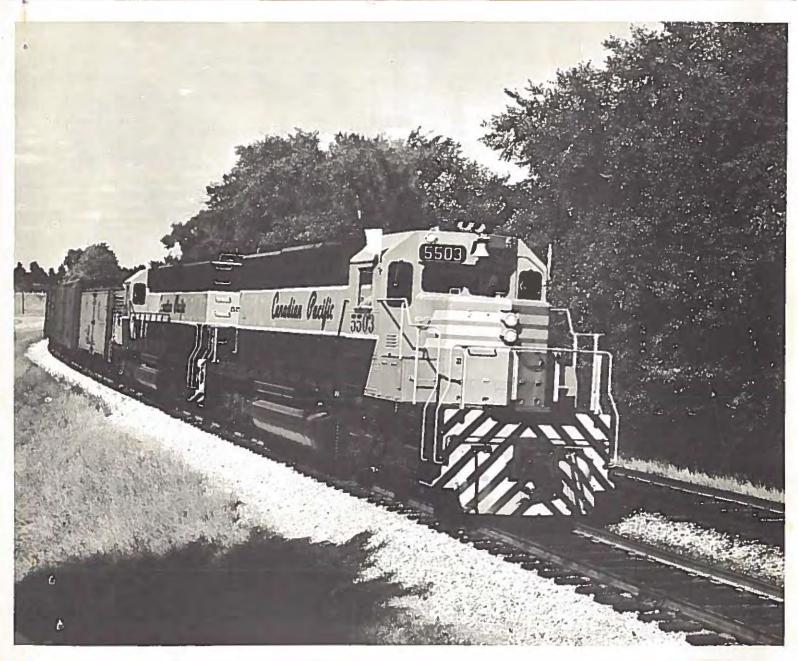
newsletter August 1966

50c





newsletter

Number 247

August, 1966

Published monthly by the Upper Canada Railway Society, Inc., Box 122, Terminal A, Toronto, Ont.

Editor _____ James A. Brown

Authorized as Second Class Matter by the Post Office Department, Ottawa, Ont., and for payment of postage in cash.

Members are asked to give the Society at least five weeks notice of address changes.

Please address NEWSLETTER contributions to the Editor at 3 Bromley Cres., Bramalea, Ontario. No responsibility is assumed for loss or non-return of material.

All other Society business, including membership inquiries, should be addressed to UCRS, Box 122, Terminal A, Toronto, Ontario.

The Cover

White flags streaming in the breeze, two of Canadian Pacific's brand new SD-40's make short work of the climb towards Guelph Jct., on one of their first assignments. These production models make an interesting comparison with the EMD SD-40 demonstrators pictured on page 48 of the March issue. (See page 126)

/J.A. Brown

Contributors to this Issue

Roger Boisvert, John Bromley, Bruce Chapman, Harlan Creighton, Tom Henry, Bryce Lee, Bob McMann, Don McQueen, Peter Meldrum, George Pearce, David Stalford, Frank Vollhardt Jr.

Production: John Bromley, Tom Henry.

Printing: Basil Headford.

PRINTED PH CANADA

Distribution: Charlie Bridges, Harold McMann, George Meek, Bill Miller, Bruce Shier, John Thompson, Ted Wick-

son.

READERS' EXCHANGE

Harold McMichael, 30 Palmerston Ave., Brantford, Ont., has small builders' photos and enlarged copies available for trade for Canadian and NYC, preferably 122 size.

ADDRESS WANTED: Frank Vollhardt Jr., 2435 Mahoning Ave. N.W., Warren, Ohio, 44483, wants to locate James H.Allen, formerly of 67 Indian Road Cres., Toronto. Can anyone help him?



Regular meetings of the Society are held on the third Friday of each month (except July and August) at 587 Mt. Pleasant Road, Toronto, Ontario. 8.00 p.m.

Aug 19th; Social and Film Night, to be held at 587 Mt. Pleasant Road, 8.00 p.m.

Members are invited to bring wives and friends for an informal film night. Refreshments will be served.

Aug 19thSept 5th;
a special feature exhibit at the Marine Museum, Canadian National Exhibition. Intended to complement CNR 6213, on view adjacent to the Museum, the exhibit has been arranged by the Toronto Historical Board with the cooperation of UCRS. The CNE is closed Sundays.

Sept 2nd;
(Fri)

A train-watching session will be convened at CN's Burlington Station, junction point for the busy Oak-ville Subdivision and the Toronto Yard Access Lines. Plenty of rail service between Toronto and Burlington, including commuter trains at 5.20 and 6.20 p.m., EDT.

Sept 2nd, The sixth annual "Steam Era" of the 3rd, Ontario Steam and Antique Preservers 5th; Ass'n will be held at Milton, Ont., Labour Day weekend (except Sunday). Steam traction engines and model locomotives are highlights of this extremely worthwhile show.

Sept 16th; Regular meeting of the Society, at (Fri) 587 Mt. Pleasant Road. Entertainment will be announced.

Sept 24th; STEAM/Diesel excursion to Halibur-(Sat) ton, leaves Toronto 8.30 a.m., returns at 8.30 p.m. Fares: Adult; \$9, Child; \$5, Infant; \$1. Order your tickets now.

Sept 25th; STEAM excursion to Niagara Falls, (Sun)

including run across Burlington
Beach and an opportunity to view
Welland canal shipping. Train departs Toronto 8.15 a.m., returns at
9.00 p.m. Fares: Adult; \$7, Child;
\$4, Infant; \$1.

NOTE ON STEAM EXCURSIONS: Complete brochure is now being distributed. For additional copies, write to Box 122, Terminal "A", Toronto. Combined Adult Fare (both days);\$15 Combined Child Fare (both days);\$8 Surcharge of 50¢ per ticket will apply on tickets sold on the day of the trip.

U.C.R.S. News

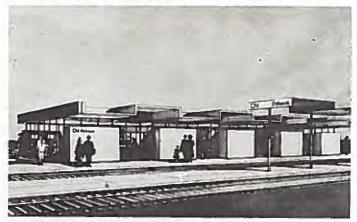
This month's NEWSLETTER sees the conclusion of our series of supplementary Rulebook pages which have reproduced completely the Canadian railroader's Bible, the Uniform Code of Operating Rules. Should you have any questions concerning the Rulebook, we'd be delighted to hold a "Rules Forum" in a future issue to answer them. Incidentally, the complete set of Rulebook pages will be available in about a month, bound in Bulletin form at a price to be announced.

Included with this issue is a listing, correct to August 1st, of the Society's Regular Members. The Associate Member listing will be distributed with a forthcoming issue.

A special note to our American members: In view of the U.S. Postal Regulations concerning Zip Code marking of Second Class matter, would you please see that all correspondence to us bears your complete return address, including the Zip Code. If your address label does not now include the Zip Code, you can help to improve delivery of your NEWSLETTER by supplying this information immediately. Thanks.

The Sales Committee now has available a new 3" decal of the Society crest, suitable for use on car windshields, books and photo albums, etc. The decals, in attractive silver, blue and white, are available from the Committee by mail at 25¢ each, or may be purchased at meetings. Authorized use of the decal is restricted to members only, and you are asked to quote your membership number when ordering.

RAILWAY News and Comment



CN PLANS NEW RAIL COMPLEX AT OSHAWA

Canadian National has announced plans for a 50-acre, \$2.5-million transportation complex in the Oshawa area which will include a new passenger station and freight classification yard.

The new yard, to be located south of CN's main line and west of Stevenson Road South, will contain eight miles of track for the storage and classification of cars serving industry in the Oshawa-Whitby-Pickering area. To ease the operation of industrial switchers in the area, a service track is to be constructed south of the main line between Whitby and 'Oshawa. The new passenger station — first of its kind on the CN system — will be located north of the present main line, at Thornton Road, and will release the site of the present station for redevelopment. (See cut above)

Final approval of the project is dependent on the approval of the Oshawa City Council for the closing of Thornton Road South at the point where the proposed new yard crosses it.

OTTAWA OPENS NEW UNION STATION

On July 31st, the Capital's barely completed passenger station opened for business in the city's east end. Despite the remote location, no bus service has been provided from the new station to any part of the city; with the railways pointing out that they are not in the bus business, and the Ottawa Transportation Commission protesting the annual loss that would arise if they handled the service, the matter remains unresolved. The National Capital Commission, responsible for the redevelopment of the Capital area including the massive railway relocations, has made no comment.

The first days of the new station were marred by tragedy when a coupling on a steam line failed, fatally injuring two workmen and seriously scalding a third.

A complete report on the railway changes in the Hull-Ottawa district will be featured in a forthcoming NEWSLETTER issue.

