Canadian Rail

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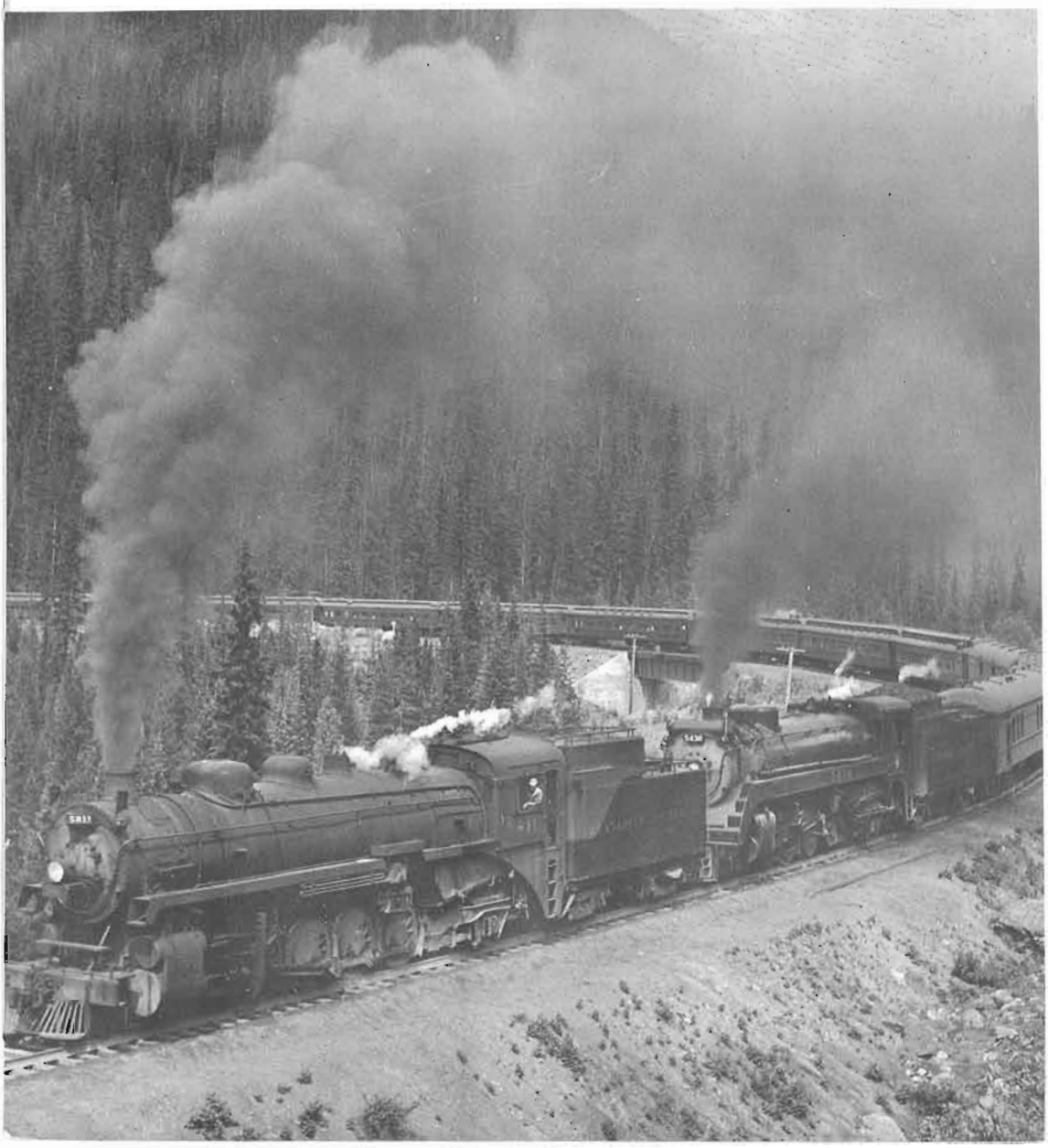


introduction

THE GREAT PASSENGER TRAIN ROBBERY

There is no question that transportation systems everywhere aren't what they used to be. Horse-drawn vehicles have disappeared and even ships don't look like ships anymore. For a little less than 100 years, the steel wheel on the steel rail - or some equivalent thereof - excercised an absolute monopoly on land transportation, only to have it finally and entirely demolished by the advent of the rubber tire on asphalt - or some equivalent thereof - early in the twentieth century.

With just over half the century past, the aeroplane - or the second-generation "jet" - successfully carved its own slice of the transportation pie. And since the airlines were after the long haul business, the railways suffered while the buses continued to thrive.

And so, the great passenger train robbery unfolded.

The railways were slow to react to this invasion of what was once their particular, private preserve. The railway observer, having been thrust into the slough of despond in the depression years of the 1930's, anxiously endured the crisis years of the 1940's, in anticipation of the resurgance of the 1950's.

And finally, this resurgance began to flower. Innovations by the score, from dome cars to turbine trains, not to mention accelerated schedules and variegated amenities. The railways were fighting back!

But it seemed as though the blight could not be cured nor the trend reversed. Canadian rail passenger service, in spite of all the valiant efforts of the protagonists, continued to be an unprofitable and therefore expendable affair on the year-end balance sheet.

Well then, what is to be done?

That is what this issue of CANADIAN RAIL is all about.

When Mr. R.A.Linney was asked if he would do one of the summer '71 issues of our magazine, he replied that he would like to do a "think" issue on the dilemma of the Canadian passenger train. In view of the recent action of the Canadian Transport Commission in opening "Pandora's Box" by asking for briefs on the rationalization of the Canadian transcontinental passenger train service, the proposition seemed to be sound.

What follows might be described as some of the "ideas" which escaped from "Pandora's Box".

I hope that you enjoy reading it. And I hope that it will force you to do a little thinking about a subject which will have a profound efrect on all our lives.

S.S. Worthen, Editor
CANADIAN RAIL

S.S. Worthen.

A double-headed passenger extra east climbs up the grade between the upper and lower Spiral Tunnels approaching Yoho, B.C. Photo courtesy CP RAIL.

The Transcontinental Question

The 1950's reverberated to theories about the future existence of passenger rail service. Canadian National was making moves that indicated the railway would like to forget about passenger trains altogether; Canadian Pacific, on the other hand, had just put in an order for a complete set of stainless steel passenger cars that included the newest feature in their passenger service - the dome car. The C.P.R. was also operating a forty page passenger schedule that included such trains as the Dominion, the Alouette, and the Canadian.

And today, the trend has almost completely reversed. Many people tend to forget that before the Canadian Pacific adopted its present policy of trying to discontinue the passenger trains that operate at a defecit, the company made every attempt to attract the travelling public back to the rails. It was not the simple concept of "If there are no passengers, there will be no trains".

In the 1960's, Canadian National altered it's position and decided to make an all out attempt to attract passengers. They have bought equipment from various U.S. railroads that includes the now famous "Hiawatha" or "Sceneramic" full length dome cars, and the "Bay" observation cars. The C.N.R. has rebuilt the equipment to company standards, and set about to operate a modern and efficient passenger service.

The Canadian Broadcasting Corporation program The Great Canadian Train Robbery, televised last Spring, tended to illustrate what has really happened to the transcontinental train service - although that wasn't the expressed purpose of the show. The Canadian came across as a passenger train to take as a part of a vacation, rather than as a mode of transport to get across the country - a relaxing, comfortable way to see the Rockies from the depths of Albert Canyon.

The C.B.C. commentators continually dwelt on the question about the fate of the travelling public and the citizens who live in many of the small towns that were once station stops along the route. The answer is, of course, they drive.

The program also answered the question as to why both the Canadian and the Super Continental have become such a seasonal business. Vacations are a summertime habit, and winter travellers are mostly on the road for business reasons. Business is time, involving necessary speed and short travelling time. Airlines do offer that service.

The demands of such a seasonal service have forced both the C.N.R. and CP RAIL to operate their transcontinental trains at a defecit, and both have applied to the Canadian Transport Commission for permission to discontinue the service, although the common feeling is that the request was more for the 80 per cent subsidy than anything else. The C.T.C. denied permission for both the requests - as was expected - and has since asked for briefs from all interested parties, including the general public, on a workable proposal for the future operation of a Canadian transcontinental passenger service.

CP RAIL was allowed to raise fares for accomodation aboard the Canadian, and was also given permission to study the effects of the reduction or complete elimination of dining car services on the train. Without dining car service on a transcontinental passenger service, the railway may as well revert back to a schedule that would include meal stops. It would also be interesting to see how the company would advertise the train if the sleeping car accomodations were withdrawn as well - another of the requests that they made at the recent C.T.C. hearings.

It would be an interesting trip - sitting up for three consecutive nights, and stopping every four and a half hours to eat.

But when Transportation Minister Don Jamieson speculated that a transcontinental pool service is a possibility, he opened the door for a great deal of speculation. The biggest question is: who would gain the right (although it seems as if the railways tend to look at it more as a misfortune) to operate the amalgamted service, and over what route.

The Canadian now serves Montreal and Toronto, and passes through Ottawa, Sudbury, Thunder Bay, Winnipeg, Brandon, Regina, Moose Jaw, Calgary, Kamloops, for Vancouver.

The Super Continental leaves from Montreal and Toronto, and serves Ottawa, Capreol, Sioux Lookout, Winnipeg, Saskatoon, Edmonton, Kamloops, and terminates in Vancouver.

