



# PAINTING



THE

# 20<sup>TH</sup> CENTURY LIMITED

by H. L. VAIL JR.



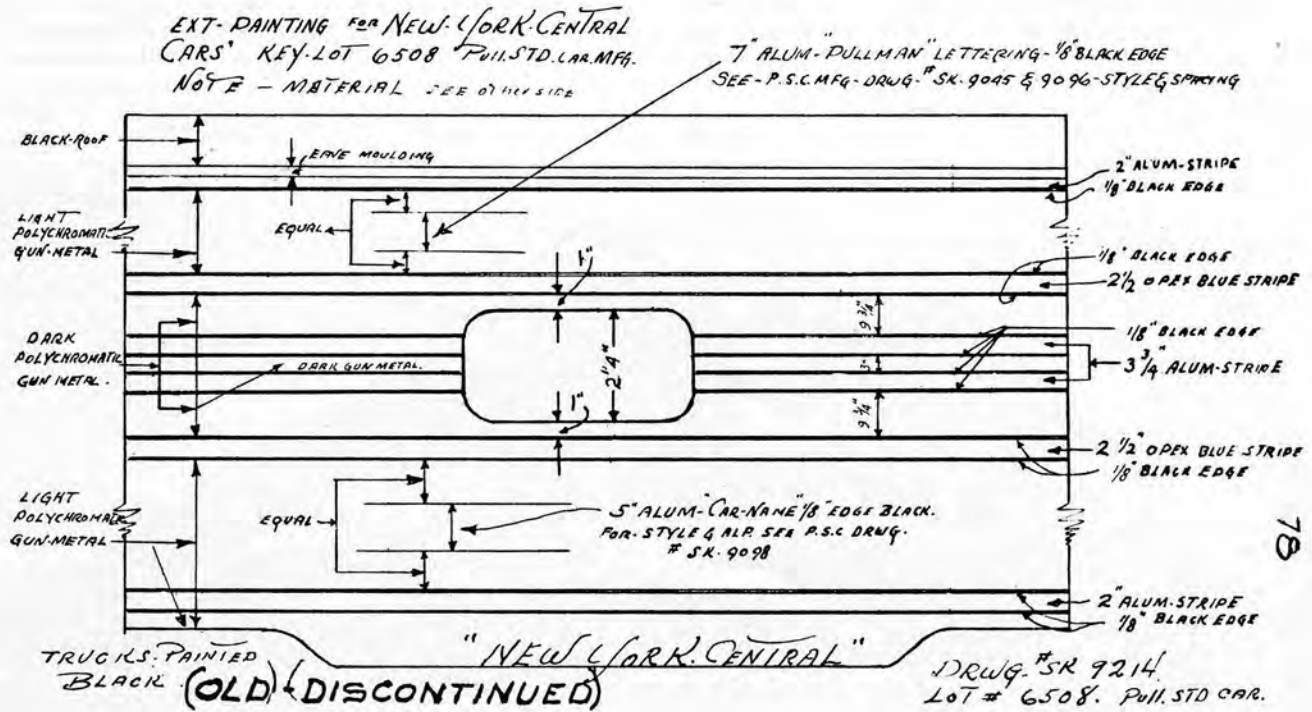
20th Century Limited Observation-Lounge car "Hickory Creek" was equipped with a bar and five double bedrooms. N. Y. C. photo by Ed Nowak, N. Y. C. S. H. S. Collection



**P**rior to 1938, the New York Central had only one "Streamlined" train; the Mercury, between Cleveland and Detroit. By this time, it was appropriate that any further Streamlining should begin with a complete re-equipping of the most popular, and famous train in the world, the Twentieth Century Limited. The plans for this transformation were laid with The Pullman Co., and the job of creating a new image for the "Century" was given to Mr. Henry Dreyfuss, regarded as the foremost industrial designer of that, if not all, time.

The result, complete with hemispherical nosed Hudson locomotives, is now history. With the advent of new "light weight" Pullmans of "only" sixty-seven or so tons (vs ninety ton heavyweight) Pullman Green car bodies with Antique Roman gold leaf lettering were replaced by Mr. Dreyfuss with a new two tone Grey scheme separated with "Opex Blue" stripes, lined out with Aluminum Stripes and with new modern Block lettering and numbering in Aluminum to match.

The original art work furnished for the NYC owned cars by Mr. Dreyfuss was in the form of Henry Dreyfuss drawing E-28 for the Dining Cars, and E-36 and E-42 for the Baggage-Mail Cars. These drawings show the general arrangement, but not for the details. No NYC drawings were ever made of this original arrangement, so it is only through the assistance of Mr. Arthur Dubin, Pullman archivist extraordinary, that the original detailed scheme shown in Figure 1 was obtained; drawing being from The Pullman Co. painters notebook.



Pullman Co. paint shop notebook. FIGURE 1 Collection of Arthur D. Dubin

You will notice that all the stripes and all the lettering, is outlined or "edged" with narrow black lines which are typically used to "strengthen" the contrast. Some individuals have criticized this design as being "too busy", and/or "not quite right". It is, in spite of this, my favorite. However, hardly a year had gone by, before changes in the striping were contemplated. NYC drawings R-51773 for the Baggage Mail Cars, NYC Lot 2130 and R-51774 for the Diners, NYC Lot 2129 were dated April 14, 1939, though not "checked" until 7/14/1939. Issue "B" of each drawing adding the dimension of the light and dark grey panels were done 12/2/1939 and Issue "C" adding lettering details and minor changes was done 1/13/1940. Photographs of The Century in 1939 do not indicate any re-painting of any cars. The new Pullman cars built in 1940 have this new arrangement which replaced the Opex Blue stripes delineating the dark grey window panel with Aluminum stripes, changed the two wide Aluminum stripes centered on the windows to two narrow Aluminum stripes, and re-located the top stripe from below and adjacent to the roof eve moulding to a location on the eve moulding. Beginning in 1940 all the cars, NYC and Pullman were re-painted. The Locomotive Tenders were also re-painted with stripes to match. This arrangement is shown as Figure 2, NYC System drawing R-51774, Issue "C".



