at the shore end but to take on a cross-slope at the outer end to follow the list of the train-ferry. While this may sound complicated and does create problems for stress transfer in design, it is quite simple. The best example is to take a piece of cardboard and tape one end to a flat surface and then move the other end around as if it was resting on a ship moving up and down and listing to the side. Now, if I haven't put you to sleep, let's go back to the *S.S. Leonard*.

Only in Canada, you say? A pity! Well, not in this case. As we mentioned, the *Leonard* was quite unusual. Instead of using a shore-based railway car transfer facility, it was equipped with an on-board car transfer system.

First a quick look at why the *Leonard* was built. The underlying cause was initiated on June 29, 1903, when the Dominion Government signed an agreement with the Grand Trunk Railway for the construction of a new government-supported transcontinental railway line. Because of the route selected east of Winnipeg, construction was slow during the initial years. By 1907, things were looking up, with work having begun on the

▼ S.S. LEONARD

This photo was published with an article by Sandy Worthen in the October 1972 issue of *CRHA Canadian Rail*. The photo was credited to Messrs. Cammell Laird and Company, and was taken during the ship's speed trials.



bridge across the St. Lawrence at Québec. On August 29, the next step towards a need for the *Leonard* occurred when the Québec Bridge collapsed with the death of 75 workers. This caused the Government to step in to assist with the replacement of the fallen bridge. Concerns about the safety of the new bridge delayed the start of reconstruction, as the design was checked and rechecked. Meanwhile, railway construction was moving ahead on schedule. It was soon realised that the line would be completed before the new bridge would be ready. Faced with this dilemma, the Laurier government decided, especially in light of the growing political problems over the National Transcontinental and Grand Trunk Pacific railways, that it could not wait for the bridge to put the line in service. So, in 1912, the Cammell Laird and Company, Birkenhead, United Kingdom, was engaged by the Canadian Government to build it a ship for transferring railway cars across the St. Lawrence River.

Cammell Laird and Company's designers went to work, and designed, perhaps as Sandy says, the most unusual train-ferry ever built. Dana describes it: "She resembled a barge with a boxy steel framework on top, the purpose of which was to support and guide the movable train deck, which could be raised or lowered in order to compensate for local tidal conditions. The wheelhouse sat on top of the superstructure at the bow, while the two smoke stacks were located on the starboard side."

The ship was launched on January 17, 1914 by Cammell Laird and Company had a length of 313 (or, some sources say, 326) feet, a beam (width) of 65 feet, and draft of approximately 15 feet. Her design tonnage was 3365 tons and carried Cammell Laird's design Number 797. She was a coal fired, steam powered vessel, with screw propellers. The *Leonard* had a propeller at the bow, to help in manoeuvring around the docks, as well as to help in any river ice.

The boxy steel framework on this unique ship had ten three-legged towers about 35 feet tall, along each side. These legs were braced with lattice bracing and had a steel frame at the top to tie them together. This frame also supported the pilot house (bridge) at the bow. This boxy frame guided the moveable train- or tidal-deck, which was capable of being raised to a maximum of about twenty feet above its resting position on the main deck. The train-deck had three tracks with a usable length of about 272 feet each. Ten sets of vertical lifting screws were used in raising or lowering this train-deck. Unlike the more normal shore-based system, this one had to be able to lift and lower the weight of both the deck and the cars.

After its construction, the *S.S. Leonard* crossed the Atlantic under her own power. She was entered in the *Registry of Shipping* for the Port of Québec, September 20, 1915, with a registered tonnage of 3348 tons and Canadian registry number 138088.

She then undertook her mundane task of crossing the St. Lawrence River carrying about 15 freight cars or one passenger train per trip. It appears that fate had led to her construction, and it could be said that fate extended her brief service at Québec. This extension came as the result of the September 11, 1916, failure of a lifting link that caused the loss of the centre span of the new Québec Bridge. This accident kept the *S.S. Leonard* in service for about an extra year, until she was finally withdrawn from service on December 3, 1917.

This train-ferry, described as a "naval novelty" apparently carried the name *S.S. Trammere* during her sea trials. On this side of the ocean, the first plans were to name this vessel the *Ottawa*, but she was christened the *S.S. Leonard*, probably in honour of the government's member on the National Transcontinental Railway Commission, Lieutenant-Colonel R. W. Leonard, a soldier, engineer, and author.

While this was the end of this unique and short-lived train-ferry in Canada, it is probably worth adding a few extra comments on the rest of her life. Early in 1918, the *Leonard* made a return trip to Britain to help with the urgent task of ferrying war supplies to the Continent from England. The *Leonard* was renamed *TF 4* and started her cross-England Channel service between hastily-built docks on November 6, 1918, only days before the November 11 armistice. This operation ceased in March 1919, although the docks were not dismantled until 1927.

The *TF 4* was then sold to the Anglo-Saxon Petroleum Company and served until she was finally scrapped in 1932 as an oil tanker carrying the name *S.S. Limax*.

Moving up river to the Montréal area, Dana has again supplied some details to help round out the train-ferry operations on the St. Lawrence River. While I had mentioned the existence of pre-railway ferries on the river, I had understood that none of them were or could be converted to railway use. I had totally forgotten about one train-ferry service in the area that I mentioned in our April 1993 column, as well as the ferry operations of the "ice railway" when there was no ice.

The Montreal and Lachine Rail-Road built a wharf at Lachine above the rapids on the north shore of the St. Lawrence River. In 1850 the Montréal and New York Rail-Road took over the above railway as well as the Lake St. Louis and Province Line Rail-Way and its line from Kahnawake to Mooers, New York. The break in this line was across the St. Lawrence from Kahnawake, on the south shore, to Lachine.

Dana forwarded the following based on the Montreal and New York's 1852 annual report. "The *Iroquois* was ordered from Augustin Cantin in 1852, with delivery expected in June 1853. She was 160 feet by 44 feet, overall, and powered by two 40 h.p.

oscillating engines made by E. H. Gilbert of Montreal. Fitted to carry cars, freight and passengers, the cost of the *Iroquois* is stated to be about £6000; the slips, about £500."

Notes by John M. Mills on the *Iroquois* state: Launched, Montreal 1853; Length, 147 feet; Beam, 24 feet; Propulsion, steam engine, side paddle wheels. Rebuilt in 1866 with a length of 155 feet, a beam of 27 feet, and a displacement of 351 tons. The *Iroquois* burned in March 1871 at Caughnawaga (Kahnawake).

The second edition of John Lovell's 1856 book *Montreal in 1856: A sketch Prepared for the Celebration of the opening of the Grand Trunk Railway of Canada* refers to the *Iroquois* as follows: "This, it may be remembered by the way, is the only *Steam Ferry* in Canada East, which is open every day of the year. The crossing is made with a powerful steamer, which has been built with a Railroad track on its deck for the purpose of connecting the two divisions of the Montreal and New York Railroad without breaking bulk. The *Iroquois* crosses the St. Lawrence with a locomotive and tender, and three loaded cars at a time, and this work it is capable of repeating every fifteen minutes, if necessity requires it."

The South Eastern Railway had its cars for Montréal handled on the end of Grand Trunk Railway trains, first by way of Saint-Jean, and after 1877 by way of Saint-Lambert. A considerable amount of the South Eastern Railway's traffic was destined for the Quebec, Montreal, Ottawa and Occidental Railway in Montréal. By 1879, the Grand Trunk had become very unfriendly, mainly due to the CPR's attempts to penetrate southern Québec and the changing railway alliances. South Eastern trains were delayed deliberately and the connection became so unsatisfactory that the South Eastern Railway decided to find some other way of getting into Montréal.

The result of this inconvenience was that the SER and QMO&O jointly chartered La Compagnie du Traverse de Chemin de fer d'Hochelaga à Longueuil (the Hochelaga and Longueuil Railway Ferry Company). This new company set up shop a couple of miles downstream from the Victoria Bridge with docks in Longueuil on the south shore and in Hochelaga on Montréal Island.

