## Canada's Railway Magazine since 1945



# AUGUST 1996





### AUGUST 1996

NUMBER 557

PUBLISHED BY Upper Canada Railway Society P.O. Box 122, Station A Toronto, Ontario M5W 1A2

ISSN 1193-7971

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### UCRS excursion to Muskoka

Saturday, October 19, and Sunday, October 20 Our second UCRS excursion of the year will be from Toronto to Parry Sound, to explore the railways of that area during the photogenic season of fall colours.

We will leave from Toronto on VIA Train No. 1, the Canadian, at 12:45 on Saturday, iust after noon, and travel north over the train's new route via the Bala Subdivision on the east side of Lake Simcoe. We will arrive in Parry Sound later that afternoon, and spend the rest of the day and most of the next day touring the area by van. CN's Bala Subdivision and CP's Parry Sound Subdivision pass through town, both busy parts of the main transcontinental lines. For the rusty railfans, both railways' stations are still standing, and much evidence remains of the Ottawa, Amprior and Parry Sound line to Depot Harbour, near Parry Sound. We'll return to the CN station on Sunday afternoon in time to catch the southbound Canadian, VIA Train 2, back to Toronto, to arrive by 9:00 p.m.

We will handle the arrangements for reservations (including all discounts) on the trains and at the bed-and-breakfast in Parry Sound. When you reserve a place on the trip, we will give you information on how to pick up and pay for your train ticket. We will also divide the cost of the rental van equally between all of the people travelling on the trip, so the more of us there are, the cheaper it will be.

Please reserve your space with us by early October. The approximate price for travel and accommodations will be \$115 per person, assuming discounted adult fares on the train and double occupancy at the B&B.

Research and Reviews
RAILWAY ARCHAEOLOGY
BOOKS
STATIONS

Space is limited, so let us know soon.

To make a reservation or for more information about the trip, please contact Paul Bloxham by telephone at 905 770-6916 or by e-mail at pbloxham@cenvmc.cencol.on.ca.

#### Readers' exchange

For sale – Magazines from an estate. Broken sets of Railroad, Trains, Railroad Model Craftsman, Model Railroader, and Buses Illustrated (U.K.). To be picked-up in Richmond Hill. Send stamped, self-addressed envelope to Ray Corley, 41 Lynndale Road, Scarborough, Ontario M1N 1B9. For a list of other books, timetables, and brochures for sale, enclose \$2.00.

*Television programme* – Jim Frost reports that television series about railways, entitled "Ribbons of Steel," starts on Friday, September 27, on the Life Network.

### **UCRS** meetings

The next meeting in Toronto will be at 7:30 p.m. on Friday, October 18, on the third floor at Metro Hall, on King Street at John Street, just west of St. Andrew subway station and a short walk from Union Station. Please bring your slides and videos for a mixed evening's entertainment.

, The following meeting, also at Metro Hall, will be on Friday, November 15. Paul Bloxham will be presenting a selection of his photographs of contemporary railway operations in southern Ontario.

The Hamilton meetings will be at 8:00 p.m. on Friday, October 25, and Friday, November 22, both at the Hamilton Spectator auditorium, 44 Frid Street, just off Main Street at Highway 403. The meetings will feature recent news and members' current and historical slides.

### Transcontinental

THE RAPIDO
THE PANORAMA
IN TRANSIT
THE TRAIN SPOTTERS

#### **Cover** photos

The photo on the front cover, from the Paterson-George collection, is of new CNR H16-44s 1849 and 1844 leading Train 467 at Lorne Park, Ontario, on May 14, 1955. The 18 H16s, built by the Canadian Locomotive Company in Kingston that year, were later renumbered into the 2200-series, and were retired in 1967, when they were only 12 years old.

The top photo on the rear cover is of the first CP locomotive to be painted for the St. Lawrence and Hudson Railway, SD40-2 5654. In this photo by Michel Belhumeur, No. 5654 is on display at the Canadian Railway Museum at Saint-Constant, Québec, on June 6, 1996, "Diesel Day" at the museum, the day after the relettered unit was completed.

George Matheson writes that on display at the museum that weekend in addition to StL&H 5654 were: CN 70-ton 30 (in operation), Roberval and Saguenay RS2 20, CNR 77 (CN's first diesel-electric switcher), CN narrow-gauge G8 805, Port of Montréal S3 1002, CN RS18 3684, CP M630 4563 (idling), CPR No. 7000 (CP's first dieselelectric), CPR S2 7077 (the first diesel built by MLW), CPR H24-66 "Train Master" 8905 (the last H24-66 in existence of the 127 that were built), CN F3A 9171, CNR FA1 9400, and CNR self-propelled car 15824.

Also shown on the back cover is "Classic" 8401 of the Corporation intermunicipale de transport des Forges, in downtown Trois-Rivières, Québec. This photo is by David Onodera.

This issue completed on September 17, 1996

### Editor

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

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

### Subscriptions

Subscriptions to *Rail and Transit* are available with membership in the Upper Canada Railway Society. Membership dues are \$29.00 per year for addresses in Canada; \$35.00 (or \$27.00 in U.S. funds) for addresses in the U.S. and overseas. Please send inquiries and changes of address to the address at the top of this page.

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# **Edmonton Transit goes shopping**

### **By Rick Paul**

Rick Paul is general supervisor engineering for Edmonton Transit. This article is reprinted from Transit News, the employee magazine of Edmonton Transit.

The Plant and Equipment section of Edmonton Transit went shopping in May. We're anticipating budget approval to go ahead with plans to buy buses over the next few years. To check out the market, we invited the "big" three Canadian bus manufacturers to show off their latest models.

Edmonton Transit is committed to providing service to the largest possible segment of the community, and as a result, our shopping trip focused on low-floor model buses.

Since we have a lot of experience with New Flyer Industries, we opted for a visit from Rick Zembiski, general sales manager with NFI in Winnipeg. Rick updated us with the latest improvements to the NFI 40-foot low-floor buses currently being manufactured. Among the improvements are better corrosion protection processes, newer, cleaner-burning engines from Detroit Diesel and Cummins, improved heating and ventilating systems, and more-accessible electrical panels for easier fault diagnosis.

One of the most significant technical innovations in the transit bus industry is the use of multiplexing in the electrical system. This technology will reduce the weight of the vehicle by using less wire for electrical circuits, and will provide a very accurate means of diagnosis and adjustments of various electrical systems.

The next manufacturer on our list was Orion Bus Industries. OBI has recently been purchased by Western Star Trucks of Kelowna. They are currently producing conventional 40-foot high-floor and Orion II low-floor medium-duty models in their plant near Toronto. OBI has produced a prototype 40-foot flow-floor bus, and is planning production of these models for several Ontario transit properties for delivery in 1996. Bob Bevis, sales manager for OBI, brought the Orion VI low-floor bus to Edmonton on May 15 for a demonstration.

One of the most obvious features of the Orion VI is the seating layout and door configuration. This bus had three doors: front, centre, and rear, with the rear door located behind the rear axle, giving it a very European look. Seating is limited; with the three door arrangement, there are only 28 seats. Bob assured us that Orion is able to produce two-door configurations which would approach our seating specification requirements.

The Orion VI offers the new Detroit Diesel Series 50 engine or Cummins L10 as engine options. The bus features a unique (for transit buses) independent front suspension which allows a wider front-door access for wheelchair entrance and exit. The Orion VI offers electrical-circuit multiplexing as well.

Nova Bus's 40-foot low-floor demonstrator was the next vehicle to visit Davies Shop. Nova Bus is located in Saint-Eustache, Québec, and produces the 40-foot highfloor "Classic" coach, formerly manufactured by General Motors. Nova Bus is partly owned by Bombardier, Inc.

The Nova Bus low-floor model is easily identified by the large one-piece windshield and the centre-door location of the wheelchair ramp. The ramp telescopes from under the bus floor, rather than "flip down" as the NFI and OBI models. A ramp is also available at the front door, if specified. This bus also offers the multiplexing feature four in the other models, and Cummins 8.3 or Detroit Diesel Series 40 engine options. We were fortunate to be able to put this bus into revenue service, and received favourable comments from the operator.

On May 30, Champion Motor Coach Inc. presented their medium-duty SOLO 30-foot bus for a brief viewing. The SOLO bus has a seating capacity of 24, which fits the criteria for paratransit service. The bus is equipped with a full air-brake system, and is available in one- and two-door configurations. It also has a wheelchair ramp at the front door. We're considering this type of vehicle for the demanding South Park route.

Members of the Edmonton Transit management team, Amalgamated Transit Union local 569, the bus specification committee, representatives from the disabled community, as well as selected maintenance staff were invited to "kick the tires" of the buses. A road test was also included in the demonstration. Everyone was encouraged to provide their comments, which will be compiled and used to assist in the refinement of our new bus tender document.



# Edmonton Transit customer information on **Low-floor buses**

Low-floor bus service is provided on a limited number of routes. Low-floor buses do not have stairs inside the front and rear doors. They are equipped with a wheelchair ramp and a kneeling feature that permits easier access for persons who have difficulty climbing steps or who may use a wheelchair or power scooter.

Space is available on each low-floor bus for two wheelchairs on a first-come, first-served basis. Passengers with disabilities who use low-floor bus service are expected to do so without assistance from the transit operator. Wheelchairs tie-downs are available and should be used. Because of vehicle design constraints, wheelchairs or scooters that are wider than 28 inches or longer than 48 inches cannot fit onto low floor-buses.



# Canadian National Railways Locomotive Roster July 31, 1996



Photo by Paul Bloxham of CN 9577 and 5112 at Belleville, Ontario.

			-1 NO. 1	Canadian Lines Or	ıly			MAX.	CNR RATED CONT.	NOM.	TOTAL	
CNR CLASS	BUILDER	& MODEL	OF UNITS	ROAD NUMBERS	YEAR BUILT	YEAR MODIFIED	H.P.	SPEED (mph)	TRACT. EFFORT	FUEL CAPY.	(Note D)	RESTR'N GROUP
ROAD FR	EIGHT UN	ITS	897						1000	1.0.	(NOLE D)	
MF-32a	MLW/B	HR-616	18	2100,2102-2104,2106-2119	1982		3000	65(1)	74	3350	390	G
MF-36a	MLW	M-636	1	2313	1970		3000	75	74	3400	388	н
MF-36b	MLW	M-636 SUB-TOTAL	2	2323,2338	1971		3000	75	74	3400	388	н
EF-640a	GE	Dash 8-40CM	30	2400-2429	1990		4000	65(4)	94	3830	390	G
EF-640b	GE	Dash 8-40CM	25	2430-2454	1992		4000	65(4)	94	3830	390	G
EF-644a	GE	Dash 9-44CW SUB-TOTAL	23 78	2500-2522	1994		4400	65(4)	94	3800	385	G
GF-620a	GMD	SD-38-2	4	1650-1653	1976		2000	65	71	2660	373	F
GF-30c	GMD	SD-40	7	5000,5001,5003-5007	1967		3000	65	85	3340	389	G
GF-30d	GMD	SD-40	50	5008,5010,5012,5013,5015-5017,5019-5025,5027,5028 5030-5032,5035,5036,5038,5040,5041,5044,5046	1967-8		3000	65	85	3340	388	G
GF-30e	GMD	SD-40	35	5048-5057,5060,5061,5063-5072,5074,5075 5077,5078,5080-5083,5085-5091,5093-5098,5100-5102 5105,5106,5108-5110,5112,5115-5117,5120-5122,5125	1969		3000	65	85 .	3340	389	G
GF-30h	GMD	SD-40	39	5105,5106,5108-5110,5112,5115-5117,5120-5122,5125 5126-5129,5131-5133,5135,5137-5139,5141-5150,5153-5158, 5160-5162,5164,5165,5167-5171,5173,5175	1969-71		3000	65	85	3340	389	G
GF-30k	GMD	SD-40	48	5176-5183,5185-5207,5209-5225	1971		3000	65	85	3340	389	G
GF-30m	GMD	SD-40	13	5227-5233,5235-5240	1971		3000	65	85	3340	388	G
		SUB-TOTAL	192									
F-30n	GMD	SD-40-2	20	5241-5252,5254-5261	1975		3000	65	85	3340	385	G
SF-30p	GMD	SD-40-2	16	5262-5277	1975		3000	65	85	3340	385	G
F-30q	GMD	SD-40-2	15	5279-5293	1976 -		3000	65	85	3340	387	G
SF-30r	GMD	SD-40-2	19	5294-5299,5301-5313	1978		3000	65	85	3340	384	G
GF-30s	GMD	SD-40-2	10	5314-5323	1979		3000	65	85	3340	384	G
GF-30t	GMD	SD-40-2	30	5324-5352	1980		3000	65	85	3340	387	G
SF-30u	GMD	SD-40-2	10	5354-5363	1980	-	3000	65	85	3340	387	G
GF-30v	GMD	SD-40-2	18	5364-5381	1973	(E)	3000 3000	65 65	85 85	3340 3340	390 390	G G
3F-30w 3F-30x	GMD GMD	SD-40-2 SD-40-2	6 5	5382-5387 5388-5392	1973 1978	(E)	3000	65	85	3340	390	G
3F-3UX	GMD	SUB-TOTAL	149	5388-5392	1970		3000	05	65	3340	390	9
GF-636a	GMD	SD-50F	40	5400-5439	1985-6		3600	65(2)	94	3500	390	G
GF-636b	GMD	SD-50F	20	5440-5459	1987		3600	65(2)	94	3500	390	G
GF-638a	GMD	SD-50AF	4	5500-5503	1986		3800	65(2)	94	3500	395	G
GF-638b	GMD	SD-60F	59	5504-5513,5515-5563	1989		3800	65(2)	94	3500	387	G
GF-640a	GMD	SD701	26	5600-5625	1995		4000	70	94	3550	390	G
GF-643a	GMD	SD75I SUB-TOTAL	24. 173	5626-5647	1996		4300	70	95	3950	396	G
GF-630a	GM/CN	SD-40-Q	10	6000-6009	1992/93 R	м	3000	65	85	3340	390	G
	GM/CN	SD-40-Q	10	6010-6019	1995 RM		3000	65	85	3340	390	G
SF-630c	GM/CN	SD-40-Q	9	6020-6028	1995 RM		3000	65	85	3340	390	G
		SUB-TOTAL	29									
GF-430a	GMD	GP-40-2L		9400-9404,9408-9410,9412,9415,9416,9418-9420,	1974		3000	65	57	3000	263	E1
				9422-9425,9427,9429-9432,9434,9436-9450 9452-9473,9475,9477-9486,9489,9490								
	GMD	GP-40-2L		9405-9407,9411,9413,9414,9417,9421,9426,9428,9433	1974		3000	76	49	3000	263	E1
	GMD GMD	GP-40-2L GP-40-2L		9492,9493,9495,9496,9498-9501,9503-9515,9518-9520,9522-9530 9531,9533,9534,9536,9538-9545,9547-9558,9560-9562,9564-9572			3000 3000	65 65	57 57	3000 3000	263 263	E1 E1
F-430d	GMD	GP-40-2	32	9574-9587,9589-9593,9595,9597-9610,9612-9632 9633-9639,9641-9647,9649-9653,9655-9667	1977		3000	65	57	2300	260	E1
GF-430d GF-430e	GMD	GP-40-2 GP-40-2	32	9668-9670	1974	(G)	3000	76	49	2660	258	E1
	GMD	GP-40-2	3	9671-9673	1974	(G)	3000	76	49	2660	258	E1
SF-430f										2660		

