

# ALCO RS1

# Study-Part I

## The Original Roadswitcher

by DON DOVER

The first RS1 (Alco Spec E1640?) came in March 1941 as RI 748 and started a new era in locomotives. As a concept, it was new although it shared many parts with the S1's and S2's, in production since May 1940. The RS1 was truly the first roadswitcher, being able to fulfill the advertising claims of "for both road and switching service". To make use of the diesel's "90% availability", during the day it could be on the road and then used all night as a yard switcher. By early 1942, the phrase had been simplified to "road switcher" as two words. Railroad men and other builders, except EMD, soon picked up "roadswitcher" as a natural and logical term for a new concept. Except for EMC's pre-NC #518 in 3/35, and the 98-ton NH "Y's" built by GE in 9/36, there had never been anything like the roadswitcher configuration; however, the #518 and NH "Y's" (and other off-centercabs) were designed and used strictly for switching, being limited to only 25-35 mph.

The next roadswitchers, outside of Alco, were the Baldwin DRS64-660 for the French National Railways (72898-, 4/46) and the first FM was H15-44 Monon #45 (L1198, 9/47). The first GP7, CNW #1518, did not come until 10/49 just before Alco was to introduce their third roadswitcher, the RS3.

Of course, until 1951 Alco apparently never used the now familiar model designations of S1 thru S4, RS1 thru RS3, FA1, PA1, etc. It always used "1000hp switcher" or whatever, in advertising; and the "E1540", etc., spec designations for internal use. And, Alco engineering personnel used the spec numbers until the end. "RSD1" never was used by Alco, but was assigned by loco-fans as a logical "handle" for the C-C RS1.

The RS1 design-line started in 9/29 when Alco bought the McIntosh & Seymour engine company and immediately launched a development program for a new line of engines to compete with and improve on the only practical diesel of that day, the Ingersoll-Rand. By 8/30 their first new engine (6 cyl. 300hp, 9½" x 10½"), the Model 330, was put in demo #300, later Jay Street #300. And, by 7/31, a larger (6 cyl. 600hp, 12½" x 13") new engine was ready, the Model 531 was put in the first HH, NH #0900; both engines were fairly successful and, in effect, were the first modern diesel engines especially designed for locomotives.

As is always the case, more than 600 hp was needed so Alco took the next traditional step by going to 8-cylinders to achieve an 800 hp engine, but it weighed 5½ tons more than the 17-ton 6 cyl. Model 531. Before this 8 cyl. engine could be tried in a locomotive, Dr. Buchi, developer of the turbo, sold Alco on using the first turbocharger (not supercharger) on an American loco, thus converting the 600 hp 531 to a 900 hp 531-T (18 tons), used first on PB&NE #207 in early 1937, BS #81-85 followed soon after. In 1938 the 531 was redesigned to cut weight, improve performance and lower production costs. This became the 660 hp 538, and the 1000 hp 538-T engines. Very soon after, the need was recognized for a lower hood switcher to compete with EMC SW's and NW's. A program, somewhat less than the 538 redesign, was accomplished in 1939 to produce the "low profile" 539 engine. Mainly this was done by moving the mounting bosses from the bottom of the 538 engine about 16½" up on the engine sides, this allowing the oil pan to extend down between frame members as was common with automobiles. This, plus other changes, allowed the HH's high hood to be lowered about 27" on the S1 and S2. From there to the RS1 involved only lengthening the frame of the S2 by 8½' plus adding a short hood and road trucks.

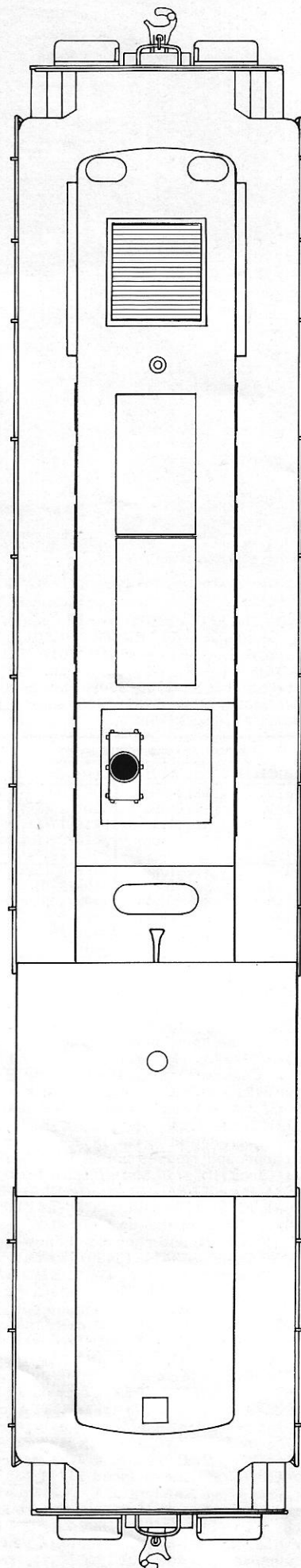
It is said that the RS1 was first conceived on the back of an envelope in the Chicago office of RI president, John Farrington, about August 1940. He ordered two (RI #748, 749, 3/41) at a time when RI had no Alco switchers except HH900 #730, and when only twelve S1's and two S2's had been built. But, of course, RI had long been a customer for many Alco steamers, had taken delivery on RI DL103B #624 in 12/39, and had already ordered DL107's #622, 623.

The so-called AAR-B (9'4" wheelbase, swing bolster, drop equalizer) truck found on Alcos (also BLW and GE) from the RS1 on was not new, but was a variation of a well-known Commonwealth design built by General Steel Castings and used previously on such locomotives as the EMC demos #511, 512; B&O #50, the IC Green Diamond, some electric locos, etc.

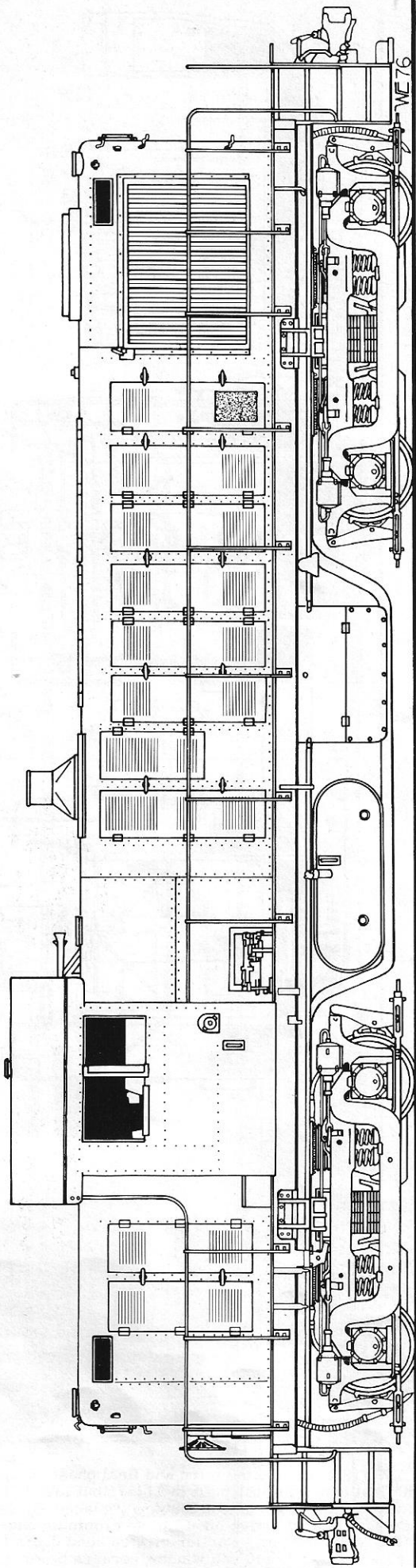
Undoubtedly, the RS1, during its 19 year span (1941-60) of production, would have sold many more than 623 if it could have been boosted to 1200 hp - 1350 hp, had about ten tons added, and had not competed against the RS2 and RS3. Apparently after the 1946 introduction of the RS2, Alco advertising never pushed the RS1 (more profit in RS2). It has been a very dependable and well-liked loco by both operation and maintenance crews. And, no other roadswitcher ever rode better. Several RS1's in 1976, in good condition, sold for \$50,000 each, but with inflation, we may see the price climb back to the original \$80,000 when introduced in 1941.