The company commissioned Augustin Cantin of Montréal to construct a train-ferry. This ship, launched in 1881, was 182 feet (or some sources state 185 feet) long, with a 30-foot beam, and weighed 395 tons. Its Canadian registry number was 80690. At the time of her launching she was named the *S.S. ABC* (named for A. B. Chaffee, Secretary-Treasurer of the South Eastern Railway). This train-ferry could carry five cars and was moved by screw propellers driven by her steam engines. She started service in the summer of 1881 and was generally used only during the months from April to December. The *S.S. ABC* was renamed the *S.S. South*

Eastern, and continued moving railway cars across the St. Lawrence at Montréal until after the 1887 completion of the CPR bridge at Lachine. The *South Eastern* was touted as being able to carry up to 400 cars per day.

Once the South Eastern's traffic was moving on the CPR's bridge, the *South Eastern* was sold to the Richelieu and Ontario Navigation Company. In 1890, she was sold to the Canadian Pacific Car and Passenger Transfer Company. This company operated it between Prescott, Ontario, and Ogdensburg, New York. In 1897 the *South Eastern* burned and was rebuilt as the *International*, which was later sold in 1909 and reduced to a sand barge. She was broken up in 1914.

As mentioned, I must thank Sandy Worthen and Dana Ashdown for forwarding most of the above information that included data from the following:

The Quebec Train Ferry of 1914, by S. S. Worthen, as published in the October 1972 issue of the CRHA's *Canadian Rail*.

The Ice Railway, by R. R. Brown, as published in the CRHA's *Canadian Rail*.

Railways of Southern Quebec, Volume I, by J. Derek Booth, published by Railfare, 1982.

Canadian Coast and Inland Steam Vessels, 1809-1930, by John M. Mills, as published by The Steamship Historical Society of America, 1979.

Montreal in 1856: A sketch Prepared for the Celebration of the opening of the Grand Trunk Railway of Canada, by John Lovell, Montreal, 1856.

Where to file it?

While we are on the subject of ships, this may be a good spot to cover a little story that Lewis Swanson has forwarded. However, I will let you decide whether you want to call this a ship story, or file it with your locomotive rosters.

Lewis wrote that while going through the book *The Northwest Passage*, by Brenden Lehane, one of the Time-Life series, *The Seafarers*, he came across this item on Franklin's ship, the *H.M.S. Erebus*.

Sir John Franklin was an English naval officer and Arctic explorer who did considerable mapping or charting of the eastern Arctic Ocean as his part in the British search for the North-West Passage. Today we remember Franklin probably more for the search for him and his 1845-1848 expedition that was lost after being locked in the ice for three years. This story relates to one of the two vessels used in this ill-fated expedition.

Franklin on his last expedition had two ships, both former bomb-vessels, or platforms for mortar launching, that had been strengthened for polar service. The second vessel was the 340-ton *HMS Terror*, and the lead ship, under Franklin's command, was the 370-ton *HMS Erebus*.

The *Erebus* had been refitted in 1845 with a steam engine to provide an auxiliary propulsion system. This engine was the 15-

ton, 25-horsepower locomotive from the London and Greenwich Railway, a 2-2-0. The locomotive was placed crosswise, deep in the hull, and the front wheels had been removed. A shaft was coupled to the left driver of the loco that drove the ship's auxiliary propeller. This propeller could be lifted out of the water when not in use.

It is not clear whether the *Terror* had been fitted with an auxiliary engine of this rather weird type or not.

These ships, having been locked in the ice for three years off King William Island, were abandoned by their crews. So these vessels still rest on the bottom of the Arctic Ocean, where, as Lewis mentions, they are no doubt safe from acquisitive railfans!

Station news

This is probably a good chance to clean up a few station items that have been piling up over the last couple of months.

Back in December, I had commented about the conversion of the Canadian Northern suburban station at Mount Royal, Québec into a café-restaurant, called Le Torréfacteur de la Gare. My comparison of the treatment of interior of this station to the former TH&B station in Brantford, Ontario, brought a response from Bill Deryshire on the current status of the Brantford station. After an earlier fire, this station had been rebuilt and was operating as the Iron Horse Restaurant. Bill advised that this restaurant had closed last year and the building was put up for sale, but now the "for sale" sign on this station-restaurant has been removed. He further advises that while the windows are covered, a new sign states that it is undergoing renovations. Perhaps this means another opening soon, and perhaps Bill will keep us posted. The station had not been fully restored inside, but it could give one the feel of being on a dining car by sitting inside the replica of a railway car that had been constructed inside.

A St. Patrick's Day trip along the old Canadian Northern line from Montréal to Ottawa revealed that the two-story station at Hawkesbury, Ontario, has been demolished.

During a recent discussion with Allan Maitland, he told me a couple of stories about the old Témiscouata Railway. He also mentioned that we should look at doing an article on this line. So, to help refresh my memory of this line, I took a trip along this line from Rivière-du-Loup to Edmundston. From Cabano south, the old roadbed has been converted into a hiking and snowmobile trail. This inspection revealed a couple of station-like buildings, on station sites. I'll put them in that category until I can check on their history. The first one was a single-storey frame structure at Dégelis, operated as a drop-in centre for seniors. This building gives the appearance of a replica. But the real question about the authenticity arose when I arrived at Cabano. The old station there was a two-storey "plain jane" frame structure,

and in the years I recall it, was covered with imitation brick siding. Presently the building appears to be about the same size, two storeys, but is now clad with a clapboard style siding. The simple lines of this station provided little trim to inspect, so it had to raise questions in my mind. Perhaps some of our readers can shed some light on these buildings.

Cornwall Electric Railway Society

Our December item on Courtaulds Canada Limited and the Cornwall Street Railway Light and Power Company Limited reminded Sandy Worthen of the efforts of a number of rail and transit fans in Cornwall, Ontario.

Sandy, with verification from Tony A. Clegg, sent along a brief outline of the attempts some 45 years ago to establish Canada's first operating tramway museum in Cornwall.

Back in 1949, shortly before the abandonment of the CSRL&P's passenger operations, the Cornwall Electric Railway Society (CERS) was established. This was a group of streetcar enthusiasts primarily from Montréal and Ottawa with the goal of creating an operating museum using some of the CSRL&P's electrified trackage.

The CERS held its first fan-trip using CSRL&P Car No. 23 on March 13, 1949. Subsequent to the July 27, 1949, abandonment of passenger service, Car No. 29 was the only streetcar available for Society excursions, although a few trips used the Company's electric locomotives.

Selected as the first car for restoration and preservation was CSRL&P No. 29, a car built by the St. Louis Car Company, St. Louis, Missouri, U.S.A., in 1930 for the Northern Texas Traction Company of Dallas and Fort Worth, Texas, U.S.A. Its road number there is unknown, but it was one of four NTT 250-series cars bought by the CSRL&P in 1939 after the NTT terminated operation in 1934. No. 29 was a modern, lightweight, double-ended car, mounted on roller-bearing trucks and was in good condition still in 1949.

The museum project proceeded with a ceremony at the Cornwall car barns in August 1949, where CSRL&P's car No. 29 was donated to the Cornwall Electric Railway Society.

The transfer of a key organiser slowed CERS plans. The formation of the Canadian Railway Museum at Delson/Saint-Constant, (Montréal), changed the focus for an operating streetcar museum, and diluted the pool of available volunteers necessary to sustain a museum.

The end of this endeavour came with genuine disappointment and regret that Messrs. Omer Lavallée, Ronald S. Ritchie, and Allan Toohey made an appointment with the CSRL&P management in 1952 and reluctantly returned Car Number 29 to the company, thus terminating the plan to create Canada's first operating streetcar museum.