Both railways now serve a major Rocky Mountain tourist resort; CN has created Jasper, while CP has watched Banff grow around their Banff Springs Hotel.

Through the process of elimination of all duplicate cities the proposed route should maintain service to the following points;

Montreal - Toronto - Ottawa - Thunder Bay - Winnipeg-
Regina - Saskatoon - Edmonton - Calgary - Banff -
Jasper - Kamloops - terminates in Vancouver.

Either Capreol or Sudbury would have to be eliminated as the connecting point for the Montreal and Toronto sections.

But a possibility for a "pooled" transcontinental service could be as follows;

Train 1; CN, Montreal to Ottawa.
CP RAIL, Ottawa west to Sudbury and connection with Train 2 from Toronto.

Train 2; CP RAIL, Toronto to Sudbury and connection with Train 1 from Montreal.

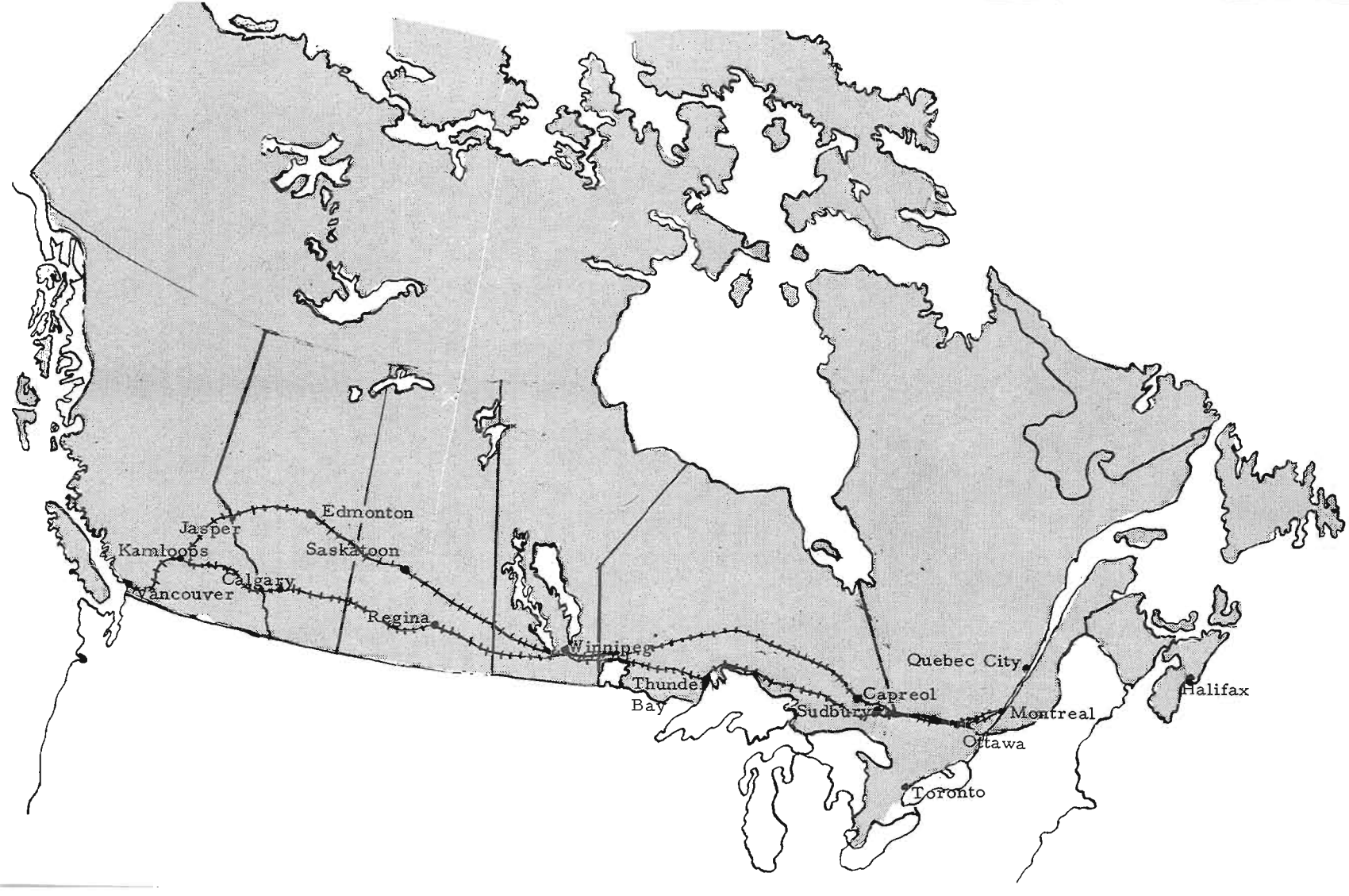
Train 1+2; CP RAIL from Sudbury to Thunder Bay, Winnipeg, Brandon, and Regina.

DIVISION AT REGINA

Train 1; CN, Regina to Saskatoon and west to Edmonton, Jasper, and Kamloops.

Train 2; CP RAIL from Regina to Moose Jaw, Medecine Hat, Calgary, Revelstoke, and Kamloops for connection with Train 1, above.

Train 1+2; CN from Kamloops through to Vancouver.


Edmonton
Jasper
Kamloops
Saskatoon
Calgary
Vancouver
Regina
Winnipeg
Thunder Bay
Sudbury
Capreol
Quebec City
Halifax
Montreal
Ottawa
Toronto

Should the decision be taken to revise the service for a seasonal operation, then perhaps the winter route could be altered as follows;

Train 1; CN, Montreal to Ottawa.
CP RAIL, Ottawa to Sudbury and connection with Train 2 from Toronto.

Train 2; CP RAIL, Toronto to Sudbury and connection with Train 1, above.

Train 1+2; CP RAIL from Sudbury to Thunder Bay, Winnipeg, and Regina.
CN from Regina to Saskatoon and west to Edmonton, Jasper, Kamloops, and Vancouver.

Branch line service via CP RAIL to Calgary, Banff, and Lake Louise from Edmonton.

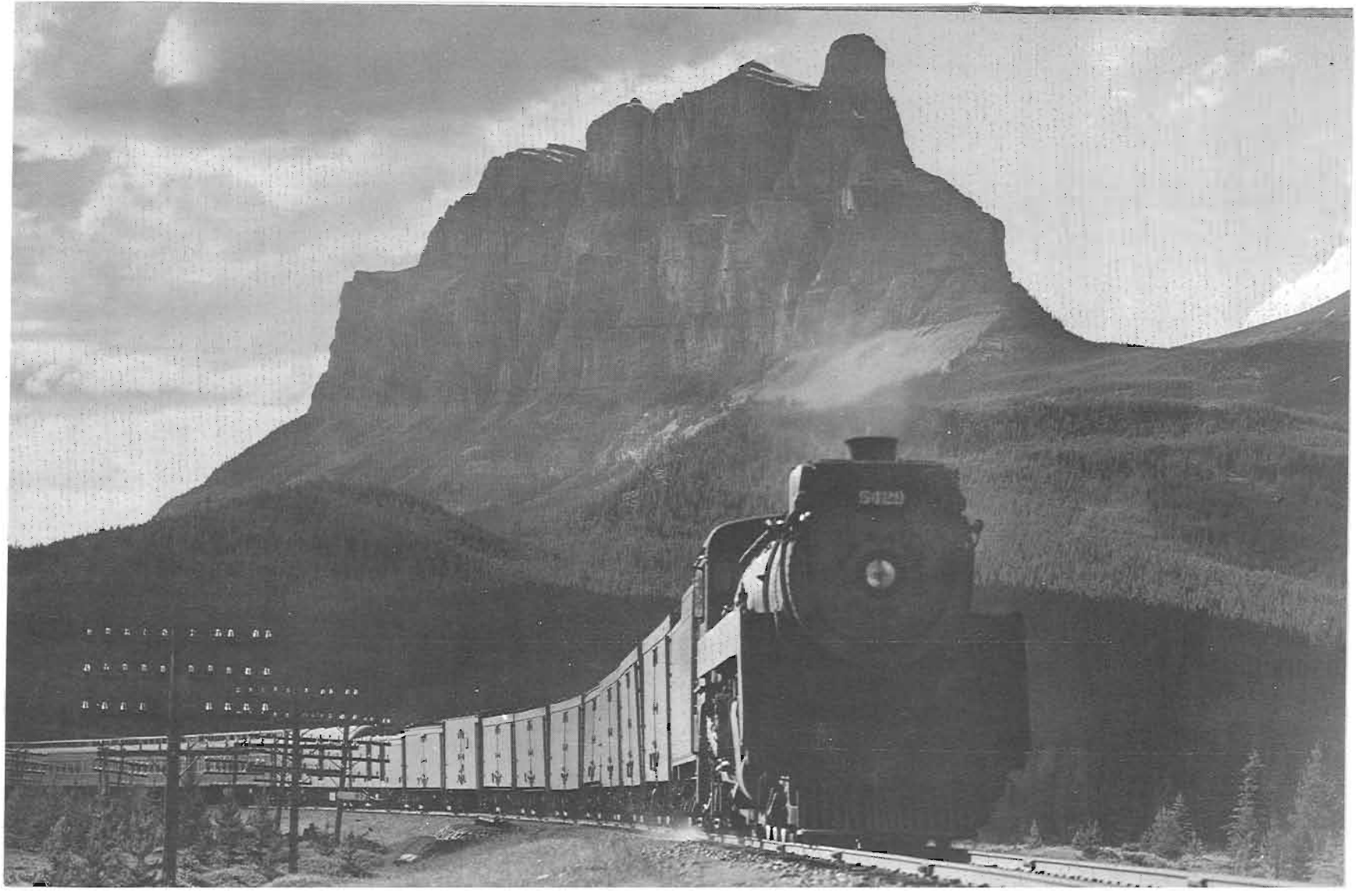
The C.N.R. route was chosen over the Canadian's in consideration of the larger urban population en route; and while it is true that the population will not all travel by rail, the potential is there. The suggestion is designed to eliminate first the duplicate cities served, and then to eliminate the two train operation west of Regina during the slack winter months. It also means that proper connections would have to be provided by CP RAIL on the Calgary to Edmonton right-of-way - in terms of more than BUDD cars - for meets with both the east and west bound trains.