TURBOTRAIN MOCKUP TESTED IN TORONTO

CN's Turbotrain moved a step closer to reality on August 5th when a mockup of a Power Dome Car shuttled around the Union Station area in Toronto checking clearances (Turbotrain is slightly wider but considerably shorter than conventional equipment). On August 8th, two United Aircraft turbines mounted in the mockup were fired up and tested to confirm the suitability of exhaust deflecting ducts which have been installed on track 1 of the station. Turbotrain weathered both tests perfectly.

The mockup consisted simply of a steel-sheathed plywood model, full size, of a 25-foot section of a Power Dome Car, and included both conventional and dome roof heights. It was constructed on the frame of retired sleeping car "Port Hawkesbury".

NATIONWIDE RAIL STRIKE LIKELY

News of strikes and strike threats dominates the Canadian railway scene this month. Seventeen non-operating rail unions recently rejected a conciliation report by Mr. Justice Craig Munroe, and their 77,000 members are now taking a strike vote. The 21,000 CBRT members who empowered their leaders to call a strike some months ago are considered almost certain to reject the report of Mr. Justice J.C.A. Cameron, which exactly duplicates the wage proposals of the Munroe report.

The CBRT had demanded a 90-cent hourly pay boost. Both reports recommended a raise of 18% based on current wage rates, and attained in four stages over the two-year contract period; this is approximately equivalent to a 40-cent hourly hike at present wage levels.

Under labour law, workers may legally strike seven days after a conciliation report is received by the labour department. Thus, CBRT members could legally tie up CN operations on August 17th. However, it is expected that this group will hold off until the other non-op groups have ratified strike action; a combined walkout of the country's 97,000 non-op workers is considered likely around Labour Day, tying up all of Canada's major rail operations.

Since the House will not resume sitting until October 5th, one month after the suggested strike date, it is considered likely that the government will not step in to prevent the strike but will move quickly to stop it once the railways have been tied up. If Parliament is called into emergency session, it will probably tie in its over-all railway legislation, based on the report of the MacPherson Royal Commission on Transportation, with any special measure necessary to end the strike.

The workers' unrest is indicated by numerous wildcat walkouts which have generally been local in nature. CN and CP express handlers in Toronto and Montreal disrupted express service in the two cities for a few days in early August, forcing the cancellation of CN's piggyback trains. Maintenance and servicing personnel at CN's Montreal facilities staged a two-day walkout, during which time their duties were taken over by supervisory personnel. Some concern exists over whether the unions will be able to persuade their members to wait for the legal strike call.

According to the railways, the calculable demands of the unions amount to more than \$250-million, or more than 25% of the combined gross revenues of CN and CP.

WCRA LOCOMOTIVE TO VISIT ALASKA

Faced with a heavy repair bill before their locomotive could operate again in B.C., the West Coast Railway Association has leased their 110-ton 2-8-2 to the Anchorage (Alaska) Centennial Development Commission, for operation in the Anchorage area. The Centennial commemorates the state's purchase from Russia in 1867.

The 1929-built locomotive was donated to the group by Crown Zellerbach Canada Ltd., and has been used on several excursions in the Vancouver area.

CN GOES ON 24-HOUR CLOCK, SYSTEMWIDE

CN's 1966 Fall timetables — both working time tables and public schedules — will be published in terms of the 24-hour clock system. For some time, CN's Western rail operations have been carried on in the 24-hour system, although public schedules retain the a.m. and p.m. designations.

The CN decision follows a general industry trend that has been encouraged by widespread computer use. The Armed forces and many airlines have used the 24-hour system for some time.

Lightface and boldface type to indicate a.m. and p.m. times will disappear from public folders. As an example, 'Rapido' which now leaves Toronto at 4.45 p.m. will be shown in the new timetables as departing at 16.45.

Canadian Pacific has been informed of CN's decision and has been invited to follow suit. While CP has not yet commented, it is understood the matter is under consideration.

BELOW: Looking for all the world like the "Commodore Vanderbilt" Hudson of the 30's is NYC's experimental jet-powered RDC, on test in north-western Chio.



NYC HAS A JET TRAIN, TOO -- LITERALLY!

Shrouded in secrecy were the recent experiments on the New York Central near Toledo, Ohio, in which a "Black Beetle" roared along at speeds "somewhere between 100 and 150 miles an hour... emitting an almost deafening whining sound."

The "Beetle" was a conventional RDC-3, modified at NYC's Collinwood Shops with a shovel-like nose, side skirting, truck alterations and -- most important -- two jet engines on the roof. Apparently all propulsion power is derived from these engines while the trucks serve only to guide the car; it is reported that "the tracks are magnetized to keep the car on the rails." (Didn't Lionel try this a few years back?)

CN'S FINANCIAL RESULTS ENCOURAGING

Canadian National's operating revenues for the first half of 1966 were up almost \$50.5-million over the same period last year. Railway operating expenses climbed \$35-million, to yield a net railway operating income, exclusive of fixed charges, of \$15,518,000 at June 30th. The net income at June 30th, 1965 for the first half of that year was a mere \$44,000.

MINIATURE CNR FEATURED IN LILLIPUTIAN CITY

Visitors to Niagara Falls will be anxious to visit the newly-opened Canadia, a 10-acre site on Dorchester Road North in which 1/24 scale models of famous Canadian sites, buildings and facilities are displayed. The models, erected out of doors, include 1/24 size models of the Peace Tower (13' high), Fort Henry and the St. Lawrence Seaway.

One of the highlights of Canadia is the scale model railway which duplicates, in 1/2"=1' scale, the operations of Canadian National, complete with crossings, signals, yards, etc. The model line, billed as the world's largest, is estimated to have cost \$35,000, and boasts 72 scale miles of track (which works out to about three actual miles of 2½" gauge track).

Canadia will be open this year until November. Admission charge is \$1.25.

DAMAGE HEAVY AS CP TRAIN HITS ROCKSLIDE

Two of Canadian Pacific's DRF-class units, Nos. 4220 and 5016, were heavily damaged on August 9th when train 965 slammed into a rockslide on a curve just north of Bigwood, Ont., 62 miles north of Parry Sound. Three crewmen were injured. The mishap occurred in a rock cut, and although only ll cars were derailed, CP's Toronto-Sudbury main line was blocked for 30 hours while wrecking crews from Toronto and Sudbury hauled the wrecked equipment clear. CP's fast freights and the 'Canadian' were rerouted via CN's Bala Subdivision between Parry Sound and Coniston.

BELOW: In a consist like this one, CP 5016 was trailing a 4200 when their train hit a rockslide, badly damaging both units. /George Pearce



NEW PAINT SCHEME OUT FOR ONR LOCOMOTIVES

The Ontario Northland has confirmed rumours that locomotives which have been painted in the striking new ONR design (February NL, page 28) will be repainted back to the old style. The reason given for this move is that section forces and other on-line employees have difficulty seeing the dark green units against a forest background. Other ONR equipment will reportedly retain the "visual redesign"; how compatible the two totally-different styles will be is difficult to imagine.

ONE INJURED AS CN TRAIN HITS GASOLINE DRUM

An example of malicious vandalism occurred on August 7th, when a drum of gasoline was rolled onto CN's eastbound main line just east of Mimico. Train 156, inbound to Toronto from Niagara Falls, struck the drum which immediately exploded, spewing flaming gasoline along the train. Fires beneath the locomotives and between two passenger cars were extinguished by crew members. Ten windows in the first coach were blown in, and one passenger received cuts. The blast, which was heard as far away as Sunnyside station, distorted the lead unit's front steps to the extent that they had to be cut away before the train could negotiate the switches on the approaches to Union Station. Train 156 was powered by units 1911 and 1915. The accident is under investigation.

FIRE DESTROYS CPR SNELGROVE STATION

Canadian Pacific's Snelgrove Station, almost 95 years old, was completely gutted by fire on July 31st. The occupants of the building, reported to be a CP section foreman and his family, were on vacation at the time. There is suspicion that the fire was deliberately set, and an investigation is under way.

When the station was first constructed, it was named Edmonton, and it was not until years la+ ter that the name was changed to Snelgrove, after a prominent resident, to avoid confusion with the Alberta capital. Snelgrove is five miles north of Brampton.

> BELOW: Some months before fire destroyed Snelgrove station, CP 8147 leads a southbound grain train past the old building. /J.A. Brown



WORTH NOTING ...

