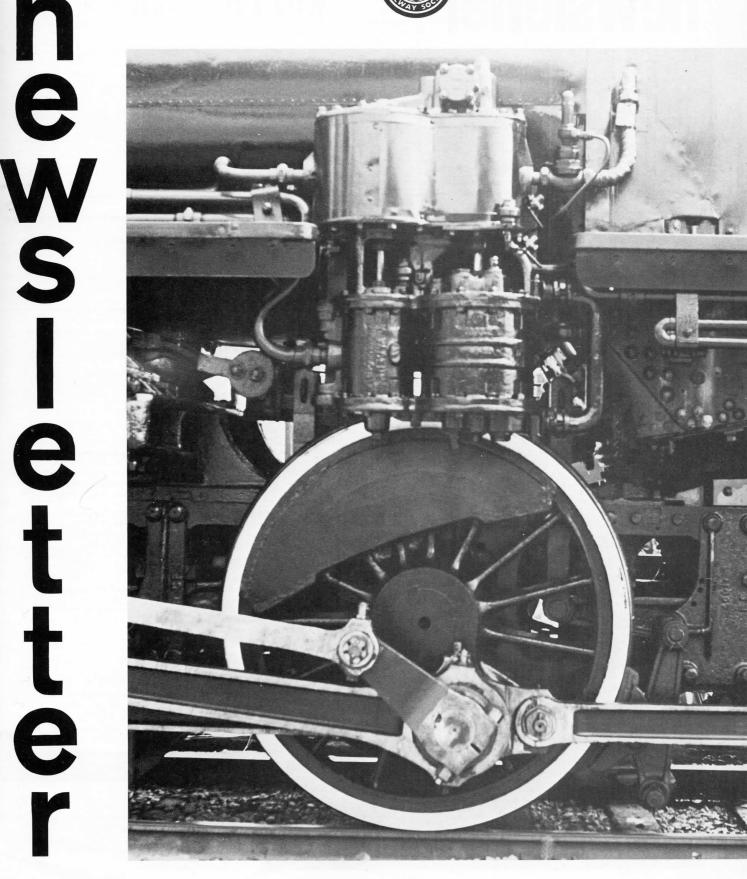
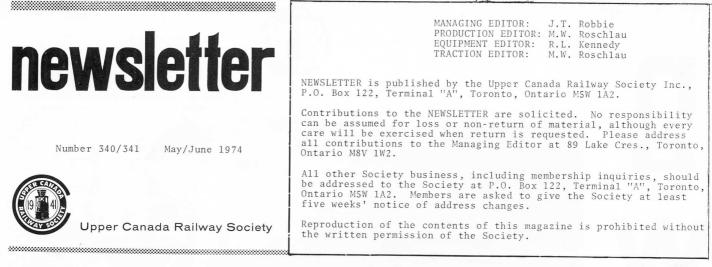
UPPER CANADA



### RAILWAY SOCIETY





## **Readers' Exchange**

WANTED: Photos, negatives, information, memorabilia from the Levis (County) Tramways, Levis Quebec (equipment lists, historical data, reports etc.). Preparing, hopefully, a history. Please send information to Gerry Burridge, Box 152, Pointe Claire-Dorval Quebec, H9R 4N9.

Ontario Northland, Algoma Central, British Columbia Railway (Pacific Great Eastern), Toronto, Hamilton & Buffalo and many other railroads are presently being researched and studied for a series of future articles, current operations being the main theme. They will be complete with rosters of motive power and rolling stock plus schedules, assignment of power etc. As much information and detail as possible will be used including historical data starting immediately with the ONR and ACR (including non-rail operations).

Anyone wishing to assist with information, loan of photos etc., or someone close to these railways willing to go out and seek information or take photos is now urged to contact us. Drop a little note in the mail with your name, address and telephone number mentioning which railroad interests you and material which you may have access to. Small roads like Essex Terminal, Romaine River, Thurso & Nation Valley and many more will all be included. If you write, you will he contacted by us as soon as possible. Here is your chance to aid in a very worthwhile project and at the same time see your name in print. Won't you join in with the effort?

Write to:

U.C.R.S. Newsletter P.O. Box 122, Terminal "A", Toronto Ontario M5W 1A2

### **Contributors:**

John Cooshek George Meek Ron Layton J. Norman Lowe Michael Eagleson Ted Wickson Jude Linley John D. Thompson R.J. Sandusky William Janssen Neil McCarten Steve Munro Distribution:

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Regular meetings of the Society are held on the third Friday of each month (except July and August) at 589 Mt. Pleasant Road, Toronto, Ontario. 8.00 p.m.

- July 19: 35mm slide and 8mm movie night. Members are
  (Fri.) invited to bring their own slides or 8mm moviessif they would like them shown.
- Aug. 16: UCRS Social Night. Professional 16mm movies (Fri.) will be shown and free refreshments served. A special feature will be a movie on the Moscow subway system.
- Sep. 6: Outdoor Meeting. Place to be announced. (Fri.)
- Sep. 20: Regular Meeting. To be announced. (Fri.)
- Sep. 27: Hamilton Chapter Meeting, 8:00 p.m. in the (Fri.) CN James St. Station, James St. North.
- Sep. 28: UCRS railway excursion from Toronto to Hali-(Sat.) burton and return via Lindsay with exclusive diesel power. Departure times and fares will be announced in the near future.
- NEXT ISSUE

CP Rail Diesel Locomotive Roster Compiled by Ray Kennedy

CP Royal Hudson #2860 returns to excursion service in British Columbia

Toronto hosts E.R.A. convention

U.C.R.S. RDC Trip around Toronto

Commuter train service starts from Toronto to Barrie

Ontario Hydro launches a new railway car

ALL in the July/August NEWSLETTER

### The Cover

Rebuilt and overhauled, here we see 1057's pump, driver and wheel at C.P.R.'s John Street Poundhouse before her first trial run on October 20, 1973. (J.T. Robbie)

## MAINLINE ELECTRIFICATION

#### A NEW COLUMN Edited by R. Layton

\* May 6 saw the official opening of British Rail's electrified service from London to Glasgow. The entire system of 25 kv a.c. lines now amounts to 728 route miles, most of which is double or four track route. Along with the erection of overhead wiring, the line has been resignalled and in some places re-aligned to allow 100 m.p.h. running in all but a few locations. The signalling can allow a minimum of two minute headway between 100 m.p.h. trains although the timetable allows for only five minutes between the high speed trains. The almost one per hour passenger trains now cover the 401 miles of the ex-LMS main line between the two cities at an average speed of 78 m.p.h. including stops, giving a five hour journey.