One problem with such a complex service is the sleeping car accomodations from connecting points such as Halifax, Saint John, New Brunswick, and coach connections with Quebec City and Chicago. Making such a system work would involve a great deal of effort from both the railways, as well as an honest attempt to provide the most efficient service possible under the economic conditions created by the sleeping and dining car accomodations and services. That coeperation also includes giving the train right-of-way priority on the main line to create a reasonably tight schedule.

Also essential for the service would be an arrangement where passengers would not be required to change cars if they were leaving Toronto for Jasper; the same is true if a passenger boarded the train in Montreal for Banff. At least one sleeping car would have to be reserved for "North Route" passengers on both Trains one and two; the same is true for "South Route" passengers Close supervision of the use of equipment would also be essential similar to the operation recently introduced by CP RAIL for the equipment used on the Canadian and Atlantic Limited.

The suggested route or routes are not designed to force the transcontinental passenger services into one direct route without considering connections or existing services - an appearant result of AMTRAK, the government consolidation of passenger services in the United States. In fact, AMTRAK eliminated more passenger trains when it officially took over on May 1st, 1971, than the private railroads had eliminated in the past three years. The hopeful note is that the organization did go back to the U.S. Congress to obtain permission to add trains to their operating schedule.

➔ Canadian Pacific's transcontinental train "The Dominion", photographed in the late 1940's between Lake Louise and Banff, Alberta. The Dominion carries one of the items that kept passenger service alive for many years - the mail car. Photograph courtesy CP RAIL.



The Canadian transcontinental route would simply eliminate the miles of duplicated services, to try and modify the defecit claimed by both railways on the operation. And that defecit is a sizeable one.

The privately-owned CP RAIL lost fifteen million dollars on their coast-to-coast service in 1968. CN has reported a working defecit of fourteen million dollars for their transcontinental service in 1969.

It's even difficult to imagine a transcontinental passenger train breaking even on it's operation with existing operating union regulations, and the basic costs of sleeping and dining car accomodations and services. Dining car facilities are just inherantly expensive. Basic meal-service equipment involves an initial cost of thirty thousand dollars. Add space requirements for food storage, food preparation - even with airline type infrared ovens - refrigeration, and staff; they all combine to make even the concept of serving meals uneconomical. But with the railways loosing almost twenty million dollars a year in the continuation of the service, there has to be some way for revision.

The General Manager of CN's Passenger Sales and Services Department, Alex Olynyk, speculated in an article printed in the Montreal Star earlier this year, that the railway will be forced to try several innovations in sleeping and dining car services in the near future, to help determine public reaction to them - and to help eliminate that large defecit. Those innovations could include a form of sleeping car accomodation where the passenger would be required to make up his own bed, with the necessary linen supplies coming from a commisary on the train.

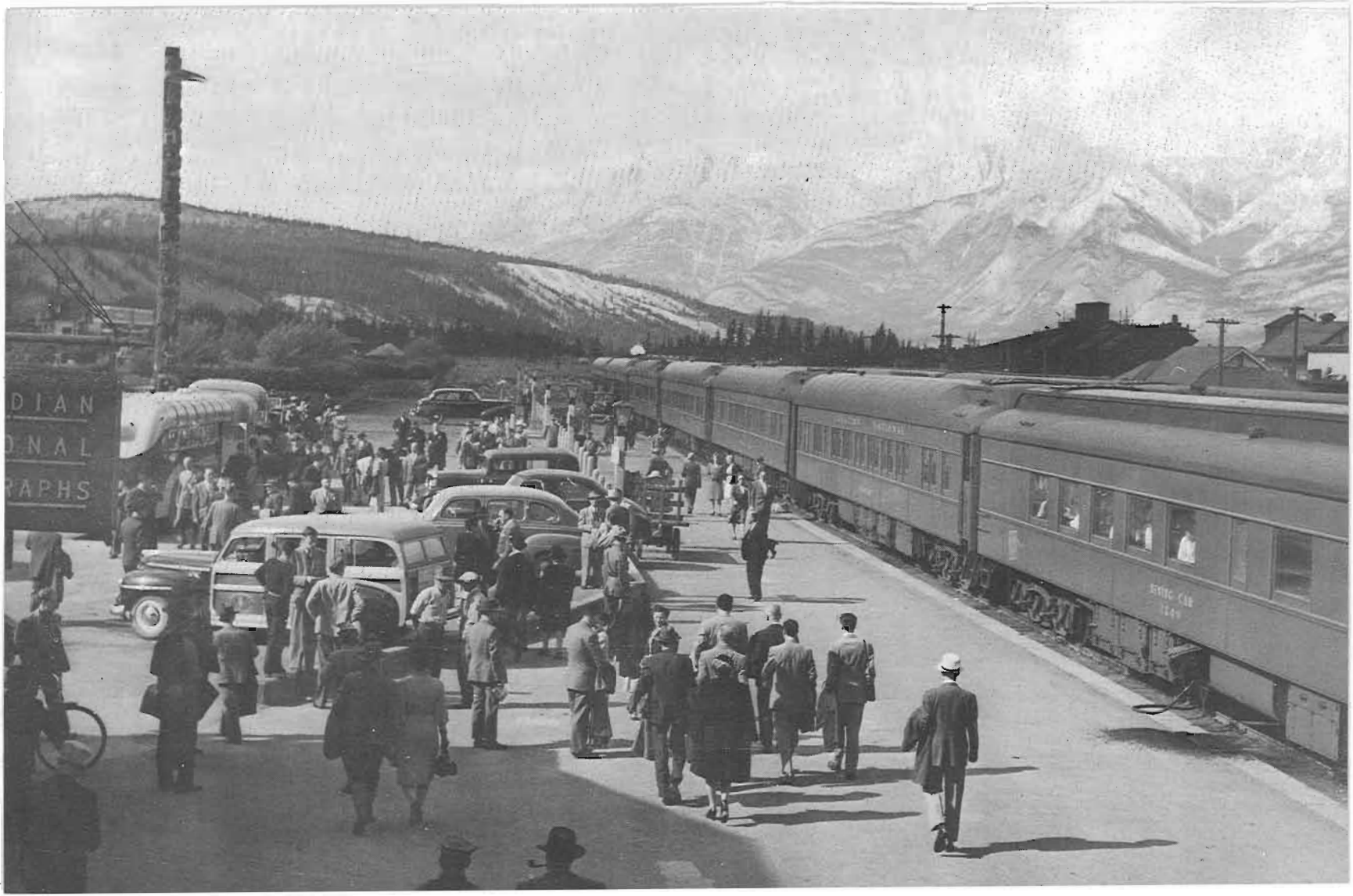
That sounds almost like the colonist cars used in the early 1900's. All the car would need is a coal stove in one end, and it could be a step back into the pages of history. It was always the greatest enjoyment to take the train, and be on the receiving end of the service from the crew.

But CN would also like to redesign their equipment so that the dining and club car facilities could be operated in units, with combination dining-sleeping car crews. The problem with instituting such a service is, of course, the unions. CN and the various Brotherhoods involved would have to come to an agreement before such a service could ever be introduced. But it would certainly be a step in the right direction.

Dining and sleeping car accomodations combine to provide the services essential on any transcontinental run. And if the run is ever going to appeal to the travelling public, there has to be a complete service.

And if such a service is ever to be developed in some form close to that suggested earlier, there will have to be a signifigant amount of government money, and some government leader ship in the development of the concept. The Department of Transport's Canadian Transportation Commission will have to consider the feasability of a pooled or concentrated transcontinental rail passenger service, and after a great deal of relevant investigation and consideration, come to some decision as to who should operate the train, on what basis, and over what route.

Jasper, 1945: the eastbound Continental Limited sits in the Jasper station awaiting servicing and passengers. Photograph courtesy of Canadian National Railways.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RAPHS


DRUGS
CN

There are five potential possibilities:

CP RAIL could operate the service with a guaranteed government subsidy, and with the cooperation from CN on maintenance of the right-of-way and priority for the train.

C.N.R. could operate the train, with the same government backing and the same cooperation from CP RAIL.

The federal government could set up a crown corporation (much like AMTRAK in the United States) to do the job, with research, advice, and cooperation from both the railways.

Or it could be a pool service in every sense of the word, with CP RAIL operating the train over it's right-of-way, and CN doing the same over it's track

The last alternative is what CP RAIL asked for at the recent C.T.C. hearings - a transcontinental service that was scheduled on an alternative day basis with the CN. CP RAIL would operate the Canadian one day, and CN would operate the Super Continental the next.

