

GREAT PASSENGER TRAINS

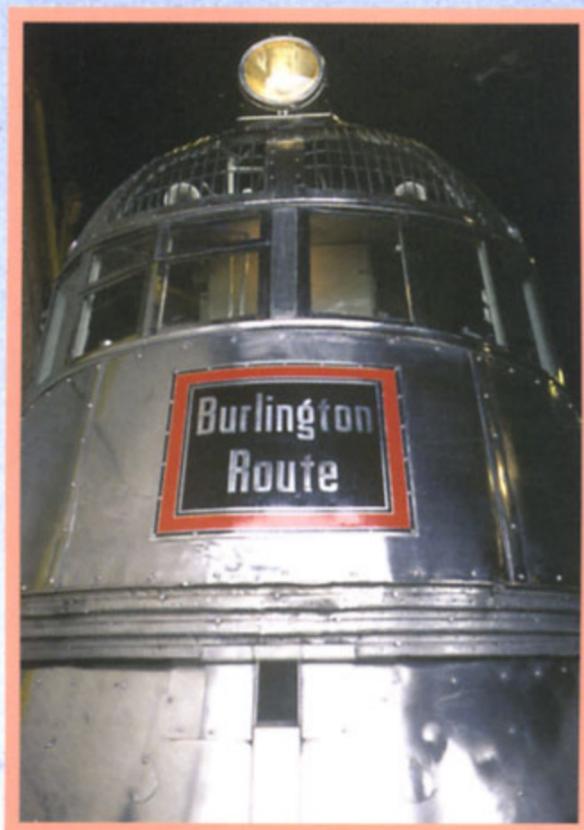
BURLINGTON'S ZEPHYRS



KARL ZIMMERMANN

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KARL ZIMMERMANN



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Ducking in and out of late afternoon sun, the westbound *California Zephyr*—as seen from the Vista-Dome buffet-lounge—is westward bound across Illinois in March 1970. MIKE SCHAFER

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Front cover: It's late winter 1960 at Plattsmouth, Nebraska, and No. 9900, the first of a long line of *Zephyr* streamliners, looks nearly as shiny and new as the day it rolled forth from the Edward G. Budd Manufacturing Company at Philadelphia 26 years earlier. But this wintry day is a sad one for the little train, by this time known as the *Pioneer Zephyr*, because it's in the middle of its last revenue trip, heading to Chicago where it will go on permanent display at the Museum of Science and Industry. JIM NEUBAUER

Frontispiece: When it came to Midwest and Western passenger trains from the 1930s through the 1960s, "*Zephyr*" was a household name. KARL ZIMMERMANN

Title page: (Main photo) *Zephyrs* set several speed records and became synonymous with speed. Although the *California Zephyr* was not one of the speediest *Zephyrs* of the fleet, it certainly sizzles in this scene at Sandwich, Illinois, on an October afternoon in 1958. JIM NEUBAUER. (Inset) *Zephyr* 9900 about to emerge from its 1997 reshoppping. MIKE SCHAFER

Contents page: With the *Zephyrs* came an impressive output of ephemera related to their operation: menus, matchbooks, playing cards, ticket folders, introductory brochures, napkins, and everything between. FROM THE COLLECTIONS OF KARL ZIMMERMANN, KEVIN J. HOLLAND, ROBERT P. SCHMIDT, AND MIKE SCHAFER

Back cover dustjacket: (MAIN PHOTO) The 1956 edition of Burlington's *Denver Zephyr*, shown speeding its way through Naperville, Illinois, in July 1958, represented the pinnacle of the *Zephyr* era. GEORGE SPEIR. (FOLDER) Burlington heavily promoted its passenger trains in a variety of ways, such as this 1963 folder promoting thrifty travel aboard the *Denver Zephyr*. WILLIAM F. HOWES JR. COLLECTION

Front endpaper: The *Morning Zephyr* glides along Mississippi River waters en route from Chicago to Minneapolis, Minnesota, early in its career of linking Chicago and the Twin Cities. This domed version of the *Twin Zephyrs* was introduced in 1947. BURLINGTON ROUTE, KARL ZIMMERMANN COLLECTION

Rear endpaper: The Chicago, Burlington & Quincy was one of the most respected railroads serving the Midwest and West. This map from a public passenger timetable shows the railroad's territory as of 1939 when several of its principal lines were becoming *Zephyr* routes. MIKE SCHAFER COLLECTION