A number of developments have occurred in the design of overhead equipment during this scheme. Where more than two tracks must be covered, the conventional crossbeams have been replaced by span wires. Compound catenery is no longer used on high speed sections, a modified simple catenery being sufficient. In yards, a trolley wire system is used to remove the expense of miles of little used catenery wires. Until this time, the catenery wire has been made of hard-drawn copper, now being replaced with aluminum conductor steel reinforced cable. It has also been found that the use of hydraulic tensioners at one end of a section and balance weights at the other have eliminated the need for a centre section anchor. These anchors add at least \$500 per mile to the cost of the overhead. It is estimated that because carbon collector pans are standard on the locomotives, a working life of 35 years can be expected from the contact wires.

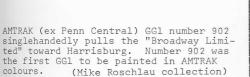
\* A 1500 volt d.c. overhead system has been adopted for the Newcastle LRT project in northeast England. The use of 1500 volts will require seven substations compared with 13 for a 750 volt or 1000 volt system. The decision to adopt the higher voltage is expected to save over \$1 million. \* A study recently completed by the Illinois Central Gulf Railroad showed that it would be possible to electrify that road's main line with a healthy 30-40% return on investment. The system proposed was 50 kv a.c. 60 Hz., which appears to be developing into the unofficial North American standard. The study suggests that the electrification should be carried out in three stages, each with decreasing return on investment. Stage One is from Chicago to Memphis via Cairo, Fulton and Paducah. Stage Two involves two short sections from Cairo to St. Louis and an extension from Paducah towards Louisville. Stage Three completes the mainline from Memphis to Jackson and New Orleans.

Stage One will require 88 electric locomotives as opposed to 195 if diesel traction was retained, with the final count for the whole system of 156 electric locomotives compared with a potential diesel fleet of 316 units. Further savings would be accrued by the 10% higher availability of electric units and the expected life of electric locomotives being 35 years compared with 15 years for the useful life of a diesel. Maintenance costs of diesels increase directly with power output; with a comparable fleet of electrics, the ICG's maintenance bill would be only 18% that of the diesel fleet.

The ICG has been told that the funds are available for such a project (approximately \$140 million for overhead and substations) repayable over a 30 year period. The only sour note in the project is that an ICC judge has suggested a merger of some of the ICG's competition, which may make such a large investment less attractive.

\* Two one-mile sections of 50 kv a.c. overhead have been erected by the Union Pacific Railroad. One is of American design, the other is of European design. It is intended to energize one of these sections to test its effect on telecommunications equipment.

\* The Belgian State Railways (SNCB) has added six new multi-system locomotives to its fleet. They are equipped to run over Belgian 3000 volt d.c., Dutch 1500 volt d.c., French 25 kv a.c. and German 15 kv a.c. systems. Designated class 18, the locomotives are almost identical in appearance to the French 40100 class, having a Co-Co wheel arrangement and clearly showing the common Alsthom origin. The units are rated at 5870 h.p. and carry three Faiveley (half diamond) pantographs, one each for the French and German systems and a third for either d.c. system. The locomotives are 72.5 feet long, 14 feet high (pantographs lowered) and weigh 113 tonnes (metric) in working order.







Farewell



# Hello

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## Memories...

Remember the wanderings of 6218?

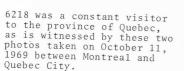
Let's hope these pictures will bring back a lot of happy memories.



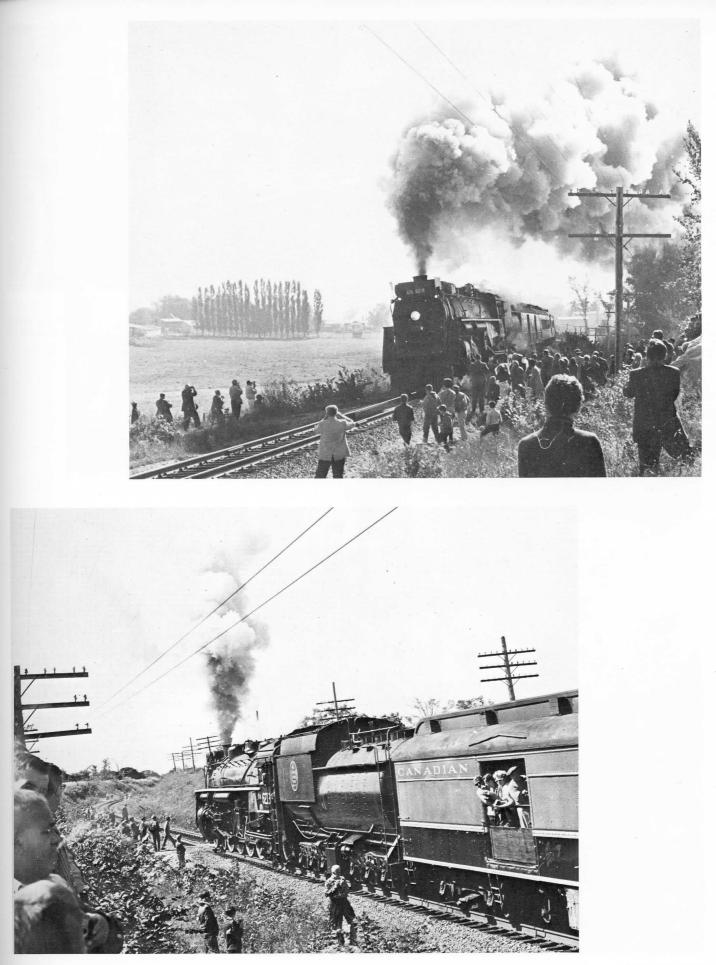
OPPOSITE PAGE:

Remember the photo lines, runpasts and photostops? Both the upper and lower photos were taken on a 6218 excursion from Montreal to Ottawa on September 20, 1969.

(Both photos -Jos. Langevin)

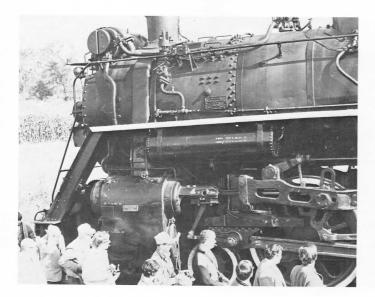






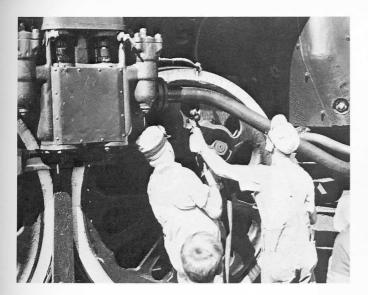


Water stops are always a big part of any excursion. Remember all the fuss and comotion they caused in the local towns? Kids on the cowcatchers, townsfolk posing in front of the engine while the employees scurry around, checking and oiling her. (Three photos by J. Largevin)





64 MAY-JUNE 1974



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Greasing the bearings with the air gun is always a highlight at every coaling stop. (J. Langevin)



These coaling operations involved much planning and work, usually drawing large crowds in the towns where these operations were carried out.

