



Oddball 40' PS-1 Box Cars

Ted Culotta

Mid-Atlantic RPM
Baltimore-Washington
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Oddball 40' PS-1 Box Cars

Thank you

- George Eichelberger
- Michael Gruber (Mainline Photos)
- Ed Hawkins
- Matt Herson
- Keith Kohlmann/C&NW HS
- Bob Lliejestrاند (Bob's Photo)
- Tim O'Connor
- George Toman
- Bill Welch

This will be posted to prototopics.blogspot.com



“Standard” 40' PS-1 Box Cars

above - Walter E. Frost



left - George Sisk photo, Collection of Charles Winters
lower right - courtesy of Bill Welch

- 10-panel welded sides
- 6'7'/8' door opening
- PS-1 ends
- PS-1 roof
- PS-1 underframe



Oddball 40' PS-1 Box Cars

My definition of an “Oddball” 40' PS-1 Box Car:

Any 40' PS-1 with a collection of traits and characteristics different from the standard 40' PS-1, the standard constructs of a 40' PS-1 being:

- 10-panel welded sides
- 6'/7'/8' door opening
- PS-1 ends
- PS-1 roof
- PS-1 underframe

Oddball 40' PS-1 Box Cars

For further scope clarification, this discussion is limited to “oddball” relative to the “standard” 40' PS-1 Box Car design of ~10'5"-10'6" inside height, not later evolutions such as the “Mini Hy-Cube”



Haskell & Barker Collection, National Museum of American History, Smithsonian Institution

Monon non-PS-1 box car

- 500 cars (nos. 1-500) built by Pullman-Standard in 1947
- erroneously listed as a PS-1 in the Pullman-Standard lot list, but more akin to a welded AAR postwar box car and an interesting prototype and modeling opportunity, nonetheless

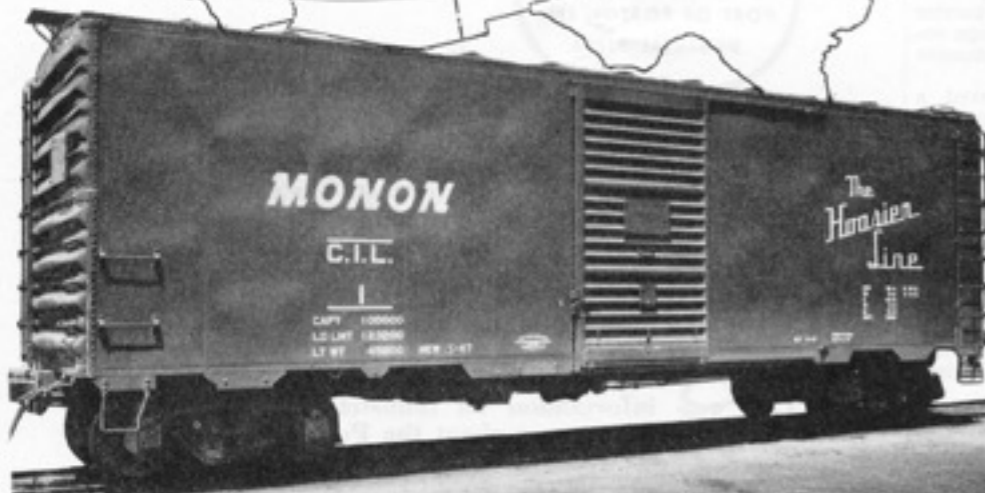


1953, Bob's Photo

Features:

- early PS-1 welded underframe, akin to AAR welded underframe
- 4/4 Improved Dreadnaught ends
- 10-panel welded sides
- Murphy rectangular panel roof
- Superior 7-panel (1-250) or 6/6/5 Imp. YSD (251-500) doors

The Amazing



Monon fast freight service is available for any shipment out of, into or by way of Indiana or between points within the state itself.

Eighty-two Monon freight specialists are located across the nation to serve shippers.

The NEW IDEA in Box Car Numbers Initiated by MONON

"C.I. & L." Box Car No. 1 is a symbol not alone of a new style in car numbers but of the progressive spirit that characterizes all of Monon's operations and services.



Itinerary...

OF MONON'S NEW BOX CAR No. 1 In a little more than a year

Each unneeded digit eliminated from a car number reduces opportunities for error. On the chance that many shippers have never seen the crazy-quilt pattern of a freight car's travels, during which its numbers may be used thousands of times, we are showing the day-by-day itinerary of Box Car No. 1 in a little more than one year. This is the first car to carry the Monon's new simplified system of numbering. On these trips the Railroads have already saved thousands of lead pencil strokes, typewriter impressions, teletype impulses and spoken numerals. Here is the amazing itinerary, with cargoes carried:—

May 7-47	Michigan City, Ind.	Monon	New	Nov. 3	St. Louis, Mo.	T.R.R.A.	Cigarettes
7-8-9	French Lick, Ind.	Monon	On display	4	St. Louis, Mo.	M.K.T.	Cigarettes
16	Bloomington, Ind.	Monon	On display	5	Kansas City, Mo.	U.P.	Cigarettes
June 9	LaFayette, Ind.	Monon	On display	8	Ogden, Utah	Sou Pac	Cigarettes
13	Crawfordsville, Ind.	Monon	First load	9	Sparks, Nevada	Sou Pac	Cigarettes
16	Crawfordsville, Ind.	Monon	Merchandise	10	Roseville, Calif.	Sou Pac	Cigarettes
17-18	Louisville, Ky.	Monon	Freight house	11	Oakland, Calif.	Sou Pac	Cigarettes
20	Louisville, Ky.	L. & N.	Merchandise	19	Port Costa, Calif.	Sou Pac	Unloaded
22	Nashville, Tenn.	L. & N.	Merchandise	25	Crockett, Calif.	Sou Pac	Gov't Load
22	Birmingham, Ala.	L. & N.	Merchandise	26	Sparks, Nev.	Sou Pac	Sugar
22	Montgomery, Ala.	L. & N.	Merchandise	28	Ogden, Utah	Sou Pac	Sugar
27	Montgomery, Ala.	S.A.L.	Merchandise	Dec. 3	Kansas City, Mo.	G.M. & O.	Sugar
July 1	Jacksonville, Fla.	S.A.L.	Merchandise	5	Chicago, Ill.	B. & O.C.T.	Sugar
2	West Lake Wales, Fla.	S.A.L.	Merchandise	16	Chicago, Ill.	B. & O.C.T.	Empty
3	Miami, Fla.	S.A.L.	Merchandise	17	Chicago, Ill.	B. & O.C.T.	Syrup
5	West Lake Wales, Fla.	S.A.L.	Merchandise	19	Chicago, Ill.	B. & O.C.T.	Syrup
10	Savannah, Ga.	S.A.L.	Merchandise	19	Chicago, Ill.	Monon	Syrup
11	Vidalia, Ga.	S.A.L.	Merchandise	24	Indianapolis, Ind.	Monon	Syrup
11	Vidalia, Ga.	M.D. & S.	Merchandise	24	Indianapolis, Ind.	U.I.	Syrup
12	Macon, Ga.	C. of Ga.	Merchandise	26	Indianapolis, Ind.	N.K.P.	Auto parts
15	Athens, Ga.	S.A.L.	Merchandise	26	Lima, Ohio	Erie	Auto parts
16	Abbeville, S. C.	S.A.L.	Merchandise	30	Bloomfield, N. J.	Erie	Drugs
16	Hamlet, N. C.	S.A.L.	Merchandise	Jan. 6-48	Bloomfield, N. J.	Erie	Drugs
20	Cayce, S. C.	S.A.L.	Signal Material	9	Lima, Ohio	Erie	Drugs
23	Camden, S. C.	S.A.L.	Signal Material	10	Frankfort, Ind.	N.K.P.	Drugs
24	Hamlet, N. C.	S.A.L.	Signal Material	10	St. Louis, Mo.	T.R.R.A.	Drugs
26	Apex, N. C.	S.A.L.	Signal Material	11	St. Louis, Mo.	Cotton Belt	Drugs
30	Sanford, N. C.	S.A.L.	Empty	13	Corsicana, Tex.	Sou Pac	Drugs
Aug 7	Sanford, N. C.	S.A.L.	Lumber	23	San Francisco	Sou Pac	Drugs
8	Richmond, Va.	S.A.L.	Lumber	Feb. 3	San Francisco	Sou Pac	Coffee
9	Richmond, Va.	R. F. & P.	Lumber	7	Los Angeles	A.T. & S.F.	Coffee
11	Alexandria, Va.	P.R.R.	Lumber	14	Los Angeles	A.T. & S.F.	Drums
11	Wilkes-Barre, Pa.	D. & H.	Lumber	14	Los Angeles Harbor	Harbor Belt Line	Drums
12	Jermyn Transd., Pa.	N.Y.O. & W.	Empty	20	Los Angeles	U.P.	Coconut
13	Carbondale, Pa.	N.Y.O. & W.	Empty	20	Council Bluffs	C.M.S.P. & P.	Coconut
13	Cadous, N. Y.	N.Y.O. & W.	Empty	4	Chicago Division St.	C.M.S.P. & P.	Coconut
16	Wurtsboro, N. Y.	N.Y.O. & W.	Empty	6	Chicago (Dunning)	C.M.S.P. & P.	Coconut
22	Cayuga, Pa.	D.L. & W.	Empty	12	Chicago (Cragin)	C.M.S.P. & P.	Soya Meal
24	Buffalo, N. Y.	N.K.P.	Empty	13	Norpsud	I.H.B.	Soya Meal
28	Northeast, Pa.	N.K.P.	Tomato juice	13	Riverdale	I.H.B.	Soya Meal
30	Lima, Ohio	B. & O.	Tomato juice	20	Argo (via St. Louis)	G.M. & O.	Barley Chaff
Sept. 2	Cincinnati, Ohio	L. & N.	Tomato juice	23	Jackson, Tenn.	N.C. & St.L.	Barley Chaff
3	Strawberry, Ky.	L. & N.	Tomato juice	24	Nashville	N.C. & St.L.	Barley Chaff
3	Bowling Green, Ky.	L. & N.	Tomato juice	30	Nashville	N.C. & St.L.	Feed
4	Gallatin, Tenn.	L. & N.	Tomato juice	April 1	Memphis	I.C.	Feed
10	Nashville, Tenn.	L. & N.	Tomato juice	3	Magnolia, Miss.	I.C.	Feed
11	Nashville, Tenn.	T.C.	Made empty	6	McComb, Miss.	I.C.	Empty
15	Cookeville, Tenn.	T.C.	Merchandise	7	Reserve, La.	I.C.	Empty
16	Algood, Tenn.	T.C.	Merchandise	9	Baton Rouge	I.C.	Fuel
20	Monterey, Tenn.	T.C.	Lumber	10	New Orleans	I.C.	Fuel
22	Harriman, Tenn.	Sou	Lumber	10	New Orleans	T. & P.	Fuel
25	Knoxville, Tenn.	L. & N.	Tobacco	16	New Orleans	T. & P.	Coffee
26	Corbin, Ky.	L. & N.	Tobacco	17	Dallas, Tex.	T. & P.	Coffee
28	Norton, Va.	N. & W.	Tobacco	19	Texasarkana, Ark.	Mo Pac	Empty
30	Norfolk, Va.	N.P.B.	To army base	20	Little Rock	Mo Pac	Empty
Oct. 5	Norfolk, Va.	N.P.B.	From army base	25	Bauxite, Ark.	B. & N.	Alumina
6	Norfolk, Va.	N.P.B.	Tobacco	26	Bauxite Jct., Ark.	Mo Pac	Alumina
8	Norfolk, Va.	N.P.B.	Made empty	May 5	Kansas City, Kans.	U.P.	Alumina
10	Norfolk, Va.	A.C.L.	Sugar	6	Trousdale, Oregon	U.P.	Alumina
11	So. Rocky Mount	A.C.L.	Sugar	17	Trousdale, Ore.	U.P.	Empty
16	Wilson, N. C.	Norfolk Sou	Leaf tobacco	18	Osaha, Neb.	U.P.	Lumber
16	Raleigh, N. C.	Norfolk Sou	Leaf tobacco	21	Osaha, Neb.	C.St.P. M&O	Lumber
17	Duncan, N. C.	Norfolk Sou	Leaf tobacco	23	Ashland, Wis.	D.S.S. & A.	Lumber
17	Durham, N. C.	Norfolk Sou	Unloaded	25	Mackinaw City, Mich.	N.Y.C.	Lumber
20	Durham, N. C.	Norfolk Sou	Cigarettes	26	Toledo, Ohio	B. & O.	Lumber
29	Charlotte, N. C.	Sou	Cigarettes	28	Norwood, Ohio	B. & O.	Lumber
30	Charlotte, N. C.	Sou	Cigarettes	June 6	Indianapolis, Ind.	Monon	Empty
				7 to 13	On line	Monon	Merchandise
				14 to 19	Bedford, Ind.	Indiana Limestone Centennial	(On display)
				June 20 to 1	On line	Monon	Merchandise
				July 19	On line	Monon	Merchandise
				July 20	Chicago, Ill.	Railroad Fair Eastern Railroads	Exhibit (On display)
				Thru mid-September	Chicago, Ill.	Railroad Fair Eastern Railroads	Exhibit (On display)