Drawing by Win Cuisinier © 1976

TOP



Phase II



ALCO RS1

4 4.666ft  
1.422 m

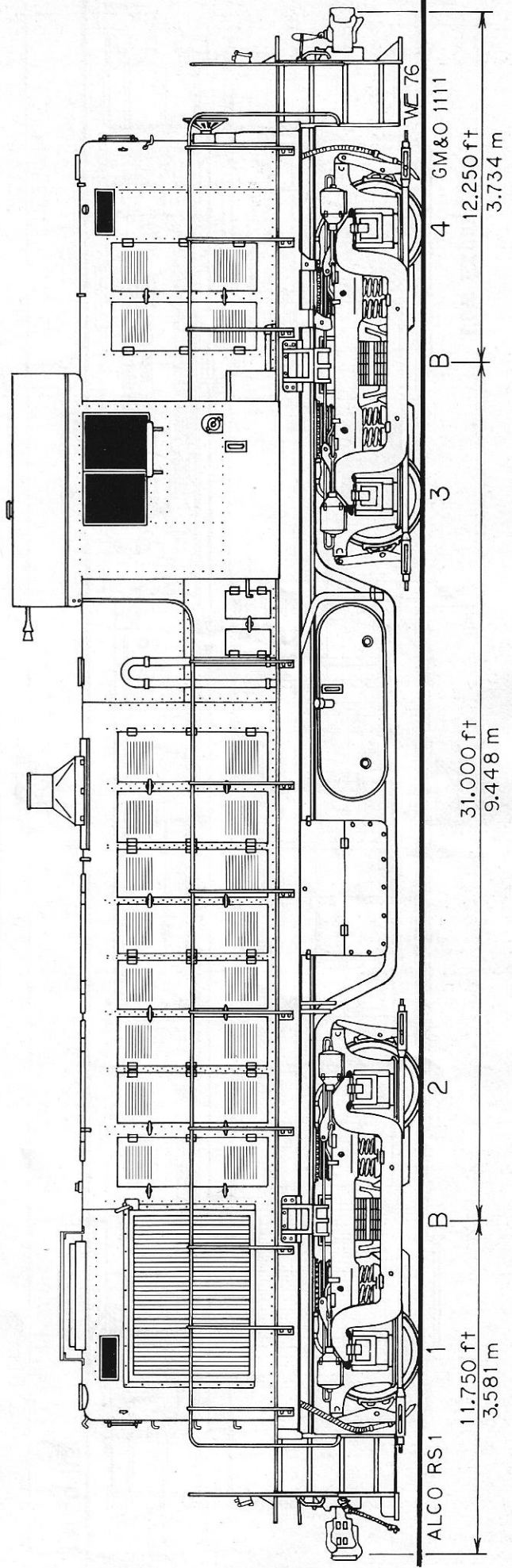
B 4.666ft  
1.422 m

3 4.666ft  
1.422 m

2 9.333ft  
2.844 m

1 GM&O 1122

Drawing by Win Cuisinier © 1976



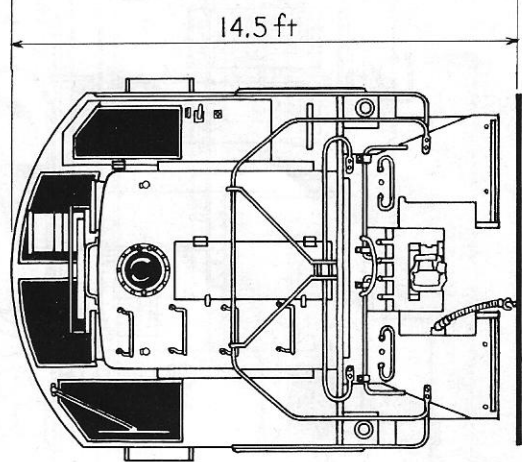
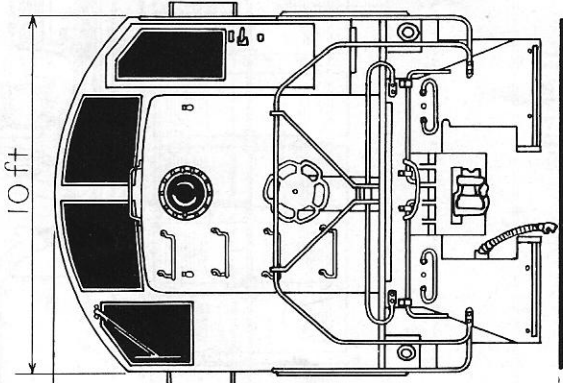
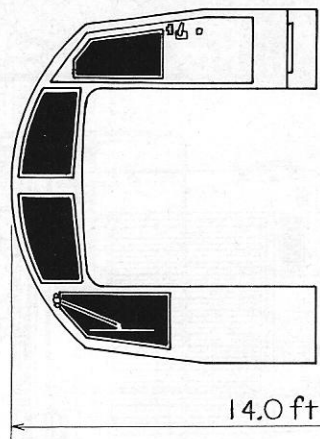
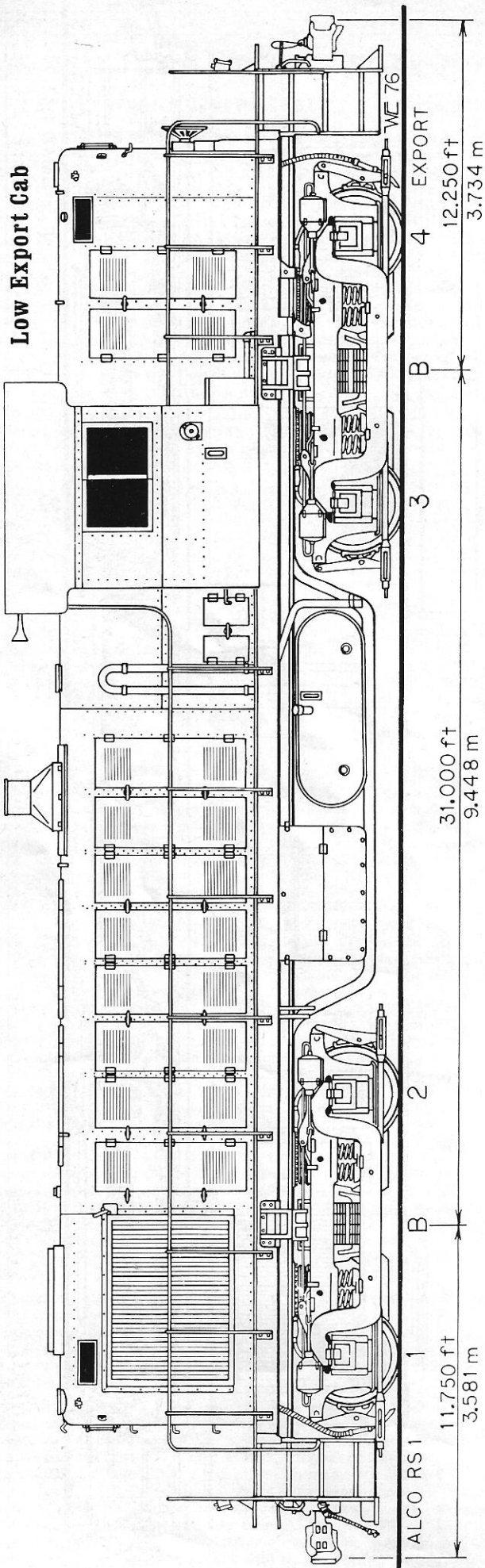
ALCO RS1