- -To avoid delays necessitated by quick turnarounds of 'Sceneramic' Dome cars in Vancouver, the big domes are running in trains 1, 2, 5 and 6 only, leaving the Toronto-Vancouver 'Super Continental', Nos. 3 and 4, domeless in the mountains.
- -Two CPR sectionmen were charged with public mischief and theft when they stole a motorcar at Woodbridge, Ont., and set out for MacTier; the car was demolished when a northbound freight overtook it some 25 miles on its way.
- -The city of Sault Ste. Marie, Ont., is studying the feasibility of relocating CPR lines in the area.
- -The State of Vermont obtained an injunction restraining the B&M from dropping its Windsor, Vt.- Springfield, Mass. portion of CN's Montreal-New York service (July NL, page 107).
- -The Canada Labor Relations Board has ruled that CN locomotive engineers must vote to determine whether they will be represented by the Brotherhood of Locomotive Engineers or the BLF&E; there has been considerable rivalry between the two unions over the matter.
- -CN is hastening to expand its telephone reservation and information service (again) in Toronto in an effort to thwart criticism that it takes longer to find out fares and times than it does to make the trip; ticket selling facilities will be expanded, too.
- -The B.C. Cabinet has given the go-ahead to a seven-mile solids pipeline which will operate between a Quesnel-area mine and PGE's Barlow station, transporting diatomaceous earth and water in the form of a slurry (1)
- -NYC is planning to have in operation by late 1967 a computer which will automatically telephone NYC shippers to inform them of the progress of their shipments; the machine's voice will be an oscillator capable of generating 16 different tones and so create an audible message.
- -Mayor Harold Prescott of Capreol, Ont., wants CN to donate a locomotive for display there, as part of the town's Centennial celebrations; the railway is holding out for \$5,000 for the engine, but Mr. Prescott thinks it would be nice if it were donated. His quote of the week: "I don't give a damn where we put it, as long as we get it."
- -In spite of the booming business on CN's Cabot Strait ships, Newfoundland railway passenger traffic continues to decline; the Atlantic Region vice-president has warned that if the trend continues, the service on the narrow-gauge line will be subject to discontinuance.
- -NYC has given notice that it wants out of the long-haul passenger business, concentrating instead on short-haul, high-speed shuttle trains. The road hopes by January 1st, 1967, to discontinue such long-haul trains as the famed '20th Century Limited'; PRR, with which NYC merges on October 1st, has already filed to discontinue its 'Spirit of St. Louis', but will retain the 'Broadway' for the time being. This policy will almost certainly mean the end of the CPR-TH&B-NYC Toronto-New York service, which has been rumoured ready for the axe for some time.

CP BOOSTS ITS ADVERTISING

Canadian Pacific has embarked on an extensive advertising programme to inform the Canadian public fully of its diversified activities. Full-colour and black and white newspaper ads are being scheduled, with the emphasis on rail operations and other transportation services. A series of hour-long colour TV shows this fall will also carry CP advertising.



BELOW: If you want the business, you have to blow your own horn...which is exactly what CPR did recently for the benefit of cameras filming TV commercials. While a spit-and-polish train shuttled back and forth across the Forks of Credit bridge (RIGHT), a helicopter zeroed in on a highly animated band (LEFT) extolling the virtues of CP's container system.

/J.A. Brown



World Railway News

... Edited by Peter Meldrum

* British Railways' Western Region has inaugurated new high-speed services between London and Cardiff/Plymouth. It has been discovered that these trains require more power than is provided by the 2,700 h.p. Type 4 diesels normally assigned, and consequently these trains are now in charge of 2,000 h.p. Type 3's in multiple.

To eliminate this need for m-u operation, Brush Electrical Engineering has been commissioned to produce a 4,000 h.p., single engine proto-type locomotive, to be named "Kestrel". The new machine will bear a family resemblance to the conventional Type 4 but will boast a cleaner front end, with the end warning panel and four-digit headcode board neatly faired into the body contour.

"Kestrel" is 66'-6" long and weighs 142 tons in working order. The power plant will be a newly-developed Sulzer 16-cylinder diesel, developing 4,000 h.p. at 1,050 r.p.m; it drives an alternator whose output in turn is rectified to provide d.c. traction power. All six axles are powered. Train heating requirements and auxiliary motors are powered by separate alternators, while a small d.c. generator provides control and starting power. No steam heat is provided for, since BR is standardizing on electric heating. The engine will be equipped with air and vacuum brakes and dynamic braking, and boasts such refinements over the present Type 4 as pressurized engine room, self-cleaning air filters and a.c.-driven radiator fans.

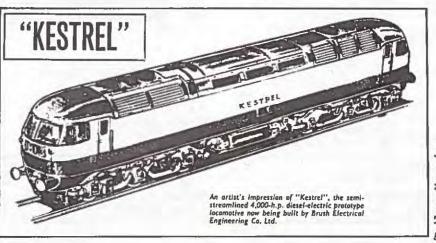
The prototype is expected to be ready for trials by the end of the year.

* Canada is to receive a strange immigrant soon in the form of ex-Dinorwic Quarries 0-4-0 "Elidir". Built by Avonside in 1933, of Orenstein and Koppel design, it has been stripped down, rebuilt and repainted. We have no information as to the Canadian destination of this engine; can some reader help out, sending details to Peter Meldrum, 16 The Links Road, Apt 105, Willowdale.

- * Thousands of London commuters were delayed during rush hour on August 2nd by a 64-year-old BR signalman, Raymond Ashbee. Mr. Ashbee felt the urge for a tea break, and took it on the spot. Unfortunately, it was an unscheduled 20minute break and 150 commuter trains were held up as a result.
- * Recently, a locomotive engineer in East India pulled his passenger train into a siding to allow the Bombay mail to pass. And that's where he made his mistake, according to the Associated Press:
- "Shouting passengers, angry at the delay, attacked the locomotive and put the engineer and crew to flight. They next dispatched a station master to a hospital with bone fractures, and beat his wife. Battling police all the while, the passengers then spent three busy hours ripping up tracks, tearing down signals and cutting telephone lines. Six express trains (including the Bombay mail) and three locals were delayed for hours."
- * The prototype of a new class of diesel-electric locomotives for the Austrian State Railways has left the plant of Simmering-Graz-Pauker AG. The 74-ton, 55-foot locomotive is powered by a single Maybach-Mercedes-Benz 1450 h.p. engine; a separate 75 h.p. S-G-P diesel drives two d.c. generators and two hydrostatic pumps which supply power for the air compressor and traction motor blower and other auxiliaries. A hydrostatic pump on the main engine drives the cooling fan. The unit develops a starting tractive effort of 49,000 lbs., and has a maximum speed of 68 m.p.h.

* Shorties:

- -Egypt's president Nasser announced recently that a subway -- the first in Africa would be built in Cairo with Soviet aid.
- -General Motors Diesel Ltd., London, Ont., has been awarded a \$6.5-million order for 34 diesel-electric locomotives for New Zealand.
- -British Railways is installing 'effluent flushing aprons' on several platforms of London's Euston station to permit use of sleeping car conveniences while cars are at a stand.



EQUIPMENT Notes

'NEW LOOK' VANS FOR CANADIAN NATIONAL

CN has awarded a contract for 150 new cabooses to Hawker Siddeley Canada Ltd., which will build the car shells at its Trenton, N.S. works and complete the cars at its Fort William plant. Delivery begins in December, 1966.



The new cabooses will be of all-steel construction, five feet longer than those now in use, and will feature roller bearings, specially-designed trucks, cushion underframes and safety glass. Lighting, refrigeration, hot plate, marker lights, radio and incinerating toilet will all be operated electrically by means of an axle-driven generator. The bay-window cupola will be located at the centre of the car and will be equipped with wind deflectors and electric windshield wipers. Improved seats, washing and cooking facilities are also included.

CN designed the new caboose after a four-year period of study, experiment, observation and consultation with the Brotherhood of Railroad Trainmen.

CANADIAN PACIFIC INCREASES SD-40 ORDER

Received just hours too late for inclusion in last month's NEWSLETTER was the information that CP has ordered an additional 33 3000-h.p. SD-40 units from General Motors Diesel Ltd. Delivery of the new units will follow completion of the order of 32 now being received from the builder, and is expected to be completed by June, 1967. It is understood that all 65 units will be for service on CP's Pacific Region.

Prior to receipt of the first SD-40's, CP reassigned numbers from the 5100-series, as originally intended, to the 5500-series. The SD-40 numbers and classifications are now as follows:

5500-5531; class DRF-30a 5532-5564; class DRF-30b

During July, Nos. 5500-5503 were received from GMDL and, by mid-August, were still undergoing shakedown runs on the Windsor-Toronto-Montreal circuit.

STILL MORE CAR ORDERS BY CN

National Steel Car Corp., of Hamilton, Ont., has been favoured with almost \$20-million worth of new freight car orders from Canadian National, including the highest dollar volume contract awarded to one company in Canadian railroad history. The orders will result in a doubling of NSC's work force, to about 1700 men.

NSC's large order is for 700 70-ton cylindrical covered hopper cars for bulk commodities such as potash, cement and sugar; delivery will begin in October.

Also ordered from NSC were 400 70-ton, 50-foot box cars equipped with nine-foot plug-type doors, and two 180-ton capacity depressed centre flat cars for the transport of large, overweight items. These cars will be delivered in April and May, 1967.