MONON

THE HOOSIER LINE

CHICAGO, INDIANAPOLIS and LOUISVILLE RAILWAY COMPANY

This ad appeared in the May, 1948 *Traffic World* magazine. Note that the car no. is C.I.L. 1, but the image is obviously modified since Improved Youngstown doors were used on car nos. 251-500, not 1-250.



Fayetteville, North Carolina, March 22, 1959, Col. Chet McCoid photo, Bob's Photo

Modeling:

- AAR welded underframe - scratchbuild (working on 3D parts)
- 4/4 Improved Dreadnaught ends - BLT, resin or C&BT
- 10-panel welded sides - Archer panel line decals (see Southern 9' door opening PS-1)
- Murphy rectangular panel roof - IMWX/RC, BLT
- Superior 7-panel doors - IM; Improved YSD - Southwest Scale
- Decals - Speedwitch (coming)



Fayetteville, North Carolina, May 2, 1952, Col. Chet McCoid photo, Bob's Photo

Chicago and North Western riveted PS-1 Box Car

- 4,625 cars total, built in 1948, 1949, 1951, 1953
- each order reflects the changes to the PS-1 design over that period (excepting the riveted side construction)



- 7-panel Superior door - wider second panel
- early “notched” tabs at bolsters and side sill support sections

- 7-panel Superior door - wider third panel
- later style bolster tabs and side sill support sections



both images - Collection of Jim Gerstley

Chicago and North Western riveted PS-1 Box Car



Chicago and North Western riveted PS-1 Box Car

- CNW 7 was part of last group delivered, 625 cars in 1953, nos. 1-625

Chicago and North Western riveted PS-1 Box Car

Series Start	Series End	Quantity	Build Date	Notes	Numbering
86300	88298	1,000	1948	early PS-1 underframe; "plain" top of ends; flat end roof panels	even nos.
106600	108598	1,000	1949	"PS-1" bolster tabs; trapezoids on top of ends; flat end roof panels	even nos.
6200	10198	2,000	1951	"PS-1" bolster tabs; trapezoids on top of ends; stiffeners in all roof panels	even nos.
1	625	625	1953	"PS-1" bolster tabs; trapezoids on top of ends; stiffeners in all roof panels	
Total		4,625			

For information about additional details on these cars and similar cars built for American Smelting and Refining, Duluth, South Shore & Atlantic, and Ferrocarril del Pacifico, consult *Railway Prototype Encyclopedia 1*



Chicago and North Western riveted PS-1 Box Car

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

- Intermountain or Branchline car body
- Speedwitch (early) or Intermountain (late) PS-1 roof
- Kadee end pattern
- Kadee, Intermountain or good 'enuff' underframe members
- Floor - scratch or model
- Doors -
 - Youngstown - Intermountain, Branchline or Kadee
 - Superior - Southwest Scale
- Tab sections below side sills - model or scratch



Chicago and North Western riveted PS-1 Box Car

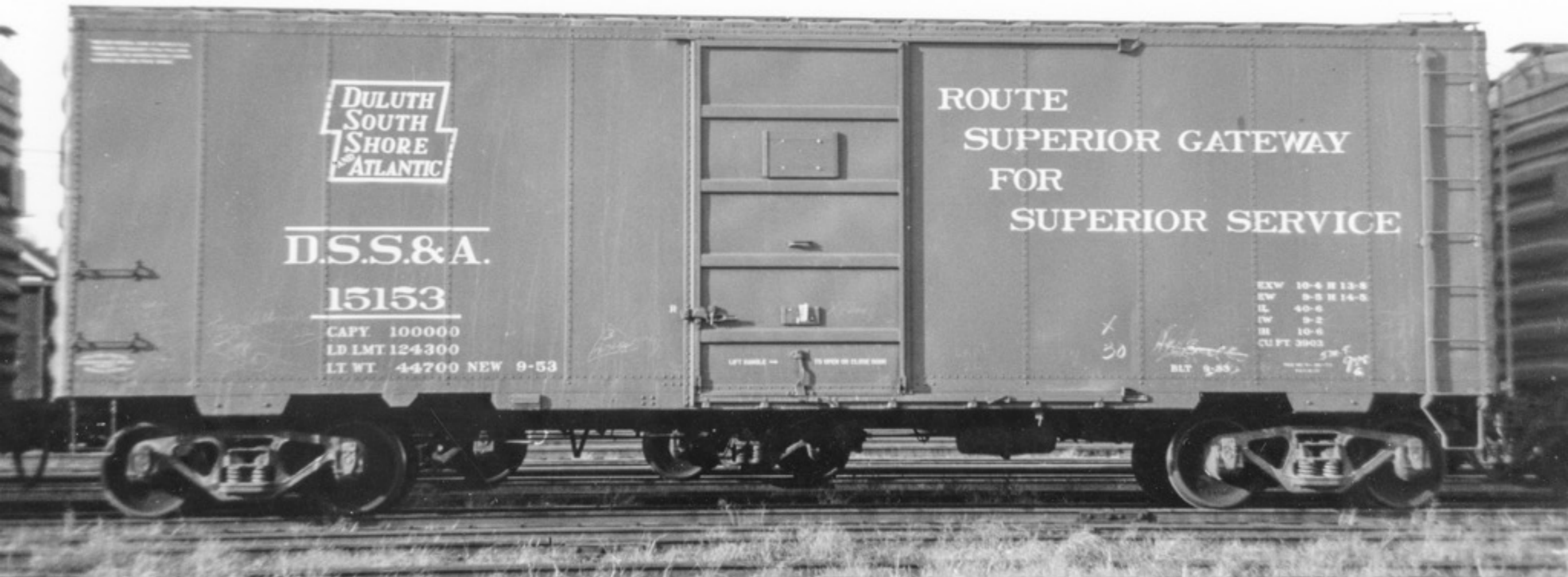
- Kadее end pattern
- Doors -
 - Youngstown - Intermountain, Kadее or Branchline
 - Superior - Southwest Scale



Chicago and North Western riveted PS-1 Box Car

- See *Railway Prototype Cyclopedia, Volume 1*
- Speedwitch decal D195 shown above