But there is bound to be a great deal of debate before any decision is reached.

It seems that the most effective way of operating a transcontinental passenger train service - from an efficient and non duplicate point of view - would be to give one of the railways the right of monopoly on the service. A pool operation could only too easily revert back to the same deteriorated condition of mixed service that developed in the early 1960's with the Montreal to Toronto traffic; one company could withdraw from such a joint operation, leaving the other in a position of monopoly anyway.

Should one company begin the task of setting up the suggested transcontinental train service, it could at least concentrate on the actual operation of the train, without the problems of two company confusion or differences.

And a concentrated effort is exactly what the transcontin ental passenger service needs.

The feeling is that the C.N.R., with all present conditions in prime consideration, would get the service.

They're working to earn it.

← Jasper,1962; the Super Continental.....decked out in the then new "lazy worm" image of the C.N.R., pulls into Jasper en route to Edmonton.
Photograph courtesy Canadian National Railways.

The Corridor

The Canadian transportation corridor stretches from Windsor, Ontario in the southwest to Quebec City in the northeast. More than three-quarters of all passenger trains operating in Canada are listed on schedules between these two points. But the Canadian transportation corridor is more than just a transportation route- it is also the principle testing ground for innovations in the railway industry. It is here that the CN TURBO made its first run; it will also be the testing area for the new LRC (Light,Rapid and Comfortable) passenger train.

The major routes within the corridor, in terms of passenger patronage,are as follows;

Montreal - Quebec City
Montreal - Ottawa
Montreal - Toronto
Toronto - Windsor

At the present time, Canadian National provides service to all these cities. CP RAIL does not offer passenger service between Toronto and Montreal, and has also reduced its Quebec City-Montreal operation to a return service twice a day. CP RAIL's Montreal to Ottawa service is an RDC consist, supplemented once a day by the luxury of the Canadian.

Short, inter-city runs such as these are greatly affected by the competition with both the airlines and the automobile. The best example of the possible future competition is STOL - the proposed short take-off and landing system for service between Ottawa and Montreal. Such a system would mean that a businessman could fly from <u>downtown</u> Montreal to <u>downtown</u> Ottawa, avoiding ground transportation problems in either of the two cities, and make the trip within a one hour flight time.

The railways used to offer that service between the two cities - without the noise and space that always seems to accompany every airport. For some reason, the City of Ottawa saw fit to remove the railway right-of-way from the city, and build a station that is as far out of the downtown district and as inconvenient as the airport was to begin with.

The only thing that really saves the Montreal to Ottawa train service - for the next ten years, anyway - is an interdepartemental report that was issued by the City of Montreal earlier this year. It revealed that the proposed STOL airport site in Montreal the Victoria parking lot, originally built for Expo '67 - will not hold permanent structures for at least another ten years. The lot was originally built on land reclaimed from the St. Lawrence River by dumping garbage as fill, and the land is still settling.

But CP RAIL is facing another dilemma with the Montreal to Quebec passenger service. Several resident groups in the Quebec capital are demanding that the only access track to the station, through the lower section of the city, be removed in the interest of urban beautification. That would mean that Quebec City, as far as CP RAIL is concerned, would be as good as eliminated. CN does have the facilities to terminate at Ste. Foy in the west end of Quebec City. CP RAIL would have to terminate their service at Ancienne Lorette - and that is exactly where the airport is. A railway station that is not within a reasonable distance of the centre of the city is as inconvenient as flying - and flying reportedly takes less time.

STOL threatens the one real advantage that inter-city rail passenger transportation has had over the airlines. That is the direct downtown to downtown service, at a reasonable price, and within a reasonable time limit. Canadian National's Rapido concept certainly proves that the public are still interested in travelling by train - if the railways are interested in running them. The Rapidos to Toronto were reported to be the only trains on the entire CN system that do not operate at a defecit.

But the C.N.R. - after four long years of trying to prove the viability of the passenger service between the two cities- will apply for a federal subsidy to cover 80 per cent of the losses on the entire Montreal to Windsor operation; but the rail way is particularly concerned with the Montreal to Toronto service. CN has not released the exact amount of the defecit from the run, but the figure probably does not irk the railway as much as the prospect of appearing before the Canadian Transport Commission with a subsidy application for the service does.

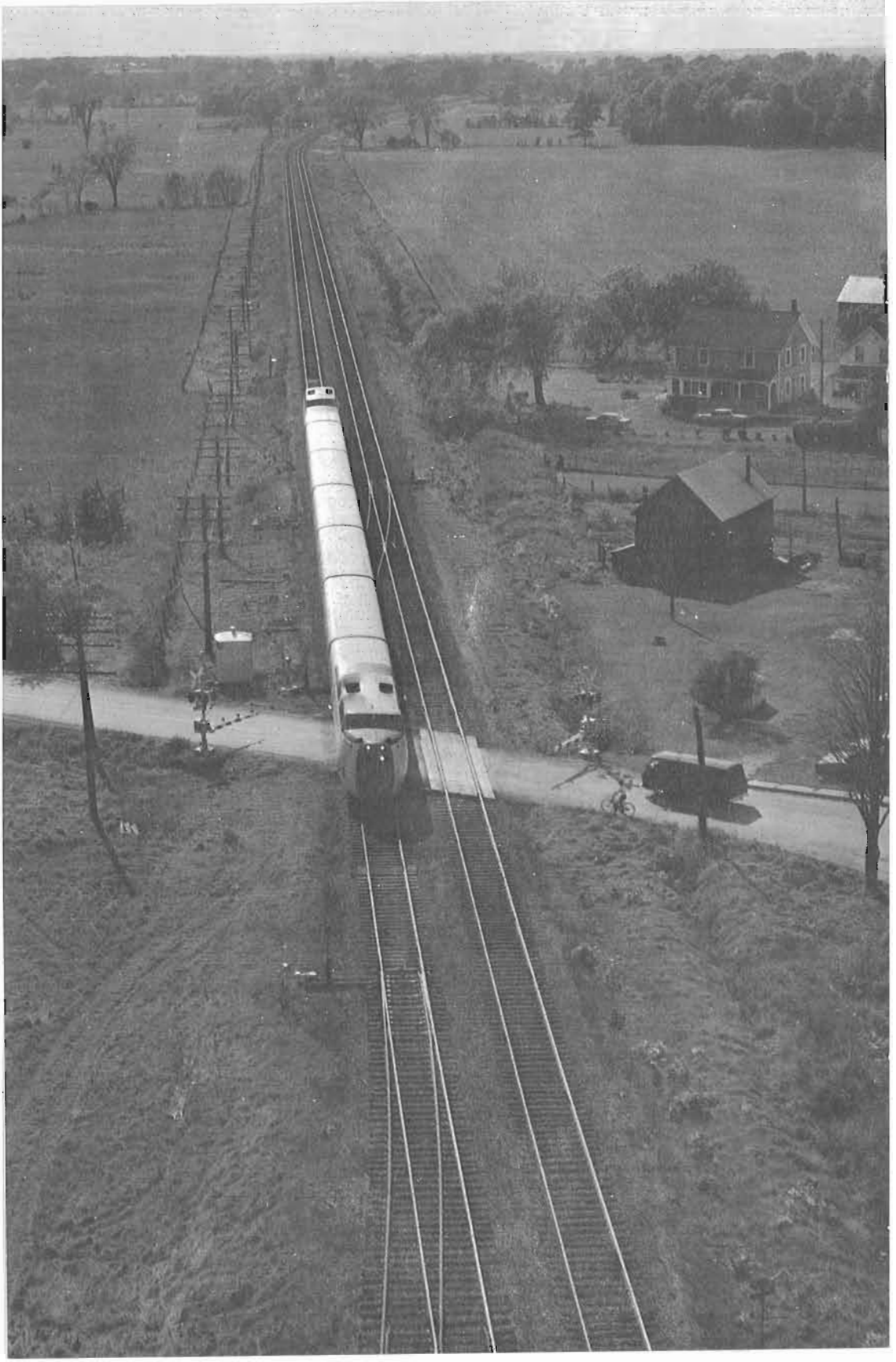
The C.N.R. had invested heavily in both ideas and promotion to show that the service could be profitable. Now, as one Toronto official conceeded, "this has not been the case". And the very idea that the railway has to apply for a subsidy for the service will come as a disappointment to many, particularly to those who have insisted that trains could operate at a profit in competition with inter-city airline services.

The Montreal - Toronto run had the traffic potential of the country's two largest cities, and the ingenious promotion of the CN to maintain it. Together, itt appeared to be a winning combination. And now, the CN apparently finds the need to improve its financial backing more important than perpetuating the idea that train travel between Montreal and Toronto was paying its own way. Company officials say that if the 80 per cent government subsidy is approved, it will permit the company "to operate an even better train service between the two cities.".

Canadian National has also become involved in a great deal of experimentation in the development of techniques to maintain and improve their corridor traffic. The mainstay of the experimentation is, of course, the TURBO, and the concept of operating high speed trains on existing tracks through the utilization of sophisticated suspension systems.

But the future of the TURBO itself is still in question. After almost five years of on-again-off-again service, CN is in the process of revaluating the concept of the train, and is expected to reach a decision on whether or not they will keep the train, when the contract with United Aircraft expires at the end of the summer.