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SWITCHE	ER UNITS		230									
onnone			2.50									
MHL-410a	a MLW/CN	DL-411RB	3	106,108,110	1982-5 RB	1000	40(3)	49	1050	258	E2	
MHT-410a	a MLW/CN	DL-411RB	1	117	1984 RB	1000	40(3)	49	1050	258	E2	
		SUB-TOTAL	4									
	CHICH	00.001		7000 7040								
GS-418a		GP-9RM	14	7000-7013	1985 RM	1800	65	49	1700	257	E1	
GS-418b	GM/CN	GP-9RM	30	7014-7043	1991 RM	1800	65	47	1700	248	D1	
GS-418c	GM/CN	GP-9RM	35	7044-7078	1992 RM	1800	65	47	1700	248	D1	
GS-418d	GM/CN	GP-9RM	5	7079-7083	1993 RM	1800	-65	47	1700	248	D1	
		SUB-TOTAL	84	•								
GS-413a	GM/CN	SW-1200RM	2	7100,7101	1986 RM	1350	65	45	775	046	D2	
GS-413b	GM/CN	SW-1200RM	⊷ 6	7102-7107	1987 RM	1350	65	45	775	246		
+		SUB-TOTAL	8		1901 1/14	1330	05	45	115	246	D2	
		000-10174										
GY-418a	GM/CN	GP-9RM	14	7200-7213	1985-6 RM	1800	65	49	1700	257	E1	
GY-418b	GM/CN	GP-9RM	18	7214-7231	1986 RM	1800	65	49	1700	257	E1	
GY-418c	GM/CN	GP-9RM	8	7232,7233,7235-7240	1987 RM	1800	65	47	1700	248	D1	
GY-418d	GM/CN	GP-9RM	8	7241-7248	1988 RM	1800	65	47	1700	248	D1	
GY-418e	GM/CN	GP-9RM	22	7249-7270	1990 RM	1800	65	47	1700	248	D1	
GY-418f	GM/CN	GP-9RM	10	7271-7280	1993 RM	1800	65	47	1700	248	D1	
		SUB-TOTAL	80						1100	210	2.	
				· · · · · · · · · · · · · · · · ·								
GS-412a	GM/CN	SW-1200RB	17	7300-7314,7316,7317	1987 RB	1200	65	47	775	246	D2	
GH-20b	GMD	GP-38-2	27	7500.7518 7500 7500 7504 7506 7508 7500 7500	4070 4077 05/5							
	00	01-00-2	<u></u>	7500-7518,7520-7522,7524,7526,7528,7530,7532	1973 1977-85(F)	2000	65	47	2160	257	E1	
MS-410a	MLW/CN	DL-411RB	5	8700,8701,8703-8705	1984 RB	1000	45(3)	49	1050	258	E2	
MS-410b	MLW/CN	DL-411RB	5	8706-8709,8711	1985 RB	1000	45(3)	49	1050	258	E2	
		SUB-TOTAL	10	•				15	, 350	2.00	<b>م</b> بيد	
BOOSTE	r units		108									
	au			101.100	1001 5			_	-		•	
MH-00a	CN-PSC	MS-7 Bstr.	2	164,168	1964-5	-	40(3)	36	0	259	E2	
	CNE	VDU AN	•	200 207			e 5	10	•	000		
GY-00b	GMD	YBU-4M	8	200-207	1980 1985-86(A)	-	65 65	49	0	258	E2	
GY-00c	GM/CN	YBU	4	211-214	1986 RM	-	65	49	0	258	E1	1
GY-00d	GM/CN	YBU	18	215-232	1986 RM	-	65	49	0	257	E1	
GY-00e	GM/CN	YBU	9	233-241	1987 RM	-	65	47	0	248	D1	
GY-00f	GM/CN	YBU	22	242-263	1990 RM		65	47	0	248	D1	
GY-00m	CN-PSC	MS-7 Bstr.	7	264-270	1964-6 1990-91(C)		65	40	0	254	E2	
GY-00g	GM/CN	YBU	11	271-281	1993 RM	-	65	47	0	248	D1	
		SUB-TOTAL	79									
OU 00-	0115			500 540	1070				•			
GH-00a	GMD	HBU-4	19	500-518	1978	-	65	57	0	258	E2	
GH-00b	GMD	HBU-4	4	519-522	1980	-	65	57	0	258	E2	
GH-00c	GMD	HBU-4Mod.	4	523-526	1980 1986(B)	•	65	57	0	258	E2	
		SUB-TOTAL	27									
IDO AD CH												
ROAD SW	VITCHER		. 381				3					
<b></b>		GMD-1		1101 1105 1106 1113 1115 1116 1120 1123 1124 1127	1958	1200	ਾ 65	40	2000	248	01	
GR-12m	GMD	GMD-1	10	1101,1105,1106,1113,1115,1116,1120,1123,1124,1127	1958	1200	65 65	40	2000	248	D1	
GR-12m GR-12s	GMD GMD	GMD-1	10 3	1129,1130,1133	1959	1200	65	40	2000	248	D1	
GR-12m GR-12s GR-12t	GMD GMD GMD	GMD-1 GMD-1	10 3 8	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149	1959 1959	1200 1200	65 65	40 40	2000 2000	248 248	D1 D1	
GR-12m GR-12s GR-12t GR-12w	GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1	10 3 8 11	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167	1959 1959 1959	1200 1200 1200	65 65 65	40 40 40	2000 2000 2000	248 248 248	D1 D1 D1	
GR-12m GR-12s GR-12t GR-12w GR-12z	GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1	10 3 8 11 5	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177	1959 1959 1959 1960	1200 1200 1200 1200	65 65 65 65	40 40 40 40	2000 2000 2000 2000	248 248 248 248	D1 D1 D1 D1	
GR-12m GR-12s GR-12t GR-12w	GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1	10 3 8 11 5 5	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167	1959 1959 1959	1200 1200 1200	65 65 65	40 40 40	2000 2000 2000	248 248 248	D1 D1 D1	
GR-12m GR-12s GR-12t GR-12w GR-12z	GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1	10 3 8 11 5	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177	1959 1959 1959 1960	1200 1200 1200 1200	65 65 65 65	40 40 40 40	2000 2000 2000 2000	248 248 248 248	D1 D1 D1 D1	
GR-12m GR-12s GR-12t GR-12w GR-12z GR-12zc	GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL	10 3 8 11 5 5 42	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182	1959 1959 1959 1960 1959	1200 1200 1200 1200 1200	65 65 65 65 65	40 40 40 40 40	2000 2000 2000 2000 2000	248 248 248 248 248 248	D1 D1 D1 D1 D1	
GR-12m GR-12s GR-12t GR-12w GR-12z	GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1	10 3 8 11 5 5	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353,	1959 1959 1959 1960	1200 1200 1200 1200	65 65 65 65	40 40 40 40	2000 2000 2000 2000	248 248 248 248	D1 D1 D1 D1	
GR-12m GR-12s GR-12t GR-12w GR-12z GR-12zc GR-12u	GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL SW-1200RS	10 3 8 11 5 5 42 14	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357	1959 1959 1959 1960 1959 1959	1200 1200 1200 1200 1200	65 65 65 65 65	40 40 40 40 40	2000 2000 2000 2000 2000 2000	248 248 248 248 248 248 248	D1 D1 D1 D1 D1 B	
GR-12m GR-12s GR-12t GR-12w GR-12z GR-12zc	GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL	10 3 8 11 5 5 42	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377,	1959 1959 1959 1960 1959	1200 1200 1200 1200 1200	65 65 65 65 65	40 40 40 40 40	2000 2000 2000 2000 2000	248 248 248 248 248 248	D1 D1 D1 D1 D1	
GR-12m GR-12s GR-12t GR-12w GR-12z GR-12zc GR-12u	GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL SW-1200RS SW-1200RS	10 3 8 11 5 5 42 14 25	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357	1959 1959 1959 1960 1959 1959	1200 1200 1200 1200 1200	65 65 65 65 65	40 40 40 40 40	2000 2000 2000 2000 2000 2000	248 248 248 248 248 248 223 222	D1 D1 D1 D1 D1 B	
GR-12m GR-12s GR-12t GR-12w GR-12z GR-12zc GR-12u	GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL SW-1200RS	10 3 8 11 5 5 42 14	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377,	1959 1959 1959 1960 1959 1959	1200 1200 1200 1200 1200	65 65 65 65 65	40 40 40 40 40	2000 2000 2000 2000 2000 2000	248 248 248 248 248 248 248	D1 D1 D1 D1 D1 B	
GR-12m GR-12s GR-12l GR-12u GR-12z GR-12z GR-12u GR-12y	GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SW-1200RS SW-1200RS SW-1200RS	10 3 8 11 5 5 42 14 25 40	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396	1959 1959 1950 1960 1959 1959	1200 1200 1200 1200 1200 1200	65 65 65 65 65 65	40 40 40 40 40 40 40	2000 2000 2000 2000 2000 2000 775 775	248 248 248 248 248 248 223 222	D1 D1 D1 D1 D1 B B	
GR-12m GR-12s GR-12t GR-12w GR-12z GR-12zc GR-12u	GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL SW-1200RS SW-1200RS	10 3 8 11 5 5 42 14 25	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377,	1959 1959 1959 1960 1959 1959	1200 1200 1200 1200 1200	65 65 65 65 65	40 40 40 40 40	2000 2000 2000 2000 2000 2000	248 248 248 248 248 248 223 222	D1 D1 D1 D1 D1 B	
GR-12m GR-12s GR-12l GR-12u GR-12z GR-12z GR-12u GR-12y	GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SW-1200RS SW-1200RS SW-1200RS	10 3 8 11 5 5 42 14 25 40	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396	1959 1959 1950 1960 1959 1959	1200 1200 1200 1200 1200 1200	65 65 65 65 65 65	40 40 40 40 40 40 40	2000 2000 2000 2000 2000 2000 775 775	248 248 248 248 248 248 223 222	D1 D1 D1 D1 D1 B B	
GR-12m GR-12s GR-12t GR-12w GR-12z GR-12z GR-12z GR-12y GR-12y	GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL SW-1200RS SW-1200RS SW-1200RS SUB-TOTAL GMD-1B	10 3 8 11 5 5 42 14 26 40 24	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423	1959 1959 1959 1960 1959 1959 1960	1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65	40 40 40 40 40 40 40 40	2000 2000 2000 2000 2000 775 775 2000	248 248 248 248 248 223 222 248	D1 D1 D1 D1 D1 B B D1	
GR-12m GR-12s GR-12t GR-12w GR-12z GR-12z GR-12z GR-12y GR-12y	GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL SW-1200RS SW-1200RS SW-1200RS SUB-TOTAL GMD-1B	10 3 8 11 5 5 42 14 26 40 24	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423	1959 1959 1959 1960 1959 1959 1960	1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65	40 40 40 40 40 40 40 40	2000 2000 2000 2000 2000 775 775 2000	248 248 248 248 248 223 222 248	D1 D1 D1 D1 D1 B B D1	
GR-12m GR-12s GR-12k GR-12w GR-12z GR-12z GR-12y GR-12y GR-412a GR-412a	GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SW-1200RS SW-1200RS SW-1200RS SUB-TOTAL GMD-18 GMD-1A	10 3 8 11 5 5 42 14 25 40 24 15	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1600-1614	1959 1959 1950 1950 1959 1959 1960 1989 RB 1988 RB	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65	40 40 40 40 40 40 40 40 30	2000 2000 2000 2000 2000 2000 775 775 2000 1000	248 248 248 248 248 223 222	D1 D1 D1 D1 D1 B B D1 A	
GR-12m GR-12s GR-12t GR-12w GR-12z GR-12z GR-12z GR-12y GR-12y GR-412a GR-612a GR-612a	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL SW-1200RS SW-1200RS SW-1200RS SUB-TOTAL GMD-1B GMD-1A	10 3 8 11 5 5 42 14 25 40 24 24 25 2	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1600-1614 1900-1901	1959 1959 1959 1960 1959 1959 1960 1989 RB 1988 RB	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65	40 40 40 40 40 40 40 40 30 30	2000 2000 2000 2000 2000 2000 775 775 2000 1000 775	248 248 248 248 248 248 223 222 248 240(D) 245	D1 D1 D1 D1 D1 B B B D1 A D1	
GR-12m GR-12s GR-12t GR-12w GR-12z GR-12z GR-12u GR-12y GR-412a GR-612a GR-612a GR-612a	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL SW-1200RS SW-1200RS SW-1200RS SUB-TOTAL GMD-1B GMD-1A GMD-1 GMD-1 SUB-TOTAL	10 3 8 11 5 5 42 14 25 40 24 15 2 7 9	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1600-1614 1900-1901 1904,1905,1907,1908,1810,1911,1915	1959 1959 1950 1950 1959 1959 1960 1989 RB 1988 RB 1958 RB 1958	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65	40 40 40 40 40 40 40 40 30 40 40	2000 2000 2000 2000 2000 775 775 2000 1000 775 775	248 248 248 248 248 223 222 248 240(D) 246 246	D1 D1 D1 D1 D1 B B B D1 A D1 D1	
GR-12m GR-12s GR-12t GR-12w GR-12z GR-12z GR-12z GR-12y GR-12y GR-412a GR-612a GR-612a GR-612a GR-12n MR-20a	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS GMD-1AL GMD-1B GMD-1A GMD-1 SUB-TOTAL M-420	10 3 8 11 5 5 42 14 26 40 24 15 2 7 9 25	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359,1384,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1500-1614 1900-1901 1904,1905,1907,1908,1810,1911,1915	1959 1959 1959 1960 1959 1959 1960 1989 RB 1988 RB 1958 1958-9	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 6	40 40 40 40 40 40 40 40 30 40 40 40	2000 2000 2000 2000 2000 775 775 2000 1000 775 775	248 248 248 248 248 248 223 222	D1 D1 D1 D1 D1 B B D1 A D1 D1 D1 E1	
GR-12m GR-12s GR-12k GR-12w GR-12w GR-12zc GR-12zc GR-12y GR-412a GR-612a GR-612a GR-612a GR-612a GR-12n MR-20a MR-20b	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS GMD-1A GMD-1B GMD-1 SUB-TOTAL M-20 M-420	10 3 8 11 5 42 14 26 40 24 15 2 7 9 25 26	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1600-1614 1900,1901 1904,1905,1907,1908,1910,1911,1915 3500-3506,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559	1959 1959 1959 1960 1959 1959 1960 1988 RB 1988 RB 1958 1958-9 1973 1974	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 6	40 40 40 40 40 40 40 40 30 40 40 40 40	2000 2000 2000 2000 2000 775 775 2000 1000 775 775	248 248 248 248 248 248 223 222 248 240(D) 246 246 246 260 260	D1 D1 D1 D1 D1 D1 D1 D1 A D1 D1 D1 E1 E1	
GR-12m GR-12s GR-12t GR-12w GR-12z GR-12z GR-12z GR-12y GR-12y GR-412a GR-612a GR-612a GR-612a GR-12n MR-20a	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS GMD-1AL GMD-1B GMD-1A GMD-1 SUB-TOTAL M-420	10 3 8 11 5 5 42 14 26 40 24 15 2 7 9 25	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1600-1614 1900-1901 1904,1905,1907,1908,1810,1911,1915 3500-3506,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559 3560-3564,3566-3579	1959 1959 1959 1960 1959 1959 1960 1989 RB 1988 RB 1958 1958-9	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65(1) 65(1) 65(1)	40 40 40 40 40 40 40 40 40 40 40 40 47 47 47	2000 2000 2000 2000 2000 775 775 2000 1000 775 775 1000 1200 1400	248 248 248 248 248 248 223 222	D1 D1 D1 D1 D1 D1 D1 D1 D1 A D1 D1 E1 E1 E1	
GR-12m GR-12s GR-12k GR-12w GR-12w GR-12zc GR-12zc GR-12y GR-412a GR-612a GR-612a GR-612a GR-612a GR-12n MR-20a MR-20b	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS GMD-1A GMD-1B GMD-1 SUB-TOTAL M-20 M-420	10 3 8 11 5 42 14 26 40 24 15 2 7 9 25 26	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1600-1614 1900,1901 1904,1905,1907,1908,1910,1911,1915 3500-3506,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559	1959 1959 1959 1960 1959 1959 1960 1988 RB 1988 RB 1958 1958-9 1973 1974	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 6	40 40 40 40 40 40 40 40 30 40 40 40 40	2000 2000 2000 2000 2000 775 775 2000 1000 775 775	248 248 248 248 248 248 223 222 248 240(D) 246 246 246 260 260	D1 D1 D1 D1 D1 D1 D1 D1 A D1 D1 D1 E1 E1	
GR-12m GR-12s GR-12k GR-12w GR-12z GR-12z GR-12z GR-12y GR-412a GR-412a GR-612a GR-612a GR-612a GR-612n MR-20a MR-20b	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL SW-1200RS SW-1200RS SW-1200RS SUB-TOTAL GMD-18 GMD-18 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL M-420 M-420	10 3 8 11 5 42 14 25 40 24 15 2 7 9 25 26 19	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1367 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1600-1614 1900-1901 1904,1905,1907,1908,1810,1911,1915 3500-3506,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559 3560-3564,3566-3579	1959 1959 1950 1950 1959 1959 1960 1989 RB 1988 RB 1958 1958 1958-9 1973 1974	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65(1) 65(1) 65(1)	40 40 40 40 40 40 40 40 40 40 40 40 47 47 47	2000 2000 2000 2000 2000 775 775 2000 1000 775 775 1000 1200 1400	248 248 248 248 248 248 223 222 248 240(D) 246 246 246 246 260 260	D1 D1 D1 D1 D1 D1 D1 D1 D1 A D1 D1 E1 E1 E1	
GR-12m GR-12s GR-12k GR-12w GR-12z GR-12z GR-12z GR-12y GR-12y GR-412a GR-612a GR-612a GR-612a GR-612a GR-12n MR-20a MR-20b MR-20c	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL SW-1200RS SW-1200RS SW-1200RS SUB-TOTAL GMD-18 GMD-1A GMD-1 GMD-1 SUB-TOTAL M-420 M-420 HR-412 SUB-TOTAL	10 3 8 11 5 42 14 25 40 24 15 2 7 9 25 26 19 8 78	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1600-1614 1900-1901 1904,1905,1907,1908,1910,1911,1915 3500-3506,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559 3560-3564,3566-3579 3580,3582-3588	1959 1959 1950 1950 1959 1959 1960 1988 RB 1988 RB 1958 1958-9 1973 1974 1974 1976	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 (1) 65(1) 65(1)	40 40 40 40 40 40 40 40 40 40 40 40 40 4	2000 2000 2000 2000 2000 775 775 2000 1000 775 775 1000 1200 1400	248 248 248 248 248 248 223 222 248 240(D) 246 246 246 260 260 260 260	D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 E1 E1 E1 E1	
GR-12m GR-12s GR-12t GR-12z GR-12z GR-12z GR-12z GR-12y GR-12y GR-412a GR-612a GR-612a GR-612a GR-612a GR-612a GR-20a MR-20a MR-20a MR-20a GR-20a	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL SW-1200RS SW-1200RS SW-1200RS SUB-TOTAL GMD-18 GMD-18 GMD-14 GMD-1 GMD-1 SUB-TOTAL M-420 HR-412 SUB-TOTAL GP-9RM	10 3 8 11 5 5 42 14 25 40 24 15 2 7 9 25 26 19 8	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1384-1396 1400-1423 1600-1614 1900-1901 1904,1905,1907,1908,1910,1911,1915 3500-3506,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559 3560-3564,3568-3579 3580,3582-3588	1959 1959 1950 1950 1959 1959 1959 1960 1989 RB 1988 RB 1958 1958 1958-9 1973 1974 1975 1981	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 (1) 65(1) 65(1) 65(1)	40 40 40 40 40 40 40 40 40 40 40 40 40 4	2000 2000 2000 2000 2000 775 775 2000 1000 775 775 1000 1200 1400 1400	248 248 248 248 248 248 223 222 248 240(D) 246 246 246 260 260 260 260 260	D1 D1 D1 D1 D1 B B B D1 A D1 D1 D1 E1 E1 E1 E1 E1	