Other 1948-1953 Riveted PS-1 Box Cars



Bob's Photo

For information about additional details on the CNW cars and similar cars built for American Smelting and Refining, Duluth, South Shore & Atlantic, and Ferrocarril del Pacifico, consult *Railway Prototype Encyclopedia 1*



Illinois Central Riveted PS-1 box car

- 1,500 cars (nos. 22000-23499; steel floors in last 25 cars) built by Illinois Central in 1954 with main components from Pullman-Standard



Fayetteville, North Carolina, March 1, 1959, Col. Chet McCoid photo, Bob's Photo

Illinois Central Riveted PS-1 box car

- 1,000 (?) cars (nos. 3000-3999) built by Illinois Central in 1957 with main components from Pullman-Standard
- Listed in *ORER* with non-PS-1 cars (4000-4999?)
- Approximately 300+/- cars in 3000-4999 series had 'DF' Loading Devices



Pullman-Standard photo, Bob's Photo

New Haven 10'0" inside height PS-1 box car

- 1,500 cars (nos. 34500-35599) built by Pullman-Standard in 1948



Collection of Ted Culotta

New Haven 10'0" inside height PS-1 box car

- Above is a 10'6" PS-1 with top end "Murphy" corrugation and full height door



Note shorter (height)
of top panel of door

Charles Wales photo, William Hopkins Collection

New Haven 10'0" inside height PS-1 box car

Note absence of small
"Murphy" corrugation on end



New Haven 10'0" inside height PS-1 box car



New Haven 10'0" inside height PS-1 box car

- Modified PS-1 end (Kadee riveted)
- Modified Intermountain or scratchbuilt side (Archer panel line decals — see Southern 9' door opening PS-1)
- Early PS-1 underframe
- Modified Southwest Scale door
- Intermountain roof with outer panel ribs removed
- Speedwitch D118 decals

Akron, Canton & Youngstown 3253
ex-New Haven 10'0" inside height PS-1 box car



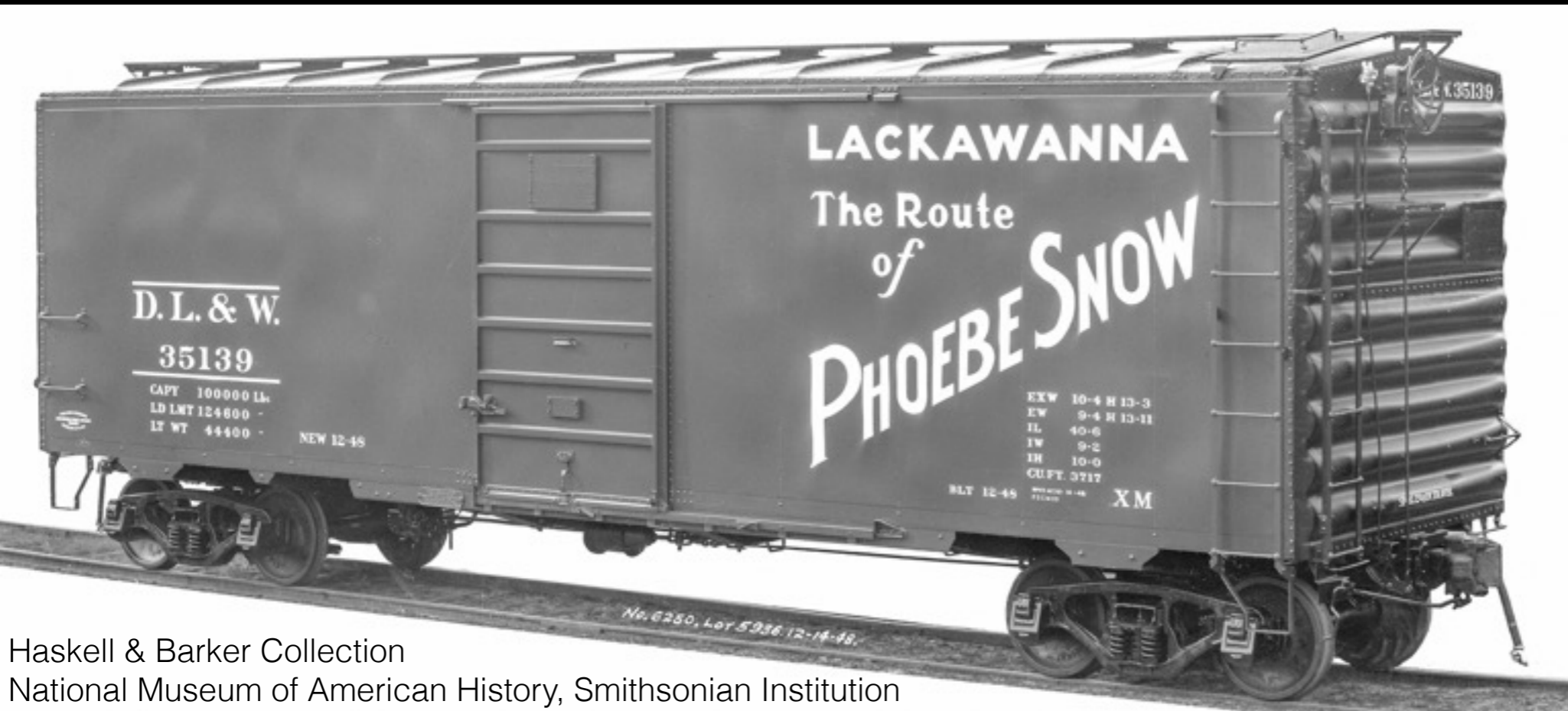
Port Huron & Detroit 1023
ex-New Haven 10'0" inside height PS-1 box car



Louisville, New Albany & Corydon
ex-New Haven 10'0" inside height PS-1 box car



10'0" inside height PS-1 box cars



DL&W,
built 1948,
Pullman-
Standard

Haskell & Barker Collection
National Museum of American History, Smithsonian Institution

Hamlet, North Carolina
March 29, 1959
Col. Chet McCoid photo
Bob's Photo





10'0" inside height
PS-1 box cars

B&O M-67,
built 1957,
B&O shops





Pullman-Standard photo, Bob's Photo

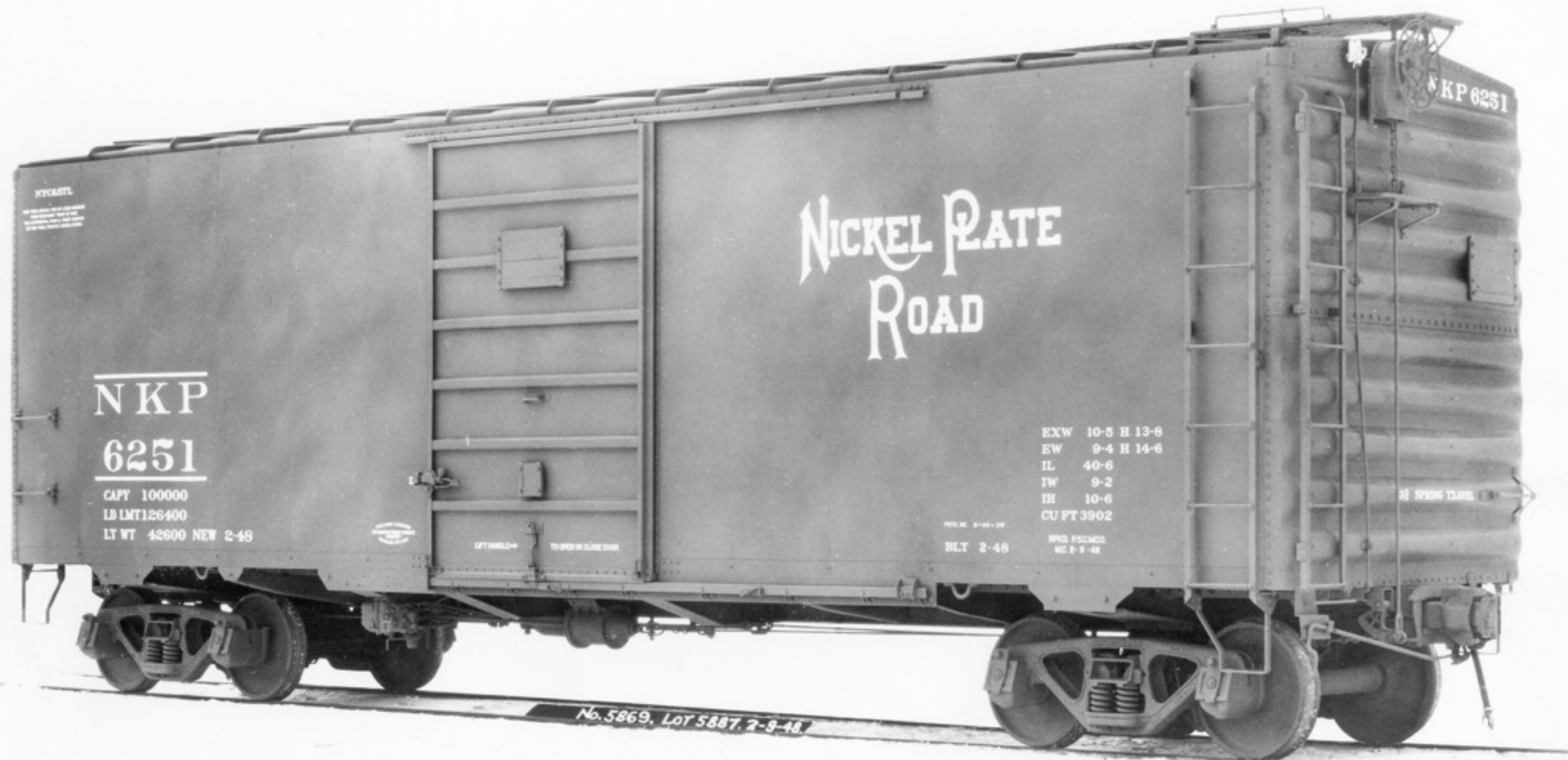
Chesapeake & Ohio 12-panel PS-1 box car

- 1,000 cars (nos. 15000-15999) built by Pullman-Standard in 1948



Chesapeake & Ohio 12-panel PS-1 box car

- 1,000 cars (nos. 15000-15999) built by Pullman-Standard in 1948



Pullman-Standard photo, courtesy of Al Hoffman

Nickel Plate Road 12-panel PS-1 box car

- 1,000 cars (nos. 6000-6999) built by Pullman-Standard in 1948



Collection of Bill Welch

Nickel Plate Road 12-panel PS-1 box car

- 1,000 cars (nos. 6000-6999) built by Pullman-Standard in 1948

Rock Island 12-panel PS-1 box car



Pullman-Standard photo

- The Rock Island also had 1,000 12-panel PS-1 box cars, car nos. 25500-26499, built 1948.