Hawker Siddeley will build 250 quadruple-hopper cars of 100-ton capacity at its Trenton, N.S. works. These cars will be used for coal, sand and crushed rock service, with delivery beginning in February, 1967.

BELOW: An article in the October, 1965 NEWSLETTER briefly discussed the Sylvania "Kartrak" system of automatic car identification. The reflective sheeting, shown on CN's latest RDC acquisition, was used on the Boston and Maine for automatic recording of car data as the unit passed a trackside scanner. CN does not use the "Kartrak" system. /J.A. Brown



CPR 1095 GOES ON DISPLAY AT KINGSTON

In a July 1st ceremony, CP's D-10-h 4-6-0 No. 1095 was officially placed on display in front of the CPR station at Kingston, Ont. The locomotive was built in Kingston, in 1913, and is in excellent condition; however, without a fence as protection from vandalism it is questionable how long this condition will last. Like the powers that be in Windsor and Haliburton who feel that no display engine is complete without a name, 1095's sponsors have christened the locomotive "Spirit of Sir John A."

MORE LEASED POWER COMES TO CP

Canadian Pacific has acquired under lease three more B&LE units from the DM&IR, which had borrowed them for some months from B&LE.. (See July NL, page 110) The latest arrivals, to be maintained at St. Luc, are B&LE 717A, 717B and 718A.

Also leased by CP for Vancouver-Revelstoke service are Pacific Great Eastern RS-18 units 614, 618 and 620.

CP has returned Alco 1000 h.p. switchers 3041 and 3042 to the Delaware and Hudson.

BELOW: Ontario Northland coach 820 was formerly CP 2281, and is still painted in CP's Tuscan Red livery.

Frank Vollhardt Jr



BRIEFLY...

- * Effective September 1st, CP's entire fleet of CLC 'Trainmasters' will be reassigned to Weston Shop, Winnipeg, to ease the load on Calgary's Alyth Shop brought about by the arrival of the 5500-series SD-40's.
- * CP's Baggage-Buffet-Coach 3052, popular on the CP Branchline excursion last fall, has been converted to a transfer caboose by the removal of all seats and the addition of a desk and stove. The air conditioning has been left intact.

BELOW: This way-out paint job is typical of those being applied to cars of the Confederation Train. (July NL, page 112)



Traction Topic

Edited by John F. Bromley



- * Scarborough councillors vetoed the proposed limited tramline from Warden Station at their meeting of June 28th while Reeve Campbell was out of town. So far, both the TTC and the local council have come out against the proposal while Metro Planning Board is undecided. /JFB
- * A newspaper report on June 29th stated the TTC expects to ship 200 PCCs to Alexandria. This, of course, is no longer news, however the paper went on to wonder how all the street cars would be removed from Lansdowne, as track was scheduled to be ripped out. A TTC spokesman assured the press that enough track was being saved to remove the cars. Shortly afterwards, the TTC discovered that the PCCs in storage at Lansdowne had been removed three months earlier to Danforth. Following this, rail and overhead in the area disappeared very quickly. /JFB
- * A report in the Globe & Mail indicates that the TTC is considering major bus and street car route changes as a result of a recent survey. Some changes, as yet unannounced, should be made before the opening of the subway extensions next year. The lone street car casualty is expected to be the DUNDAS route north of Dundas West Station, while ROGERS-SUBWAY cars may be rerouted to Bathurst Station to relieve over-crowded buses of Routes 7 and 90. The latter move would also serve to divert the ROGERS passengers to the B-D subway. /.TFB
- * Worth a laugh is the fact that, after com-plaining for years about lack of bus service on Greenwood, irate residents are now com-plaining about noise and dust created by buses on Route 31. The TTC may move the lower part of the route to Jones Ave., whose residents want buses! There must be a moral here....

Want a genuine cobblestone that has hugged the rails on King Street for 40 years? The TTC is selling 250,000 cobblestones at 12¢ each. How about that new patio you've been planning.....

Last but not least, a little bit of old New York has reached the BLOOR-DANFORTH subway. Uniformed policemen now patrol the line Sundays to control prank-playing youths.... /JFB

* The TTC was surprised by a request from the CNR in early July that they service the commuter GO-car(t)s, as the railway apparently had no facilities to service the self-propelled units. In view of the fact that GO-Transit is going to take away some TTC passengers, it is not surprising to learn that the TTC respectfully declined the task. A dual-guage shop at Hillcrest might have been interesting. /JFB

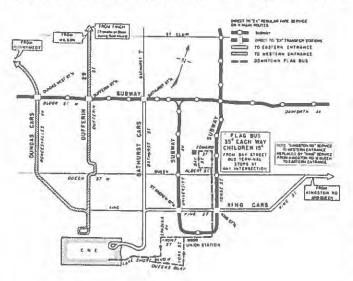
* The number of "Rotation" cars in service as of July 26th was 48, a drop of 14 from the previous high of 62. In service were:

4199, 4200, 4202, 4203, 4205, 4213, 4220, 4221 4222, 4224, 4230, 4232, 4234, 4236, 4238, 4241 4245, 4253, 4267, 4275, 4280, 4291 plus all of the AlO class except 4592.

Four "Rotation" cars removed from service in July will be "sealed" on track 3 at Danforth. The four are 4261, 4268, 4270 and 4290. /JFB

* A preview of the new KING-EXHIBITION route was given Toronto residents July 14th as the revised line operated for the first time to an Argo football game. The new route starts at Woodbine Loop, proceeding to the Exhibition via Queen, King, Bathurst and Fleet. Service to Argo games will be provided July 20, August 5 and 12, September 11 and 25 and October 1, 15 and 23. Both September and the last two October dates are day games, with service starting from Woodbine at 12:25 p.m., while other dates are night games with service beginning at 6:25 p.m. In addition, extra BATHURST cars operate over the regular route, while DUNDAS cars operate post-game only, and only to Dundas West Station.

The 1966 special Exhibition services are shown in detail on the accompanying map. KINGSTON ROAD-EXHIBITION is discontinued and replaced by KING-EXHIBITION service as outlined above. BATHURST-EXHIBITION service will be over the normal route, starting at Bathurst Station but additional cars will be in use at all times. DUNDAS-EXHIBITION service is unchanged. /JFB



Strong rumours persist among Roncesvalles and Russell personnel regarding MU service on at least the QUEEN route starting September 6th. Neville Loop is apparently to be rebuilt starting mid-August to ease curves for trains......W28 was working the BLOOR SHUTTLE the week of July 4th, moving to the KING route July 11th.....4687 was spotted on #13 run DUNDAS on July 23rd, using the old destinations.....NA switches connected in early July included both new installations at Russell (see July NL, page 116) and a third on Kingston Road at Woodbine Loop.a KINGSTON ROAD TRIPPER was seen on July 13th southbound on Church at Adelaide, destined for Runnymede.....a rear-end collision between two unidentified PCCs on the Queensway at Howard Road sent 18 persons to hospital on June 27th. No one was seriously hurt.....PCC 4586 was derailed on the rear ladder at Russell July 15th when local vandals laid a steel switch iron in the groove. The car came to a stop just 12" short of the west fence and was not damaged.....a surplus of \$4,095,763 was declared by the TTC for 1965, as passenger volume increased 4.63% to 288,038,489. The TTC expects to lose the surplus on 1966 operationsNew York subway fares were increased to 20¢ on July 4th the DuWag demonstrator unit for the Boston MBTA is expected in early September, the fore-runner of a fleet which is likely to approach 90 units. Testing will take place on the RIVERSIDE line, and may extend to BOSTON COLLEGE and CLEVELAND CIRCLE lines as well......General Steel Industries, St. Louis Car Division (St. Louis Car Co.) will be licensed to manufacture DuWag articulateds in North America, and testing may take place both in San Francisco and Shaker Heights.....MBTA has stopped painting cars in the new colours. Perhaps riders can't take bright yellow doors on Monday mornings.....Pittsburgh routes 39-BROOKLINE and spectacular 40-MT. WASHINGTON go bus on September 4th, while as of the same day all east end car lines (64,66,67,71,73,75,76, 82,87 and 88) will operate weekdays only. Plan to be in Pittsburgh for the several fantrips operating Labour Day weekend Pittsburgh scrap dealers had the nerve to ask for \$75 per car to remove scrapped PCCs from the Warring-ton scrap track. PAT finally found a dealer who would "give them a little" for each car...TTC subway lines will be segregated for a six-month trial effective September 4th..... PCC 4200 has new destination signs on the side linen..... /JFB, RM, PRMA TROLLEY FARE

* TTC line crews and city paving contractors had a busy month in July. Overhead was removed from Dovercourt and Davenport Roads, while overhead and rail was removed from Lansdowne Division. Rail along Bloor Street was paved over, starting at Dundas and reaching Brock by July 8th and Sherbourne by July 15th. Rail on Bedford Road and at Viaduct Loop has also been removed. Crane C-2 visited Park Loop on July 9th and removed all rail as it made a circuit of the loop. Asquith Loop was removed as was the Bay-King diamond on July 22nd-24th.