FAREWELL, 6218. Steaming off the page, over the Welland Canal in Southern Ontario, she pulls a long train full of railfans in-cluding UCRS private car "Nova Scotia". Like the rails in the picture, 6218 has been removed from the main line. the CNR has donated her to the town of Fort Erie which has placed her on pro-minent display in the town. Thanks for the memories. (J.T. Robbie)

(J.T. Robbie)





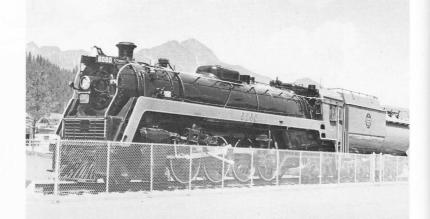


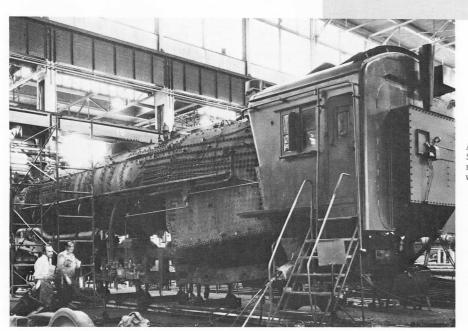
### ABOVE :

Here is the builder's photo of the first semistreamlined Mountain type (class U-1-f) steam locomotive built for fast passenger service delivered to the C.N.R. in October of 1944

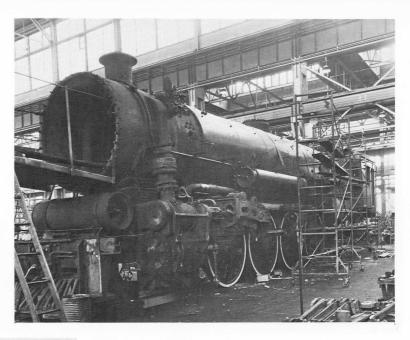
### RIGHT:

Home for 6060 from 1962 until July 27, 1972 was behind the fence in beautiful Jasper Alberta.

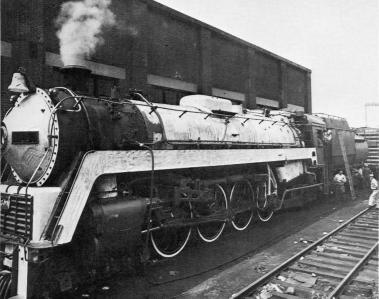




After arriving at CN's Point St. Charles Shops in Montreal on August 3, 1972, the major overhaul program began. This shot was taken in February of 1973.



Wheels have been removed in this photo taken late in May of 1973.



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Outside the main shops and being fired up for the very first time, 6060 begins a new life.

September 15, 1973 and 6060 is on the front end of train 319 for a test run to Coteau Quebec with two diesels and 60 loaded box cars.

(All photos these two pages C.N.R. - J. Norman Lowe)





## FORT

( Mike Roschlau )



( Mike Roschlau )

The following two pages are a picture story of perhaps the last doubleheader of steam locomotives that the C.N.R. will ever operate. In shades of the 6167-6218 doubleheader when 6167 was retired, 6060 pulled 6218 into the town of Fort Erie where the C.N.R. presented her to the town. The trip from Toronto was the first one for 6060 from her new home base and the Northern was coupled on just outside Fort Erie to be pulled into the town for dedication



## ERIE



( Michael A. Eagleson )

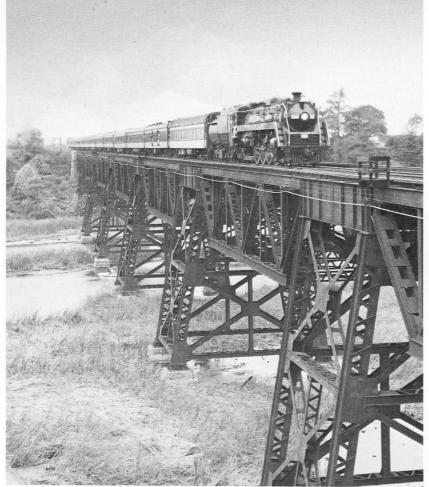


( J. Norman Lowe )



The town of Fort Erie plans to put 6218 on permanent display. The committee to preserve 6218 hopes to place her in a park in Fort Erie and use her as their main exhibit in a proposed rail museum. The museum would also see 6218 with a caboose coupled on and a station to serve both as a display of railroadiana and as a location for their gift shop.

( Michael A. Eagleson )





LEFT: Up high and flying with a full train consist at Jordan Ontario (Ted Wickson).

BELOW: The air is full of smoke as oil burning 6060 passes the CPR station at Smiths Falls Ontario. (J. Norman Lowe)





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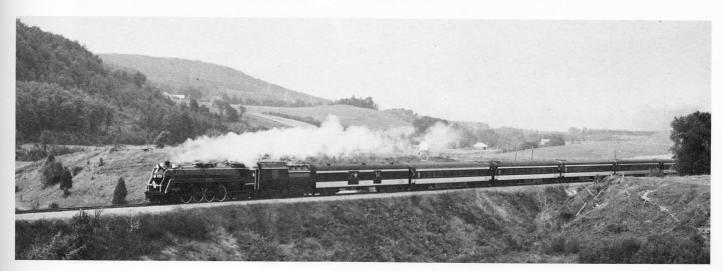
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RIGHT: October 13, 1973 saw 6060 at Merivale Ontario. Girls like steam too as witnessed by photographer Jude Linley.



LEFT: Beamsville Station and a high stepping 6060. (Lincoln Post Express)

BELOW: White smoke, driving wheels and enthused railfans are evident in this shot at a location west of Danville. (Ted Wickson)



# 136, 1057 reunited

Having been separated for a long time, in fact since May 1, 1960 when the famous CP tripleheader was operated, ex C.P.R. A-2-m class 4-4-0 #136 was reunited with one of its fellow partners, ex C.P.R. D-10-h no. 1057 by the Ontario Rail Association for excursion service. The Rogers built American type #136 with 63" drivers and 17x24" in cylinders has been added to active duty by Ontario Rail to share the spotlight with Ten-wheeler 1057. Ontario Rail operates the locomotives under the name "Credit Valley Railway".

Like the famous tripleheader where CPR locomotive 815, a D-10-c, separated 136 from 1057, once again branch line doubleheading is a highlight not only between Toronto and Orangeville but all over Southern Ontario. After the filming of The National Dream (July/August 1973 NL), in which 136 was a star, Credit Valley 1057 (May/June 1973 NL) and 136 were reunited. The trip was so successful that more trips were run The trip was so successful that more trips were run on TH&B as well as CPR lines. NEWSLETTER has presented 1057 before, but not in pictorial detail with 136, so here they are at last.