GR-12m GR-12s GR-12k GR-12w GR-12z GR-12z GR-12y GR-12y GR-12a GR-512a	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL SW-1200RS SW-1200RS SW-1200RS SUB-TOTAL GMD-18 GMD-1A GMD-1 GMD-1 SUB-TOTAL M-420 M-420 HR-412 SUB-TOTAL	10 3 8 11 5 42 14 25 40 24 15 2 7 9 25 26 19 8 78	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359,1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1600-1614 1900-1901 1904,1905,1907,1908,1910,1911,1915 3500-3506,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559 3560-3564,3566-3579 3580,3582-3588	1959 1959 1950 1950 1959 1959 1960 1988 RB 1988 RB 1958 1958-9 1973 1974 1974 1976	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 6	40 40 40 40 40 40 40 40 40 40 40 30 40 40 30 40 40 40 30 50 50 50 50 49 49	2000 2000 2000 2000 2000 775 775 2000 1000 1000 1200 1400 1400 1400 900 900	248 248 248 248 248 248 223 222 248 240(D) 246 246 246 260 260 260 260	D1 D1 D1 D1 D1 D1 D1 D1 D1 E1 E1 E1 E1 E1 E1 D1 D1	
GR-12m GR-12s GR-12t GR-12z GR-12z GR-12z GR-12z GR-12y GR-12y GR-412a GR-612a GR-612a GR-612a GR-612a GR-612a GR-20a MR-20a MR-20a MR-20a GR-20a	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL SW-1200RS SW-1200RS SW-1200RS SUB-TOTAL GMD-18 GMD-18 GMD-14 GMD-1 GMD-1 SUB-TOTAL M-420 HR-412 SUB-TOTAL GP-9RM	10 3 8 11 5 42 14 25 40 24 15 2 7 9 9 25 26 19 8 78 12	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1384-1396 1400-1423 1600-1614 1900-1901 1904,1905,1907,1908,1910,1911,1915 3500-3506,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559 3560-3564,3568-3579 3580,3582-3588	1959 1959 1950 1950 1959 1959 1959 1960 1989 RB 1988 RB 1958 1958 1958-9 1973 1974 1975 1981	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 (1) 65(1) 65(1) 65(1)	40 40 40 40 40 40 40 40 40 40 40 40 40 4	2000 2000 2000 2000 2000 775 775 2000 1000 775 775 1000 1200 1400 1400	248 248 248 248 248 248 223 222 248 240(D) 246 246 246 260 260 260 260 260	D1 D1 D1 D1 D1 B B B D1 A D1 D1 D1 E1 E1 E1 E1 E1	
GR-12m GR-12s GR-12t GR-12z GR-12z GR-12z GR-12z GR-12y GR-12y GR-12a GR-512a GR-512a GR-512a GR-512a GR-512a GR-512a GR-512a GR-512a GR-12n GR-12n GR-12n GR-12n GR-12A G	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS GMD-1 GMD-	10 3 8 11 5 5 42 14 26 40 24 15 2 7 9 25 26 19 8 78 12 10	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359,1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1600-1614 1900-1901 1904,1905,1907,1908,1910,1911,1915 3500-3506,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559 3560-3564,3566-3579 3580,3582-3588	1959 1959 1959 1960 1959 1959 1960 1989 RB 1988 RB 1958 1958 1958-9 1973 1974 1976 1981	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 6	40 40 40 40 40 40 40 40 40 40 40 30 40 40 30 40 40 40 30 50 50 50 50 49 49	2000 2000 2000 2000 2000 775 775 2000 1000 1000 1200 1400 1400 1400 900 900	248 248 248 248 248 248 223 222 248 240(D) 246 246 246 260 260 260 260 260 260	D1 D1 D1 D1 D1 D1 D1 D1 D1 E1 E1 E1 E1 E1 E1 D1 D1	
GR-12m GR-12s GR-12k GR-12k GR-12w GR-12w GR-12z GR-12z GR-12g GR-12a GR-512A GR-512A	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS GMD-1 GMD-1A GMD-1A GMD-1A GMD-1 SUB-TOTAL M-420 M-420 HR-412 SUB-TOTAL GP-9RM GP-9RM GP-9RM	10 3 8 11 5 42 14 25 40 24 15 2 7 9 25 26 19 8 78 12 10 15	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1600-1614 1900-1901 1904,1905,1907,1908,1910,1911,1915 3500-3606,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559 3560-3564,3566-3579 3580,3582-3588	1959 1959 1950 1950 1959 1959 1959 1960 1988 RB 1988 RB 1988 RB 1958 1958-9 1973 1974 1975 1981 1981 1981-2 R 1982-3 R 1982-3 R	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 6	40 40 40 40 40 40 40 40 40 40 40 40 40 4	2000 2000 2000 2000 2000 775 775 2000 1000 775 775 1000 1200 1400 1400 900 900	248 248 248 248 248 248 223 222 248 240(D) 246 246 246 260 260 260 260 260 260	D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 E1 E1 E1 E1 E1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1	
GR-12m GR-12s GR-12k GR-12z GR-12z GR-12z GR-12z GR-12y GR-12y GR-12a GR-512A GR-512A	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL SW-1200RS SW-1200RS SW-1200RS SUB-TOTAL GMD-18 GMD-18 GMD-1 GMD-1 GMD-1 SUB-TOTAL M-420 M-420 HR-412 SUB-TOTAL GP-9RM GP-9RM GP-9RM GP-9RM	10 3 8 11 5 42 14 25 40 24 15 2 7 9 25 26 19 8 78 12 10 15 17	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1600-1614 1900-1901 1904,1905,1907,1908,1910,1911,1915 3500-3506,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559 3560-3564,3568-3579 3580,3582-3588	1959 1959 1959 1950 1959 1959 1959 1960 1988 RB 1988 RB 1958 1958 1958-9 1973 1974 1975 1981 1981 1981-2 R 1982-3 R 1984 RM 1984 RM	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 (1) 65(1) 65(1) 65(1) 65 65 65 65 65 65 65 65 65 65 65 65	40 40 40 40 40 40 40 40 40 40 40 40 40 4	2000 2000 2000 2000 2000 775 775 2000 1000 1000 1200 1400 1400 1400 900 900 900	248 248 248 248 248 248 223 222 248 240(D) 246 246 260 260 260 260 260 260 260 260 260	D1 D1 D1 D1 D1 B B B D1 A D1 D1 E1 E1 E1 E1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1	
GR-12m GR-12s GR-12l GR-12z GR-12z GR-12z GR-12z GR-12z GR-12a GR-12a GR-512A GR-512A	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL M-420 M-420 M-420 M-420 HR-412 SUB-TOTAL GP-9RM GP-9RM GP-9RM GP-9RM GP-9RM	10 3 8 11 5 5 42 14 25 40 24 15 2 7 9 25 26 19 8 78 12 10 15 17 12	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1500-1614 1900-1901 1904,1905,1907,1908,1810,1911,1915 3500-3506,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559 3560-3564,3566-3579 3580,3582-3588	1959 1959 1959 1960 1959 1959 1959 1960 1989 RB 1988 RB 1958 1958-9 1973 1974 1975 1981 1981 1981 1981 1981 1981 1981 198	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 (1) 65(1) 65(1) 65 65 65 65 65 65 65 65 65	40 40 40 40 40 40 40 40 40 40 30 40 40 40 40 40 40 40 40 40 9 49 49 49 47 47 47	2000 2000 2000 2000 2000 775 775 2000 1000 1000 1700 1400 900 900 900 900	248 248 248 248 248 248 223 222 248 240(D) 248 246 260 260 260 260 260 260 260	D1 D1 D1 D1 D1 D1 D1 D1 B B B D1 A D1 D1 E1 E1 E1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1	
GR-12m GR-12s GR-12l GR-12z GR-12z GR-12z GR-12z GR-12z GR-12a GR-12a GR-512A GR-512A	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS GMD-1A GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GP-9RM GP-9RM GP-9RM GP-9RM GP-9RM	10 3 8 11 5 42 14 25 40 24 15 2 2 7 9 25 26 19 8 78 12 10 15 17 12 15	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1500-1614 1900-1901 1904,1905,1907,1908,1810,1911,1915 3500-3506,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559 3560-3564,3566-3579 3580,3582-3588	1959 1959 1959 1960 1959 1959 1959 1960 1989 RB 1988 RB 1958 1958-9 1973 1974 1975 1981 1981 1981 1981 1981 1981 1981 198	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 (1) 65(1) 65(1) 65 65 65 65 65 65 65 65 65	40 40 40 40 40 40 40 40 40 40 30 40 40 40 40 40 40 40 40 40 9 49 49 49 47 47 47	2000 2000 2000 2000 2000 775 775 2000 1000 1000 1700 1400 900 900 900 900	248 248 248 248 248 248 223 222 248 240(D) 248 246 260 260 260 260 260 260 260	D1 D1 D1 D1 D1 D1 D1 D1 B B B D1 A D1 D1 E1 E1 E1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1	
GR-12m GR-12s GR-12l GR-12z GR-12z GR-12z GR-12z GR-12z GR-12a GR-12a GR-512A GR-512A	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL M-420 M-420 M-420 M-420 HR-412 SUB-TOTAL GP-9RM GP-9RM GP-9RM GP-9RM GP-9RM	10 3 8 11 5 42 14 25 40 24 15 2 2 7 9 25 26 19 8 78 12 10 15 17 12 15	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1500-1614 1900-1901 1904,1905,1907,1908,1810,1911,1915 3500-3506,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559 3560-3564,3566-3579 3580,3582-3588	1959 1959 1959 1960 1959 1959 1959 1960 1989 RB 1988 RB 1958 1958-9 1973 1974 1975 1981 1981 1981 1981 1981 1981 1981 198	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 (1) 65(1) 65(1) 65 65 65 65 65 65 65 65 65	40 40 40 40 40 40 40 40 40 40 30 40 40 40 40 40 40 40 40 40 9 49 49 49 47 47 47	2000 2000 2000 2000 2000 775 775 2000 1000 1000 1700 1400 900 900 900 900	248 248 248 248 248 248 223 222 248 240(D) 248 246 260 260 260 260 260 260 260	D1 D1 D1 D1 D1 D1 D1 D1 B B B D1 A D1 D1 E1 E1 E1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1	
GR-12m GR-12s GR-12k GR-12k GR-12k GR-12k GR-12z GR-12z GR-12y GR-12a GR-512a GR-712n GR-7120	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS GMD-1 GMD-	10 3 8 11 5 42 14 25 40 24 15 2 2 7 9 25 26 19 8 78 12 10 15 17 12 15 81 34	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1395 1400-1423 1600-1614 1900-1901 1904,1905,1907,1908,1910,1911,1915 3500-3606,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559 3560-3564,3568-3579 3580,3582-3588 4000-4011 4012-4021 4022-4038 4100-4116 4117-4128 4129-4143	1959 1959 1950 1950 1959 1959 1960 1989 RB 1988 RB 1958 1958-9 1973 1974 1975 1981-2 R 1981-2 R 1981-2 R 1982-3 R 1984 RM 1984 RM 1984 RM 1984-900RM 1991 RM	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 (1) 65(1) 65(1) 65 65 65 65 65 65 65 65 65 65	40 40 40 40 40 40 40 40 40 40 30 40 40 40 40 40 40 40 40 40 40 40 40 40	2000 2000 2000 2000 2000 775 775 2000 1000 775 775 1000 1200 1400 1400 900 900 900 1400 1400	248 248 248 248 248 248 223 222 248 240(D) 246 246 260 260 260 260 260 260 260 260 248 248 248 248 248 248	D1 D1 D1 D1 D1 D1 D1 D1 B B B D1 A D1 D1 E1 E1 E1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1	
GR-12m GR-12s GR-12k GR-12z GR-12z GR-12z GR-12z GR-12y GR-12y GR-412a GR-512A GR-512A	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-100RS GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL GMD-1 SUB-TOTAL GP-9RM GP-9RM GP-9RM GP-9RM GP-9RM GP-9RM GP-9RM GP-9RM GP-9RM	10 3 8 11 5 42 14 25 40 24 15 2 7 9 25 26 19 8 78 12 10 15 17 12 15 81 34 45	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1500-1614 1900-1901 1904,1905,1907,1908,1810,1911,1915 3500-3564,3566,3579 3560-3564,3566-3579 3580-3564,3568	1959 1959 1959 1960 1959 1959 1960 1989 RB 1988 RB 1958 1958 1958 1958-9 1973 1974 1976 1981 1981 1981 1981 1981 1981 1981 198	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 (1) 65(1) 65(1) 65 65 65 65 65 65 65 65 65	40 40 40 40 40 40 40 40 40 40 40 40 40 4	2000 2000 2000 2000 2000 775 775 775 2000 1000 1000 1200 1400 1400 900 900 900 900 900 1700 1400	248 248 248 248 248 248 248 248 240(D) 246 246 260 260 260 260 260 260 260 260 260 26	D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D	
GR-12m GR-12s GR-12k GR-12k GR-12w GR-12w GR-12z GR-12z GR-12g GR-12a GR-612a GR-612a GR-612a GR-612a GR-612a GR-12n MR-20a MR-20b MR-20c MR-20c MR-20d GR-4186 GR-4186 GR-4186 GR-4187 GR-4187	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-100RS GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL GP-9RM GP-9RM GP-9RM GP-9RM GP-9RM GP-9RM GP-9RM GP-9RM GP-9RM GP-9RM GP-9RM	10 3 8 11 5 42 14 25 40 24 15 2 2 7 9 25 26 19 8 78 12 10 15 17 12 15 81 34	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1395 1400-1423 1600-1614 1900-1901 1904,1905,1907,1908,1910,1911,1915 3500-3606,3508-3510,3512-3524,3527-3528 3530-3533,3536,3538-3551,3553-3559 3560-3564,3568-3579 3580,3582-3588 4000-4011 4012-4021 4022-4038 4100-4116 4117-4128 4129-4143	1959 1959 1950 1950 1959 1959 1960 1989 RB 1988 RB 1958 1958-9 1973 1974 1975 1981-2 R 1981-2 R 1981-2 R 1982-3 R 1984 RM 1984 RM 1984 RM 1984-900RM 1991 RM	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 (1) 65(1) 65(1) 65 65 65 65 65 65 65 65 65	40 40 40 40 40 40 40 40 40 40 40 40 40 4	2000 2000 2000 2000 2000 775 775 775 2000 1000 1000 1200 1400 1400 900 900 900 900 900 1700 1400	248 248 248 248 248 248 248 248 240(D) 246 246 260 260 260 260 260 260 260 260 260 26	D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D	
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GR-12m GR-12s GR-12l GR-12z GR-12z GR-12z GR-12z GR-12g GR-12g GR-12g GR-12a GR-12A GR-12A GR-12A GR-12A GR-12A GR-12A GR-12A GR-12A GR-12A GR-12A GR	GMD GMD GMD GMD GMD GMD GMD GMD GMD GMD	GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS SW-1200RS GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 GMD-1 SUB-TOTAL GMD-1 SUB-TOTAL SUB-TOTAL GP-9RM	10 3 8 11 5 42 14 26 40 24 15 2 2 2 2 2 2 2 2 5 26 19 8 78 12 10 15 17 12 15 81 34 45 79 9 2 2 2 12 10 15 15 15 15 15 15 15 15 15 15	1129,1130,1133 1134,1139-1141,1143,1144,1147,1149 1150,1151,1153-1156,1159,1160,1163,1166,1167 1169-1172,1177 1178-1182 1338,1339,1341-1344,1346,1348-1350,1352,1353, 1355,1357 1359-1364,1366,1367,1369,1371,1374,1375,1377, 1379,1381,1383,1385-1389,1391,1392,1394-1396 1400-1423 1600-1614 1900-1901 1904,1905,1907,1908,1810,1911,1915 3500-3506,3508-3510,3512-3524,3527-3528 3530-3533,353,5383-3551,3553-3559 3560-3564,3566-3579 3580,3582-3588 4000-4011 4012-4021 4022-4036 4100-4116 4117-4128 4129-4143 4700-4732,4760 4761,4762,4765-4785,4787-4800,4802,4803,4805-4810 9302-9310 9313,8314	1959 1959 1959 1960 1959 1959 1960 1989 RB 1988 RB 1988 RB 1958 1958-9 1973 1974 1976 1981 1981-2 R 1982-3 R 1984 RM 1984-RM 1984 RM 1989-90RM 1991 RM	1200 1200 1200 1200 1200 1200 1200 1200	65 65 65 65 65 65 65 65 65 65 65 65 65 6	40 40 40 40 40 40 40 40 40 40 40 40 40 4	2000 2000 2000 2000 2000 2000 775 775 2000 1000 775 775 1000 1200 1400 1400 1400 1400 1400 1700 1400 1700	248 248 248 248 248 248 248 242 248 240(D) 248 246 246 260 260 260 260 260 260 260 260 260 26	D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D1 D	
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	<b></b>		NO.		U.S.Lines Only				MAX.	CNR RATED CONT.	NOM.	TOTAL	LOCO.
CNR CLASS	BUILDER	& MODEL	OF UNITS	ROAD NUMBERS		YEAR BUILT	YEAR MODIFIED	H.P.	SPEED (mph)	TRACT.	FUEL CAPY.	WEIGHT (1000#)	RESTR'N GROUP
						DOILT	MODIFIED	n.r.	(mpn)	1000#	U.S.G.	(Note D)	GROUP
ROAD SW	ATCHER		188										
GR-12za	EMD	SW-1200 SUB-TOTAL	6 6	1513-1515,1517-1519		1960		1200	65	40	900	248	В
GR-17x	EMD	GP-9	6	4134-4139		1958-59		1750	65	47	1300	246	D1
GR-17b	EMD	GP-9	5	4432-4434, 4438, 4439		1954		1750	65	47	1200	248	D1
GR-17d	EMD	GP-9	2	4444, 4446		1956		1750	65	47	1100	248	D1
GR-17k	EMD	GP-9	5	4909, 4917-4920		1957		1750	65	47	2000	252	D1
GR-17w	EMD	GP-9	1	4930		1958		1750	65	47	2000	252	D1
GR-417a	EMD/GTW	GP-9RB	36	4600-4635		1989-93		1750	65	47	2540	248	D1
GR-18a	EMD	GP-18 SUB-TOTAL	4 59	4701,4702, 4706, 4707		1960		1800	65	47	2000	246	D1
GR-420d	EMD	GP-38 (DC)	7	6200-6206	(ex DT&I 200-206)	1966		2000	65	50	2600	261	E1
CD 420-	-	00 2040		5000 5000 5004 5044							2600	252	2007/07/0
GR-420a GR-420e	EMD	GP-38AC	11	5800-5802, 5804-5811	( DTAL 007 044)	1971		2000	65	48	2600	262	D1
GR-420e GR-420f	EMD	GP-38AC GP-38AC	8	6207-6214	(ex DT&I 207-214)	1970		2000	65	50	2600	263	E1
GR-4201	EMD	SUB-TOTAL	25	6215-6220	(ex DT&I 215-220)	1971		2000	65	50			E1
GR-420g	EMD	GP-38-2	35	5700-5734	(ex MoPac/UP 2000 Series)	1972-73		2000	65	50	2600	263	E1
GR-4201	EMD	GP-38-2	20	5812-5831		1978		2000	65	50	2600	260	E1
	EMD	GP-38-2	5	5832-5836		1980		2000	65	50	2600	260	E1
GR-420j	EMD	GP-38-2	6	5844-5849	(ex P&LE 2051-2056)	1977		2000	65	52	3600	276	E1
GR-420k	EMD	GP-38-2	12	5850-5861	(ex CRI&P 4368-4379)	1978		2000	65	50	2000	260	E1
GR-420h	EMD	GP-38-2 SUB-TOTAL	8 86	6221-6228	(ex DT&I 221-228)	1975		2000	65	50	2600	261	E1
GR-620b	EMD	SD-38 (DC)	3	6250-6252	(ex DT&I 250-252)	1969		2000	65	70	3200	371	G
GR-620c	EMD	SD-38 (DC)	2	6253-6254	(ex DT&I 253-254)	1971		2000	65	70	3200	370	G
		SUB-TOTAL	5		(			2000		10	0200	0/0	0
ROAD FR	EIGHT UNI	TS	64										
GF-30f	EMD	SD-40	12	5900-5911		1969		3000	65	70	3200	367	G
GF-30g	EMD	SD-40	9	5912-5920		1970		3000	65	70	3200	366	G
GF-30j	EMD	SD-40 SUB-TOTAL	9 30	5921-5929		1970		3000	65	70	3200	367	G
GF-30y	EMD	SD-40-2	8	5930-5937	(ex MoPac/UP 4173-4196)	1975		3000	65	74	4000	390	G
GF-430h	EMD	GP-40	6	6400-6405	(ex DT&I 400-405)	1968		3000	65	50	2600	261	E1
GF- <b>4</b> 30j	EMD	GP-40-2	8	6406-6413	(ex DT&I 406-413)	1972		3000	65	50	2600	263	E1
GF-430k	EMD	GP-40-2	8	6414-6421	(ex DT&I 414-421)	1973		3000	65	50	2600	261	E1
GF-430	EMD	GP-40-2	4	6422-6425	(ex DT&I 422-425)	1979		3000	65	50	2500	262	E1
		SUB-TOTAL	20		5							, Marc ( ), ( ), ( Marc (	