Rock Island 12-panel PS-1 box car



Morris Abowitz Collection

- Fifteen cars were modified for express service in 1953, car nos. 20070-20084
- For additional information about all the 12-panel PS-1s presented here, see *Railway Prototype Encyclopedia* 31-32



Walter E. Frost photo

Mississippi Central 12-panel PS-1 box car

- 100 cars (nos. 5000-5099) built by Pullman-Standard in 1949



Walter E. Frost photo

Mississippi Central 12-panel PS-1 box car

- 100 cars (nos. 5000-5099) built by Pullman-Standard in 1949

12-panel PS-1 box car Modeling

- Modified PS-1 end (Kadee riveted)
 - Modified Intermountain or scratchbuilt side (Archer panel line decals — see Southern 9' door opening PS-1)
 - Early or '1949' PS-1 underframe
 - Appropriate doors
 - Intermountain roof with outer panel ribs removed
-
- For additional information about all the 12-panel PS-1s presented here, see *Railway Prototype Cyclopedia* 31-32



Collection of J. Michael Gruber

Chicago and North Western riveted PS-1 Auto Car

- 250 cars (57400-57898, even nos.) built by Pullman-Standard in 1949 with 10'8" inside height, 15'1" door opening, riveted sides

Chicago and North Western riveted PS-1 Auto Car



Chicago and North Western riveted PS-1 Auto Car



Haskell & Barker Collection,
National Museum of American
History, Smithsonian Institution

No. 6629 Lot 5951
10-21-49



Chicago and North Western riveted PS-1 Auto Car

Haskell & Barker Collection, National Museum
of American History, Smithsonian Institution

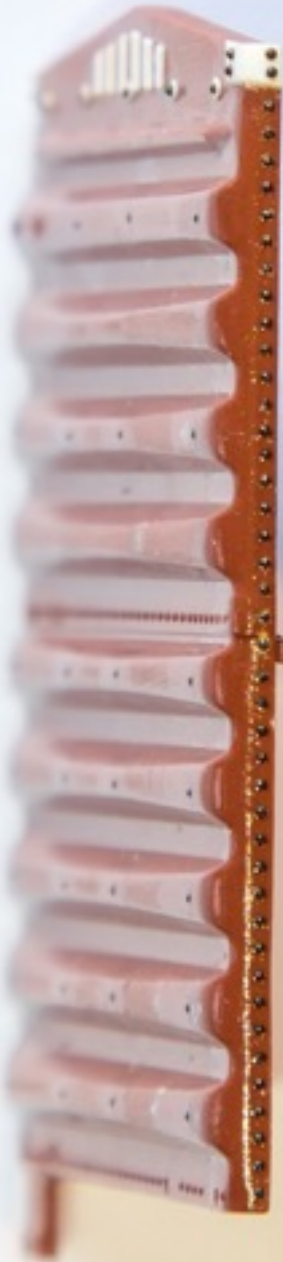


10'8" IH



10'6" IH

note that small trapezoids at top of end are "taller" on CNW car

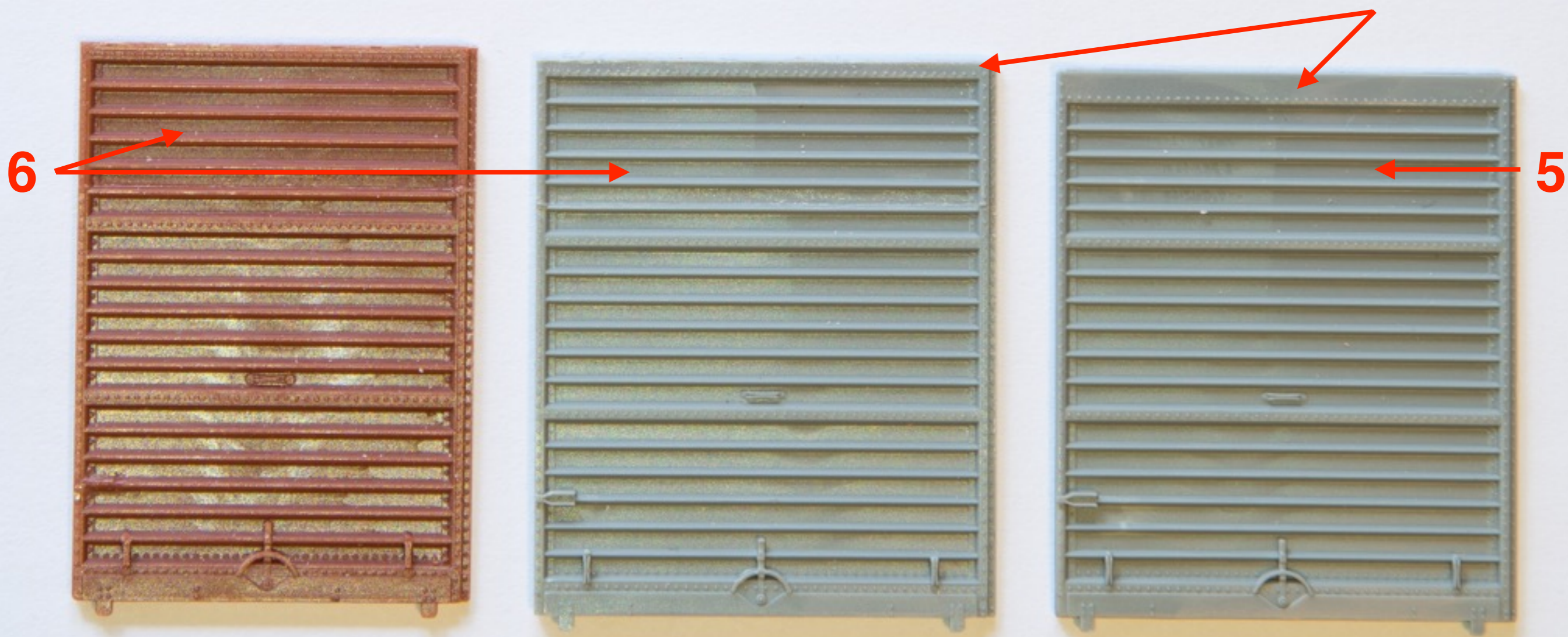


Chicago and North Western riveted PS-1 Auto Car

- Kadee end (removed from Kadee body)
- new trapezoids from 0.005" styrene
- new dimples and rivets at top
- round bolt heads on corrugations where wood nested
- new top corner braces with rivets
- Archer rivets along end corner
- filled right grab and placard board holes

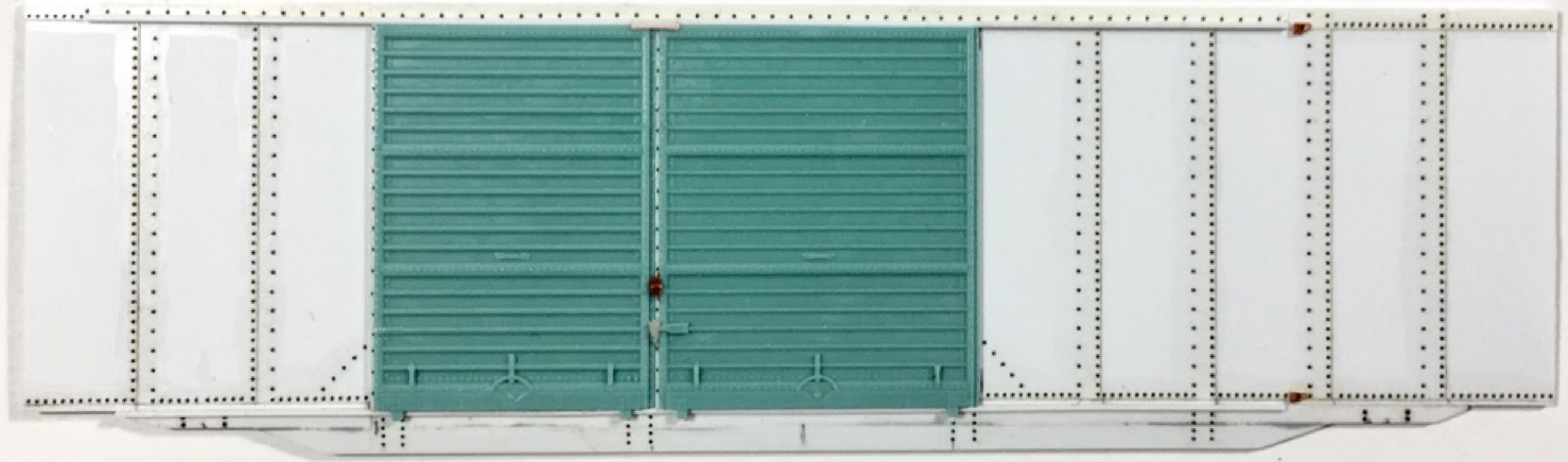


Chicago and North Western riveted PS-1 Auto Car
outer roof ribs removed per early PS-1 roof



