



BY DAVID P. MORGAN

INEVITABLY, the streamliner revolution ignited in the West by the Union Pacific *M-10000* and Burlington *Zephyr* of 1934 burned eastward across the prairies to envelop "The most famous train in the world." Conservative New York Central was not prepared to surrender its extra-fare, all-Pullman, New York-Chicago flagship *20th Century Limited* to the novelty of articulation, aluminum, stainless steel, or diesel power, but the company's most elite patrons were clearly entitled to an evolution in the speed and style of their nocturnal passage.

Inaugurated June 15, 1902, on a breathtaking 20-hour schedule between America's no. 1 and 2 metropolises, the 5-car, 42-passenger *Century* was viewed as an extravagance by an English editorialist: "Surely it is only an experiment. There are over 900 miles between the two American cities."

The experiment endured. In less than 10 years, wooden cars were replaced by steel, 4-4-2s and 4-6-0s and 2-6-2s by Pacifics. Amenities included telephone connections at terminals, a barber, ladies'

maids, fresh and salt water baths, and market reports. Hudson locomotives were introduced in 1927 to curb the number of extra sections required by the *Limited's* expanding popularity. Nevertheless, on a climactic January 7, 1929, no. 26, the eastbound *20th Century*, ran in seven sections to accommodate 822 passengers. In sum, the train had earned its proud owner's slogan of "A national institution."

For all of its fame, the great train was rendered obsolete by the Great Depression, hopelessly dated by its spoked drivers, heavyweight equipment, Pullman-Green paint, solid bearings, and open-platform observation—a Hoover in a Roosevelt world.

Change was rampant in a post-Prohibition, DC-3, V-8, swingtime, New Deal America, and NYC—the majority rail passenger carrier in the New York-Chicago market—could not afford to ignore that tide, if only because rival Pennsylvania intended to launch a "Fleet of Modernism."

CONSERVATIVE MODERNISM

On the 36th anniversary of its cherished *Century*, Central cast its ballot for "conservative modernism," i.e., profes-

sionally styled, pilots-to-markers streamlining was embraced, but a coal-oriented railroad specified steam locomotion; articulation (mating car ends over a common truck) was deemed incompatible with the need for an easily expandable consist; head-end power for train electrical needs and electro-pneumatic brakes were not included; and rainbow colors would have embarrassed company and clientele alike.

An investment in 10 engines and 62 cars was required to protect a schedule that required an intermediate change of power and two identical sections of both westbound and eastbound trains in peak season. That sum must have given pause to the directors of a company that would not pay a dividend during 1932-1942.

Traditional NYC suppliers American Locomotive Co. and Pullman-Standard Car Manufacturing Co. built the engines and cars; industrial stylist Henry Dreyfuss was retained as designer. Mark well their names; they were responsible for the greatest of all *Centurys*.

"Wonder train of a wonder age," "A perfect train for a perfect trip," "America's most distinguished train," "Train of happy memories," "The train of trains"

The greatest *Century* of all

New York Central's 1938

20th Century Limited



At an unspecified date, but probably in 1938 or 1939, train no. 25, the westbound *20th Century Limited*, streaks north along the Hudson River. All photos, NYC Kalmbach Collection

... publicity superlatives aside, what was it about this 1938 edition of the *20th Century Limited* that initially arrested the eye? Surely it was the seemingly seamless flow of metal from bullet-nosed locomotive to rounded-end observation. For the *Century* of a half-century ago was created from scratch as a unit and operated as a unit — as “one long metallic tube,” to quote the company. Rounded roofs, full-width diaphragms, skirts, foldaway steps, and a common two-tone gray color scheme with blue and silver accents from tender to tail sign melded to make this train, for all its diverse accommodation, one vehicle.

(Let the record show that the mightier Pennsy, which did not omit a dividend during the Depression, included in the consist of the rival *Broadway Limited* older, if refurbished, mail and dining cars and entrusted the train to existing nonstreamlined power during the nocturnal hours.)

THE TRAIN OF TRAINS

What manner of train was this new *20th Century Limited* introduced to the public live on CBS radio from Grand Central Terminal, New York, on June 15,

1938, by NYC President F. E. Williamson, movie actor Jimmy Cagney, National Baseball League President Ford Frick, and “Miss Twentieth Century” — “America’s most beautiful model,” Virginia Judd.

The new *Century* was fast, carded to complete its 961-mile run in 16 hours at an average speed of 59.89 mph. (En route, that schedule required westbound train 25 to cover the 133 miles from Toledo, Ohio, to Elkhart, Ind., in 113 minutes, averaging 70.6 mph start-to-stop.)

The new *Century* was luxurious. An affluent patron stepped off the gate-to-vestibule red carpet in Grand Central onto a train wherein he could gaze at the Hudson River over a martini from rearward facing sets, get a haircut and shave, dictate correspondence to a train secretary, have a shower, dine at a table with four companions, play bridge in a nightclub setting, and retire to a 6’-8” double bed within reach of a radio.

The new *Century* was private. Gone was the archetypal, green-curtained, upper-and-lower-berth Pullman section and its satellite end-of-car, linoleum-tiled restrooms, replaced by the roomette — a room for one with its own foldup bed and

lavatory facilities behind a sliding door with lock.

The new *Century* was expensive: a maximum 16-car consist and locomotive — 1448 feet long, 1400 tons in weight — cost \$1,384,000 vs. \$115,000 and \$250,000 for a *Century* of 1902 and 1922, respectively.

THIS COLOSSAL STEEL TITAN

In terms of imagery, the 1938 *20th Century Limited* was its locomotive — and, specifically, its signature hemispherical, fin-split nose. Students of streamlining will find a prototype in the helmet of future Holy Roman Emperor Maximilian II of 1557 pictured on page 817 of Volume 5 of the *New Encyclopaedia Britannica* (1987). Stylist Otto Kuhler had suggested fins in proposals of the early 1930s and incorporated one on the Alco DL-109 road passenger diesel. Reading and Union Pacific employed a variation on rebuilt streamlined steam power; and an unfortunate version surfaced on Chesapeake & Ohio L-1 Hudsons intended for sections of the post-World War II stillborn *Chessie*. But the tapered, aluminum-painted fin, flowing rearward past stack exhaust grills into a skyline casing over

sandbox and dome, came off marvelously well in a design once captioned by *Trains Magazine* (Kalmbach Publishing Co.) as "perhaps streamlining's high-water mark."

The 10 J-3a 4-6-4s, nos. 5445-5454, built by Alco in March-April 1938 for the *Century* were the final engines of an order for 50 super Hudsons and brought NYC's Hudson roster to 275 locomotives. Refined versions of the J-1 class that had introduced their wheel arrangement to America in 1927, these "colossal steel titans" could produce 3880 drawbar hp at 65 mph and 4700 indicated hp at 80 mph in consequence of Baker-valve-gear-controlled 22½" x 29" cylinders, 79" drivers, 265 lbs. boiler pressure, 4187 square feet of heating surface, and 82 square feet of grate area. A starting tractive force of 41,860 lbs. was supplemented by a booster exerting 12,100 lbs. out of regard for the *Century's* slack-free tightlock couplers.

Streamlining raised total engine weight to 365,500 lbs. — 5500 more pounds than conventional J-3 sisters — and obliged relocation of the bell to under the pilot and turbogenerator to an engine bed bracket on the right side ahead of the trailing truck. Still, Dreyfuss exposed cylinders and valve motion, aluminum-painted

Boxpok or Scullin disc driving wheels, and engine and trailing trucks for what publicists termed an "arresting picture of super-power."

The 12-wheel tenders had a false extension 42" beyond their tanks for visual purposes. Whereas tenders of contemporary streamlined Hudsons on other roads had a capacity of 25 tons of coal and 20,000 gallons of water, the J-3a's carried 28 tons and 13,600 gallons in consideration of water scoops that could pick up from track troughs on the fly.

MORE THAN A TRAIN

Typical 1938-edition *Century* consists, reported in 13- and 16-car trains, were compiled from eight car configurations, all measuring 84'-6" over buffers coupled, excepting the observation, which was an inch longer.

Behind the tender rode a 12-wheel Railway Post Office-baggage car. The 60-foot mail compartment provided letter slots, working tables, storage, wardrobe, toilet, and doorways with pickup arms for the 15 clerks processing the train's first-class-postage lading; and the 21-foot compartment behind was reserved for passenger luggage and company mail. These cars carried nos. 5017-5020.

