PACIFIC FRUIT EXPRESS
EARLY 1950s FLEET

TED CULOTTA

RPM EAST

23-25 MARCH 2023

This will be posted to prototopics.blogspot.com

Thank you

Andy Carlson
Bob Chaparro
Dick Harley
Richard Hendrickson
Frank Peacock
Anthony Thompson
Terry Wegmann
Bill Welch

PFE Roster at January, 1953

- Includes only series with at least 100 cars
- Listed by reporting marks numbers
- Source: *Official Railway Equipment Register*, January, 1953

Series Start	Series End	Class	Qty. Jan. 1953	% of PFE fleet	Notes
91022	98718	R-30/40-9	7111	18.44%	
85001	85275	R-30/40-9	162	0.42%	meat service
62501	68900	R-30/40-19, -21, -24	5889	15.27%	
5001	8000	R-40-23	2961	7.68%	
46703	48702	R-40-23	1982	5.14%	4943 total
40001	44700	R-40-10	4559	11.82%	
73001	76554	R-30/40-16	3399	8.81%	incl. 76228, 76229
2001	5000	R-40-25	2985	7.74%	
60001	62500	R-30/40-18	2437	6.32%	
8001	10000	R-40-26	1997	5.18%	
45701	46700	R-40-20	987	2.56%	
44701	45700	R-40-14	979	2.54%	
90001	91021	R-30/40-8	807	2.09%	from R-30-1 to -6
71273	71953	R-40-4	482	1.25%	from R-30-2 to -6
38563	39062	R-40-4	471	1.22%	
13280	15919	R-30-4	466	1.21%	from R-30-11, -12
200379	200587	R-50-5	201	0.52%	
			37875	98.21%	PFE total = 38565

PFE Roster at January, 1953

- Includes only series with at least 100 cars
- Listed by reporting marks numbers
- Source: *Official Railway Equipment Register*, January, 1953

Series Start	Series End	Class	Qty. Jan. 1953	% of PFE fleet	Notes
2001	5000	R-40-25	2985	7.74%	
5001	8000	R-40-23	2961	7.68%	
8001	10000	R-40-26	1997	5.18%	
13280	15919	R-30-4	466	1.21%	from R-30-11, -12
38563	39062	R-40-4	471	1.22%	
40001	44700	R-40-10	4559	11.82%	
44701	45700	R-40-14	979	2.54%	
45701	46700	R-40-20	987	2.56%	
46703	48702	R-40-23	1982	5.14%	
60001	62500	R-30/40-18	2437	6.32%	
62501	68900	R-30/40-19, -21, -24	5889	15.27%	
71273	71953	R-40-4	482	1.25%	from R-30-2 to -6
73001	76554	R-30/40-16	3399	8.81%	incl. 76228, 76229
85001	85275	R-30-40/9	162	0.42%	meat service
90001	91021	R-30/40-8	807	2.09%	from R-30-1 to -6
91022	98718	R-30-40-9	7111	18.44%	
200379	200587	R-50-5	201	0.52%	
			37875	98.21%	PFE total = 38565

PACIFIC FRUIT EXPRESS COMPANY.

REPORTING MARKS—"P. F. E."

GENERAL OFFICES, 116 NEW MONTGOMERY STREET, SAN FRANCISCO 5, CAL. AND 11 SOUTH LA SALLE STREET, CHICAGO 3, ILL.

REFRIGERATOR EQUIPMENT.

The refrigerator cars of this Company are marked "Pacific Fruit Express" and "P. F. E." and are numbered and classified as follows:

Item Number.	A.A.R. Mech. Designation.	Markings and Kind of Cars.	Numbers.	Dimensions. Inside. Length. Between Ice Tanks—Bulkheads in Place.	Inside. Length. Between Linings Clear (Bulkheads Collapsed).	Inside. Width, Inside.	Inside. Height, Inside.	Outside. Length.	Outside. Width. Width at Eaves.	Outside. Width. Extreme Width.	Outside. Height from Rail. To Extreme Width.	Outside. Height from Rail. To Eaves.	Outside. Height from Rail. To Top of Running Board.	Outside. Height from Rail. To Extreme Height.	Doors. Sides Doors. Width.	Doors. Sides Doors. Height.	Capacity. Capacity of Ice Tanks. Pounds. Total Capacity for Crushed Ice.	Capacity. Capacity of Ice Tanks. Pounds. Total Capacity for Coarse Ice.	Capacity. Capacity of Ice Tanks. Pounds. Total Capacity for Chunk Ice.	Capacity. Capacity of Ice Tanks. Capacity Measure (Cubic Feet). Depth.	Capacity. Capacity of Car. Cubic Feet Level Full. Between Ice Boxes Bulkheads in Place.	Capacity. Capacity of Car. Cubic Feet Level Full. Clear Capacity (Bulkheads Collapsed).	Capacity. Capacity of Car. Pounds.	Number of Cars.
				ft. in.	ft. in.	ft. in.	ft. in. Note AA	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	lbs.	lbs.	lbs.	ft. in.				
		PASSENGER. P. F. E.																						
1	BR	Express, Refrig., Pass. Train Equipped. Note B	500 to 799	41 6½	.....	8 8½	6 8	50 10	10 0⅞	10 4½	4 6	12 4¾	13 10	14 9	5 ...	6 0½	13200	12700	12000	325	....	2586	....	83000	155
		Total Passenger Refrigerators ...		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	....	....	....	.....	155
		FREIGHT. REFRIGERATOR. P. F. E.																						
2	RS	Ventilated... Note B	800 to 1999	33 2½	.....	8 2½	7 ...	41 10	9 4¾	9 10⅝	3 4½	12 3⅛	12 11⅜	14 3⅛	4 ...	5 9¾	11700	11200	10600	279	..	1918	....	80000	1
3	RS	" Notes B, J, K	2001 to 5000	33 2½	.....	8 3	7 3	41 8½	9 5¾	10 3½	3 6½	12 9½	13 7⅝	15 1½	4 ...	7 6¼	12700 Note J	12200 Note J	11500 Note J	302	....	1988	....	80000	2985
4	RS	" Notes B, J, K	5001 to 8000	33 2½	39 ..	8 3	7 3	41 8½	9 5¾	10 3½	3 7	12 9⅜	13 7¼	14 11	4 ...	7 6¼	12700 Note J	12200 Note J	11500 Note J	302	....	1988	2320	80000	2061
5	RS	" Notes B, J, K	8001 to 10000	33 2½	.....	8 3	7 4½	41 8¾	9 5¾	10 3½	3 6½	12 9½	13 7½	15 1½	4 ...	7 5⅝	12700	12200	11500	302	....	2011	....	80000	1997
6	RS	" ..... Note B	13220 to 13279	33 2½	.....	8 2½	7 ...	42 2	9 6	9 11½	3 7	12 8½	13 0½	14 4½	4 ...	5 9¾	11700	11200	10600	280	....	1918	....	66000	8
7	RS	" ..... Note B	13280 to 15919	33 2½	.....	8 2½	7 ...	42 2	9 6	9 11½	3 7	12 8½	13 0½	14 4½	4 ...	5 9¾	11700	11200	10600	280	....	1918	....	66000	466
11	RS	" ..... Note B	15920 to 31249	33 2½	.....	8 2½	7 ...	41 8½	9 4⅛	9 10½	3 4½	12 3⅝	13 1⅜	14 7⅛	4 ...	6 4½	11700	11200	10600	279	....	1918	....	66000	99
12	RS	" .. Notes B, D	"	"	.....	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	....	"	....	70000	
13	RS	" ..... Note B	31250 to 36473	33 2½	.....	8 2½	7 ...	41 9½	9 4⅛	9 10½	3 4½	12 3⅝	13 1⅜	14 7⅛	4 ...	6 4½	11700	11200	10600	279	..	1918	....	70000	60
14	RS	" ..... Note B	36474 to 38562	33 2½	.....	8 2½	7 ...	42 3	9 5⅛	10 1⅛	3 4	12 7¼	13 4	14 4½	5 ...	6 5	11700	11200	10600	279	....	1918	....	78200	32
15	RS	" ..... Note B	38563 to 39062	33 2½	.....	8 2½	7 ...	41 9	9 5¼	9 11½	3 7	12 7⅛	13 1⅜	14 7¼	4 ...	6 3⅝	11700	11200	10600	279	....	1918	....	78500	471
16	RS	" Notes B, C, J, K	40001 to 44700	33 2½	.....	8 8	7 3	41 8½	9 4⅝	10 0½	3 7½	12 6⅞	13 4⅝	14 8½	4 ...	7 0¾	11000 Note J	10600 Note J	10000 Note J	263	....	1988	....	82000	4559

PFE Roster at January, 1953 from *ORER*

17	RS	"	Notes B, J, K	44701 to 45700	38	2½	.....	8	3	7	8	41	11	9	4⅛	10	0½	3	7	12	7⅛	13	4½	14	0½	4	...	7	0½	12700 Note J	12200 Note J	11500 Note J	302	....	1988	....	80000	979
21	RS	"	Notes B, J, K	45701 to 46702	38	2½	39 ..	8	3	7	8	41	11	9	4⅝	10	0½	3	7	12	8⅛	13	6	14	8	4	...	7	2¼	12700 Note J	12200 Note J	11500 Note J	302	....	1988	2330	78000	987
22	RS	"	Notes B, J, K	46703 to 48702	38	2½	39 ..	8	3	7	8	41	8½	9	5⅝	10	3½	3	7	12	9⅜	13	7¼	14	11	4	...	7	6¼	12700 Note J	12200 Note J	11500 Note J	302	....	1988	2330	80000	1982
23	RS	"	.. Notes B, J	50001 to 52775	38	2½	.....	8	3	7	8	41	8½	9	5¾	9	10⅛	3	6⅞	12	8⅞	13	8	15	2½	4	...	6	10½	12700 Note J	12200 Note J	11500 Note J	302	....	1988	....	70000	5
24	RS	"	Notes B, J, K	55001 to 55900	38	2½	.....	8	3	7	8	41	8½	9	5¾	9	10½	3	6⅞	12	8⅞	13	8	15	2½	4	...	6	10½	12700 Note J	12200 Note J	11500 Note J	302	....	1988	....	70000	2
25	RS	"	.. Notes B, J	60001 to 62500	38	2½	.....	8	3	7	8	41	8½	9	7¼	9	11⅛	3	6⅞	12	8⅞	13	8	15	2¾	4	...	6	10½	12700 Note J	12200 Note J	11500 Note J	302	....	1988	....	70000	2437
26	RS	"	Notes B, J, K	62501 to 68900	38	2½	39 ..	8	3	7	8	41	8½	9	7¼	9	11⅛	3	6⅞	12	10⅛	13	9½	15	4¼	4	...	6	11⅛	12700 Note J	12200 Note J	11500 Note J	302	....	1988	2332	70000	5889
27	RS	"	..... Note B	70727, 71061	38	2½	.....	8	2½	7	...	41	9½	9	4⅛	9	10⅜	3	5½	12	7¼	13	1⅛	14	7⅛	4	...	6	4½	11700	11200	10600	279	....	1918	....	80000	2
31	RS	"	..... Note B	71273 to 71953	38	2½	.....	8	2½	7	...	41	9½	9	4⅛	9	11⅛	3	7	12	7¼	13	1⅛	14	7⅛	4	...	6	4½	11700	11200	10600	279	....	1918	....	77800	482
32	RS	"	(See Exceptions) Notes B, J, K	73001 to 76554	38	2½	.....	8	3	7	3	41	8½	9	6	9	10⅛	3	6⅞	12	9	13	6	15	0¾	4	...	6	10½	12700 Note J	12200 Note J	11500 Note J	302	....	1988	....	70000	3199
33	RS	"	Exceptions Notes B, J	76228, 76229	"		39 ..	"		"		"		"		"		"		"		"		"		"		"		14500 Note J	14000 Note J	13200 Note J	347	....	"	....	"	
34	RS	"	..... Note B	80101 to 80150	38	4	.....	8	3½	7	1	41	8½	9	9¾	10	3½	3	7	12	9⅛	13	4¼	14	11½	4	...	6	2¾	11000	10600	10000	279	....	1948	....	75200	48
35	RSM	"	.. Notes B, J	85001 to 85275	38	2½	.....	8	3	7	3	41	8½	9	5¾	9	10⅛	3	6⅞	12	8⅞	13	8	15	2⅝	4	...	6	10½	11000 Note J	10600 Note J	10000 Note J	303	....	1988	....	70000	162
36	RSM	"	..... Note B	85276 to 85500	38	2½	.....	8	3	7	3	41	8½	9	5¾	9	10⅛	3	6⅞	12	8⅞	13	8	15	2¾	4	...	6	10½	11700	11200	10600	279	....	1988	....	70000	9
37	RS	"	..... Note B	90001 to 91021	38	2½	.....	8	2½	7	2	41	9	9	5¾	9	11⅛	3	7	12	9⅛	13	4¼	14	10½	4	...	6	2¾	11700	11200	10600	279	....	1974	....	66000	807
41	RS	"	.. Notes B, H	"	"		.....	"		"		"		"		"		"		"		"		"		"		"		"	"	"		....	"	....	77800	
42	RS	"	..... Note B	91022 to 96523	38	2½	.....	8	3	7	3	41	8½	9	5¾	9	10⅛	3	6⅞	12	8⅞	13	8	15	2¾	4	...	6	10½	11000	10600	10000	253	....	1968	....	70000	2161
43	RS	"	Notes B, E, J	"	"		.....	"		"		"		"		"		"		"		"		"		"		"		11000 Note E	10600 Note E	10000 Note E	"	....	"	....	"	2560
44	RS	"	..... Note B	96524 to 98718	38	2½	.....	8	3	7	3	41	8½	9	5¾	9	10⅛	3	6⅞	12	8⅞	13	8	15	2¾	4	...	6	10½	12700	12200	11500	302	....	1988	....	70000	634
45	RS	"	Notes B, G, J	"	"		.....	"		"		"		"		"		"		"		"		"		"		"		12700 Note G	12200 Note G	11500 Note G	"	....	"	....	"	1456
46	LRC	Refrigerator		99001 to 99100	.....		3710½	6	1⅞	6	5½	41	9½	9	5¾	9	10⅛	3	6⅞	12	8⅜	13	8	13	8	3	8	5	3	.....	.....	.....	...	....	....	1500	70000	39
47	RS	Ventilated... Note B		100051, 100386	37	6	44 5	8	11	7	...	47	2⅝	10	3½	10	8	3	7	12	5⅝	13	0⅛	14	3½	4	...	6	9	13000	13400	12600	331	....	2349	2679	101000	2
51	RS	"	.. Notes B, K	100401 to 100475	38	3	.....	9	1½	7	3	47	2⅝	10	4	10	8	3	7	12	10	13	8	15	2¾	4	...	7	0¼	13900	13400	12600	331	....	2530	....	101000	73
52	RS	"	.. Notes B, K	100476 to 100500	38	3	43 9	9	1½	7	3	47	2⅝	10	4	10	8	3	7	12	10	13	8	15	2¾	4	...	7	0¼	13900	13400	12600	331	....	2530	2894	101000	24
53	RS	"	.. Notes B, K	200001 to 200100	42	6	.....	8	8	8	10½	52	6⅛	10	3	10	8	8	7	13	1½	13	7⅛	15	1⅛	4	...	6	2¾	14600	14100	13300	350	....	2532	....	122000	98
54	RS	"	..... Note B	200101 to 200120	42	6	.....	8	8	7	7½	52	6⅛	10	2½	10	8	8	6⅛	13	5⅜	11	4½	15	8½	4	...	7	3	14600	14100	13300	350	....	2808	....	132000	18
55	RS	"	Overhead & End Ice Tanks .... Notes B, F	200121 to 200125	44	3	.....	8	8	8	8	52	6⅛	10	4⅝	10	8⅛	3	6⅛	13	6⅜	14	5	15	8½	4	...	7	5¼	15100 Note F	9000 Note F	8500 Note F	351 Note F	...	2556	....	122000	5
56	RS	"	... Notes B, K	200126 to 200200	43	6	.....	8	6	8	...	52	2⅛	9	9¾	10	7⅛	3	5½	18	7⅛	14	5⅞	15	5⅛	6	...	8	2⅛	14600	14100	13300	350	....	2958	....	120000	75
57	RP	Refrigerator		★200201 to 200225	44	6	.....	8	6	7	8	52	2⅛	9	9¾	10	7⅛	3	5½	18	7⅛	14	5⅞	15	5⅛	6	...	7	3	.....	.....	.....	..	.....	2742	....	.....	....
61	RS	Refrigerator, Overhead Ice Tanks		200226 to 200237	.....		50 ..	8	3	7	2½	52	9	9	11 1/16	10	7 7/16	3	7 1/16	18	10 13/16	14	8½	14	8½	5	...	6	7 1/16	9000	.....	.....	...	....	....	2965	120000	12
		Forward																																	38286

★ Denotes additions. ◆ Denotes increase. ♣ Denotes reduction. (See Page xviii.)

PFE Roster at January, 1953 from *ORER*

PACIFIC FRUIT EXPRESS COMPANY—CONTINUED.