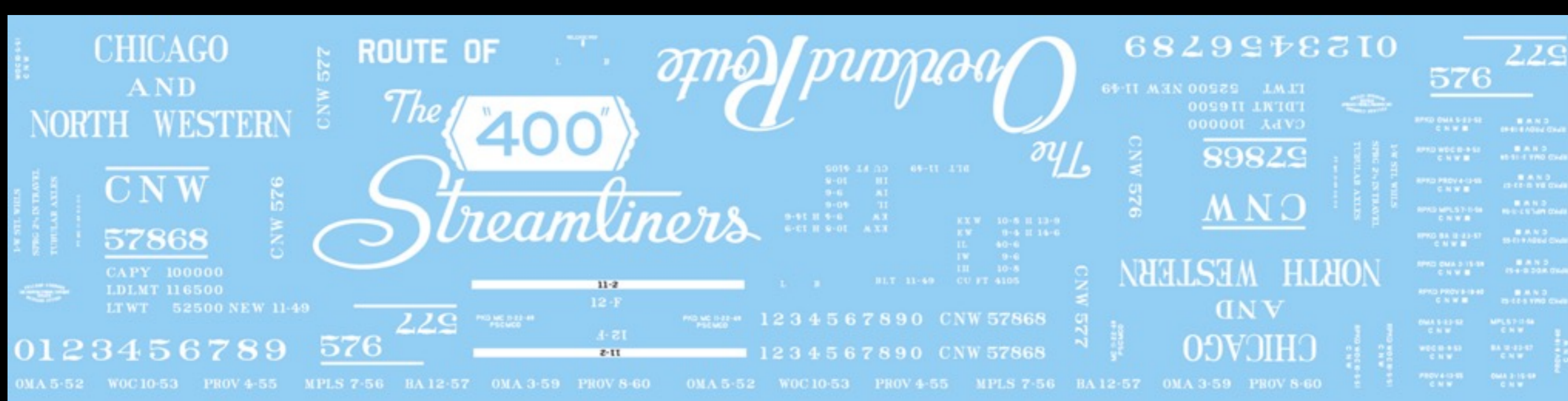
Chicago and North Western riveted PS-1 Auto Car

- 6-6-6 Improved Youngstown doors created by modifying Branchline Trains doors
- top of door shortened



Chicago and North Western riveted PS-1 Auto Car

- Scratchbuild sides and sills (CNW auto car is 10'8" inside height)
- Scratchbuild underframe - using combination of 3D printed structural members and styrene floor



Chicago and North Western riveted PS-1 Auto Car

- Scratchbuild sides and sills (CNW auto car is 10'8" inside height)
- Scratchbuild underframe
- This will be a Speedwitch kit (everything is modified and cast, so why not?)
- For those who prefer to do the project the decals are available as Speedwitch D193



George Sisk photo, Collection of Charles Winters

Seaboard Air Line AF-4 PS-1 Auto Car

500 cars built 1948 by Pullman-Standard, car nos. 22450-22949



Calexico, California, January 15, 1955, Col. Chet McCoid photo, Bob's Photo

Seaboard Air Line AF-4 PS-1 Auto Car

As built, black ends and roof



Seaboard Air Line AF-4 PS-1 Auto Car

- Modified Kadee PS-1 riveted end
- Modified Intermountain side
- Southwest Scale doors (modified left door)
- Intermountain roof with outer panel ribs removed
- Scratchbuilt underframe (or just use kit underframe)
- Various details
- Speedwitch decals - D194



Seaboard Air Line AF-4 PS-1 Auto Car



- Speedwitch decals - D194



Southern Railway 9' Door-opening PS-1 Box Car with “exceedingly heavy underframe”

- Built late 1951 - early 1952 by Pullman-Standard, Bessemer, Alabama
- Southern 30000-32018
- CNO&TP 262056-262059
- AGS 307028
- NO&NE 330501



San Diego, California, November 11, 1955, Col. Chet McCoid photo, Bob's Photo

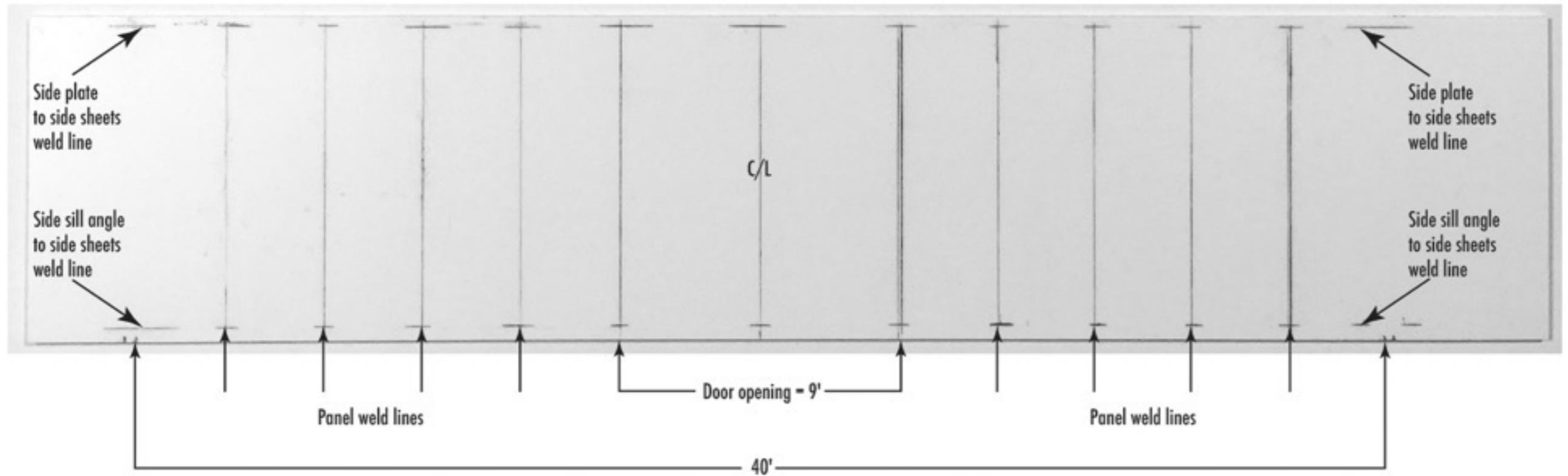
Southern Railway 9' Door-opening PS-1 Box Car



Fayetteville, North Carolina, December 30, 1951, Col. Chet McCoid photo, Bob's Photo

Southern Railway 9' Door-opening PS-1 Box Car

Southern Railway 9' Door-opening PS-1 Box Car



0.040" sheet styrene with weld lines marked out in pencil



After addition of 0.005" styrene for portion of upper door track and Archer Panel Lines to simulate weld lines



Collection of Ted Culotta

Lancaster & Chester 1000-1019 9' Door-opening PS-1
Box Car, built in 1952 by Pullman-Standard



Milwaukee Road 9' Door-opening PS-1 Box Car

Built 1959 by Pullman-Standard

- 17400-17599
- 17600-17699, Roller bearing trucks



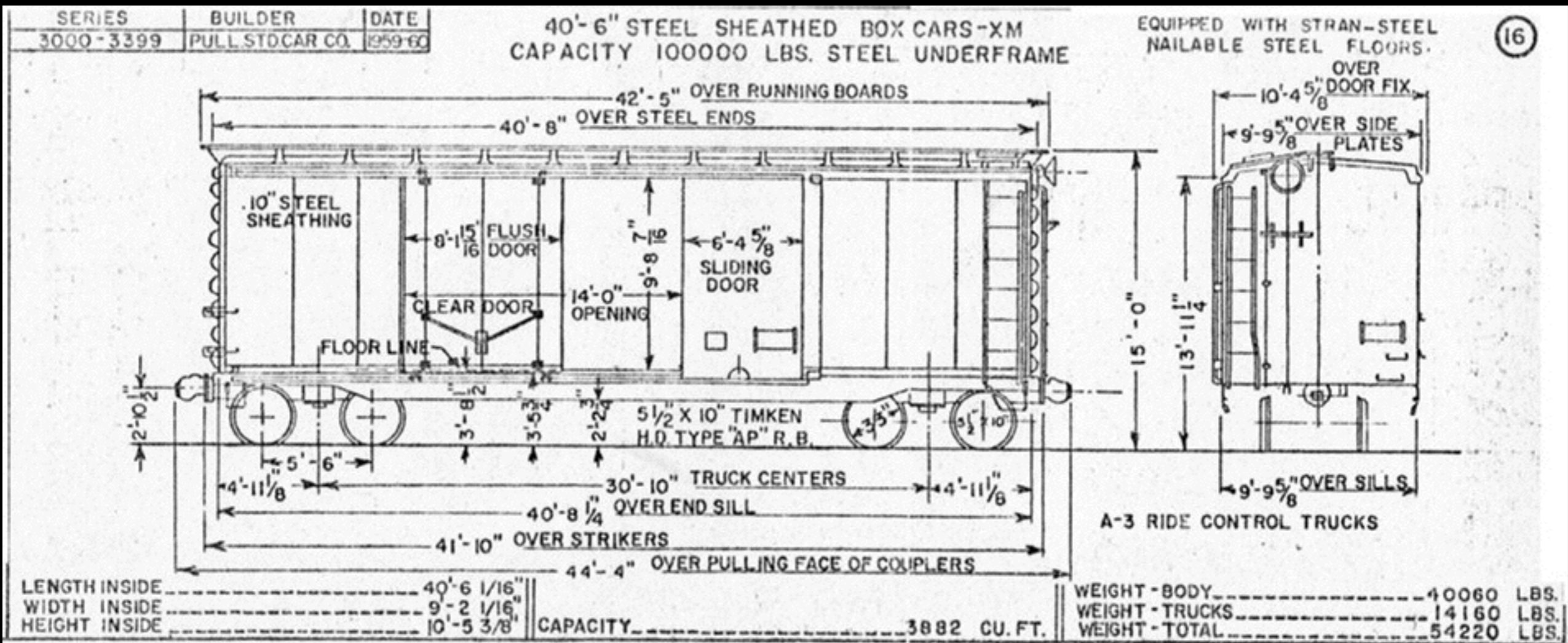
Milwaukee Road 9' Door-opening PS-1 Box Car