The problems of the TURBO characterize the same problems that have been encountered by the railways in other facits of future development. If United Aircraft had been given a government subsidy to complete necessary testing on the TURBO in the Canadian weather conditions before it was put into service, many of the breakdowns could have been avoided. It seemed to be a never-ending process of trial-and-error repairs. The train sets were taken out of service again in February of this year, after Canadian National complained about the development of thermal cracks in the wheels. United Aircraft has since gone shopping to find wheels suitable for the TURBO assembly, and is believed to have found the answer in a low carbon, softer railway wheel that was developed in Britain.



United Aircraft has been forced to cover the costs of the research and experimentation involved each time that the TURBO was taken out of service. Aircraft research in Canada is almost completely subsidised by the federal government, but the railways have only thus far received piece grants for the development of the LRC - and nothing into the feasability of something like the TURBO. Transport Minister Don Jamieson has announced that his department would like to help in the development of a Canadian aircraft industry, in cooperation with De Havilland and the various developers of the STOL project. Yet railways carry a much higher percentage of goods moved to help the Gross National Product, and receive less of the gross when it is time to distribute financial assistance for development projects. The classic example is, as mentioned, the TURBO. A project like STOL, when workable, would be a highly exportable item. There are already variations of the TURBO in service in the United States, France, and West Germany. Britain is also developing a high speed passenger concept known as the Advanced Passenger Train design, which they too are anxious to export.

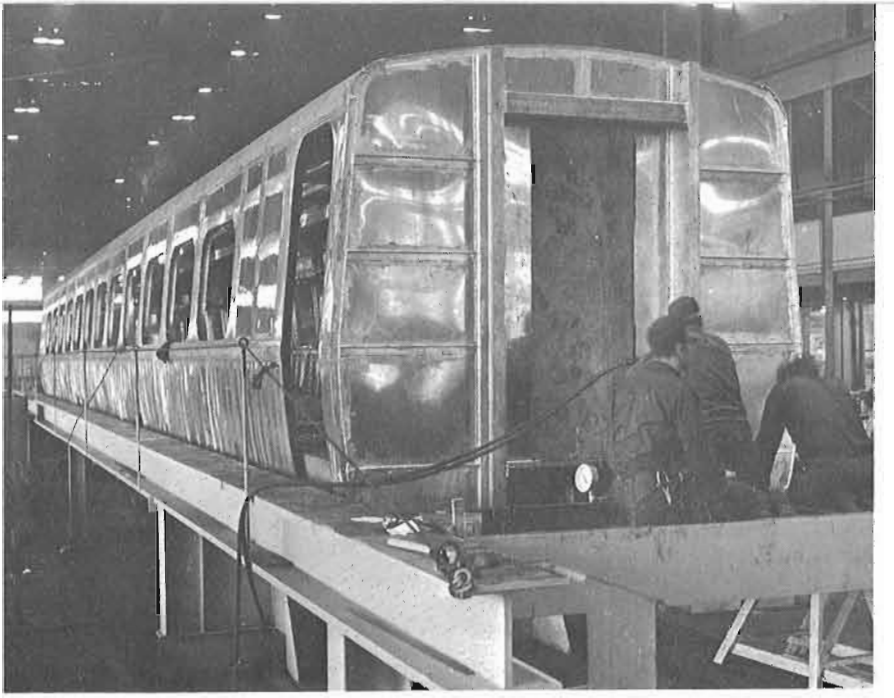
Even if the CN does decide to completely abandon the TURBO, and United Aircraft takes the concept back to the United States, there is still another experimental train on the drawing boards. It is the LRC - Light, Rapid, and Comfortable - being developed by a three company consortium. The federal government has given the consortium financial backing to conduct experiments and research into the complete development of the concept. M.L.W. Industries of Montreal is doing all the basic locomotive design and assembly; Aluminum Company of Canada (ALCAN) is concentrating on the structural design of the cars, and Dominion Foundry and Steel Company (DOFASCO) is building the suspension system.

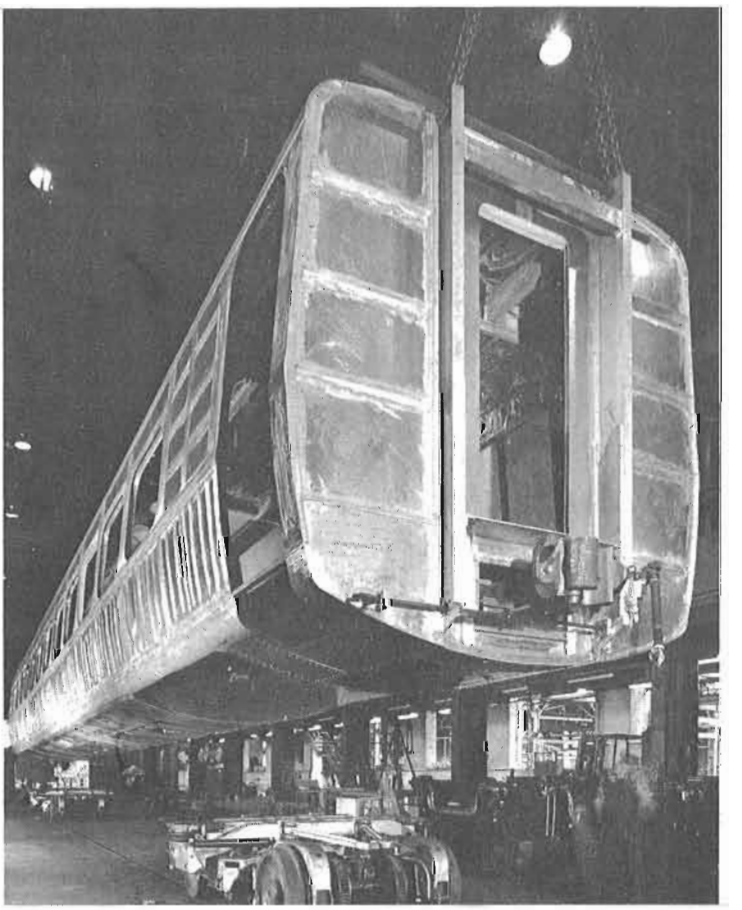
The LRC is a push-pull train concept, much like the TURBO- and will have diesel units at either end - just as the TURBO was equipped with turbines at both ends. The DOFASCO suspension system will permit high speeds on banked curves, so that the LRC could be easily operated on existing roadbeds. The LRC has one large advantage over the TURBO; cars can be added or subtracted within certain limitations, thus providing accomodation spaces for the railway directly proportional to the passenger traffic requirements.

But aside from the flexibility, TURBO has the edge. Each of the turbines used for propulsion weighs less than one pound per horsepower reduced; the regular diesel unit designated for use on the LRC averages 15 pounds for each horsepower produced. The weight will effect starting speeds, tractive effort, and acceleration at speed.

Canadian National has yet to announce plans to put the LRC into service, but the developing consortium has already conducted stress tests on the prototype car, and MLW Industries has said that the first diesel locomotive could be ready by the end of the year.

One thing to be considered in the development of high speed passenger service is the dangerous situations that develop at level crossings. Here, CN's TURBO is pictured at high speed during the first season of operation.
Photograph courtesy Canadian National Railways.





comparison

	TURBO Seven car sets in tandem	RAPIDO 13 car conventional consist
Number of diesel units	none	3
Number of gas turbines	8	none
Number of passenger cars	14	13
Average length of cars	(control) 73 feet (regular) 56 feet	85 feet
Number of passenger places	600	640
Weight when empty (including motive power)	700,000 lbs.	2,300,000 lbs.
Weight per passenger place	1,130 lbs.	3,600 lbs.
Total horsepower propulsion	3,200 hp.*	5,400 hp.
Potential top speed	120 mph	90 mph

* The TURBO's turbines weigh less than one pound per horsepower produced. A General Motors 16 cylinder 567 diesel-electric unit weighs 15 pounds for every horsepower produced for traction effort.

← The prototype L.R.C. car under construction at Montreal Locomotive Works. Both photographs courtesy Forster McGuire and Company Limited

TURBO is almost as good as dead and buried. It no longer has the faith of the crews that work on board, or in the maintenance division; and as a result of the record that shows the TURBO has been out of service more than it has been in, it has a poor reputation for dependability with the travelling public. The TURBO has the true distinction of having delayed almost every train listed on the schedule between Montreal and Toronto. But the very concept of turbine propulsion, combined with the overhung suspension system, is one answer to the search for a vehicle that could maintain high speeds on existing roadbeds.

It is also interesting to speculate on what the life of the TURBO could have been if the government had provided some research funds into the project. Perhaps the TURBO would still be in service, enjoying the tremendous recognition it received during the initial weeks of operation; perhaps a TURBO service could be expanded to such runs as Montreal - Ottawa, or Quebec - Montreal. A shorter TURBO, much like that used in the U.S. corridor at the present time, could possibly fit into the requirements for the Edmonton to Calgary service - or at least tighten rail service as public transportation between the two cities.

But the car still looms as the greatest competitor to the rail passenger service in the 715 mile Canadian corridor, and forecasts indicate that the dominance will continue for at least another twenty years. It is something that rail proponents will have to live with; for when the merits of the various forms of transportation are compared, the auto still provides the greatest flexibility, convenience, and low cost benefits.