REFRIGERATOR EQUIPMENT—Continued.

Item Number.	A.A.R. Mech. Designation.	Markings and Kind of Cars.	Numbers.	Dimensions. Inside. Length. Between Ice Tanks—Bulkheads in Place.	Inside. Length. Between Linings Clear (Bulkheads Collapsed).	Inside. Width, Inside	Inside. Height, Inside.	Outside. Length.	Outside. Width. Width at Eaves.	Outside. Width. Extreme Width.	Outside. Height from Rail. To Extreme Width.	Outside. Height from Rail. To Eaves.	Outside. Height from Rail. To Top of Running Board	Outside. Height from Rail. To Extreme Height.	Doors. Side Doors. Width.	Doors. Side Doors. Height.	Capacity. Capacity of Ice Tanks. Pounds. Total Capacity for Crushed Ice.	Capacity. Capacity of Ice Tanks. Pounds. Total Capacity for Coarse Ice.	Capacity. Capacity of Ice Tanks. Pounds. Total Capacity for Chunk Ice.	Capacity. Capacity of Ice Tanks. Capacity Measure. Cubic Feet.	Capacity. Capacity of Ice Tanks. Capacity Measure. Depth.	Capacity. Capacity of Car. Cubic Feet Level Full. Between Ice Boxes—Bulkheads in Place.	Capacity. Capacity of Car. Cubic Feet Level Full. Clear Capacity (Bulkheads Collapsed).	Capacity. Capacity of Car. Pounds.	Number of Cars.
				ft. in.	ft. in.	ft. in.	ft. in. Note AA	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	lbs	lbs.	lbs		ft. in.					
		Brought forward																								38286
		FREIGHT. REFIGERATOR. P. F. E.																								
1	RS	Ventilated, Note B, J, K	200301 to 200375	38 3	.....	8 8	7 8½	47 2½	10 4¼	10 8	3 7	13 6⅜	14 4¾	15 8¾	4 ...	7 5½	13900 Note J	13400 Note J	12600 Note J	831	....	2555	....	95000	74
2	RS	" .....Note B	200376	36 9	.....	8 10	6 7	47 2½	10 3½	10 8	3 7	12 5⅝	13 0 1/16	14 3 1/16	4 ...	6 9	13900	13400	12600	831	....	2137	....	101000	1
3	RS	" .....Note B	200377	36 7	.....	8 8	6 6½	47 2½	10 3½	10 8	3 7	12 5⅝	13 0 1/16	14 3 1/16	4 ...	6 9	13900	13400	12600	831	....	2061	....	101000	1
4	RS	" .....Note B	200378	36 4	.....	8 6	6 6	47 2½	10 3½	10 8	3 7	12 5⅝	13 0 1/16	14 3 1/16	4 ...	6 9	13900	13400	12600	831	....	2007	....	101000	1
5	RS	" Notes B, J, K	200379 to 200587	38 3	.....	8 8	7 8½	47 2½	10 4¼	10 8	3 7	13 6⅜	14 4¾	15 8¾	4 ...	7 5½	13900 Note J	13400 Note J	12600 Note J	831	....	2555	....	95000	201
6	RS	" ..Notes B, J	296522	33 2½	.....	8 3	7 3	41 8½	9 5 3/16	9 10½	3 6½	12 8⅞	13 8	15 2¾	4 ...	6 10½	11000 Note J	10600 Note J	10000 Note J	263	....	1988	....	70000	1
		Total Freight Refrigerators.....																								38565

Painting and Lettering is not covered in any detail in this presentation as it is a subject unto itself and continues to evolve. The most current published material can be found in *Southern Pacific Freight Car Painting and Lettering Guide* by Harley and Thompson from sphts.

The Wood Cars

- Original Wood
- Original Composite (steel superstructure)
- Refurbished/Rebuilt Cars

Fodder for the Fleet

Since its incorporation in 1906, PFE invested heavily in rolling stock, with the major acquisitions in the R-30-1, -2, -4, -5, and -6 classes. This strong commitment continued in the late ‘teens and ‘20s with the R-30-11, -12, -13, and -14 classes. The last new wood cars were added between 1928-1930 in the R-40-2 and -4 classes.*

PFE had rebuilding programs in place throughout its history. The rebuilds that produced the -4** and -8 classes started the "modern" rebuilds that continued with the program of the late ‘30s through the late ‘40s that made up a major portion of the fleet well into the ‘50s.

See *Pacific Fruit Express* and Harley website

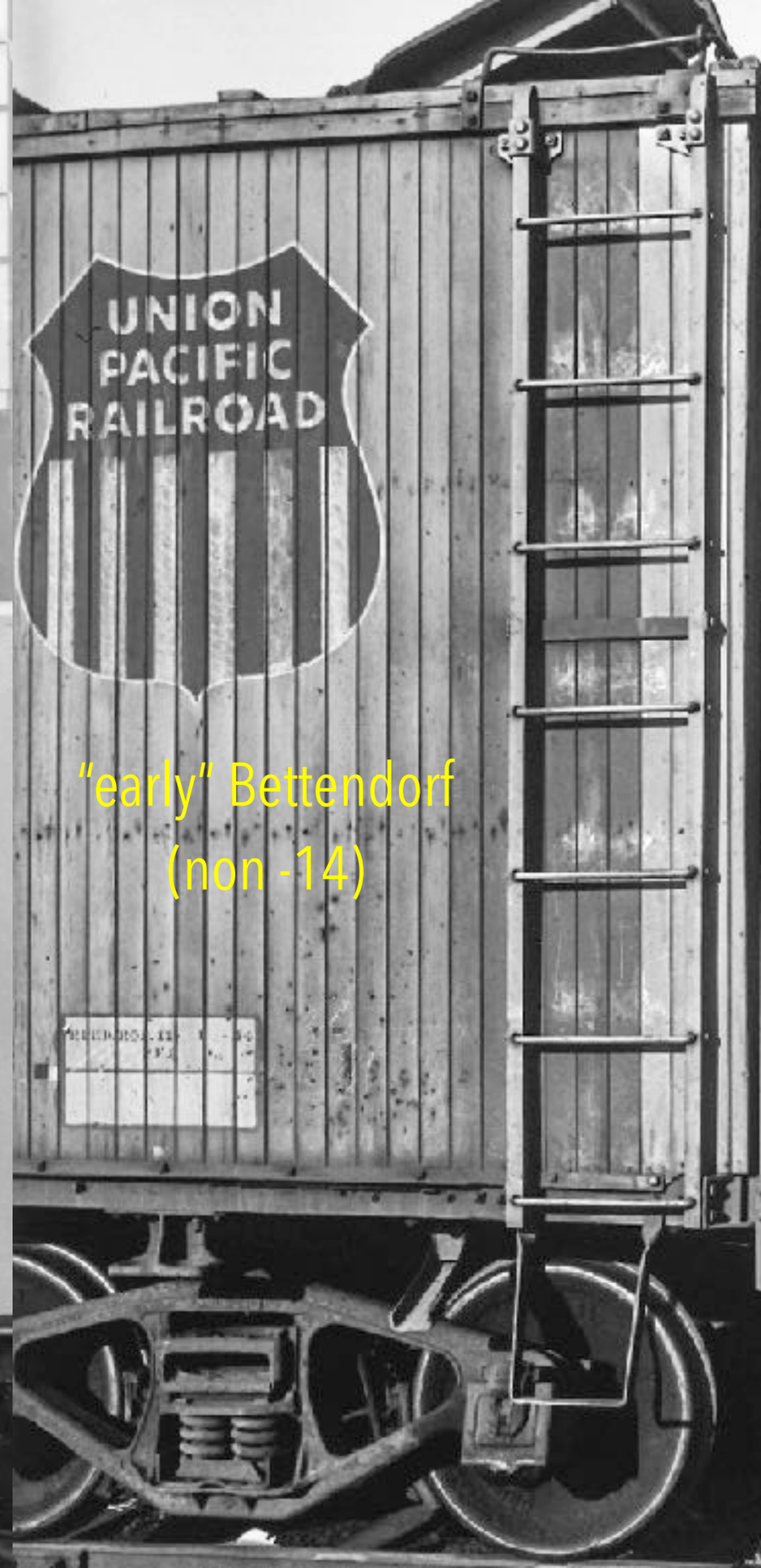
*PFE added 89 cars in class R-40-1 that were based upon an ARA design (SFRD adopted this design as their standard refrigerator car design of the late ‘20s and early ‘30s)
**there were both new and rebuilt -4 classes

NTILATED REFRIGERATOR

I.L. 33 FT. 2⅛ IN.
I.W. 8 FT. 2⅛ IN.
I.H. 7 FT. 0 IN.
CU. FT. 1918
5X9 JOURNALS

R-30-13

Built-up with "un-flanged" bolster



"early" Bettendorf
(non -14)

TILATED REFRIGERATOR

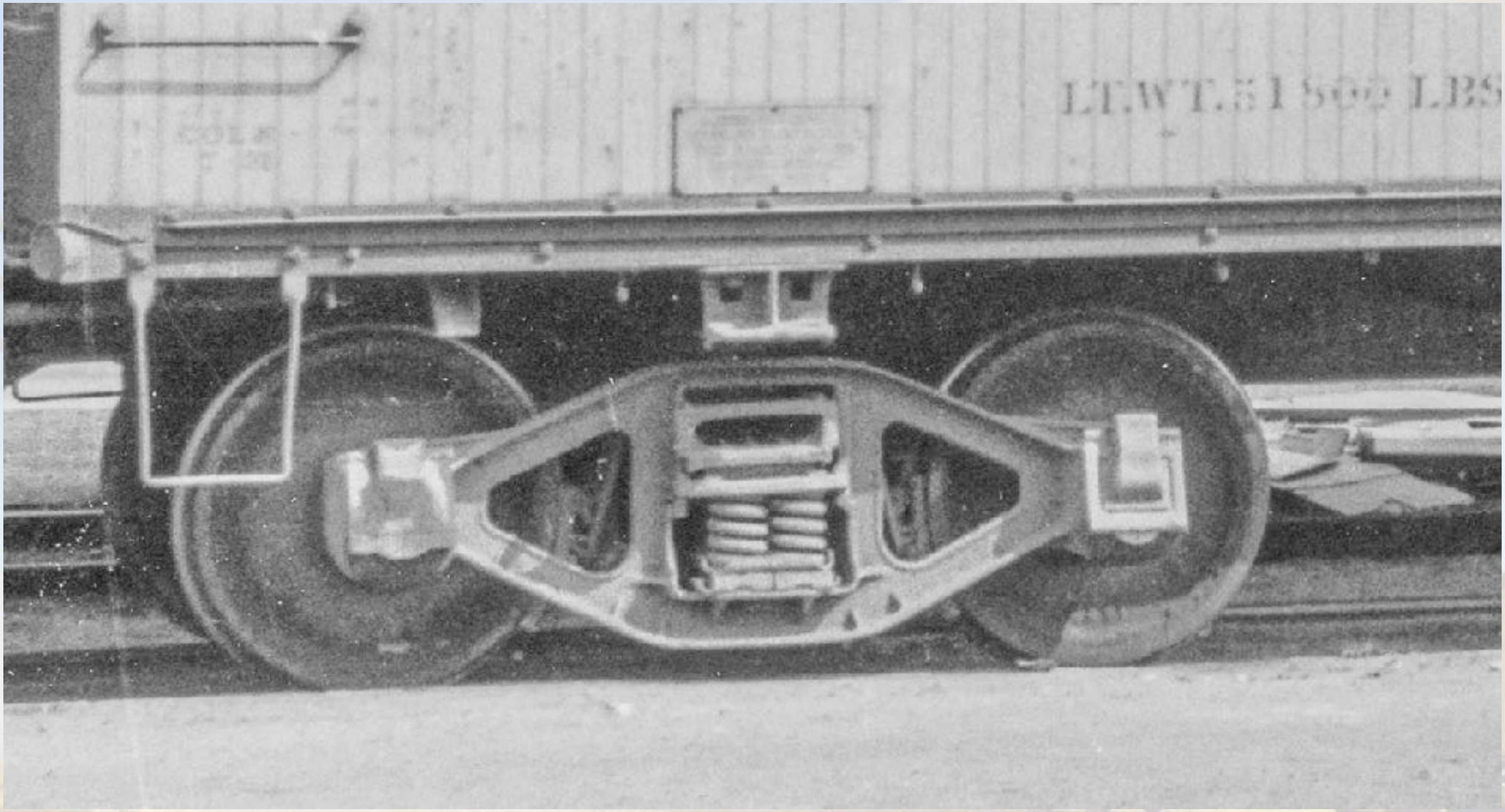
I.L. 33 FT. 2⅛ IN.
I.W. 8 FT. 2⅛ IN.
I.H. 7 FT. 0 IN.
CU.FT. 1918
5X9 JOURNALS

R-30-13

REPTD. L.A. II- 7-1935
P.F.E.CO.

Built-up with "flanged" bolster

R-30-14



Compare/contrast this with the “early” Bettendorf

R-30-4 and R-40-4

The R-40-4 builds (new) and R-30-4 and R-40-4 rebuilds represented a significant shift in PFE car development through the introduction of steel for the superstructure of the cars. Other changes included improved insulation and power hand brakes (introduced for part of the R-40-2 class).

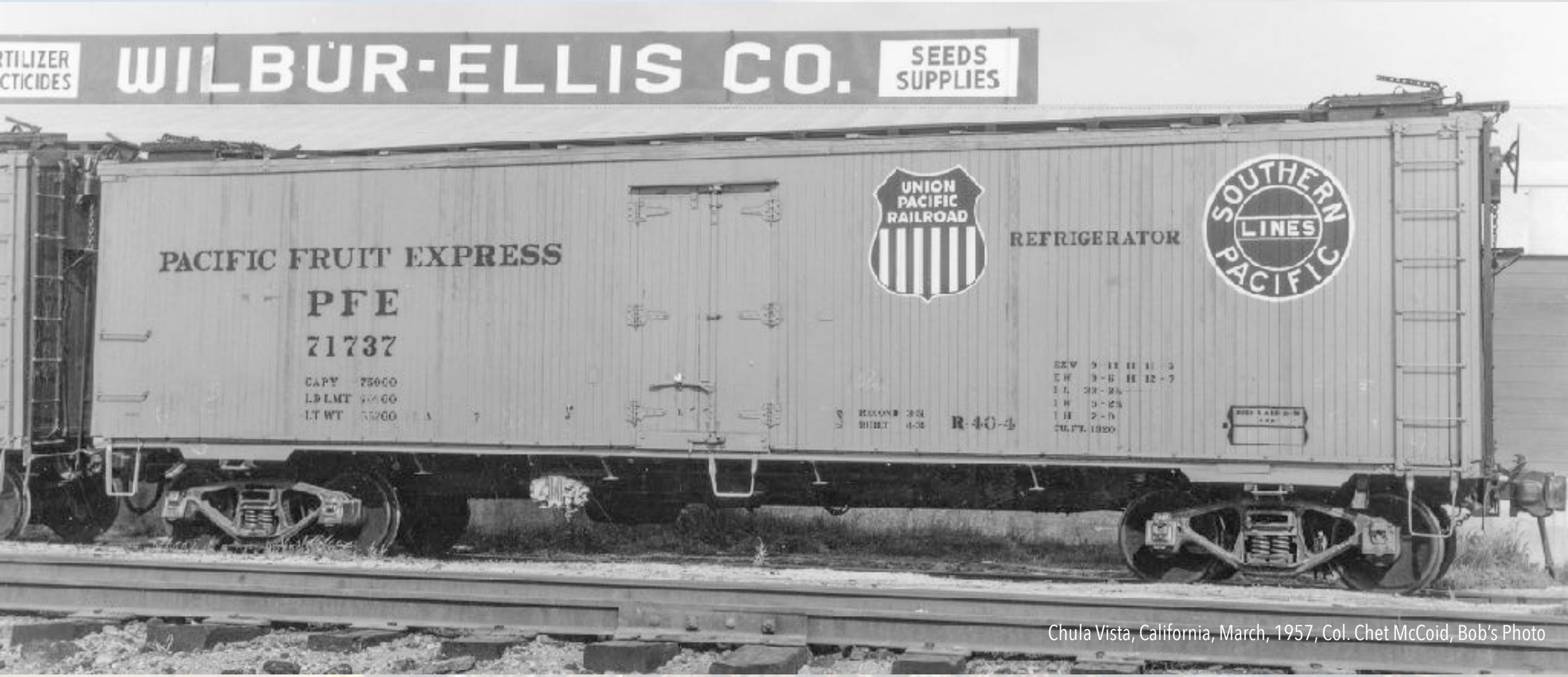
- New R-40-4 cars: 38563-39062
- Rebuilt R-40-4, 510 cars:
  - 71273-71300
  - 71359-71400
  - 71429-71500
  - 71586-71953
- Rebuilt R-30-4, 619 cars:
  - 13220-15919 and 19920-22519

R-40-4

Bob Charles Collection, NMRA/Kalmbach Memorial Library

PFE 71624 was one of the R-40-4s drawn from the R-30-2 to -6 classes and rebuilt to R-40-4 standards