- Scratchbuild side similar to Southern car
- Improved Youngstown door - Kadee part no. 2245



Courtesy of Matthew Herson

Northern Pacific Combination Door PS-1 Box Car



Northern Pacific Combination Door PS-1 Box Car

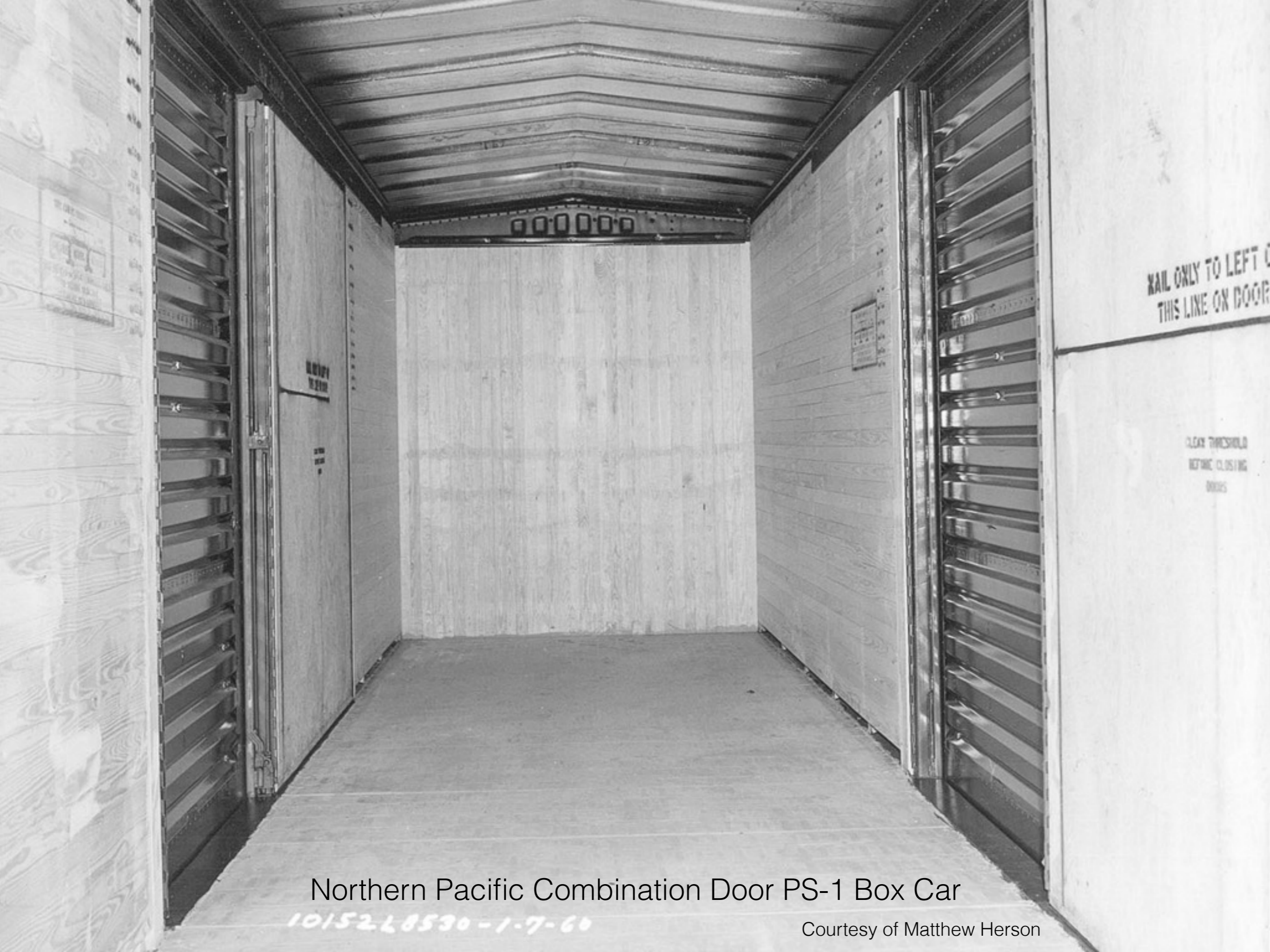
Northern Pacific Combination Door PS-1 Box Car

Courtesy of Matthew Herson





Northern Pacific Combination Door PS-1 Box Car



NAIL ONLY TO LEFT
THIS LINE ON DOOR

CLEAR THRESHOLD
BEFORE CLOSING
DOORS

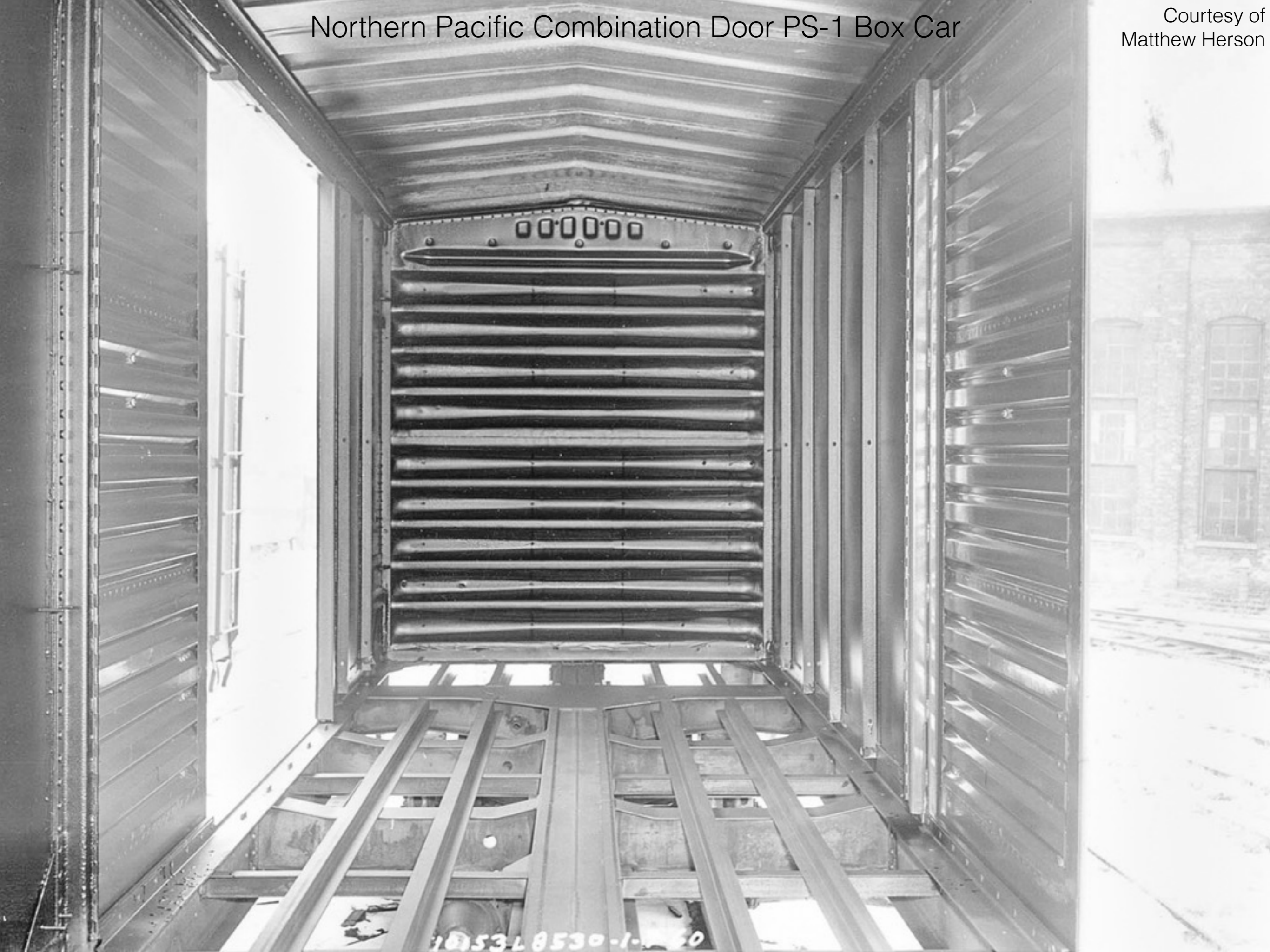
Northern Pacific Combination Door PS-1 Box Car