1 11.750ft  
3.581 m

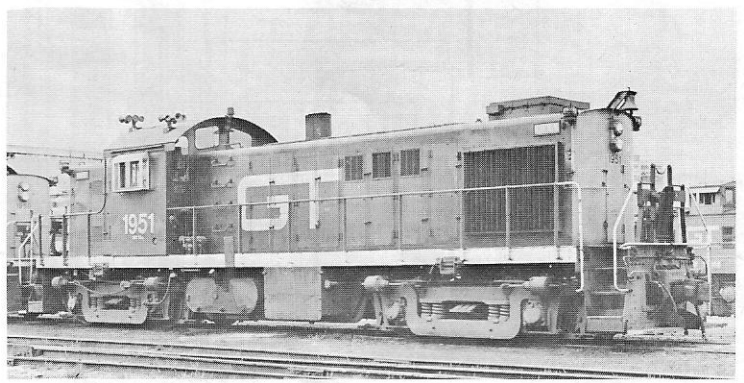
B 31.000ft  
9.448 m

2 12.250ft  
3.734 m

3 4 GM&O 1111  
12.250ft  
3.734 m

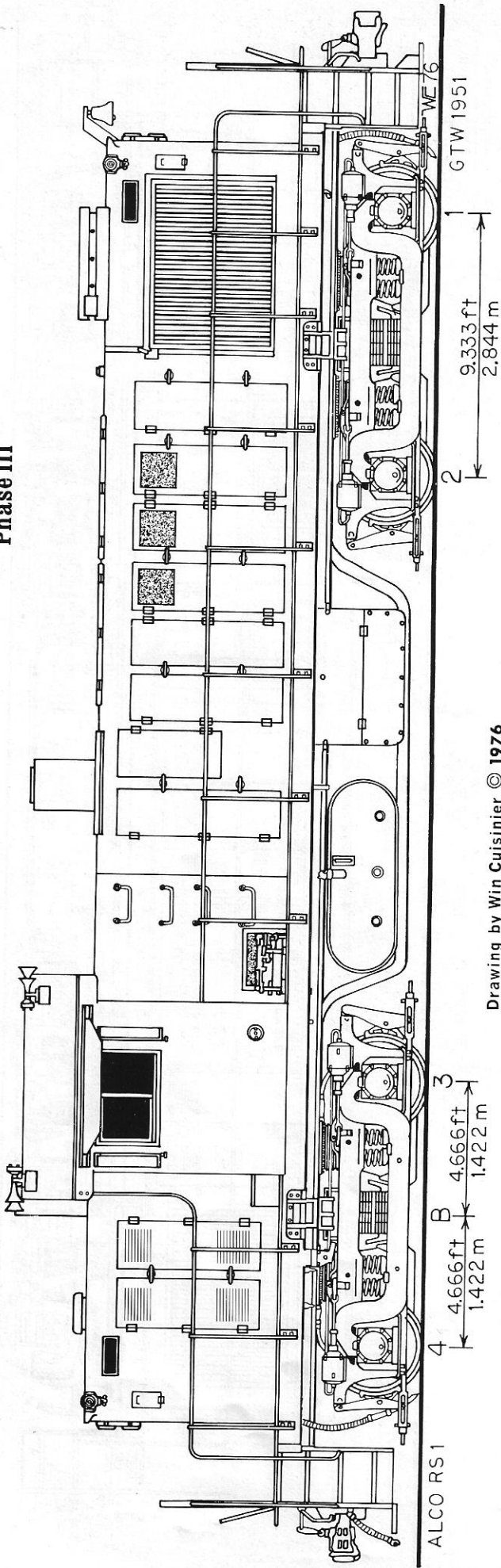


Drawing by Win Cuisinier © 1976

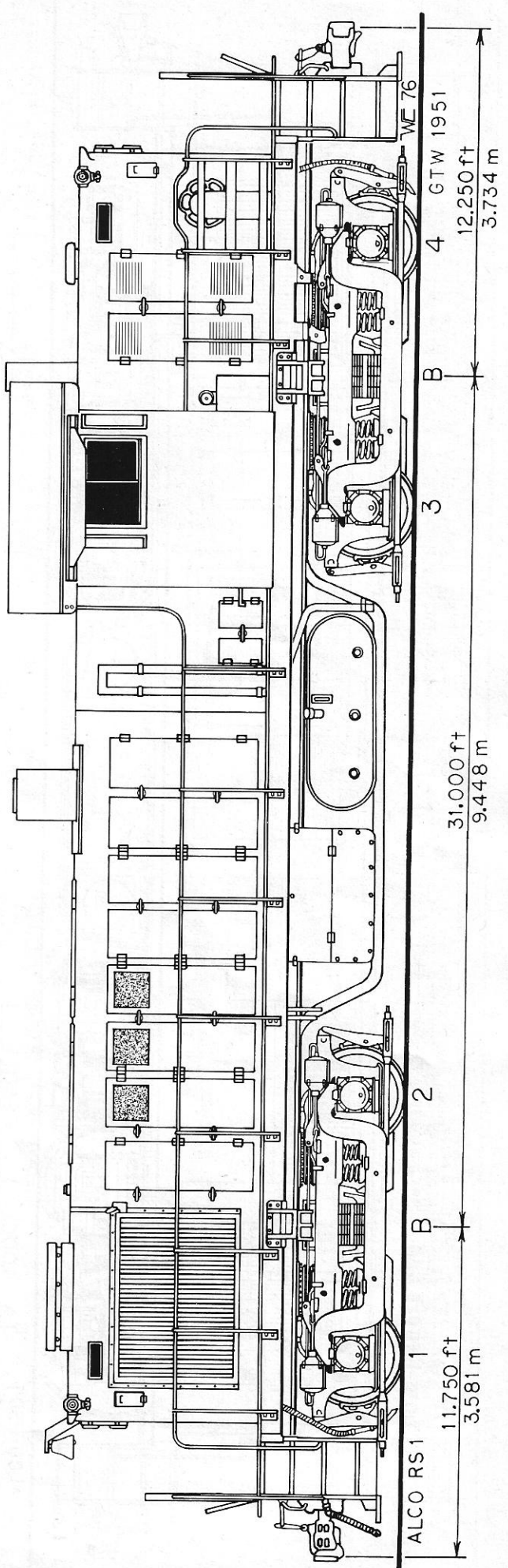


Larry E. White  
 GTW #1950 started the third and final phase of the RS1; #1951 was the last domestic RS1 built in 11/57, but last 13 NdeM's came later. Phase III had hood louvers replaced by carbony filters and had the distinctive hood lips to eliminate sheetmetal curve (also on Late S4's). Earlier riveted hood doors had become welded (in L/48) and cab window corners became rounded (in 5/55). Photographed at Detroit, MI, 7/4/72.