R-40-4



Chula Vista, California, March, 1957, Col. Chet McCoid, Bob's Photo

PFE 71737 was (re)built in April, 1931 and reconditioned March, 1951

R-30-4

PFE 15445 was rebuilt in 1931 from an R-30-11 and designated class R-30-11-4, subsequently shortened to R-30-4 with the updating of painting and lettering (P&L) standards of 1944

Collection of Michael Urac

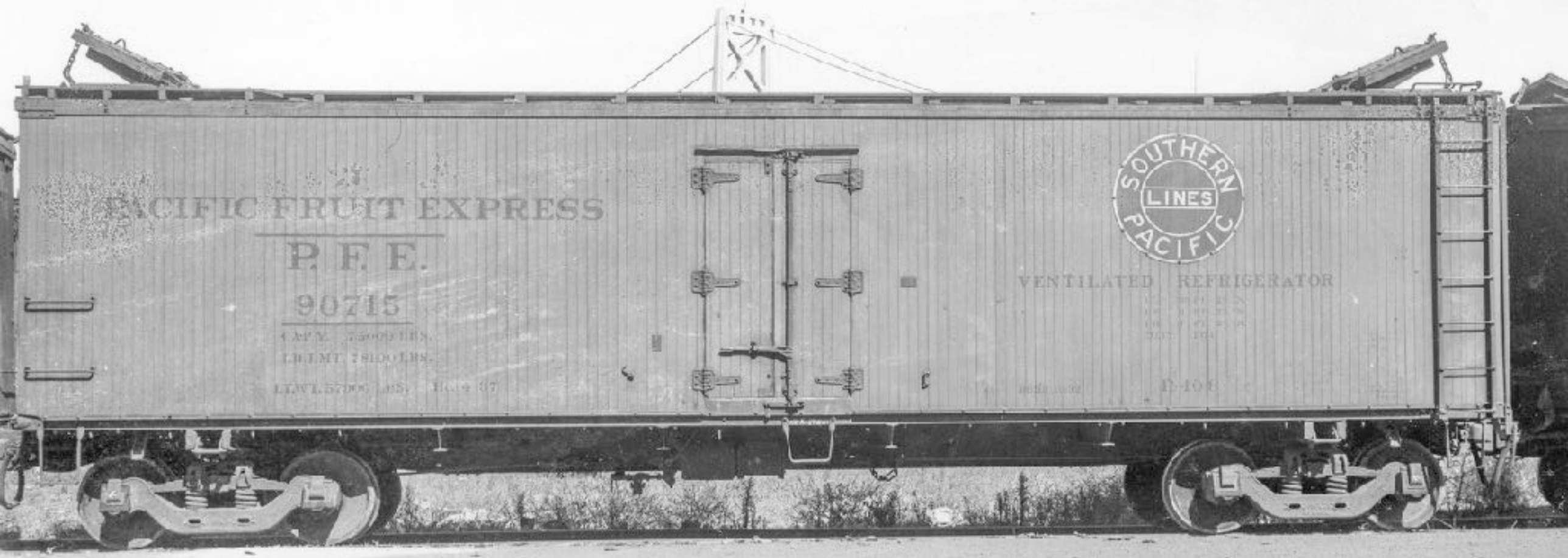
R-30-4

PFE 13415 was reconditioned (at the least) at Colton in March, 1950

R-30-8 and R-40-8

In 1931, PFE rebuilt 400 cars from R-30-2 through -6 classes to class R-40-8, car nos. 71954-72353. There were also 621 rebuilds of R-30-11 cars that retained the original underframes, but had bodies of the current -8 standards and were designated R-30-11-8. Ultimately, these were all assigned to series 90001-91021.

R-40-8



San Francisco, Will Whittaker

PFE 90715 was an R-40-8 built* in October, 1932. It is notable for the Simplex trucks and enameled sheet metal medallions screwed to the car side, introduced ca. 1928 and phased out ca. early 1937

*the R-40-8 rebuilds were stenciled "BUILT" as opposed to the rebuilt R-30-11-8 cars that were stenciled "REBLT." likely because the 30-ton cars retained the original underframes while the 40-ton cars retained little save hardware from the original cars

R-40-8

PFE 90609 is another newly rebuilt R-40-8 notable for its early National Type B trucks

Collection of Michael Urac

R-30-8

PFE 90397 differs from the other -8 rebuilds shown in that it was rebuilt from an R-30-11, retaining the original 30-ton Bettendorf underframe

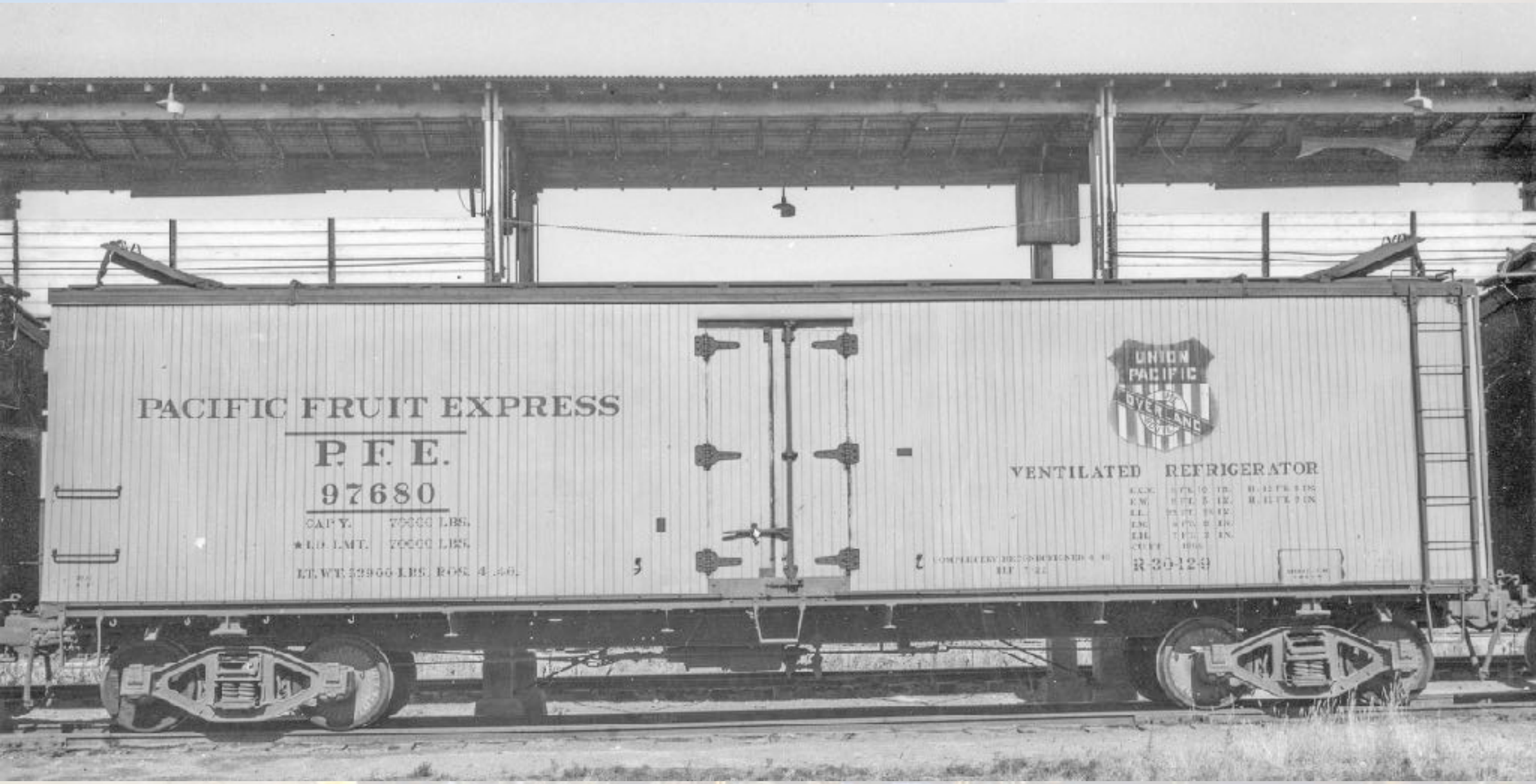
Collection of Michael Urac

R-30-9/R-40-9

In 1938, PFE embarked upon an extensive program to maintain the 20,000+ cars from the R-30-12, -13, and -14 classes. The first group of such cars to be shopped were "reconditioned" in PFE parlance, which was distinct from rebuilding (like the rebuilt -4 and -8 classes shown previously), and involved renewing wood superstructure members (or replacing with steel ones post-1949) and replacing insulation. The reconditioned -9 cars also received ladders, power hand brakes, and replacement trucks, where needed. Early reconditioned -9s retained wood sheathed hatch covers and wood platforms, but as the program continued, the platforms were eliminated, and later cars received Equipco integral hatch covers. These refurbs also retained their KC schedule brakes

- Beginning in 1949, many -9s were again reconditioned, with steel superstructures, and in some cases, plywood sheathing on the sides.
- Only a handful of experimental -9s received circulating fans.
- Over 7,900 cars were refurbished as -9s, by far the largest of the late '30s through mid-to-late '40s rebuilds

R-30-9



This much-published Will Whittaker image shows -9 PFE 97680 with the PFE UP medallion in use from 1936 to 1942. Note this car has T-section trucks and retains its KC schedule brakes and received Equipco integral hatch covers. It was reconditioned at Roseville in April, 1940

R-30-9

PFE R-30-9 shown after repainting at Roseville in October, 1946 in the then-current P&L scheme. Note that it has been upgraded with AB brakes and retains its wood hatch platforms

Collection of Ted Culotta

R-30-9

PFE R-30-9 93151 was one of the -9s reconditioned in the late 1940s that received a steel superstructure as well as plywood sheathing. Note that it also has the additional support added at the body bolsters. It had wood sheathed hatch covers without platforms

San Diego, California, October 2, 1954, Col. Chet McCoid, Bob's Photo

R-30-9

This photo of R-30-9 98444 affords a great view of the 30-ton built-up underframe. It was equipped with Equipco integral hatch covers

Charles Winters Collection

R-30-9

This -9 illustrates the P&L scheme introduced in 1954. Also of note are the fairly long structural enhancements at the body bolsters

Chula Vista, California, March, 1957, Col. Chet McCoid, Bob's Photo

The original cars, as well as the first of the -9 refurbs, used wood platforms around the wood hatch covers, as shown on this R-30-12-9 (later simplified to R-30-9) PFE 95075

R-30-16/R-40-16

Given the long time period of the program, it was inevitable that there would be evolution to the upgrades of the cars. With the -16 class, PFE standardized on the Murphy roof with rectangular corrugated panels. The -16s also received steel superstructures, making the bodies "rebuilds" in PFE parlance. Other specialties included Equipco integral hatch covers (standard on rebuilds going forward) and AB schedule brakes on the last 2,357 cars.
The -16s were the second largest group of rebuilds with 3,553 cars (nos. 73001-76554) rebuilt in 1941-1942

There were also several other interesting details:

- Convertible ice bunkers in 10 cars (75643-75652)
- Dreadnaught ends on five cars (75648-76554)
- Plywood sheathing and lining on 100 cars (74096-74195)
- Preco Model G-2 fans on 500 cars (76005-76504)

R-30/40-16

FSA/OWI Collection, Library of Congress

R-30-16

PFE 73342 was a -16 that was repainted shortly after its rebuilding, although the reason is not evident. It retained its KC schedule brakes

Washington, DC, early 1948, Charles Wales photo, William Hopkins Collection

R-30-16

PFE 73351 was a -16 repainted in 1947 in the '1946' P&L scheme. It still had its KC schedule brakes. It used a 30-ton built-up underframe

Riverside, California, August 30, 1946, Jack Whitmeyer

R-30-18/R-40-18

The -18 rebuilds continued the evolution in specialties. There were 2,500 in this group, car nos. 62001-62500, rebuilt in 1942-1943.

Details different from the -16s:

- Dreadnaught ends
- Convertible bulkheads
- All equipped with AB brakes

R-40-18

This R-40-18 illustrates the Dreadnaught ends standardized on the -18 rebuilds. This car has the '1946' P&L scheme, but has the not uncommon reversed white and red in the Union Pacific medallion

Harrisburg, Pennsylvania, August 5, 1947, Bob Charles Collection, Kalmbach Memorial Library, NMRA

R-40-18

This R-40-18 illustrates a 'hybrid' 1950 P&L scheme. The "STAGE ICING" stencil in 2-inch letters at upper left. In 1950 P&L standards this text should have been to the left of the reporting marks

Fayetteville, North Carolina, December 24, 1951, Col. Chet McCoid, Bob's Photo

R-30-19/R-40-19

The -19 rebuilds were nearly identical to the -18s; the major difference was the switch to steel running boards. The 1,000 cars of this class were rebuilt in 1944-1945 and placed in the series 62501-63500.

R-30-19

PFE 63448 was photographed in the mid-60s, by which time it had received Preco circulating fans

Rail Data Services

R-30-21/R-40-21

The -21 rebuilds were noteworthy for the widespread adoption of mechanical fans for air circulation. The cars were equipped with Equipco and Preco models (replaced in the early 50s with Preco AA-19 electric fans). Volumes of the *Official Railway Equipment Register* prior to January, 1953 did provide the details about model and manufacturer for the installation of fans (I am uncertain of when this was ceased.) There were 2,420 of the -21s in series 63501-65920, rebuilt between 1945-1947.

R-40-21

PFE 65544 was a -21 rebuild equipped with Preco FG-21 mechanical fans. Also, note the red and white stripes reversed in the UP medallion

Colton, California, January 1, 1947, Jack Whitmeyer

R-30-21

PFE 64256 was rebuilt prior to the change to the 1946 P&L standards and has single medallions on either car side. It was equipped with the Preco G-17 fans

Harrisburg, Pennsylvania, September 1, 1946, Bob Charles Collection, Kalmbach Memorial Library, NMRA

R-30-21

PFE 64973 represents one of the class late in its service life. Note the enhancements at the body bolsters

Collection of Ted Culotta

R-30-24/R-40-24

The -24s were the last class of the rebuilds, with 2,610 cars rebuilt in 1947-1948, car nos. 65921-68532. They continued the evolution, incorporating Improved Dreadnaught ends, new trucks, diagonal panel Murphy roofs on the last ~200 cars, and full-height door openings. They were also notable for the use of plywood sheathing, although many cars were resheathed with tongue and groove siding in later years. They were equipped with Preco FG-41 and FK-2 mechanical circulating fans

R-30-24

T. S. Martorano Collection

This image of PFE 67063 shows the Improved Dreadnaught ends to excellent advantage

R-30-24

The full-height door openings and new trucks (ASF A-3 Ride Control) are evident in this image, along with the plywood sheathing

ca. late 1948, Col. Chet McCoid, Bob's Photo

R-30-24

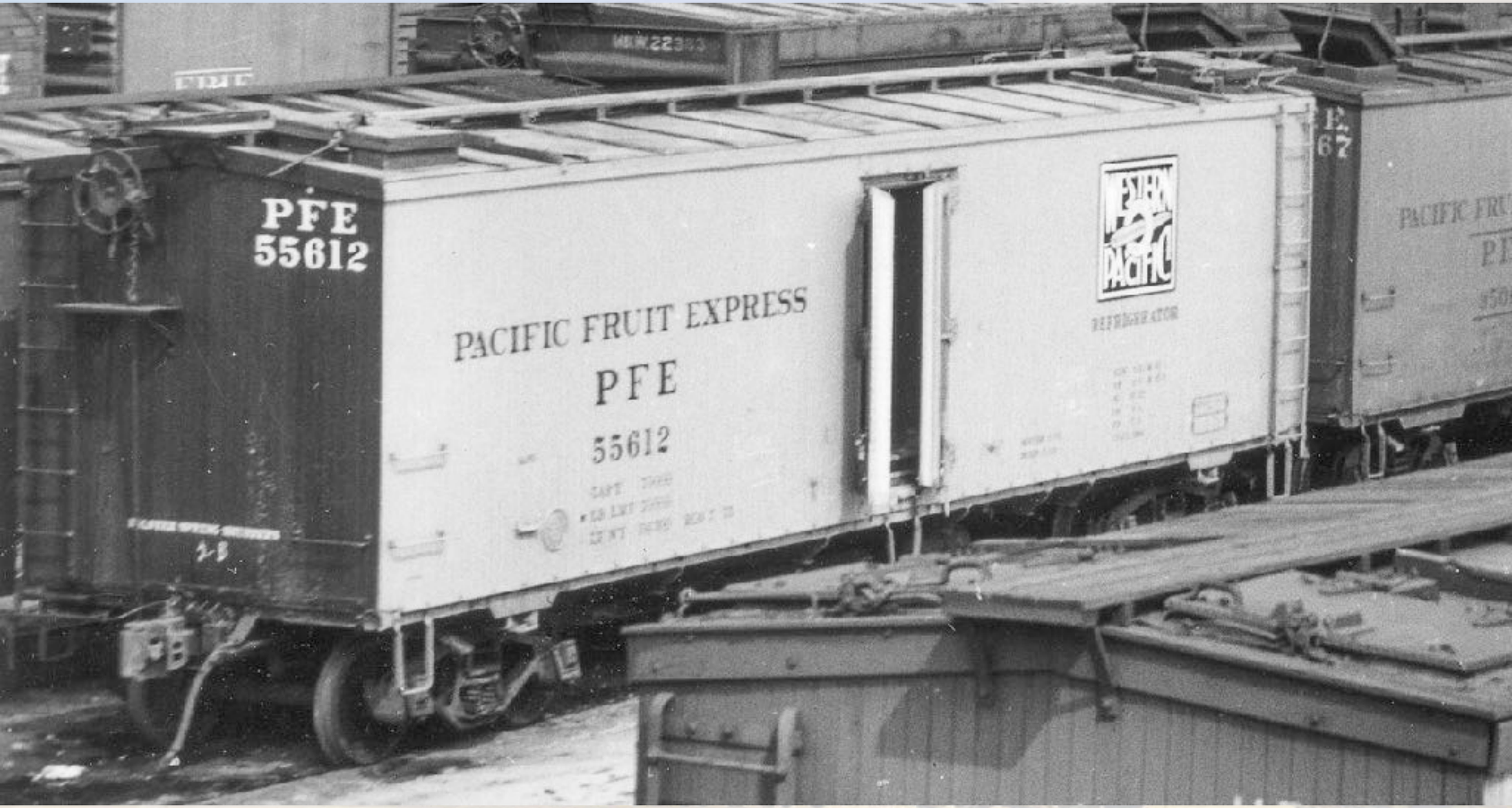
This early 60s photo shows a car with replacement tongue and groove sheathing. Of interest are the "clean" replacement sheathing boards

Collection of Ted Culotta

R-30/40-24

PFE 67438 has a diagonal panel roof, but even more notable, has a different iteration of the Improved Dreadnaught end. Note the long, narrow rectangular rib at the top of the end. See page 147 in *PFE* (second ed.) for additional photos of this end

Western Pacific



Western Pacific's contribution to the PFE fleet was 2,775 cars built in 1923-1924 that were similar to the R-30-13 class. The WP cars were reconditioned with new wood superstructures at the same schedules as other cars. However, by the late 1940s, the cars were again in need of repairs, with WP requesting the minimum capital outlay possible. They agreed to rebuild 900 cars to current standards; only 899 met the minimum standards. The cars were rebuilt with steel superstructures and received Preco AA-15 electric fans. WP rejected steel ends, Murphy panel roofs and Equipco integral hatch covers.