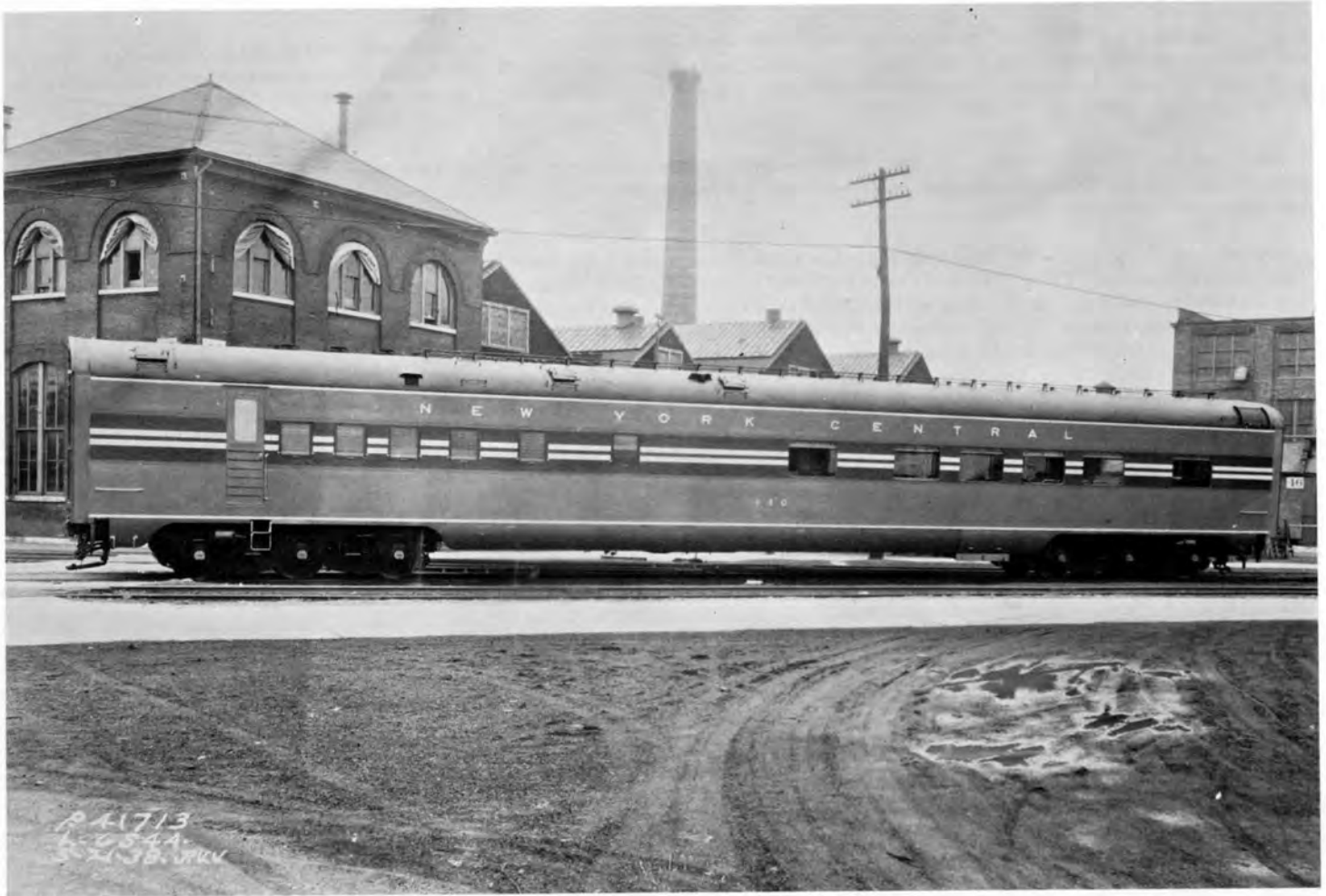
1938 "Century" Pullman "Cascade Valley", 10 Roomette - 5 Double Bedroom, corridor side original paint and striping. New at Pullman plant 4/14/1938. Pullman Photo, Collection A. K. Bush

Probably with the national restrictions of World War II, and lack of manpower, change "D" on the aforementioned NYC drawings was made 11/2/1942, removing the stripes on the eve moulding and at the bottom of the side sheet. At the same time the color of the remaining stripes and the lettering were changed to white rather than Aluminum. Shortly thereafter, change "E" 1/25/1943 was made in the NYC drawings changing the remaining stripes and lettering back to Aluminum. It is doubtful that in the short space of 2 1/2 months that any large number of cars, either NYC owned or Pullman owned were done in white, but there could have been a few. There is some photographic evidence that the original PT-1 Tender put on the Streamlined J-3a, number 5453 at Beach Grove in August 1943 may have had white striping and lettering. The striping of the cars refinished after 1/25/1943 was as shown in Figure 3, NYC System drawing R-51773, Issue "F".



NYC Baggage Mail Lot 2130, showing Striping as built 5/24/1938. Note that the "Danger" notices on the ends have not been applied. Pullman Photo NYC SHS Collection





1938 "Century" Dining Car NYC 680, NYC Lot 2129. Original paint and striping. Pullman Std. Lot 6544.  
 New at Pullman plant 5/21/1938. Pullman photo by NYC, Ed Nowak Collection H. L. Vail Jr.



1938 "Century" Baggage-Mail NYC 5070, NYC Lot 2130. Original paint and striping. Pullman Std. Lot 6545.  
 New at Pullman plant 5/24/1938. Pullman Photo NYC SHS Collection

It is thus that the "Century" and the few other New York Central assigned "Lightweight" Pullmans were painted, striped and lettered into the beginning of the "Diesel" era. The first E-7 EMD passenger diesel locomotives delivered also had the light grey body and dark grey centrally located band, but the striping was white rather than silver. (See top of page 71, November, 1976 "CENTRAL HEADLIGHT")

With the end of World War II, the New York Central ordered forty-two complete passenger trains of equipment to replace most of the aged heavyweight equipment still running. The first train to be re-equipped completely was, of course, the Twentieth Century Limited.

A number of painting and lettering schemes were tried, one having been first applied to the Six Double Bedroom-Buffer-Lounge car "Mahopac Falls" shipped from Pullman's Calumet, Ill., shops 11/22/1946, reversing the position of the greys i. e., the body color is dark grey, and the band through the windows light grey. All other lettering and striping as before. Another scheme applied for evaluation to the Pullman cars, Imperial Palace and Cascade Vale, was two tone Green. Neither of these arrangements was perpetuated.

The arrangement for the Post War (WW II) equipment became the by now well known two tone grey scheme with the colors reversed from the 1938 arrangement. The basic body side became dark grey color above and below the windows, and the original 1938 light grey through the window panel. This was then a simple reversal of the basic NYC greys, keeping the same panel dimensions as before. The two stripes delineating the greys became one and three-fourths inch wide with one-fourth inch Black edging. The color of the striping is indicated by Pullman as "Imitation Silver Enamel" and by the NYC drawings as "Aluminum Grey".