OPPOSITE PAGE: 1057 sits on the C.P.R.'s John Street turntable in new paint and fresh from a complete overhaul on May 20, 1973. (J.T. Robbie)

ABOVE: 1057 under the coaling tower at C.P. John Street roundhouse on the same date. (J.T. Robbie)

RIGHT: 1057 steams through the picturesque Forks of the Credit on May 27, 1973. (J.T. Robbie)



Here we see the rebuilt 1057 making her very first test run in the Don Valley.

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On her first excursion, May 27, 1973, the D-10-h works northbound between Streetsville and Brampton Ontario.



Railfans watch as other railfans photograph the five-car inaugural train north of Orangeville. Southbound at Brampton, 1057 swings around a curve at speed with just whiffs of steam emanating from her stack.



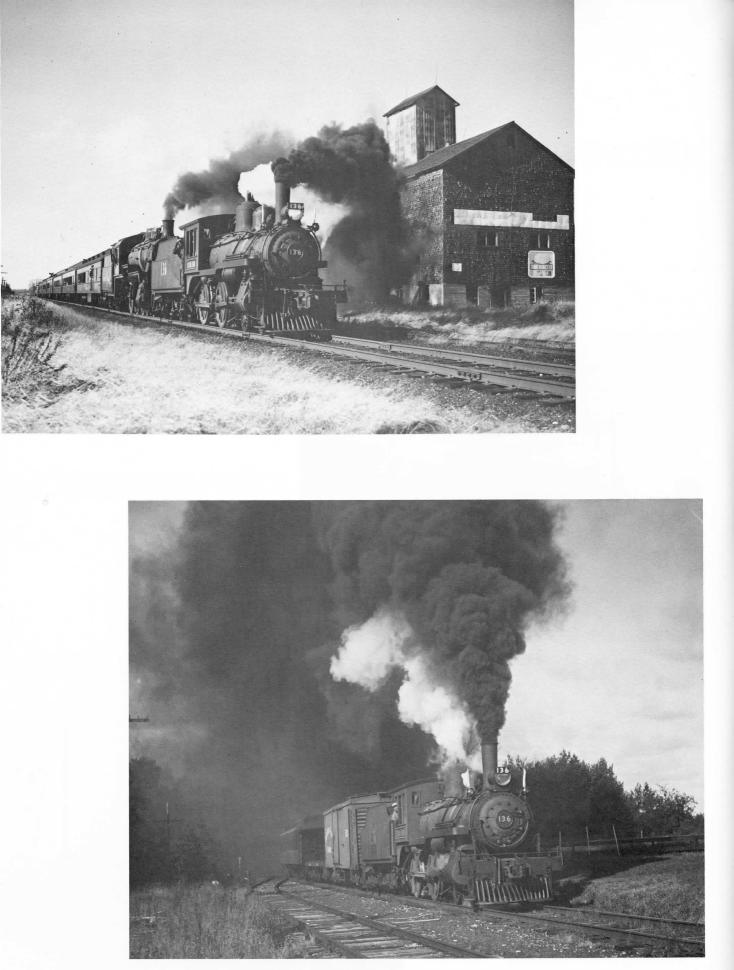


Diesel assist? It was supposed to be, but the old lady made it back to Toronto on her own; in fact she pulled the diesel along with ease.

North of Orangeville on the way back, 1057 lets it all out up the grade.

(all photos on these two pages - J.T. Robbie)







OPPOSITE PAGE: TOP: On their first excursion together, 136 and 1057 are seen near Corbetton Ont. in the early afternoon. BOTTOM: Just for you! 136 makes a special runpast with antique cars and lots of smoke near Berkeley Ont. on October 14, 1973. (Both photos - Michael Eagleson)

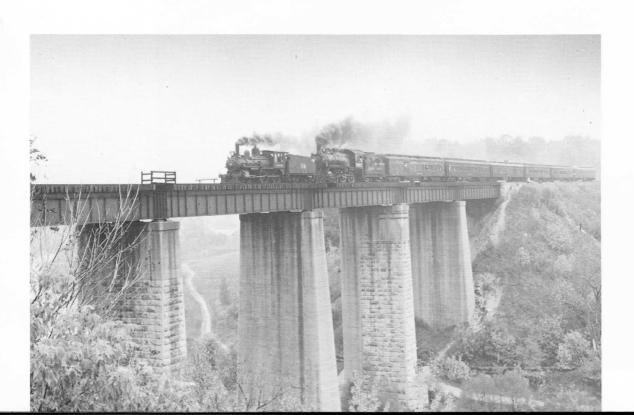
ABOVE: The two locomotives and their smoke are sil-houetted against the evening sky near Alton Ontario. (Michael A. Eagleson) BELOW: Northbound, north of Streetsville, the two locos steam away from big cities towards the vaca-tionlands of Southern Ontario. (Ted Wickson)





ABOVE: A-2-m number 136 billows smoke after crossing a road near Flesherton Ontario. (Michael Eagleson)

BELOW: The steam duo crosses the Humber River on its way out of Toronto on October 14, 1973. (Ted Wickson)



## meet no. 40

Ex Stelco work horse number 40 was a mainstay for the great steel manufacturer in Hamilton for many ayear. While in Hamilton, the Canadian National occasionally borrowed number 40 to work their yard there. Upon retirement, the 0-6-0 was donated to the National Museum of Science and Technology in Ottawa Ontario. After a short time in Ottawa, she was fired up and on one of these occasions, September 11, 1969 to be precise, we property. The occasion was the arrival of 6218 from Montreal. Number 40 is presently stored inside at the museum but offered us the last industrial or yard engine in steam in Southern Ontario, going along with 6218, 6060, 1057 and 136.

(Both photos - Jos. Langevin)

## stelco



# **Discovery of 521**

By John D. Thompson

Photos - the author.

There must be many railfans who, after reading the UCRS Bulletin describing them, or the feature article in the May 1971 Newsletter, were saddened that, seemingly, none of the handsome 500 class cars of the Hamilton Street Railway had escaped the torch. Now, following a series of events which may well rival in importance the return of the TTC Peter Witts, the well-preserved body of HSR 521 has been uncovered and returned to Hamilton for restoration.

The organization responsible for this remarkable achievement is the Ontario Electric Railway Historical Association, a group of railfans which operates Ontario's only electric railway museum. The museum, known as the Halton County Radial Railway, is located on a portion of the former Toronto Suburban Railway right of way, near Rockwood, some forty-five miles northwest of Toronto. The T.S.R. abandoned this line which extended from Toronto to Guelph, in August of 1931. Most of it was on private right of way across open country, originating latterly at the corner of Keele and St. Clair in the west end of Toronto, near the stockyards.