NYCSHS Collection, courtesy of Joe Collias

The Steel Cars

- ARA-Inspired
- War Era
- Postwar

R-40-10

The R-40-10 was PFE's first major foray into all-steel cars and it jumped with both feet, building/acquiring 4,700 cars in 1936-1937. The cars closely followed the ARA box car design of 1932 with trademarks including angle side sills with "tabbed" side sill supports, square corner Dreadnaught ends, Murphy rectangular panel roofs, and AAR-design underframe members. Refrigerator car-specific details included non-integral steel hatch covers, increased insulation in both the walls (3 inches) and roof and floor (3.5 inches), fiberglass insulation in the floors and "Dry Zero" (Kapok) in the sides, ends, and roof, increased floor rack height of 6 inches, as well as many truck and power hand brake types.

R-40-10

One of the PFE-built cars right after being placed into service

Michael Urac Collection

R-40-10

As-built car with early Barber trucks and delivery paint scheme with "Overland" UP medallion

Roseville, California, 1939, John C. LaRue, Jr. Collection

R-40-10

This car was repainted in 1942 and displays the 1942 P&L scheme including updated UP medallion

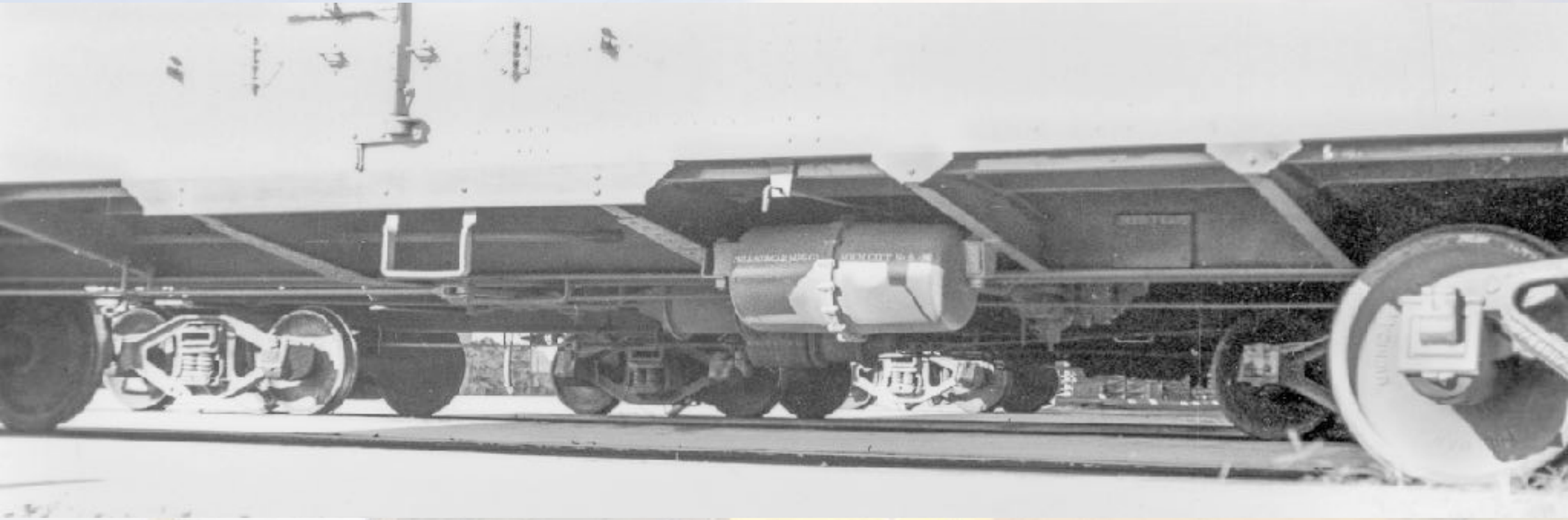
Harrisburg, Pennsylvania, June 29, 1947, Bob Charles Collection, Kalmbach Memorial Library, NMRA

R-40-10

PFE 41897 was repainted at Tucson in May, 1947 in the 1946 P&L scheme. Also of note are the early National Type B trucks

Al Armitage photo, Ron Morse Collection

R-40-10



Michael Urac Collection

R-40-14

In 1941, Pacific Car & Foundry delivered 1,000 cars that were quite similar to the R-40-10, with several enhancements. The cars were placed in the series 44701-45700 and assigned to class R-40-14. Changes from the -10 class included round (W) corner Dreadnaught ends, Equipco integral hatch covers, convertible ice bunkers, plywood lining, and placard boards.

R-40-14

R-40-14 PFE 45000 was repainted at Tucson in 1945. Note the placard board to the right of the door. Placard and route card boards were not used on the R-40-10 class at building

Courtesy of Tony Thompson

R-40-14

One interesting detail of dirty refrigerator cars is the stark contrast of freshly painted patches, such as the one here for the reweigh stencil

Fort Bragg, North Carolina, October 18, 1951, Col. Chet McCoid, Bob's Photo

R-40-20

The R-40-20 class was delivered during the war, in January through April, 1945, car numbers 45701-46702*. They were nearly identical to the R-40-14 with the most visible difference being the card boards were mounted to the left of the doors. A far less discernible detail was that the -20s were 1.5 inches taller. The R-40-20 was also notable for the introduction of "herringbone" floor racks with the slats oriented at a slight diagonal. The R-40-20s were equipped with Preco FM-2 electric fans beginning in 1950.

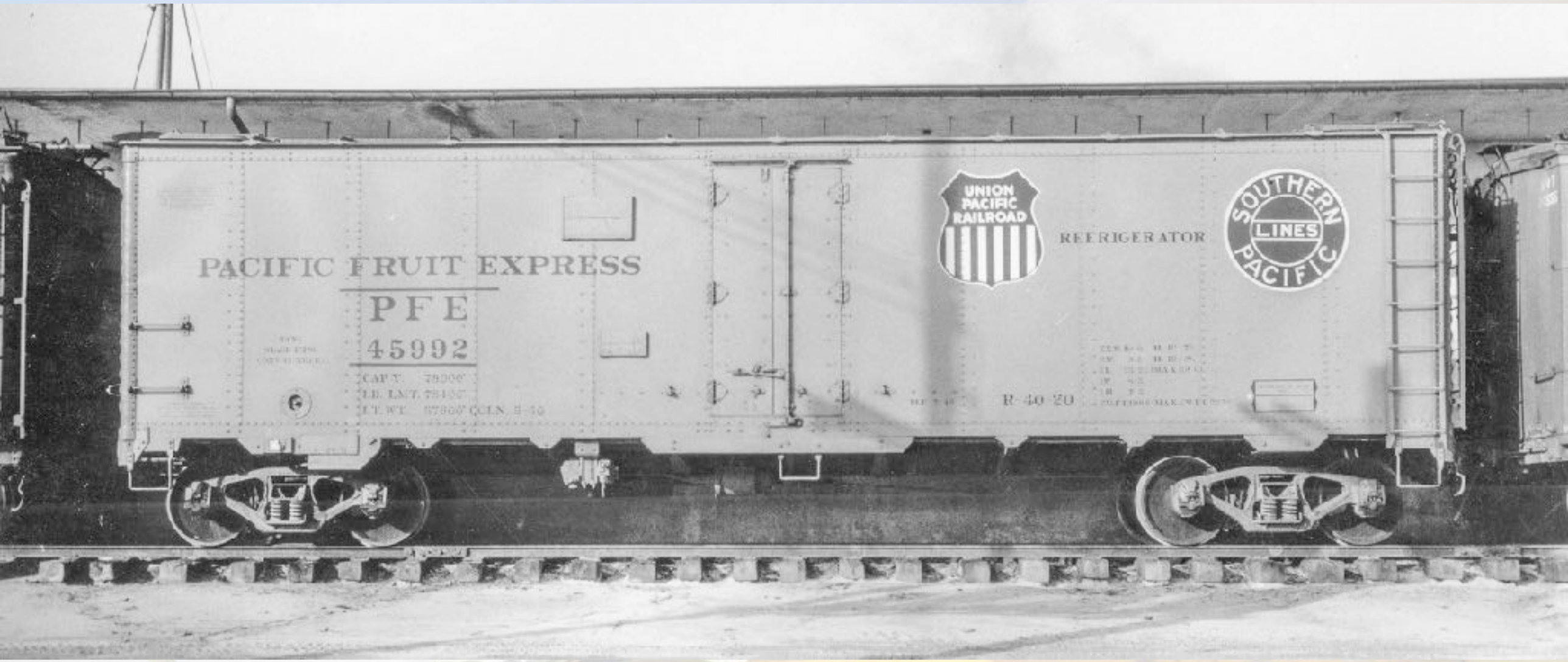
*Car nos. 46701-46702 were built by Consolidated Steel

R-40-20

PFE 45819 was still in its delivery scheme when photographed in late September, 1951

Baltimore, Maryland, September 28, 1951, Col. Chet McCoid, Bob's Photo

R-40-20



PFE 45992 was repainted in May, 1950 and was photographed in December, 1951

Fort Bragg, North Carolina, December 26, 1951, Col. Chet McCoid, Bob's Photo

R-40-23

The largest order of PFE steel ice-cooled cars was the 5,000 R-40-23 class delivered in 1947. The cars were assigned to two series: 46703-48702 and 5001-8000. They were the first class to be built new with fans, Preco FG-36, the first to employ welded underframes, and the first new PFE cars with Improved Dreadnaught ends. The cars were equipped with ASF A-3 Ride Control trucks that were quite favorably received by PFE. The cars were built with high-strength steel which offered benefits in weight, but were less corrosion resistant. Lastly, these cars used "blind" offset plywood walls that mitigated heat transmission and improved circulation (used on all subsequent PFE ice-cooled cars).

R-40-23

R-40-23 PFE 47612 shown soon after building. Note the locations of the placard board and route card board (at the left body bolster) as well as the ASF A-3 Ride Control trucks. These cars were the first built new to employ the 1946 P&L scheme with both medallions on each side of the car body

October 12, 1947, Will Whittaker photo

R-40-23

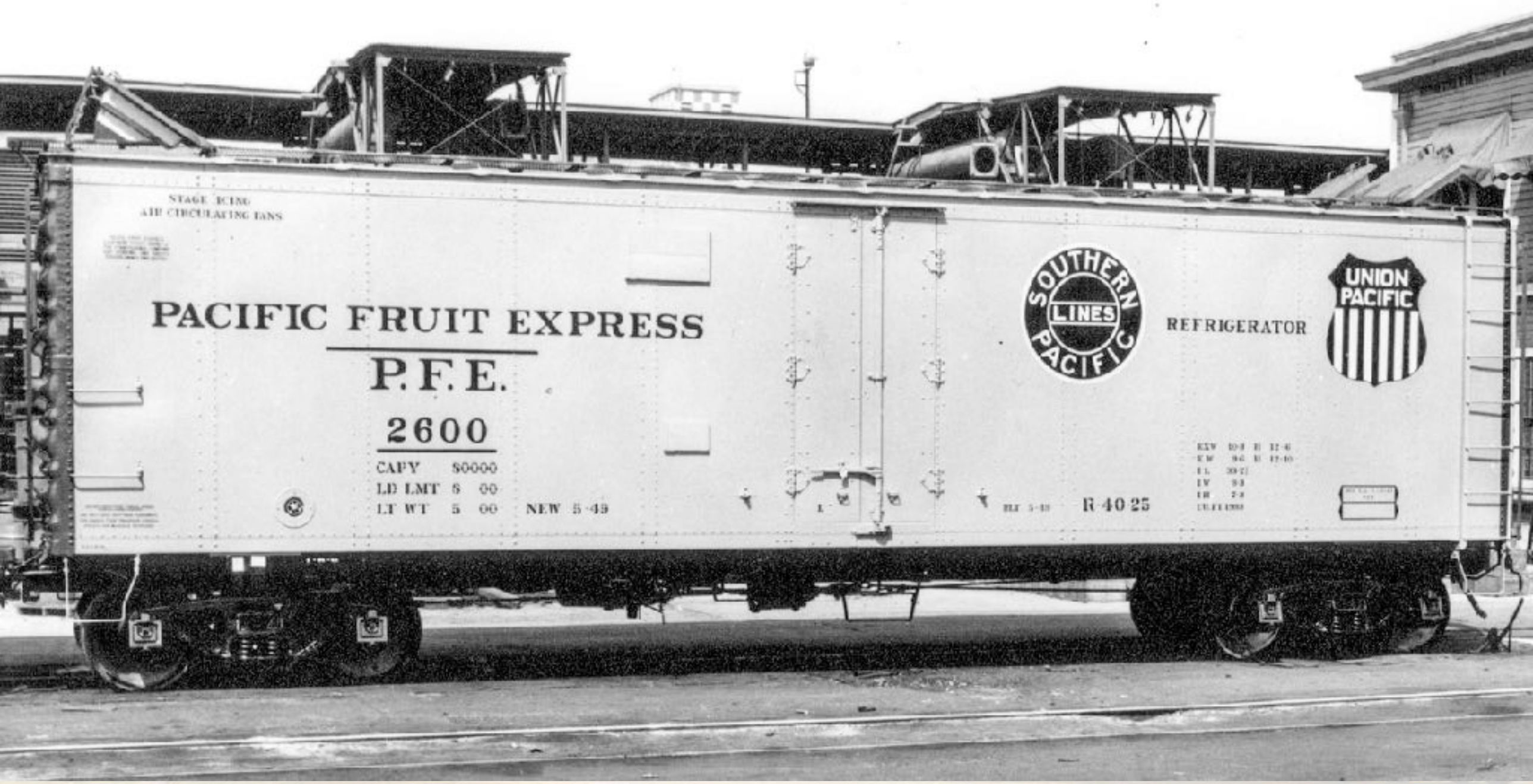
The R-40-23 class was the first PFE class to employ Improved Dreadnaught ends, as shown here

Collection of Ted Culotta

R-40-25

The R-40-25 class, built in 1949, was very similar in looks to the R-40-23. Major differences included diagonal panel Murphy roofs, Improved Dreadnaught ends with a narrow corrugation at the top of the ends and straight, horizontal bottom on the uppermost main end corrugation, Preco FK-6 mechanical fans, and stationary ice bunkers. One P&L change was that all side hardware, including ladders, hinges, grab irons, placard and route card boards, and end sill steps were painted the same color as the side instead of black. Side sill support "tabs" and the center steps below the doors remained black.