GWWD

Bob Sandusky wrote to say that he visited the Greater Winnipeg Water District railway on November 4. It is a very quiet railway now that the Supercrete gravel traffic has gone, the spur removed and the hoppers sit empty. They have just sold their former CP caboose. All equipment is now red and white, including their coach, No. 2000, and former CN caboose No. 1360. Their three locomotives now seem redundant when two would do. Shop spray-painting had to stop as a result of an environmental complaint about the lack of an enclosed paint shop. It does seem that the GWWD railway has seen its best days.

Books

Copper River and Northwestern

Books and articles concerning the construction of the White Pass and Yukon Route in Alaska, B.C., and the Yukon, or the Copper River and Northwestern Railway in Alaska have heretofore featured the exploits of contractor Michael James Heney from Pembroke, Ontario. Now we have a book which celebrates the life of his team-mate E. C. Hawkins, Chief Engineer, who headed the design groups which planned these two very difficult railroads. Hawkins grew up on Long Island, New York, but learned mountain railroad construction in building part of the Leadville line of the famed Denver South Park and Pacific. He also did irrigation work in Colorado.

The author, Alfred O. Quinn, was engaged in 1950 to head a team taking air photos for possible highway construction design on the abandoned CR&NW from Mile 27 to Chitina, Mile 131, the railway division point. His book is therefore very strong on civil engineering aspects and complements Lone Janson's book, *The Copper Spike*, which is particularly good on governmental matters. (Review in UCRS *Rail and Transit*, May-June 1977 issue.)

Neither book says much about rolling stock or the Alco-built oil-burners which hauled the trains. Copper ore concentrate was shipped in 100 lb. bags and there was a boxcar fleet for this, but some bagged concentrate also went in gondola cars. The main group of freight haulers was the 70-series bantam 2-8-2s of about 97 tons with 48-inch drivers, as used by logging railroads. These were aided by the 20-series slide valve 2-8-0s. The daily passenger trains were powered by slide valve 2-6-0s 101 and 102; 100 was the Cordova switcher. Some saddle tankers had been used for construction, and the railroad also had rotary ploughs.

Roadbed location on the standard-gauge CR&NW out of Cordova was somewhat different from WP&Y, where shelves were blasted from sheer rock cliffs. CR&NW ran through glacier country, with the only practical route often being up a river valley with

the track changing sides to avoid calving glaciers. Much expensive bridge work was involved, the most notable being the Miles Glacier bridge at Mile 49. The book contains, as an appendix, the 1910 engineering report on this most difficult of all the bridge jobs. Work on both track and bridges continued in winter. The workers were mainly Scandinavian-Canadians who were able to stand the extreme cold and continual high winds, unlike others who normally engaged in construction work.

A plan is provided of the interesting temporary terminal loop and sidings at the Miles Glacier bridge construction site, but we will have to wait for another author to provide us with a plan of the Cordova yard trackage. A photo taken from high ground gives an idea of the division point at Chitina. As the line ended at Kennicott mine on sidehill construction high on a mountain slope, there was no yard, but just some 1000 feet of double track with three crossovers. The engine house and turntable were at McCarthy, downhill five miles.

Personal letters from E. C. Hawkins to his family have survived, and help us to appreciate the very talented engineer as a person. The author also deals with the opening up of Alaska in both the Russian and U.S. eras, with considerable detail on the natives.

This book provides a very worthwhile picture of the civil engineering of a railroad which has been gone since 1938.

Iron Rails to Alaska Copper - The Epic Triumph of Erastus Corning Hawkins by Alfred O. Quinn, published 1995 by D'Aloquin Publishing Co., Quaker Mountain, Whiteface, N.Y., U.S.A. 12997. ISBN 0-9646669-0-1, softback, 8½" by 11", xii + 195 pages, 109 photographs, 30 maps and diagrams, foreword, acknowledgments, and index.

-J.D. Knowles

Oshawa Railway

From the 1930s to the 1960s the nearest electric railway freight operation to Toronto was the Oshawa Railway. UCRS had some excursions over the line. As OR had ceased running its one streetcar line in 1940 and substituted buses, our trips were made in freight gondola cars hauled by steeple-cab trolley locomotives. In the late 1940s the railway served about three dozen customers directly, including the very important General Motors north plant. The Bowmanville Museum has produced a publication which recalls OR as an electric property. Much of the switching trackage still exists today, and is served by owner Canadian National with diesel-electric switchers. OR did switching for both CN and CP and ran a modern midtown freight house for both railways.

The book describes the electric line from the perspective of local residents, and thus gives much more detail than is usual in descriptions of such properties. The beginning and early years are covered in satisfying detail, and the story is carried up to de-

electrification in 1964.

Remembering the Oshawa Railway by Clayton M. Morgan and Charles D. Taws. Softback, 8½" by 11", 50 pages, 43 photos, one 10" by 24" map, preface, timeline of major events, list of abbreviations, glossary, references, rolling stock roster with notes. Published 1996 by the Bowmanville Museum, P.O. Box 188, Bowmanville, Ontario L1C 3K9, price \$10.00 plus packaging and postage of \$2.00, total \$12.00, GST included. -J. D. Knowles

Information Network

Item 66

London Transit Historical Society

Message from: LTHS

The London Transit Historical Society was formed in the fall of 1994 to foster, promote, and increase public awareness of the history and contribution to London of the London Transit Commission and its predecessors.

Our members are dedicated to locating documented articles of London transportation history; when possible, retrieving items of historical interest; and cataloguing and securing such articles in a safe area. The London Transit Historical Society will begin to videotape a documentary in co-operation with the London cable television community channel. We hope to preserve via this documentary many stories of the past, as retired employees remember their times and workmates at the London Street Railway, London Transportation Commission, and London Transit.

Our historical bus fleet contains No. 221, a 1947 Brill; No. 275, a 1951 Brill; and No. 5000 (No. 116), the 5000th bus built by GM in London, new in 1975 and recently retired from service.

Bus No. 275 was built by the Canadian Car and Foundry Company at Fort William, Ontario. The original paint scheme is still on the bus, showing the old LTC colours and the number. The bus is powered by a Hall Scott gasoline engine mounted under the floor, with a three-speed automatic transmission. It was retired in 1972, and was in a private collection until 1995.

Some other notable items we have preserved at this time are the original minutes of the LSR Board of Directors from 1937 to 1910, a turn-of-the-century wooden farebox, three generations of LT uniforms, and many photographic items.

Anyone interested in the activities of the society or in becoming involved is encouraged to call and leave a message. Perhaps you have some special family connection, information, or stories to tell. Please share with us and help us to preserve a very important facet of London's rich heritage. London Transit Historical Society, 450 Highbury Avenue, London, Ontario N5W 5L2. Phone 519 451-1340; fax 519 541-4411.



THE RAPIDO



EASTERN CANADA

Scott Haskill
Gordon Webster
Pat Scrimgeour

GO TRANSIT

MAINTENANCE CONTRACT

GO Transit expects to issue tender proposals in May for the maintenance of its car and locomotive fleet. The work involves the management, supervision, work force, and materials required at the Willowbrook shops and the outpost locations of Guelph Jct., Georgetown, Bradford, Stouffville, and Whitby, to produce approximately 33 train-sets for weekday revenue service from an active fleet of 40 locomotives and 256 coaches, over a five-year period commencing on June 1, 1997. CN currently does this work for GO, and has throughout the history of GO Transit.

—Globe and Mail

GO NOTES

The new Hamilton GO Centre, at the former TH&B station, opened for bus service on Saturday, April 28, and for railway service on Monday, April 30. Some work continues to be done on the building and bus bay areas, and an official opening will be held in June.

- GO trains on the Georgetown and Richmond Hill lines during the afternoon rush hour left from Tracks 12 and 13 of Union Station from mid-March until April 19, while asbestos insulation and lead-based paint were removed from the platform area on Track 1.
- Following two fatal commuter train accidents in the northeastern U.S. in early 1996, GO Transit started publicising its on-board safety features and evacuation procedures. Handouts on how to operate emergency exits have been made available, and a monitor that shows a constantly-repeating safety video was set up in the concourse at Union Station. The emergency-exit handles on the windows of some cars have been modified to be easier to use.
- GO unveiled on May 17 a double-deck coach and a bus each covered completely with advertising for GO service. GO is now offering advertising space on its railway cars and buses, and expects to bring in up to \$1-million in revenue from the venture.