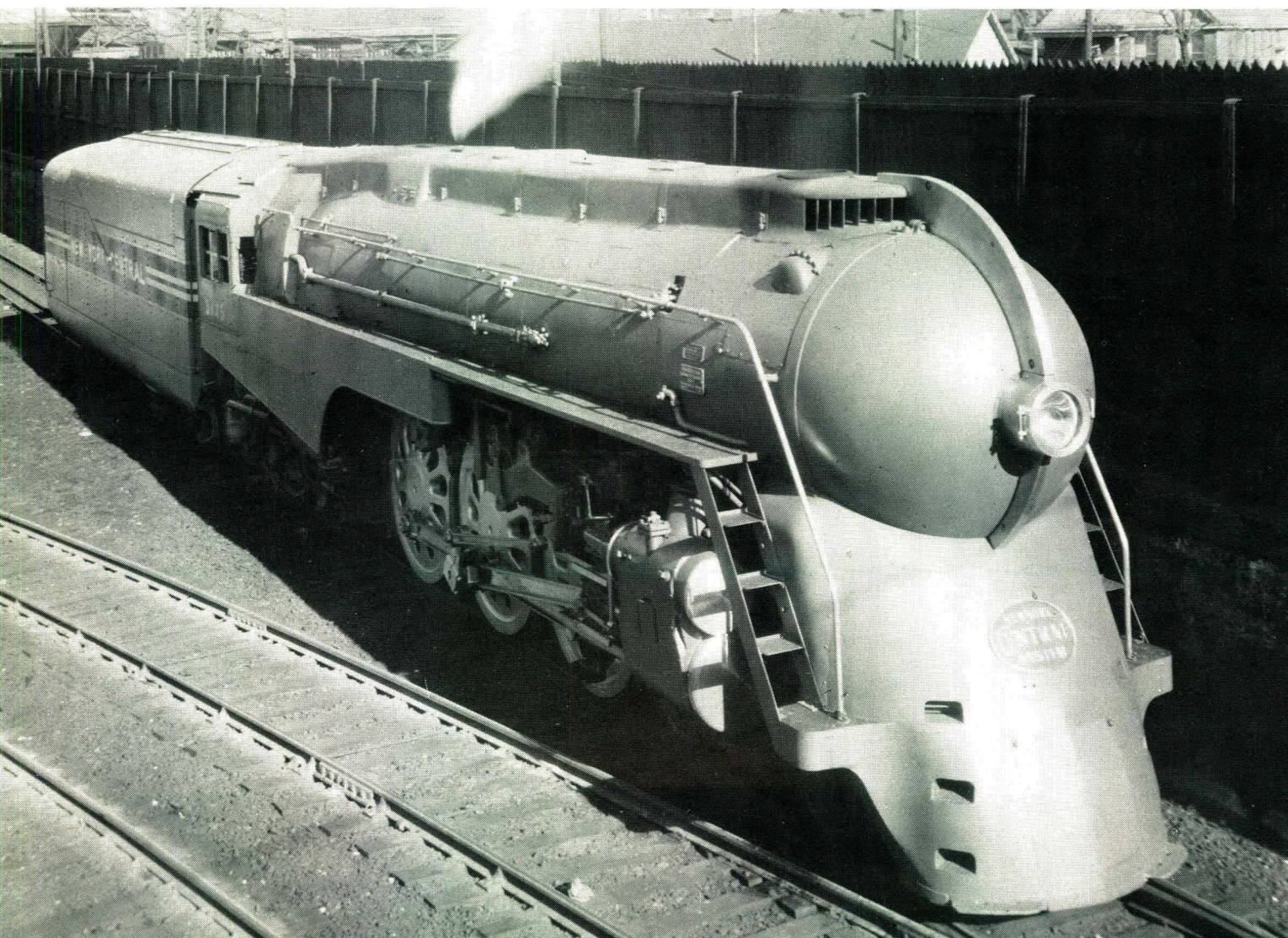
In common with such other all-Pull-

man flagships as Baltimore & Ohio's *Capitol Limited* and Santa Fe's *Chief*, the *Century* included an up-front, away-from-the-crowd haven for drinkers: an eight-wheel, *Century*-series dormitory (shower and triple-decked bunks for 18); octagonal barber shop (fresh and used linens in the corner lockers); and cork-walled, copper-trimmed bar-lounge with chairs, sofas, and round tables. Car names — *Century Club*, *Century Inn*, *Century Lounge*, and *Century Tavern* — prophesied the pleasures within, except in Indiana on Sundays, of course.

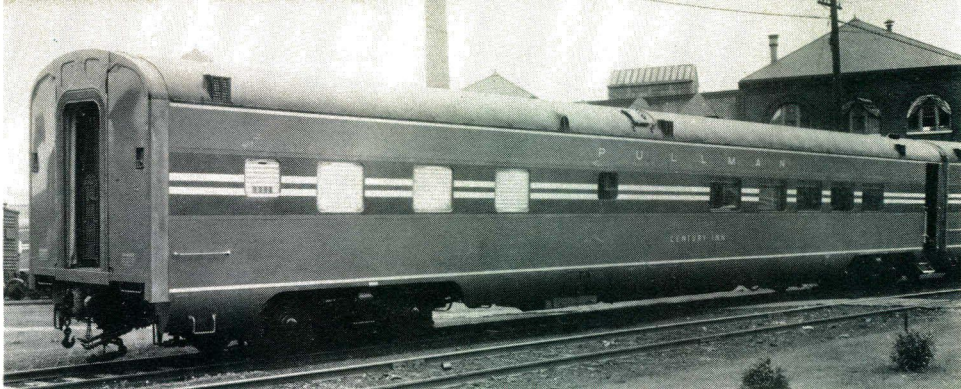
The basic Pullman was a 17-roomette *City*-series car which contained a center sofa beneath an upper berth, presumably for deadheads or technicians. All of these sleepers bore the names of on-line cities, but not all were served by the *Century*, e.g., *City of Indianapolis*.

So-called "4-4-2" Pullmans in the *Imperial* series contained the widest choice of accommodations — 4 compartments, 4 double bedrooms, 2 drawing rooms — and, no argument, the classiest names in the consist, e.g., *Imperial Chariot* and *Imperial Sceptre*. The sleeping cars rode on newly designed, complex, triple-bolster, short-lived trucks with photogenic winged bearing boxes nicknamed "Napoleon Hats" for their unique shape.

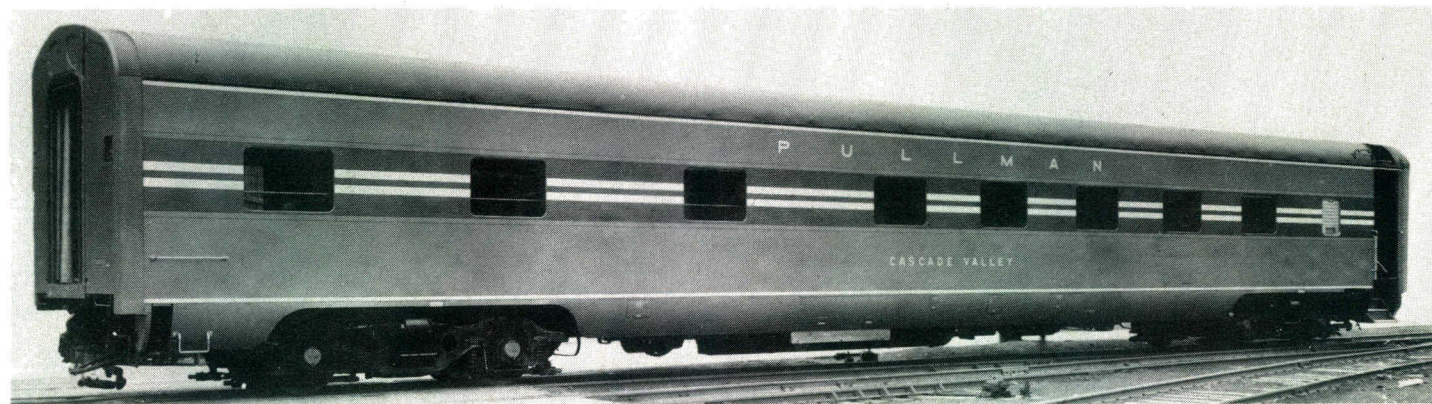
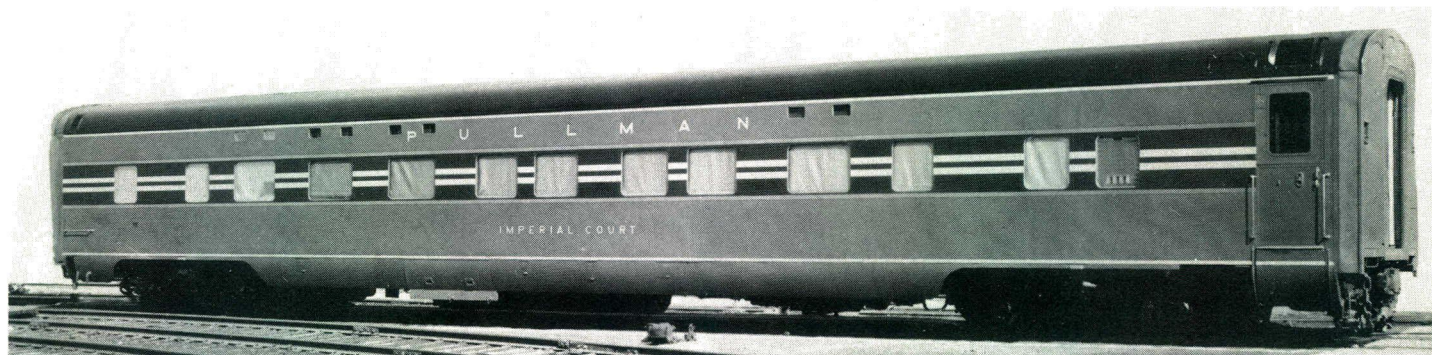
Number 5445 appears to have accumulated very little road mileage when this photo was taken. The only visible grime is a slight blackening around the stack.



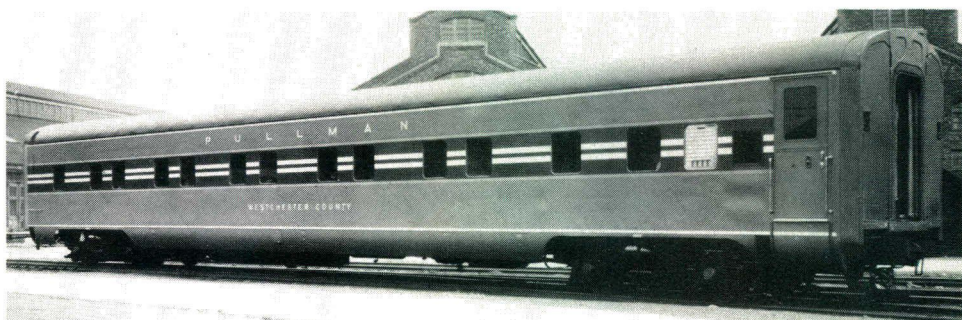
Cars of the Century series had crew dormitory spaces forward (left), as well as a barbershop and a lounge. Protective sheet-metal panels covered the framing of the full-width diaphragms.