R-40-25



Courtesy of Tony Thompson

R-40-25

Once repainted, the side sill support “tabs” and the center sill step below the door opening were also the same color as the car side

National City, California, March, 1957, Col. Chet McCoid, Bob’s Photo

R-40-26

The R-40-26 class represented a significant nod to the future. While they were dimensionally similar to the previous couple classes of new cars, they departed in some significant ways. They incorporated Youngstown flush-closing "plug doors" with six-foot door openings. They were the first PFE cars built new with overhead electric fans (Preco Model AA-2). The -26 also used floor racks with metal slats. Insulation was entirely fiberglass, another first for PFE. The -26s were the first new PFE cars to be decorated with the 1950 P&L scheme (technically, a slightly modified 1951 P&L variant).

R-40-26

The most obvious difference in this image is the wide, flush-closing door. Also, note the updated P&L scheme with the new UP medallion and the 1951 update where the periods were dropped from the reporting marks

Fort Bragg, North Carolina, December 19, 1951, Col. Chet McCoid, Bob's Photo

R-40-26

This excellent image with its low lighting highlights many of the details of the welded underframe. Note the updated paint and lettering with the lines dropped above and below the reporting marks.

National City, California, March, 1957, Col. Chet McCoid, Bob's Photo

The "Other" Cars

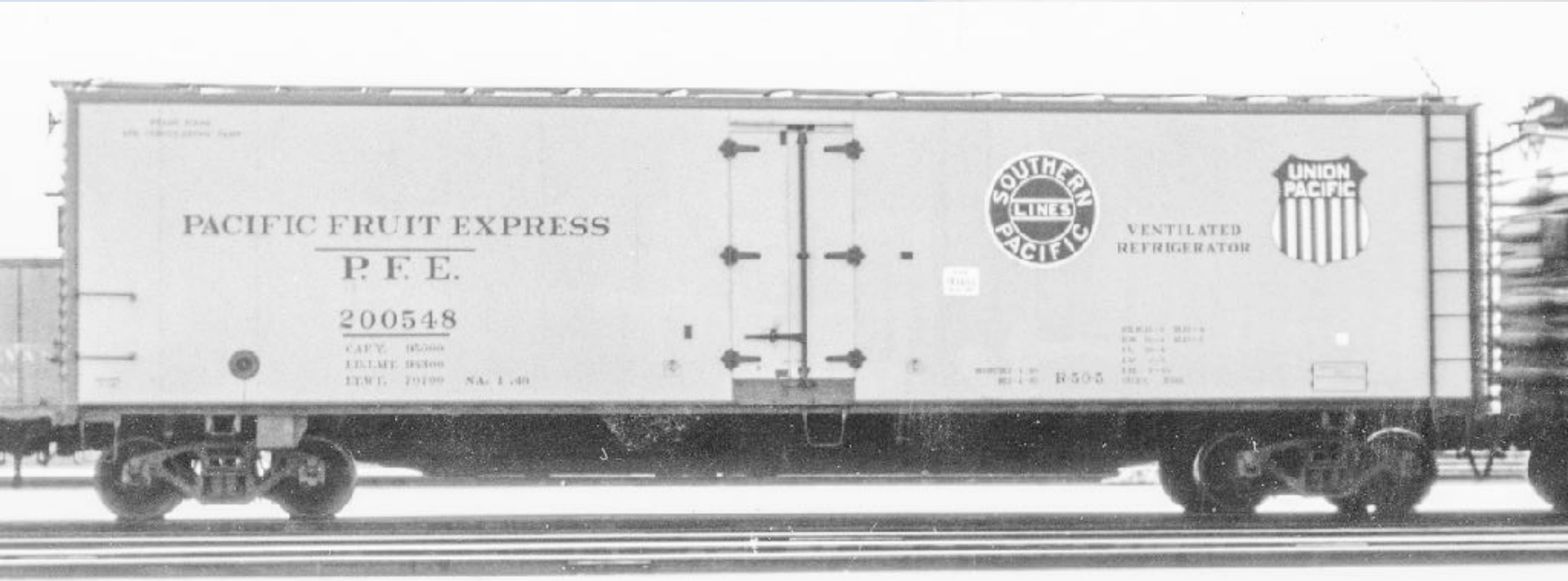
- Frozen Food – Heavily Insulated
- Express

R-50-3 and R-50-4

In 1941, 100 cars from class R-50-1 were rebuilt with steel superstructures and integral hatch plugs and covers. The first 75 had stationary bulkheads and were assigned to R-50-1-4 and the last 25 had convertible bulkheads and air circulating fans and were assigned to class R-50-1-3. PFE 100450 was one of these cars and when photographed in 1956, the class designation had been truncated to R-50-4 and it was equipped with Preco G-3 air circulating fans.

Fresno, California, May 8, 1956, Col. Chet McCoid, Bob's Photo

R-50-5



Rebuilt from R-50-1 class at Nampa between 1945-1947, car nos. 200301-200375 (tongue and groove and circa 1945 lettering) and 200379-200587 (plywood and circa 1946 lettering) with air circulating fans and seven-inch insulation for frozen food service. Note the reversed red and white in the UP medallion.

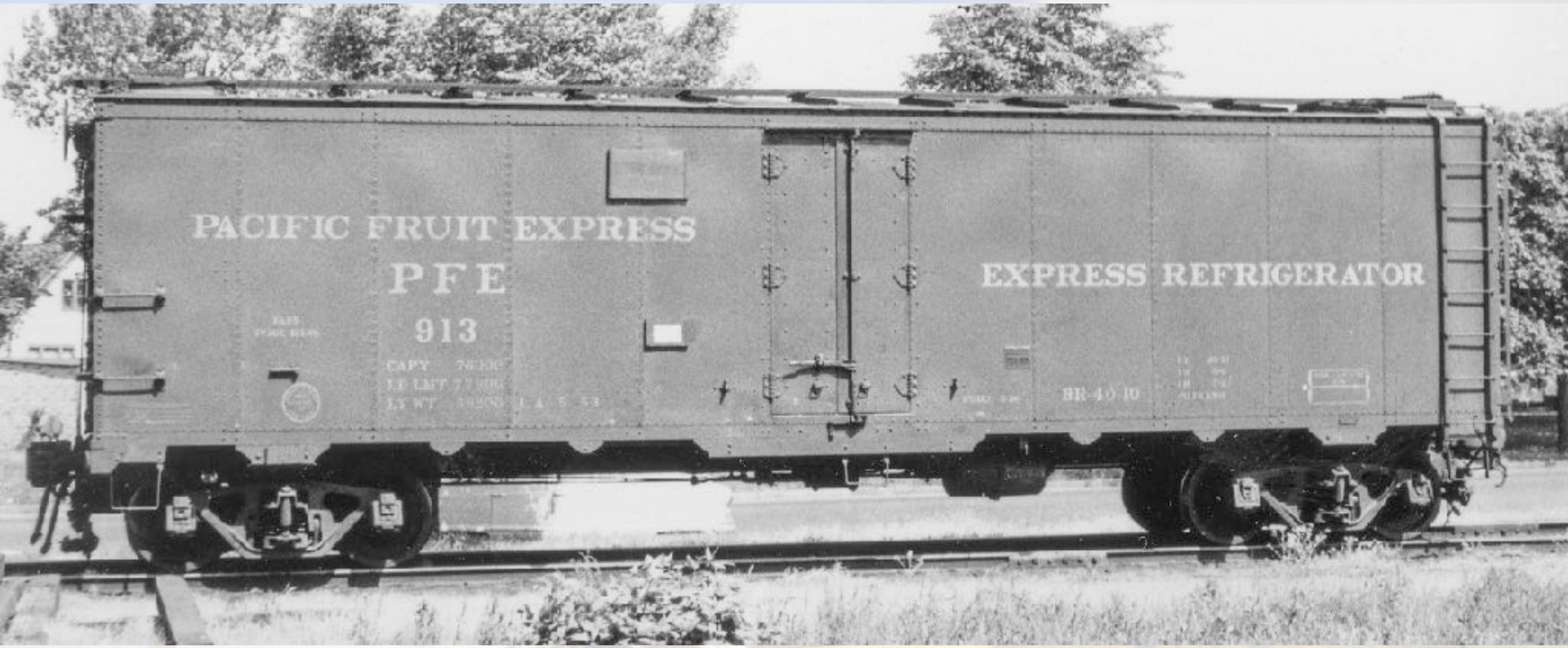
Washington, DC, early 1948, Charles Wales photo, William Hopkins Collection

BR-1

Built 1923-1924 by AC&F and General American for express service in passenger consists, car nos. 500-799. In 1952, 55 cars received heavy repairs and in 1954, 83 cars were rebuilt at Nampa, including steel superstructures, increased insulation, Preco electric fans, and steel channel side sills

Brawley, California, March, 11, 1956, Col. Chet McCoid, Bob's Photo

BR-40-10



In 1952, Railway Express Agency experienced a shortage of express refrigerator cars. To help alleviate the strain, PFE modified 50 R-40-10 reefers for express service. Changes included addition of steam and signal lines, steel running boards, electric fans, and Chrysler FR-5-D or Symington-Gould Type XL express trucks