CANADIAN NATIONAL

TRACK REMOVAL IN ONTARIO

CN has advertised for tenders for removal of all track material from three closed lines in Ontario, the Cayuga, Newton, and Owen Sound Subdivisions.

On the Cayuga Sub., the work involves dismantling the railway between Feeder West at Mile 22 and Nelles Corners at Mile 54.07, and between Jarvis at Mile 62.67 and Delhi at Mile 81. CN had authority to abandon these sections as of January 1996, and can abandon the centre section, from Mile 54.07 to Mile 62.67, after December 29, 1996.

The Newton Sub. work is between Mile 0.47 in Stratford and Mile 36.62 in Palmerston. The Owen Sound Sub. will be lifted from Mile 0.00 in Palmerston to Mile 9.43 in Harriston. Also included in the Newton and Owen Sound Sub. tenders is the dismantling and removal of some yard tracks in Stratford.

Rails and ties from the Midland Subdivision west of Orillia were being removed by reclamation trains during the week of May 6 to 10.

—Globe and Mail

WELLAND CANAL BRIDGE

CN and the St. Lawrence Seaway Authority have announced that they wish to abandon lift bridge Number 20 over the Welland Canal in Port Colborne. This bridge is located at Mile 1.43 of the Macey Spur, a remnant of the former Dunnville Subdivision (originally the Buffalo, Brantford and Goderich Railway). The line has been little-used for some time. The City of Port Colborne opposes the abandonment. Next to the bridge still stands the CN Port Colborne station, an abandoned brick building.

—Paul Duncan via Usenet

ONTARIO TIMETABLE CHANGES

A new CN timetable for most of Ontario was issued on April 28. Great Lakes District timetable No. 53 contains these changes:

- The Cayuga Subdivision remains only between Robbins (the junction with the Stamford Sub.) and Mile 22 (Feeder West). The section from Jarvis (Mile 62.7) to Nelles Corners (Mile 54.1) is now called the Cayuga Industrial Spur, and the section between St. Thomas (the western end of the line, Mile 119.0) and Delhi (Mile 82.8) is now called the Cayuga Spur.
- The Canal Subdivision (Feeder West—Thorold Jct.) is now the Canal Spur, the Thorold Subdivision (Port Robinson—Merritton) is now the Thorold Spur, and the Humberstone Subdivision (Yager—Nickel) is

now the Humberstone Spur.

- On the Guelph Subdivision, the station name Stratford Jct. has been renamed Cowie, St. Marys Jct. has been renamed Ross, and St. Marys West has been renamed Portland.
- The Fergus Subdivision (Guelph Jct.—Finnigan) is now the Fergus Spur.
- On the Dundas Subdivision, the station names at Beachville (Mile 54.3) and Dorchester (Mile 68.7) have been removed.
- The Newton and Owen Sound subdivisions have been removed.
- The Beachburg Subdivision and the section of the Newmarket Subdivision between Yelk and Ella are both still shown as open in the timetable, but are expected to be abandoned by the end of May.

ONTARIO NORTHLAND

NORTHLANDER DERAILMENT

On March 31 the southbound *Northlander*, CN Train 698, derailed shortly after leaving the station at North Bay. Five of the six former GO Transit passenger cars derailed but remained upright, though one had a big gash in the side, and was off of its trucks. The HEP generator, converted from a F9B, also derailed. The *Northlander* that day was pulled by a GP38.

The train hit an open switch, and early investigation suggested either that the switch had been tampered with, or that the switch stand had been struck by passing road traffic. There were no serious injuries, but three people were taken to hospital as a precautionary measure.

—ONR Customer Bulletin via John Reay

CANADIAN AMERICAN

B&A-CDAC-CP PAPER TRAIN

The first dedicated paper train, Bangor and Aroostook Train 1, departed from Madawaska, Maine, late on April 21, en route to Conrail's Selkirk Yard near Albany, New York. A CDAC crew took the train from Millinocket, Maine, to Sherbrooke, Québec, arriving there in the afternoon of April 22. A CP crew then took the train, as CP Train 552, to Rouses Point, New York, via Farnham and Delson. Train 552 (numbered with an even number because it is considered a south-bound train) lifts containers that have been set off by eastbound Train 906 at Desnoyers, Mile 27.6 of the Adirondack Subdivision. At Lacolle, 552 lifts intermodal traffic that has been set off by Train 556, destined for points not served by 556 on its way to Alexandria, Virginia.

On May 1 at 14:00, CDAC Train 1 arrived at Sherbrooke with CP SD40-2 5662, HATX GP40 519 (leased by CDAC), CP SD40-2 5672, and 23 cars. On May 2, CP Train 552 was seen with CP SD40-2 5645, CDAC GP40 40, and CP SD40-2 5619. Also that day, CP Train 551 was seen with CP SD40-2 5646, MK GP40 4301 (leased by CDAC), CP SD40-2 5650, and about 25 cars. —George Matheson

STCUM

NEW TERMINUS WINDSOR

Montréal's newest railway station opened on April 1, with the inauguration of the permanent replacement for CP's Windsor Station. The new STCUM commuter station, known as Terminus Windsor, was built as part of Centre Molson, the new home of the Montréal Canadiens.

Centre Molson occupies the space where the old Windsor Station trainshed used to be. During the past three years, a temporary commuter terminal was in place east of the construction site while the arena and new terminal were being built.

Terminus Windsor replaces the temporary station building, and occupies part of the new arena complex. Passengers are able to travel along covered passage-ways to the Bonaventure and Lucien-L'Allier Metro stations, as well as through Centre Molson to the Windsor Station concourse.

Terminus Windsor will accommodate the 3000 to 4000 commuters that use the STCUM's Montréal-Rigaud commuter railway line each rush hour. In addition to ticketing and other customer facilities, the terminus is planned eventually to include retail stores. —CP Rail System

STCUM SCHEDULE CHANGE

Following the new timetables issued on March 16 in connection with the opening of the Centre Molson and the Terminus Windsor, the STCUM made a further change in the times of its trains on the CPR.

The weekday afternoon departures had been changed so they were at regular intervals, at 16:40, 17:00, 17:20, 17:40, and 18:00. A week later, on March 25, one weekday train was changed again, from 17:40 to 17:30. This was because the 17:20 is the train to Rigaud, and it skips some stops; people going to those stops who finished work at 17:00 were unhappy about having to wait until 17:40. (Before March 16, the Rigaud train had left at 17:18 and the following one at 17:25). —Tom Box

VIA RAIL CANADA

TIMETABLE CHANGES

In addition to the major changes to northern Québec services and the Jasper-Prince Rupert train, VIA's summer timetable also has minor changes in the Québec City-Windsor

corridor. These changes began on April 28.

- Québec-Montréal Train 25 runs half an hour earlier, at 13:30.

- Montréal-Toronto Train 53 runs an hour later, at 07:15, and the Saturday-only Train 653 (from Montréal at 07:30) no longer runs. A stop has been added at Oshawa.

- Ottawa-Toronto Saturday-only Train 641 runs 15 minutes later, at 07:55, and daily Train 43 runs five minutes later, at 11:35.

- Toronto-Windsor Train 71 runs 20 minutes earlier, at 08:35; Train 73 runs five minutes earlier, at 12:30. Windsor-Toronto Train 72 runs ten minutes earlier, at 09:30; Train 78 runs 35 minutes earlier, at 18:05, allowing connections in London between this train and Chicago-Toronto Train 88.

- Most intercity routes in Québec and Ontario, except for the Montréal-Ottawa trains and the fast afternoon Montréal-Toronto and Ottawa-Toronto trains, have the usual three to ten minutes added for the summer, to allow for delays from track maintenance work.