1940 Built Pullman "LaPorte County", 13 Double Bedrooms, as re-painted in 1948, color and striping arrangement, "Century", car now owned by NYC, leased to and operated by Pullman. Photo 1948 by Ed Nowak

In addition to the color and striping re-arrangement, the lettering was also changed. On the Pullman cars, the "Pullman" name was lettered in new style five inch high letters in the center, and, as the cars were owned by the NYC and leased to Pullman, "New York Central" was placed in the letterboard at the car ends in three inch high letters. The car name in the usual position lettered with four inch high letters, the style of all being the same. This arrangement is shown on the Pullman Company drawing MD-D-4890 1/28/1947 through Issue "E" of 4/1/1948. The New York Central operated cars, RPO, Diners, etc., had the same style five inch lettering "New York Central" on the letterboard, five inch figures for car numbers, four inch lettering "U S Mail RPO", and two and one-half inch figures on the end doors. Originally in 1948, all letters and figures were outlined with black, the four inch and five inch letters and the five inch figures having one-eighth inch black edging, the three inch letters and the two and one-half inch figures having one-sixteenth inch black edging. This arrangement is shown as Figure 4, NYC System drawing R-54589, 3/14/1947, Issue "B".

The letters and figures used on both "Pullman" and "NYC" cars was originally designed by the NYC in 1939, to replace the Roman letters and figures on all "conventional" or "heavyweight" equipment at that time. A few minor design changes in individual letters and figures were made between 1939 and 1947.

In 1953, the black edging was eliminated from the lettering and the striping. The stripes became two inches wide, still maintaining the two feet nine inches between stripes, centered on the windows, with the color remaining "Aluminum Grey".

Beginning in 1954, the NYC owned cars leased to Pullman, as they were re-painted, the lettering on the letterboard was reversed, that is, "New York Central" was lettered in the center in the same five inch letters as on the Diners and RPO cars, with the "Pullman" in the same three inch letters at the ends of the letterboard.

In June 1958, after the NYC began operating the sleeping cars themselves, rather than the Pullman Company, the name "Pullman" was removed from the ends of the letterboard, and car numbers in four inch similar styled figures were applied below the car name.

Certain cars, assigned permanently to the Twentieth Century Limited, had script lettering, "The Century", applied about 1963 to the lower side panels at the car ends. On December 3, 1968, "The Century" ran for the last time, bringing to an end the era of deluxe passenger transportation.

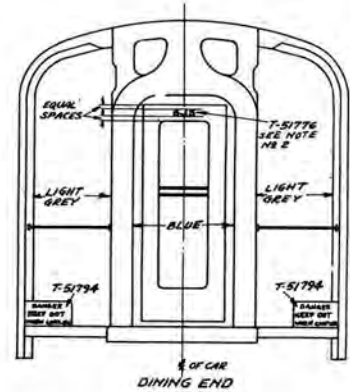
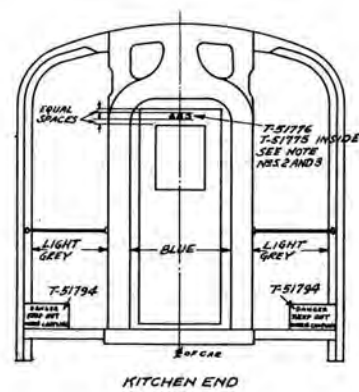
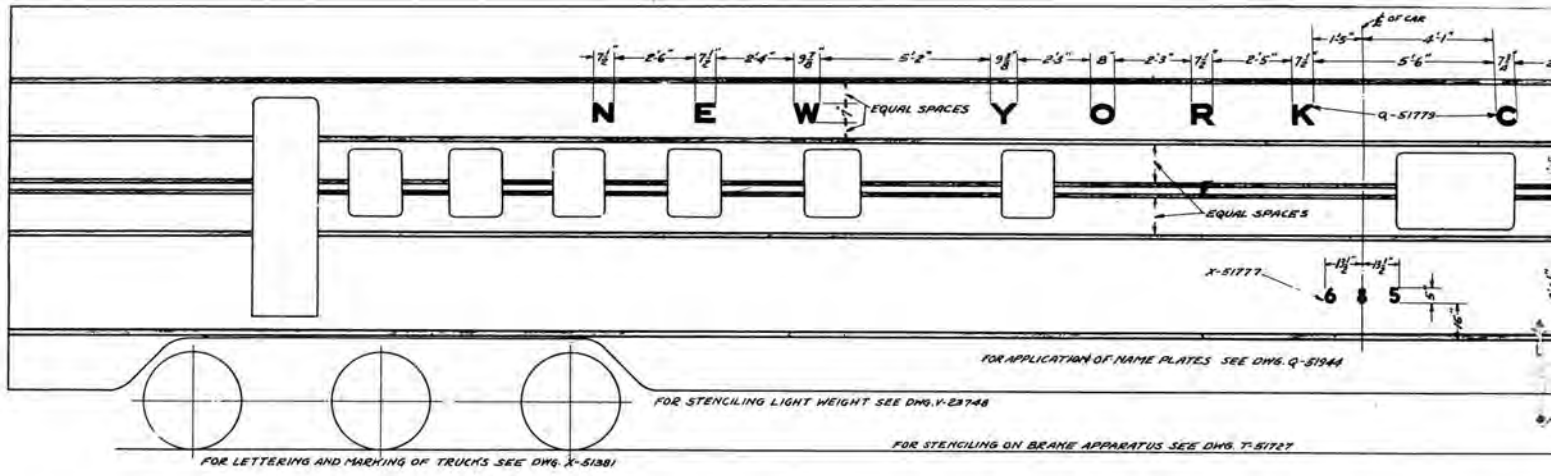


"Century" cars in 1940. Paint and striping arrangement at Mott Haven.  
Photo by Ed Nowak