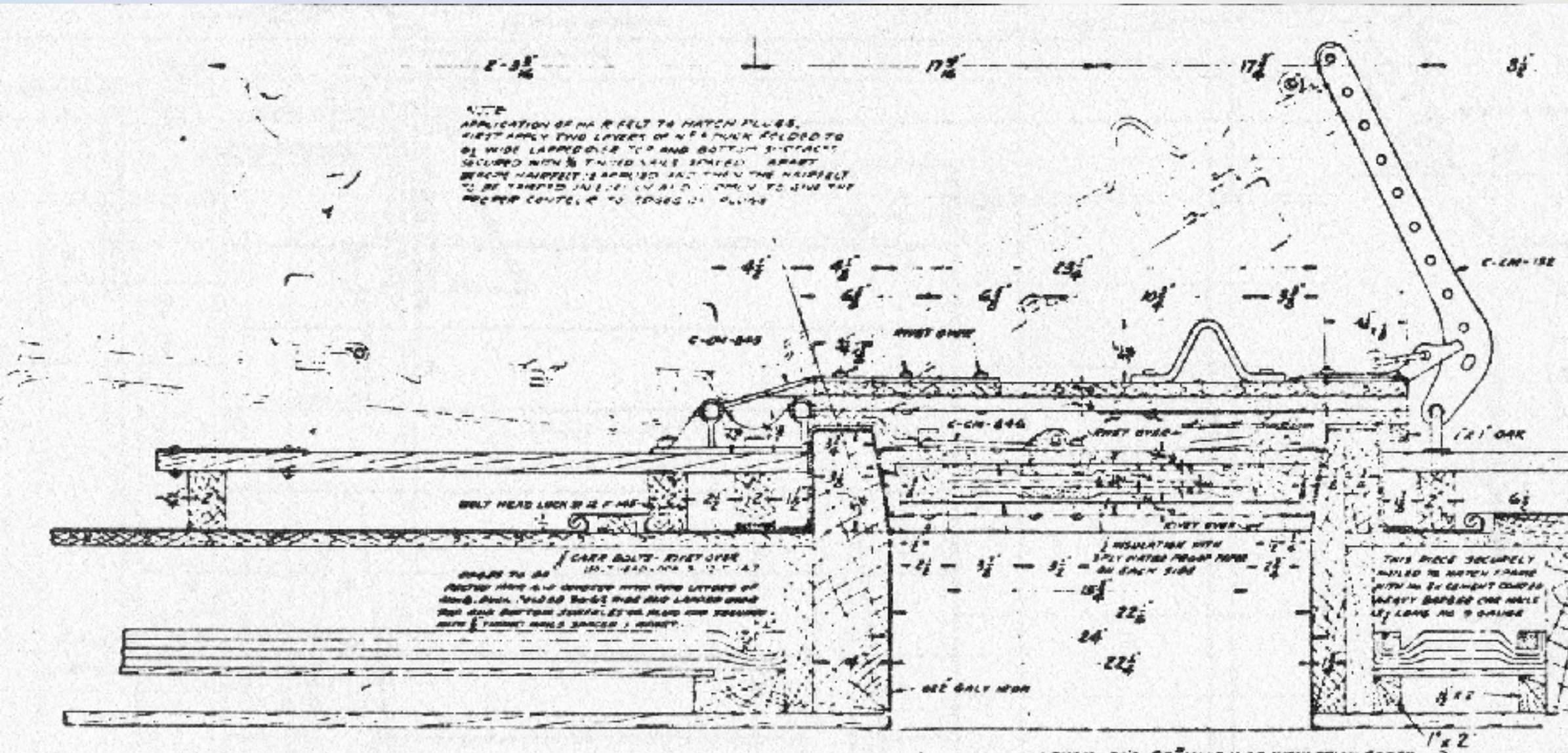
Collection of Ted Culotta

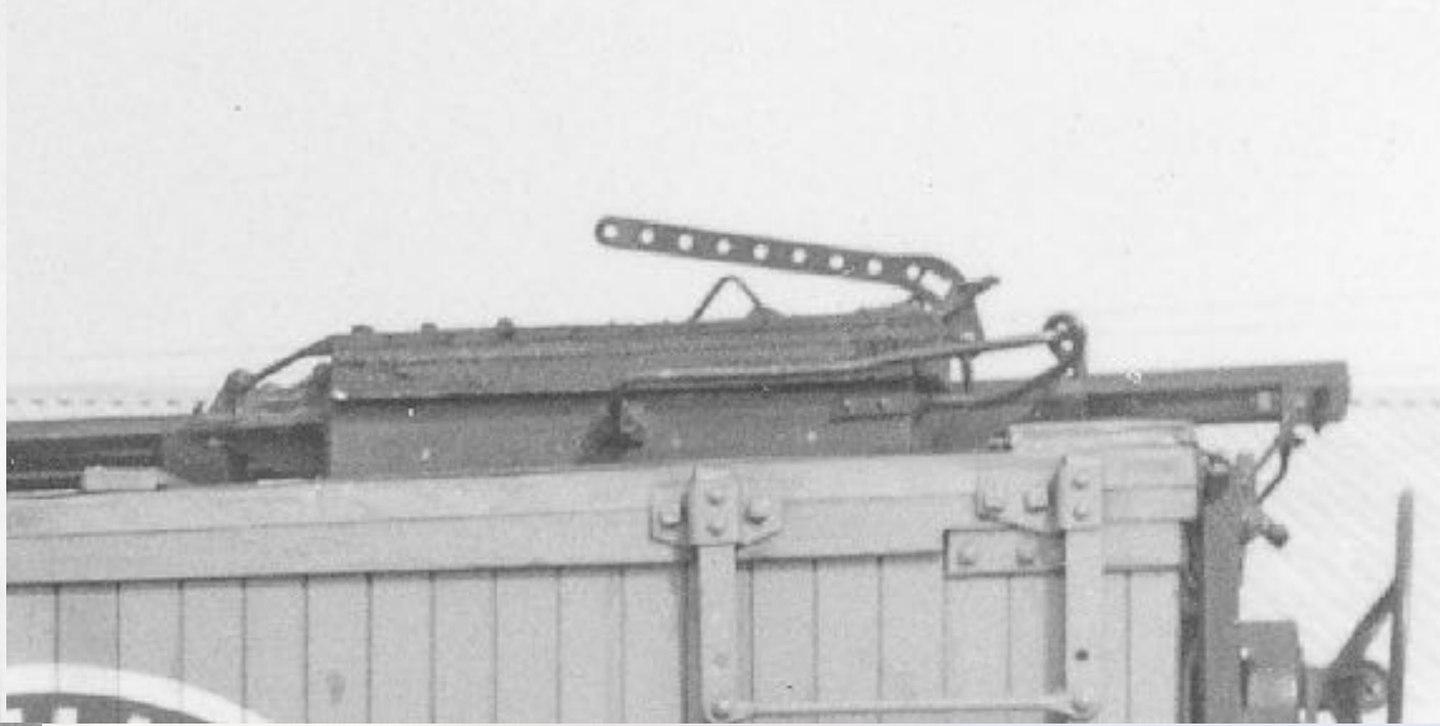
BR-40-10

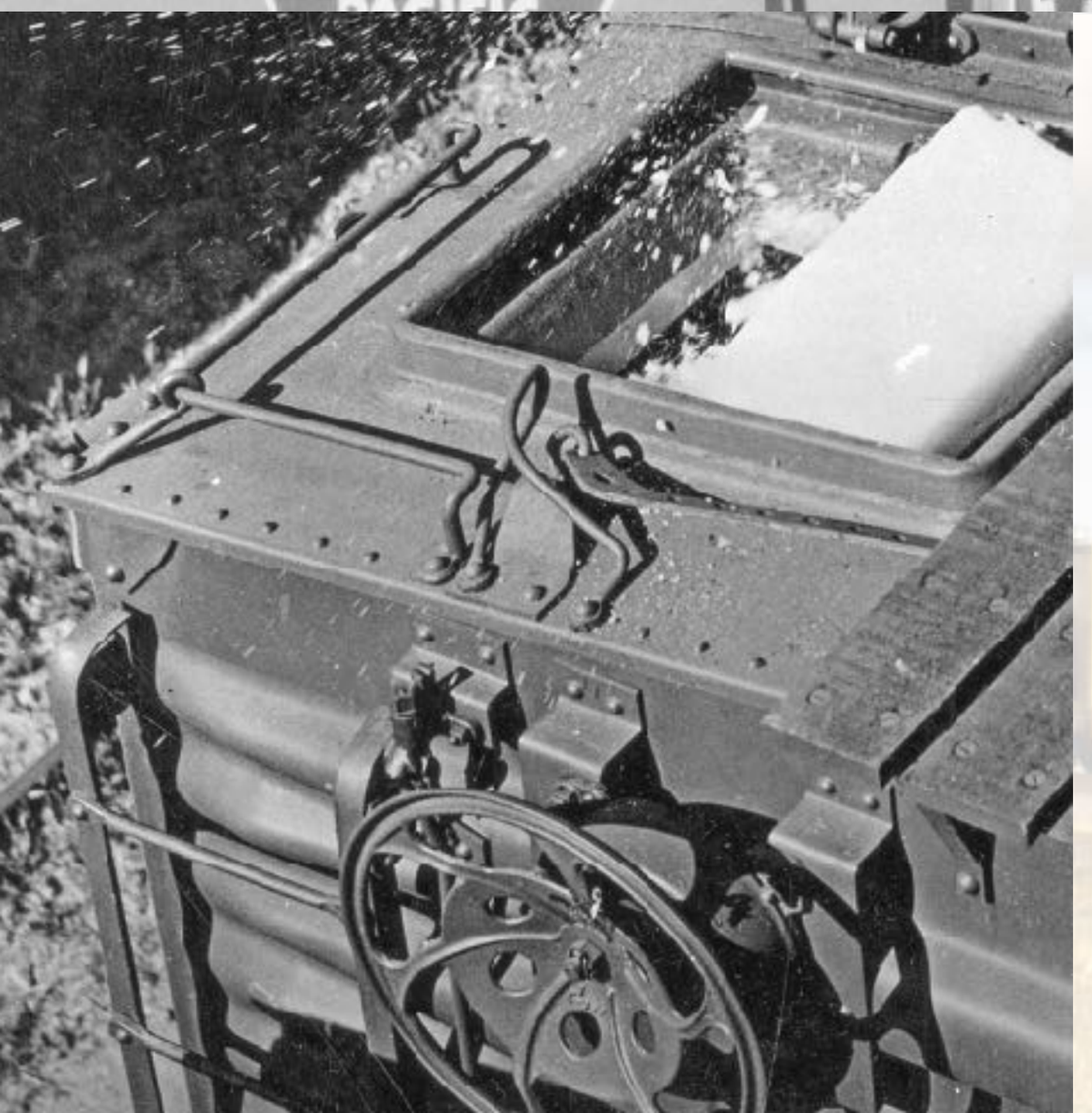
Presumed to be work of Bob Carlson

Detail Considerations for Modeling

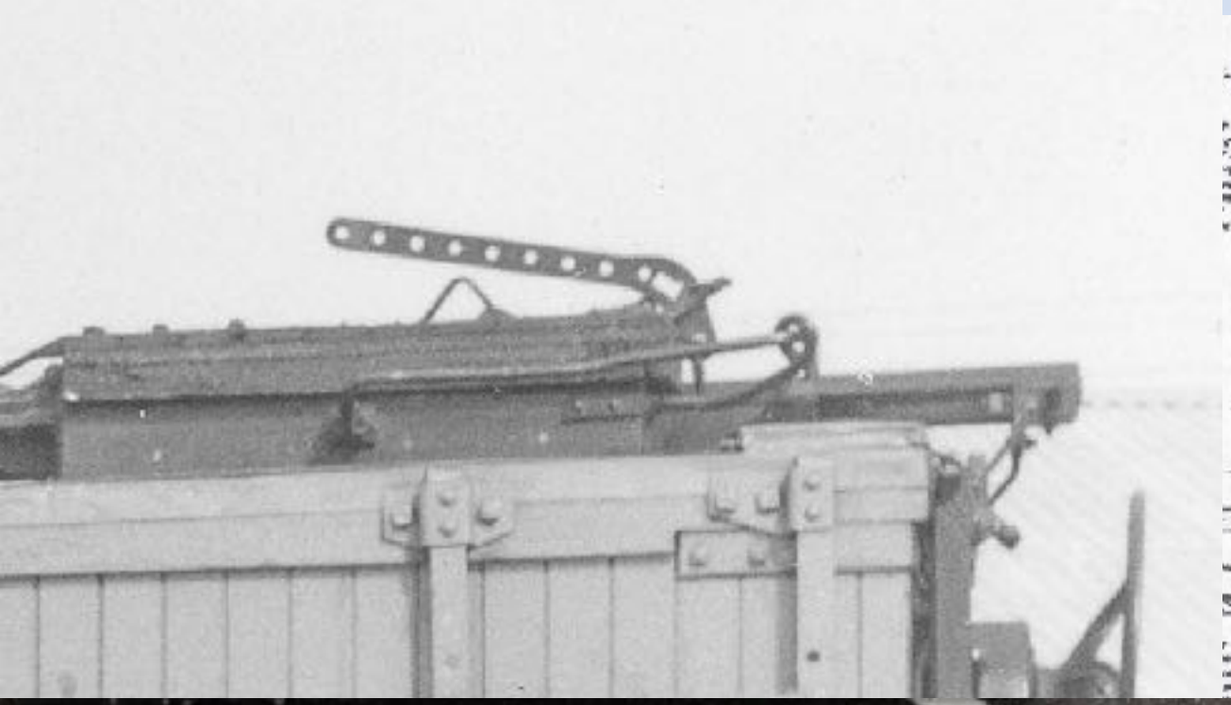
By far the most common hatch lever on cars with wood hatch covers as well as the R-40-10 class was as shown in this drawing, with its wide, gentle curve at the elbow, different than all the available parts in HO

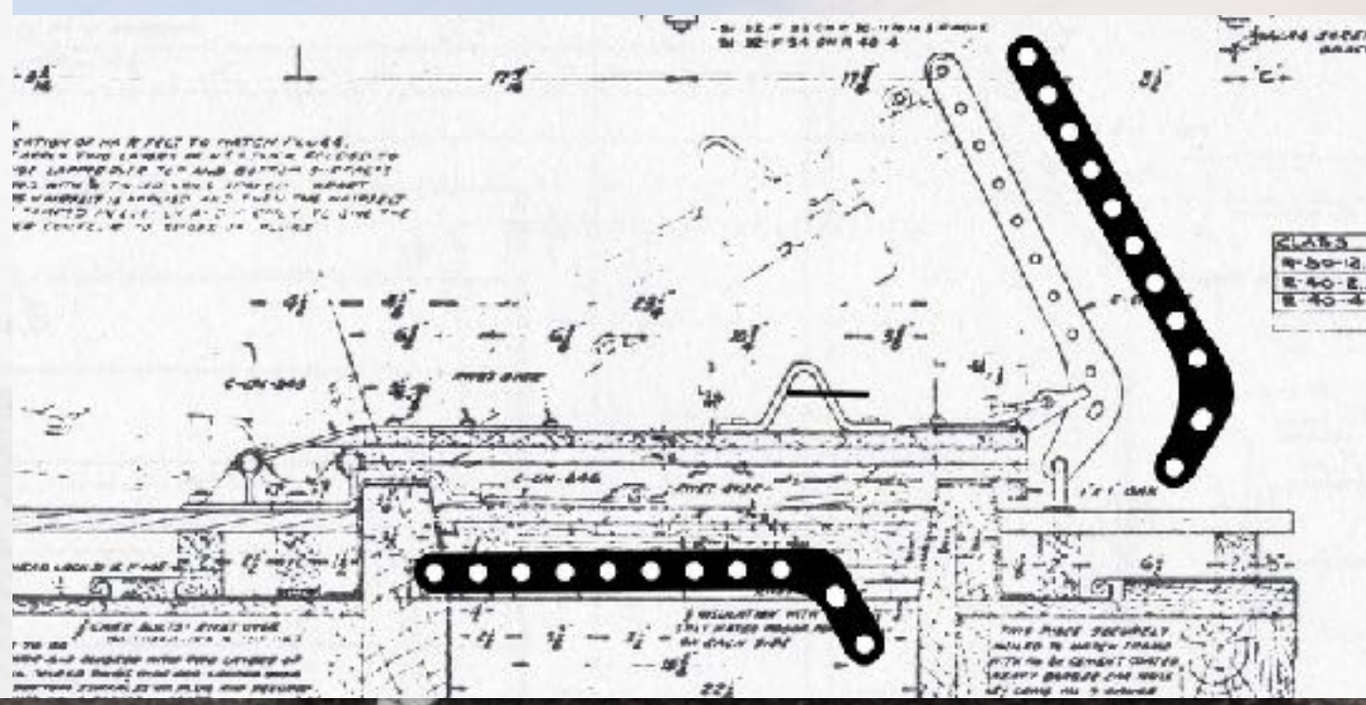


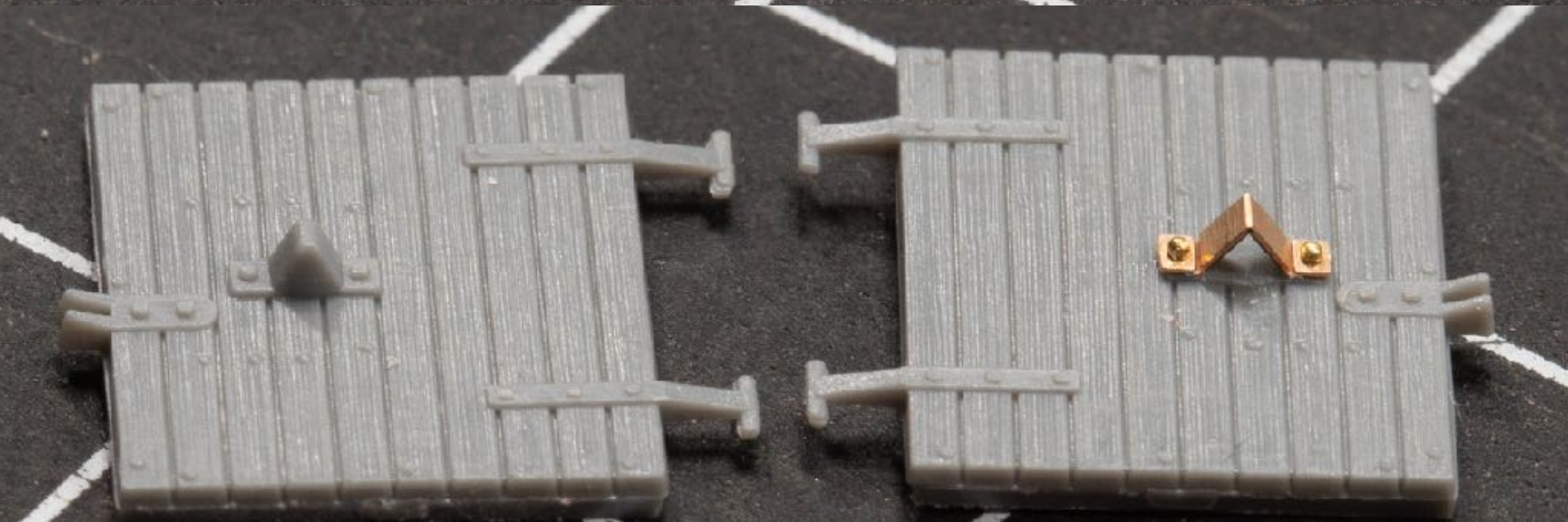




Once you're aware of it, it's hard to miss…







The lower left push pole pocket casting was removed from cars that were refurbished, rebuilt or reconditioned with ladders…

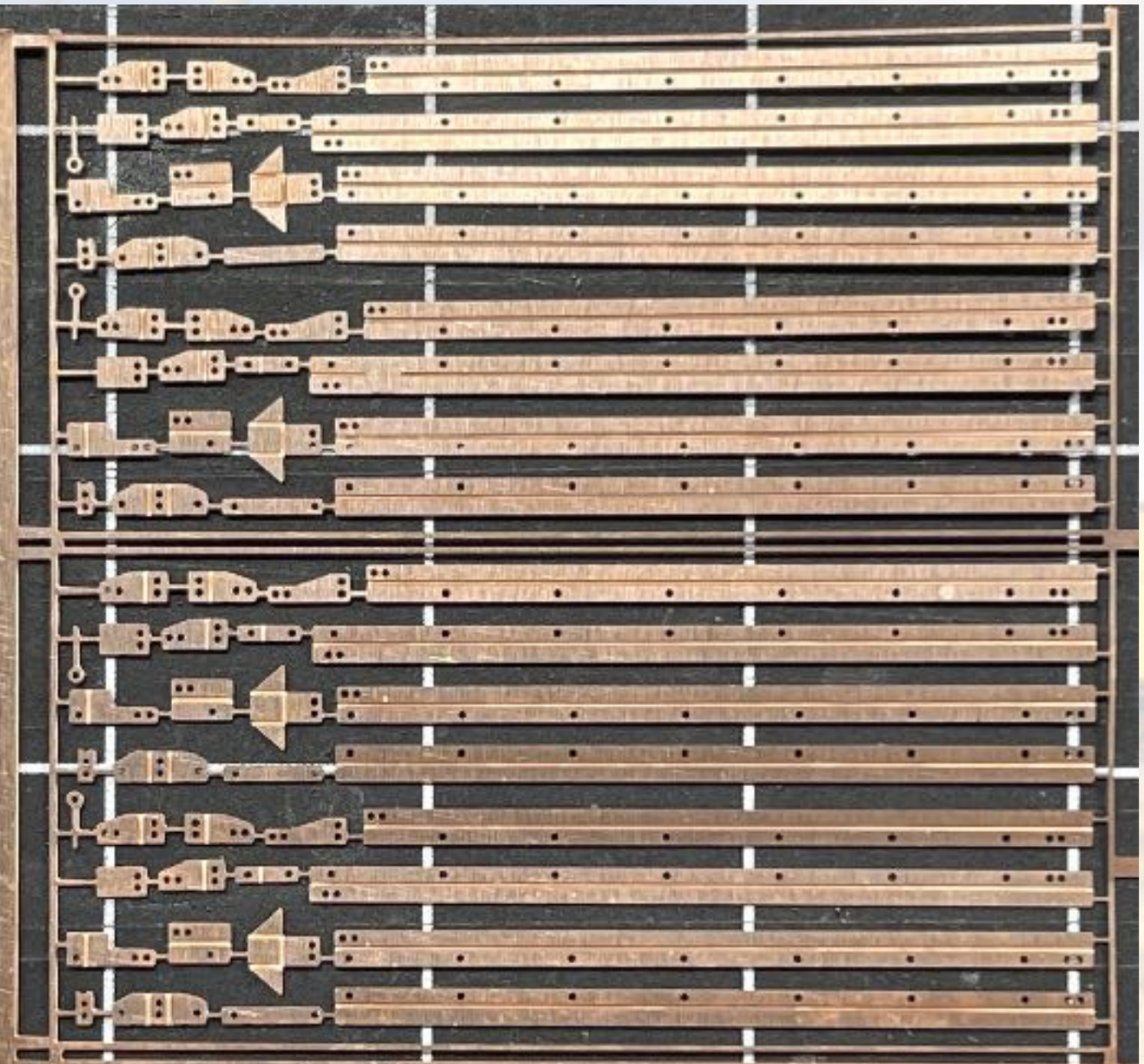
The vast majority of the -9 reconditioned/refurbished cars used Wine-style ladders on the sides and traditional riveted tread style ladders on the ends