The O.E.R.H.A. was founded in 1953, two years after the HSR 500's had been sold for scrap following the April 6, 1951 cessation of rail operations. It is rare indeed that a second opportunity to preserve a streetcar presents itself, and particularly so long after abandonment.

The preservation of 521 is particularly appropriate, as the Steel City is familiar to many Torontonians, and most traction fans who were active during the postwar era in the area visited the system. The 500's were the HSR's newest cars, having been constructed in three groups during the years 1926 to 1928. The cars were numbered 500 to 547. The 521, together with 536, had been purchased by a private individual from the International Metal Company of Hamilton, the buyers of the cars from the HSR. International had stripped the cars of their trucks, seats, mechanical and electrical equipment.

After purchase in 1951, the 521 and 536 were trucks, seats, mechanical and electrical equipment. After purchase in 1951, the 521 and 536 were trucked to a farm near Beamsville, Ontario, a small community some twenty-five miles east of Hamilton, to begin a second career as storage sheds. This was an ignominous come-down for a car which had trasnported millions of people over a twenty-four year career, but at least it was saved from scrap. The use of electric railway bodies as sheds et cetra was fairly common until recent times, as they presented a worthwhile economy measure compared to constructing a building.

Inasmuch as there was no cement floor in the shed, the soil in front of and under the Hamilton car was shoveled out to permit the car to be dragged forward. It was then neccessary to jack up the shed roof, which was resting on 521. This task was accomplished by sliding a beam under the cross wise rafters, then shoving under the beam. Jacks were placed under these posts and levered upward. Loud creaking sounds were heard as the roof was lifted off 521. At this point one of the OERHA members present, Brian MacDonald, climbed a ladder and ripped loose the nails which had been holding a portion of the roof to 521's letterboard.

When the shed roof had been raised sufficiently, props, made of 2X4's nailed together and cut to the proper length, were wedged under the beams, permitting the removal of the temporary props and jacks. As the shed roof had completely covered the car, it was neccessary to install four porps on each side of the car. This was made difficult by the fact that the ground level dropped abruptly by some two feet outside the shed, and that the soil was rather loose. However, shims were driven under the outside props to prevent their slipping.



The Matthews crew is busy inspecting the roof of the car and making preparations for pulling the car out. Note the intact tail light.



One of Matthews' trucks slowly eases the car out. The crew had to be care ful not to scrape the roof of the car on the ceiling of the barn.

The next task was to push two seven foot girders under the rear bolster of 521, lengthwise. A standard railroad tie was placed crosswise to support the car on top of the girders. The other end of the cable was attached to the crane of Matthews' small truck. The concrete block foundations under 521 were broken up with a sledgehammer.

The truck was then driven forward slowly, and 521 was inched outward on the rollers. About six feet had been covered when the tie snapped under the strain. this necessitated a pause while the tie was replaced. Once again the cable tightened, and this time 521 was dragged clear of the roof which had sheltered it for so many years.

The next step was to lift the front end about three feet off the ground using the crane on the truck. Wooden blocks were then piled under the front of 521 and the car was lowered onto them. This operation was repeated at the rear of the car, after the girders, tie, and rollers had been removed.

Next, the flat bed trailer was backed up in front of 521. The front of the car was suspended in the air by the crane while the blocking was removed. The float was backed under the car as far as the rear blocking. The front end was lowered onto the trailer. While the crane suspended the rear end, blocking there was removed. Subsequently, the rear end was lowered onto the trailer. The final job was to chain the car to the trailer for its journey to Hamilton.

In 1969, the farm of which 521 rested changed hands. For the first three years, the new owner was preoccupied with other matters, however, by the summer of of 1972, he was beginning to think of disposing of 521. Luckily, his wife happended to read about the Halton County Radial Railway in the weekend newspaper list of summer attractions.

She decided to offer the 521 to the OERHA although her husband was skeptical that the club would want the car, due to its lack of trucks. Association president Bob Johns and the late Tony Barnshaw who headed up the project until his untimely death, after reading the letter, lost no time in driving down to Beamsville to inspect the car. An agreement was made to accept the car in exchange for having new siding installed on the shed in which 521 reposed.

The two Hamilton cars had been placed end to front, about fifteen feet apart, on a raised section of ground. Fortunately, the 521 sat on concrete block foundations, which in turn rested on poured concrete footings. These supported the car, preventing the body from sagging. As the years passed, a peaked roof was erected over the cars, with the bodies constituting the roof support. Part of the roof was nailed to 521's letterboard. The shed continued for some ten feet behind the cars, and was closed in at one end, It was quite fortunate that 521 was partially protected by the roof, although the presence of the roof complicated the moving job. Although the OERHA had, by late fall of 1972,

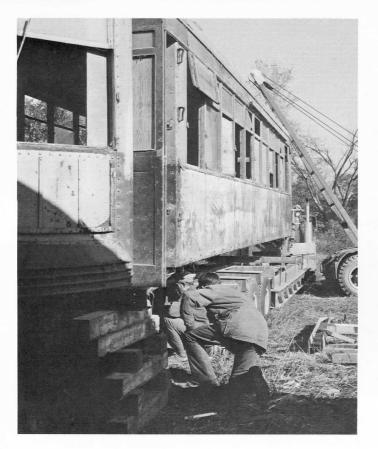
Although the OERHA had, by late fall of 1972, agreed to accept the 521, the actual move did not take place until October 22, 1973. The delay was mainly caused by the need to wait until the moist ground near the cars had been dried out sufficiently by the summer sun to support a heavy flat bed trailer truck. Also, it was necessary to wait until the OERHA's perennial car mover, Charles Matthews of Thornhill, Ontario, could fit the operation into his crowded schedule.

The two Matthews brothers and a helper arrived on site at 7:30 a.m. with their flat-bed trailer truck and also a crane truck. It was a brilliant, clear October day, ideal for outdoor work. The first order of business was to remove some offending tree branches with a chain saw, so that the long trailer could be backed in front of 521.

The Matthews crew at this time, around noon, took a well deserved lunch break. During this lull in activity your reporter discovered, embedded in the ground near 536, one of the car's wire mesh window guards. These were hung from hooks on the outside of the window posts, and were long enough to cover two windows. Also unearted was one of the single guards for one of the windows near the rear of the car.

After lunch, the flat bed trailer with 521 aboard was backed off the farm and onto the main road. Thus did 521 leave its obscure resting place of twenty-two years, and begin its journey towards rebirth as a streetcar.