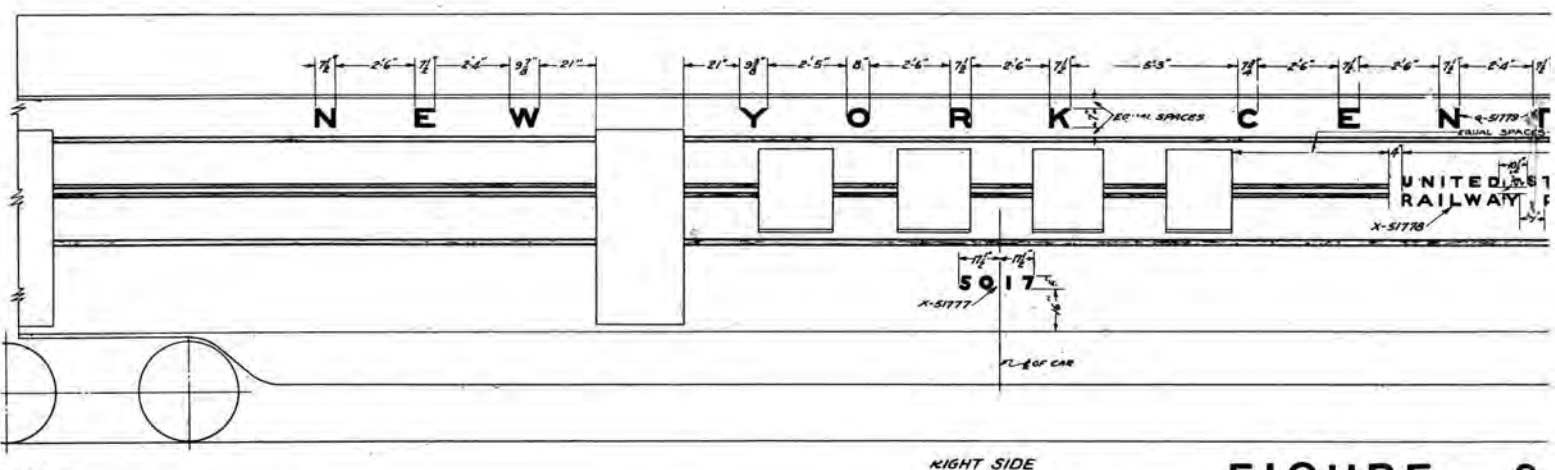
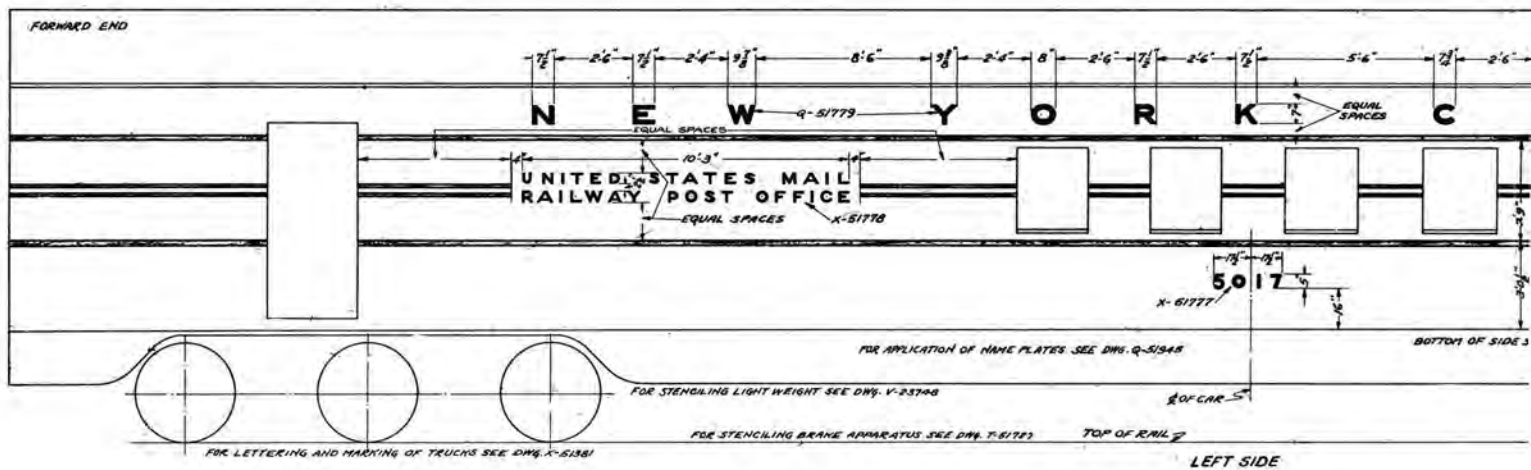
1938 20th Century Limited Pullman "City Of Toledo". Equipped as 17 roomettes, one open section. Pullman Co. photo.  
Collection of H. L. Vail Jr.





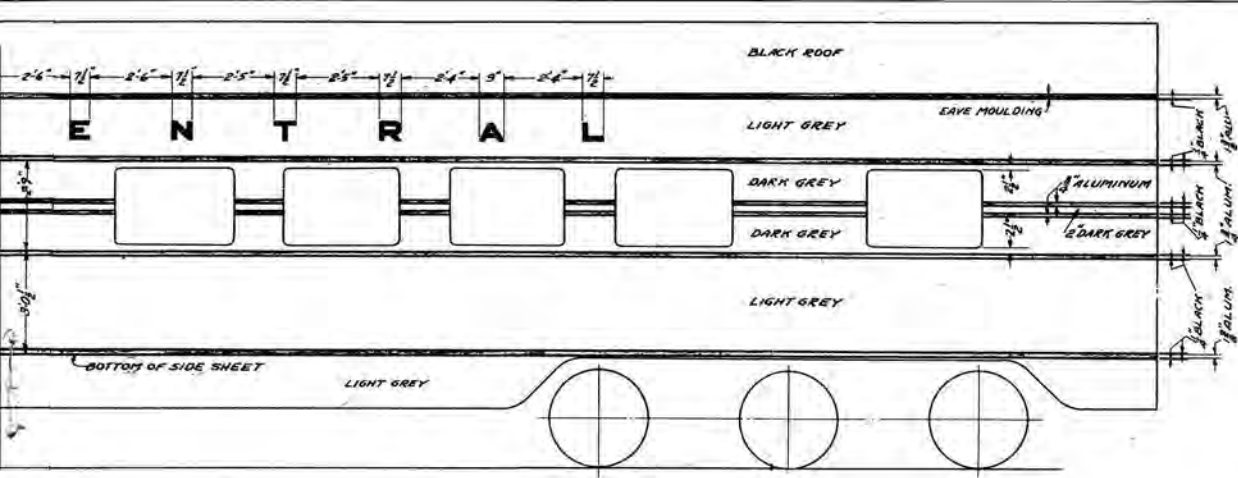
C-6-NB 7-14-39  
 T-4P  
 D-H. DREYFUS DWG. E-28 & PULLMAN DWG. 5880-90, 3H-5884