- The Winnipeg-Churchill Hudson Bay, newly converted from steam-heated to electrically-heated coaches, runs between one hour and 90 minutes faster, departing at 22:00 and arriving at 07:30 two days later, both northbound and southbound. —Tom Box

NEW EQUIPMENT IN QUÉBEC

On Sunday, April 28, the last train of VIA FP9s and blue and yellow cars to run through northern Québec arrived in Montréal. Train 602, the *Saguenay*, from Jonquière, and Train 606, the *Abitibi*, from Taschereau and Senneterre, ran on the new schedule and were combined into one train at Hervey-Jonction for the run to Montréal. The consist of the combined train was: FP9 6313, baggage car 9672, coaches 5464, 3217, 3252, and 5449, baggage car 9639, and FP9s 6309 and 6308. The lead engine and the first three cars were from Taschereau; the next three cars and the two trailing units were from Jonquière.

Monday, April 29, inaugurated the use of F40PH-2s and HEP-II equipment. The combined train from Montréal was: F40 6400, baggage car 8606 coaches 8130, 4123, 4125, 4109, 4105, and 8116, baggage car 8608, and F40 6419. The first engine and three cars were for Jonquière; the next five cars and the trailing F40 were for Senneterre.

On this day, the train was over an hour late arriving at Hervey-Jonction. The train was split in the siding at Mile 17 of the Lac Saint-Jean Subdivision, before arriving at the junction. On arrival at the siding, the Jonquière loco and cars were leading the train. After the train was broken, that section pulled ahead, made the station stop, and left on the Lac Saint-Jean Sub. for Jonquière. After the Jonquière train had left the station, the Senneterre train backed around the

connecting track (clockwise in the diagram in the November 1995 *Rail and Transit*) far enough to clear the switch, then pulled forward on the La Tuque Subdivision track.

The consist on Wednesday, May 1, was F40 6400, coach 4123, baggage cars 8606 and 8608, coaches 4105 and 8116, and F40 6427. The train was split at Hervey-Jonction between the two baggage cars.

—Gerry Burrige, Tom Box

LOCOMOTIVE STRIKES RAIL AT SPEED

In an incident similar to that at Brighton in November 1994, the oil tank of a VIA locomotive was cut open by a piece of rail laid on the tracks. Train 68, from Toronto to Montréal on May 12, was seven minutes east of Kingston when it struck the rail. About 70 litres of lubricating oil leaked over 500 metres of track. The train did not derail, but the locomotive and four cars were damaged. There were no injuries. Police charged four people with mischief and trespassing, and two of them with interfering with a transportation facility. —CP wire via Ted Deller

VIA NOTES

VIA will be introducing a programme to reward frequent users of its services, similar to the airline "frequent flyer" programmes. The scheme will be called *VIA Preference*, and points will be based on dollars spent, rather than miles covered. Accumulated points can be exchanged for free trips. • As part of the post-Brighton fire safety modifications, the LRC cars are going to be altered so that some of the ceiling lights run off batteries, so there will be more light available without HEP. At present, the only emergency lighting comes from small lights near the floor of the car. The change will have the side-effect of eliminating the period of complete darkness at Montréal's Central Station, upon arrival and before departure, while the train is switched between on-board and shore power. Locomotives cannot provide HEP in the underground station, as the locomotive would produce too much exhaust fumes. • Train 60, carrying 212 passengers, made an unexpected stop after a car wheelset failed on March 22. The eastbound train had just left Oshawa and was travelling at five m.p.h. when one wheelset fell off the first coach behind the locomotive. The coach was set out, the passengers were moved into other cars, and the train proceeded after a two hour delay. • Four unions representing VIA workers and the Canadian Labour Congress have begun the "Campaign to Save Canadian Passenger Rail." Leaflets are being distributed at VIA stations across the country. —Tom Box, Jim Sandilands

AMTRAK DETROIT STATION

The construction of a new passenger station in Detroit is being studied. City officials want a new permanent station to serve as a hub

for several railway services, including Amtrak and VIA intercity trains and local commuter trains. The commuter service may be introduced temporarily during the upcoming rebuilding of a major highway.

Amtrak is considering making any new station in Detroit a "premier station," a concept that includes an intermodal train-bus-transit facility, with revenue-generating retail space. Amtrak has limited funding to test the premier station concept, and the station in Detroit may have to compete with Atlanta for the available funds.

A likely location for the new station is across the CN and Conrail tracks from the existing "temporary" station in the New Center area of Detroit. The present station replaced the former Michigan Central station several years ago. The long-range goal of Detroit officials is to make the new Detroit station the focal point of a Chicago-Toronto passenger railway corridor.

The study is timely for VIA, as CN has authority to abandon its Chatham Subdivision this year, and VIA will need to either buy the line or choose a new route into Windsor and a new station in Windsor.

—NARP via *The Railroad List*

TOURIST RAILWAYS AND MUSEUMS

TTSL SPECIAL TRAIN

In the morning of April 22, the equipment for *Le Tortillard du Saint-Laurent*, operated by Les Trains Touristiques du Saint-Laurent (TTSL), ran as a special train for travel agents from Montréal to Québec City, departing at 09:00, and travelling on the CN via the Drummondville Subdivision. The train was powered by both TTSL locomotives, former VIA/CN FP9s 6305 and 6306, painted in a version of the 1950s GNR green, black, and gold passenger paint scheme. The 11 TTSL cars are also in this paint scheme. The TTSL had a successful inaugural season in 1995 operating daily between the Gare du Palais in Québec and Pointe-au-Pic, in the Charlevoix area of eastern Québec. The equipment was stored for the winter at the VIA Montréal Maintenance Centre. VIA used TTSL FP9 6305 on Train 601 from Montréal to Jonquiére on March 18 and back on Train 600 on March 19.

—Roman Hawryluk, *Tom Box*

PRESERVATION NOTES

The St. Lawrence Seaway Commission has decided to dispose of its railway equipment at Crysler's Farm near Morrisburg, Ontario. GTR 2-6-0 1008 and two passenger cars have been on display beside the relocated CN Aultsville station since the construction of the seaway and the relocation of the CN Kingston Subdivision. The National Museum of Science and Technology is handling the disposition.

—Ray Corley

THE PANORAMA



WESTERN CANADA

Gray Scrimgeour

#570—188 Douglas Street

Victoria, B.C. V8V 2P1

E-Mail: 70614.3561@compuserve.com

TOURIST RAILWAYS AND MUSEUMS

ROCKY MOUNTAINEER

Rocky Mountaineer Railtours' new locomotives have arrived and are in service for the 1996 season. GP40 HATX 804 (the former SBD 6746) arrived in Vancouver on April 26, and sister 805 (formerly SCL 6753) followed on April 30, both in RMR colours. The paint scheme is similar to that on the GEs but has larger areas of white, and has silver trucks. The first run was made on Sunday, May 5, with 14 cars to Kamloops, where they broke the train into a four-car consist behind 804 for Jasper (including newly-received RMR 9270) and an 11-car consist (including the dome car 9501) behind 805 for the CP leg.

RMR 9270 and 9272 are former CN baggage cars, reworked as power cars for the *Tempo* in southern Ontario and renumbered as 15301 and 15302, and sold to the Great Lakes Western, a private-car company in Wisconsin, after the *Tempo* cars were retired in 1990. On GLW, the cars were numbered 492 and 493, but they have now regained their original numbers.

All of the cars are now lettered RMR for Rocky Mountaineer Railtours, replacing the previous initials, GCRC, for Great Canadian Railtour Company. (The original name of the company was Mountain Vistas Railtour Services, when they took over the operation from VIA in 1990.) The car numbers are now painted at the lower corners of the car sides, not amidships as before.

RMR Train 102 had this consist leaving Kamloops eastbound on May 6: CP SD40-2 5904, HATX GP40 805, RMR power car 9272, baggage car 9487, coaches 5706, 5718, 5716, 5702, 5724, 5703, 5713, and 5749, and dome car 9501.