The interior arrangement of the Imperial-series cars had four double bedrooms, four compartments, and two drawing rooms. This is a view of the sleeping-room side of the car. There were fewer larger windows on the passageway side.

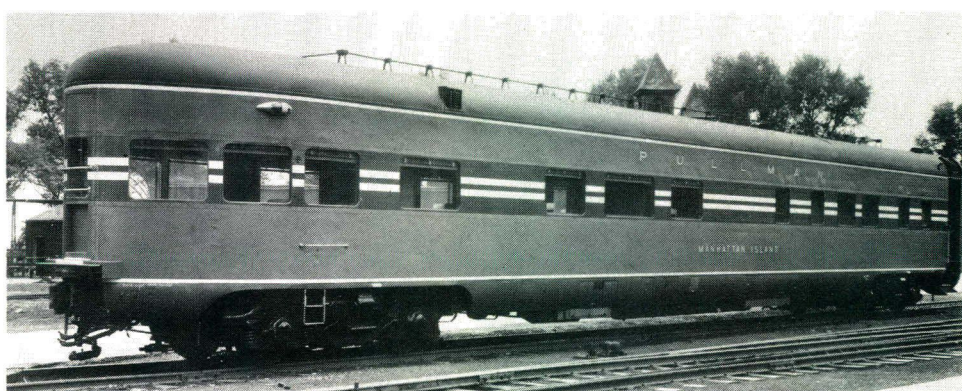


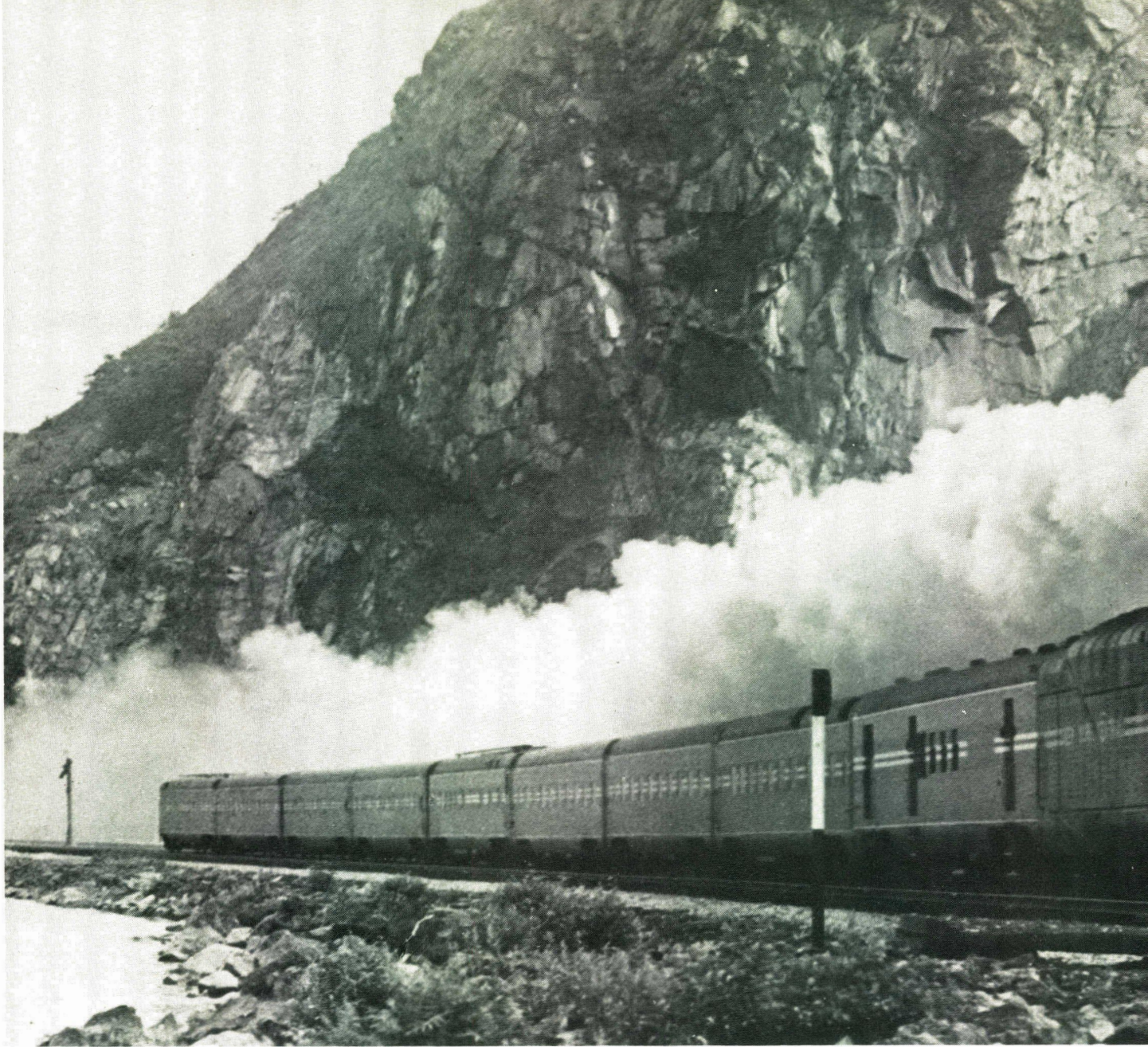
Valley-series car interiors were arranged with a ten-roomette (to the right) and five-bedroom configuration. The horizontal bars showing in the three windows at the left are round handrails.



Cars of the County-series had thirteen bedrooms on this near side. Adjacent pairs of rooms, except for end bedroom A, had folding doors in the walls between them that could be opened up to become spacious two-room accommodations.

Island-series observation cars had one drawing room and one bedroom, as well as a lounge with buffet service. There was an odometer and a speedometer located in the observation space.





At an unknown date, a short nine-car version of the eastbound *20th Century Limited* along the Hudson River with Breakneck Mountain in the background.

The 1938 *Century* usually carried, mid-train, a pair of unnamed, 12-wheel diners from series 680-685 — cars with windows and deep-glassed doors at the ends of their 38-seat dining sections, lending the illusion of a continuous room when coupled. (The end windows could be covered by pull-up mirrors when the cars were operated solo.) To eliminate the tunnel effect of traditional diners as well as create a late hour nightclub setting, the main dining room featured curving settee seating as well as tables for two with aisle-facing chairs, and was bracketed at both ends by semiprivate dinette sections. Oh yes, photos of the new wide-diaphragm ends reveal small metal signs for unsuspecting switchmen: **DANGER KEEP OUT AND AWAY FROM CORNER OF CAR WHEN COUPLING.**

Cascade-series Pullmans were dubbed "10 & 5s" — for 10 roomettes and 5 double bedrooms.

The high-density Pullmans in each

Century were County-series, 126,000-lb. (a third less weight than heavyweight predecessors), 13 double bedroom cars with beds for 26 on a double-occupancy, "top and bottom" basis.

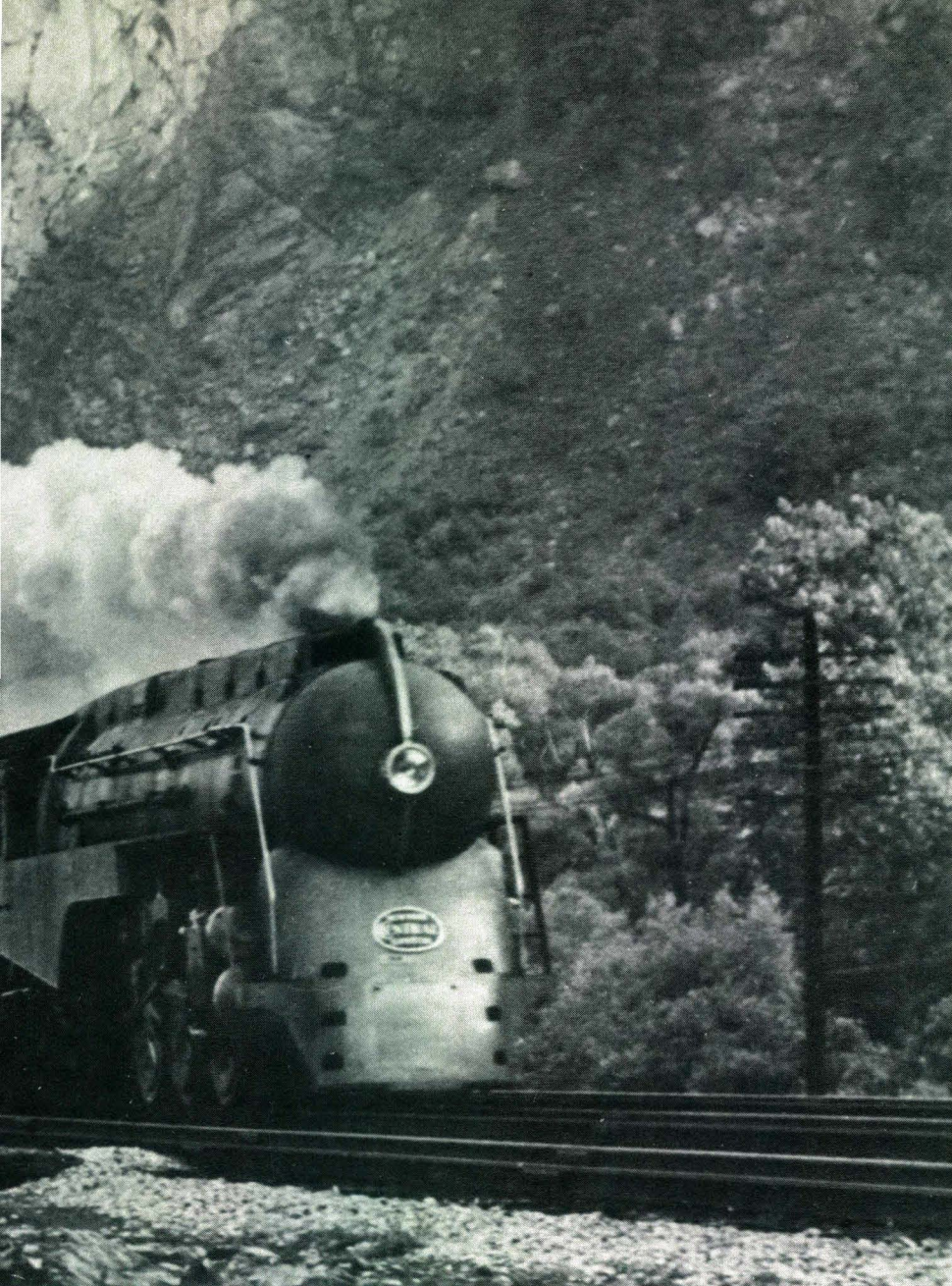
Bringing up the markers (and a distinctive, blue-lighted tail sign) was an Island-series, antenna-roofed, rounded-end Pullman buffet-lounge-observation which could sleep a maximum of six in a master room with two 6'-8" double beds with 3 x 6-foot mattresses, radio, and tub-shower, and an adjoining double bedroom which could be opened en suite for what NYC termed a "bridal suite." The rear half of the car contained a lounge with gun-metal columns, blue couches, and gray carpeting, and a solarium with window-facing, semicircular settees. Passengers could check their progress on both an odometer and a speedometer. The Island cars' limited sleeping capacity sidetracked them during World War II, and they were subse-