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The Vista-Dome parlor-observation car of the southbound *Morning Zephyr* at Mississippi Palisades State Park near Savanna, Illinois, in 1962 is engulfed in the scenery that made this route among the most scenic in all of Mid-America. *JIM NEUBAUER*



Acknowledgments

The *California Zephyr* I knew intimately and first-hand, and the *Denver Zephyr* firsthand but briefly. All the other *Zephyrs* I've come to at one remove, benefiting from the skills and knowledge of others—photographers, who captured images that froze the trains in time; writers, who have placed in print various parts of the *Zephyr* story; and scholars, experts, and aficionados with exhaustive knowledge of the Burlington Route and its *Zephyrs*. Those who generously contributed to this book fall into at least one of these categories, and some two or even all three.

Topping the list is John W. “Bill” Schultz, whose knowledge of the *Zephyrs* is encyclopedic. His own history on the subject, to be published in several forthcoming volumes by Hundman Publishing, will be truly definitive and a must for all students of passenger-train history. Meanwhile, Bill has read my manuscript, offering corrections, insights, and amplifications that have immeasurably improved it. Of course, I claim for myself any mistakes that may have slipped past his careful review. I am hugely grateful for the time he's given, the information he's shared, and the commitment to accuracy he's shown on this subject he knows so well.

In addition, a special mention must go to Ed DeRouin, a lifelong Burlington aficionado, historian, and photographer whose help in this project provided an unexpected—and, as it would turn out, vital—conduit to a source of exceptionally accurate facts and enlightening information.

Among materials already in print, I found Geoffrey H. Doughty's *The Early Zephyrs*, Hol Wagner's special “Shovelnozes” edition of the *Burlington Bulletin* (a publication of the Burlington Route Historical Society), and Mark Reutter's two-part history of Edward Budd in the Railway & Locomotive Historical Society's *Railroad History* particularly helpful, along with Fred W. Frailey's *Twilight of the Great Trains*, Richard C. Overton's *Burlington Route*, Robert J. Wayner's *Car Names, Numbers, and Consists*, Mike Schafer and Joe Welsh's *Classic American Streamliners*, and David Randall's *From Zephyr to Amtrak: A Guide to Lightweight Cars and Streamliners*.

Photographs and memorabilia, which are individually credited where they appear in the book, came from many sources, a few of which deserve special mention. Burlington Northern Santa Fe Railway was generous in sharing its extensive photo collection, and archivist Suzanne Burris consistently helpful in making that happen. Other important materials came from the collections of Joe Welsh, Bob Schmidt (who also contributed his own photography), Bill Howes, and Peter Tilp, and from Art Peterson of the Krambles-Peterson Archive. Among photographers, Jim Neubauer's contribution was especially notable, as were those of Alan Bradley, George Speir, and Phil Weibler.

Particular and hearty thanks to Andover Junction Publications' Mike Schafer and Kevin Holland, who designed and assembled this book so splendidly. Both also made important contributions from their collections, and Mike's excellent photography appears as well. Finally, a special thanks must go to Steve Esposito, manager of Andover Junction Publications—the producer of this book—and to the folks at MBI Publishing for making *Burlington's Zephyrs* a reality.

—Karl Zimmermann



With Denver and the Front Range of the Rocky Mountains close at hand, the westbound *Denver Zephyr* sweeps across the Colorado plains near Akron in 1969. LAUREL ZIMMERMANN



FOREWORD

“Twilight of the Gods” aboard the Denver Zephyr

At Creston, Iowa, the white-jacketed porter banged down the trap, wiped the handrails clean of road grime with a towel, and set out his yellow step box. I climbed down from the air-conditioned cocoon of 10-roomette 6-double-bedroom sleeper *Silver Ridge*, on this warm, muggy night ripe with Midwestern mid-summer. The air was heavy, still, and laden with a sense of things to come that might not necessarily all be good.

It was August 1968, and my wife Laurel and I were making the overnight run from Chicago to Denver on Chicago, Burlington & Quincy’s train No. 1, the *Denver Zephyr*. This was without doubt a summer of discontent for rail riders,



The *Denver Zephyr's* menu from the summer of 1968 featured floral paintings of native Colorado flowers—reproductions of the originals that adorned the walls of the *DZ's* first-class bedrooms. Note the railroad's message to travelers at the bottom of the menu: "Only the railroads can provide true low-cost, mass transportation." **KARL ZIMMERMANN COLLECTION**

with the American passenger train in eclipse and no one paying much attention. Railroads across the United States were petitioning the Interstate Commerce Commission for permission to discontinue passenger services both modest and illustrious, and the ICC often (though not always) acceded.