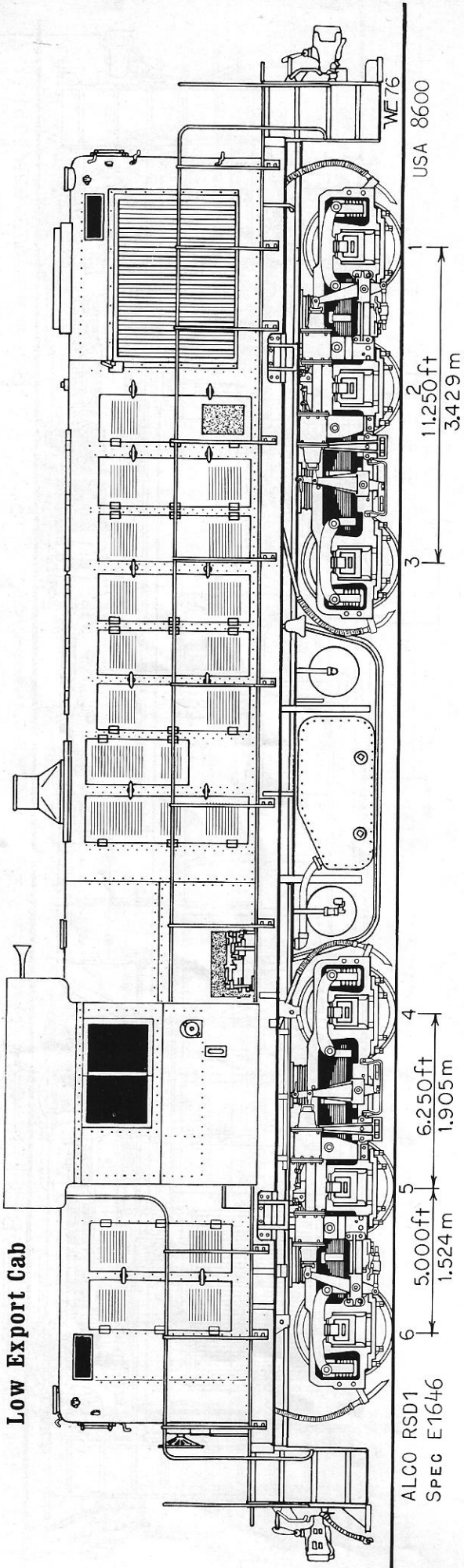
Phase III



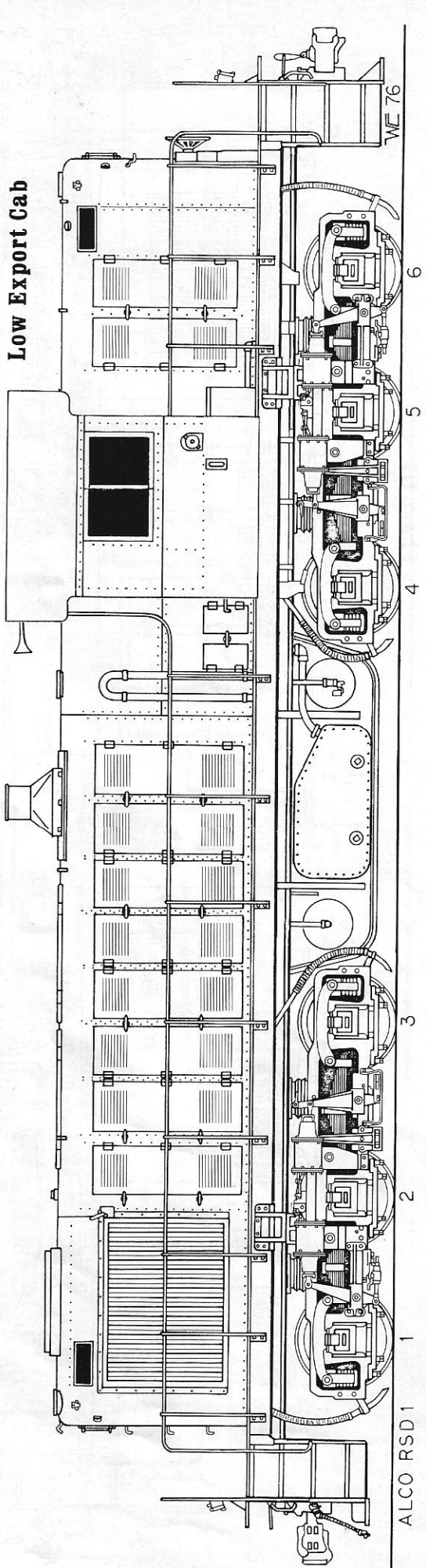
Drawing by Win Cuisinier © 1976



**Low Export Cab**



**Low Export Cab**



Drawing by Win Cuisinier © 1976

o/n	b/n	b/d	Qty.	Railroad	1st r/n	2nd r/n	Weight	s/g	mu	Notes
S3058	75825-75828	2-3/48	4	New York Central	8100,8106-8108	PC 9900,6-8	see notes	8100	yes	32
S3058	75829-75838	3-4/48	10	New Haven	0660-0669	PC 9941-44,-9945,-	243,000	yes	yes	31
S3058	75839-75841	5/48	3	Illinois Terminal	750-752	1050-1052	235,000	no	yes	22
S3058	75842, 75843	5/48	2	Gaylord Container	302, 303	Crown-Zellerbach 302,303	240,000?	no	yes	16
S3058	75844	6/48	1	GE-Atomic Energy Commission	39-3729	same	240,000?	no	no	17
S3073	76206	6/48	1	GE-Atomic Energy Commission	39-3730	same	240,000?	no	no	17
S3073	76207-76209	9,9,10/48	3	Minneapolis & St. Louis	948-1148	220-222	242,500	no	yes	29
S3073	76210, 76211	10/48	2	GE-Atomic Energy Commission	39-3731, 39-3932	same	240,000?	no	no	17
S3073	76212, 76213	11/48	2	New Haven RR	0670, 0671	PC 9946	243,000	yes	yes	31
S3073	76214	12/48	1	Pennsylvania RR	5906	PC 9916	249,700	yes	no	35
S3073	76215-76218	12/48	4	Washington Terminal	56-59	same	240,000	yes	no	43
S3073	76219	12/48	1	Gulf, Mobile & Ohio	1120	(ICG 1282)	243,000	no	yes	21
S3073	76220	12/48	1	Long Island	461	same	249,700	yes	no	26
S3088	76622	1/49	1	Long Island	462	same	249,700	yes	no	26
S3088	76624, 76625	1/49	2	Gulf, Mobile & Ohio	1121, 1122	ICG 1283, (84)	243,000	no	yes	21
S3088	76626-76628	2,2,3/49	3	Long Island	463-465	same	249,700	yes	no	26
S3088	76629-76631	3,3,4/49	3	Gulf, Mobile & Ohio	1123-1125	(ICG 1285-1287)	243,000	no	yes	21
S3096	76796	4/49	1	Gulf, Mobile & Ohio	1126	(ICG 1288)	243,000	no	yes	21
S3096	76797	4/49	1	Lake Erie, Franklin & Clarion	20	same	244,000	no	no	24
S3096	76798	5/49	1	Gulf, Mobile & Ohio	1127	(ICG 1289)	243,000	no	yes	21
S3096	76799, 76800	7/49	2	Chicago & Western Indiana	252, 253	same	251,000	yes	no	12
S3112	77166-77171	9-10/49	6	Spokane International	200-205	UP 1211-1216	see notes	200,1	yes	39
S3112	77172-77175	10-11/49	4	Chicago & Western Indiana	254-257	same	251,000	yes	no	12
S3121	77836, 77837	12/49	2	Chicago & Western Indiana	258, 259	same	251,000	yes	no	12
S3121	77838	12/49	1	Atchison, Topeka & Santa Fe	2395	same	249,500	note	no	6
S3121	77839-77841	12/49	3	Spokane International	206-208	UP 1217-1219	see notes	no	yes	39
S3121	77842-77846	12/49-2/50	5	Minneapolis & St. Louis	849-1249	223-227	242,500	no	yes	29
S3121	77847	2/50	1	National Railways of Mexico	5606	same	239,500	no	note	30
S3121	77848	2/50	1	Atlanta & St. Andrews Bay	913	same	243,000	no	no	7
S3121	77849-77852	2/50	4	Chicago & Western Indiana	260-263	same	251,000	yes	no	12
S3121	77853-77854	2, 3/50	2	Wisconsin Central (SOO)	2360, 2361	same	242,300	no	no	38
S3121	77855	3/50	1	Illinois Terminal	754	1054	235,280	no	yes	22
S3127	77069, 77070	3/50	2	Illinois Terminal	755, 756	1055, 1056	235,280	no	yes	22
S3127	77073	3/50	1	National Railways of Mexico	5607	same	239,500	note	note	30
S3130	77469-77471	3/50	3	Milwaukee Road	961-963	870-872	238,800	no	no	28
S3130	77472-77474	3/50	3	Washington Terminal	60-62	same	240,000	yes	no	43
S3130	77475-77478	4/50	4	Long Island	466-469	same	249,700	yes	yes	26
S3133	77986-77988	4/50	3	New York Central	8109-8111	PC 9909-9911	241,000	no	yes	32
S3133	77989, 77990	4/50	2	National Railways of Mexico	5608, 5609	same	239,500	no	note	30
S3138	78033-78042	4-5/50	10	National Railways of Mexico	5610-5619(1st)	5619(1st)r# 5600(2nd)	239,500	no	note	30
S3139	78088, 78089	5/50	2	National Railways of Mexico	5620, 5621(1st)	5601, 5602	239,500	no	note	30
S3139	78090, 78091	5/50	2	New York Central	8112, 8113	PC 9912, 9913	240,000	yes	yes	32
S3139	78092-78094	5/50	3	National Railways of Mexico	5622-5624(1st)	5603-5605(2nd)	239,500	no	note	30