It was only a short tip through Beamsville to the Queen Elizabeth Way, where the convoy proceeded at a rapid pace to Hamilton. Many a head turned en route at the sight of a streetcar being borne along on a trailer. At Hamilton, the car was delivered to an industrial plant for temporary storage, and was left sitting on blocks. It is planned to restore the car in Hamilton. Completion is scheduled for mid-1974, the year marking the centenary of public transportation in Hamilton. No doubt, the 521 will be placed on public display in a fashion befitting the occasion. Following this event, 521 will be



ABOVE: Here we see the car being lowered onto the flatbed trailer on which it will make its journey to Hamilton.

LOWER RIGHT: 521 moves at speed (although not her own power) along the Queen Elizabeth Way enroute to Hamilton.

trucked, ready to run, to the Halton County Radial Railway. The green streetcar should be a popular attraction at the museum, which is located only thirty odd miles from Hamilton.

The restoration of 521 does not pose as much of a problem as one might think. The trucks, although manufactured by Canadian Symington, were modeled after the Canadian Car & Foundry Design, which in turn was based on a widely used Brill truck. Thus a pair of TTC Small Witt trucks when placed under 521, will be almost identical to the originals. The 500's had 26 inch wheels, the same as the Small Witts. The four motors were Westinghouse model No. 510X, while the controller was the Westinghouse Model K35; again, fortunately, identical to those of Small Witts. The O.E.R.H.A. intends to purchase TTC small

The O.E.R.H.A. intends to purchase TTC small Witt number 2806, which has been stored outside a suburban Toronto equipment yard for ten years. After a decade of exposure to the elements, 2806 is in badly deteriorated condition, beyond the point of economical repair. However, the car is still complete, and its vital equipment, trucks, metres, controller and seats have been protected by the body, and can be removed in order to give new life to 521.

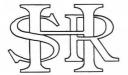
The seats of 2806 will be restuffed and possibly recovered to resemble those of the Hamilton car. Among other parts to be acquired from 2806 will be resistors, compressor, hand brake, door motos, treadle mechanism, folding steps, trolley base and retreiver, route sign, and mechanism, lifeguard, air tank, stanchions and headlight.

Of greater difficulty to replace will be the smaller items of 521's hardware. These include the petal shaped shades for the six ceiling lights; the resistor covers in the base of the lights; and the porcelain, spring loaded grabs. The latter items hopefully, can be obtained from the spare stocks of some U.S. trolley museum, as they were fairly common equipment in streetcars and rapid transit cars of 521's era. The light shades and resistor covers will have to be manufactured new, using the original specifications. Examples of each type of window guard exist, so more can easily be made.

The 521 as it now stands has more original equipment than the Associations other body, TTC North Yonge car 416. Still intact on the Hamilton car are the Nicholls-Lintern stop light and roof ventilators, as well as the roof ladder. Both front and rear folding doors are still in place, in good condition. The rear door is óperable, while the front set only requires the removal of the board placed across them by the HSR in 1951 in order to be so.

Some of the seat supports along the inside walls of the car are still in place. A number of the hooks supporting the window guards are still fastened to the







outside window posts. Hopefully enough of these can be salvaged from other sources to provide a full set. If not, this one item, again, can likely be obtained from a U.S. museum. Some of the brass window sash is missing from 521, but again this can be replaced by sash taken from other sources.

Structurally the car is in good shape, as a consequence of having been kept off the ground at Beamsville, being under the aforementioned roof, and having left service before the extensive use of corroding road salt. The roof will need some work done on it, as well as the floor in the front vestibule. A Hole had been cut in the front of the car by its second owner to permit acess, however this can be easily repaired. Some of the body side panels on the closed side are loose, on account of the rivets holding them having worked loose, however this should not prove to be much of a problem to rectify.

As viewed in October 1973, 521 presents a strange sight, with the closed side and front of the car, which were exposed to the weather, painted boxcar brown, while the other side and rear are still in HSR livery. This consisted of emerald green below the belt rail, a red striped along the belt rail, light green above the belt rail, and a grey roof. Presence of the red stripe identifies 521 as one of the last cars repainted by the HSR, in 1949-50. The interior is also painted light green over the natural woodlike finish.

If all goes well, by the Autumn 1974 HSR 521 will once again be its old self, fully restored and carrying passengers down the tree-shaded line of the Halton County Radial Railway. Certainly much credit is due the 0.E.R.H.A. for undertaking this difficult but ultimately rewarding task.

Readers wishing to know more about the HSR are referred to the following publications, all of which are available from the UCRS Publication Sales Committee, by writing the club at Box 122, or at monthly meetings:

- 1)Bulletin 36, HSR cars 500-547; a comprehensive history of the class together with photos, specifications and system map.
- .2)UCRS Newsletter, May 1971; feature article"Steel City Traction", by S.I.Westland(UCRS#27) documents the final years of HSR streetcar operation.
- 3)Cataract Traction, by John M. Mills(OERHA#1); contains a chapter of the HSR's history, also describes Hamilton area radial lines.

UPPER LEFT: Here she sits. On wooden beams, 521 awaits reconditioning in front of one of Stelco's plants in Hamilton. Note how clearly visible the number is below the windows at the right side of the car.

BELOW: TTC small Witt number 2806 is left to rot outside an equipment depot near Toronto. As can be seen, 2806 is in very sad condition but the OERHA can probably use many parts to restore the HSR 521.





LEFT: Car 521 picks up passengers on the Belt Line. This is the car currently undergoing restoration in Hamilton.

BOTTOM: Hamilton Strret Railway #543 on the Burlington route private right-ofway on September 17, 1950

## Remember the 500s?

BY STUART I. WESTLAND

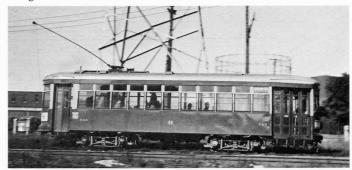
Photos - R.J. Sandusky, William C. Janssen, and N. McCarten Coll.

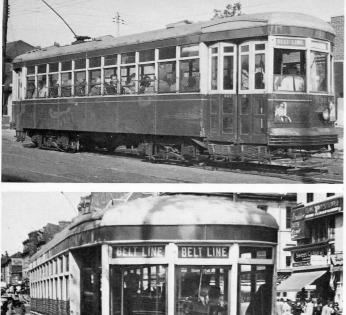
As Hamilton Street Railway 521 emerges from the shadows to begin a second career as an electric railway car, memories are stirred among electric railway enthusiasts of the days of operation of the 48-car fleet of which 521 was a member. Actually, these cars went comparatively unremarked upon by the railfan fraternity until it was too late; many Hamilton photo collections exhibit a preoccupation with the (admittedly) picturesque double-ended 400's while having comparatively little on the system's "bread and butter" cars, the workhorse 500 series. As 521 takes its place in the Halton County Radial Railway's fleet, however, it will undoubtedly have more attention lavished upon it by the electric railway enthusiast fraternity at large than the whole 48 cars of the series collectively received during their entire operating period.