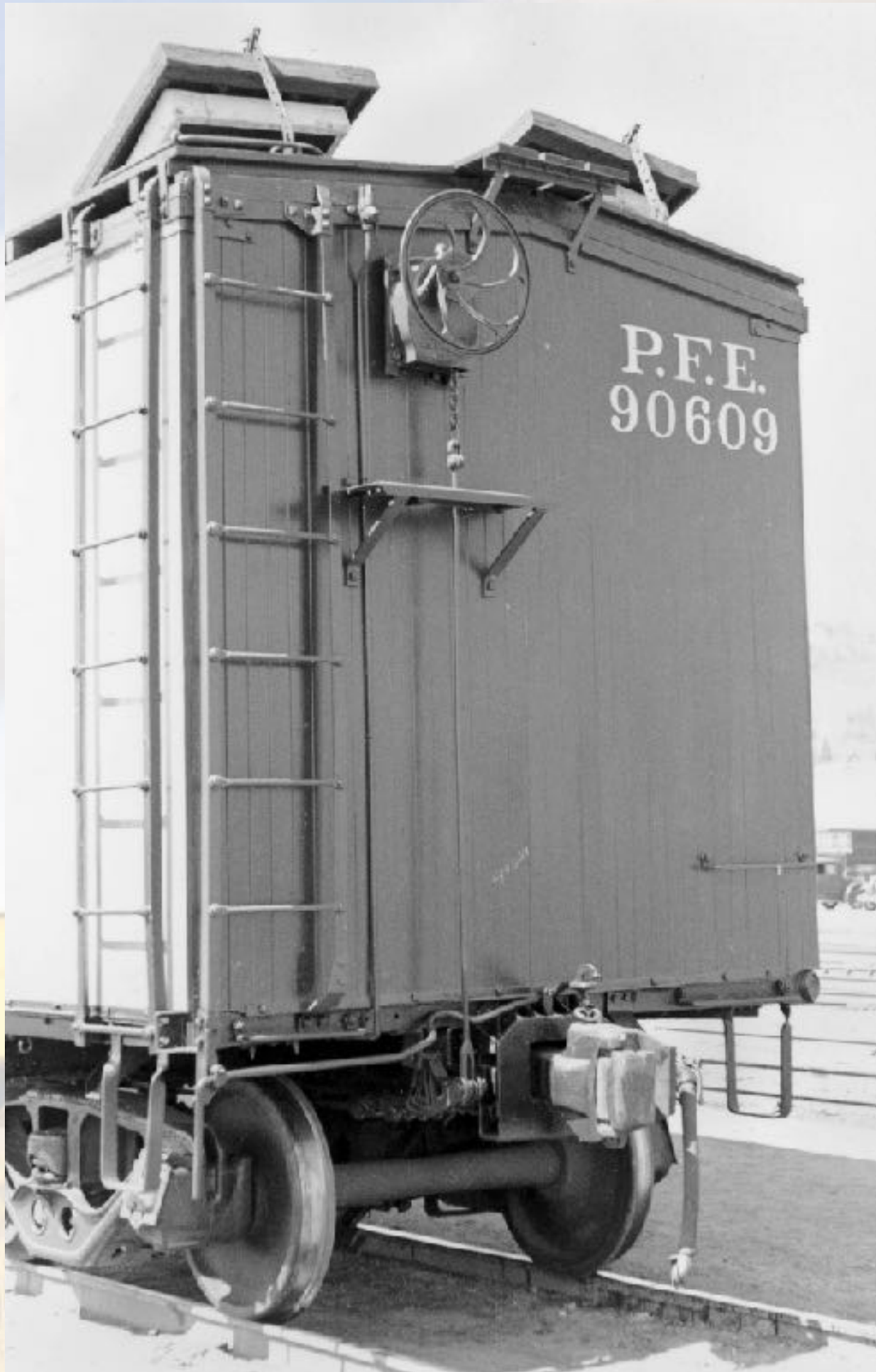
Ice bunker drain spouts, too…

Ice bunker drain spouts have generally been poorly rendered in HO scale

Etched metal to the rescue

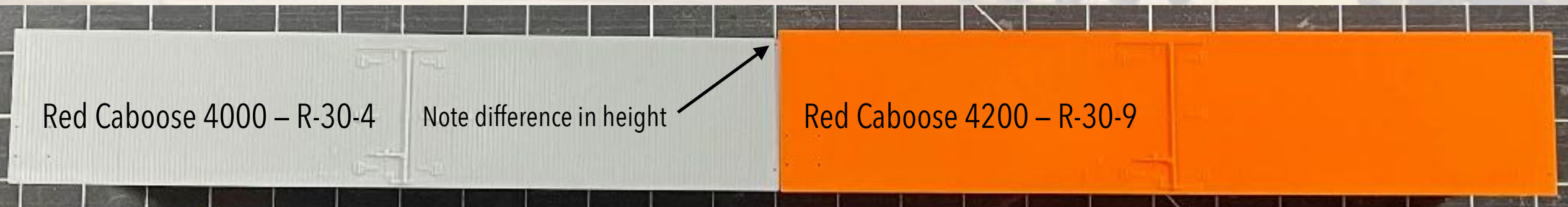
Ladders on the R-30-4/R-40-4, R-30-8/R-40-8, R-30-9/R-40-9, and R-30-16/R-40-16 used the arrangement as shown at right, with brackets at top and bottom, the angled leg on bottom of the right stile on the end, and the additional angle on the bottom of the left stile on the end to which the uncoupling device was mounted



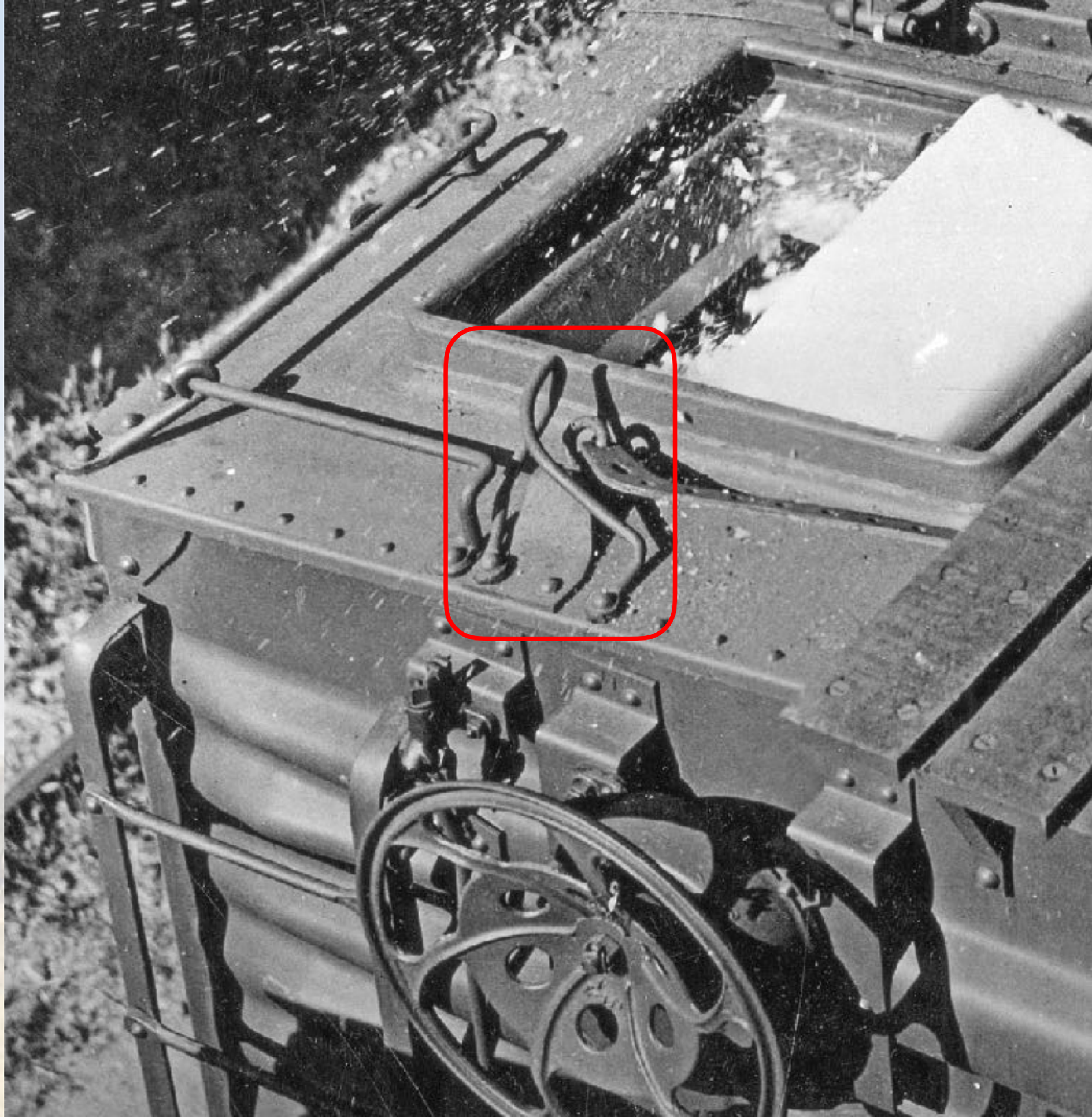


R-30-4 Modeling

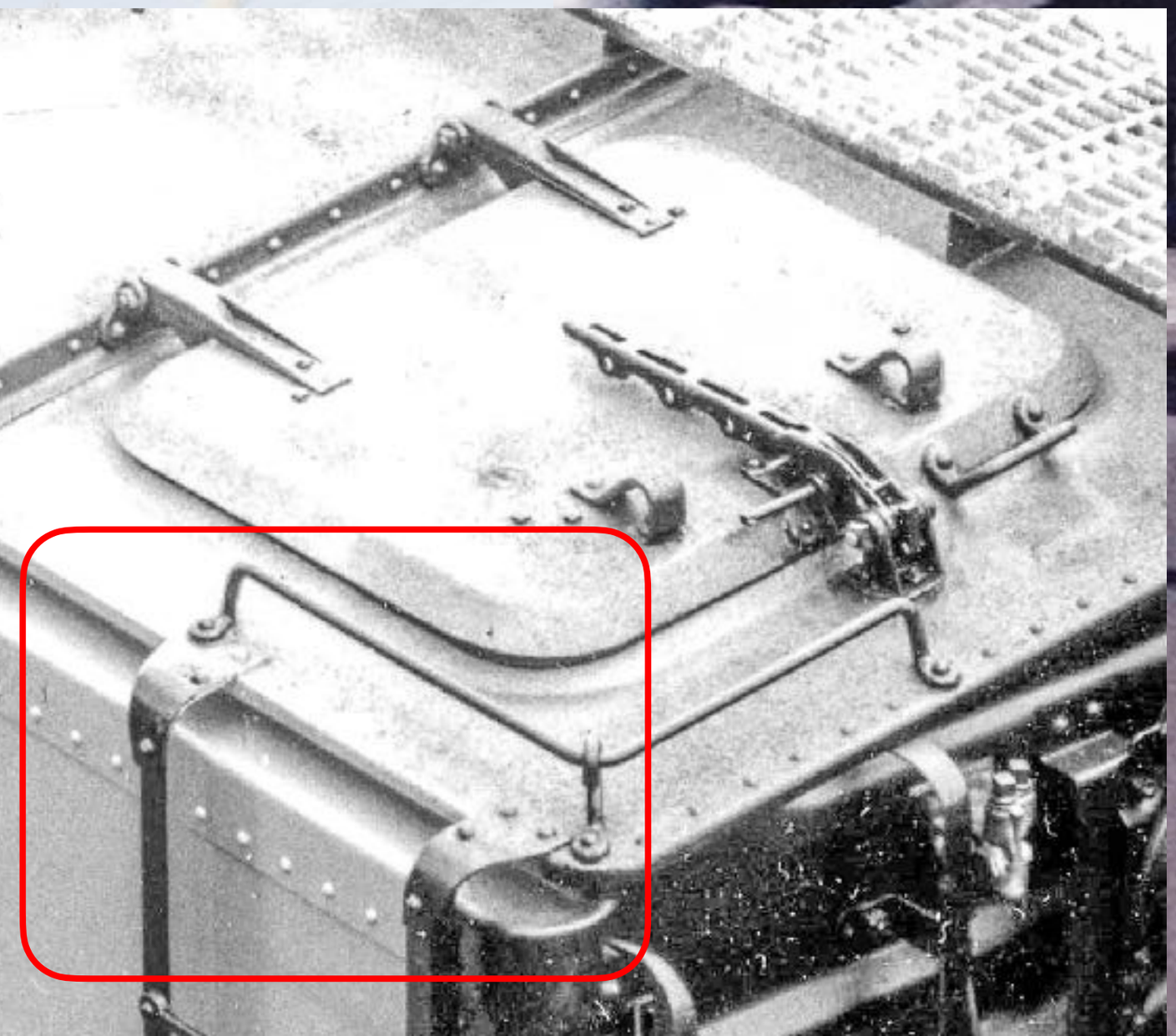
When Red Caboose first offered R-30-12-9 (later R-30-9) reconditioned versions of the their R-30-12, they made an (fortuitous) error and tooled the cars the same height as the original R-30-12 models, making them incorrect for the taller -9s. They subsequently retooled -9 to the correct height, but the original incorrect models can be used as quite convincing R-30-4 models. Compare the height of this R-30-4 to its cousin R-30-9 PFE 92966 to its right. Red Caboose's error is your win!



The R-40-10 had this interesting fixture to presumably prevent the hatch lever from remaining in the “up” position, creating a safety hazard



All the steel cars and many of the steel-roofed wood rebuilds highlighted in the clinic had upper ladder mounts like those shown here