FIGURE 2



C-6-NB 7-14-39  
 T-4P  
 D-H. DREYFUS DWG. E-42, E-36 & PULLMAN DWG. 5K-8864

FIGURE 3



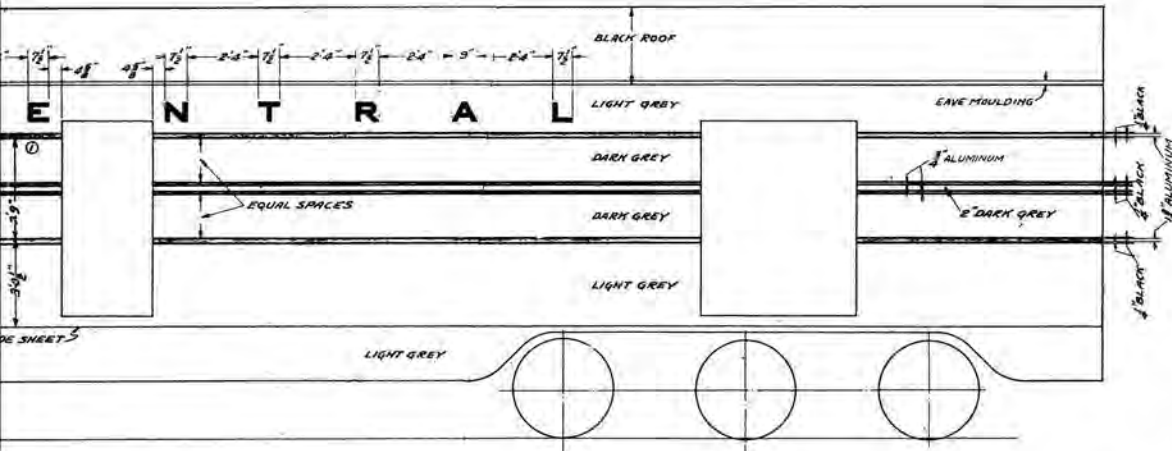
REV	DATE	ALTERATIONS	DATE	BY	CHKD
B		DOE STRIPES ADDED	12-2-37	W.P.	
C		SHORT LETTERING DETAIL DWG Q-51774 ADDED, WORKING ON DANGER NOTICE CHANGED	1-24-38	G.P.	

NOTE NO. 1:  
 1" LETTERS AND 5" FIGURES TO BE PAINTED ALUMINUM WITH 1/8" BLACK EDGING.  
 NOTE NO. 2:  
 FIGURES REFERRED TO BY THIS NOTE TO BE PAINTED IN ALUMINUM WITH 1/8" BLACK EDGING.  
 NOTE NO. 3:  
 CAR NUMBERS ON DOORS TO BE LOCATED CENTRALLY ON UPPER RAIL EXCEPT ON THE INSIDE OF THE VESTIBULE END DOOR THE NUMBER SHALL BE PLACED TO THE RIGHT OF THE DOOR CLOSER.

DETAILS

TITLE	DWG. NO.	DATE	MATERIAL
1" LETTERS	Q-51773		
5" FIGURES	R-51771		
2 1/2" FIGURES	F-51776		
DANGER NOTICE	F-51784		
1 1/2" FIGURES	F-51775		
LOCATION DANGER NOTICE	F-51782		
STENCILING LIGHT WEIGHT	V-23148		
STENCILING AIR BRAKE	F-51787		
CLEANING DATES	F-51787		
LETTERING AND MARKING TRACK CLASS N-10-XR	X-51881		
APPLICATION NAME PLATES	Q-51944		

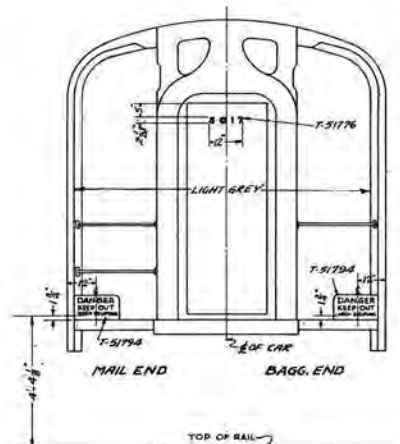
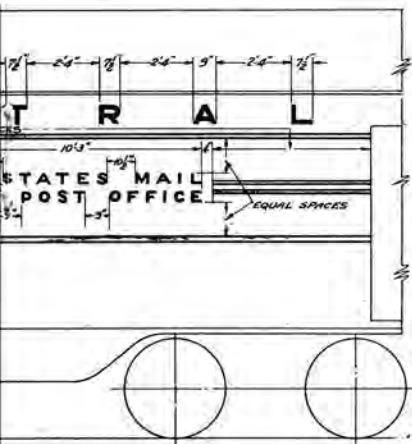
GROUP	NO.	144
USED ON	NEW YORK CENTRAL SYSTEM	EQUIPMENT ENGINEERING DEPARTMENT
LETTERING, NUMBERING AND STRIPING PASSENGER EQUIP. CARS		
R-51774		
GROUP No. 144	NEW YORK, N. Y.	APRIL 14, 1938
ABC		



REV	DATE	ALTERATIONS	DATE	BY	CHKD
A	12-2-37	2 1/2" DIMENSION WAS TO TOP OF UPPER STRIPING	12-2-37	G.P.	
C	1-24-38	SHORT LETTERING DETAIL DWG Q-51774 ADDED, WORKING ON DANGER NOTICE CHANGED	1-24-38	G.P.	
D	1-2-38	SPRINKLING ON EAVE MOLDG. AND BY BOTTOM OF SIDE SHEET REPAIRED STRIPING AND LETTERING MORE ALUMINUM COLOR	1-2-38	D.Z.	
E	1-24-38	FIGURES AND LETTERING WERE WHITE COLOR	1-24-38	G.P.	
F	1-25-38	DWG X-51881 ADDED LOCATION DANGER NOTICE MAIL END CHANGED	1-25-38	VWA	

DETAILS

TITLE	DWG. NO.	DATE	MATERIAL
1" LETTERS	Q-51773		
5" FIGURES	R-51771		
2 1/2" FIGURES	F-51776		
DANGER NOTICE	F-51784		
STENCILING LIGHT WEIGHT	V-23148		
STENCILING AIR BRAKE	F-51787		
CLEANING DATES	F-51787		
LETTERING AND MARKING TRACK CLASS N-10-XR	X-51881		
APPLICATION NAME PLATES	Q-51944		
INTERIOR LETTERING AND NOTICES	X-22816		



NOTE NO. 1:-  
 1" AND 2" LETTERS AND 5" FIGURES TO BE PAINTED IN ALUMINUM WITH 1/8" BLACK EDGING. 2 1/2" FIGURES TO BE PAINTED IN ALUMINUM WITH 1/8" BLACK EDGING.

GROUP	NO.	144
USED ON	NEW YORK CENTRAL SYSTEM	EQUIPMENT ENGINEERING DEPARTMENT
LETTERING, NUMBERING AND STRIPING PASSENGER EQUIP. CARS		
R-51774		
GROUP No. 144	NEW YORK, N. Y.	APRIL 14, 1938
ABC		





I 1938 Streamlined Train - as placed in service June 15, 1938

a) Pullman Cars, Lot 6539, 6540, 6541, 6542, 6546, 6547

Lettering and Striping Layout, Pullman Std. SK-9214  
 Style and Spacing, 7" "Pullman", Pullman Std. SK-9045, SK-9096  
 Style and Application, 5" Car Names, Pullman Std. SK-9098  
 Letters, 5" Car Names, Pullman Std. SK-9048

b) New York Central Cars

1) Dining Cars, NYC 680-685, NYC Lot 2129, Pullman Std. Lot 6544;  
 Exterior Lettering. Henry Dreyfuss E-28 1/11/1938,  
 Rev. 2/28/1938.  
 Ref: Type of Lettering (7" "New York Central") Pullman Std. SK-9096.  
 5" Numerals, H. Dreyfuss E-33.