These cars, born of a franchise renewal in 1926, and delivered in three groups over the years 1927-29, were the mainstays of the Hamilton city system over its final 24 years of rail operation. While the HSR had several lesser routes, progressively abandoned through the 1930's and 1940's, the Belt Line and the Burlington-James South (later Burlington-Westdale) routes accounted for something like 70% of the trackage on the system. (It may be argued by purists that three routes, rather than two, were the preserve of the 500's; while Belt Line cars in both directions displayed simply "Belt Line" on both route and destination sign linens and issued transfers entitled "Belt Line", HSR office practice always referred to the "Inner Belt" and the "Outer Belt" and, true enough, the cars

For about two years the 500's were used on a Westdale-James North route (Westdale Loop to Guise St. Loop) until the 1941 abandonment of the James South loop routing (via Herkimer and Locke Sts.) through south-west Hamilton. At this time the Burlington-Westdale hook-up was made. The only other route on which the 500's are known to have seen service is the Aberdeen line, the route which represented the city portion of the former Hamilton and Dundas Street Railway. Although a loop was installed at Longwood Road to turn single-end cars, use of the 500's was confined to rush hour extras on the Aberdeen line because the other end of the route (Stuart St., York and Dundurn and St. successively) did not have a track loop; thus base service was provided by double end cars throughout the history of the line. The car series embraced consecutive numbers 500 through 547, breaking the practice of giving single truck cars even numbers and double truck cars odd numbers. Ordered from the hometown National Steel Car Corporation, deliveries occurred in three groups, one of 24 cars being followed by two successive groups of 12 cars each. Generally typical of late 1920's city car design, the 500's were 40 feet 11 inches in length and had a seating capacity of about 50 depending on how closely passengers sat around the circular seat at the rear of the car. Although official rosters list the seating capacity as 53, the writer doubts that the cars could actually seat quite that many. The cars were equipped with Westinghouse 510A motors and K-35XB deadman control (including foot pedal).

The inside lining of the car composed the principal body structure (as evident from the large rivets on the inside), while the outer skin comprised thin gauge sheets. The cars were painted olive green and cream throughout the period of Dominion Power and Transmission and Ontario Hydro ownership of the HSR system. Immediately following the 1946 purchase of the railway by the owners of Canada Coach Lines, U.C.R.S. member R.F. Corley, writing in the Newsletter, told of a "sketchy railfan rumour that the 500's would be appearing in the bilious two-tone green of those insidious buses." Well, many railfan rumours have been printed in many fan journals throughout the years, and more often than not their propagators have struck out. Not so this time, however; the Corley speculation was right on target as the 500's began to appear in 1947 with the Canada Coach colours, and later total interior repaints began, using the same lines. The result was probably the greenest street cars ever seen. These interim repaintings, never completed on the total series, covered a rather pleasant combination of maroon (on the lower body and window posts) and natural stained birch and mahogany trim (above the windows and on the bulkheads). The later exterior repaints were characterized by a red stripe along the belt rail--this can still be seen on car 521.





VERY TOP: HSR car 530 on James St. N. at Macauly in August 1947. The car is climbing a temporary track switch due to utility work being done at the time. ABOVE: This shot depicts car 511 on the Belt Line. BELOW: Early Sunday morning on July 7, 1946 finds HSR car 500 making the east to north turn at King and James Streets. (note attentive policeman) A visitor to Hamilton would be struck with the similarity between the sound of the 500's in operation and that of the small Witts in Toronto. This was to be expected because of the use of similar motors and wheel diameters, and the weights were not dissimilar (37,000 lbs. for the Hamilton cars and 39,700 lbs. for the Small Witts). Operating characteristics were also generally on a par, although the 500's were slower in unloading because of the single rear treadle exit door. That familiar high-pitched hum of Westinghouse 510 motors was heard through much of lower Hamilton by virtue of the extensive coverage of the city by the Belt Line and Burlington-Westdale routes.

The writer, who was employed by the HSR as a traffic checker in 1948 and 1949, spent many hours riding and observing the 500series cars, both on and off duty, during that period. Probably the most intensive "busman's holiday" session occurred on the evening of August 4, 1949, the last day of operation of street cars between King and James Sts. (the main downtown corner) and Westdale Loop. On this occasion the writer rode the 500's back and forth on the doomed portion of the line continuously from 7:00 p.m. until car 504 made the last trip about 1:00 a.m. Curiously, no other railfan showed up for that last ride.

Hamilton's real railfan's ride was the extensive private right-ofway section of the Burlington line, with its weed-grown track and views of heavy industrial plants and steam road switching operations. The 500's, although having some tendency to nose from side to side. performed well on this track. Car 523 was lost as a result of a collision with a gondola car at the Dofasco crossing on this open track section. Performance of the 500's on trackage on the rest of the system varied in accordance with the condition of that trackage. The cars were quite smooth riding on track having good alignment, although rail corrugation seemed to prevent quiet operation on even the best track. Other track sections were quite wretched, and the noise and pitching of the car bodies associated with operation on these sections probably did much to discredit street car operation in Hamilton. Surprisingly, in view of their steel construction, a certain amount of looseness in the window and body posts of the 500's could be detected when they were operating over bad track sections.

521, when restored, will remind older Hamiltonians of the group of vehicles which played a very large part in the City's local transportation picture for a considerable period of time. And, when the car becomes operational on the Halton County Radial Railway, it will demonstrate to all visitors the fine group of vehicles upon which Hamilton depended so heavily during the latter years of street railway operation in that city.





Refurbished TTC Peter Witt car #2894 is seen at the Bathurst Exhibition Loop on February 12, 1974. The occasion was a special charter for the Canadian Hardware Show. The car rar an all-day shuttle between the Four Seasons The car ran Sheraton Hotel and the Canadian National Exhibition grounds. (Ted Wickson)

## **TRACTION TOPICS**

#### Edited by Mike Roschlau

TRUDEAU PLEDGES MONEY FOR TRANSIT

A \$290 million transportation policy focused on mass transit in Canada was unveiled on June 17 by Prime Minister Pierre Trudeau. If he is elected in the up-(1) pay all the cost of new commuter vehicles manufac-tured in Canada and half the cost of the stations and platforms that they would serve. This program is ex-pected to cost about \$50 million over five years; (2) Pay a quarter of the cost of all vehicles manufactured in Canada and used as part of public transit systems within Canadian cities. This program is expected to cost about \$100 million over the next five years; (3) Employ existing railway tracks and rights of-way going through cities and suburbs for the joint use of the railways and public transit systems; (4) Provide direct financial support and expertise to smaller municipalities to help them with the design and engineering of new, integrated public transit systems; (5) Encourage Canadian industry with financial inducements to design and produce urban and suburban transit vehicles, systems, machinery and equipment.