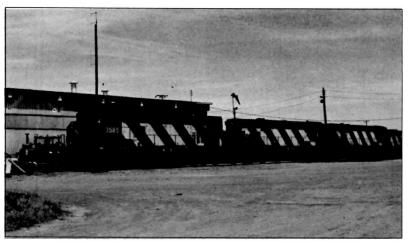


Photo by Art Clowes of CN 3585, 3550, and 3501 at Garneau, Québec.

### Modification notes:

- (A) Converted from GY-00a for use with GY-418 units.
- (B) Converted from GY-00a for use with GH-20 hump units.
- (C) Converted from MY-10a (S3) for use with GY-418 (GP9) hump units. Roller-bearing GM Flexicoil trucks added.
- (D) Total weight equals weight on drivers except for GR-612 (GMD-1, A1A trucks) and MR-14 (RS18, A1A trucks);
- these units have weight on drivers of of 160 000 lbs.
- (E) Former Union Pacific SD40-2s acquired in April 1994.
- (F) Booster cabling added for hump and flat yard service.
- (G) Former GO Transit GP40-2s acquired in 1991.

### Operating speeds:

- (1) 75 m.p.h. gearing.
- (2) 70 m.p.h. gearing.
- (3) Truck/bearing limits.(4) 73 m.p.h. gearing.

Tables from:

CN "Summary of diesel and booster units."

# CITF – TRANSIT IN TROIS-RIVIÈRES

This article is reprinted from Transit Ambassador, a newsletter published by the Canadian Urban Transit Association.

The Corporation intermunicipale de transport des Forges began transit operations in January 1981 and currently serves a population of nearly 110 000 people in the municipalities of Cap-de-la-Madeleine, Trois-Rivières, and Trois-Rivières-Ouest. The system carries over three million passengers each year, with about 100 employees, 75 of which are bus operators, and the rest are maintenance, office, and management staff. The CITF fleet consists of 37 large buses and six minibuses adapted for use by persons with disabilities.

The network consists of nine bus routes covering the three member municipalities, requigin 21 buses for base service Monday to Saturday, with 2.2 million kilometres of service per year for the conventional system, and 200 000 kilometres for the specialised system. Supplementary peakhour service is provided by an additional eight vehicles.

Before the formation of the CITF, the demise of privatesector urban transit in Trois-Rivières was already evident. In 1972, one of the owners of the Saint-Maurice Bus Company, Mr. Roger Carier, declared in the local newspaper *Le Nouvelliste* that urban transit was not a profitable business and its eventual collapse would be unavoidable. Two possible solutions were recommended: municipal subsidies to keep the operation running, or the creation of a new regional transit commission. As neither was immediately forthcoming, however, the privately-operated service ceased on June 28, 1975.

After an unsuccessful attempt to form a regional transit commission, which would have included the Trois-Rivières



metropolitan region and the Mauricie, service returned in November 1975 in the three municipalities of Cap-de-la-Madeleine, Trois-Rivières, and Trois-Rivières-Ouest. On October 21, 1975, the mayor of Trois-Rivières-Ouest announced that a new service would begin within days, operated by a private company. On November 12, the City of Trois-Rivières organised its own service by hiring 15 drivers to operate eight buses that plied the city streets. On November 20, it was the City of Cap-de-la-Madeleine's turn to begin its service, which was contracted to a private company, the Services urbains de la Mauricie inc., through a subsidy arrangement.

The refusal of the City of Trois-Rivières to accept transfers from the neighbouring systems, however, forced municipal leaders to organise a unified operation. As a result, on October 31, 1979, the CITF was created and the municipal employees concerned responded by creating their own trade union in the fall of 1980. An integrated urban transit network finally commenced service on January 31, 1981. The following year, a specialised service for persons with disabilities was added, which continues to grow to this day. The CITF has its own accessible minibuses and also contracts with taxi companies. A computerised dispatching system has allowed for quick response times and ensures an efficient working environment.

Across the system, five transit terminals ensure timed transfer connections between the conventional bus routes, with co-ordinated schedules that eliminate haphazard waiting times. The biggest of these, the Terminus Badeaux (shown in the photo, by David Onodera), is located downtown, where most routes meet, and is the centre of much activity on a daily basis. It is equipped with operatoractivated traffic signals, bricked pedestrian crossings, and four transit information pillars. Seven routes meet there every half hour, from Monday to Saturday.

In 1991, a public consultation exercise on the future of public transit in the region was conducted, resulting in an affirmation of widespread consensus among the three municipalities served. The study did reveal valuable insights into the strengths and weaknesses of the CITF, providing some excellent direction for the CITF to improve its overall service.

Ridership stabilised in 1995 at 3.1 million passengers, including a collaborative recreational service permitting children from the three municipalities to benefit from summertime activities. In 1996, the CITF is working with a \$7.2-million budget with a further \$13-million in fixed assets.

The CITF recently adopted a customer-service strategy intended to improve overall customer satisfaction among its users. Included in this approach is improved customer information, customer-service training for bus operators, gradual adaptation of the system to the changing needs of the community, and the development of new types of service, all without increasing costs.  $\blacksquare$ 

CITF FLEET LIST – From Canadian Transit Heritage Foundation Bulletin									
8001 to 8015	GM "New Look" T6H-5307N	1980							
8301 and 8302	GM "Classic" TC40102N	1983							
8401 and 8402	GM "Classic" TC40102N	1984							
8501 to 8506	GM "Classic" TC40102N	1985							
9201 to 9208	MCI "Classic" TC40102N	1992							
9401 to 9403	Nova Bus "Classic" TC40102N	1994							

# **StLPH St. Lawrence and Hudson Railway** Main freight train schedules through Ontario

## Montréal-Toronto-Chicago

### ▼ Westbound

	501	503	505	507	509	511	515	529*	737	747	921	929	271	
	Montréal Chicago	Montréal Chicago	Trois-Riv Chicago	Toronto Detroit	Montréal Detroit,	Toronto Chicago	Toronto Detroit	Toronto Detroit	Sainte-Th Detroit	Toronto Chicago	Montréal Windsor	Montréal Toronto	Saratoga London	
	Daily	Tu-Sa*	Daily	Daily	Daily	Daily	Daily	Mo-Fr	Mo-Sa	We Fr Su	Daily	Mo-Fr	Daily	_
Trois-Rivières			04:00											
Sainte-Thérèse									19:00					
Montréal Saint-Luc Dorion	22:00 22:30	10:00 10:30	07:30 12:00 12:30		06:30 07:00				21:00 21:30		02:00 02:30	4:00  4:30		
Smiths Falls	01:00 01:45	3:00  3:45	15:00 16:30		09:30 10:30				00:30 03:30		05:00 05:45	17:00 18:00		
Oshawa			21:30						08:30 09:30		10:30 11:30			
Toronto Toronto Yard Lambton/Obico	07:45 08:30 09:30 10:30	19:45 20:45 22:00	22:30 03:00 04:00 05:15	22:00 23:00 00:01	16:00 18:00 19:00 20:30	10:30 11:30 13:00	19:00 20:00 21:00	18:00	10:30 16:00 17:00 18:15	02:30 03:30 05:00	12:00 20:10 21:10 22:10	00:01 00:15 02:00	From Saratoga and Hamilton	
Guelph Jct.	11:20	22:50	06:15	01:30	21:30	14:00	22:00	18:40	19:00	06:00	23:00		20:30	
Galt				02:00 03:00		14:30 15:15	22:30 23:15	19:10	9:30 20:15					
Woodstock	-		07:30 08:15	03:30 04:00			00:01 00:45	20:10	21:00 21:45	07:30 08:30	00:30 01:30			
London	4:30  5:30	02:00 02:30	09:30 11:30	05:00 06:00	00:30 01:30	17:00 18:00	01:30 03:00	21:15 21:45	23:00 00:30	09:30 10:30	02:30 04:00		00:30	
Windsor Lakeshore	19:00	06:00	15:00	10:00	05:00	22:00	06:30	00:01	04:00	14:30	10:30			
Detroit	20:30 21:30	07:30 08:30	6:30  7:30	11:30	06:30	23:30 00:30	08:00	01:00	05:30	16:00 17:00				
Grand Rapids	03:30 04:30	4:30  5:30	00:01 01:00			06:30 07:30				23:30 00:30				
Chicago Gibson IHB Blue Island Schiller Park Bensenville		01:45	11:00			16:45				08:00				

### Notes on the use of this table

- Where two times are shown at a station, the first is the arrival time and the second is the departure time.
- Where one time is shown at a station, it is the departure time if the train
  originates there, the arrival time if the train terminates there, or at other
  stations the scheduled passing time of a train that does not stop to switch
  or to change crews.
- In Toronto, times are shown at both Toronto Yard and either Lambton or Obico. See the notes to the right for the actual origin or destination of each train.
- In Toronto, times are shown at Saint-Luc Yard and passing Dorion. See the notes to the right for the actual origin or destination of each train. Some of these trains do not enter Saint-Luc Yard.