quently rebuilt with 4 double bedrooms.

Contemporary published consists of the 1938 *Century* allow for a 13-car train, arranged from locomotive back, with 1 mail-baggage car, 1 dormitory-lounge, 2 17-roomette Pullmans, 1 10 & 5, 1 4-4-2, 2 diners, 1 4-4-2, 1 10 & 5, 1 13 DBR, 1 4-4-2, and 1 observation; revenue capacity: 172. A 16-car *Century* was composed of 1 mail-baggage car, 1 dormitory-lounge, 2 17-roomette Pullmans, 3 4-4-2s, 2 diners, 4 10 & 5s, 2 13 DBRs, and 1 observation; capacity: 238.

(Interestingly, the *Century* acquired an intrastate spiritual twin in 1941 when Southern Pacific introduced a streamlined, gray, steam-powered, all-Pullman, all-room, Pullman-Standard-built, San Francisco/Oakland-Los Angeles *Lark*.)

For all its pomp and glitter (NYC compared it to hallmarked silver and 18-carat gold), the *Century* was in today's financial jargon a capital- and labor-intensive service — more reputation than



remuneration. For example, in 1940 the *Limited* averaged 67.2 passengers a trip and \$2.61 revenue per train-mile, while Milwaukee Road counted an average of 187 riders and \$3.79 a mile for its daylight, largely coach *Afternoon Hiawatha*.

POSTSCRIPT

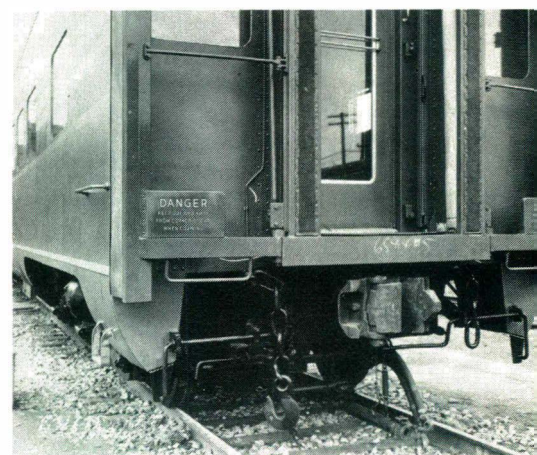
World War II inflated the *Century's* ridership, notably with military brass, and took a toll in maintenance. Train watchers noted torn rubber diaphragms between its Pullmans as well as grimy Hudsons stripped of their skirts and mated to huge, ungainly, pedestal-type tenders. Occasionally, newer if unstreamlined L-4 4-8-2s such as the 3147 would take over the helm of the company's finest. On September 7, 1943, the unthinkable happened when the J-3a of the eastbound *Century*, no. 5450, exploded at Canastota, N. Y., killing its crew of 3 and derailing all but 3 of 17 trailing cars. The engineers who boarded in Syracuse had been

advised of a malfunctioning feedwater heater but had elected to proceed rather than delay for a relief engine. In what some regarded as the ultimate conquest of the diesel, 4000-hp teams of Electro-Motive E7s began forwarding the *Century* in 1945.

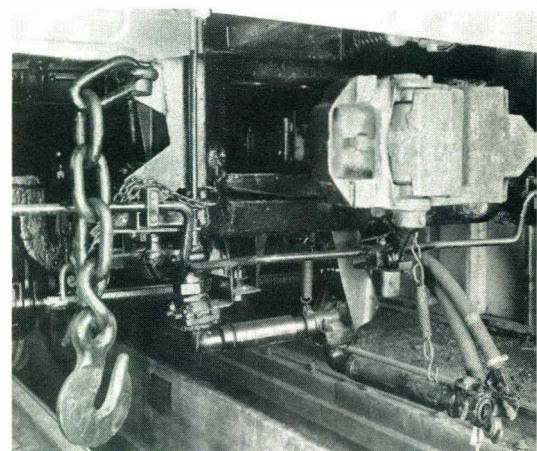
New York Central re-equipped its flagship in 1948, but skirtless cars and look-alike EMDs diluted the majesty of the 1938 edition. The greatest of all *Centurys* lost its Hudsons to scrap, its cars to Canada and Mexico. Pragmatists were saddened but not surprised. Asked for his thoughts on the future of the passenger business by the trade press *Railway Age* in 1941, NYC President Williamson had forecast: "The ultimate loss to the air of all or nearly all of the railroads' present sleeping and parlor car passengers, express, mail (at least first class mail), and no one knows what or how much freight business, appears uncomfortably probable." ❧



The Island-series observation car of each *20th Century Limited* carried an illuminated fluorescent-blue tail sign in a rectangular aluminum frame.

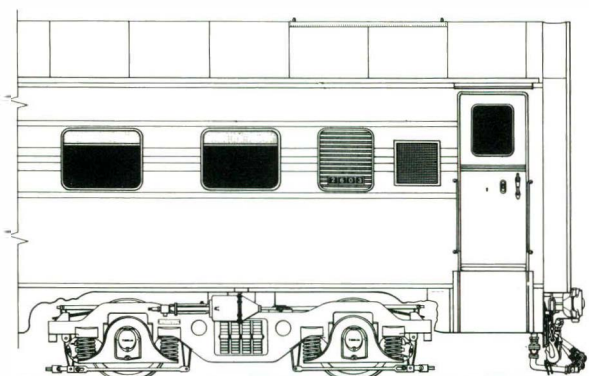


20th Century trains had two dining cars with the windowed dinette ends facing one another. In the evening the cars were converted to lounges.

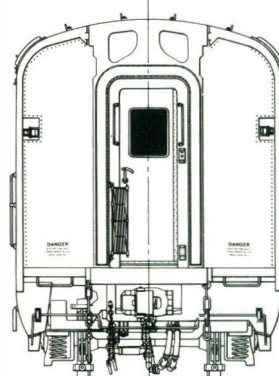


The lower end detail of the cars showing the tight-lock couplers and uncoupling bar, air and signal lines, steam line, and the safety chains.

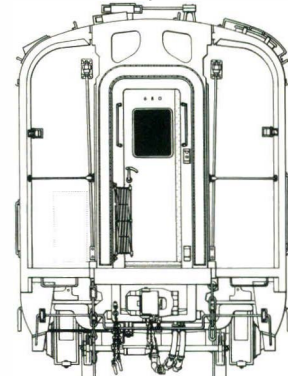
Note: All side and end elevations are HO scale; plans and roofs are N scale



Westchester County, left side vestibule end

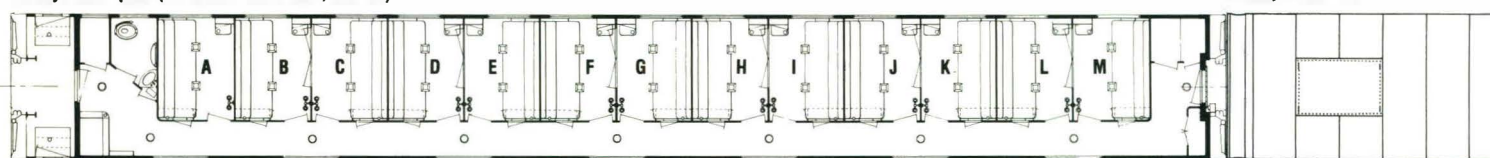


Typical end

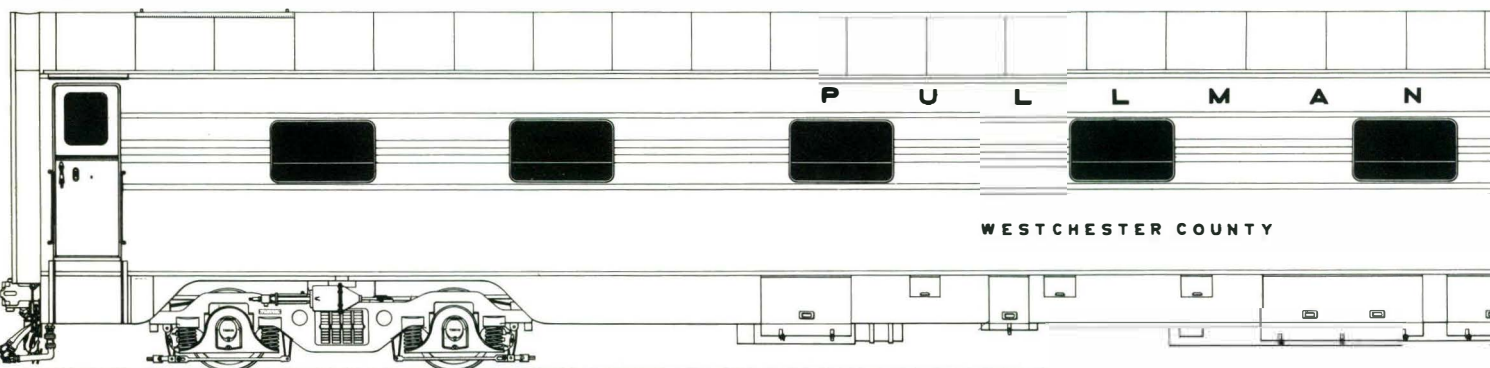


Dining car, kitchen end

County series plan (13 double bedrooms, A to M)