S3139	78095-78099	6/50	5	Central of New Jersey	1200-1204	same	246,750	no	yes	9
S3139	78100-78105	6/50	6	Pennsylvania	5625-28, 37, 38	PC 9925-27, 9937, 38	242,400	yes	yes	35
S3139	78106-78109	6/50	4	Pennsylvania 5619, 20 are (2nd)	5619, 20, 39, 40	PC 9919, 20, 39, 40	242,400	yes	yes	35
S3139	78110-78113	6, 7/50	4	Pennsylvania	5621-5624(2nd)	PC 9921-24	242,400	yes	yes	35
S3139	78115	8/50	1	Atchison, Topeka & Santa Fe	2394	same	249,500	note	no	6
S3139	78114, 116, 117	8/50	3	Pennsylvania	5629-5631	PC 9929-31	242,400	yes	yes	35
S3139	78159-78163	8/50	5	Pennsylvania	5632-5636	PC 9932-36	242,400	yes	yes	35
S3139	78241	8/50	1	Lake Erie, Franklin & Clarion	21	same	244,000	no	no	24
S3139	78242	8/50	1	Wisconsin Central (SOO)	2362	same	242,300	no	no	38
S3139	78243-78245	9/50	3	Minneapolis & St. Louis	950, 1050, 1150	228-230	242,500	no	no	29
S3139	78373	9/50	1	Minneapolis & St. Louis	1250	231	242,500	no	no	29
S3139	78374, 78375	11/50	2	Ann Arbor	20, 21	same	240,230	no	yes	5
S3139	78376	1/51	1	Duluth, S. Shore & Atlantic	107	SOO 107	246,200	no	no	14
S3139	78377	4/51	1	Pennsylvania	8857	PC 9917	244,000	yes	no	35
S3173	79046	4/51	1	Pennsylvania	8858	PC 9918	244,000	yes	no	35
S3173	79047	4/51	1	Atlantic & East Carolina	500	A&EC(SR) 405	233,040	no	no	44
S3173	79048, 79049	5/51	2	Washington Terminal	63, 64	same	240,000	yes	no	43
S3173	79050-79053	6-7/51	4	DuPont	105-108	same	no	no	15	
S3173	79054, 79055	8/51	2	Wisconsin Central (SOO)	2363, 2364	SOO 2363, 2364	242,300	no	no	38
S3177	79231-79233	9/51	3	Wisconsin Central (SOO)	2365-2367	SOO 2365-2367	242,300	no	no	38
S3177	79234	9/51	1	Central of New Jersey	1205	same	246,000	no	yes	9
S3177	79235, 346, 347	9-10/51	3	Minneapolis & St. Louis	751, 851, 951	232-234	242,500	no	no	29
S3177	79349, 74350	10/51	2	Rutland	400, 401	same	242,400	no	yes	37
S3188	79572-79575	10,11/51	4	Rutland	402-405	same	242,400	no	yes	37
S3188	79576-79578	11-12/51	3	Lake Superior & Ishpeming	1001-1003	same	240,000	no	yes	25
S3188	79579	12/51	1	Midland Continental	402	same	240,000?	yes	27	
S3188	79580	1/52	1	Genesee & Wyoming	25	same	240,000	no	yes	18
S3188	79581	3/52	1	Wisconsin Central (SOO)	2368	SOO 2368	242,300	no	no	38
S3188	79582, 79583	5/52	2	Pennsylvania	8485, 8486	PC 9914, 9915	246,000	yes	yes	35
S3188	79584, 79585	6/53	2	NY, Susquehanna & Western	254, 256	same	240,000	no	yes	33
S3188	79586-79588	7,7,8/53	3	Spokane International	209-211	UP 1220-1222	see notes	no	yes	39
S3188	79589-79591	9,8,8/53	3	Chicago & North Western	1066-1068(1st)	same	247,300	yes	no	13
S3226	80850	9/53	1	Chicago & North Western	1069(1st)	same	247,300	yes	no	13
S3226	80851, 80852	9/53	2	Chesapeake & Ohio	5114, 5115	B&O 9185, 9186	247,100	yes	no	10
Q1201	MLW 76430-76432	4/54	3	National Railways of Mexico	5619-5621(2nd)	same	239,500	no	note	30
S3226	80853, 54, 978, 979	12/54	4	SOO (MStP&SSM)	350-353	same	243,980	no	no	38
S3245	81345	5/55	1	Genesee & Wyoming	30	same	240,000	no	yes	18
S3245	81347-81349	10/56	3	National Railways of Mexico	5622-5624(2nd)	same	239,500	yes	note	30
S3275	82011-82017	10-11/56	7	National Railways of Mexico	5625-5631	same	239,500	yes	note	30
S3275	82019-82025	12/56-1/57	7	National Railways of Mexico	5632-5638	same	239,500	no	note	30
S3283	82343-82347	1-2/57	5	National Railways of Mexico	5639-5643	same	239,500	no	note	30
S3283	82348-82354	7-8/57	7	National Railways of Mexico	5644-5650	same	239,500	yes	note	30
S3283	82355, 82356	11/57	2	Grand Trunk Western	1950, 1951	same	247,000	yes	yes	19
S3283	82357	5/58	1	National Railways of Mexico	5651	same	239,500	no	note	30
S3299	82923-82927	5-6,12/58	5	National Railways of Mexico	5652-5656	same	239,500	no	note	30
S3299	83619-24,80	12/59-1,3/60	7	National Railways of Mexico	5657-5663	same	239,500	no	note	30