—Jim Johnston, Dean Ogle, Earl Roberts

SP 4449 IN VANCOUVER

Southern Pacific 4-8-4 4449 arrived in Vancouver on May 5, and left on May 8.

The northbound trip was made under sunny skies, and plenty of people were track-side and at Pacific Central Station. Arrival in Vancouver was about 25 minutes off the advertised 13:45, not bad for an excursion

train such as this. The train ran empty between Seattle and Everett due to a BNSF ban on the carriage of passengers over this section. No. 4449 went south with "357" in her train number boards; Train 357 was Great Northern's southbound *Morning International* from Vancouver to Seattle.

The consist of the train was: SP 4449, DLMX 1001 (tool/support car *Yes Dear*), DLMX 1002 (crew sleeper *Clackamas River*), BKSX 1001 (power car), Amtrak 800269 (dome lounge), BKSX 4001, BKSX 4734, BKSX 9407 (dome coach), BKSX 4700, NRMX 2202, NRMX 2955, and BKSX 9410 (dome coach). Five other cars planned for use were trapped behind washouts on the Port of Tillamook Bay Railroad. —Dean Ogle

MINIATURE RAILWAY VANDALISED

On the night of April 11, five one-eighth-scale locomotives in the workshop of the B.C. Society of Model Engineers at Confederation Park in Burnaby were dismantled by a vandal, using the society's own welding torch. The frames and axles of four steam locomotives and one diesel engine were damaged. The five locomotives are owned by the society, and operation on the miniature railway has continued using equipment owned by club members.

—Burnaby Now via Ron and Denise Kline

CANADIAN PACIFIC

TRAIN STRUCK BY FLYING AUTO

A Calgary driver had an interesting encounter with a CP train on February 27. While driving to work at a hospital, the operator of a pickup truck swerved to avoid two autos as he approached the Country Hills Boulevard bridge over the CP Red Deer Subdivision north of Beddington. He grazed a light pole, went down the embankment and through a fence, flew through the air, and hit the side of CP SD40-2 5808 just below its roof level. The unit just happened to be stopped under the overpass at the time.

The truck slid down between 5808 and the concrete retaining wall, wedging itself between the two and jamming the doors so the rescue crews had to extract the bruised driver through his rear window. He was grateful for both his fastened seat belt and the presence of 5808, which possibly saved him from worse injury.

—Calgary Herald via Bob Sandusky

BRITISH COLUMBIA RAILWAY

DERAILMENTS

There was a rash of derailments on BCR during April. On April 8 at Mile 267.4 of the Takla Subdivision, one unit and eight loaded log cars derailed on soft track. The Takla Sub. was subsequently closed between Mile 197.0 at Lovell and Mile 274.3 at Minaret until the roadbed firms up, which may not be

until this summer or fall.

On April 9 at Mile 252.8 of the Lillooet Subdivision, the power and seven cars made it over, but the eighth and ninth cars of a northbound freight train derailed due to track subsidence caused by a beaver dam breaking. There was a 40-hour closure to lift cars and fill the hole. This derailment trapped plenty of power and business north of the site.

On April 12 at Mile 635.0 of the Chetwynd Subdivision, there was a major derailment with 14 cars on the ground. The crew walked back from the head end but because it was night, they could not see anything other than that the train had come apart. They were instructed to stay put, and at first light found that one bulkhead flatcar of lumber, two loaded boxcars, and 11 cars of LPG, one of which was leaking, had derailed. As they were in an uninhabited area, no one had seen or noticed anything amiss. The line was closed for three days and again, much power and business was caught north of it.

ROYAL HUDSON SEASON BEGINS

BCR 4-6-4 2860 went on a test run from North Vancouver to Squamish on April 26 with six coaches. The train was out of North Van around 07:30, into Squamish at 09:30, and out again at 14:00.

BURLINGTON NORTHERN SANTA FE

AMTRAK TRAINS DISRUPTED

From late April until May 18, mudslides on BNSF between Everett and Seattle hampered Amtrak operations in Washington State. Citing safety concerns, BNSF refused to allow Amtrak to carry passengers between those points, forcing the public onto buses while the trains deadheaded empty. Normal Seattle rainfall for the year had been exceeded by half and the ground was saturated and unable to accept any more water.

—Dean Ogle, *Al Toner*

DELAYS FOR MANITOBA TRAFFIC

High water in the Winnipeg area closed BNSF's Crookston—Noyes, Minnesota line on April 24 for over two weeks. Traffic was rerouted via CN through Pokegama, Wisconsin, and CP through Minot, North Dakota, resulting in delays of up to three days.

—BNSF Today via Dean Ogle

WEST COAST EXPRESS

WCE REPORTS GOOD RIDERSHIP

Five months after it opened, West Coast Express is carrying about 5400 riders per day, 75 percent of the expected usage at the one-year mark. Coquitlam and Maple Ridge area transit users, intended to be the major beneficiaries of the commuter trains, continue to report Greater Vancouver's lowest approval

ratings for public transit. Only 58 percent of Coquitlam and Maple Ridge residents rated transit service (including buses, not just the trains) as good or excellent. In contrast, the rest of Greater Vancouver recorded 73 percent thumbs-up. • The reporting marks BCUX are being used by West Coast Express.

—Surrey-North Delta News Leader via Dean Ogle

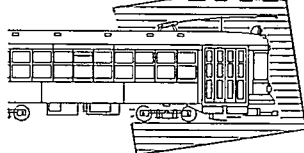
COASTWISE SHIPPING

CLIPPER IV REFITTED

Clipper Navigation's 330-passenger catamaran *Clipper IV* has been retrofitted with gas turbines, and went back into service between Seattle and Victoria on April 27. The ship now travels at 40 knots (about 72 km/h), cutting the travel time between the two cities to one hour and 45 minutes — 45 minutes faster than the previous schedule. Its top speed is 45 knots (88 km/h). *Clipper II* was also in Victoria on April 27; this 29-knot, 181-passenger vessel will allow the Seattle-based company to increase daily service between the two cities. There will be five daily round trips during the peak season of May to September.

—Victoria Times-Colonist

IN TRANSIT



Scott Haskill

Ashford Hall, 2520 Bloor Street West #15
Toronto, Ontario M6S 1R8
E-Mail: 72154.1331@compuserve.com

KITCHENER-WATERLOO

NEW FARES

Kitchener Transit's new fare structure for 1996 is intended to increase ridership. Monthly passes remain at the same price as 1995 — \$54 a month for adults and \$44 a month for seniors and high school students. Tickets have been re-introduced to the system after a long absence, and the adult ticket price works out to \$1.40 each. Cash fares have been raised by 20 cents to \$1.60. A new \$5 day pass has been introduced.

Most significantly, Kitchener Transit's transfer policy has been revised, to a 60-minute free transfer. Customers with transfers can travel anywhere on the Kitchener Transit system for 60 minutes, including stopovers and round trips.

THE MILK RUN

Kitchener Transit's new accessible bus route has been named "The Milk Run." The name was chosen because the bus follows a regular route, runs rain or shine, takes its time, and

makes plenty of stops, just like a farm milk truck would. The name also suggests travel without stress, and is distinctive and easy to remember.

The route is operated in partnership with the local mobility bus operator, Project Lift. Full size New Flyer low floor buses, common on regular KT routes, are used on "The Milk Run." The bus can be flagged down anywhere along its route. There are two wheelchair positions, including one being tested that can be used without belts or tie-downs.

As with other services of this type, "The Milk Run" links residents with shopping areas, medical buildings, the downtown area, hospitals, and other locations on its wandering path around the city. Drivers are trained to offer assistance when passengers want it. The route operates Monday through Friday, from 09:00 until 15:00 for a nine-month trial.