County series roof

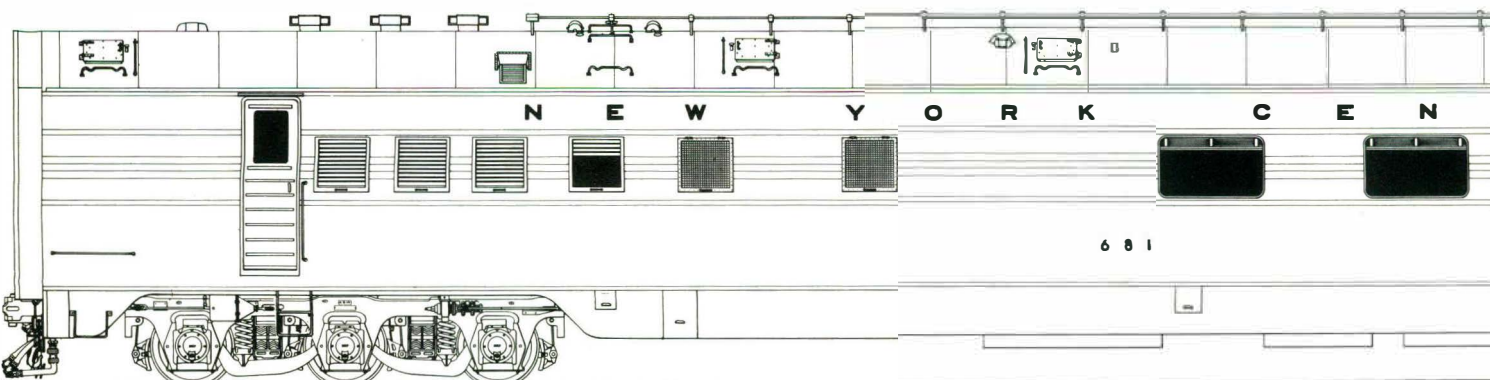
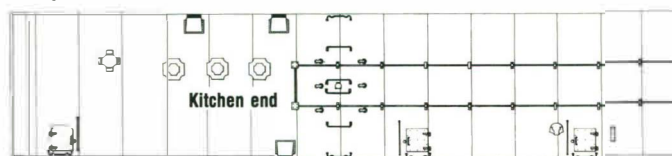


WESTCHESTER COUNTY

Drawn for MODEL RAILROADER MAGAZINE by
HAROLD W. RUSSELL

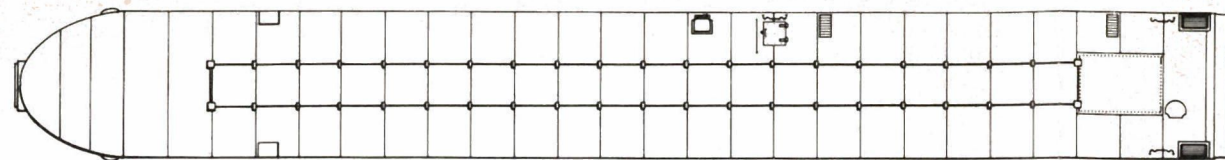
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Dining car roof

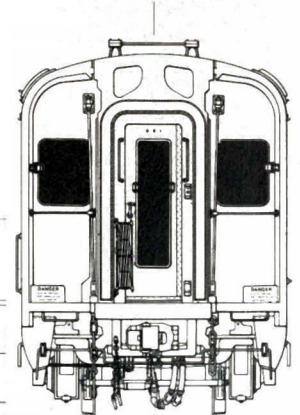
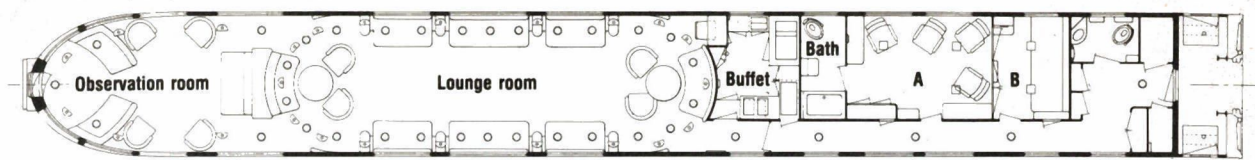


NEW YORK CENTRAL

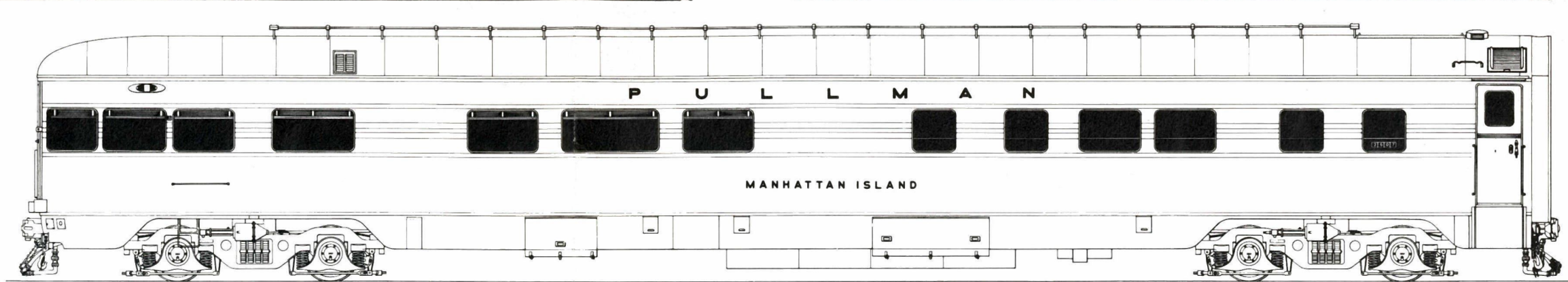
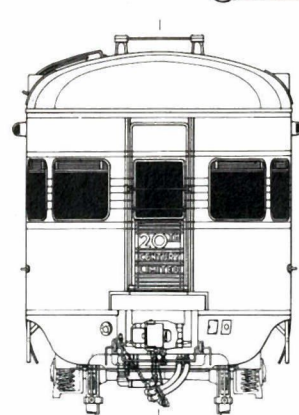
Island series roof



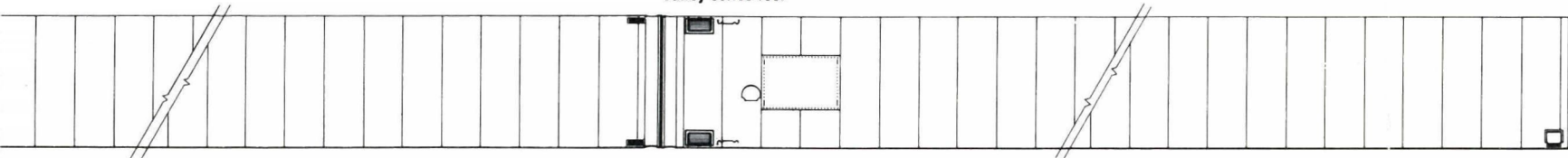
Island series plan (observation, lounge, bedroom A, drawing room B)