Tenders were called July 25th for alterations to Danforth Carhouse. It is likely that work will consist of some rail removal as well as partial conversion for buses.

Form U-RELIEF OF FLAG PROTECTION.

(1) Westward trains except No 65 Eng 764 wait at G until ten thirty

1039 am.

- (2) Westward trains except No 65 Eng 764 walt at G until No 65 Eng 764 arrives at F.
- (3) Westward extra trains except Extra 765 West wait at G until ten thirty

1030 am.

NOTE: Under these examples, trains cannot be held at more

These examples permit the train so protected to occupy the main track without rear flag protection against the trains specified until the time stated in (1) and (3), and until the train arrives at the point last named in (2).

On two or more tracks, protection is afforded only to trains moving with the current of traffic.

Form U train order must not be used if there are other trains in the same direction between the point where such order is to be delivered and the point where protection is to be provided.

Should a train, after leaving a point from which rear protection is provided, pass another train in the same direction before the order is fulfilled, it must thereafter be governed by Rule 99. Under other conditions the situation must be protected by the train dispatcher.

Form U train order must not be used to protect a train within the working limits of a work

Form V-SPECIFYING THE SPEED OF A TRAIN.

(1) Do not exceed ten 10 miles per hour between mileage twelve point one 12.1 and mileage twelve point five 12.5 (or at mileage twelve point five 12.5).

To be used when track is reported unsafe for normal speed as prescribed by Rule 43, or for other conditions as may be required.

Form W-TRAIN ORDER CHECK OF TRAINS-MODIFYING CLEARANCE OR REGISTER REQUIREMENTS.

- (1) All regular (or class) trains due at C before seven fifteen 715 am Thursday Feb. 22nd have arrived (or left, or arrived and left) (except No 9).
- due to leave A Thursday June 30th has arrived (or left) K.
- (3) Extra 475 West has arrived (or left) C on train order No ten 10.
- (4) Extra 456 West may leave C without obtaining clearance.

Where there is a train order signal at such station, the following must be added:

> "provided train order signal indicates proceed".

- (5) Extra 456 West may leave C without registering.
- (6) Extra 456 West may register at C by register ticket.
- (7) Extra 456 West register at C.
- (8) Extra 475 West may check register at C for arrival of Extra 748 East due at C after ten thirty 1030 am Thursday March 26th.

Form X-WHEN ENGINE ON A TRAIN IS CHANGED.

- (1) No 1 has Eng 456 instead of Eng 458.
- (2) Eng 755 instead of Eng 758 on Extra West (or Pagr Extra West) in train order No ten 10 (or Nos ten 10 and twelve 12).

Other trains affected must be given a copy of the order as soon as practicable.

Form Y-PROTECTION OF TRACK WORK.

(1) Men working seven thirty 730 am until five thirty 530 pm between mileage twelve 12 and mileage twelve point five 12.5. All trains be prepared to stop at the red signal.

(1) will be used to provide train order protection for track work as prescribed by Rule 42. The foreman must be advised of the limits and times specified in the order and arrange signals accordingly.

(2) Between the hours of seven thirty 730 am 530 pm and five thirty eastward trains approach red signal at mileage ninety eight point five 98.5 and westward trains approach red signal at mileage ninety six point five 96.5 prepared to stop and do not pass this signal until instructions have been received from foreman. either by radio communication or personal contact.

(2) will be used in radio equipped territory to provide train order protection for track work as prescribed by Rule 42. The foreman must be advised of the limits and times specified in the order and arrange signals accordingly.

Form Z-SIDING TO BE USED AS MAIN TRACK.

Main track out of service between siding switches at H. Switches lined and secured for siding. Trains will move through siding at restricted speed.

This form of order to be used when necessary to use a siding for main track movements.

When some form of block signal system is in operation to the next open train order office or to the station where the preceding and following trains diverge, or when the interval prescribed by Rule 91, paragraph 3, has expired, the information relative to the next train shead Operator 63 RAILWAY COMPANY CLEARANCE The next train ahead from this station left Station NU (or block signal 5-7-23 When some form of bloc to the station where the paper) Second train Orders for OK at. your

19 Tons. Engineman Conductor REGISTER TICKET Lei OF NAME Empties Signals displayed (as per Rule 20) Engine Arrived Loads

on pink (Printed

5

(Printed on yellow paper)

	FORM	F RAILWAY 19 (R or Y) der No 10
То		At Station
Signatures		
	Reper Made_Com_	ated at <i>Time</i> . Time <i>Time</i> . Opr. Jones

(Printed on white paper)

7	RAILWAY				
Station	Date				
Train	Time				
Train	Arrived	Left	Signals Displayed (as per Rule 20)		

When necessary to check the train register to ascertain whether all trains due which are superior have arrived or left, conductor must complete this form, showing thereon all trains due which are superior and fill in the time of those which have arrived or left and signals displayed, if any, and deliver, or have it delivered to engineman before leaving.

CHECKED BY

CONDUCTOR

GENERAL DESCRIPTION AND LOCATION OF SIGNALS

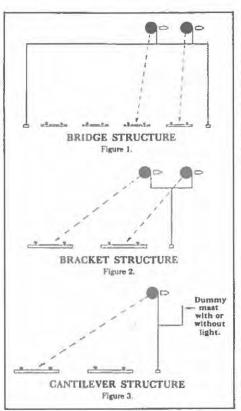
246. Wherever practicable, train order signals will be located adjacent to the train order office to which they apply, and other fixed signals, except switches, will be located over or to the right of the track they govern. Where conditions require other locations they will be indicated in special instructions.

247. When bridge, bracket or cantilever structures are used, signals will be located with respect to the tracks on which they affect movements as shown in figures 1, 2 and 3. One or more dummy masts, as in figure 3, indicates that there are one or more tracks between the active signal and the track on which it affects movements.

248. Indications of fixed signals of the semaphore and color light types are shown by the position of semaphore arms, color of lights, flashing of lights, or any combination thereof. They may be qualified by letter plate, marker, shape of semaphore arms, or any combination thereof.

Semaphore type signals display their indications by arm, or arms, to the right of the signal mast and in addition, by night, display lights of the prescribed color as viewed from an approaching train.

Color light type signals display their indications by lights of prescribed color or flashing of such lights as viewed from an approaching train.



RULES GOVERNING THE MOVEMENT OF TRAINS IN THE SAME DIRECTION BY SIGNAL INDICATION

251. On portions of the railway, and on designated tracks so specified in the time table, or by special instructions, trains will run with reference to other trains in the same direction by block signals whose indications will supersede the superiority of trains, except that the movement of work extras will be governed by train orders.

- 252. The movement of trains will be supervised by the train dispatcher who will issue instructions as may be required.
- 253. The train dispatcher must be advised in advance of any known condition that will delay the train or prevent it from making usual speed.
- 254. A train must not enter on nor foul a main track, nor re-enter a main track after having cleared it except by signal indication or until permission has been received from the operator or train dispatcher. Permission must not be given by the operator without authority of train dispatcher.
- 255. When a signal or permission has been given to a train, it may proceed until receiving a signal or message to take the siding. Such instruction by message will, when practicable, be given at a preceding station.
- 256. Unless otherwise provided, trains displaying signals will continue to display them through the territory.
- 257. Special instructions as may be necessary to govern this method of operation will be issued. Except as affected by such instructions and Rules 251-256 inclusive, all Operating, ABS and Interlocking Rules remain in force.

RULES GOVERNING OPPOSING AND FOLLOWING MOVEMENTS OF TRAINS OR ENGINES BY SIGNAL INDICATION

261. On portions of the railway, and on designated tracks so specified in the time table, or by special instructions, trains or engines will be governed by block signals whose indications will supersede the superiority of trains for both opposing and following movements on the same track.

262. Special instructions as may be necessary to govern this method of operation will be issued. Except as affected by such instructions and Rule 261, all Operating, ABS and Interlocking Rules remain in force.

CENTRALIZED TRAFFIC CONTROL RULES

NOTE: Wherever the words "train dispatcher" appear herein they apply to the employee performing the duties.

263. Rule 261 applies in CTC. The movement of trains and engines will be supervised by the train dispatcher who will issue instructions as may be required.

The train dispatcher must be advised in advance of any known condition that will delay the train or prevent it from making usual speed.

- 264. When a train or engine is stopped by a signal indicating STOP and no conflicting movement is evident:
- (a) A member of the crew must immediately communicate with the train dispatcher, stating his name, occupation, location and train or engine number.
- (b) If there is no conflicting movement, the train dispatcher may authorize the train or engine to pass the signal, but before doing so must provide protection against all opposing movements. The train or engine so authorized must move at restricted speed to the next signal, and be governed by Rule 104A at spring switches, Rule 104B at dual control switches, and Rule 672 at automatic interlockings.
- (c) Instructions received from the train dispatcher must be in writing and repeated before being acted on, and train dispatcher must make the proper record immediately.