2) Baggage-Mail Cars, NYC 5017-5020, NYC Lot 2130, Pullman Std. Lot 6545:  
 Exterior Lettering and Striping, H. Dreyfuss E-42 2/25/1938  
 (Left side), E-36 1/15/1938 Rev. 2/2/1938 and 2/28/1938 (Right side)  
 Ref: Type of Lettering (7" "New York Central") Pullman SK-9096  
 Type of Lettering (4" "United States Mail Railway Post Office") Pullman Dwg. SK-9048  
 Lettering Layout (4" USMRPO) H. Dreyfuss E-42  
 5" Numerals: H. Dreyfuss E-33

II 1940 Revised Striping on 1938 Built equipment, and as applied to equipment added in 1940. All lettering the same as originally applied in 1938

a) Pullman Cars

Pullman Company Dwg. SK-C-10031.  
 Lettering same as original application.

b) New York Central Cars.

- 1) Dining Cars NYC Lot 2129  
 Lettering, Numbering and Striping, Passenger Cars, NYC R-51774, 5/14/1939, Issue B 12/2/1939,  
 Issue C 1/12/1940.  
 Ref: H. Dreyfuss E-28, Pullman Dwg. 328-D-50 and SK-9854.
- 2) Baggage-Mail Cars, NYC Lot 2130:  
 Lettering, Numbering and Striping, Passenger Cars, NYC R-51773, 5/14/1939, Issue B 12/2/1939,  
 Issue C 1/13/1940  
 Ref: H. Dreyfuss E-42, E-36, Pullman Dwg. SK-9854
- 3) NYC System Drawings all dated 5/14/1939:  
 7" Letters NYC Q-51779 Ref: Pullman SK-9236, (and SK-9096).  
 4" Letters NYC X-51778 Ref: Pullman SK-9048/  
 5" Figures NYC X-51777 Ref: H. Dreyfuss E-33.  
 2 1/2" Figures NYC T-51776 Ref: Pullman SK-9237  
 1 1/2" Figures NYC T-51775

Note: These letters and figures are copies of those originally applied to this equipment in 1938.

III 1943 Revised Striping: eliminating 1 3/8" wide Aluminum Striping and 1/4" Black edging along roof moulding and 1 3/8" wide Aluminum Striping and 1/4" Black edging along lower stretch (bottom of Side Sheet). All lettering the same as originally applied in 1938.

a) Pullman Cars:

Pullman Company Dwg. SK-C-10031-A, and General Order 3185 dated 2/24/1943

b) New York Central Cars:

- 1) Dining Cars, NYC Lot 2129:  
 NYC R-51774, Issue D 11/2/1942 and Issue E 1/25/1943.
- 2) Baggage-Mail Cars, NYC Lot 2130:  
 NYC R-51773 Issue D 11/2/1942 and Issue E 1/25/1943.

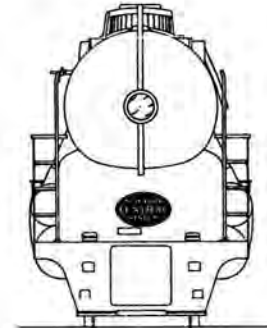
Note on both above: Issue D removed the top and bottom stripes and changed color of remaining Stripes and Lettering from Aluminum to White color. Issue E changed remaining Stripes and Lettering back to Aluminum color.

IV Experimental reversal of Color Scheme: Light Grey through windows, Dark Grey above and below windows, Striping and Lettering as just before:

- a) Pullman Cars  
Dwg. No. unknown. First car to receive reversed color scheme at Calumet Shop, "Mahopac Falls", Pullman Co. Lot 4080 B, shipped 11/22/1946
- b) NYC Cars
  - 1) Dining Cars (1938 Equipment NYC Lot 2129)  
Lettering, Numbering and Striping, Pass. Equip. Cars, R-51774, Issue H (Re-traced all revised) 2/20/1947 through Issue N 7/20/1960

VII Paint Color Reference

- a) 1938: "Duco" Lacquer
  - 1) Dark Grey: Dark Polychromatic Gunmetal to match DuPont #8592
  - 2) Light Grey: Light Polychromatic Gunmetal to match DuPont #8576
  - 3) Aluminum to match Sherwin Williams #CE 4424
  - 4) Opex Blue Striping color to match Sherwin Williams #6508-N-10
  - 5) Black roof and edging to be Pullman #109
- b) 1948: "Dulux" Enamel
  - 1) "Dulux" Dark Grey DuPont #P-88-23854
  - 2) "Dulux" "Century" Light Grey DuPont #88-8234
  - 3) "Dulux" Aluminum Grey DuPont #95-7581
  - 4) "Dulux" Black edging DuPont #95-004
- c) 1960: "Dulux" Enamel
  - 1) "Dulux" Dark Grey DuPont #83-6717
  - 2) "Dulux" Light Grey DuPont #83-35453
  - 3) "Dulux" Aluminum Grey DuPont #95-7581



V "1948" 20th Century Limited, as placed in Service September 15, 1948, all new "painted" equipment, and re-painted "lightweight" equipment

- a) Pullman Cars, Painting, Striping and Lettering, NYC assigned Lightweight cars:
  - 1) Pullman Co. Tracing No. M. D-D-4890 dated 1/28/1947 through Reiss.  
E 4/1/1948 - Ref: 5" Letters (wide) "Pullman" Pullman Co. Tracing No. M. D-D-5026  
1/15/1948 - Ref: NYC Dwg. Z-51902F.  
Tracing No. M. D-D-5026 1/15/1948 - Ref: NYC Dwg. Z-51902F.
  - 2) 4" Exterior Letters for Car Names. Pullman Co. Tracing No. CE-D-3494 (2 sheets) 3/26/1948
  - 3) Spacing of Lettering and Words - Car Names - NYC, Pullman Co. Tracing No. CE-B-3498  
3/27/1948
  - 4) "3" Letters on Letterboards at Ends, NYC assigned Lightweight cars ("New York Central" and "Pullman"), Pullman Co. Tracing No. M. D-D-5028 1/15/1948.
- b) New York Central Cars
  - 1) All "Century" Dinners, Baggage-Mail Cars, 1938, 1939 and 1940 built lightweight Sleeping Cars, and Post War (WWII) Lightweight Sleeping cars, dining cars, etc.  
NYC Dwg. SK-N-8162 11/6/1952. Also specific drawings for each Lot of cars.