A sense of closing windows and diminishing opportunities was one of the reasons I was circling the country by rail that summer, on an itinerary that would include Penn Central's substandard *Broadway Limited*, Burlington-Rio Grande-Western Pacific's still-splendid *California Zephyr*, Southern Pacific's *Cascade*, Union Pacific's *City of Portland* and *City of Los Angeles*, and Baltimore & Ohio's *Capitol Limited*. Though I'd ridden the Burlington's Chicago-Denver route frequently on the *CZ*, headed for Salt Lake City or the West Coast, the *Denver Zephyr* was new to me. I was determined to get it into my train diary while I still could.

In Creston, it was about 11 p.m. when I strolled along my mostly silver train—fluted stainless-steel, glittering in the station lights. It was literally the last word in lightweight passenger trains, and not just because "Zephyr" begins with "z." Delivered in 1956 by The Budd Company, the *Denver Zephyr* was the last all-new consist for a long-distance train introduced in a pre-Amtrak North America. That also made it, of course, the last of a long line of *Zephyrs* that had its beginning in 1934.

"As you travel over this bountiful land of ours, may you be ever reminded of the grace Almighty God has bestowed upon us. Let us acknowledge our debt to Him with prayers of thanksgiving."

Meal Check.

Champ Cocktail, 1.15	Tomato Juice, 40	Celery Hearts, 35
SOUPS		
Chicken Broth with Rice Cup, 40; Tureen, 65	Hot or Jellied Consomme	
ENTREES		
Boneless Rocky Mountain Trout (10 oz.), Sauté Menniere	3.60	
Baked Young Chicken, Brown Rice Dressing	3.25	
Pork Tenderloin Sauté, Sauce Robert	3.40	
Roast Top Sirloin of Beef au Naturel	3.65	
Broiled Sirloin Steak (12 oz.), Button Mushrooms	3.95	
Sugar Cured Ham and Eggs	1.85	
Hot Biscuits Served with Entrees		
VEGETABLES		
Baked Potato, 45	Whipped Potatoes, 30	
Whole Baby Beets, 30		
French Peas in Butter, 30		
SALADS		
(Includes Dinner Rolls)		
Tossed Salad Bowl, Louisiana, 2.25	(Tossed Salad with Strips)	
Lettuce and Tomato Salad, 1.25	Choice of Dressing: French, Olive & Vinegar, 1000 Island, Blue Cheese or Mayonnaise	
Chicken Salad, Mayonnaise, 2.10	Crab Louis, 2.75	
Chilled Fruit Salad Plate, Cottage Cheese, 2.00		
DESSERTS		
Apple Pie, 45; ala Mode, 70	Chilled Melon (In Season), 60	
Strawberry Sundae, 55	Peaches or Pears in Syrup, 40	
BEVERAGES		
Coffee, per Pot, 35	Tea, Hot or Iced, per Pot, 35	
Hot Chocolate, per Pot, 35	Decaffeinated Coffee, per Pot, 35	
Individual Milk, 25		
Additional charge will be made for service outside the dining car. This service is subject to delay when dining car is busy.		
It will be a pleasure to serve any dish not listed that you may wish if it is available.		
Sacharin is available upon request.		

COCKTAILS	
Manhattan, Martini or Old Fashioned, 1.00	
WINES	
DOMESTIC - IMPORTED	
Champagne, 6 oz. Dom., 1.50	
LIQUORS	
Canadian Whiskey, 1.10	
Bourbon, 1.10	
Scotch, Imported, 1.20	
Beer - Ale, 50	
Complete Wine List Available	

MINOR ALCOHOLIC TAX
WHEN BUY THE DRINK
WHENBY YOU TAX FOR DRINK

MENU	
(For Children Under 12)	
\$1.50	
Fruit Juice or Cup of Soup	
Hamburger Patty	
Potato - Vegetable	
Bread - Butter	
Ice Cream	
Milk	
\$1.00	
Cup of Soup	
Peanut Butter and Jelly Sandwich	
Ice Cream	
Milk	
Parents May Share their meals with Children or Purchase Half Portions of Select Dinner Menu for Children at Half Price (Except steak).	