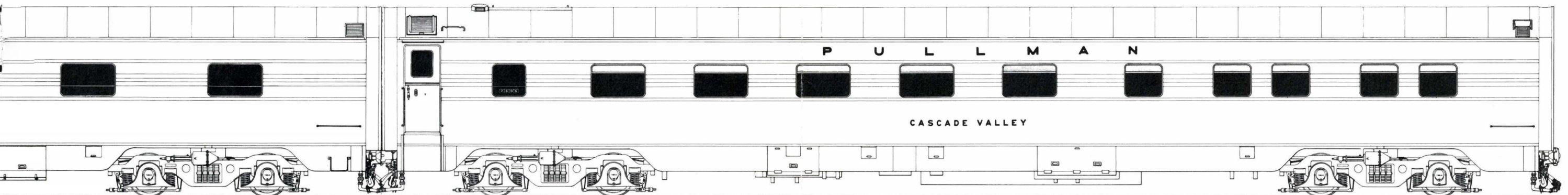
Dining car, dining room end



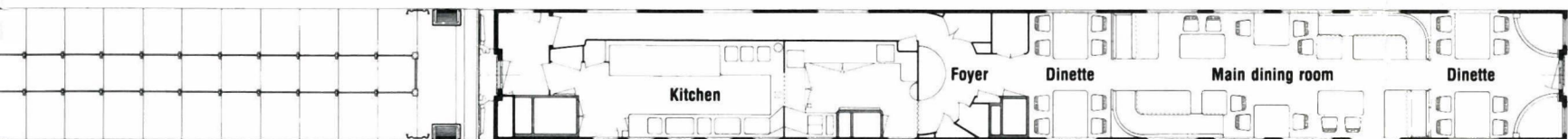
Valley series roof



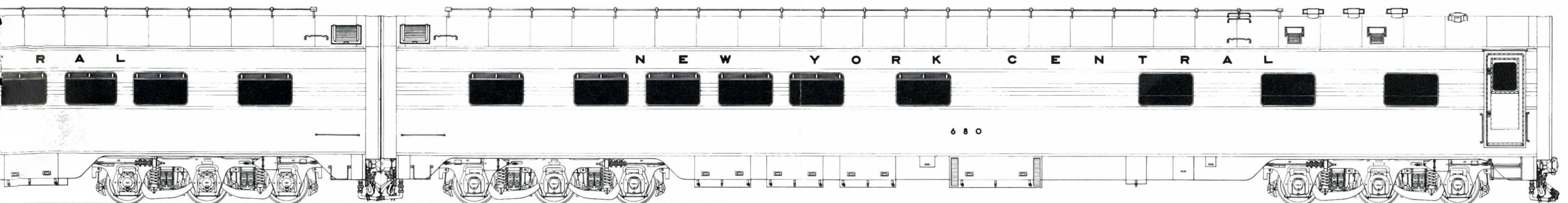
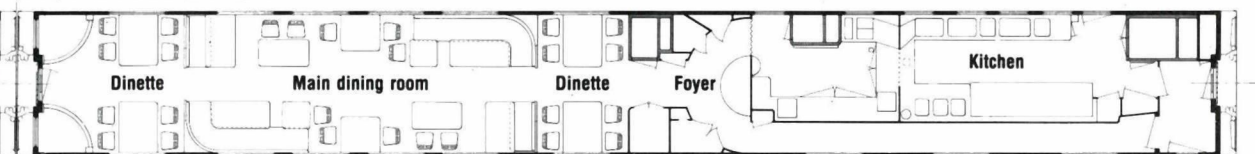
Valley series 10 & 5 plan (10 roomettes 1 to 10, 5 bedrooms A to E)

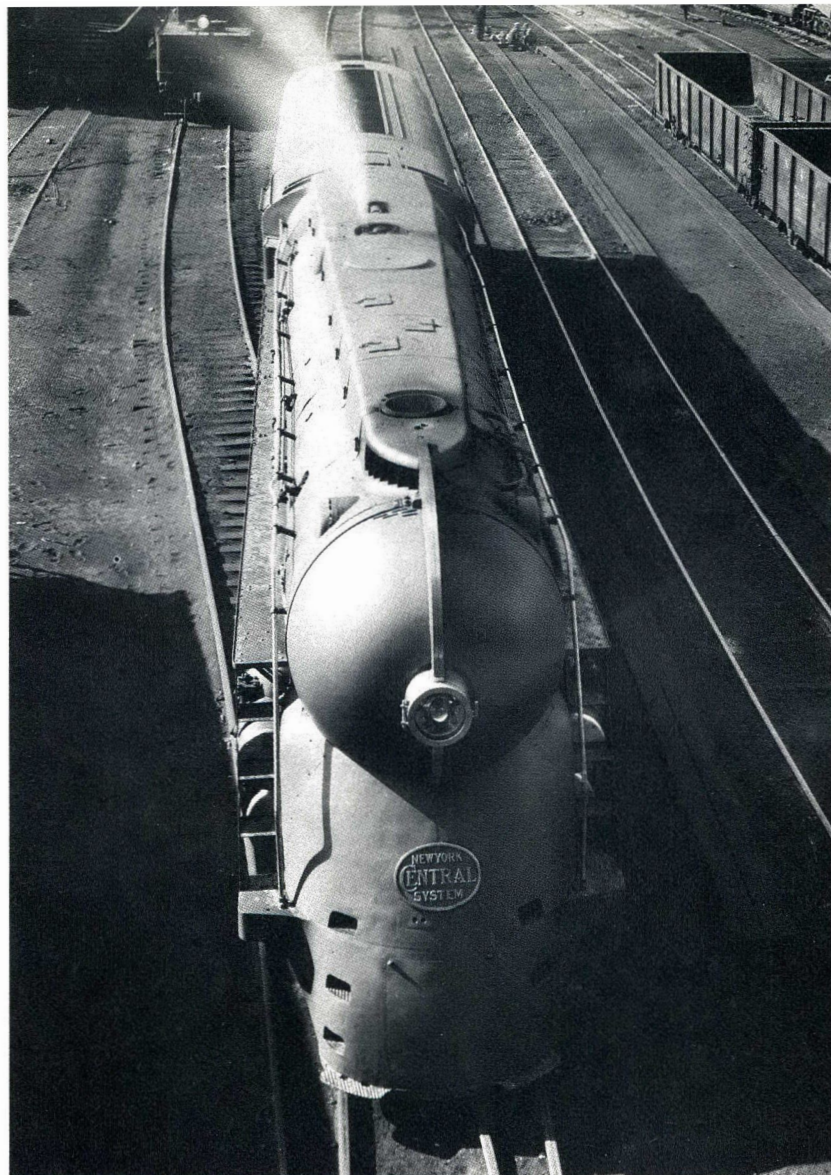


Dining car plan



Dining room ends coupled together

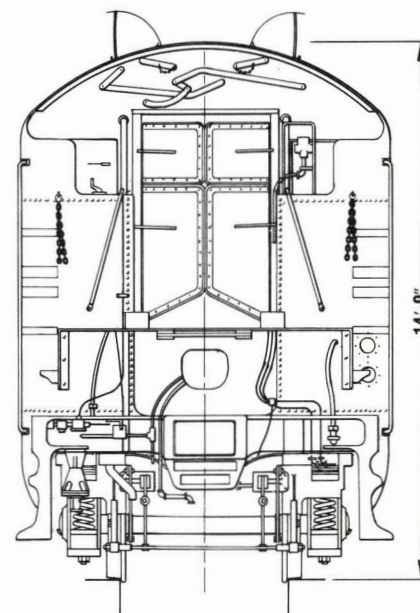
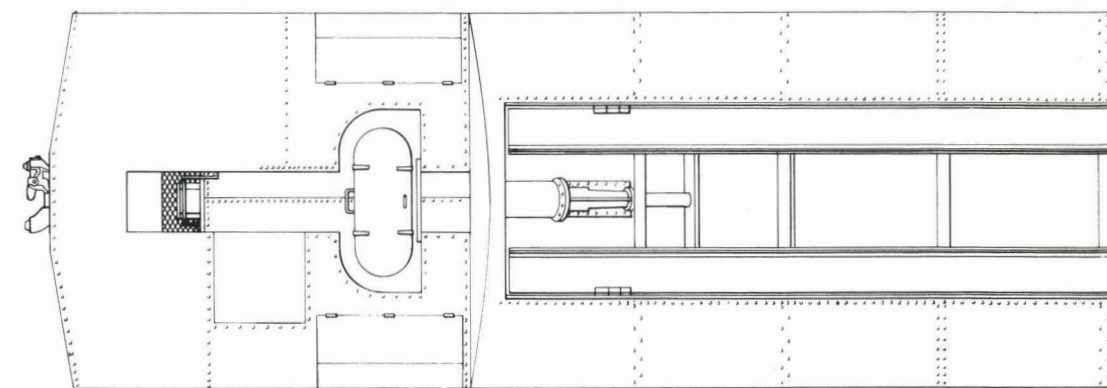




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HAROLD W. RUSSELL
 Color renderings by **CHUCK BOIE**

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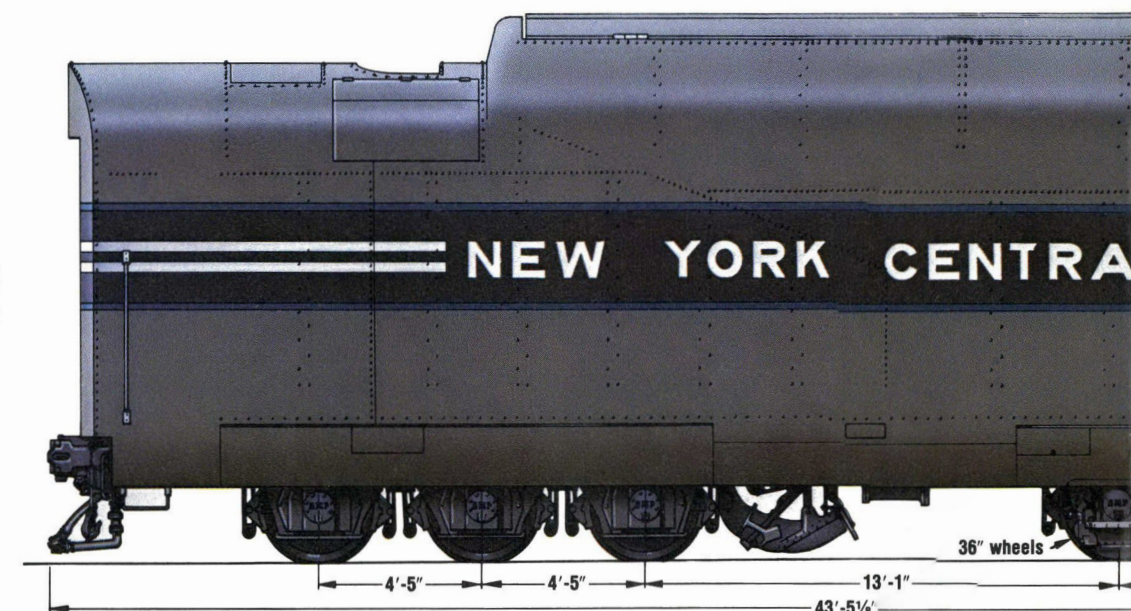
Note: All views are S scale