10152-28530-1-7-60

Courtesy of Matthew Herson

Northern Pacific Combination Door PS-1 Box Car

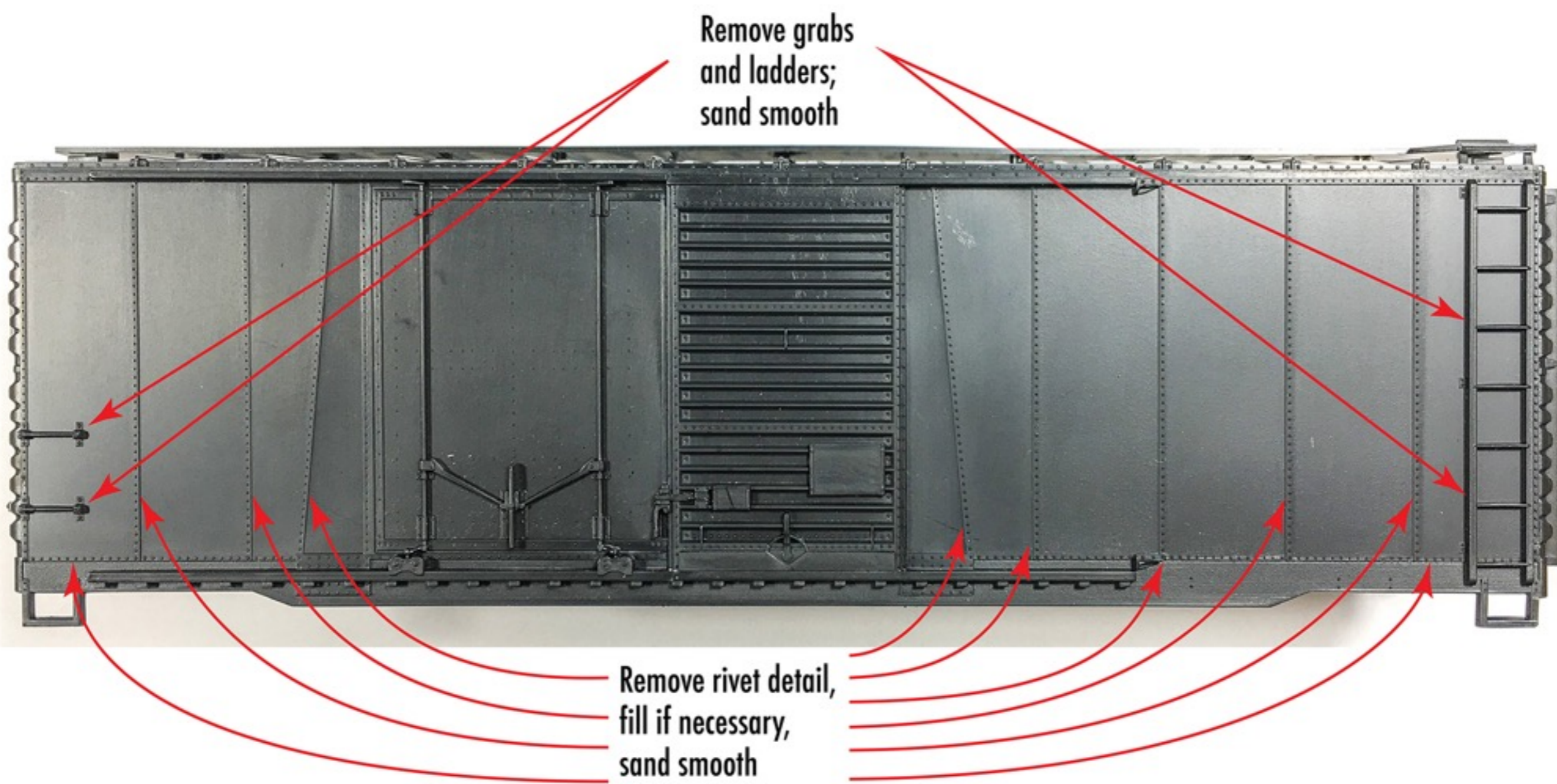
Courtesy of
Matthew Herson



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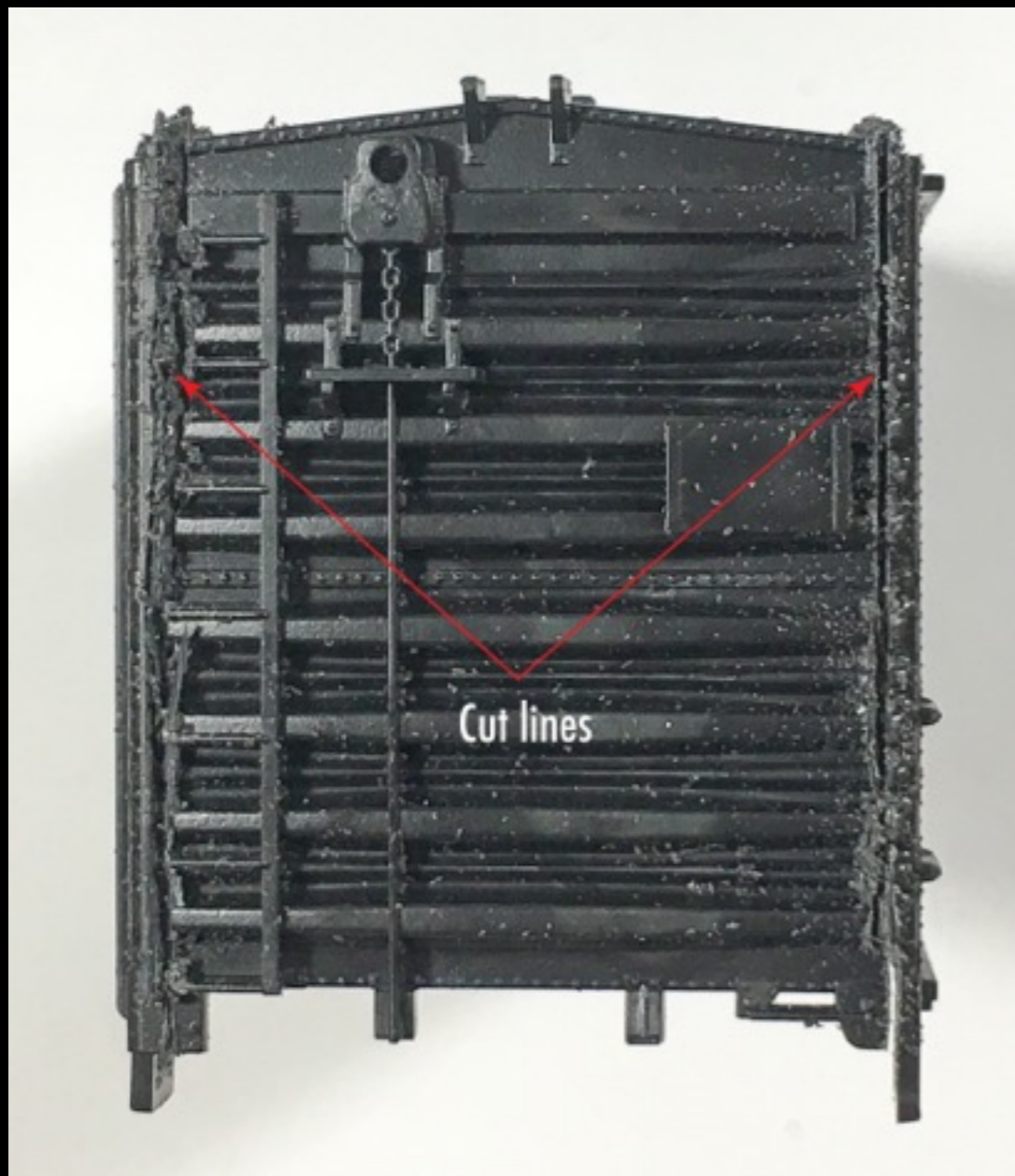


Northern Pacific Combination Door PS-1 Box Car



Kitbashing a "98%" Northern Pacific Combination Door PS-1 Box Car

- Accurail 3800 40' Combo Door Box Car - use sides
- Make *smooth* sides between doors and ends - remove riveted panel lines - sand smooth - add Archer Panel Line (AR88013) and Rivet AR88025) decals
- Intermountain PS-1 roof and Kadee or Intermountain welded ends
- Scratch or ignore underframe
- Working on decals....