"Table Flowers are Colorado Carnations"

Select Dinner Menu

To Insure Prompt Service, Please Write Each Item on Meal Check
(Price applies each Entree includes Soup or Tomato Juice, Potato, Vegetable, Dessert and Beverage)

Chicken Broth with Rice Cup, 40; Tureen, 65	Hot or Jellied Consomme			
Tomato Juice Cocktail				
Relish Tray				
ENTREES				
Boneless Rocky Mountain Trout (10 oz.), Sauté Menniere	4.35			
Baked Young Chicken, Brown Rice Dressing	4.00			
Pork Tenderloin Sauté, Sauce Robert	4.15			
Roast Top Sirloin of Beef, au Naturel	4.40			
Broiled Sirloin Steak (8 oz.), Button Mushrooms	4.65			
Hot Biscuits				
CHOICE OF TWO				
Baked Potato	Whipped Potatoes			
Whole Baby Beets	French Peas in Butter			
Garden Fresh Tossed Salad — Choice of Dressing (Served with these meals, (6 additional))				
Apple Pie	Chilled Melon			
Strawberry Sundae	Peaches or Pears in Syrup			
Coffee	Tea	Iced Tea	Milk	Decaffeinated Coffee

Supper Suggestions

Boiled Shortribs of Beef, Potatoes du Jour, Dinner Salad	2.95			
Broiled Rib Lamb Chops, Baked Potato, Dinner Salad	3.75			
Double-Deck Chicken Sandwich on Toast, Garni, Potato Salad	2.35			
Coffee	Tea	Iced Tea	Milk	Decaffeinated Coffee

Employee in Charge of this Car is
J. W. Vaghy, Manager of Dining Car Service, Chicago
W. F. Burke, General Passenger Traffic Manager, Chicago

ONLY THE RAILROADS CAN PROVIDE TRUE LOW-COST, MASS TRANSPORTATION

And this 22-car *DZ* was still sharp—sparkling in both appearance and service. This *Denver Zephyr*—the 1956 version at the age of 12 in 1968—had everything an overnight train traveler could want. I sensed that it was late in the game, but I also knew that I was getting a look at a *Zephyr* experience still largely intact.

At the rear of the train was *Silver Veranda*, the blunt-end Vista-Dome parlor-buffet-observation car where we'd had cocktails, in the Colorado Room. Ahead of that were a pair of 10-6 sleepers, *Silver Terrain* and *Silver Hollow*, and a pair of Slumbercoaches, *Silver Rest* and *Silver Slumber*.

Like our sleeper, all of these stainless cars had been built for the 1956 *DZ*.

The rest of the consist I would walk by as I strode up to the head end, where four Electro-Motive E8s muttered their impatience to be off, bound for Omaha and points west. I passed two Pennsylvania Railroad sleepers with a Four Winds tour group, diner *Silver Tureen* (where a few hours earlier we'd been served lamb chops and a sirloin steak), Vista-Dome "Chuck Wagon" lounge *Silver Cup*, Vista-Dome coach *Silver Buckle*, another sleeper, and eight flat-top coaches—all buttoned-up for the night, with shades closed or curtains drawn for sleep. I hurried past another diner and a baggage-mail car, then the chanting diesels. Engineer Anderson appeared at the cab door of the lead E8 and waved for me to come up, so I knew I was expected.

A few connections made, and a few strings pulled, had led to my being invited to ride the locomotive. The invitation had come from Mary Lou Gordon, the Burlington's supervisor of passenger train services who happened to be aboard that night. She'd signed on with CB&Q years earlier as one of the *Zephyrettes*, or hostesses, aboard the *California Zephyr* and had gone on to take responsibility for those women and eventually all aspects of the railroad's on-board service. She made sure we were treated well by our sleeping-car porter and the dining-car steward; it was easy to see how she had risen in her five years in that role to be first among equals. Innocently or otherwise, she graciously perpetuated the flattering fiction that we were "personal friends of Mr. Quinn." (William J. Quinn was at that time Burlington's president.)

As I shook Anderson's hand in the cab of the E8, he introduced me to White, his fireman, who motioned for me to sit in his seat, where I'd spend the next few hours peering through the lopsided left-hand windshield. At once I was enveloped in the unique magic of a first-generation diesel-locomotive cab—the fuel-fragrant warmth, the expectant rumble of restrained power lurking behind the electrical cabinet at my back. Heat radiated from there, making the cab hotter even than the warm outdoors, though side windows were cranked all the way down to catch a breeze. The finish inside the cab was comfortably workaday and old-shoe, paint worn through in places—testimony to the fact that the locomotives had been on the road for more than a decade and a half.