X2200 MODEL ROSTER ©1977

**ALCO RS1 Study- Part III**

**ALCO RS1, RSD1, RSC1**

Owner	*Original Owner	r/n	b/n
Kron, Canton & Youngstown		D2 r# 102	74323
Alabama Power Co.		64	79049
Alabama, Tennessee & Northern		101, 102	71435, 73096
"		103-105	73326, 73327, 73758
"		106-109	74321, 75110-75112
"		110, 111	75480-75481
Alaska Railroad		1000, 1001	71319, 71320
"		1002, 10-12	70659, 62, 72, 64
"		1013-1016	70665, 66, 56, 47
"		1017-1020	72157, 70669, 74, 76
"		1021-1025	69567, 70668, 73, 57, 67
"		1026-1030	70663, 70, 40, 41, 44
"		1031-1033	69424, 70645, 70660
"		1034-1036	69427, 70634, 72143
"		1041-1043	69570, 69425, 69568
"		1050-1053	70661, 75, 76, 42
"		1054, 55, 57	69567, 70659, 69993
"		1065, 67, 69	70656, 70647, 70677
"		1070, 72, 74, 75	70668, 73, 57, 72
"		1076-1078	70667, 70664, 70674
"		1085, 87, 89	69993, 70677, 70642
Angers, Winslow & Western		3-5	73760, 75217, 75218
Arter Scrap Co., St Paul, MN			77854
Arton Ry (later GM&O)		50-53	74322, 74494-74496
"		54-59	74677-74681, 74823
Atos Hornos de Mexico		100	77843
American Agricultural Chem.		2	75555
Armer, Smelt, & Ref. (for NdeM)		5606, 5607	77847, 77073
Arbor (now Conrail)		20, 21	78374, 78375
Arabian American Oil Co.		1000-1002	75222, 75483, 76623
"		1003-1005	77071, 77072, 79348
Atchison, Topeka & Santa Fe		2394, 2395	78115, 77838
"		2396-2399	75391-75393, 75482
Atlanta & St. Andrews Bay		901-903	69426, 69427, 69800
"		904-908	70810, 11, 21, 09, 22
"		909-911	72812, 73332, 73333
"		912, 913	75559, 77848
Atlantic & East Carolina		500 r# 405	79047
Atlas Mine & Mill Equip. Supply			73572
Atomic Energy Commission		3729-3732	75844, 76206, 10, 11
Baltimore & Ohio		9185, 9186	80851, 80852
Bamberger Railroad		570 (UP 1270)	70820
Battle River Coal Co.		182	72922
Birmingham Rail & Loco		743	70817
Birmingham Southern		743 r# 243	70817
Black River & Western		57	76216
Board of Water & Light		n/# (Lansing, MI)	77472
Charlton Northern (NP)		952, 953	73765, 73766
Chalmet & Hecla		205, 206	79577, 79578
Cape Fear Ry (RSD1's)	USA	8676, 8679	72169, 72172
Carolina Power & Light		63	79048
Central of Brazil		3100-3119	71413-71432
"		3120-3133	73703-73716
"		3134-3137	75924, 25, 30, 31
Central California Traction		80	77840
Central of New Jersey		1200-1205	78095-78099, 79234
Catahouchee Industrial		3, 38, 97	72812, 75564, 75562
"		115-117	73328, 77850, 73330
"		118, 382(ex 117)	73333, 73330
Catahouchee Valley		743	70817
Chesapeake & Ohio		5114, 5115	80851, 80852
Chicago & Eastern Illinois		115-118	73328-73331
Chicago & Western Indiana		252, 253	76799, 76800
"		254-257	77172-77175
"		258-263	77836, 37, 49-52
Chicago & North Western		200-234	see M&STL
"		1066-1069(1st)	79589-79591, 80850
"		1080, 1081(1st)	72816, 72921
"		1081-1083(2nd)	73093, 75118, 77845
"		1086, 1087(2nd)	77846, 79235
C&K Coal Co.		1052 (58)	75841
Cleveland Electric Illuminating		1052	75841
Conrail		(see AA, NYC, PRR, PC, NH)	
Consumers Power Co.		401	79350
Continental Grain Co.		205, 206	79577, 79578
George T. Cook Co.		1110	70825
Crown Zellerbach		302, 303	75842, 75843
Cumberland Ry		(see Sydney & Louisburg)	
Dept. of Transportation (RSD1)		(see Federal RR Administration)	
Devco RR (new name of S&L)		(see Sydney & Louisburg)	
Domtar Newsprint, Ltd.		#?	75679
Dow Chemical Co.		#?	80851
Duluth, South Shore & Atlantic		100, 101	73753, 73760
"		102-105	75215, 75217-75219
"		106, 107	75389, 78376
E. I. DuPont de Nemours (SRP)		105-108	79050-79053
Eastman Kodak		9	77849
East Washington RR		103	72813
Elfrisco (SL-SF)		(took over all AT&N RS1's)	

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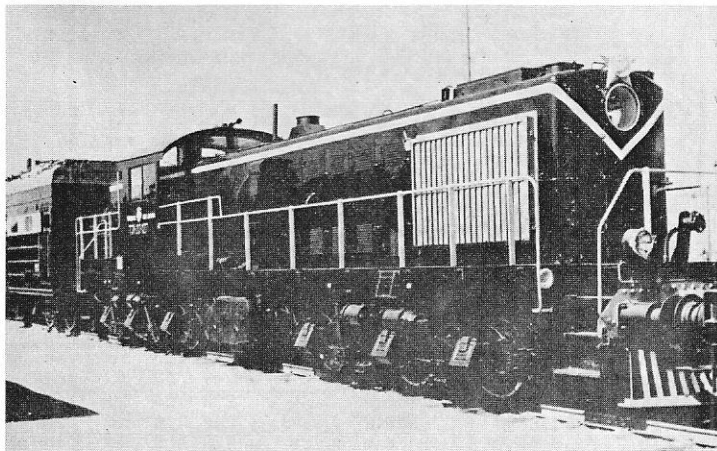
Owner	r/n	b/n
Federal RR Admin. (RSD1)	8009, 16, 18	69566, 70637, 39
" (Pueblo Test Track of DOT)	8025, 27	70646, 48
Federal RR Admin. (RSD1)	8003, 04, 11	69568, 69570, 69427
" (Pueblo Test Track of DOT)	8031, 8670	70652, 72163
Feliciano Eastern	204	73097
*Gaylord Container Co.	302-303	75842, 75843
*General Electric (for AEC)	3729-3732	75844, 76206, 10, 11
*Genesee & Wyoming	25, 30, 42	79580, 81345, 76212
"	43, 44, parts	77174, 77849, 77851
"	parts	70813
Gifford Hill & Co.	204	73097
*Grand Trunk Western	1950, 1951	82355, 82356
*Great Northern	182-185	72922-72924, 71433
Green Mountain	405, 1052, 1053?	79575, 77070, 75839
Gulf, Mobile & Ohio	50-59	(see Alton RR)
*	1102-1104	71438, 73094, 73095
*	1105-1107	73335-73337
*	1108-1110	73573, 73574, 73752
*	1111-1113	74910, 74911, 75216
*	1114-1117	75220-75224
*	1120-1122	76219, 76624, 76625
*	1123-1125	76629-76631
*	1126, 1127	76796, 76798
*	1130-1132	74496, 73752, 73094
Hanford Engineering Works	(see GE and AEC)	
Hartford & Slocum	257	77175
Illinois Central Gulf	1133, 1266	74677, 71438
"	1269, 1280, 1283	73335, 75223, 76624
*Illinois Terminal	750(753), 51, 52	75839-75841
*	754-756	77855, 77069, 77070
International Minerals & Chem.	203, 205, 207	70821, 70809, 75555
International Multifoods	352	80978
Interprovincial Steel Pipe	910?	73332
Jahnkee Services	204	73097
*Kansas City Southern	1110-1113	70825-70828
*Lake Erie, Franklin & Clarion	20, 21	76797, 78241
"	22	79347
*Lake Superior & Ishpeming	1001-1003	79576-79578
Livonia, Avon & Lakeville	20	76797
*Long Island RR	461-465	76220, 76622, 26-28
*	466-469	77475-77478
Manalta Coal Co.	182	72922
Mannix Construction Co.	50, 53-55	73757, 571, 572, 756
Marfax Steel	115-118	73328-73331
Maule Industries	#?	80852
Metal Processing Corp.	49	74320
*Midland Continental RR	401, 402	74912, 79579
Midland Electric Coal Co.	209	74821
*Milwaukee Road	961-963 r# 870-874	77469-77471
*	1676, 77 r# 873, 874	70814, 70815
*	1678, 79 r# USA	69567, 69568
*Minneapolis & St. Louis (C&NW)	200-202	71317, 71434, 71436
*	203-205	73093, 73097, 73334
*	206-208	73759, 74317, 74318
*	209-211	74821, 74822, 74824
*	212-218	74909, 75113-75118
*	219-222	75390, 76207-76209
*	223-230	77842-46, 78243-45
*	231-232	78373, 79235
*	233, 234	79346, 79347
Minneapolis, St. Paul & Sault Ste. Marie	(see SOO Line)	
Minnesota, Dakota & Western	15	70822
Morrison-Knudsen	1066	73762
Morristown & Erie	15	72817
Morton Salt Co.	101	75392
*National Ry of Mexico	5600-5605(2nd)	78042, 88, 89, 92-94
*	5606, 5607	77847, 77073
*	5608, 5609	77989, 77990
*	5610-5618	78033-78041
*	5619-5621 (MLW)	76430-76432
*	5622-5624(2nd)	81347-81349
*	5625-5638	82011-17, 19-25
*	5639-5651	82343-82354, 82357
*	5652-5656	82923-82927
*	5657-5663	83619-83624, 83680
*	(RSD1's) 5700-5705	74671-74676
Neptune Terminals	55	73756
*New Haven (to PC)	0660-0669	75829-75838
*	0670, 0671	76212, 76213
New Hope & Ivyland	57	76216
*New York Central (to PC)	8100-8105	75825, 75680-75684
*	8106-8108	75826-75828
*	8109-8113	77986-88, 78090, 91
*New York, Susquehanna & West.	231, 233(1st)	69992, 69993
*	231, 233(2nd)	70812, 70813
*	230, 32, 34, 36	71437, 73098-73100
*	238, 40, 42, 44	73568, 569, 754, 755
*	246, 48, 50, 52	75555-75558
*	254, 256	79584, 79585