### Origin and destination points in Toronto and Montréal

- To or from Toronto Yard 504, 510, 511, 512, 515, 516, 521, 522, 523, 557, 558, 732, 734, 902, and 906.
- To or from Lambton (power to or from Toronto Yard) 528, 529, and 747.
- To or from Obico 928 and 929.
- To or from Saint-Luc 921 and 926.
- To Montréal Wharf, interchanged to Port of Montréal (arrival after time shown at Saint-Luc) 500, 502, and 508.
- To Hochelaga (arrival after time shown at Saint-Luc) 928.
- From Hochelaga (departure before time shown at Saint-Luc) 501, 503, 509, and 929.

These trains also make other stops in the Toronto and Montréal areas.

# StLEH "East-West Corridor"

# Chicago-Toronto-Montréal

### ▼ Eastbound

	500	502	504	902	508	510	512	516	528*	906	926	928	270	
	Chicago Montréal	Chicago Montréal	Chicago Toronto	Toronto Trois-Riv	Detroit Montréal	Detroit Toronto	K City Toronto	Detroit Toronto	Detroit Toronto	Toronto Sherb'ke	Windsor Montréal	Toronto Montréal	Chicago Saratoga	
	Daily	Mo-Fr*	Daily	Daily	Mo-Sa	Daily	Daily	Daily	Ex Mo Sa	Daily	Mo-Fr*	Mo-Fr	Daily	
Kansas City							16:00							•
Chicago Shoreham Bensenville Schiller Park IHB Blue Island	22:30 13:30 16:30	21:30	16:30			· ·	1:45  3:30			•			02:15	
Grand Rapids	03:30 04:30	09:05 10:05	02:00 03:00				01:00 02:00						13:30 14:30	
Detroit	:00  2:00	6:00  7:00	09:30 10:30		23:00	07:00	08:00 09:00	03:30	07:00				21:00 22:00	
Windsor Lakeshore	13:30	18:30	12:00		00:15	08:20	10:30	05:00	07:50		22:30		23:30	
London	17:00 18:30	21:30 23:00	16:00 17:30		03:45 04:15	2:40  4:10	3:30  5:00	09:30  3:00	10:20 10:50		02:00 02:30		04:00 06:00	
Woodstock	19:30 20:00					15:05 15:50					04:00 04:30			
Galt						16:25 16:55					05:00 05:30			<u>.                                    </u>
Guelph Jct.	21:30	01:30	20:00		06:20	17:30	18:00	15:30	12:50		06:00		09:30	
Toronto Obico/Lambton Toronto Yard	22:30 23:30 00:30	02:30 03:10 04:10 05:00	21:00 22:00 23:00	01:30	07:30 08:00 08:50 09:50	18:50 19:50 20:50	19:30 20:30 21:30	16:30 18:00 19:00	13:40	00:01	06:50 07:30 08:30 14:00	21:30 22:30 23:00	To Hamilton and Saratoga	
Oshawa	01:00 02:00													
Smiths Falls	07:00 08:00	:00  2:20	-	07:30 09:00	5:30  6:00					06:00 06:40	20:00 20:45	04:00 04:30		
Montréal Dorion Saint-Luc	10:30 11:00	5:00  5:30		:30  2:00  6:00	18:10 18:30					09:15 09:45 11:30	00:01 00:30	07:00 10:00		
Trois-Rivières				20:00				-						
Sherbrooke										19:30				

### Notes on the operation of these trains

502 - Operates on other days of the week as required.

503 - Operates on other days of the week as required.

528 - TripleCrown RoadRailer (operated by StL&H for Norfolk Southern and Conrail) 529 - TripleCrown RoadRailer (operated by StL&H for Norfolk Southern and Conrail)

730 - Operates on other days of the week from Toronto to Buffalo as required; carries General Motors auto traffic.

73 I - Does not operate east of Oshawa on Saturdays; carries General Motors and Ford auto traffic.

732 - Carries General Motors, Toyota, and CAMI auto traffic.

734 - Operates on other days of the week as required; handles primarily Honda traffic.

747 – Carries automobiles to Chicago.

926 - Also operates on Sundays from Toronto to Montréal.

### Additional trains, operating as required

506 - Detroit to Montréal, as a combination of 508 and 510.

513 - Montréal to Toronto, as a combination of 507 and 515 as required when traffic is light from Montréal; the regular trains 507 and 515 then run only from Toronto to Detroit.

517 - Toronto to Chicago, as a combination of 501 and 511 when traffic is light.

- 702 Solid train of sulphuric acid, Sudbury to Detroit.
- 708 Solid train of sulphuric acid, Sudbury to Buffalo.

739 - Sainte-Thérèse to Toronto, as a combination of 730 and 731 when traffic is light.

- 901 Montréal to Toronto, overflow from 929 or on weekends.
- 903 Montréal to Toronto, traffic for connections to Chicago and Western Canada.
- 918 Toronto to Montréal, general freight. 919 - Montréal to Toronto, general freight.

# StLEH "Niagara Gateway"

## Montréal-Toronto-Philadelphia

### ▼ Southbound

	730	732	734	522	558	270
	Sainte-Th Buffalo	Toronto Niag Falls	Toronto Niag Falls	Toronto Buffalo	Toronto Phila	Chicago Saratoga
	Tu-Sa*	Daily	Tu-Su*	Daily	Mo We Sa	Daily
Sainte-Thérèse	07:00					
Montréal Saint-Luc Dorion	09:30 10:00					
Smiths Falls	12:30 13:00					
Oshawa	18:30 20:30					
Toronto Toronto Yard Lambton/Obico	21:30 23:30 00:30	01:30	00:45 01:30 03:30	11:30 13:30	16:30 17:30 19:15	From Chicago and London
Guelph Jct.	02:00	04:00	05:00	15:00	20:30	09:30
Route	via GU	via GU	via GU	via GU	via GU	via GU
Oakville						
Hamilton	04:00 04:45	05:30 07:00	06:45 07:30	·16:15 17:45	22:00 23:00	1:30   3:00
Welland	06:00 09:30	08:30	09:00	19:45 21:30	00:30	15:00 16:00
Niagara Falls, N.Y.	0:30   :30	09:30	10:00	22:30 23:00	01:00 01:30	17:00 17:30
Buffalo	4:30			01:30	03:45 05:15	-19:30 11:00
Binghamton					:45  5:30	20:00 07:30
Mohawk						16:00 17:30
Saratoga						18:00
Allentown					23:00 00:01	
Philadelphia					08:00	

7	Northbound	÷

	731	521	523	557	271
	Niag Falls Sainte-Th	Buffalo Toronto	Niag Falls Toronto	Phila Toronto	Saratoga London
	Daily*	Daily	Daily	Mo We Fr	Daily
Philadelphia				19:30	
Allentown				23:30 01:30	
Saratoga	-				20:00
Mohawk					20:30 22:00
Binghamton				10:30 13:30	03:30 23:30
Buffalo		15:00		21:30 23:30	07:00 11:00
Niagara Falls, N.Y.	21:00	17:30 18:00	22:30	02:00 02:30	3:00  3:30
Welland		19:00 20:30	23:30 04:00	03:30 04:30	4:00  5:00
Hamilton	23:00 23:30	22:00 00:01	06:00 09:00	06:00 08:00	16:30 19:00
Oakville	00:15	00:45	10:00		
Route	via CN	via CN	via CN	via CN	via GU
Guelph Jct.					20:15
Toronto Obico/Lambton Toronto Yard	02:40	02:00 04:00 06:00	11:30 12:30 13:30	10:00 11:00 12:30	To London
Oshawa	04:30 06:00				
Smiths Falls	10:30 11:00				
Montréal Dorion Saint-Luc	1				
Sainte-Thérèse	16:00	<u> </u>	1		

### Freight train schedules

"via GU"

Westbound/southbound StL&H trains from Toronto to Hamilton operate from Toronto Yard west over the StL&H Belleville Subdivision to Leaside, North Toronto Subdivision to West Toronto, Galt Subdivision to Guelph Jct., and then south on the StL&H Hamilton Subdivision (the former CP Goderich Subdivision) to Hamilton.

#### "via CN"

Eastbound/northbound StL&H trains from Hamilton to Toronto operate from Hamilton north over the StL&H Hamilton Subdivision to Desjardins/Hamilton Jct., then east over the CN Oakville Subdivision, to Canpa (in Etobicoke), north on the StL&H Canpa Subdivision to Obico, and east on the Galt, North Toronto, and Belleville subdivisions to Toronto Yard.

**Routes between Toronto and Hamilton** 

• Freight train schedules are not the same as those of passenger trains. They are not part of the railway's operating timetables, but are targets for loading times, connections, and delivery of customers' goods. They are often modified or augmented day-to-day to allow for traffic conditions, track maintenance work, crew availability, or weather.

 In addition to the trains shown in these tables, St. Lawrence and Hudson operates road switchers, local freights, trains east of Montréal from Québec and Sherbrooke, trains entirely within the U.S., GO Transit passenger trains in Toronto, STCUM passenger trains in Montréal, and also handles trains from the CPR "core" into Toronto and Montréal.

# Research and Reviews



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Well, I am now physically located in Toronto, but am still slightly less than organised! I'm hoping this will change. I must issue an apology to those who have written me over the past few months, and to whom I have not replied. I am getting there! Don't tell anyone, but during my move I squeezed in a few weeks of vacation, and spent most of it wandering around the east.

#### Trips in Québec and on the QNS&L

Before I get into my ramblings, here is a story associated with part of Peter Gloor's trip to Canada this summer. Peter is from Switzerland, and spent nearly a month this summer railfanning in Canada, including a couple of trips in Québec after a western sojourn. I have mixed some additional information in with the story of Peter's trip.

Peter used Québec City as the starting point for his eastern trips. He regretted that on the day he was there, he wasn't able to see *Le Tortillard du Saint-Laurent*, which leaves the Gare du Palais at 07:30, earlier in the morning than he had arrived from Montréal. The refurbished F-units and coaches of this train are painted in a green-and-goldscheme similar to that of the CNR from the 1950s, and look sharp.

Le Tortillard du Saint-Laurent carries passengers to the Casino de Charlevoix at Pointe-au-Pic and all indications are that it is doing quite well. It operates on the trackage of the Chemin de fer de Charlevoix, which in December 1994 purchased the 147 km former Murray Bay Subdivision from CN. Part of this line had been electrified when owned by the Quebec Railway, Light and Power Company, before the QRL&P was amalgamated with Canadian National.

The freight operation of the CFC has the paper and cement industries as the traffic base, and the traffic has been growing since they acquired the line. The CFC interchanges traffic with the CNR at CN's Limoilou Yard, which is on the north side of the Saint-Charles river in the north-east part of Québec City.

Peter rode the *Chaleur* from Lévis to Gaspé. He could perhaps have spent some more time in Québec, as the train was three hours late. One thoughtful act was that the station agent sent someone for coffee and donuts from Tim Horton's while the passengers were waiting for the tardy *Chaleur*. The delay made Peter eligible for a 50 percent refund on his ticket, to be given only as a credit on a later ticket purchase within six months. He doesn't think he'll will be back in Canada within this time.

Often VIA doesn't give many details about train delays, and when they do, they seem to come from a stock list; sometimes they are the real problem, and other times not. In Peter's case it could have been any of a number of causes. The *Chaleur* could have been delayed waiting for other passenger trains from west of Montreal. During the good summer weather, heavy track maintenance work could cause delays.

In addition, changes that started 20 or so years ago could be part of the problem. At that time CN had basically two routes from Montréal to the Maritime provinces on the south shore of the St. Lawrence. Since then, track abandonments has resulted in the railway from Saint-Rosalie (about 70 miles east of Montréal) to Saint-André Junction (near Rivière du Loup) becoming a single-track line. These abandonments were hardly finished when it was decided to construct a new tunnel under the St. Clair River at Samia, Ontario, that would permit CN to offer a competitive container service from Halifax, via Saint-André and a cut-off above Lévis, on to Montréal and west to Chicago. This service has been successful and since the tunnel opened in the spring of 1995, freight traffic has increased. So a heavy volume of freight traffic could have caused some delays.

Peter's trip through the night was over two types of terrain and also over trackage built by two railways. After he left Lévis, he was soon on the long tangents along the St. Lawrence, where the Appalachian Mountains are far enough south to leave a wide band of rich, flat farmland along the river. As his train moved east, this band of flat land became narrower as the mountains came closer to the river. Then, as his train left the St. Lawrence River and headed more southerly toward Matapédia, it was going across the northern part of the mountain range.

The Grand Trunk Railway of Canada East constructed the line from Chaudiere, on the Québec and Richmond Railway just a few kilometres west of Lévis, to Rivière du Loup. This line was completed in 1860 and made many changes in travel along the 120 miles of the St. Lawrence River between Québec and Rivière du Loup. It improved mail service from Europe during the ice-free months. Mail could be dropped at Rivière du Loup and taken by train to Québec and Montréal.

While there were plenty of schemes for many years to connect Rivière du Loup with the Maritime provinces by railway, construction didn't get started until after Canada's confederation in 1867. The line from Rivière du Loup via Mont-Joli (originally called Sainte-Flavie) and to Matapédia and Campbellton was constructed by the Intercolonial Railway. It was near Routhierville, Québec (Mile 33.92 on the CN Matapédia Subdivision), that the final link in the Intercolonial Railway between Halifax and Rivière du Loup was placed. This permitted trains starting on July 3, 1876 – to travel between Upper Canada and the Maritime provinces by an all-Canadian route. Back in the 1870s, Routhierville was called Assametqugham.

A few comments on the place-names of the towns along the south shore of the Gaspé Peninsula, which is also the north shore of the Baie des Chaleurs. There are aboriginal names like Matapédia, Escuminac, Cascapédia, and Paspébiac. There are English names like Cross Point, Carleton, Maria, New Richmond, New Carlisle, Newport, Chandler, and Douglastown. Among the French names are Nouvelle, Saint-Siméon, Bonaventure, Saint-Godfroi, Marcil, Gascons, Sainte-Adélaïde, Barachois-de-Malbaie, and Gaspé. Then, there are a few descriptive names like Cross Point, Black Capes, Grande-Rivière, Percé (reference to the pierced rock that is nearby), and Summit. Other names, like Caplan, can trick you. It was named after an Indian, Jean Caplan, who lived on the banks of the stream at this location.

Peter says that he enjoyed the complimentary buffet breakfast on the train and the scenic ride along the shore of the Baie des Chaleurs from the rearmost vestibule of the train. He remarked that the VIA service was excellent, better than on previous trips, and that the interior of the trains was spotless.

He returned from Gaspé by taking the bus to Campbellton, New Brunswick, and catching the westbound *Ocean* there. The VIA agent at Québec had suggested changing from bus to train at Matapédia, but Peter found that it would be easier at Campbellton, as the distance from the bus station to the railway station there is only a few hundred metres.

Next, Peter flew to the airport at Wabush, near Labrador City. From there, he rode the Québec North Shore and Labrador train down to Sept-Îles. The QNS&L train consisted of groups of two Budd cars each, separated by a deadheading Pullman Standard dome, the former Wabash and Southern *City of St. Louis,* painted silver with yelloworange stripes and orange ends, to match the ex-VIA Budds.

"The ride was absolutely fabulous, sunny weather, smooth, heavy-duty welded track, friendly personnel, but a small delay. I rode with the engineman. He kept complaining all the way about the lack of power on his train. On his two running Budds, he got only three-quarters power. He couldn't hook up the rear pair, as the dome was in between. That was why we picked up some delay en route.