—CUTA Forum

OTTAWA

FUNDING CUTS

OC Transpo must shave a further \$2.4-million from its operations to make up part of a \$3.2-million funding shortfall for 1996. This comes after having to increase fares and cut services to meet provincial spending cuts of over \$6-million. In order to accomplish this, a number of cost savings in non-service areas are being made. OC Transpo will have to face a further funding reducing of \$3-million in 1997, for a total reduction of 30 percent in provincial funding subsidies over three years.

OC Transpo has announced that on September 1, 95 bus drivers and 13 maintenance staff will be laid off, at the same time as service is reduced. —CUTA, OC Transpo

STATION RECONSTRUCTION

OC Transpo is repairing the expansion joints in the upper deck of St. Laurent Station on the Transitway. During the construction, all routes will be loading at a common stop, which will be moved as work progresses. The work is to be complete by the end of August.

—OC Transpo

OTHER ONTARIO CITIES

MISSISSAUGA: RIDERSHIP UP

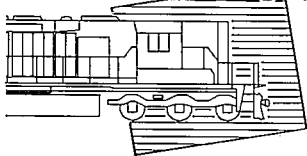
Mississauga Transit released its year-end results, which showed several positive trends. Ridership increased three-and-a-half percent in 1995 over 1994. Sales of MT's \$16 weekly pass increased by seven percent. Preventable accidents were down by 48 percent over a two-year period, and there was a 33 percent reduction in passenger complaints about drivers. The ridership increase was attributed to a rise in student trips, as school boards cut back on busing, while employment increases in Mississauga (often as businesses move from Toronto locations) have resulted in more cross-boundary commuters from Metro.

LONDON: TARGETS FOR 1996

The London Transit Commission has prepared its 1996 budget while taking into account reduced provincial subsidies for transit. The \$27.8-million budget includes a projected rise in the revenue-cost ratio to 61.2 percent, from 58.6 percent in 1995; a zero increase in City of London funding for transit; and a combined two-year reduction in provincial funding of \$1.2-million. To meet the more stringent targets, LTC will reduce service by about two percent over the course of the year, and will increase its fares by an average of almost eight percent.

—CUTA Forum

MOTIVE POWER



John Carter

2400 Queen Street East #204
Scarborough, Ontario M1N 1A2
E-Mail: 72123.563@compuserve.com

CANADIAN NATIONAL

SD38-2s BEING RENUMBERED

To make room for the forthcoming order of SD75ls in the 5600- and 5700-series, the four former Northern Alberta Railways SD38-2s are being renumbered from 5700–5703 to 1650–1653. This is an unusual number block for large road power, but it puts the SD38-2s in a similar series to CN's other six-axle branch-line power, the GMD-1s with A1A trucks, which are in the 1600–1614 series. SD38-2 5702 had been renumbered as 1652 by April 17, when it was seen at Walker Yard in Edmonton; 5701 was renumbered as 1651 early in May.

HYDRO UNITS TRANSFERRED FROM CP

Five SD40-2s owned by Ontario Hydro and assigned to CP since they were delivered in 1978 have now been transferred to CN. The five were CP 5779–5783, and have now been renumbered as CN 5388–5392. They have been reported to be still in CP Rail action red or CP Rail System candy-apple red, but with their new CN numbers and no lettering. Ontario Hydro also owns CN SD40-2s 5306–5313 and CP SD40-2s 5784–5796 and 5860–5862. The transfer follows the award of a contract to CN to carry coal from Bienfait, Saskatchewan, to the Ontario Hydro generating stations at Marmion Lake, near Atikokan, and Thunder Bay. The units are not used specifically on the coal trains, but may be used anywhere on the system. Seen in Edmonton: 5392 on May 8 and 5389 on May 11.

NOTES

CN GP9 7236 and slug 237 arrived in Calgary in mid-April. They are remote-control-equipped, like many other GP9-slug pairs. Up to now, all local switching has been performed by 1100-series GMD-1s. One wonders if the days of the unrebuilt GMD-1s are numbered. • SD70I 5614 has recently been sublettered for Grand Trunk Western. No other SD70Is have been reported to have had these letters added.

CN UNITS IN NEW SCHEMES

This list, in two parts, is of CN locomotives that have been repainted into the "CN North America" paint schemes, with or without the map of North America. The list does not include switchers. It does include M420s which were painted without a map because they were road switchers of 2000 horsepower. This list is not exhaustive, and any reports of additional engines in the "with map" and "without map" versions will be welcome. Please send additions to Paul Bloxham, 311–309 Major Mackenzie Drive East, Richmond Hill, Ontario L4C 9V5, or by e-mail to pbloxham@cenvmc.cencol.on.ca.

CN North America scheme with map
208 units seen

Dash 8-40CMs . 2430 2431 2432 2433 2434
2435 2436 2437 2438 2439
2440 2441 2442 2443 2444
2445 2446 2447 2448 2449
2450 2451 2452 2453 2454

(All units in series, as delivered.)

Dash 8-44CWs . 2500 2501 2502 2503 2504
2505 2506 2507 2508 2509
2510 2511 2512 2513 2514
2515 2516 2517 2518 2519
2520 2521 2522

(All units in series, as delivered.)

M420 3567
SD40s 5055 5121 5213 5214 5132
5234

SD40-2s 5266 5271 5272 5294 5314
5316 5317 5319 5320 5322
5323 5324 5325 5326 5328
5329 5330 5332 5334 5335
5336 5337 5338 5339 5340
5342 5343 5345 5346 5349
5351 5352 5353 5354 5355
5356 5358 5359 5360 5362
5363

SD40-2s 5364 5365 5366 5367 5368
5369 5370 5373 5377 5378
5379 5380 5381 5382 5383
5384 5386

(Former UP units, painted upon rebuilding.)

SD60 5537
SD40s (GTW) .. 5900 5904 5907 5917 5920
5923 5924 5928 5930 5931
5932 5934 5935

SD40s 6000 6001 6002 6003 6004
6005 6006 6007 6008 6009
6010 6011 6012 6013 6014
6015 6016 6017 6018 6019

(Units painted upon rebuilding.)

GP40s (GTW) .. 6401* 6408 6414 6416 6417
6418 6419 6421 6423

(* — 6401 painted for Operation Lifesaver.)

GP40-2s 9402 9404 9407 9409 9418
9421 9424 9427 9444 9447
9461 9464 9468 9471 9473
9477 9482 9492 9495 9498
9501 9507 9508 9512 9515
9520 9523 9528 9530 9531
9540 9548 9550 9551 9557
9558 9562 9569 9577 9581
9595 9604 9606 9607 9622
9623 9630 9639 9645 9652
9657

GP40-2 9677
(Former GO unit, painted upon modification.)

CN North America scheme without map
47 units seen

M420s 3502 3504 3551 3576 3578
SD40-2s 5371 5372 5374 5375 5376
5385 5387

(Former UP units, painted upon rebuilding.)

SD70Is 5600 5601 5602 5603 5604
5605 5606 5607 5608 5609
5610 5611 5612 5613 5614
5615 5616 5617 5618 5619
5620 5621 5622 5623 5624
5625

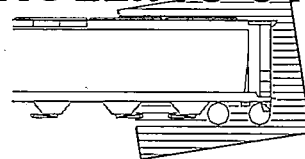
(All units in series, as delivered.)

SD40s 6020 6021 6022 6023 6024
6025 6026 6027 6028

(Units painted upon rebuilding.)

Motive Power sources: Paul Bloxham, James Brock via Internet, Timothy Green via Internet, Bill Miller, John Reay, Bob Sandusky, Ken Yaremchuk via Internet.

ROLLING STOCK



CANADIAN NATIONAL

FREIGHT CAR FLEET CHANGES

CN has recently acquired several series of new freight cars. Here is some information on them, taken from the April issue of the *Official Railway Equipment Register* and from observations.