- 265. When a train or engine is stopped by a signal indicating STOP and all means of communication have failed, such signal may be passed under protection of flagman but only to enter the siding or clear the main track governed by the signal. Rule 104A must be complied with at spring switches, Rule 104B, paragraph 2, at dual control switches, and Rule 672 at automatic interlockings.
- 266. A train or engine may be given exclusive occupancy of a track or tracks within specified limits and specified times to perform switching or other work when authorized by the train dispatcher in the following manner: "(train or engine) may use (track or tracks) between and (or at) muntil m".

When requesting track and time limits, employee will give his name, occupation, location, train or engine number and specify time and work limits and track or tracks to be used. When such authority is granted, the instructions must be in writing and repeated to the train dispatcher before being acted on, and no movement may be made under this rule until the engineman has been advised and understands the track and time limits granted.

After the train or engine has entered the limits specified, the train dispatcher must block all levers controlling signals governing movements into such limits at Stop and must not remove lever blocks nor permit any other train or engine to enter the limit until track and time limits have expired unless the train or engine is reported clear of the track or tracks specified.

During the period track and time limits are authorized the train or engine may use the track or tracks specified in either direction without flag protection.

The train or engine must be clear of the track or tracks specified, switches restored to normal position before expiration of the time specified, and train dispatcher so advised. If not clear by the time specified, protection must be provided as prescribed by Rule 99. If additional time is required, authority must be secured from train dispatcher before previously authorized time expires.

- 268. A train or engine must not enter on nor foul a main track, nor re-enter a main track after having cleared it, except by signal indication or until permission has been received from the train dispatcher.
- 269. In CTC, protection of the rear of a train on the main track between the switches of a siding, and at such places as may be designated in special instructions, is not required.
- 270. Unless otherwise provided, trains displaying signals will continue to display them through the territory.
- 272. When CTC operation is interrupted or suspended, trains and engines will be governed by instructions from the train dispatcher.
- 273. Special instructions as may be necessary to govern this method of operation will be issued. Except as affected by such instructions, Rule 261 and Rules 263-272 inclusive, all Operating, ABS and Interlocking Rules remain in force.

For Block and Interlocking Signal indications, Rules 281-293, see Rule-Book pages 19-20

ELECTRIC STAFF BLOCK SYSTEM RULES

- 301. On portions of the railway so specified in the time table, or by special instructions, the use of the main track will be governed by the electric staff block system. Possession of a staff supersedes superiority of trains for train movements.
- 302. The movement of trains will, unless otherwise provided, be supervised by the train dispatcher who will issue instructions as may be required to operators or conductors.
- 303. Special instructions as may be necessary to govern this method of operation will be issued. Except as affected by such instructions and Rules 301 and 302, all Operating, ABS and Interlocking Rules remain in force.

MANUAL BLOCK SYSTEM RULES

- 321. On portions of the railway so specified in the time table, or by special instructions, the use of the main track will be governed by the manual block system.
- 322. The movement of trains will, unless otherwise provided, be supervised by the train dispatcher who will issue instructions as may be required to operators or conductors.
- 323. Special instructions as may be necessary to govern this method of operation will be issued. Except as affected by such instructions and Rules 321 and 322, all Operating, ABS and Interlocking Rules remain in force.

TRAIN ORDER SIGNAL RULES

401. The following signals will appear where conditions require their use.

RULE	SIGNAL	NAME	Indication
401A		Stop Signal	Stop — for orders,
401B		Caution Signal	Caution — for 19Y orders,
401C	case of G	Clear Signal	Proceed

- 402. Train order signals affect all train movements in the direction in which the indications apply, the normal indication being proceed.
- 403. When the STOP signal is displayed for trains in the direction in which the signal applies, it will indicate the delivery of restrictive train orders which may affect the train at that station and the train must stop before fouling the siding switch where an opposing train clears, except where the train order signal is beyond such switch, or where there is no siding, stop must be made before train passes the signal.

- 404. When the caution signal is displayed for trains in the direction in which the signal applies, it will indicate the delivery of 19Y train orders, none of which is restrictive at that station. The speed must be so regulated as to enable proper delivery of the orders to be made to both front and rear of the train.
- 405. When train orders or clearances are placed in a mechanical device for delivery to a train, additional train orders affecting that train must not be accepted by an operator until the train orders and clearances have been removed from the device and are in possession of the operator.

AUTOMATIC BLOCK SIGNAL SYSTEM RULES

- 505. Block signals, cab signals, or both, govern the use of the blocks, but do not supersede the superiority of trains unless Rule 251 or Rule 261 is in effect. They do not dispense with the use or observance of other signals whenever and wherever required.
- 506. When an interlocking is in use in ABS territory, interlocking rules govern movements through the interlocking.
- 507. When signals in ABS territory are withdrawn from service trains will be governed by instructions from the train dispatcher.
- 508. A station protection signal affords protection against all trains in the direction in which the signal applies, and movements may be made in either direction in the block at restricted speed. When a station protection signal does not form part of an ABS, protection extends only to the "Block End" sign, and Rules 512 and 513 must be observed.

Where approach signals are not provided, approach signs will be placed one mile from station protection signals.

- 509. When a train or engine is stopped by a signal indicating STOP and no conflicting movement is evident:
- (a) A member of the crew must immediately communicate with the train dispatcher, stating his name, occupation, location and train or engine number.
- (b) On information from the train dispatcher that there is no conflicting train movement, the train or engine may proceed at restricted speed to the next signal.
- (c) If unable to secure the information that there is no conflicting train movement, it may proceed only under flag protection (as prescribed for OUTSIDE ABS TERRITORY) to the next signal displaying a less restrictive indication than Stop or Stop and Proceed.
- (d) Instructions received from train dispatcher must be in writing and repeated before being acted on, and train dispatcher must make the proper record immediately.
- 510. A train or engine which is to enter a siding or yard track at a point where the switch to be used is not more than 500 feet beyond a Stop and Proceed signal may pass such signal at restricted speed without stopping provided the switch is lined for the track to be used and the track between the signal and the switch is seen to be clear.

- 512. Where block indicators are provided, the indicator must be observed immediately before a main track switch is opened. When indication shows "track occupied" the switch must not be opened unless the movement is protected as prescribed by Rule 99 for OUTSIDE ABS TERRITORY, except at meeting points on single track when the train to be met has cleared the switch and is occupying the block. The indication "track unoccupied" does not authorize a train or engine movement, and does not relieve employees from protecting their train or engine as required by the rules.
- 513. Where block indicators are not provided or when declared out of service, a train or engine which is to foul or enter a main track from a crossover, siding or other track, must wait three minutes after the main track switch has been opened before moving foul, except at meeting points when the train to be met has cleared the switch and is occupying the block. This will not relieve employees from protecting their train or engine as required by the rules.





Indication-

track unoccupied.

Indication-

track occupied.

At main track crossovers, the indicators at the switch in each track refer to the blocks on the other track.

NOTE: Block indicator may or may not be equipped with a push button.

514. A train or engine entering a block between signals must be protected as required by the rules, and must proceed at restricted speed to the next signal unless track is seen to be clear to the next signal and such signal indicates proceed.

EXCEPTION: This rule does not apply when entering a block in CTC where an electrically-locked hand operated switch is provided.

- 515. When a train or engine has passed a signal permitting it to proceed at other than restricted speed and is delayed in the block, it must proceed at restricted speed to the next signal unless track is seen to be clear to the next signal and such signal indicates proceed.
- 516. A train or engine having passed beyond the limits of a block must not back into that block except under protection.
- 517. If any part of a train or engine overruns a signal indicating STOP, front of train or engine must be protected immediately as prescribed by Rule 99 for OUTSIDE ABS TERRITORY, and member of crew must immediately communicate with train dispatcher and be governed by his instructions.
- 518. To avoid holding main track signals at stop, cars or engines must not be allowed to stand between the fouling point and a main track switch.

INTERLOCKING RULES

- NOTE Wherever the word "signalman" appears herein it applies to the employee performing the duties.
- 605. Interlocking signals govern the use of the routes of an interlocking, and as to movements within interlocking limits, their indications supersede the superiority of trains, but do not dispense with the use or the observance of other signals whenever and wherever they may be required.