A legislative inquiry into the Ontario Government's \$25 million GO-Urban train experiment at the Canadian National Exhibition has been urged by Ontario New Demo-cratic Party leader Stephen Lewis. He said it is time for a thorough investigation into the costs of the magnetic cushion trains and the 2.5-mile demonstration track. This was the first call for such an inquiry although the Liberal opposition has repeatedly called on the Government to abandon the wheel-less trains in favour of streetcar-type vehicles.

#### SHORT TURN

.....The two A-11 class PCC cars to be used for the TTC's new surface rail animits TTC's new surface rail grinding train are #4631 and 4668.....Yellow striped markings have been painted across the streetcar tracks on St. Clair Ave. between Yonge and Keele Streets resembling a private right-ofway. There is no by-law, however, to prosecute drivers who trespass over the tracks.....Flyer Industries wav. Ltd. of Winnipeg has been awarded a contract to provide 343 electric trolley buses worth \$25,725,000 for San Francisco....Eaton's department store chain has once again chartered the entire TTC system to help celebrate its "Record Breaking Day Sale". On Thursday June 27, rides were free from 9 to 11 a.m., costing Eaton's \$30,000 for the two-hour period.

MONTREAL SUBWAY NEWS

Gauze ventilation pads, believed responsible for spreading the January 23 Montreal subway fire which destroyed a nine-car subway train, will be eliminated from new cars to be used on Metro lines. These pads, along the undercarriage of the cars, appear to have been the path along which the fire spread. The pads are used to dissipate heat generated by the train's brakes. The wooden floors on the trains, protected by only a thin layer of aluminum underneath, are the most flammable materials used in the cars. The cost of changing the floors would be very high, however. The subway tires which had flats 10 times in the past four years, are guaranteed by Michelin Ltd. for 150,000 miles. An inquiry into the durability of the tires in presently underway.

The president of Canadian Vickers Ltd. of Montreal has denounced as "politically motivated" a decision by the Montreal Urban Community to award a \$118 million contract to build 423 subway cars to Bombardier Ltee. of Valcourt Que. although Vickers was the low bidder. Vickers is still considering sueing for damages even though they think that the contract is hopelessly lost to Bombardier.

BELOW: One of the cars assigned to the Lansdowne TTC streetcar route on February 12, 1931 was Niles car no. 2162. This photo was taken exactly 43 years prior to the one above. (Toronto Transit Commission)



### RAPID TRANSIT FOR EDMONTON

As a result of various studies and reports, it has been recommended that approval be given to the construction of the first stage of a rail rapid transit line in Edmonton known as the "Northeast Line" on the C.N.R. right-of-way from 62 St. to 95 St. and then directly downtown via a tram subway operation. In order to transport people from the northeast area of the city to downtown and other sections, a new major transportation route is required due to the present lack of road capacity. Therefore, this rail rapid transit line meets the needs of the area better than any other alternative. It conforms with the transportation guidelines of the city's General Plan and cost estimates indicate that for the future, rail rapid transit is less expensive. It provides for better cross-town feeder bus services direct through the north and northeast areas, particularly along 118 Ave.; to the Northern Alberta Institute of Technology; and to the shopping centres along 137 Ave. It will mean shorter travel times for down-

JASPER PLACE LINE

St.

149 142

St. 103 Ave 134

St.

151 St.

157

St

124 105 St.

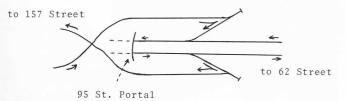
University

of Alberta

62

town portions of journeys made by public transit, it will tend to minimize the demand for parking in the downtown area and reduce the increasing congestion on streets leading to downtown. The system can also be readily expanded north to the future Clairview Town Centre and south as future conditions dictate.

A second line, called Jasper Place, has been proposed to serve western Edmonton, This line would leave downtown Edmonton via the same subway tunnel as the Northeast line as far as the 95 St. portal. Here, the trains reverse direction (double ended cars) and proceed through a crossing to traverse to the right side, continuing west (see diagram). On 105 Ave., the trains



would use a 25 foot right-of-way on the south side of the avenue, leaving one lane free for traffic. The line continues west on Stony Plain Rd. and 103 Ave. to 151 St., from where it turns south to 100 Ave. again swinging west as far as 157 Sf.

151 St., from where it turns south to 100 Ave. again swinging west as far as 157 St. All level crossings are protected by LRT-controlled warning lights - a practice long proven in Europe. Stations will have floor level platforms and will be completely enclosed except at 134 St. which will have only awnings and a small waiting room. Station design will be frugal but well lit with extensive glass areas for passenger safety. All stations will have a staircase overpass crossing the tracks. Trains are suggested to run on a five minute headway. Therefore, allowing 15 minutes for a one-way trip results in six trains being required for the service, Initially, two-car trains would suffice with a rush hour capacity of 4800 passengers an hour in each direction. Later, three-car trains could be employed to provide a peak hour capacity of 7200 passengers per hour. Without further capital expenditures other than for vehicles, headways of every three minutes could be obtained, i.e. 12,000 passengers per hour. Stations at 151 St. and 157 St. would have park-and-ride facilities on land originally intended for the Jasper Freeway.

intended for the Jasper Freeway. Surface right-of-way is used exclusively once leaving the downtown subway. All line is double tracked using heavy continuous welded rail for low maintenance and noise levels. All switches in residential areas are of the solid frog type to further reduce noise. Extensive landscaping is used to create a mall effect. Fencing of the line is preferably by low hedges although steel fences or concrete walls may be more appropriate at certain places.



ABOVE: TTC Large Witt number 2316 poses at the original Humber Loop in 1940. Note the sign posting the route and hours of service for the old Mimico Bus. (T.T.C.)

ABOVE: The construction scene looked like this on November 4, 1973 as PCC car #4574 passed through. In the foreground, steel re-inforcing rods are visible. This is where the concrete was poured for the new wall.

BELOW: Looking south on Lakeshore Blvd., we see the newly installed traffic light regulating the flow of automobiles when streetcars are due. When a streetcar passes under a sensor in the wire, the traffic light turns red for the autos and lets the streetcar pass. When another sensor on the other side is passed, the automobiles are again permitted to proceed. (Ted Wickson)

## Humber Loop Track Relocation

BELOW: Four months later, in March of 1974, the new underpass is in place and the streetcars are using it. PCC 4339 leaves Humber Loop outbound as construction work proceeds. (Steve Munro)