That is also one of the basic observations listed in the Canadian Transport Commission's Intercity Passenger Transport Study, which surveys the needs in the corridor for the next 20 years; it should provide the groundwork for future transportation planning in the area that contains half of the entire population of Canada. Yet compared to the other three major intercity rail corridors in the world, the Windsor to Quebec City section has the lowest population.

The ratio of population per mile is less than one seventh that of the U.S. northeast corridor between Boston and Washington; 14,000 persons per linear mile in Canada, compared to 100,000 per linear mile in the U.S. The ratio of population per mile in the Japenese Osaka-Tokyo-corridor is 95,000; the ratio in the British northwest corridor (London to Leeds, Manchester or Liverpool) is also 100,000 per linear mile.

Canada's relatively low population accounts for the fact that there has not been the congestion and intercity travel restraints that other countries have had to face, to cope with rising traffic demands. But the fact that there are still problems with rush hour and holiday peak traffic indicates the need for more transportation planning.

If the dominant mode of intercity travel in the corridor is still the auto, it is even more the case on a national representative scale. The C.T.C. study indicates that the family car accounts for 85 per cent of annual travel, versus 11 per cent for the airlines, 13 per cent for railways, and 8 for bus.

In the U.S. corridor, auto travel accounts for some 68 per cent of annual totals, versus 11 per cent for airlines, 13 for the railways, and 8 per cent for the bus. Canadian figures for the corridor are the 50 per cent by auto; 31 per cent travel by air, 17 per cent travel by rail, and 2 per cent take the bus. Nationally, only three per cent go by rail, five per cent go by air, and seven per cent travel by bus.

The figures indicate that rail travel is still in a relatively competitive situation in the Canadian corridor, a fact that could be explained by the lower population ratio and the longer distances involved. Road trips can also prove to be a problem under Canadian winter conditions. The other interesting fact is that air travel is more prevelant in the Canadian corridor than it is in the U.S.; 31 per cent against 11 per cent.The railways need something like the TURBO that can compete with the airlines on a scheduled time basis to balance those figures for survival of the passenger service.

From the point of view of the railways, a number of economic racts dictate against a viable passenger service - at least they do to the research council for the Canadian Transport Commission that made up the intercity report.

Technical changes and increased income have helped to strengthen other forms of transportation. The federal government has, as previously mentioned, provided substancial financial assistance to auto and air services in the form of new terminals and expensive highway netwroks. It would be interesting to speculate on the differences that would show up in railway spending procedures if the government adopted the same policy towards railway stations that it has maintained for airports across the country. The Government of Canada covers a portion of the cost of construction, operation and maintenance of every major airport in the country. The airlines can concentrate on operation and the maintenance of equipment, and avoid the complicated procedure of operating terminals. Railways are required to contend with the operation and maintenance of equipment, shops, stations, and the overall service that they offer through freight and passenger operation. Perhaps an innovation sponsored by the government along the lines of passenger service revisions recently introduced by CP RAIL for the Brandon subdivision (and alredy in effect in several other areas throughout the system) - called Central Customer Service - might put rail passenger service on a level closer to par with the airlines. CP RAIL has also applied to institute the same service in the Montreal area, to eliminate the many jobs that are duplicated between Windsor Station and several other commuter stations along the lakeshore. Passengers would be required to contact Windsor Station for information or reservation services, such as the passengers travelling from the Brandon subdivision are required to contact the main office in Brandon.

Another major difference that does give the edge to flying is that railways are primarily organized to carry freight, for that is their basic source of income. Airlines were organized from the start to make money from passenger services; this does tend to make a difference in the style of operations.

A CN executive, Mr. R.M.Veenis, manger of the southwestern Ontario area, made that point in another article published by the Montreal Star. He said that railway critics often forget that early passenger trains were " a form of communication as much as they were a form of travel.".

"If we were building the country all over again, our first priority would probably not be a railway. It would more likely be a national communications link.".

Canadian Pacific's train to Quebec City leaves Windsor Station heading for Westmount. Photograph courtesy CP RAIL.

He gave the far north as an example of a place where transportation is important, but where communication services, such as telephones, comes first in the minds of the developers.

Projects such as STOL, strong government subsidies to the airline industry, and the marked bias towards the construction of highways have all but killed basic medium-distance intercity passenger traffic potential for the railways. Rather than investigating the possibilities of improving mass transportation between two points, provincial governments have oftened turned to the hasty construction of highways. The classic example of the reverse of that trend is GO Transit; but the classic example of the thinking the way of the autoroute is the Province of Quebec's decision to build more road connections to the site of the new jetport at Ste. Scholastique, rather than investigating the possibility of developing mass transportation systems with CN, who in turn have announced a reconstruction program to build tracks into the area. A railway link would at least solve most of the problems associated with ground transportation at every airport in every city. The train would have the advantage of a private right-of-way.

And almost in retaliation to this lean towards the construction of highways and federal grants to the airline industry, the railways have reverted to a "trial and see" process of introducing or reducing services on their intercity passenger trains. Canadian National is in the process of determining ways to maximize passenger services without dropping any essential components. One of the more controversial moves was the discontinuance of meal service on the Montreal to Ottawa run last spring. There was a reason for the move; the railway was in the preparation stages for the introduction of TURBO-style eat at your seat meal service, rather than the conventional dining car. The airline-type meal is not new to CN's conventional trains; it was also introduced in 1967 on the TEMPO trains that serve southern Ontario. The service came to the Ottawa operation as of June 1st, when three rebuilt dining cars were placed in service on the morning and evening trains. The cars are named after famous clubs across Canada (Club Richeleu, Club St.Denis, and University Club) and are offcially known as the club-galley cars.

For the passengers who choose not to pay the extra fare for the service, there are other types of dining facilities on the train. CN refers to this type of car as their café-bar-lounge, which includes the familiar 24 seat lounge, and another 20 seat area that is reserved for passengers who use the cafeteria service. The seats are not sold as accomodation to passengers as they have been in the past.

The three new club cars are part of a 24 car rebuilding program that was announced by the C.N.R. in the spring; it is part of the 8.5 million dollar passenger car improvement program to make train travel"more acceptable to the public". CN is also considering ways to make a trim in service on slack days, in an attempt to operate the train at a lower defecit.

CP RAIL has initiated a program of closer supervision of their equipment in an attempt to either reduce the defecit of passenger operation, or prove to the Canadian Transport Commission that the Atlantic Limited and the Canadian are indeed a money loosing proposition. A department has been established in Montreal to ensure that both trains are operating on an equipment to crew to passenger ratio that represents 80 per cent capacity.

And both companies have applied for permission to cancel trains in various districts across Canada that have proven to be uneconomical to continue. With CN, it involves a total of

fifteen passenger trains; two of these involve a total loss of 2.2 million dollars on services within the corridor (Ottawa-Toronto and Ottawa-Brockville). The other applications involve the following runs;

In Quebec;
- Quebec City - La Malbiaie - Clermont
- Quebec City - Lyster - Richmond
- Montreal - Sherbrooke - Coaticooke
- Deux Montagnes - Grenville

In Ontario;
- Ottawa - Brockville
- Ottawa - Toronto
- Hearst - Nakina
- Hornepayne - Manitouwadge
- Sioux Lookout - Thunder Bay

Manitoba routes;
- Dauphin - Winnipegeosis
- Flin Flon - Cranberry
- Portage - Osborne Lake
- The Pas - Lynn Lake

Saskatchewan;
- Regina - Saskatoon - Prince Albert
- Prince Albert - Hudson Bay

Alberta;
- Edmonton - North Battleford
- Camrose - Calgary

The majority of those services are extremely affected by one thing; the highway. The use of rail passenger transportation has dwindled in proportion to the rise in the use of the private car, or bus. Rail service has always been restricted to the use of standard equipment - be it conventional train or RDC, and cannot present the flexible and reasonably fast transportation that the car can. It is very difficult to evaluate services such as those listed above, where the railway provides a transportation link between two points that are not exactly major urban centres, and are restricted by the lower passenger traffic potential. The short "back woods" runs that filled the schedules until the early 1950's have been displaced from the railways by the rapid development of highways and other forms of private transportation.

But all the cancellations highlight the one thing that CN is trying to do with their passenger services everywhere; either make it attractive and reasonably quick to try and attract passengers to make the service pay its own way, or eliminate it - and concentrate on those that do have support from the travelling public.

And CP RAIL is right behind; they recently applied to the Transport Commission for permission to discontinue two passenger trains;

Toronto - Windsor
(after an annual loss of $600,000)

Calgary - Lethbridge - Medecine Hat
(after an annual loss of $340,000.)

The morning Montreal-Toronto local arrives at Gananoque Junction. Photograph courtesy Canadian National Railways.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But despite the problems with economic and passenger theory operations, the question of intercity rail transportation is still a vital one. It will be up to the railways, and unfortunately to their own financial backing, to find a way to keep railway travel attractive and efficient. There are various items under consideration for the immediate future - such as TURBO and the LRC - but there are also several companies investigating the possibilities of ground transportation for operation without existing tracks. One such idea is the French TACV, or tracked air cushion vehicle for possible use within traffic points such as the Canadian and U.S. corridor.

But both the National Research Council for the Government of Canada and the Canadian Transport Commission have conducted research into the feasible use of such a system under Canadian weather conditions; the C.T.C. report, The Intercity Transportation Passenger Study, will be released by Information Canada later this year. One major conclusion of the report is that it would definately not be economical to upgrade or rebuild existing conventional track systems. The suggestion is to get "leverage" out of better designed vehicles through advanced suspension systems.