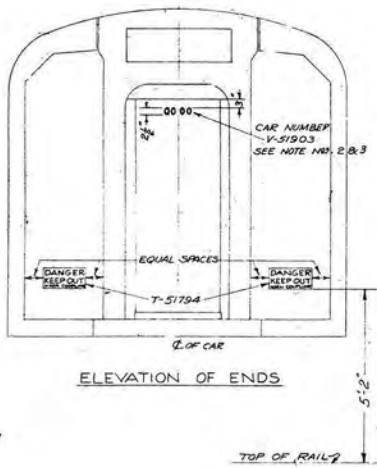
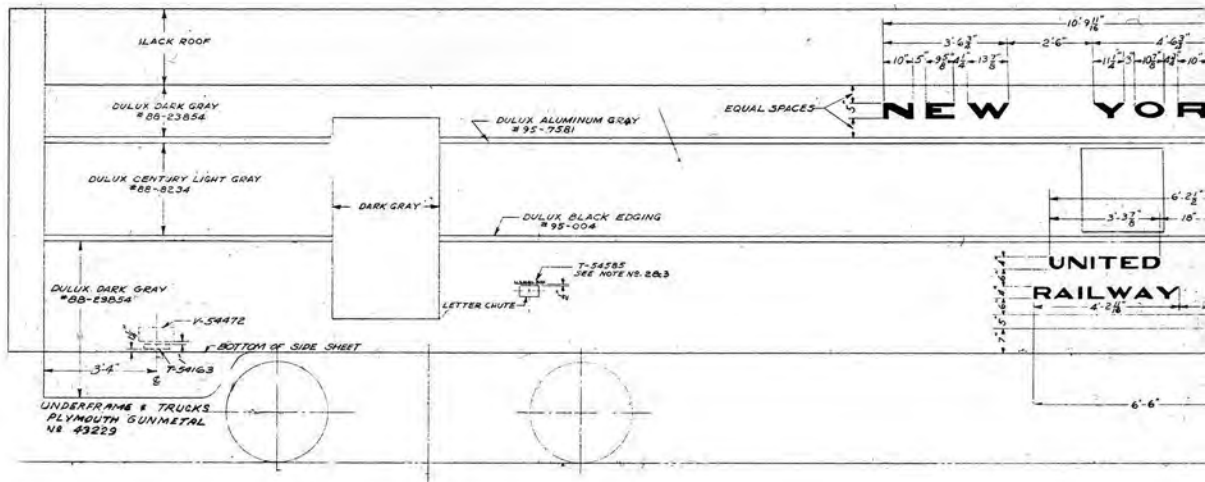
2) NYC System Drawings for Letters and Figures:

5" Alphabet, Wide Letters	Z-51902	6/14/1939	Rev. F. 3/24/47
5" Figures (Car Nos)	N-51905	6/14/1939	
4" Alphabet	Q-51906	6/14/1939	
4" Alphabet (Car Names)	Z-54973		
4" Figures (Car Nos on Cars with Names)	R-51907	6/14/1939	
2 1/2" Figures	V-51903	6/15/1939	
1" Letters	T-54585		

VI Last Revision - Removing Black edging from stripes, letters and figures

a) Pullman Cars

Painting, striping and Lettering NYC assigned Lightweight cars.  
Pullman Co. Tracing M. D-D-4890 Reiss I, 4/6/1953 removed black edging from striping and lettering.



UNITED STATES MAIL  
 RAILWAY POST OFFICE

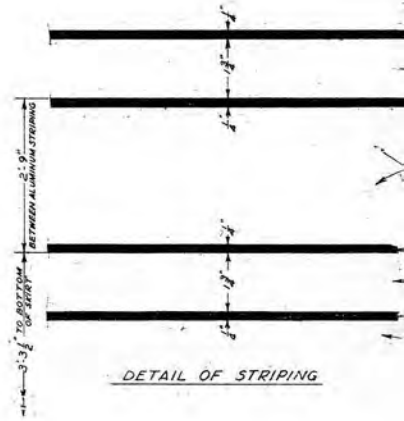


FIGURE 4

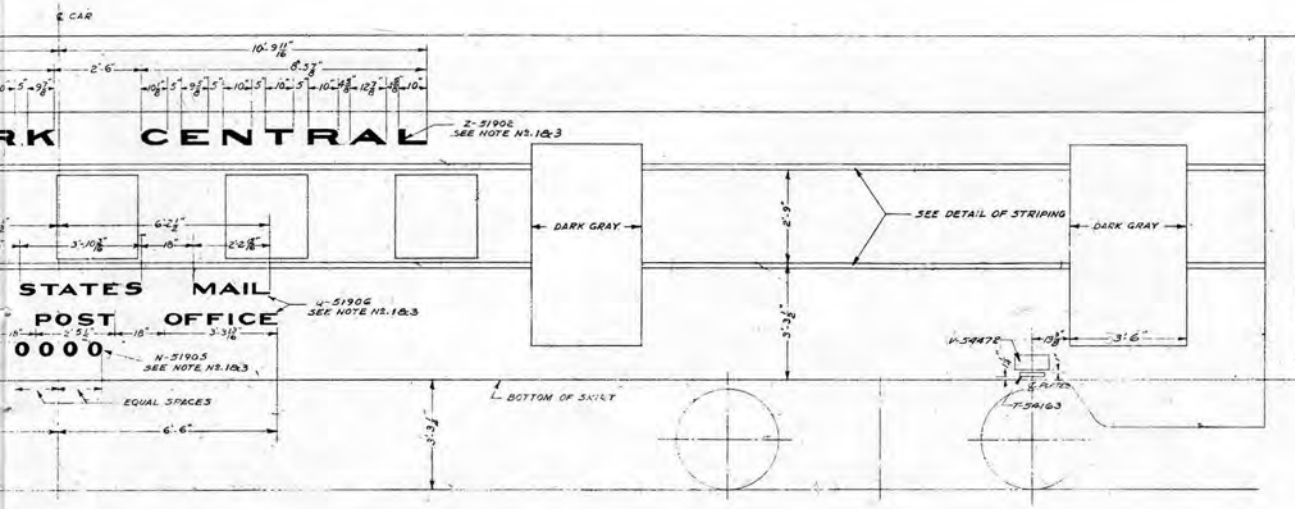
C-42X 3-17-47  
 T- A.C.  
 D- A.C.



Power for the 1938 Twentieth Century Limited was provided by 10 Alco J-3a Hudsons that were given beautifully designed streamlining by Henry Dreyfuss to match the new passenger cars. Locomotives 5445-5454 were considered by many to be the best appearing streamlined steam engines ever built. Hudson 5453 shows her graceful lines for her proud owners at Flushing, N. Y. on August 6, 1939, at the Worlds Fair of 1939-40. The streamlined shrouds were removed from all of these locomotives by 1947.