CN 388000–388999 (1000 cars) are new three bay covered hoppers built by Trenton Works Ltd. from 8/95 to 2/96 (5250 cf,

224 000 lb. capacity). They are primarily in grain service. The cars are painted a darker shade of grey than we're used to seeing on CN covered hoppers. The lettering follows a standard arrangement (with noodle) except that all lettering is black rather than red. These cars are built to the new 110-ton rating (224 000 lbs. capacity, 286 000 lbs. on rail) rather than the 100-ton rating of most grain hoppers. This is the reason for the increase in cubic capacity from 4550 cubic feet to 5250, since covered hopper sizes are determined by how much volume a given weight of their assigned commodity takes up (in this case grain).

CN 558000-558424 (425 cars) are new high-cube boxcars (52'8" IL, 13' IH, 6525 cf, door opening of 16', 214000 lb. capacity) built by Trenton Works Ltd. during 2-3/96. Apparently they're in paper service, with the extra height used to stack the rolls in the car. These are a 50-foot flat-top high-cube car with double-sliding Superior-type doors. The cars are painted in the standard CN boxcar red complete with noodle. These too, are 110-ton cars.

CN 598300-598499 (200 cars) are apparently identical to earlier Trenton Works boxcars (598000-598299) built 12/93-2/94 (60'9" IL, 11' IH, 6340 cf, door opening of 16', 188000 lb. capacity) - this presumably means that they too are built by Trenton Works, but in early 1996. Any sightings?

More aluminum bathtub gondolas have arrived on the system. **CNA 194000-194229** are slightly larger (47'9" IL, 11'7" IH, 4690 cf, 242000 lb.) than the 193000-series Johnstown America gondolas of 1995. They are quite different in appearance from the 193000s, without the outside bracing that last summer's cars have.

More rebuilt or renumbered boxcars are in the following series (anyone know their former numbers, builders, or build dates?). Some are former GTW cars.

- **CN 413600-413739** (50'6" IL, 11' IH, 12' door, 5277 cf, 194000 lbs.)
- **CN 415485-415486** (50'6" IL, 11' IH, 10' door, 5277 cf, 194000 lbs.)
- **CNA 415919-415922** (50'6" IL, 11' IH, 10' door, 5277 cf, 200000 lbs.)
- **CNA 597026-597040** (59'9" IL, 12'11" or 13' IH, 10' door, 7638 cf, 175000 lbs.)
- **CNA 597041-597057** (59'9" IL, 12'11" IH, 10' or 16' door, 7065 cf, 172000 lbs.)
- **CNA 598700-598713** (57'8" to 60'8" IL, 10'9" IH, 16' door, 6040 cf, 186000 lbs.)
- **CNA 598714-598725** (59'7" IL, 10'9" IH, 16' door, 6040 cf, 176000 lbs.)
- **CNA 598726-598729** (60'8" IL, 11'7" IH, 16' door, 6657 cf, 185000 lbs.)
- **CNA 598730** (60'9" IL, 11'6" IH, 10' door, 6347 cf, 144000 lbs.)
- **CNA 598731** (60'8" IL, 11'6" IH, 10' door, 6200 cf, 144000 lbs.)

- **CNA 598732** (60'9" IL, 11'7" IH, 10' door, 6347 cf, 179000 lbs.)
- **CNA 598733-598783** (60'9" IL, 11'5" IH, 16' door, 6636 cf, 173000 lbs.)
- **CNA 598784-598785** (60'9" IL, 11'4" IH, 16' door, 6382 cf, 185000 lbs.)
- **CNA 598786-598789** (60'9" IL, 11'6" IH, 16' door, 6480 cf, 185000 lbs.)
- **CNA 598790-598793** (60'9" IL, 11'6" IH, 16' door, 6347 cf, 186000 lbs.)
- **CNA 598794** (59'9" IL, 11'7" IH, 16' door, 6280 cf, 186000 lbs.)
- **CNA 598795** (60'9" IL, 11'4" IH, 16' door, 6280 cf, 185000 lbs.)
- **CNA 598796** (60'9" IL, 11'7" IH, 16' door, 6280 cf, 185000 lbs.)
- **CNA 598797** (60'9" IL, 11'4" IH, 16' door, 6420 cf, 185000 lbs.)

There are also some recently-renumbered bulkhead flatcars, some former DWC (info again wanted):

- **CN 602000-602999** (51'6" IL, 10'10" IH, 160000 lb.)
- **CN 604000-604999** (51'6" IL, 10'10" IH, 160000 lb.)
- **CN 615800-615849** (51'6" IL, 10'9" IH, 157000 lb.)
- **CN 618220-618263** (50'6" IL, 6'2" IH, 192000 lb.)

A major renumbering process is taking place with CN's five-unit well cars. CN is changing from a system in which every platform has its own number (i.e., a set is 679000-679001-679002-679003-679004) to the industry standard in which the same number applies to the entire five-unit set. Some of these cars are now wearing their third numbers on CN. It looks like this:

- CN 640000-640399 are being renumbered **640400-640479**
- CN 678200-678499 are being renumbered **678500-678559** (original numbers were 679200-679499)
- CN 679000-679199 are being renumbered **677000-677039**
- CN 679500-679749 are being renumbered **677040-677089**
- CN 679750-679999 are being renumbered **677090-677139**
- CN 683200-683609 are being renumbered **683610-683691** (20 cars were originally 637000-637019)

Some auto racks are having their reporting marks changed from CN to CNA. Included are:

- **CNA 704000-704110**
- **CNA 711900-711943**

Disappearing fast now on CN are the insulated boxcars (280000-series) and mechanical refrigerator cars (230000-series). Forty-foot boxcars are nearly completely gone, and the last major holdout (the 445000-series grain service cars) are now going fast. Gondolas in the 140000/191000-series (built in the 1950s) are also nearly gone.

-Ian Cranstone

SHOP CLOSURES

CN will close its car shops at Taschereau Yard in Montréal and at Gordon Yard in Moncton. Car repair work will also be reduced or eliminated at Halifax, Senneterre, and Hamilton.

A total of 250 jobs will be abolished. Taschereau Yard will lose 45 jobs, and 175 will be eliminated at Moncton. Work will be shifted to MacMillan Yard in Toronto, which will gain 142 positions. CN says that, system-wide, its car shops were being used to only 35 percent of capacity, and the consolidation of eastern work at Toronto follows a trend of focusing railway jobs in the Toronto area, where traffic is busiest in the east.

The changes are expected to save CN \$19-million a year. -Globe and Mail

GOVERNMENT OF CANADA

GRAIN CAR SELL-OFF

Transport Canada has hired Wood Gundy, a securities firm, to help it sell off the government's large fleet of grain cars. The fleet of approximately 13 000 hopper cars will be sold to private companies. The government expects to issue a request for bids in June, with the sale of the fleet to be completed by the end of the year. Transport Canada has said that they expect the sale of the fleet to bring in \$400-million, while executives from the private sector put the value of the fleet at only \$100-million. -Globe and Mail

BOMBARDIER

MAJOR ORDER FROM AMTRAK

Bombardier, along with GEC Alsthom, has won an order from Amtrak to supply a fleet of 18 high-speed (150 m.p.h.) trainsets for service between Boston and Washington.

The "American Flyer" power cars are based on GEC Alsthom's TGV-type equipment in service throughout Europe, and the stainless-steel cars will use the newest version of the banking system in VIA's LRC cars. Each trainset will be made up of six coaches and two power cars. The cars will be built at La Pocatière, and finished at Bombardier plants in the U.S. The first of the new trains is set to be in service in the fall of 1999.

First-class cars will seat 44 passengers in a 2-1 configuration, coach cars will seat 71 passengers in a 2-2 configuration, and the dining car will have capacity for 34 passengers, with a lounge area, a dining area, and a business centre.

Amtrak's selection of the Bombardier proposal was largely based on the financing arrangements. Bombardier is providing the \$611-million (U.S.) to purchase the trains and part of three new maintenance facilities, and performance of the trains will be guaranteed by the payment of penalties for late trains and other failures.