But it is also interesting to compare the various cost estimates for the construction of the three basic proposed forms of ground transportation for use in Canada. Developers estimate that it would cost a minimum of 55 million dollars to develop a TACV system between Montreal and Toronto. Transport Minister Don Jamieson has estimated that the construction costs for the STOL concept between Montreal and Ottawa would be 15 million dollars, although did not mention if that price included the development of a short take off aircraft. Complete development of the existing railway facilities for use with a TURBO concept between Montreal and Ottawa has been set at 7 million.

And those estimates say it all.

They also say why the railways need TURBO.

That concept answered every requirement for the immediate and future improvement for intercity rail transportation.

With the use of regular diesel propulsion and basic standard passenger car facilities, the LRC now seems to be almost a step backwards from the TURBO - but it is certainly a step forward from the rigid conventional passenger train. And the developing companies are correct when they say that the LRC will not present as many problems as the TURBO did when first introduced, because it is not such a radical or swift advancement from the conventional train.

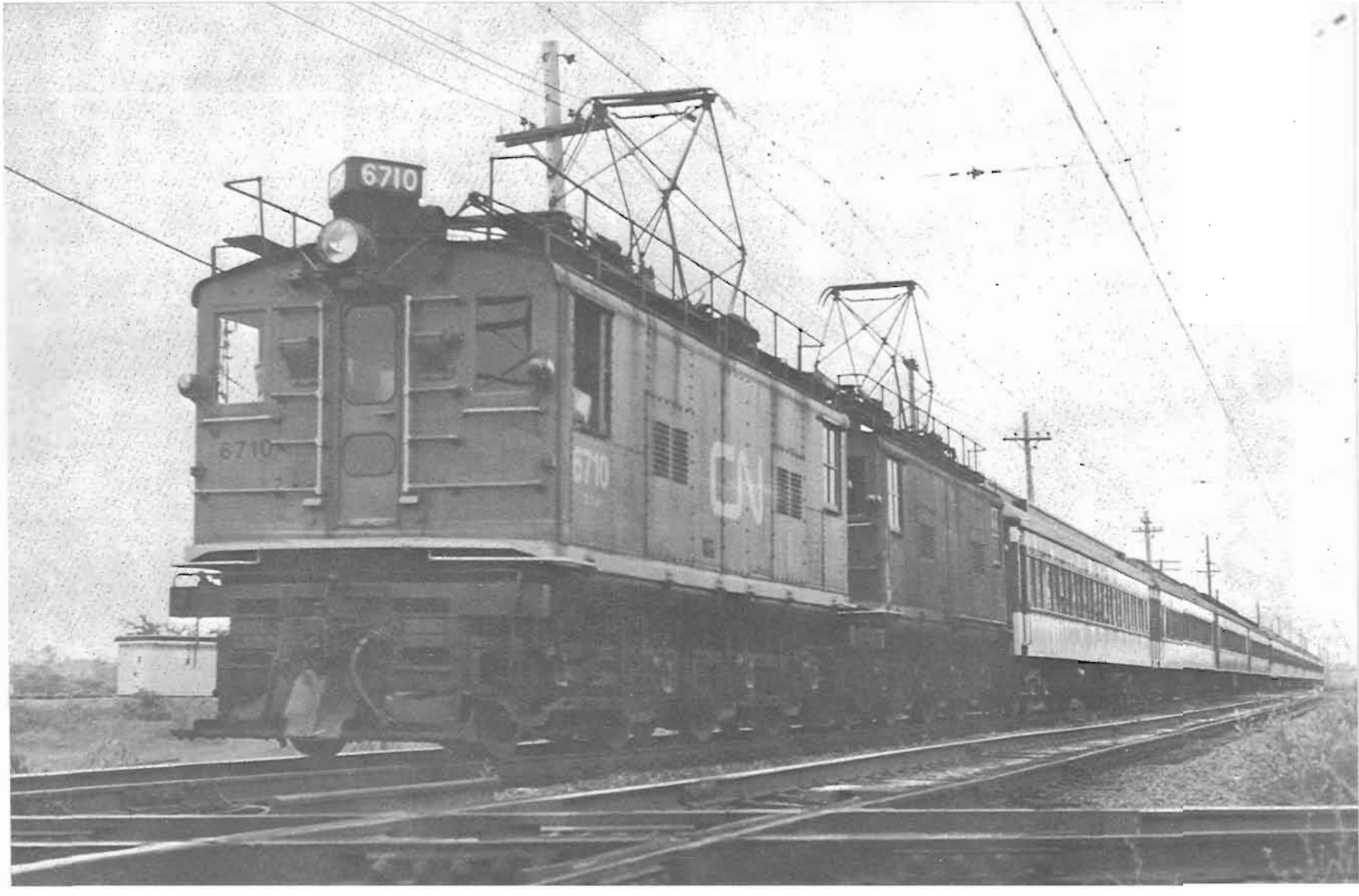
But for either the LRC or the TURBO to win any ground in the intercity transportation competition, they must have more backing - financially and otherwise - than they do now.

Thanks to the Montreal Star, the Montreal Gazette, the Toronto Globe and Mail, Information Canada, The Ottawa Citizen, and La Presse (Montreal) for information used in this article.

Special thanks to Ken DeJean for providing information and suggestions used in the assembly of this article.