"The railway is not downhill all the way. There are some grades out of Lab City southbound, and those were stiff enough to cost us about 15 minutes. The remaining 15 minutes of our total delay came from waiting for a work train to clear the main.

"The trip down the canyon was great. All vestibules on the train were packed with local people who wanted to see the scenery. We met at least six northbound freights and saw three work trains."

The Québec North Shore and Labrador Railway was constructed in the early 1950s to tap the rich iron ore deposits in western Labrador. The first contractor's timetable for the southern 181 miles was issued effective November 30, 1952. The track reached Schefferville, the northern terminus of the 356-mile main line on February 13, 1954. Steam power was used during construction, and several locomotives from other railways were purchased for the purpose. On the matter of grades, the design grade southbound was 0.3 percent, and northbound 1.8 percent. The line was designed to be operated with full CTC signalling using remotecontrolled diesels.

From Sept-Îles, Peter went to Port-Cartier, but saw no trains there on the Chemin de fer Cartier. He would have needed another day, he says, to wait for one along the highway north of town.

Peter flew back from Sept-Îles to Montréal. He says that he didn't like Montréal, because there was too much traffic, the buildings were too big, and there was much air pollution. He did visit Windsor Station, however, and saw an STCUM train with a GP9 and a generator car, and found a spot near the Lachine Canal to photograph trains heading in and out of Central Station.

Peter says that it was a great trip, and now he needs to start saving money again for his next trip.

### West coast bridge

Several times back in the spring and summer of 1993 we mentioned the efforts to convert part of the right-of-way of CN's former Cowichan Subdivision (originally part of the Canadian Northern Pacific Railway) in the area of Victoria, B.C., into a hiking and bicycle trail. The problem part of the project was the old timber trestle and drawbridge over the Selkirk Water in Victoria. The conversion was further delayed by a fire in the timber trestle on May 30, 1995. We reported that in the June 1995 issue of Rail & Transit. Well finally, according to an article forwarded by Gray Scrimgeour, the structure over the waterway was opened on August 29, 1996. To help overcome the complaints from boaters, the trestle was raised at one point to provide more clearance for them. Operators of larger vessels requiring the opening of the drawbridge, which was retained, must provide a two-hour notice to the operator of another Victoria drawbridge in order to have the Selkirk Water bridge opened. The opening of the trail across the Selkirk Water, and the recent completion of an overpass over the Trans-Canada Highway, means that the trail is now open from downtown Victoria to Swan Lake.

#### Stations

Pardon the pun, but some of the hottest station news comes out of Pictou, Nova Scotia, where the historic CN station was severely damaged by fire early on Friday, August 2, 1996. The Pictou station, constructed about 1904, was a storey-and-a-half red brick structure. One feature that made the Pictou station unique was that its basic hip roof was punctuated with 12 dormers that permitted more useful floor space. Many of these dormers were highlighted with semicircular stone eyebrows over the windows and curved stone coping to cap the brickwork of the dormers. A local museum was located on the ground floor, while the upper floor contained the town's youth centre. Staff and local residents managed to remove the museum's artifacts during the fire.

I visited Pictou a week after the fire, and it was expected that the council meeting that day would decide the whether they would attempt to rebuild the station.

While the date of the official opening of the railway into Pictou is November 28, 1887, the area around the Pictou Harbour basin had seen railways back as early as 1829 when the General Mining Association's horse-drawn tramways were built for hauling coal from the mines to the wharves. In the same year this company constructed a smelter and used local iron ore to produce the first iron rails in Canada.

May 27, 1839, was an important day in the Pictou area with the arrival of the Samson, along with two other locomotives, the Hercules and the John Buddle. Built by Timothy Hackworth in England during the previous year, the Samson was one of the largest and most powerful locomotive in North America during its time.

The restored *Samson* is presently on display at the Nova Scotia Museum of Industry, in Stellarton. I found the trip through the museum interesting. In addition to the *Samson*, a nearby model layout depicting the operation of the Intercolonial from around 1900 has been well executed by a local modelling group.

Back at Pictou . . . CN had obtained

permission to abandon its operations into the town by federal authority dated February 11, 1985. Railway operations officially ceased on December 31, 1986, and CN advised on October 16, 1988, that the track has been removed.

As part of my visit to Pictou, I drove out to Wentworth Park to have a look at the former Canadian National Railways' Pictou Lodge. Originally known as the Wentworth Park Lodge, it was opened in the spring of 1926 and promoted as a beautiful bungalow hotel. What it was really was a group of single-storey rustic log buildings, including a main lodge and a series of cabins. These cabins, or bungalows, featured stone fireplaces in their sitting room. The lodge was situated on the coast of Northumberland Strait and targeted the guests who liked the fresh summer breezes off the water while playing a round of golf at the nearby Pictou Golf Club. A drive through the lodge grounds definitely takes one back to the slower and more-relaxed days of by-gone years.

From Pictou, I followed the nowabandoned Great American and European Short Line Railway that Sir Sandford Fleming promoted as part of the "All-Red Route" of the 1860s, along Northumberland Strait back to Oxford Junction, Nova Scotia. The original stations at Tatamagouche and Pugwash are still standing and have been recycled to new commercial uses.

Tatamagouche was on the main line of the Great American and European Short Line Railway and the station here is a storey-anda-half brick building. On one end is a flatroofed single-storey baggage and express area. The flat roof permitted a patio to be added on top, and it is reached from the second floor. Three CN cabooses have been added adjacent to the station. The numbers on two of the cabooses are CN 71257 and CN 79815. The station and these cabooses have been converted into an inn and cafe.

The station at Pugwash is near the end of the 4.6-mile-long Pugwash spur, and is identical to the one in Tatamagouche. The second floors of these stations were used for living quarters for the station agent and his family. One recent visitor to Pugwash mentioned that he was the son of one of the station agents, and that his family of ten lived in the cramped station quarters. The living quarters at Pugwash are now used by the local historical society. The main office area has been converted to the community's library. The baggage and express wing is presently occupied by the tourist bureau. We also wrote of this station and the Great American and European Short Line Railway back in February 1993, with some extra details concerning abandonments in our June 1993 column.

Ted Deller sent along a recent news clipping saying that Mayor John Murphy of St. John's, Newfoundland, is attempting to have the city's old railway station turned into a transportation museum and indicated that the city is discussing the acquisition of this two-storey stone building with CN.

Murphy, who is optimistic this takeover will come about, states that he would like to see the current museum in Pippy Park moved to the station site, along with the locomotives and cars there and at Bowring Park. The mayor also remarked that there is excellent office space on the upper floor that could be rented-out to help offset the operating cost of the building. Some of the secondfloor offices have fireplaces that were exposed from behind false walls when the station was restored a few years ago.

This station, designated the Riverhead Station, was constructed by the Reid Newfoundland Company and was finished in the fall of 1902. Reid and the railway staff moved in on January 7, 1903. It was constructed of granite that came from Reid's quarry in the Gaff Topsail area. This station replaced one in an old military building at Fort William, near the site of the later-built Hotel Newfoundland. While the staff moved into the new station in January, trains continued to departed from the old Fort William station until June 1, 1903.

One other station that has been mentioned this summer is the CPR station at Foster, Québec, near Lac-Brome. This Eastern Township station, as mentioned in our June 1993 column, was then at the junction of the CPR's "Short Line" to Saint John, New Brunswick, and the abandoned Montreal and Atlantic Railway's north-south line. Vernon Erle Ikeda of Montréal has now confirmed the earlier rumour that this station that had been in sad shape and without doors and windows in 1993 has been moved about four kilometres south, closer to Lac-Brome on Route 243 (Chemin Lake). Vernon also advised that the station "has been lovingly restored and is now the tourist information bureau for the Lac-Brome area."

### Church bell

I made my annual summer pilgrimage to Prince Edward Island to see our member Keith Pratt and his wife Jean. As usual, Keith had arranged for us to meet several other Islanders and to visit some of the local sites. After a sumptuous dinner, we spent a joyous evening, and several of the local ladies invited by Keith loaded me up with extra stories and railway information. Since I haven't got all of this sorted out, I am going to leave the details until another column.

But earlier in the day, Keith took me a few miles from Bloomfield Station to the small community of Campbellton. Here we went to the small white frame United Church. We entered the small foyer and at one side hung the bell rope, a common fixture in many smaller churches. Keith then proceeded to give the rope a few tugs, and the bell was ringing loud over the village. What makes this bell special is that it formerly graced engine No. 18 of the Sandy River and Rangeley Lakes Railroad. This railroad was one of the mystic two-foot-gauge railways that penetrated numerous valleys of southwestern Maine. Back in 1937, Keith arranged to acquire this bell for the church. The bell was dedicated at a special evening service on June 20, 1937. Our inspection of the church revealed a pump organ. This brought to life the newspaper account of that service in 1937. The wood-burning stove in the corner with the long overhead stove pipe to the chimney brought back other memories of sitting in the hard wooden pews of a similar church in the winter with the only heat coming from the stove and its long pipe.

### Books

### Mike Leduc's second station book

Its hard to realise, but it has been two years since Mike Leduc brought out his book on the CN family of stations that have existed on Montreal Island. Well for the station buffs, Mike has now published his second book on Montréal Island stations. This book follows the general format of his first, but covers the railway stations of CP and its constituent companies. This is a soft-covered 100-page book with its twenty or more photographs and about an equal number of maps trace the development and locations of each of the stations of the Canadian Pacific Railway as well as the predecessor companies including the North Shore Railway, the Quebec, Montreal, Ottawa and Occidental Railway, the Atlantic and North West Railway, and the Ontario and Quebec Railway. It is a great reference book for understanding the evolution of the CP family of stations on Montréal Island.

Copies of this book, entitled Montréal Island Railway Stations: CP and Constituent Companies, cost \$17.00 each, inclusive of postage, and can be ordered directly from Michael Leduc, 57 Roosevelt Drive, Dollard des Ormeaux (Québec) H9G 1J1.

-Art Clowes

### Two new books from Kalmbach

Two new reference books from Kalmbach Publishing of Milwaukee contain some information on Canadian railways.

The fifth edition of the American Shortline Railway Guide, by Edward A. Lewis, contains brief descriptions and locomotive rosters of most small and regional railways in the U.S. and Canada. In its 368 pages, the book lists 25 Canadian railways, which is not an exhaustive list, and gives one to five paragraphs of information about each. There are some photos in the book, but none of Canadian subjects.

The 31st annual Steam Passenger Service Directory, prepared by the Empire State Railway Museum of Phoenicia, New York, has one page, with a photo, a description, and other information, for each tourist railway or railway museum in the U.S. and Canada. There are 25 entries for Canada among the 320 pages.

Both of these books are good as basic references, or to compare Canadian railways and museums to those in the U.S., but are too all-encompassing to be able to treat Canadian subjects in any detail.

-Pat Scrimgeour

# Denis Taylor's and Alex Campbell's Stations



**Pictou, Nova Scotia, CN** – A photo taken after the fire of August 2, 1996, showing that the roof and much of the second storey has been destroyed, but that the exterior and the first floor remain, making future restoration of the station possible.

-Photo by Art Clowes, August 8, 1996

# Canadian Pacific's three-year rail network plan

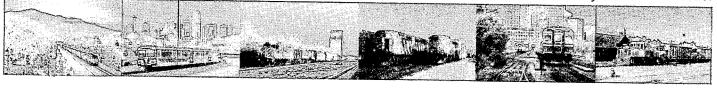
CPR AND StL&H LINES PROPOSED TO BE TRANSFERRED TO SHORT-LINE RAILWAYS								
Subdivision	From	То	Province	Distance	Comments			
Edmundston Sub.	Grand Falls	Cyr Jct.	New Brunswick	7.8 miles	Sale to IRR in progress			
Sherbrooke Sub.	Lennoxville	Brookport	Québec	59.7 miles	Sale to IRR in progress			
Newport Sub.	Newport	Brookport	Vermont-Québec	58.4 miles	Sale to IRR in progress			
Adirondack Sub.	Brookport	Saint-Jean	Québec	20.0 miles	Sale to IRR in progress			
Seaway Spur	Cote Sainte-Catherine, First Ave to Mile 38.38, Adirondack Sub.		Québec	2.3 miles				
LaSalle Loop Spur	LaSalle, Des Oblats St. to Lapierre St.		Québec	3.0 miles				
South Bank Branch Spur	LaSalle, Clement St.	Montréal, De l'Église Ave.	Québec	3.1 miles				
Stanbridge Sub.	Farnham	Stanbridge	Québec	13.7 miles	Sale to IRR in progress			
Saint-Guillaume Sub.	Farnham	Sainte-Rosalie Jct.	Québec	28.0 miles	Sale to IRR in progress			
Trois-Rivières Sub.	Mascouche	Québec	Québec	151.4 miles				
Saint-Maurice Valley Sub.	Trois-Rivières	Grand-Mère	Québec	27.9 miles				
Saint-Gabriel Sub.	Lanoraie	Joliette	Québec	7.5 miles				
Lachute Sub.	Thurso	Lemieux Island (Ottawa)	Québec-Ontario	33.2 miles				
Prescott Sub.	Oxford Station	Preswood (Ottawa)	Ontario	30.4 miles				
Chalk River Sub.	Smiths Falls	Chalk River	Ontario	4.8 miles	Sale to TOR in progress			
Havelock Sub.	East of Toronto Yard, Mile 178	Havelock	Ontario	87.2 miles	CP internal short-line			
Nephton Sub.	Havelock	Blue Mountain	Ontario	20.0 miles	CP internal short-line			
Goderich Sub.	Guelph Jct.	Guelph, Norwich St.	Ontario	15.4 miles				
St. Thomas Sub.	Putnam	St. Thomas	Ontario	19.8 miles				
Dunnville Sub.	Smithville	Port Maitland	Ontario	19.0 miles	Former TH&B line			
North Bay Sub.	Chalk River	North Bay	Ontario	117.3 miles	Sale to TOR in progress			
Temiscaming Sub.	Mattawa	Temiscaming	Ontario-Québec	40.5 miles	Sale to TOR in progress			
Cartier Sub.	North Bay	Coniston	Ontario	76.2 miles	Sale to TOR in progress			
Nickel Sub.	Sudbury	Creighton	Ontario	10.0 miles				
Little Current Sub.	McKerrow	Turner	Ontario	38.0 miles				
Webbwood Sub.	Sudbury	Sault Ste. Marie	Ontario	181.1 miles				
Kimberley Sub.	North Star (Cranbrook)	Kimberley	British Columbia	15.8 miles				
Nelson Sub.	Curzon (Yahk)	Nelson	British Columbia	95.1 miles				
Boundary Sub.	Nelson	Robson West	British Columbia	30.7 miles				
Rossland Sub.	Castlegar	Warfield	British Columbia	22.0 miles				

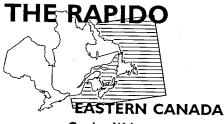
### CPR AND StL&H LINES PROPOSED TO BE ABANDONED

Must be offered for sale to	private companies for two mont	hs, then must be offered to governme	ents at net recover	y value	
St-Henri Yard CFS Lead	Montréal, Greene Ave. to Richelieu St.		Québec	0.7 miles	
Lachute Sub.	Sainte-Thérèse West	Saint-Augustin	Québec	4.2 miles	
Scarborough Pit Spur	Scarborough, Old Finch Ave. to Sheppard Ave.		Ontario	0.8 miles	
Belleville Sub.	Leaside	Toronto, Cherry St.	Ontario	3.2 miles	Don Branch
Galt Sub.	Toronto, Tecumseth Ave.	West Toronto, Cariboo Ave.	Ontario	3.8 miles	Used by GO Transit
Goderich Sub.	Guelph, Norwich St. to Woodlawn Rd.		Ontario	3.1 miles	
Port Burwell Sub.	Ingersoll	Tillsonburg	Ontario	17.6 miles	
Owen Sound Sub.	Streetsville	Orangeville	Ontario	35.7 miles	· · · · ·
CN Caso Sub.	Hewitt (Welland)	Fargo West	Ontario	150.4 miles	Joint ownership with CN
Manitouwadge Sub.	Struthers Jct.	Geco	Ontario	39.8 miles	
Breton Sub.	Sunnybrook	Breton	Alberta	14.0 miles	

# Transcontinental

Railway and transit news from coast to coast





Gordon Webster

### CANADIAN PACIFIC ST. LAWRENCE & HUDSON

### THREE-YEAR PLAN

A new three-year network plan was announced by the CPR, which includes the sale or closure of one-quarter, or 7000 km of its track in Canada and the U.S. The plan includes the sale or discontinuance of approximately 2600 km of track in Canada, concentrated in Ontario and Québec, with smaller segments in New Brunswick, Alberta, and British Columbia. (See the table on Page 14.)