Front

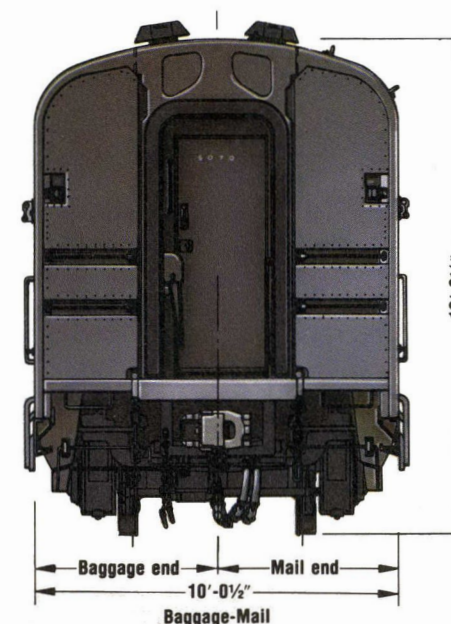
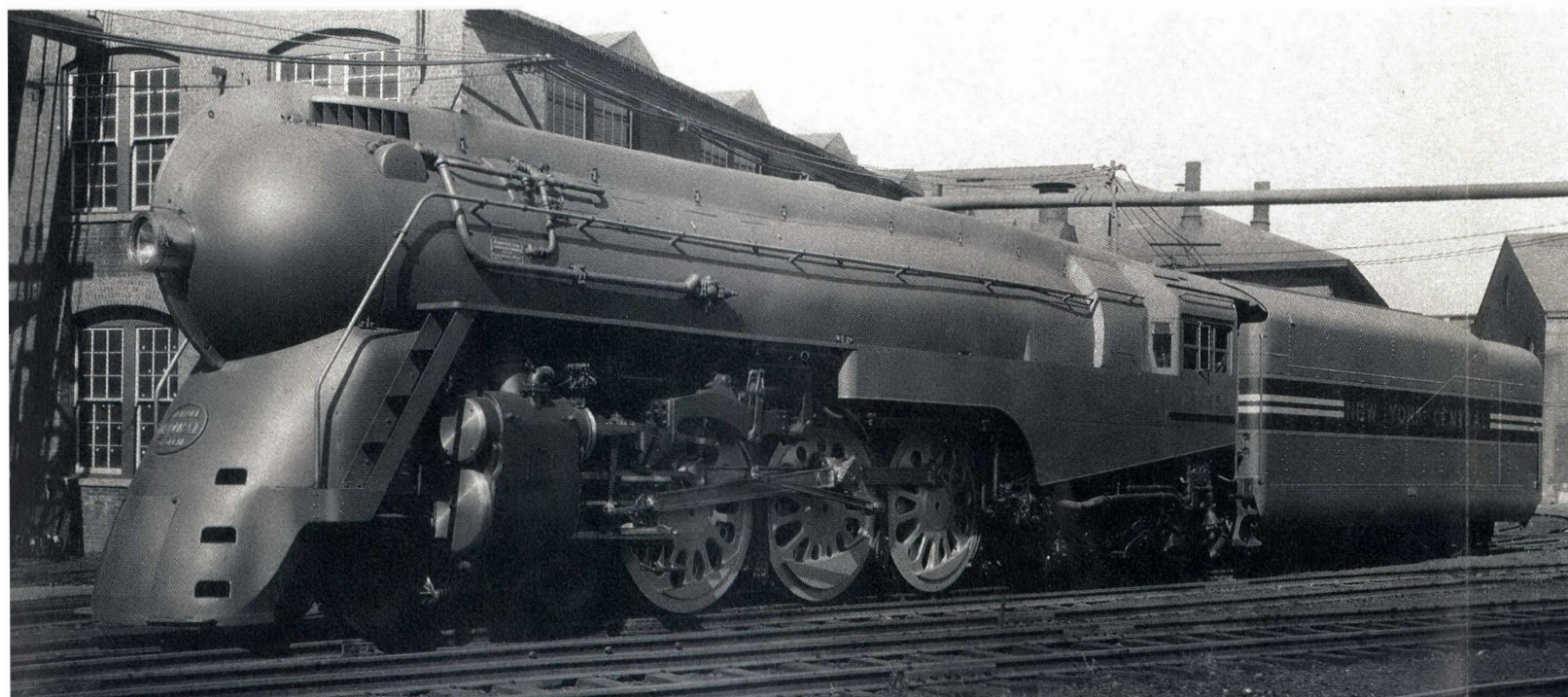


Rear



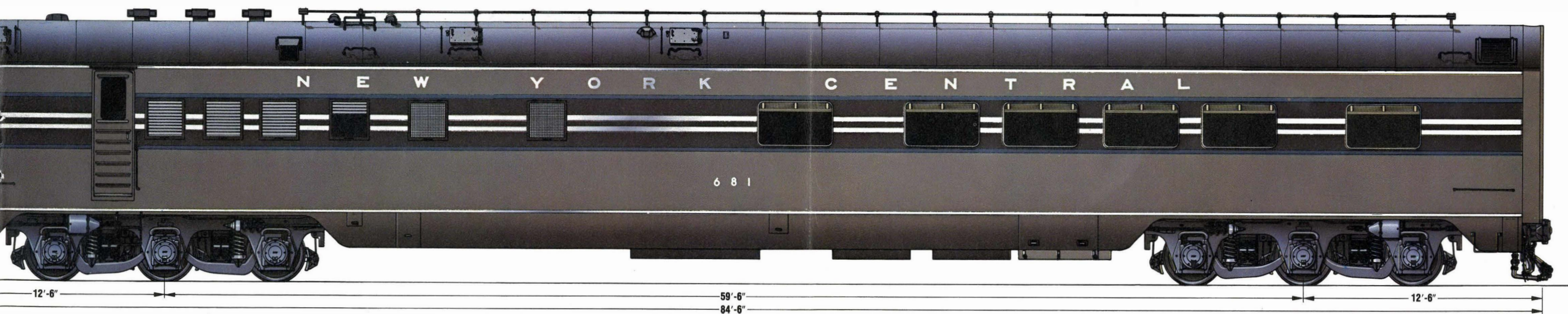
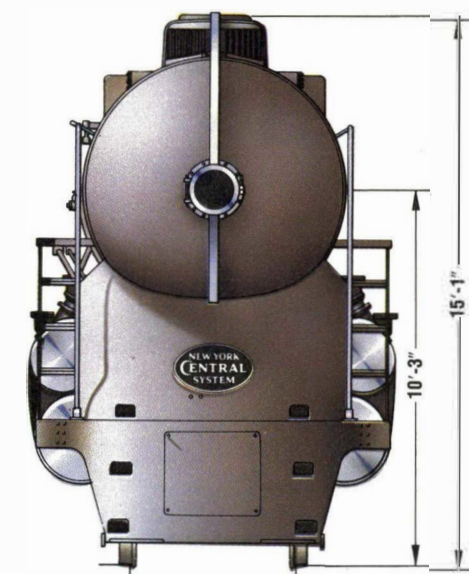
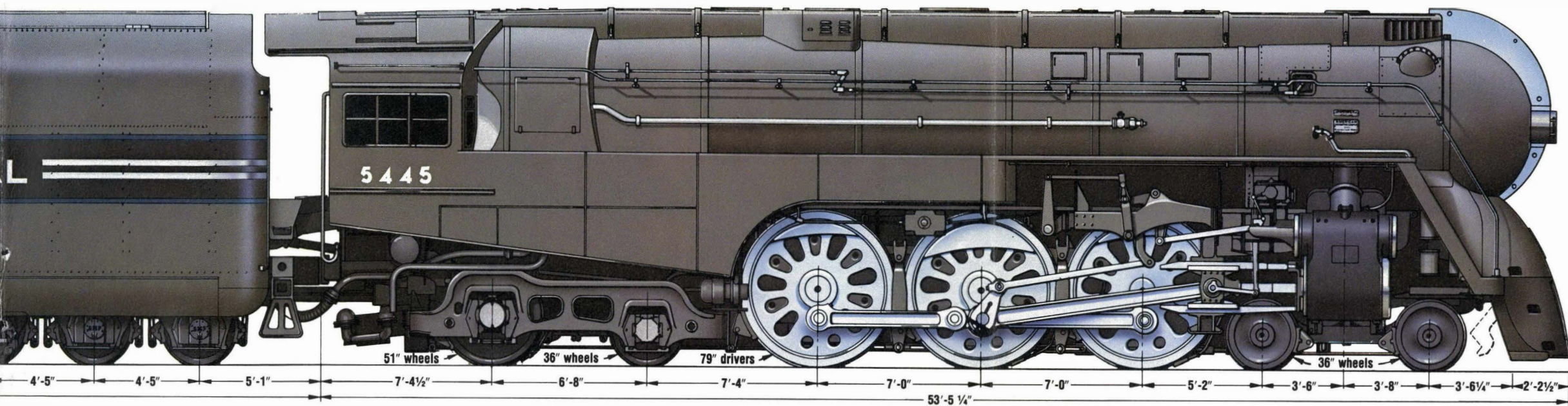
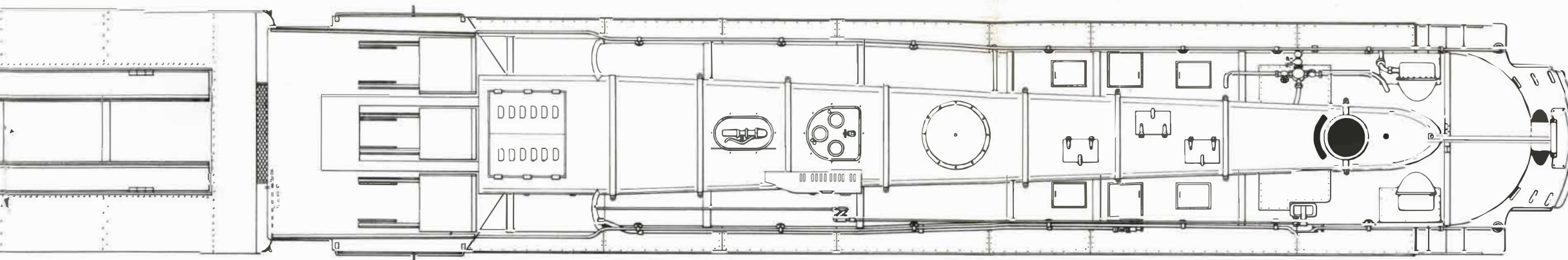
Even from the top the locomotives gave the impression of speed. The louvers in front of the tapered top carried air back to the stack, and up, to lift the smoke above the locomotive.