- 605A. Unless otherwise specified in special instructions, rear flag protection is not required within interlocking limits.
- 611. Unless otherwise provided, signals must be kept in the position displaying the most restrictive indication, except when displayed for an immediate movement.
- 612. Appliances must be operated carefully and only by those charged with that duty. If any irregularity affecting their operation is detected the signals must be displayed to give their most restrictive indication until repairs are made. Any defects must be promptly reported to the superintendent.
- 613. When the route is set, signals must be operated sufficiently in advance of approaching trains or engines to avoid delay.
- 615. When necessary to change any route for which the signals have been cleared for an approaching train or engine, switches, movable point frogs or derails must not be changed or signals cleared for a conflicting route until the train or engine for which the signals were first cleared has been brought to a ston.
- 616. The lever operating a switch, derail, movable point frog, detector bar or lock must not be moved when any portion of a train or engine is standing on or closely approaching the switch, derail, or movable point frog.
- 617. Operating levers must be blocked or marked and should not be used when a track, switch or signal is undergoing repairs or when a track is obstructed.
- 618. During cold weather the levers must be moved as often as may be necessary to keep connections from freezing. The use of salt is forbidden.
- 619. If the force whose duty it is to keep switches clear when snow or sand is drifting is not on hand when required, the fact must be reported to the superintendent.
- 621. Signalmen must observe, as far as practicable, whether the indications of the signals correspond with the position of the levers.
- 622. Signalmen must not make nor permit any unauthorized repairs, alterations or additions to the interlocking.
- 623. If there is a derailment, or if a switch, movable point frog or derail is run through, or if any damage occurs to the track or interlocking, the signals must be restored so as to display their most restrictive indication and no movement permitted until all parts of the interlocking and track liable to consequent damage have been examined and are known to be in safe condition.
- 624. When necessary to disconnect a switch, movable point frog, derail, facing point lock, detector bar or electric locking circuit, all switches, movable point frogs and derails affected must be securely spiked or fastened in the required position, and the levers blocked or marked in such a manner that they cannot be operated before any train or engine is permitted to pass over them.
- 625. When switches, movable point frogs, derails or signals are undergoing repairs, stop indication must be displayed for any movement which may be affected by such repairs until it has been ascertained from those in charge of the repairs that the switches, movable point frogs and derails are properly lined and secured for such movement.
- 626. Signalmen must, as far as practicable, observe all passing trains and note whether they are complete and in order. Should there be any indication of conditions endangering the train, or any other train or engine, the signalman must take such measures for the protection of trains as may be practicable.
- 628. Hand signals must not be used when the proper indication can be displayed by the inter-locking signals.

- 631. Lights in interlocking stations must be so placed that they cannot be seen from approaching trains.
- 633. If a train or engine overruns a signal indicating STOP, the fact must be immediately reported to the superintendent. In case of apparent disregard of signals by trains or engines, signalmen must, if practicable, see if proper indication was displayed.
- 634. Signalmen must not permit unauthorized persons to enter the interlocking station.

When a signalman is relieved, he must transfer all necessary information.

- 637. A running switch movement must not be made within interlocking limits.
- 661. If a signal indication permitting a train or engine to proceed, after being accepted, is changed to a STOP indication before it is reached, the stop must be made at once. Such occurrence must be reported to the superintendent.
- 663. A train or engine must not pass an interlocking signal indicating STOP until conductor or engineman has been fully informed of the situation, or hand signal has been received from the signalman. Movement may then be made at restricted speed. Yellow flags by day and yellow lights by night will be used by signalmen in giving hand signals. Such occurrence must be reported to the superintendent.
- 667. Sand must not be used, nor water allowed to run from engine appliances within interlocking limits.
- 669. Trains or engines stopped by signalman in making a movement through an interlocking must not move in either direction until they have received the proper signal from him.
- 670. A reverse movement within interlocking limits, or a forward movement after making a reverse movement, must not be made without the proper interlocking signal indication or permission from the signalman.
- 670A. When a train or engine having accepted an indication of an interlocking signal permitting it to proceed stops within thirty feet after passing such signal it must not again proceed without permission from the signalman or under the provisions of Rule 672.
- 671. While an interlocking station is closed, should a signal for an open route indicate STOP, train and engine crews must know that the route for their train is properly lined and be assured they are protected against movements on conflicting routes, after which train may proceed at restricted speed. The fact must be reported to the superintendent from the first available point of communication.
- 672. When a train or engine is stopped by the STOP indication of an automatic interlocking signal, and no immediate conflicting movement is evident, a member of the crew must proceed to the crossing and unlock box marked "switches" and be governed by instructions posted in the box. In boxes where lights are provided to indicate the approach of trains, if those of the opposing railway are lighted and no train is seen approaching, he will open the switch and give proceed hand signal to his train. If lights are not provided, or if those of the opposing railway are not lighted, such employee, after opening the switch must wait three minutes before giving his train signal to proceed. After his train has occupied the crossing he will close switch and lock box.

At automatic interlockings where push buttons are provided on signals to enable a return movement to be made over the crossing while switching, trainman will unlock box and press button. If signal does not clear he must comply with instructions in preceding paragraph.

Special instructions will be issued as may be necessary.

673. When a train is running against the current of traffic it must approach interlocking limits under such control as to be able to stop at a dwarf signal indicating STOP.

BLOCK	AND INTERLOCKING SIGNALS	The following signals will appear whe require their use. These illustrations give a cations. Other indications will be shown in ay tions. Lights may be to either side of signumber plates may be provided for the purpfying location.	ecial instruc- nal mast and	MOTE: In some cases, signal indications may be given by semaphores, as shown below; * - Squared Blade ** - Pointed Blade
Rule			NAME	Indication
281			Clear Signal	Proceed.
282			Approach Medium Signal	Proceed, approaching next signal at medium speed.
282A			Approach Limited Signal	Proceed, approaching next algual at limited speed.
283			Medium Clear Signal	Proceed, medium speed within interlocking limits or through turnouts.
283A			Limited Clear Signal	Proceed, limited speed within Interlocking limits or through turnouts.
284			Approach Slow Signal	Proceed, approaching next signal at slow speed. Trains exceeding medium speed must at once reduce to that speed.
285			Approach Signal	Proceed, preparing to stop at next signal. Trains exceeding medium speed must at once reduce to that speed. Reduction to medium speed must commence before passing signal.
286			Medium Approach Signal	Proceed at medium speed preparing to stop at next signal.

286A		Limited Approach Signal	Proceed at limited speed preparing to stop at next signal.
287	A P	Slow Clear Signal	Proceed, slow speed within interlocking limits or through turnouts.
288	FLASHING FLASHING	Słow Approach Signal	Proceed, preparing to stop at next signal. Slow speed within interlocking limits or through turnouts, medium speed must then not be exceeded until a more favorable indication has been accepted.
290		Restricting Signal	Proceed at restricted speed.
291		Stop and Proceed Signal	Stop, then proceed at restricted speed.
291 A		Grade Signal	Trains handling fifty per cent or more of ruling grade tonnage approaching a grade signal indicating "stop, then proceed at restricted speed" may pass it without stopping and proceed at restricted speed.
291R S	O	Station Protection Signal	Stop, then proceed at restricted speed and preceded by a flagman when necessary to ensure full protection.
292		Stop Signal	Stop.
293	S FLASHING	Take (or Leave) Siding Signal	Be governed by algnal indication. Take (or leave) slding when "S" lighted or light flashing. NOTE Lighted "S" or flashing light is used in conjunction with a block or interlocking signal.