# Owner Index by Dan Dover

Owner	r/n	b/n
*Northern Pacific	155, 156 r# 800, 801	73761, 74316
* " (to BN)	157, 158 r# 802, 803	73765, 73766
Ohio River Co.	21	78241
Old Sydney Collieries	300	74318
*Oregon Electric (SP&S)	52, 55, 53, 54	73570, 756, 571, 572
Peabody Coal Co.	15, 16, 209	70809, 70821, 74821
*Pennsylvania RR (to PC)	5619-5624	78106, 07, 10-13
* " "	5625-5628	78100-78103
* " "	5629-5631	78114, 78116, 78117
* " "	5632-5638	78159-78163
* " "	5637-5640	78104, 05, 08, 09
* " "	5906, 8485, 8486	76214, 79582, 79583
* " "	8857, 8858	78377, 79046
Penn Central	9900-9913 (see NYC 8100-8113)	
"	9914-9940 (see PRR 8485, 86, 5906, 8857, 58, 5619-40)	
"	9941-9946 (see NH 0662, 63, 64, 65, 67, 71)	
Port Utilities Comm. of SC	1w, 4k	70811, 79349
Potomac Electric Power Co.	1, 2	76215, 75561
"	3, 4	72814, 73764
Precision Nat'l Load Test Car		77173
Procter & Gamble	1	79347
*Rock Island	735-739	71312-71316
* " "	740-745	70823, 24, 16-19
* " "	746, 747	69569, 69570
* " "	748, 749	69424, 69425
*Rutland RR	400, 401	79349, 79350
* " "	402-404	79572-79575
Sabine River & Northern	1001 r# 101	79576
"	102-104	79572, 79573, 75215
St. Louis-San Francisco (Frisco)	(see AT&N 101-111)	
St. Regis Paper Co.	404	79574
Solite, Inc.	48, 50?	74319, 75560
SOO Line (DSS&A)	100-107 (see DSS&A 100-107)	
* " (MStP&SSM)	350-353	80853, 54, 80978, 79
* " (WC)	2360-2362	77853, 77854, 78242
* " (WC)	2363, 2364	79054, 79055
* " (WC)	2365-2368	79231-79233, 79581
Southern Ry (A&EC)	405 (ex 500)	79047
" (Tenn.)	(see Tennessee RR)	
South Hopkins Coal Co.	243	70817
*Spokane International	200-205 r# 1211-16	77166-77171
* " "	206-208 r# 1217-19	77839-77841
* " "	209-211 r# 1220-22	79586-79588

Owner	r/n	b/n
*Spokane Portland & Seattle	50, 51	73757, 73762
"	52, 53	73570, 73571
"	54, 55	73572, 73756
Steiner-Liff Co.	58	76217
Sydney & Louisville (Devco)	203-205	71434, 75390, 73334
"	206-208	71317, 71436, 75117
"	209-211	77853, 78242, 79055
"	212, 213, 300	79231, 79232, 74318
*Tennessee Coal & Iron (USA)	600, 601 r# USA	69428, 69566
* (USS) 602-604 r# 134-136		75203, 75204, 75484
Tennessee RR (SR)	1-3 (1W, 2H, 3J)	70811, 70821, 70822
"	4-6 (4K, 5L, 6W)	79349, 70809, 75555
Tennessee Valley Auth. (RSD1's)	25, 31, 33, 34	72150, 68, 56, 58
"	35, 36, 37	72167, 43, 65
"	38, 39, 40	70660, 70645, 70649
"	41, 42, 43	70653, 72171, 70634
"	(got USA 8006, 22, 30, 8652, 58 for parts?)	
Tidewater Southern (WP)	746, 747	77840, 77171
Truax Traer Coal	7337	75113
Union Carbide Co.		74911
United Cement Co. (RSD1)	1776	72149
US Army (requisitioned)	8000-8003	69992, 93, 69567, 68
"	8004-8006	69570, 69424, 69425
"	8007-8009	69569, 69428, 69566
"	8010-8012	69426, 69427, 69800
* " (new)	8013-8056	70634-70677
* " (exported)	8600-8649	72073-72122
* " (returned)	8650-8679	72143-72172
* " (exported)	8680-8699	72123-72142
*US Navy	6 (65-00078)	72817
US Pipe & Foundry (RSD1)	39	72148
US Steel, Fairfield Works	134-136	75203, 75204, 75484
Vermont Ry	250, 401	75557, 79350
"	402-404	79572, 79573, 75215
Virginia Electric Power Co.	61	77473
*Washington Terminal	40-43	71318, 72813-72815
* " "	44, 45	73763, 73764
* " "	46-49	74314, 15, 19, 20
* " "	50-55	75560-75564, 75679
* " "	56-59	76215-76218
* " "	60-62	77472-77474
* " "	63, 64	79048, 79049
Western Dominion Collieries	182	72922
Western Energy Corp.	31, 32	73571, 73757

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Russian TEG (RSD1 copy) #TE1-20-127 (Kharkov-1949). Gas is generated from anthracite coal in car behind and mixed with diesel oil to stretch fuel. It still may be a useful idea.



Alco Historic Photos NdeM RSD1's (E1647) #5600-05 (r# 5700-05) were very similar to USA 8600's except for having standard cabs and numberboards, and were the last of 163 RSD1's built. Unusual truck design, peculiar to RSD1's, was a fabricated, equalized, rigid bolster, pedestal type apparently designed and built almost "overnight" for the rush Trans-Iranian program in L/1942, maybe by James G. Blunt (Blunt truck) in charge of Alco engineering then.

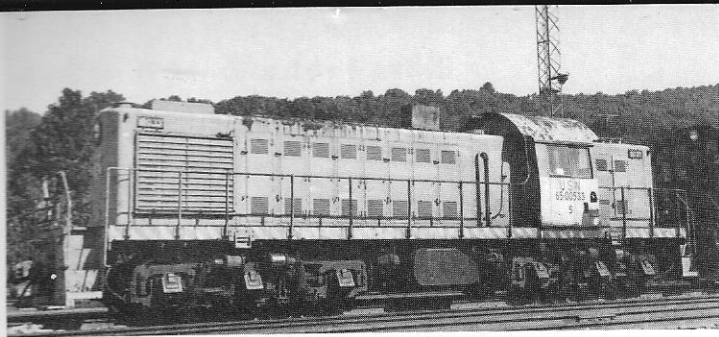
## EXPORT RS1 ROSTER

(In Chronological Order)