Below: The fully exposed polished running gear of the shrouded J3 Hudsons provided good access for maintenance crews.



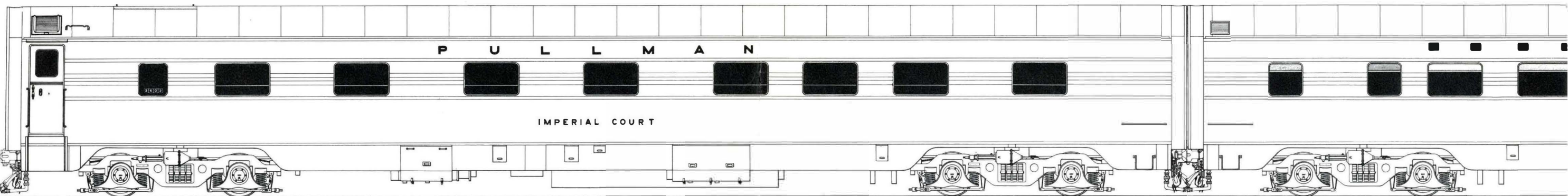
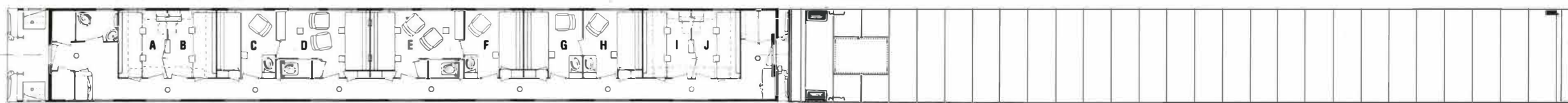
Observation end





Imperial series 4-4-2 plan (4 bedroom, A-B-I-J; 4 compartment, C-F-G-H; 2 drawing room, D-E)

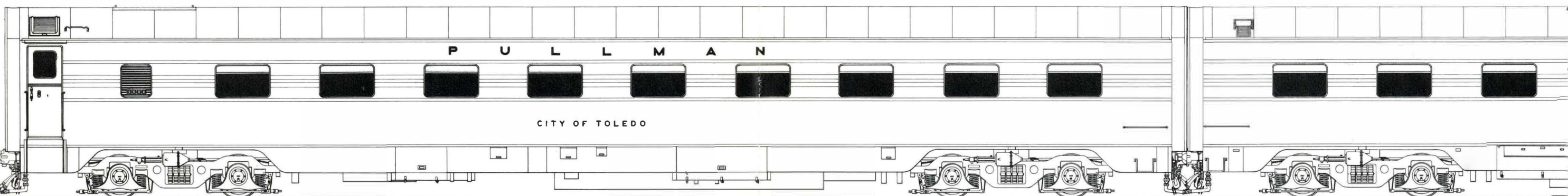
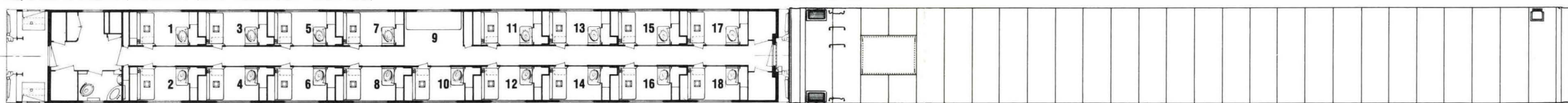
Imperial series roof



Imperial series left side

City series 17 roomette plan (no. 9 is porter's station with extension sofa)

City series roof

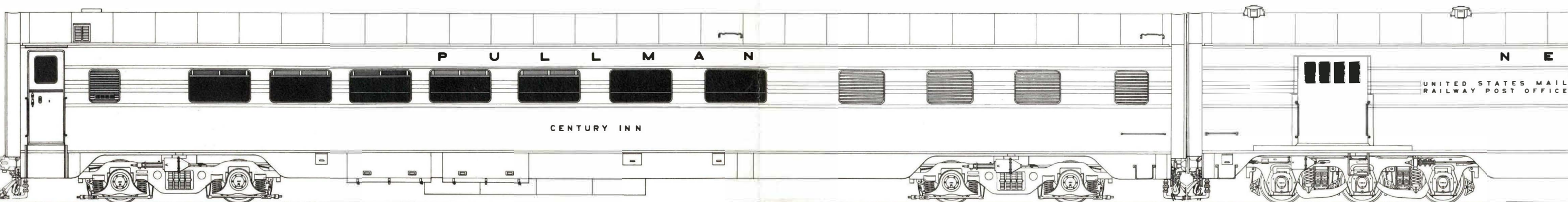
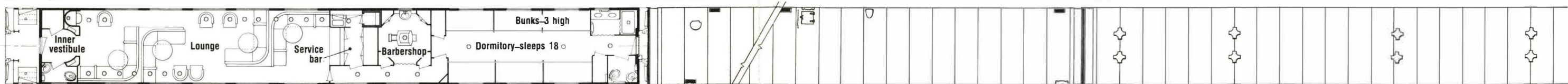


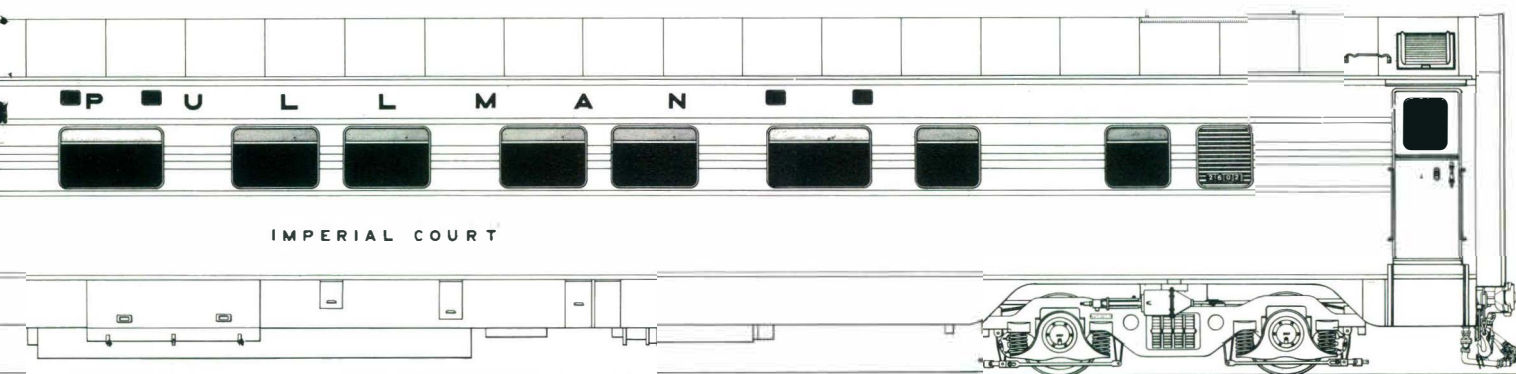
City series left side

Inn series plan

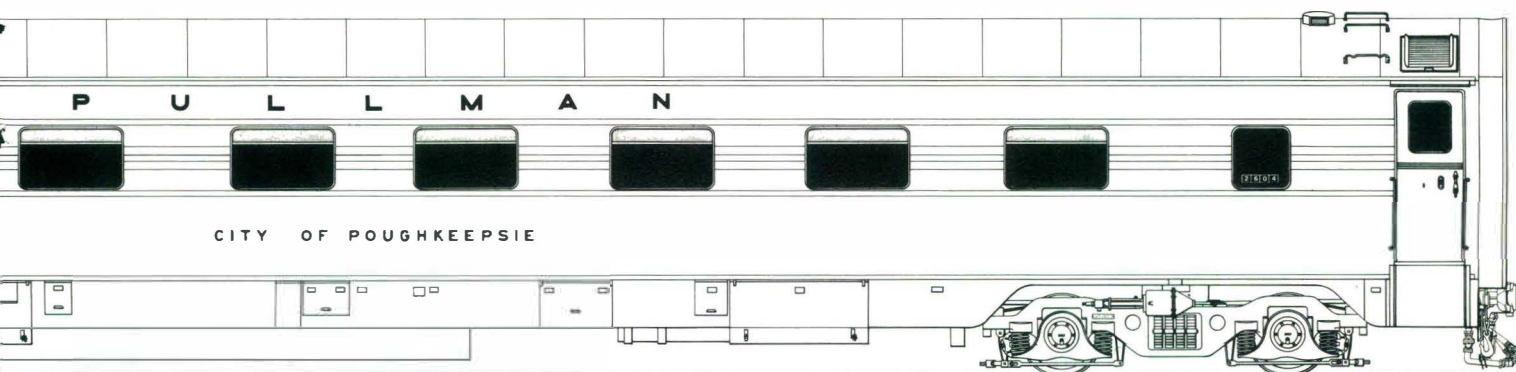
Inn series roof

Baggage-mail roof





Note: All side elevations are HO scale; plans and roofs are N scale



Baggage-mail plan