Anderson leaned out the window, craning his neck to look back along his train for the conductor's highball. When it came, he acknowledged it by grabbing the dangling handle of the whistle cord, then heralding departure from Creston with two businesslike blasts of the chime horn. He kicked off train and engine brakes with his right hand; with his left he opened the throttle two notches, prodding the four units' prime movers to chortle with intimations of the 9,000 horsepower they could produce. Under Anderson's practiced hand, the *Denver Zephyr* eased gently into motion, not disturbing the patrons in the six sleepers, two slumbercoaches, and nine coaches trailing behind.

Notch by notch Anderson urged his locomotives on, causing the twin model-567B engines in each unit to whine or shout in a different voice at each step along the way. Finally he had the throttle pulled all the way back, in "run eight," and we were flying—taking every advantage of the 79-miles-per-hour track speed. Block signals loomed distantly, then flew by.

"Green," Anderson called out.

"Green," answered White in confirmation. Burlington's line across Iowa and Nebraska was often arrow-straight, but when it swung through gentle curves I'd lean out the window to watch our train arc behind me, fluted sides of most cars shimmering faintly in whatever ambient light there was in this spacious, empty country. From stylish bulldog-nosed diesels to elegant observation car carrying matched tailsigns reading "Burlington Route" and "*Denver Zephyr*," the train that was laid out for me to see remained a classic.

ABOARD THE **Burlington Route** VISTA-DOME
DENVER ZEPHYR



Westward ho! Train No. 1, the *Denver Zephyr*, streaks past a grade crossing near Aurora, Illinois, on a late afternoon in August 1961. JIM NEUBAUER

CHICAGO • DENVER • COLORADO SPRINGS

MOSTLY SILVER

RIGHT: Silver prefixes of car names on the Burlington was a tradition that began in 1936. MIKE SCHAFER

August 3, 1968, was near the end of an era—the long and complex period, some 150 years in all, when American railroads ran their own passenger trains. Amtrak would take over on May 1, 1971. The Chicago, Burlington & Quincy itself was nearing its end; in less than two years, it would be folded into Burlington Northern. Nevertheless, the Burlington Route at that time remained among the most pro-passenger of the nation's railroads.

The 22-car consist of the westbound *Denver Zephyr* that day—swollen to meet the demands of the peak travel season and the needs of the Four Winds tour group—speaks volumes about passenger railroading at the time.

The first thing it says is that plenty of people—enough to justify 19 cars with revenue space—still wanted to ride the train. At the bottom of the *Denver Zephyr's* dining-car menu was bannered the hopeful, almost truculent observation, "Only the railroads can provide true, low-cost, mass transportation." That day's *DZ* would seem to support that assertion.

Most of the substantial train was made up of stainless-steel cars built by The Budd Company, a *Zephyr* tradition from the start. They carried *Silver*-prefixed names, a tradition only slightly younger. The heart of the train—dome observation, three sleepers, two Slumbercoaches, diner, Chuck Wagon dome, and coach dome—were all original *DZ* cars. Baggage-mail *Olympus* had been built in 1948 for the *Nebraska Zephyr*. (Originally the *Twin Zephyrs* of 1936, these trainsets predated the "Silver" naming convention.) *Olympus* was shifted to the *DZ* in 1951.

Among the stainless-steel flat-top coaches, at least one—*Silver Halter*—



and possible two had been built for the *Denver Zephyr*. *Silver Larch* was a *California Zephyr* car that had begun life as a 16-section sleeper. *Silver Sword* and *Silver Shaft* had been built for the *Kansas City Zephyr* and *American Royal Zephyr*, *Silver Gleam* for the *Silver Streak Zephyr*, *Silver Chariot* for the *Aristocrat*, and *Silver Birch* as a *Zephyr* pool-service car. (The consist sheet shown here is probably in error in that coach line number DZ36 is shown as being protected by *Silver Range*, a *CZ* 10-6 sleeper; more likely, the car was 50-seat coach *Silver Rein*. Almost certainly, the yard clerk accidentally wrote "Range" instead of "Rein.") The ninth coach, at the front of the consist and most likely for local passengers, was a smooth-sided 56-seat chair car built by Pullman-Standard for Chicago & North Western's "400" fleet and sold to CB&Q in 1963—a fish out of water in this train of fluted stainless steel, although the Burlington had at least repainted it silver. Just ahead of that, right behind the baggage-mail, was diner *Silver Feast*, operating as a buffet-lounge. The two sleepers carrying the Four Winds tour were Penn Central cars, former Pennsylvania Railroad 4-compartment 2-drawing room 4-double-bedroom *Imperial Loch* and 6-double-bedroom-lounge *Henry Phipps*.