PHOTO MEMOIRS

Cornwall Street Railway steeplecab locomotive number 12 switches tank cars at the C.I.L. plant in the west end of Cornwall. Canadian National Railways has purchased the holdings of the Cornwall Street Railway, and plans to eliminate the electric operation as soon as possible. Photograph by John Doyle.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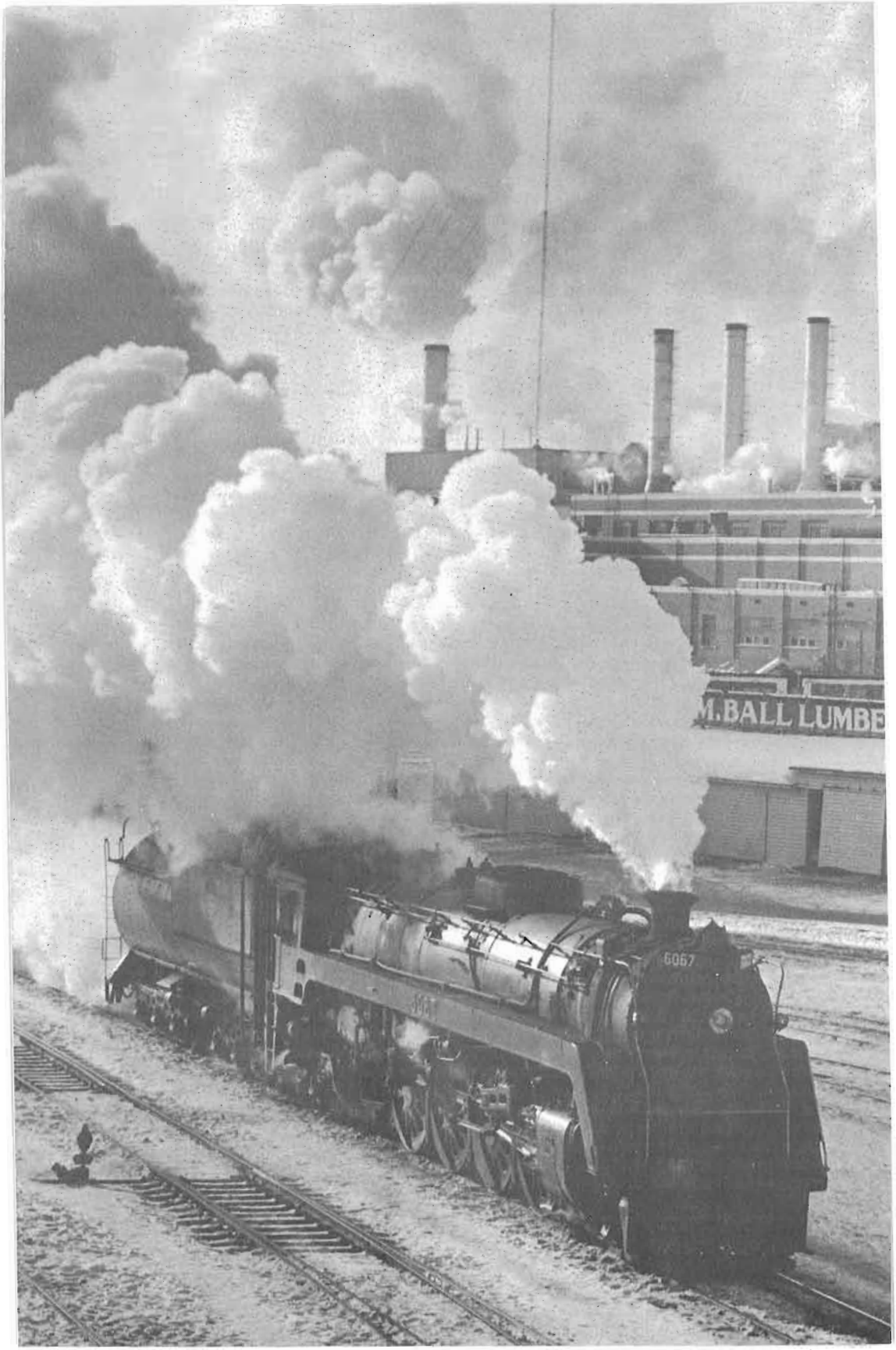
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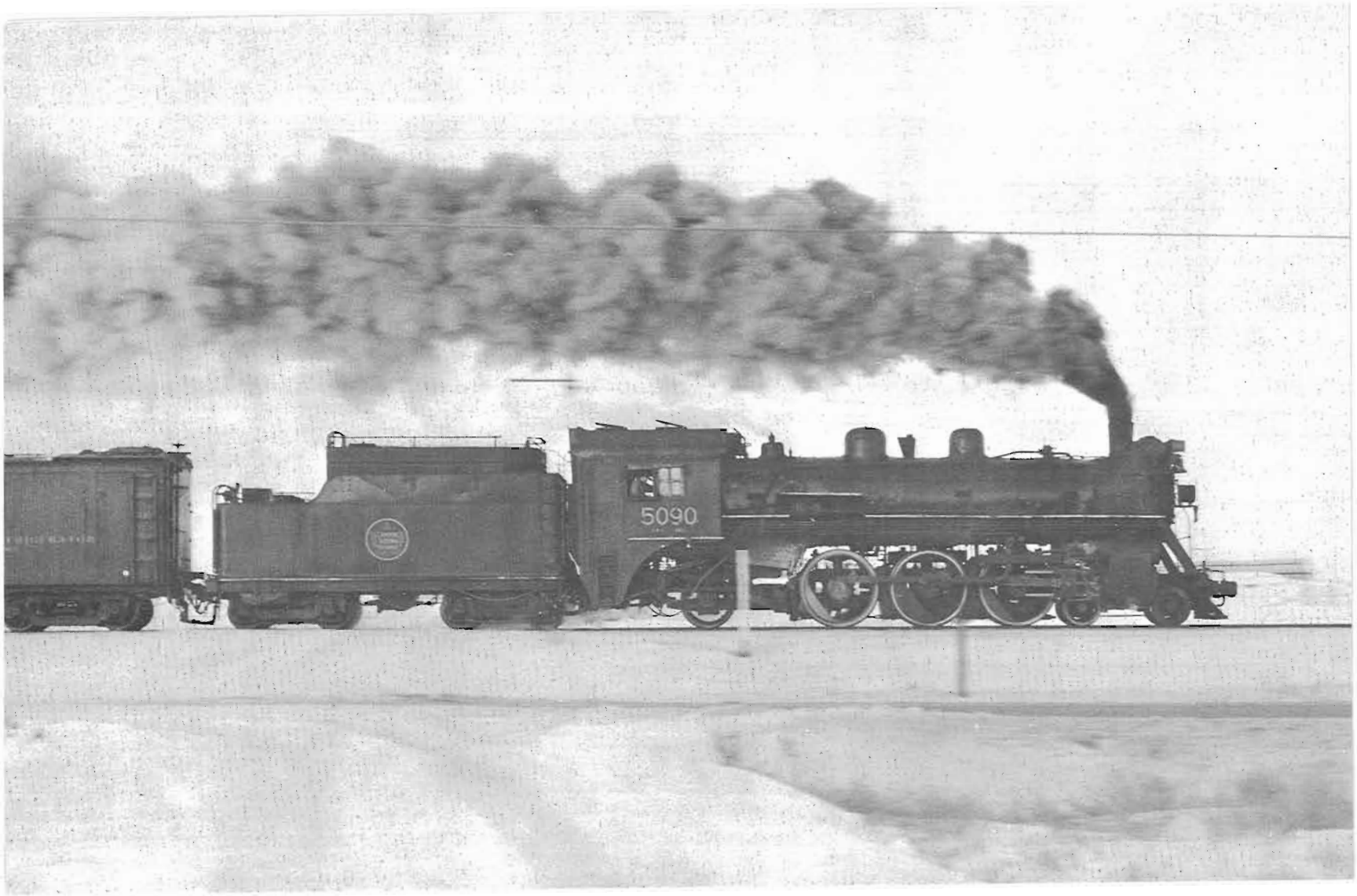
Page 234: One of the afternoon commuter trains from Montreal to Deux Montagnes heads across the diamond at EJ Tower. Photo courtesy Ken DeJean.

Page 235: CN Mountain number 6067 backs into Saskatoon station in the winter of 1959 to take train number 9 on to Edmonton. Photograph courtesy J. Nash

Canadian Pacific "C" liner heads a trio of GM Geeps on Big Hill, near Field, British Columbia. Photograph courtesy CP RAIL.

CN No. 5090 with Train 31 at North Saskatoon, Sask. in February of 1960. Photo courtesy J. Nash.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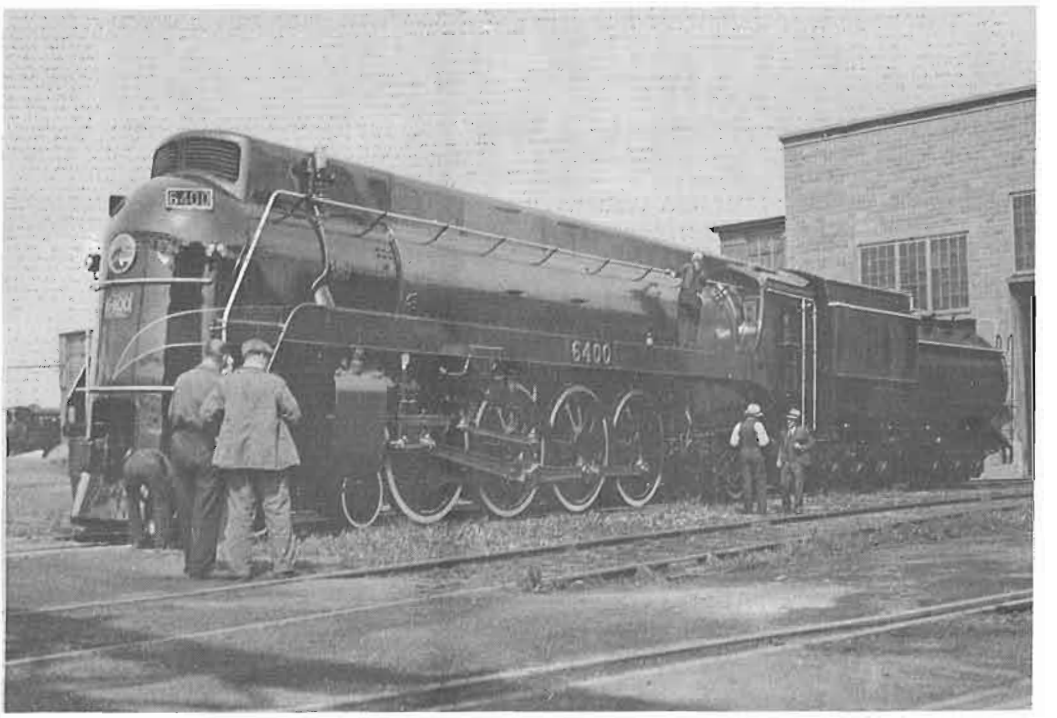
The second to last weekend of 6218: here the engine pulls an excursion to Ottawa on June 26th, 1971.One week later, the engine was officially retired with ceremonies at Belville, Ontario.
Photograph courtesy Sylvia Garnis.

The Delaware and Hudson's day train to New York passes through St. Constant, Quebec en route from Montreal. Photograph by Ken DeJean.

Engineers from Montreal Locomotive Works make the final inspection of CN 6400 prior to delivery in 1936. Photograph courtesy Wm.M. Townsend.



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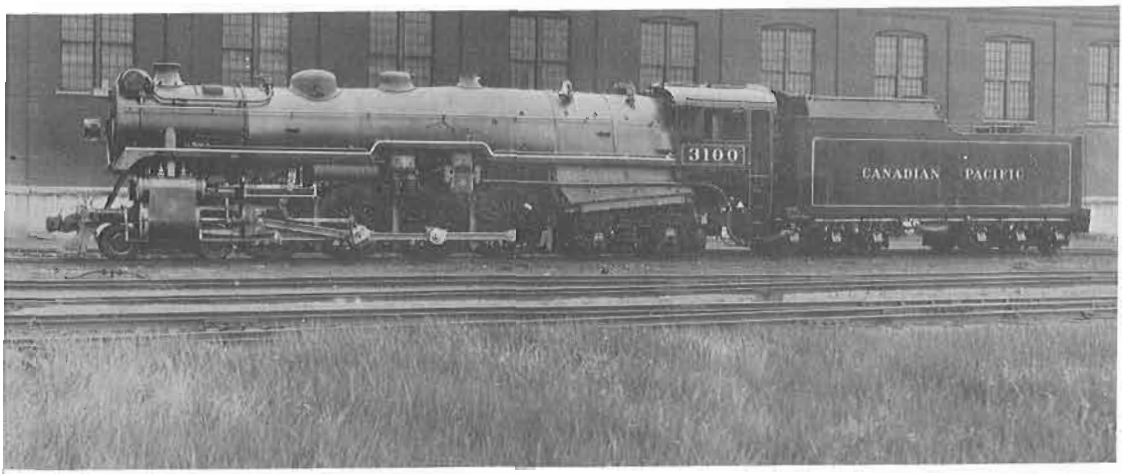

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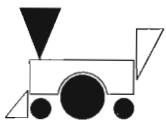

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