There are 26 lines in New Brunswick, Québec and Ontario, comprising 1900 km of track, and 265 km of track on four lines in Alberta and B.C. that will be offered for sale or lease to other operators. Also under consideration is the possibility of internal shortline companies managing some of the lines. Operations will be discontinued on 440 km on 13 different lines, 10 of which are in Ontario.

The railway ended operations July 31 on 440 km of low-density branch lines on the Prairies as part of the Robson fast-track rationalisation process. All of these lines were used for hauling grain. Options are also being explored for a further 2000 km of track, comprising the Kansas City to Chicago corridor and the "Corn Lines" in northern Iowa and southern Minnesota. An additional 1550 km of line across the system are under close review. Changes to CP's three-year plan can be announced at any time, and there will be an annual update. —*CPR* 

HAVELOCK INTERNAL SHORT LINE The first of many potential short lines in the east on StL&H will start November 1 on the Havelock Subdivision in Ontario. The office for the short line will be in Havelock. The Manager of the Havelock Internal Shortline (ISL), as it is presently called, is Greg Geddis, the former superintendent of the Toronto Terminals Railway. Mr. Geddis worked for CP prior to going to the TTR. • The new end of main track on the Havelock Subdivision is at Mile 178.0, east of Toronto Yard.

### PURCHASE OF QCR

The CPR intends to purchase 90 percent of the outstanding shares of the Québec Central Railway Company by August 30. CPR currently owns or controls only roughly nine percent of all the capital stock of the QCR. It intends to offer \$5.75 cash for each £1 par value of capital stock. One condition of the offer is that at least 90 percent of the stock subject to the bid must be deposited under the bid. The offer totals an estimated \$5.8million. A number of stockholders agreed before the deadline to deposit about 60 percent of the outstanding capital stock. If CPR is successful in its initial acquisition, it intends to acquire all remaining shares under compulsory statutory acquisition rights, or if such rights are unavailable, CPR may propose an amalgamation, statutory arrangement, or other transaction, so that it has complete ownership of the company. Trains have not operated on the 237-mile QCR since December 22, 1994.

### DISPATCHING CHANGES

The rail traffic control centre on an upper floor in Union Station in Toronto will be closed as part of CP's reorganisation.

Control of the CPR "core" lines north of Mile 12.5 on the MacTier Subdivision, including all of the former Algoma Division, was moved to the new Network Management Centre in Gulf Canada Square in Calgary when the new CPR head offices there opened in early September.

The rail traffic control centre in Toronto still controls most of the former Toronto Division, now part of the St. Lawrence and Hudson. Plans are to centralise the dispatching of all of the StL&H in a new centre in the former Leaside station near Toronto, recently used by CP as an accounting office.

Local traffic in Toronto was for many years regulated by the MacTier Sub. dispatcher, but a new StL&H Toronto Terminal RTC desk has now been established, which controls the territory south of Mile 12.5 on the MacTier Sub., east of Guelph Jct. on the Galt Sub, and west of Darlington on the Belleville Sub., including the North Toronto, Canpa, and Havelock subdivisions.

### DIESEL SHOP CLOSURES

The StL&H will be consolidating its locomotive shops over the next few months. The changes, which are to commence November 1, will result in 32 positions being transferred from Saint-Luc Yard in Montréal to Toronto Yard, and another 30 positions being eliminated. The railway states that fewer locomotive repairs are required as a result of the completion of a locomotive modification programme to be completed by October, and the sale of lines in Ontario, Québec, and Vermont. There are currently three diesel shops on the StL&H, at Toronto, Montréal, and Binghamton, New York. The StL&H said that the railway can reduce costs by using a reliable fleet of GM units, maintained in Toronto, the geographic centre of the StL&H. The railway expects to retire a large portion of its remaining MLW units (RS18s and C424s) once the number of lines has been reduced. Montréal has been the main repair shop for MLWs.

By the end of 1996, it is expected that the Montréal facilities will be maintaining 75 MLW locomotives, 24 yard engines, 11 STCUM locomotives used on the Montréal– Dorion-Rigaud commuter service, and will perform minor, unscheduled repairs on GM locomotives. As the MLW fleet is further reduced in 1997, the staff at the Montréal facilities will be adjusted accordingly. -CPR

### CANADIAN NATIONAL

GECO BRANCH SHORTENED

The original connection of CN's Geco Branch industrial spur in southwestern Scarborough was removed on June 6. This connection, at Mile 327.0 of the Kingston Subdivision, was opened in 1947. The spur and the onceextensive sidings south of Eglinton Avenue, from Pharmacy Avenue east to Kennedy Road, are now accessible only from the later connection, made in 1953, at Mile 59.7 of the Uxbridge Subdivision.

The Geco Branch, which connected to many spurs north and west, was built in three stages in 1947, 1949, and 1953, to serve the new industries which grew up on the lands of the former General Engineering Co. munitions plant after the second world war. In the past 20 years, until its closure in 1994, the heaviest traffic was from the General Motors van plant west of Warden Avenue.

With this traffic gone, the elimination of the connection at Mile 327 reduces interference with the busy main line traffic on the Kingston Subdivision, and the remaining limited movements are routed via the junction with the Uxbridge Subdivision at Scarboro Jct.

Track will be removed between the connection with the Kingston Sub., at Mile 0 of the Geco Branch, and the connection with the Harris Lead, at Mile 2.10. This includes the removal of the "C" yard between St. Clair Avenue and Birchmount Road. This will leave the 1.05 miles of the Geco Branch from the connection with the Uxbridge Sub at Mile 3.15 plus the 1.21 miles of the Harris Lead and its associated small sidings.

Current service to the Geco Branch is provided by the 06:30 Don yard job on Mondays, Wednesdays, and Fridays.

-Calvin Henry-Cotnam, Ray Corley

#### CASINO RAMA CHANGES

Following disappointingly-low ridership in its first month of operation, Casino Rama has reduced to once a day the train service that it runs from Toronto to the casino, east of Orillia. From September 3, the schedule is:

### Northbound

Mo-Th ..... dp Trto 09:50 ar Rama 12:20 Fr ..... dp Trto 18:05 ar Rama 20:45 Sa Su Hol .... dp Trto 11:00 ar Rama 13:30

### Southbound

Mo-Th ..... dp Rama 17:20 ar Trto 19:45 Sa ...... dp Rama 02:00 ar Trto 04:20 (Saturday morning, late Friday night) Sa Su Hol .... dp Rama 18:45 ar Trto 21:05 The Casino Rama Express now uses Track 1 at Union Station in Toronto and loads through the GO concourse. This is more convenient to the subway and to the GO ticket-sales area than the arrangement in August, when the trains used Track 13 and loaded through the main station concourse. —Paul Bloxham, Richard Carroll

### VIA RAIL CANADA

#### CANADIAN TO BE REROUTED

With the abandonment of CN's Newmarket Subdivision between Barrie and Rama, set for September 22, VIA Trains 1 and 2, the *Canadian*, will have their route in and out of Toronto changed.

Train 1 will continue to leave west from Union Station (12:45 on Tuesdays, Thursdays, and Saturdays), and run via the Weston and Newmarket subdivisions. At Snider, No. 1 will cross the diamond, back west around the north wye track, then head east on the York Subdivision to Doncaster. From there, the train will run north on the Bala Subdivision, and will join the present route on the Bala Subdivision at Washago. From Washago, Train 2 will run south on the Bala Subdivision directly to Toronto, arriving at Union Station facing west, as now (at 21:00 on Tuesdays, Thursdays, and Sundays).

The stations at Newmarket, Barrie, and Orillia will no longer be served. Newmarket continues to be served by GO trains, and the Orillia station is also used as the Ontario Northland bus station. With the removal of these stops, Washago and Parry Sound will be the only points between Toronto and Sudbury that are served by Trains 1 and 2. IC3 TO DEMONSTRATE IN ONTARIO Two train-sets of Danish IC3 "Flexliner" selfpropelled equipment will be used by VIA in Ontario for four to five months, beginning with the timetable change on September 29. The IC3 is made by Adtranz, the transportation joint-venture of ABB and Daimler-Benz (AEG), and is now in service in Denmark, Sweden, and Israel. The two three-car sets coming to Ontario are from Israel, and have been in use in the U.S. for several months. VIA will be using the equipment not only to try the latest successor to the Budd RDC, but also to test additional trains at new times of the day on several of its lines from Toronto.

Before the new services begin, the equipment will tour southern Ontario; it will be in Ottawa on September 20 and 21, Stratford and Kitchener on September 23, London on September 24, Niagara Falls on September 25, and Toronto on September 26 and 27.

The two IC3 train-sets will run independently of each other, one remaining in service east of Toronto, and the other west of Toronto. They will return to Toronto for servicing on Saturdays. The equipment cycles and train times are:

### Train-set east of Toronto

MONDAY TO FRIDAY Train 651 – dp Kingston 06:15, ar Toronto 08:35 Train 640 – dp Toronto 09:00, ar Ottawa 13:12 Train 643 – dp Ottawa 13:50, ar Toronto 18:08 Train 650 – dp Toronto 20:00, ar Kingston 22:20 SATURDAY Train 655 – dp Kingston 07:00, ar Toronto 09:20 Servicing at TMC

Train 44 — dp Toronto 15:00, ar Ottawa 19:05 SUNDAY

Train 643 – dp Ottawa 13:50, Toronto 18:08

Train 650 — dp Toronto 20:00, Kingston 22:20

### Train-set west of Toronto

MONDAY TO FRIDAY Train 680 -dp Stratford 06:45, ar Toronto 08:45 Train 83 – dp Toronto 09:20, ar London 11:30 Train 82 – dp London 12:30, ar Toronto 14:35 Train 681 - dp Toronto 15:15, ar Kitchener 16:52 Train 684 - dp Kitchener 17:15, ar Toronto 18:55 Train 687 - dp Toronto 23:00, ar Stratford 01:01 SATURDAY · Train 682 - dp Stratford 07:40, ar Toronto 09:48 Train 93 – dp Toronto 11:30, ar Niag Falls 13:21 Train 94 – dp Niag Falls 14:30, ar Toronto 16:20 Servicing at TMC SUNDAY Train 93 – dp Toronto 11:30, ar Niag Falls 13:21 Train 94 – dp Niag Falls 14:30, ar Toronto 16:20 Train 683 - dp Toronto 22:25, ar Stratford 00:26 -Richard Carroll, David Stremes

#### FALL TIMETABLE CHANGE

The winter timetable will come into effect on Sunday, September 29. The largest changes are those associated with the demonstration of the IC3. On many lines, up to ten minutes that were added for track construction during the summer will remain in the schedule. Québec-Montreal - No changes.

Montréal-Ottawa - No changes.

Montréal-Toronto – Trains 57 and 60, which carry the baggage cars, are 10 and eight minutes slower, respectively. No other changes.

Ottawa-Toronto - No changes to Trains 41, 641, 43, 44, 45, 46, or 47. Train 643 is a new IC3 run, with stops in Smiths Falls, Brockville, Kingston, Cobourg, Oshawa, and Guildwood. Train 40 runs on a new Monday-Friday schedule, with stops in Guildwood, Oshawa, Cobourg, Kingston, Brockville, and Smiths Falls. The IC3 takes over Train 40's old time at 09:00, as Train 640; it stops in Port Hope instead of Cobourg, but the schedule is otherwise identical to the old Train 40. Train 42 no longer stops in Oshawa and Port Hope; this allows it to gain time at stations from Cobourg to Smiths Falls, but the final arrival time in Ottawa is unchanged. Train 44 adds a run on Saturday, so it's now daily except Tuesdays. On Saturday only, Train 640 runs with an F40 and LRC cars, and Train 44 uses the IC3.

Toronto-Niagara Falls - No changes to Trains 90, 95, 97, or 98. Some of the times of Train 92 are changed by one minute. Trains 93 and 94 are Saturday-and-Sundayonly runs using the IC3, making all stops.

Toronto-Sarnia – Train 85 leaves Toronto at 07:00, 50 minutes earlier, and arrives at Sarnia at 11:20, 45 minutes earlier. Train 685 departs from Toronto at 11:45, five minutes earlier, and is five minutes slower. Train 689 is unchanged. Train 89 leaves Toronto at 17:30, 55 minutes earlier, and run six minutes more quickly to Sarnia; this train will be used by commuters who come in on IC3 Train 680 in the morning.

Toronto-Kitchener/Stratford – Trains 680, 681, 682, 683, 684, and 687 are new IC3 runs, making all stops.

**Toronto-London** – No changes to Trains 80 or 81. Trains 82 and 83 are new IC3 runs, and will make all stops except at Ingersoll.

Toronto-Windsor - Train 70 departs Windsor at 05:50, 10 minutes earlier, and is 10 minutes slower, so that the arrival time in Toronto is unchanged. The departure time of Train 670 is unchanged, but it is seven minutes slower. Train 72 leaves Windsor 10 minutes later and is three minutes slower. Train 74 leaves Windsor at 12:20, 65 minutes later, and is five minutes slower. The departure time of Train 76 is unchanged, but it is eight minutes faster. Train 71 leaves Toronto 35 minutes earlier, at 08:00, and makes the trip to Windsor in eight minutes less. The departure times of Trains 73, 75, 77, and 79 are unchanged, but 73 is 10 minutes faster, 75 is nine minutes slower, and 79 is four minutes faster. -Tom Box



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### CANADIAN NATIONAL

COLLISION ON EDSON SUB.

Three men were killed on the night of August 12, when 19 runaway covered hoppers collided with westbound Train 117-10, 73 cars behind GP40-2s 9627, 9575, and 9508. The collision occurred about 10 km east of Edson, just east of the bridge over the McLeod River, between station names Wolf Creek (Mile 120.8) and Yates (Mile 122.9).

The cars had rolled away from the yard at Edson (Mile 129.6) about 15 minutes earlier, and ran downhill east on the south track. At Yates, 6.7 miles east of Edson, the two tracks converge to single track, prior to crossing two bridges over the Edson and McLeod Rivers. Train 117 was westbound on the single track, and was lined to take the north track at Yates. The hoppers made it to the single-track section, where Train 117 met them in the dark.

The crash killed the two-man crew of engineer and conductor, plus a friend who was travelling with them. An event recorder showed that the train was travelling at 53 m.p.h. when it met the string of covered hoppers, and that the emergency brakes had been applied.

The impact of the collision crushed the cab of the lead unit and badly damaged the second unit. Both were engulfed in flames from ruptured fuel tanks, and have been scrapped. The third diesel remained on the tracks, but has a bent frame.

There have been reports that CN rail traffic controllers in Edmonton saw the CTC panel indicating occupancy of the track ahead of Train 117, but assumed that it was a false signal and did not have time to contact the train.

The Edson yard track was not equipped with a derail; apparently it had been removed several years previously.

After the collision, CN announced that it had hired a specialist in railway safety to look into the causes of the accident, separately from CN's own internal investigation and that to be carried out by the Transportation Safety Board.

> -Glen Brosinsky, Ted Deller, Victoria Times-Colonist, CN, other newspaper and TV sources

### PREMIERS' TRAIN

On August 21, CN hosted a special train to transport the Canadian premiers from Edmonton to Jasper, for their annual conference. The train, which was shown as No. 601 on the line-up, had the following consist: CN GP40-2 9527, VIA F40PH-2 6440 (to supply electrical power to the train), VIA HEP-II coaches 4106 and 4114, VIA dining room car 8411-Imperial, VIA coaches 4112 and 4118. CN company service car 15161-Coureur Des Bois, CN reception-marketing car 15165-Tawaw, and CN track inspection car 15050-Sandford Fleming. The train was escorted by an RCMP helicopter and a convoy of road vehicles (RCMP and CN Police, among others). The official party boarded the train at Bissell, on the west side of Edmonton; the train left only a few minutes late from the posted 13:00 departure time.