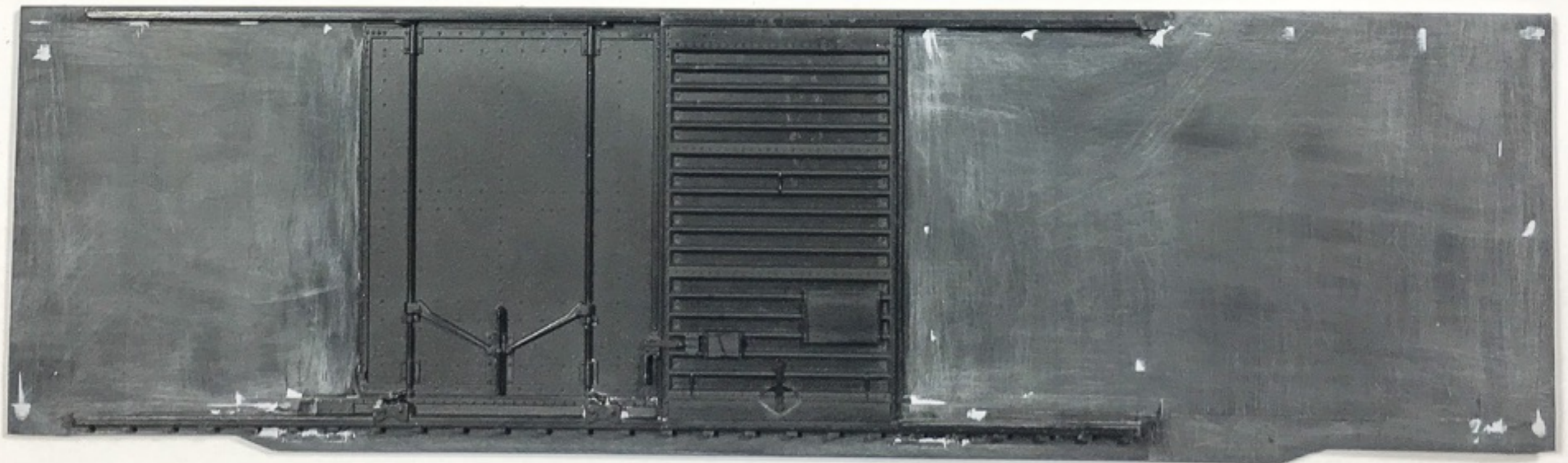
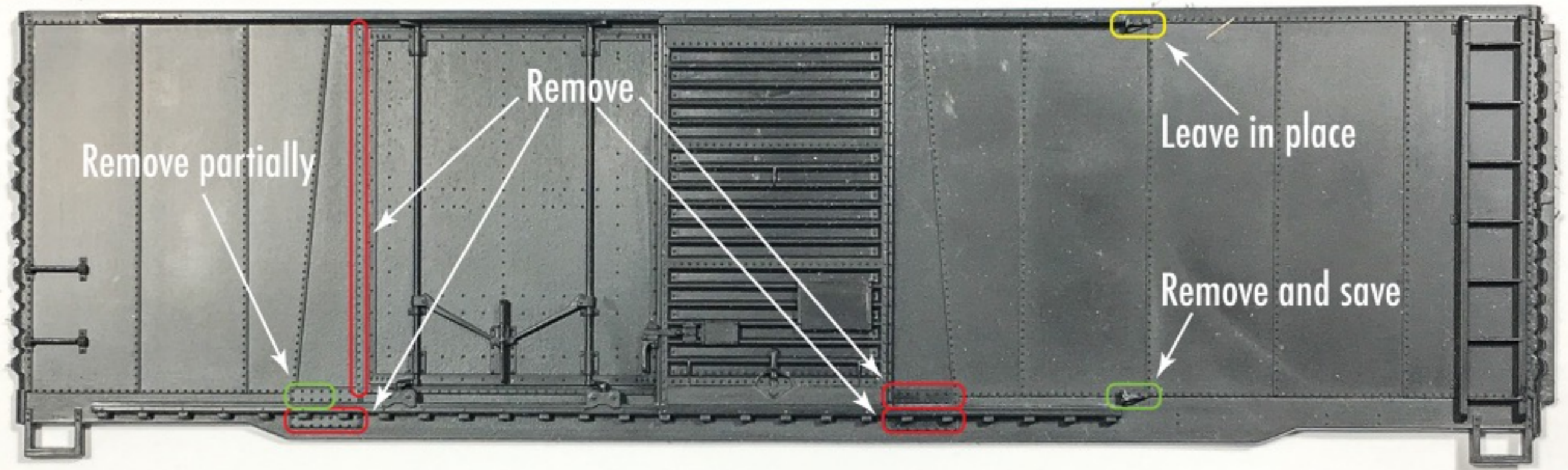
Kitbashing a "98%" Northern Pacific Combination Door PS-1 Box Car

- Remove the ends from the car body by first sawing through into car body at ends
- Score a line along the inside joint between roof and ends using an Xacto knife; make a few passes
- Push outward from inside and snap end away

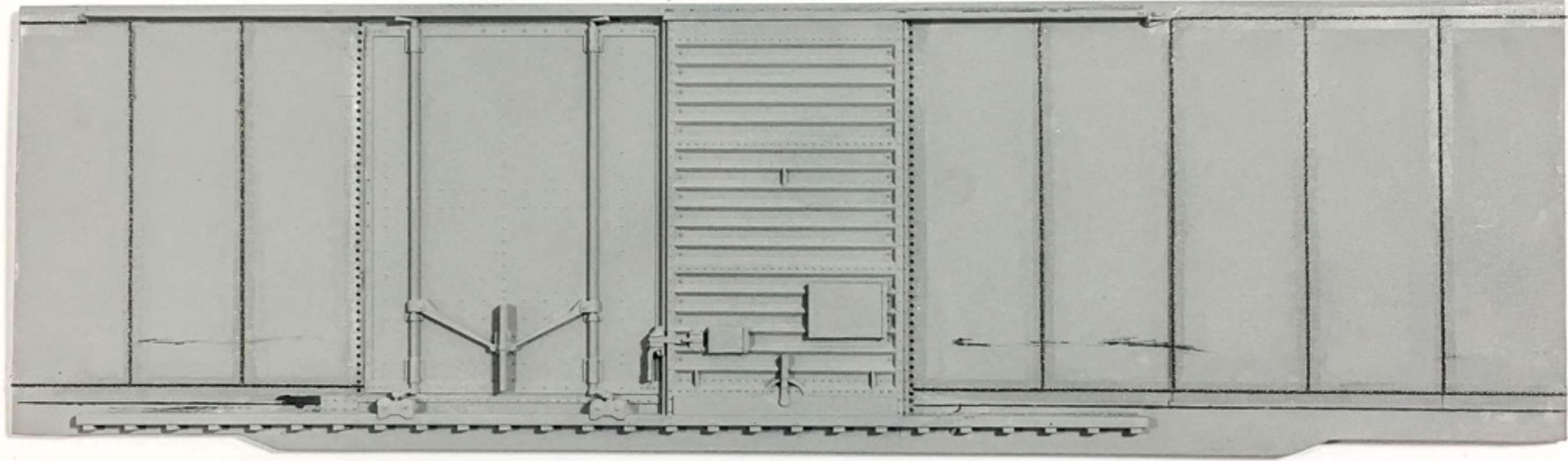


Kitbashing a "98%" Northern Pacific Combination Door PS-1 Box Car

- Remove the sides from the roof by scoring a line along the angle where roof and top of side meet using an Xacto knife; make a few passes
- Push downward and snap sides away

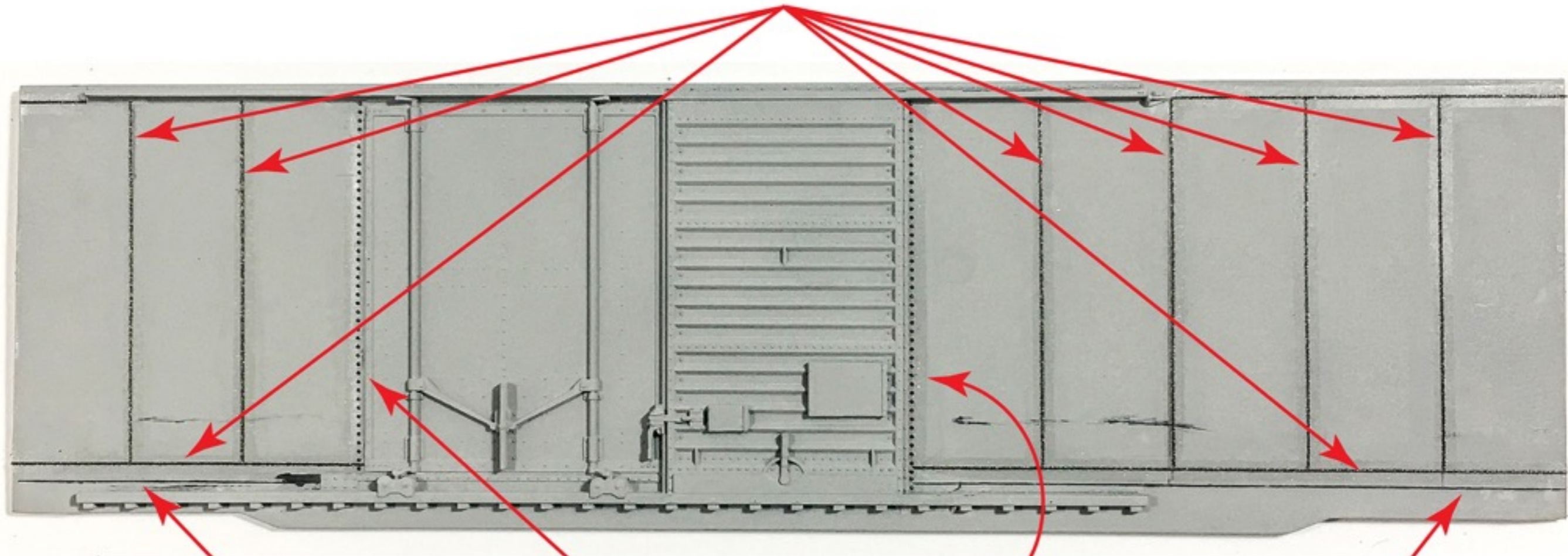


- In addition to the rivet lines, grabs, and ladder, other details must be removed, modified or preserved, as shown



- The NP side as it sits on the workbench at this moment....

Archer Panel Lines to simulate weld beads



Archer Rivet Decals

Scribed Lines for joint between side sill and side sill support*

*Lines scribed with stainless scribers from umm-usa.com. The scribers are etched and fit in an Xacto knife handle



Milwaukee Road Combination Door PS-1 Box Car



Harlowton, Montana, May 25, 1960, Bob's Photo

Milwaukee Road Combination Door PS-1 Box Car

- Chad Boas offers a set of castings to kitbash these cars, but there are some discrepancies...



Milwaukee Road Combination Door PS-1 Box Car

- Scratchbuild side plus doors and harvest details where appropriate from Accurail car side
- Intermountain PS-1 roof and Kadee or Intermountain welded ends
- Scratch or ignore underframe
- Working on decals....



Collection of Ted Culotta

Milwaukee Road Combination Door PS-1 Box Car

Oddball 40' PS-1 Box Cars

Thank you

- George Eichelberger
- Michael Gruber (Mainline Photos)
- Ed Hawkins
- Matt Herson
- Keith Kohlmann/C&NW HS
- Bob Lliejestrang (Bob's Photo)
- Tim O'Connor
- George Toman
- Bill Welch

This will be posted to prototopics.blogspot.com