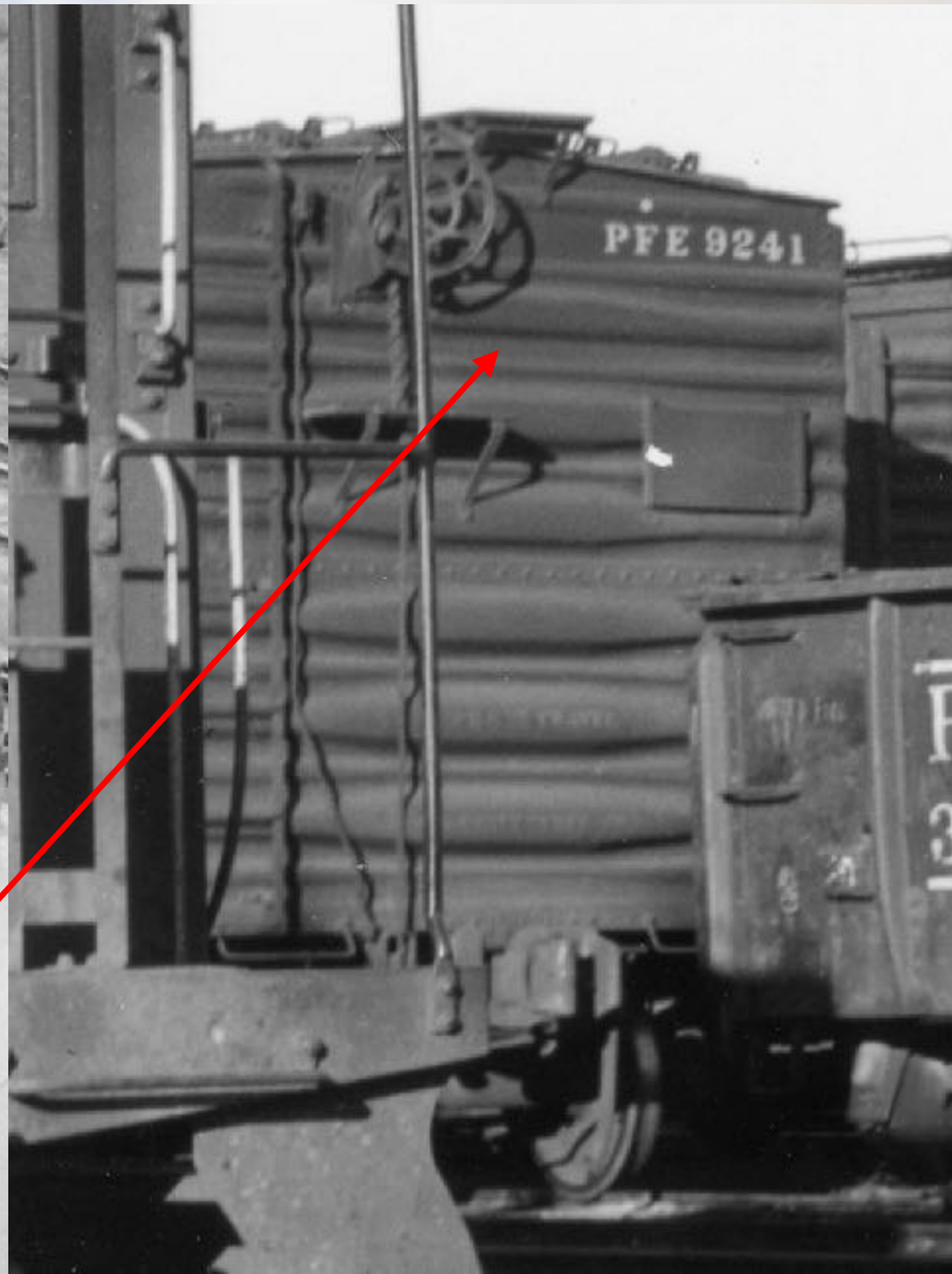


The R-40-23 actually had two styles of sill steps below the doors…

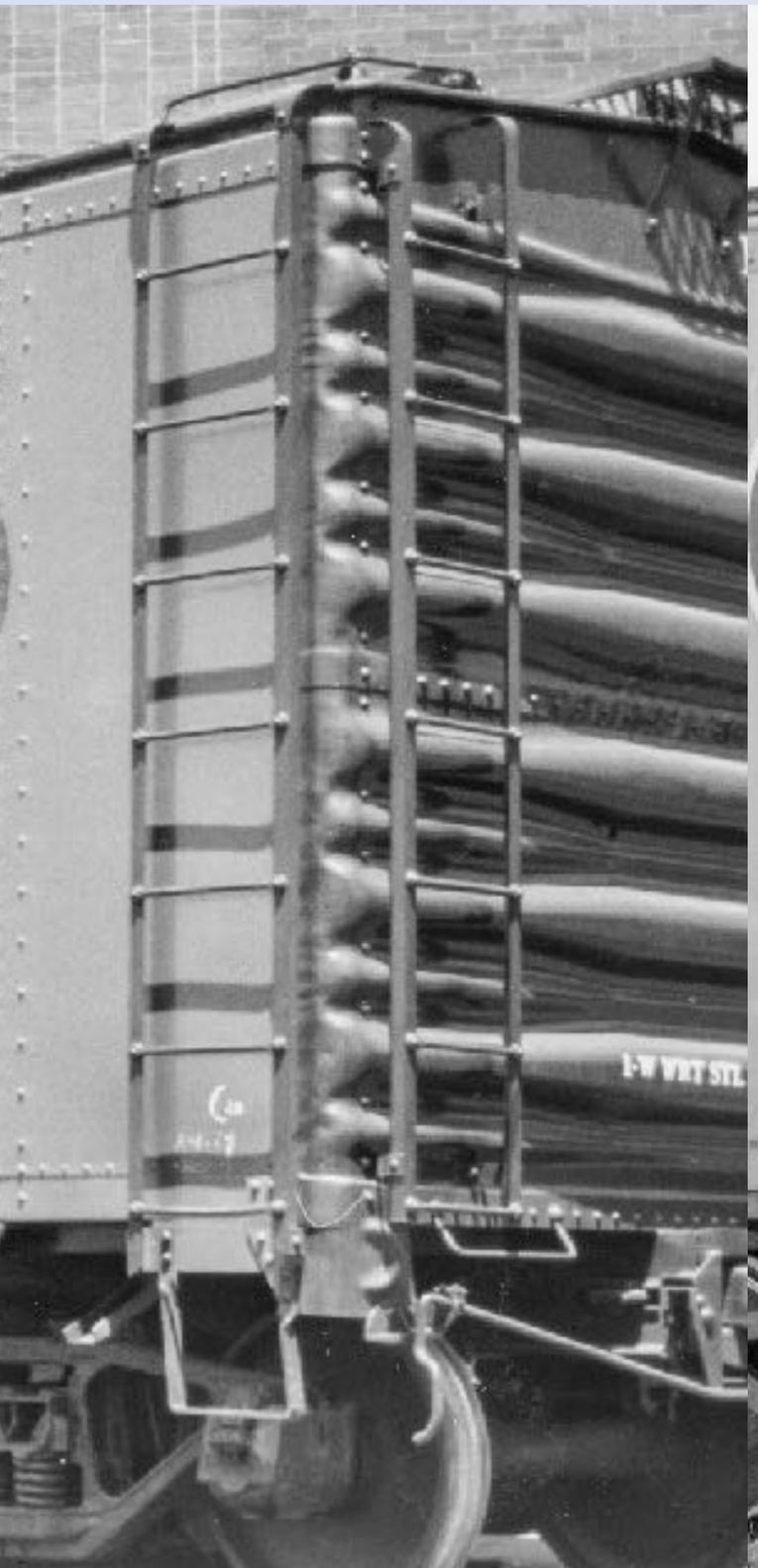
simple

double-rung

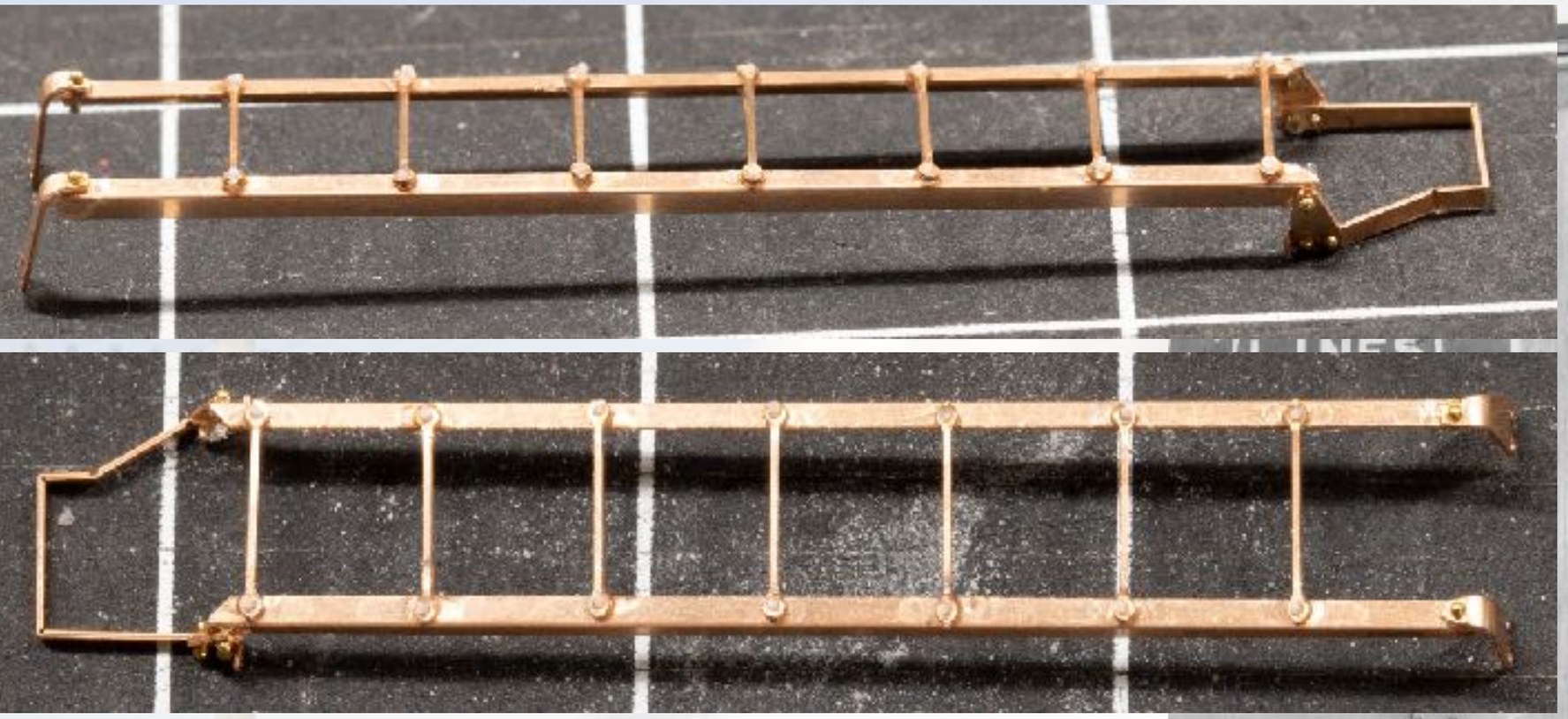
The uppermost main rib on the ends of the R-40-25 and -26 is flat along its bottom edge

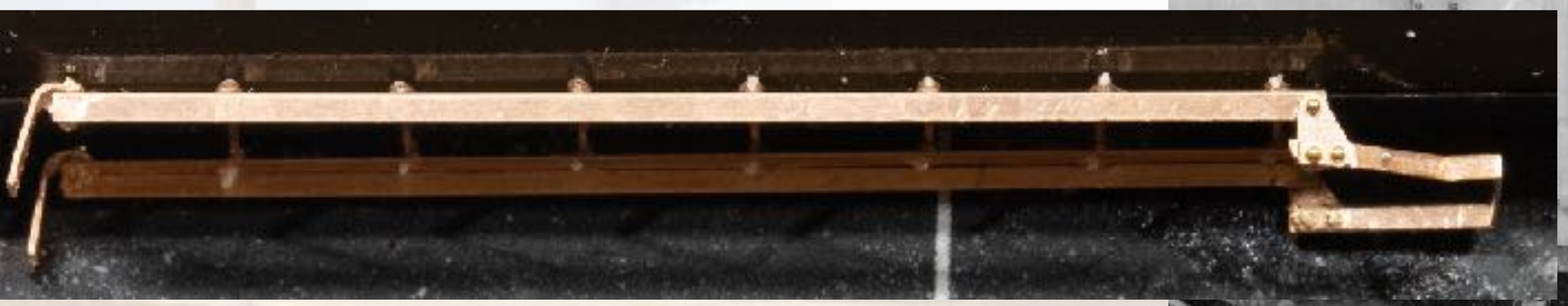


The ladders and sill steps of the R-40-23, -25, and -26 (shown L to R, respectively) represent an evolution. The bottom of the ladders and the steps on the -23 are attached to a small bulb angle below the side sill; those on the -25 and -26 are attached to the bottom of the side sill via riveted shapes, similar to a PS-1 box car. The ladders on the -26 are of a Wine design, with the rungs secured into holes in the stiles, as opposed to using treads that are riveted to the stiles.



The R-40-25 and -26 ladders (as well as the -23 although they are simpler) can be effectively replicated using etched metal assemblies, as shown here. The stiles, treads ("rungs,") upper and lower mounting brackets, and steps are all separate pieces assembled to create a highly realistic and durable ladder assembly





HO Scale Models

Class	Manufacturer	Notes
R-30/40-9	Sunshine	kits 25.7 -- 25.34
R-30-9	Red Caboose	4100 or 4200-series; Bettendorf underframe
R-30/40-9	Red Caboose	w/ Tichy or PFE* underframe
R-30/40-16	Sunshine	kits 25.59 -- 25.67
R-30-16	PFE*	
R-30/40-16	PFE*	w/ Tichy or PFE* underframe
R-30/40-18	Sunshine	kits 25.35 -- 25.43
R-30/40-18	PFE*	built-up underframe; RTR from Intermountain
R-30/40-19	Sunshine	kits 25.44 -- 25.49
R-30/40-19	PFE*	built-up underframe; RTR from Intermountain
R-30/40-21	Sunshine	kits 25.50 -- 25.58
R-30/40-21	PFE*	built-up underframe; RTR from Intermountain
R-30/40-24	Sunshine	kits 25.68 -- 25.71
R-30/40-24	Scale Trains (ex-MTH)	SXT1257-SXT1259
R-40-23	Intermountain	40599 (undec kit); RTR available
R-40-25	Intermountain/Amarillo	ends not accurate
R-40-26	Sunshine	ends not accurate
R-40-4	Tichy	kit 4024
R-30-4	Red Caboose	"short" kit - 4000-series
R-50-5	Sunshine	kits 25.72 -- 25.74
R-70-2	Sunshine	kits 25.1 -- 25.3
R-40-10	Sunshine	kits 46.1 -- 46.6
R-40-10	Intermountain	41799 (undec kit); RTR available
R-40-14	Intermountain	kitbash
R-40-14	Athearn	kitbash
*PFE = Pacific Freight Enterprises		

HO Scale Models

Red Caboose R-30-12

HO Scale Models

Sunshine Models R-30-9

HO Scale Models

Pacific Freight Enterprises R-30-16

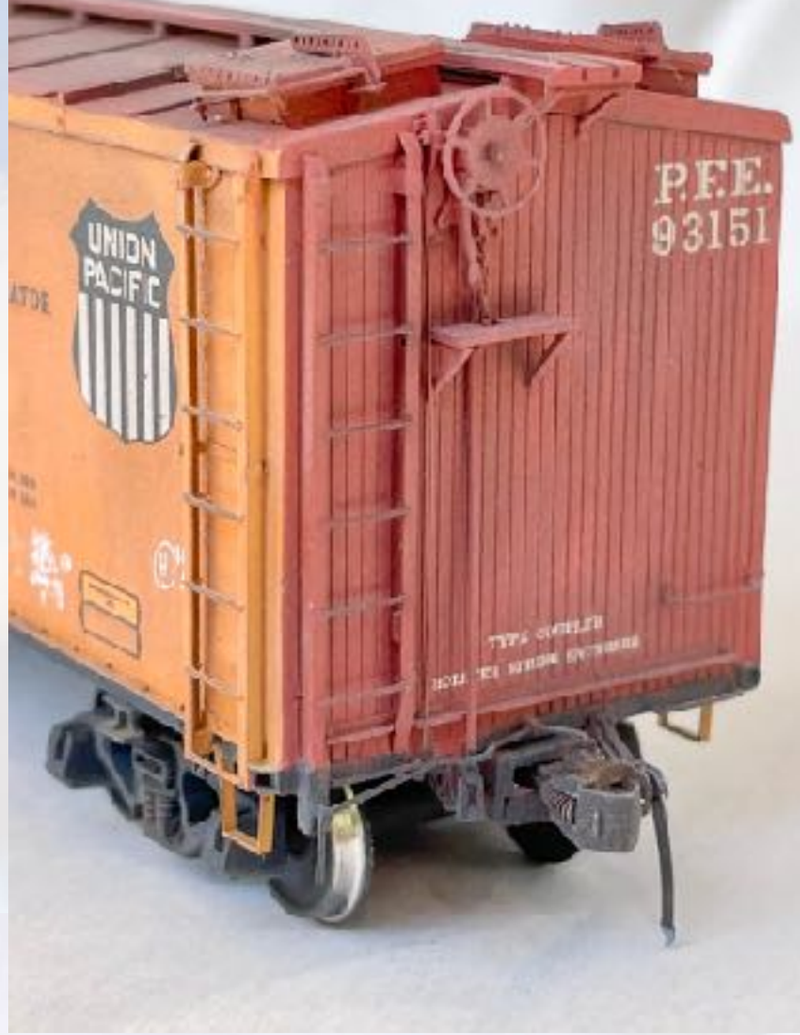
HO Scale Models

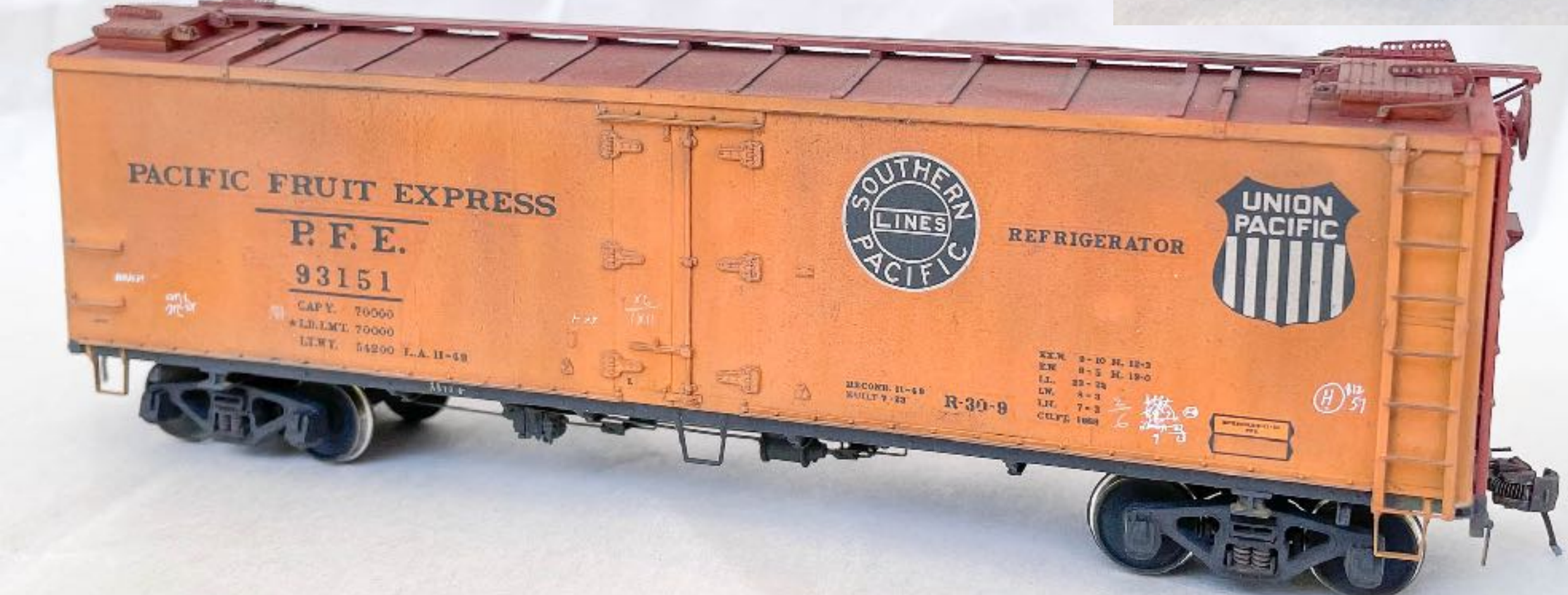
Pacific Freight Enterprises R-30-12-18

HO Scale Models

Sunshine Models R-40-10

National Scale Car R-30-9





HO Scale Models

Kitbashed R-40-14

HO Scale Models

Kitbashed R-40-14

HO Scale Models

Kitbashed R-40-14

References

- *Pacific Fruit Express* by Thompson, Church, and Jones
- *Southern Pacific Freight Car Painting and Lettering Guide* by Harley and Thompson
- Dick Harley's online resources
- Modeling the SP (Tony Thompson's blog)
- Modeling the SP (Bob Chaparro's site)
- Prototype Railroad Topics (my blog)

Thank you

Andy Carlson
Bob Chaparro
Dick Harley
Richard Hendrickson
Frank Peacock
Anthony Thompson
Terry Wegmann
Bill Welch

This will be posted to prototopics.blogspot.com

UP 2-10-2 5015 westbound in Nebraska, ca. 1950, Linn Westcott