—Jim Brock via CNet

# CANADIAN PACIFIC

Near midnight on August 8, 43 grain cars stored in a back track at Taft, B.C. (Mile 23.4, Shuswap Sub.) rolled away westward. The derail did its job, and 12 cars ended up in various positions on the siding. A train came upon them at 00:30 on August 9, but they were clear of the main line. The cars had rolled away in spite of the fact that seven handbrakes were applied. The cars had been stored for a week, and westbound freights had been picking up 10-car chunks from this 65-car storage track. Most of this storage track is on a one-percent down-grade.

While the hooks were working at Taft, at 23:05 on August 12, the first westbound CN train to be diverted over the CPR after the CN collision east of Edson derailed on the east switch at Glenogle, B.C. (Mile 28.1 of the Mountain Sub.) while entering the siding. A five-pack container car three cars behind the units went into the adjacent Kicking Horse River, depositing a container full of meat and another of beer into the water. The main line was shut until 14:00 on August 13. Only VIA Train 2 (the only Canadian to be diverted because of the accident on the Edson Sub.) and possibly two CN diversions made it over the CP, and a major CP freight traffic jam ensued. -G. H. Marmot via Dean Ogle

REMOTE CONTROL COMES TO B.C. CPR's B.C. District will begin remote-control yard engine operation on 26 Coquitlam yard assignments and four Williston yard assignments. GP9 1685, with the belt pack accessories has arrived in Coquitlam, and will likely be used for training purposes. Subject to union negotiations, belt-pack operation could begin as soon as October 1996.

-Phil Mason via Dean Ogle

### CPR NOTES

The Slocan Subdivision was lifted by a contractor between late June and mid-July, leaving the wye at South Slocan as the only remnant. • CPR (E&N) has removed the north siding switch at Cobble Hill. • Power on the E&N as of July 11 was GP38ACs CP 3002, 3006, and 3007, and E&N 3005. • CP is currently having to serve Victoria three times weekly instead of the once a week they'd prefer. — Dave Wilkie, Dean Ogle

### PASSENGER TRAINS

### WEST COAST EXPRESS

West Coast Express expanded its commuter service for the summer only to include a train on Sundays between Mission and downtown Vancouver. The special summer service began on July 14 and continues until September 15. The Sunday Express departs from Mission at 11:00 and arrives in Vancouver at 12:13. Eastbound, the train departs from Waterfront Station at 18:00 and arrives back in Mission at 19:13. -BC Transit

### AMTRAK

On July 19, the southbound *Mount Baker International* derailed almost immediately upon starting to move out of the Vancouver depot. A steering problem on the first car of the Talgo train-set was suspected. Passengers were sent to Seattle by bus and the equipment eventually deadheaded, leaving Vancouver at 03:30 the next morning. The northbound train operated on time on July 20. The next day, July 21, the northbound Talgo struck a four-wheel-drive truck stuck while trespassing on the tracks under the freeway overpass immediately south of Colebrook. —Dean Ogle

BURLINGTON NORTHERN SANTA FE BNSF used New Westminster switch engines 390 and 391 (both SW1000s) to take 100 Korean hockey players on excursion to White Rock and back on August 11. The special, made up of four privately-owned antique passenger cars, left New Westminster at 11:20 and returned at 15:45. —Dean Ogle

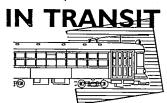
#### E&N-VIA

On Saturday, August 24, the northbound *Malahat* hit and killed a 62-year-old man who was walking on the tracks. The accident happened near Little Qualicum River, in a forested area. The passengers from the train (about 60) were taken to Courtenay by bus. --CFAX, Victoria Times-Colonist

#### PASSENGER SHIP NEWS

The burned hulk of the former CN ship Prince George has been sold to a Puyallup, Washington, salvage broker. Crews from Chenco International Inc are reportedly preparing the ship for towing to a breakers' yard. -Dean Ogle

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### VICTORIA

### LATEST LRT REPORT

A report released on July 30 estimates the cost of a light-rail line from Langford to downtown Victoria at \$298-million. The 18 km line would run from the Langford E&N station through CanWest Mall and along the Galloping Goose Trail (a former CN right-ofway) to Town and Country shopping centre at Douglas Street, then along Douglas to Hillside Avenue, west on Hillside to Government Street, and through downtown to James Bay, near the Parliament Buildings.

The report, prepared by a Vancouver consulting firm, gives a lower estimate of cost than that in a 1990 report to BC Transit (\$335-million), which considered three-car trains running every five minutes, and carrying 8000 people per hour.

The latest report recommends two-car, low-floor trains running every six minutes in rush hour and every 15 minutes in off-peak hours. The study says a fleet of 24 cars would cost \$80-million, fixed facilities \$191-million, and such facilities as a park-and-ride centre \$6.3-million. Property acquisition has been estimated as \$19-million, but the province already owns most of the right-of-way. The report now will be discussed by municipalities and public interest groups.

—Victoria Times-Colonist

### VICTORIA NOTES

The west side of Menzie Street just north of Superior Street has been converted into a series of angled bus bays for the terminus of a number of BC Transit Victoria bus runs. The new on-street terminal is right by the Parliament Buildings. By the end of July, full operation of the bays had begun. The improved facility, with its central location, should encourage increased use of transit by government workers in Victoria. • Fall service changes on BC Transit in Victoria include: The introduction of the growing fleet of low-floor New Flyer buses on Route 20-Cook; an extension of Route 39-Royal Oak-UVic to Camosun College and Interurban: a new Route 40 between Royal Oak and Western Exchange; and a new express Route 6, with direct non-stop service from downtown to High Quadra. -Dean Ogle

### TORONTO

WYCHWOOD DEMOLITION PLANS The TTC's former Wychwood/St. Clair carhouse may be demolished soon. The oldest parts of the complex were built in 1913 by the City of Toronto for the Toronto Civic Railways, and Wychwood was used as a carhouse until 1978, when St. Clair Division was closed. The site was then used intermittently by the TTC and by UTDC as a testing and commissioning site for CLRVs and ALRVs, and as a storage site for retired PCCs, trolley coaches, and buses. The carhouse's last major use was for the fitting of the CIS

last major use was for the fitting of the CIS communications system into TTC buses and streetcars, a project that was completed in the early 1990s. Since then the carhouse has not been intensively used.

The Wychwood site was among a list of properties recently deemed surplus to transit needs, and the TTC is now considering razing the complex to avoid maintenance and security costs. The Toronto Historical Board, which is responsible for evaluating and listing historic structures, has been investigating Wychwood carhouse for possible designation, but has not yet formally determined that the site is historically significant.

The need for security at the location was demonstrated on August 26, when it was discovered that four streetcars stored inside the carhouse had been vandalised, with up to two dozen windows smashed on each car. The cars were 4609 and 4615, out of use since December 1995, and 4524 and 4529, stored since 1990. All four had been sold and were awaiting shipment. After the damage was discovered, 4524 and 4609 were shipped out to purchaser Tom Twigge the next day. No. 4615 was moved to Hillcrest temporarily for safekeeping, then back to Wychwood, and was shipped on September 9. No. 4529 remains outdoors at Wychwood.

### SHEPPARD SUBWAY CONSTRUCTION After much highly-publicised debate, Metro Council in early August authorised the letting of contracts to dig the twin tunnels for the Sheppard Subway, from Yonge Street to Don Mills Road. No money was approved for any other significant construction work on the subway, including the finishing of stations, or the installation of track, signals, or power supplies.

Design work on the rest of the subway will likely continue, but further construction will require later approval and additional funding. The decision to proceed with the tunnelling came as a surprise, as it was expected that the entire project would be cancelled, given the high cost of the project, the uncertain political support for the line, and pressure for reduced capital spending.

### ATO TEST TRAIN

An extensive test of the possible use of automatic train operation on the TTC's subway had been under way since last fall, but was recently cancelled. The testing programme was in anticipation of using ATO on the new Sheppard Subway, where the proposed platform edge doors would require accurate train positioning. ATO was considered for the upcoming re-signalling of the existing subway system.

A short list of potential commercial suppliers of ATO systems was determined, and included AEG, ABB, GEC Alsthom, GRS, and Harmon Industries. All five are established international railway signalling companies, the first three being European, and the last two, American.

A test train was made up of H-5s 5736-5737 and H-1s 5411-5410. All four cars had a wide yellow stripe along the entire length of the car, filling the space between the bottom of the windows and the top of the fluting. Marked on the stripe in three places per side was "Test Train" in red letters. Every pair of passenger doors had a wide red cross on it, extending diagonally from each corner, and a Do Not Enter sign with pictogram on one of each pair of door windows. At the cab ends, the bottom of the non-cab side window had red Test Train lettering on a yellow background. All of this was intended to prevent passengers from boarding.

When viewed in late July, 1996, in GEC Alsthom service, H-5 car 5736, which led at the south end, had extra piping or cabling with a flat rectangular antenna-like object on the outside, right beside the inter-car door. Both H-5s had almost all seats and seat frames removed, but with the structural metal supports still in place. The cars were filled with equipment boxes bearing shipping labels from France. There did not appear to be any modifications to the H-1 cars, except for the exterior markings.

Tests commenced in October 1995. Tests of the GRS and GEC Alsthom systems (which both use radio links for the ATO) were completed. The test train operated between the Osgoode pocket track and St. Clair West Station. During the GEC Alsthom tests (of the company's "SACEM" system, first used in Paris on the RER regional metro) the train was driven by GEC employees, usually in the evening, after the afternoon rush hour had ended, but while regular service was still operating. The train and its support services were based at Davisville Carhouse.

Cable was laid from Osgoode to Queen's Park for the AEG system, but the project was cancelled on August 1, as part of the ongoing reduction in expenditures at the TTC, and the anticipated cancellation of the Sheppard Subway. -Ray Corkey, SH

# THE TRAIN SPOTTERS

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June 20 - Rode the Northlander, ONR Train 697 from Toronto to North Bay, with a consist of 1808-204-609-700-615-601. The train met a southbound at Pefferlaw. At Washago, a school group boarded for a short trip to the next stop, Gravenhurst. A brief stop was made north of Bracebridge to allow some track machinery to clear. At Transfer (North Bay), Train 450 was met. Train 697 was 30 minutes late arriving North Bay. After getting off the train, my trip by car began. A trip was made to the yard area where CP 3131 was seen switching the CP yard; ONR 1501 and two TEE train-sets were at the ONR shops.

June 21 - The drive west via Highway 11 began. ONR Train 698 was seen south of Thornloe (same consist as ridden the day previous). At Val Gagne, a southbound ONR freight with four units and 85 cars was sighted in the distance. There was no activity at Cochrane, Mattagami, or Kapuskasing. At Hearst, the ONR had 1603 and silver van 107 sitting in the yard; the ACR passenger train consisted of 1756-309-301-5495-3243.

June 22 - The ACR train left Hearst at 08:45, revealing WC 3027 on the next track to the passenger consist. CN Train 337 was seen at Longlac switching; it had 9659-3510-9313 leading. (The 9659 is notable for having the numbers "96" on the rear of the unit in black paint.) Just before Train 337 was ready to laeave Longlac for Thunder Bay via the Kinghorn Sub., an eastbound CN 100series train pulled through at 13:45 with 5318-5189 leading. At Jellicoe, unit 5096 was turned and waiting to lead Train 337 after the crew change. Train 337 left Jellicoe at 16:20, and was by Current River at 20:52. In Thunder Bay, CP track geometry cars 64-65-424994 were at the station; an eastbound CP train passed with 6025-HLCX 5025-CP 1837. The local yard jobs were covered by CP 1242-8171 and CN 7217-270.

June 23 - Travelling westward on Highway 11, nothing was seen moving on the CN Kashabowie or Fort Frances subdivisions. At Atikokan, two trains were parked: 5388-5143-5000 with ballast cars and 5296-5366-5303 with coal cars. (CN 5388 is a former CP unit.) No action was seen on the MD&W (International Bridge and Terminal) line into Fort Frances.

June 24 - At Kenora in the early morning, two trains were sighted, namely an eastbound with CP 5955-5692-HATX 916 on a wheat train and a westbound with 5794-5554-HLCX 5016. At Symington, a westbound off the Sprague Sub. appeared at 12:39 with CN 5528-5501. Train 2, the eastbound Canadian, pulled into Winnipeg station. At WMC, VIA units 6458 and 6304 were present along with baggage car 8602. Later, at Portage la Prairie, a CN eastbound passed at 16:35 with 9418-9492-9443; a CP westbound at 19:07 with 5700-5504; and a CN eastbound at 19:17 with 5028-5101.

June 25 - A trip along CP branch lines between Brandon and Regina yielded no train movements. At Regina, a CP eastbound passed at 16:50 with 6036-MKCX 9528; and an eastbound at 18:18 with 6022-5811. For supper, a stop was made at "Van Horne's," a restaurant made out of former VIA car 5511. now parked next to Casino Regina, which is within the former CPR/VIA Union Station building.

June 26 - In the morning, the CN yard was visited, where 1412-1416, 5361-5327-5304, and 5141-5110-5168 were the power sets in attendance. Later, at Moose Jaw, at the CN station, units 4730-4762 were seen. At the CP station, an eastbound double-stack train passed with 5728-6407. In the yard were 3030-3064, and 6048-5875, among many other units. At Antelope at 16:39, a CP eastbound passed with 5946-5834. At Gull Lake, an eastbound with 9014-5947 switched in the siding while another eastbound with 9012-5878 passed at 16:47. On the approach to Dunmore, a westbound was seen with 5867-Soo 6014-HLCX 5018-CP 5754.

June 27 - At the Medicine Hat yard, units 1535-1545 were switching. An eastbound passed at 10:03 with 5940-5959-5499-776 leading. On the Cousins Industrial Spur, units 3086-3061-3008-3048 were switching Western Co-operative Fertilizers Inc. At Suffield, a westbound potash train was seen with 5875-6048-9560 leading and 5709-5968 in remote. The potash train met an eastbound at Kininvie, with Soo 6018-HATX 914-CP 9018-HLCX 6056 at 11:15. At Bassano, units 3114-3047 were seen switching at 13:02. This train runs off the Irricana Sub., and apparently operates only once per week. The next stop was Calgary, where the Regio-Sprinter was ridden and photographed (at the cost of a number of mosquito bites).

June 28 - No railway activity, but plenty of wildlife was spotted, including bighorn sheep and lambs at the junction of Highway 40 and the road to Kananaskis Lakes.

June 29 - On arrival at Edson at 17:00, 2502 was on the wye, 5454-5443-5410 were at the shop, and 2400-5424 were parked with a coal consist.

June 30 - An eastbound empty coal train was seen west of Hinton at 11:10 with 2446-2450. The local switcher left the Weldwood plant at 11:40 with 4019-4001 and 30-odd cars. At 14:03, CN Train 771 was seen loading at Gregg River with 2417-2423-2504. At Cardinal River, a coal consist with 5447-5503-5541 was loading by pulling uphill through the loadout. At Leyland, units 2521-2419-2407 were parked. Light engines 2515-5454-5410 were seen westbound at Steeper. To close out the day, an eastbound with 2408-5553-5516 was still in twilight at 22:57 by Pedley.

July I - In the pocket track at Jasper was VIA 6451 and coaches 8124, 4003, plus, of course, CNR 6015. In the yard were units 2522-2411-2422-2412-2436; three westbounds were tied up with 5331-5142, 2426-5082, and 5546-5505, while at the shop were 5459-5456. At this time, it was discovered that the lack of activity was due to a CN derailment further west, on the Clearwater Subdvision, north of Kamloops. As a result, CN and VIA trains were detouring via the CP over Kicking Horse Pass. VIA Train 6 arrived at Jasper with 6438-8120-4005-8515. In bright sun at 21:40, a westbound of empty bulkheads for the BCR passed behind 5511-5548.

July 2 - At Bickerdike at 11:41, the westbound TEST train was seen led by unit 4778. Just west of Edson, unit 5338 and one hopper car headed west. At Edson, 5519 was on the wye and 5553 was at the shop. A westbound was tied up at Edson East with 5022-5178; tied up at Whitecourt were 4789-4712.

July 3 - Before the flight back to Toronto from Calgary, a stop at the CP Red Deer yard yielded a southbound with 3053-5520-5905 and 3046-3015 sitting in the yard.