Upper Canada Railway Society

```
Adams, A.J. 199 Oakcrest Ave. Tor 13.

1371 Alden, D.N. 150 Dowling Ave., Apt 300 Tor 3

1112 Aldridge, C. 50 Wembley Dr. Tor 8

29 Allen, H.T. 57 Berwick Ave. Tor 7

846 Anderson, J.W. 2 Springbank Ave. Scarborough

540 Anthony, ".G. 1018 Briar Hill Ave. Tor 19

1331 Andrew, E. 115 Evahill Cres. Richmond Hill

508 Appleyard, L. Box 76, King City

792 Atkins, A.W. 137 Glengarry Ave, Tor 12

1286 Backler, J.D. 145 Jameson Ave, Ap 601, Tor 3

798 Balmer, G.A. 360 Backville St, Tor 5

1052 Balmer, J. 360 Sackville St, Tor 5

1052 Barker, Miss E, 126 Bowie Ave, Tor 10

665 Barnshaw, AB, 490 Indian Rd, Ap 4, Burlington

15 Eaxter, LG, 36 Hemford Cres, Don Mills

148 Bayly, JC, 246 Heath St W, Tor 10

706 Eedard, C, 4977 6th Ave, Montreal 36, FQ

993 Benns, R, 43 Bowmore Rd, Tor 8

84 Bernard, JR, 239 Wanless Ave, Tor 12

856 Blaine, "E, 37 Garden Dr, Grimsourt

479 Borland, JC, 2 Flaxton Dr, Tor 16

66 Bost, RJ, 63 Ealmoral Dr, Frantford

791 Bowlan, CWR, 192 Cameron St, Ap 20, Corunna

839 Brandon, M, 31 Upper Canada Dr, Ap 309,

Willowdale

Eridges, CS, 27 Delma Dr, Tor 14

670 Browley, JF, 32 North Dr, Scarborough
willowdale

Willowdale

Fridges, CS, 27 Delma Dr, Tor 14

Tooley, JF, 32 North Dr, Scartorough

Scookbanks, R, RR#4, Stouffville

Jrookbanks, C, 4925 Rosalie, Dearborn, Mich 48126

Frown, James A, J Bromley Cres, Framalea

Frown, John A, 165 Van Dusen Elvd, Tor 18

Rose Erown, RA, 10 Bromton Dr, Scarborough

John A, 165 Van Dusen Elvd, Tor 18

Rose Erown, S, 99 Trethewey Dr, Tor 15

Buddles, G, 61 Stanley St, Ap 2, Kingston

John B, 18 Roncesvalles Ave, Ap 22, Tor 3

Burfam, MV, 118 Roncesvalles Ave, Ap 22, Tor 3

Burfam, RY, 11 Silverrest Ave, Tor 14

Cre Burchill, F, 4 Latimer Ave, Ap 505, Tor 12

Rose Burnham, RE, 32 Oakburn Pl, Ap 11, Willowdale

Burns, M, J49 Lytton El, Tor 12

Jurton, JE, 166 Ellington Dr, Scarborough

Butler, LW, 107 18th St, Tor 14

Eutler, RE, 3337 E Cyprese St, Scottsdale,

Ariz 35257

Button, RE, 61 Frovince St S, Hamilton
Ariz Sp287

Button, FE, 61 Frovince St S, Hamilton

1412 Cameron, H, 273 Heath St E, Tor 7

1260 Campbell, END, 80 Lawton El, Ap 19, Tor 7

432 Campbell, JE, 59 Church St, Gananoque

1035 Carr, MR, 3143 O'Hagan Dr, Cooksville

711 Carter, RM, 70 William St, Ap 18, Guelph

210 Ceallaig, F, Eox 44702, Los Angeles, Cal 90044

1199 Cheatle, JA, 129 Pinewood Trail, Fort Credit

1421 Clare, F, 72 Harlow Cres, Rexdale

76 Clark, RG, 33 Highland Ave, Fort Erie

997 Cleland, E, Heaford

1025 Codner, L, 991 O'Connor Dr, Ap 8, Tor 16

343 Coleman, EH, 15 Wychwood Park, Tor 4

560 Common, WM, 145 Kent St, Hamilton

1291 Cook, D, 80 Glen Rd, Tor 5

1028 Corner, E, 40 Alberta Ave, Tor 4

795 Coulman, EA, 160 Glen Fark Ave, Tor 19

406 Crompton, AB, 28 Melody Rd, Weston

269 Cushing, AA, 47 Rockwell Ave, Tor 3

1263 Cushing, AA, 47 Rockwell Ave, Tor 9

671 Dale, WG, Sox 549, Terminal A, Tor 1

1402 Davidson, JR, Eox 651, Port Perry

1427 Davis, K, 178 Glengrove Ave W, Tor 12

1419 Davison, EB, 17250 Redford Ave, Detroit, Mich

48219

1242 Dawson, DM, 126 Russett Ave, Tor 4
            306 Button, RE, 61 Frovince St S, Hamilton
            1242 Dawson, DM, 126 Russett Ave, Tor 4
```

```
484 Dell, JB, 76 Durant Ave, Tor 6
420 Dickens, KA, Thomson Dr, RR#1, Waterdown
1252 Dillon, Mrs J, 99 Kendal Ave, Tor 4
1251 Dillon, W, 99 Kendal Ave, Tor 4
1367 Dunn, Mrs M, 267 Erookdale Ave, Tor 12
726 Dyer, JE, 33 Hopedale Ave, Tor 6
1353 Eastman, R, 220 Gainsborough Rd, Tor 8
391 Edwards, ED, 513 Eirchmount Rd, Scarborough
1324 Ehrke, G, Eox 571, Terminal A, Tor 1
1165 Ellah, R, 932 Glencairn Ave, Tor 19
990 Elliott, RL, 50 Anndale Rd, Scarborough
1179 Emery, H, 1 Ottawa St, Tor 7
1418 Evans, DP, 18 Purley Cres, Scarborough
717 Ferguson, JW, 46 Lockheed El, Weston
529 Fox, JF, 925 Tanager Ave, Burlington
529 Fox, JF, 87 Darlingside Dr, West Hill
764 Gairn, AR, 2331 New St, Eurlington
George, R, 323 8th Line, Oghville
672 Gilmour, RKJ, 61 Charles St E, Ap 304, Tor 5
730 Glover, H, 134 Hallam St, Tor 4
1140 Godfrey, R, 42 Avoca Ave, Tor 7
920 Grainger, EV, 137 John St, Thornhill
1383 Gray, CH, 60 Gulliver Rd, Tor 18
1397 Green, MR, 58 Grenoble Dr, Ap 49, Don Kills
1205 Green, MR, 58 Grenoble Dr, Ap 49, Don Kills
1205 Green, MR, 58 Grenoble Dr, Ap 49, Don Kills
1205 Green, MR, 58 Grenoble Dr, Ap 49, Don Kills
1206 Halfpenny, M, 55 Ellerslie Ave, Ap 1112, Willowdale
1266 Halls, GJ, 48 Swanhurst El, Streetsville
      loudale

1266 Halls, GJ, 48 Swanhurst El, Streetsville

1414 Hampson, C, 67 E 41at St, Hamilton

965 Hanbidge, D, 43 Vermont Ave, Tor 4

635 Hancock, Dr GL, 209 Highland Cres, Willowdals

821 Harper, E, 1122A Queensway Ave, Ay 1, Tor 18

854 Harris, GGR, 148 Forest Hill Rd, Tor 7

1156 Harrison, J, 83 Valley Dr, Stoney Creek

1223 Hawley, G, 248 Compton St, Ottawa 14

174 Hay, WL, 140 35th St NE, Canton, Ohio 44714

1376 Head, B, Mono Road

48 Headford, BM, 383 Broadway Ave, Tor 12

411 Heard, CWK, 5 bis, ave Pierre-Grenier, F-92-

Boulogne-Billancourt, France

1109 Helson, GR, 1840 Victoria Park Ave, Ap 715,

Scarborough

715 Henahan, JL, 14 Burlington St, Ap 5, Tor 14
                                                                                                                     loudale
    1109 Helson, GR, 1840 Victoria Park Ave, Ap 715,
Scarborough
715 Henahan, JL, 14 Burlington St, Ap 5, Tor 14
1026 Henderson, F, Box 56, Bolton
700 Henry, T, 28 Craig St, Erampton
1292 Feriot, DH, 150 Hopedale Ave, Tor 6
577 Hiel, D, 8 Earrymore Rd, Scarborough
865 Hills, RW, 10 Ramsgate Pd, Tor 14
563 Hitchins, DH, 116 Harding Bl, Richmond Hill
493 Hole, LF, 28 Peking Rd, Scarborough
1062 Holliday, A, 7671 Wolson St, Montreal 38, P2
789 Holt, A, 7 Norbury Cres, Scarborough
42 Hood, JW, 301 Woodmount Ave, Tor 6
714 Hoover, RB, 22 Oakmount Rd, Ap 502, Tor 9
994 Hopkins, A, 119 Summitcrest Dr, Weston
28 Horner, GW, 22 Porter Cres, Scarborough
1011 Horton, S, 516 Prince Edward Dr, Tor 18
1000 Howard, A, 60 Tyndall Ave, Ap 908, Tor 3
6 Howard, FH, 65 Highland Ave, Tor 5
497 Hughson, GB, 85 Yorkview Dr, Tor 18
652 Jacobsen, RC, 32 Lowther Ave, Tor 5
476 Jagger, PH, 2 Fareham Cres, Scarborough
928 James, W, 540 Huron St, Tor 5
978 Jay, KW, 5 Golfwood Hts, Weston
1178 Johns, PW, 125 Jones Ave, Oshawa
1349 Johnstone, HA, 71 Thorncliffe Park Dr, Ap 601,
Tor 17
804 Jones, AD, 129 Spenvalley Dr, Downsview
                                                                                                                   Tor 17
                                                                                     Jones, AD, 129 Spenvalley Dr. Downsview
Jones, D, 265 Dixon Rd, Ap 905, Weston
Jones, JE, 131 Roxborough Dr. Tor 5
Jordan, EA, 48 Woodland Park Rd, Scarborough
             804
               919
```

```
282 Een, 7A, 183 Bestrock Ave, Contreal Yeet 28, 1296 Enneway, 7M, 185 Bestrock Ave, Contreal Yeet 28, 1296 Enneway, 7M, 185 Carluin Grow, Ap 906, Village 1996, Village 1997, Ap 201, Dennishing 1997, April 1997,
```