George E. Votava





ISSUE	ALTERATIONS	DATE	PREPARED BY
B	ELEVATION OF ENDS AND NOTE NO. 11 RELOCATED. TRUST & OWNERSHIP PLATES ADDED. NOTE NO. 2. CHANGED. DWG NOS. T-54163 & T-54472. F-54163 & V-54472. ADDED TO DETAIL TABLE.	10-10-1947	JDK

- DARK GRAY
- BLACK EDGING
- ALUMINUM GRAY STRIPE
- BLACK EDGING
- LIGHT GRAY
- BLACK EDGING
- ALUMINUM GRAY STRIPE
- BLACK EDGING
- DARK GRAY

**DETAILS**

TITLE	DWG. NO.	PMT. NO.	MAT. L.
5" LETTERS	Z-51902		
5" FIGURES	N-51905		
4" LETTERS	Q-51908		
1" LETTERS	F-54585		
2 1/2" FIGURES	V-51903		
OWNER NOTICE	T-51794		
TRUST NO. PLATE	T-54163	A-7063	M.I.
OWNERSHIP PLATE	V-54472	A-7172	M.I.
LETTERING, U.S. MAIL BOX	TS4585		

**NOTE NO. 1:-**  
4" AND 5" LETTERS AND 5" FIGURES TO BE PAINTED ALUMINUM WITH 1/8" BLACK EDGING.

**NOTE NO. 2:-**  
1" LETTERS & 2 1/2" FIGURES TO BE PAINTED ALUMINUM WITH 1/16" BLACK EDGING.

**NOTE NO. 3:-**  
ALL LETTERING, NUMBERING AND STRIPING TO HAVE TWO COATS OF CLEAR VARNISH APPLIED THEREON. VARNISH TO OVERLAP THESE SURFACES BY 1/8" AT ALL POINTS.

R-54589

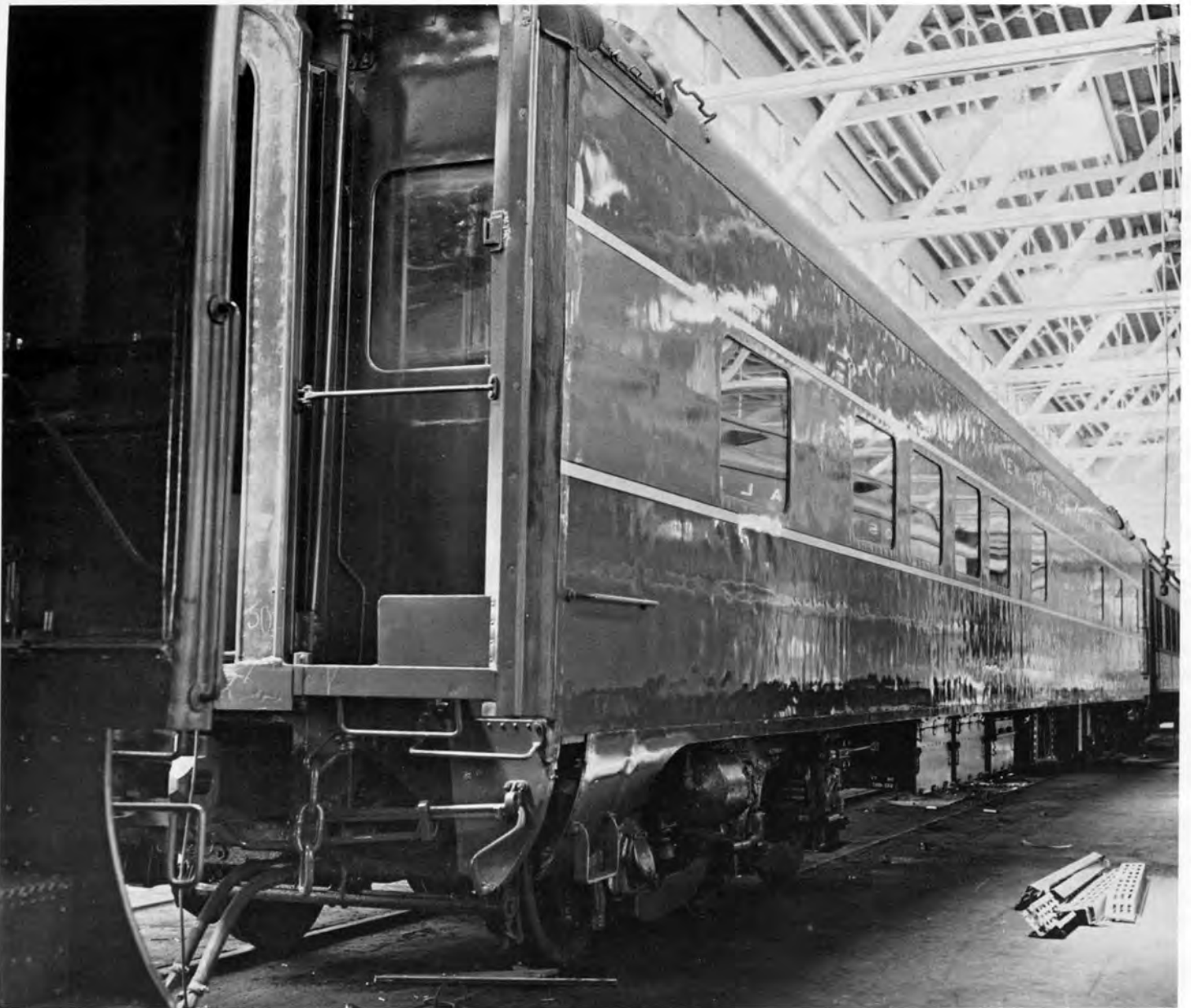
GROUP NO. 184  
NEW YORK, N.Y.  
MARCH 14, 1947

PRINTED IN U.S.A.



Pullman "Manhattan Island" for the "Century", shown as re-built to Pullman Plan 4079A, 4 Double Bedroom, Buffet, Lounge, Observation, with "1943" striping and with Pullman 41HR trucks. Car was originally built in May 1938, Pullman Std. Lot 6547, to Plan 4079, 1 Master Room, 1 Double Bedroom, Buffet, Lounge, Observation, equipped with Pullman 43-R trucks.

Photo Collection George E. Votava



N. Y. C. Dining car No. 685 is shown here in Beech Grove Shops (Ind.) after being repainted for the 1948 "Century". Note odd end corner window used on this car. N. Y. C. S. H. S. Collection



1948 20th Century Limited mid-train lounge car "Atlantic Shore" was equipped with a barbershop, train secretary and telephone service. Photo by Ed Nowak, N. Y. C. S. H. S. Collection