o/n	b/n	b/d	Qty.	Railroad	Spec #	1st r/n	2nd r/n	Weight
S1957	71413-71432	4-10/45	20	Central Ry of Brazil	E1647	3100-3119	same	230,000
S1975	73703-73716	10/45-1/46	14	Central Ry of Brazil	E1647	3120-3133	same	230,000
S3021	75006-75009	9/46	4	Sao Paulo Ry Co. (name changed to Santos A Jundiai)(Brazil)	E1651 (A1A)	500-503	same	251,900
S3026	75222	2/47	1	Arabian-American Oil Co.	E1641	A11x50	1000	
S3042	75483	9/47	1	Arabian-American Oil Co.	E1641	A11x51	1001	
S3062	75924, 75925	7/48	2	Central of Brazil	E1641	3134, 3135	same	
S3062	75926-75929	8/48	4	Santos A Jundiai (Brazil)	E1641	504-507	same	
S3062	75930, 75931	8, 9/48	2	Central Brazil	E1641	3136, 3137	same	
S3062	75932, 75933	9/48	2	Santos A Jundiai (Brazil)	E1641	508, 509	same	249,300
S3088	76623	1/49	1	Arab-American Oil Co.	E1641	1002	same	
S3127	77071, 77072	3/50	2	Arab-American Oil Co.	E1641	1003, 1004	same	
S3177	79348	10/51	1	Arab-American Oil Co.	E1641	1005	same	
S3245	81346	4/56	1	Santos A Jundiai (Brazil)	E1641A	510	same	
S3275	82018	12/56	1	Santos A Jundiai (Brazil)	E1641A	511	same	

X2200 MODEL ROSTER © 1977





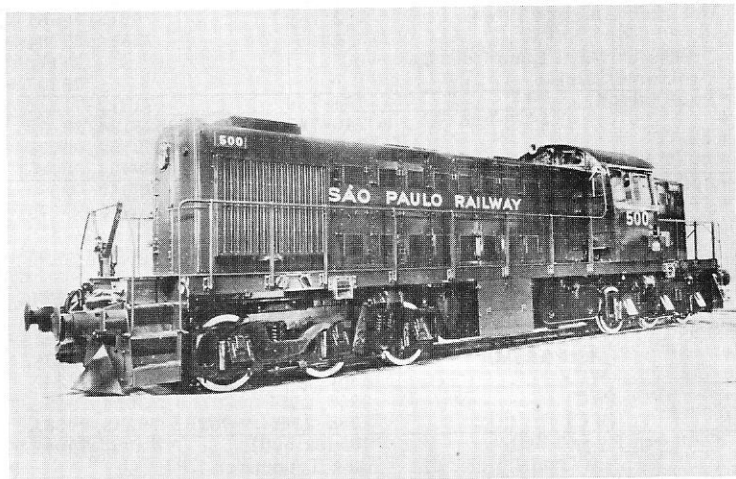
F. W. Trittenbach  
USN #5, nee USA 8033 (70654, 12/42), a typical Phi RSD1, note numberboards, at Allentown, PA, 18Aug76, in transit to? Originally a Trans-Iranian unit, it was in long term storage after return to U.S. in 1945 until becoming USAF 8033 in 1955, then to USN 65-00533 in 3/69. #5 was its local roster number on USN base in New Jersey.



Ken Douglas  
USA #8678, later r# TVA #42, on TVA property at Kingston, TN, 26May72 shows top detail, offset stack, etc., of typical RSD1. None of the 8600's had numberboards while all the 8000's did. Also 8600's were 131-ton Spec. E1646, while 8000's were 127-ton Spec. E1645.



Don Dover  
Detail end view shows slant to export cab sides, brake wheel, mu (on all RSD1's except #8000-07). Plug on cab step is for undercab fuel tank drain. At least 12 RSD1's were at sometime lettered USAF: 8007, 10, 12, 14, 33, 50; 8656, 60, 62, 66, 71, 72. USAF 8671 at Sharon Yard (Cincinnati), OH, E10/68, en route to Eglin AFB, FL.



Ken Douglas Collection  
A builder's photo of one of only four RS1 A1A's (or, logically, an "RSC1"), Sao Paulo #500-503, later RFFSA. Note welded on shipping brackets for tie-down.

### RSD1, C-C RS1 ROSTER

(In Chronological Order)

o/n	b/n	Rebuilt	b/d	Qty.	Railroad	Spec #	new r/n	old r/n	Weight	s/g	mu	
S1898	69992, 69993	M11/42	6/42	(2)	U. S. Army	E1640 rb to E1645	(8000, 8001)	ex NYS&W 231, 233	254,000	no	no	
S1898	69567, 69568	M11/42	6/41	(2)	U. S. Army		(8002, 8003)	ex MILW 1678, 1679	254,000	no	no	
S1898	69570	L11/42	7/41	(1)	U. S. Army		8004	ex RI 747	254,000	no	no	
S1898	69424	L11/42	3/41	(1)	U. S. Army		8005	ex RI 748	254,000	no	no	
S1898	69425	M12/42	3/41	(1)	U. S. Army		8006	ex RI 749	254,000	no	no	
S1898	69569	M12/42	7/41	(1)	U. S. Army		E1645	8007	ex RI 746	254,000	no	no
S1898	69428	M12/42	3/41	(1)	U. S. Army		8008	ex TC&I 600	254,000	no	yes	
S1898	69566	M1/43	4/41	(1)	U. S. Army		8009	ex TC&I 600, 601	254,000	no	yes	
S1898	69426, 69427	M1/43	3/41	(2)	U. S. Army		8010, 8011	ex A&StAB 901, 902	254,000	no	yes	
S1898	69800	M1/43	1/42	(1)	U. S. Army		8012	ex A&StAB 903	254,000	no	yes	
S1898	70634-70654	---	11-12/42	21	U. S. Army		E1645	8013-8033	same	261,100	no	yes
S1898	70655-70677	---	1-2/43	23	U. S. Army		E1645	8034-8056	same	261,100	no	yes
S1952	72073-72122	---	10/44-1/45	50	U. S. Army		E1646	8600-8649	same	268,500	no	yes
S1952	72123-72142	---	1-2/45	20	U. S. Army		E1646	8680-8699	same	268,500	no	yes
S1952	72143-72172	---	2-3/45	30	U. S. Army		E1646	8650-8679	same	268,500	no	yes
S3008	74671-74676	---	1, 4, 5/46	6	National Rys of Mexico	E1647	5700-5705	5600-5605(1st)	265,450	no	yes	

X2200 MODEL ROSTER © 1977

### RS1 Spec-Profile

Wt.	Length*	Cab Bolster		Wheelbase	Traction Motors	Gal.
		Ht.	Cntr			
115T	54'11-3/4"	14'5"	31'0"	9'4" B-B	GE731B 3-7/41	800,
to				10'6" A1A	GE731C 9/41-12/43	1600
126T	(*A few later ones were 55'5-3/4" due to different draft gear)			11'3" C-C	GE731D 1/44-on	

Apparently all were originally set up to run long hood forward.

### Specific Requests FOR WORK IN PROGRESS

- Need photos of following:
  - NP GP7's 550-569
  - Big Four Rail Motorcar M1200
  - PRR Rail Motorcars in 4700's
  - MoP and SL-SF Rail Motorcars
  - NYC U25B #2537 showing front windshield
  - N&W Slugs 9903-11 and 9914-17, 20
- Need b/d on NH RP210H #3000, 3001
- Need r/n of early RDG Brill G/M #98 & ?
- Wanted to Buy: Pocket Lists for 1920's, 1932-35, 1937-44, 1957, 1961, 1965-68. (Have 1946, 56, 59, 62 for trade)
- Wanted to Buy: Poor's Manual 1911-13
- McGraw's Electric Directory, 1914-16
- Need photos of any MoPac and SL-SF (and all subsidiaries, especially Texas and Louisiana lines) rail motorcars except MoPac 600's (Brill, Sykes, EMC) and SL-SF 2120-26 (EMC).

D&RGW SD40T-2 #5374-85  
CNW SD40-2 #6926-35  
CS GP40-2 #4247-61  
SR GP38-2 #5202-31  
SR U23B #3955-69