Another thing that this huge consist says, this embarrassment of riches, is that sometimes too much of a good thing can be not wonderful but problematic. A year earlier, a *Denver Zephyr* of this size typically would have been split and run as two sections, alleviating the crowding that occurred in the diner and, to a lesser extent, the domes of the train I rode.

Like a box score in baseball, a train consist list holds lots of history.

711 12 160 BN6060 LJ
CICERO 3 326P

HRD OTTUMWA
YDM CRESTON
WAM TRN CONDR BURLINGTON

NO 1 CONSIST

MTRS 43B 64 68 46A

OLYMPUS MAIL BAGG
S FEAST DINER
Q 4654 DZ44
S GLEAM DZ43
S BIRCH DZ42
S LARCH DZ41
S CHARIOT DZ40
S HALTER DZ39
S BUCKLE DZ37
S RANGE DZ36
S SHAFT DZ35
S SWORD DZ34
S CUP CHUCK
S TUREEN DINER
HENRY PIPPS FW 12
IMPERIAL LOCH FW 11
S RIDGE DZ10
S SLUMBER SC9
S REST SC8
S HOLLOW DZ2
S TERRAIN DZ1
S VERANDA CAR A

22 CAR TOTAL

END

BURLINGTON LINES
CLEARANCE FORM

To: C & N No. 1
Date: 11:37 am Aug 3 1968
Operator: Ohwell

OK 11:37 am W.S.J.

ABOVE: Among the souvenirs of author Zimmermann's trip aboard the *Denver Zephyr* on August 3-4, 1968, were the train's consist sheet, generated through the dispatcher's office in the Chicago suburb of Cicero, and a clearance form for the train at Pacific Junction, Iowa. KARL ZIMMERMANN COLLECTION

Soon, however, the meteorologic tension I'd been feeling resolved itself with startling violence, bursting into a wild prairie thunderstorm. It began with distant flashes of lightning trailed sluggishly by crackling thunder. First came the smell of ozone, then the rain—big, occasional drops, splattering on the windshield and mixing with the bugs that had splattered there already. Anderson toggled the wipers into action, and he and White shut the side windows.

Suddenly the drops were no longer occasional but a torrent, and lightning bolts zigzagged furiously, filling the cab with spasms of eerie blue light. The wallops of thunder now crashed right on the heels of the lightning, and the water flooding the windshield made the headlight's path a surrealistic, half-seen vision. With Anderson stoic, oblivious to the storm, we roared on through the rain at speed, cab jostling and lurching, air horns wailing for grade-crossings. We seemed to be rushing headlong into the unknown.

To the engine crew, this was no doubt all in a day's work—just another midnight display of Mother Nature's pyrotechnics on the prairie. To me, however, it was gripping, Wagnerian, fraught with who knew what. Twilight of the gods? Twilight of something.

Social center for the *Denver Zephyr* was the Colorado Room, located under the dome section of the train's Vista-Dome parlor-lounge observation car.

ROBERT P. SCHMIDT



Eventually I could see the glow of Omaha in the distance. By the time the E8s began nosing through the yard tracks, the storm had passed, replaced by a ghostly stillness. I struggled to recall the lines of a poem I'd recently read. It was by Carl Sandburg, who would dub Chicago a "player with railroads" in his famous poem about that city.

"I am riding on a limited express," the poem began, appropriately enough for the occasion, "one of the crack trains of the nation." When the *Denver Zephyr* eased into the Omaha station just shy of

1 a.m., I climbed down from the cab, waved thanks to my hosts (who had handed me their train orders and consist list as souvenirs), and hurried back to *Silver Ridge*, eager to tell Laurel, groggy with sleep, of my adventure. Somehow, though, my exhilaration was tempered by a sense of loss and finality. Would I ever have a ride like that again?

When our summer circle tour had ended and we were back at home, I reread the Sandburg poem, titled "Limited." It continued:

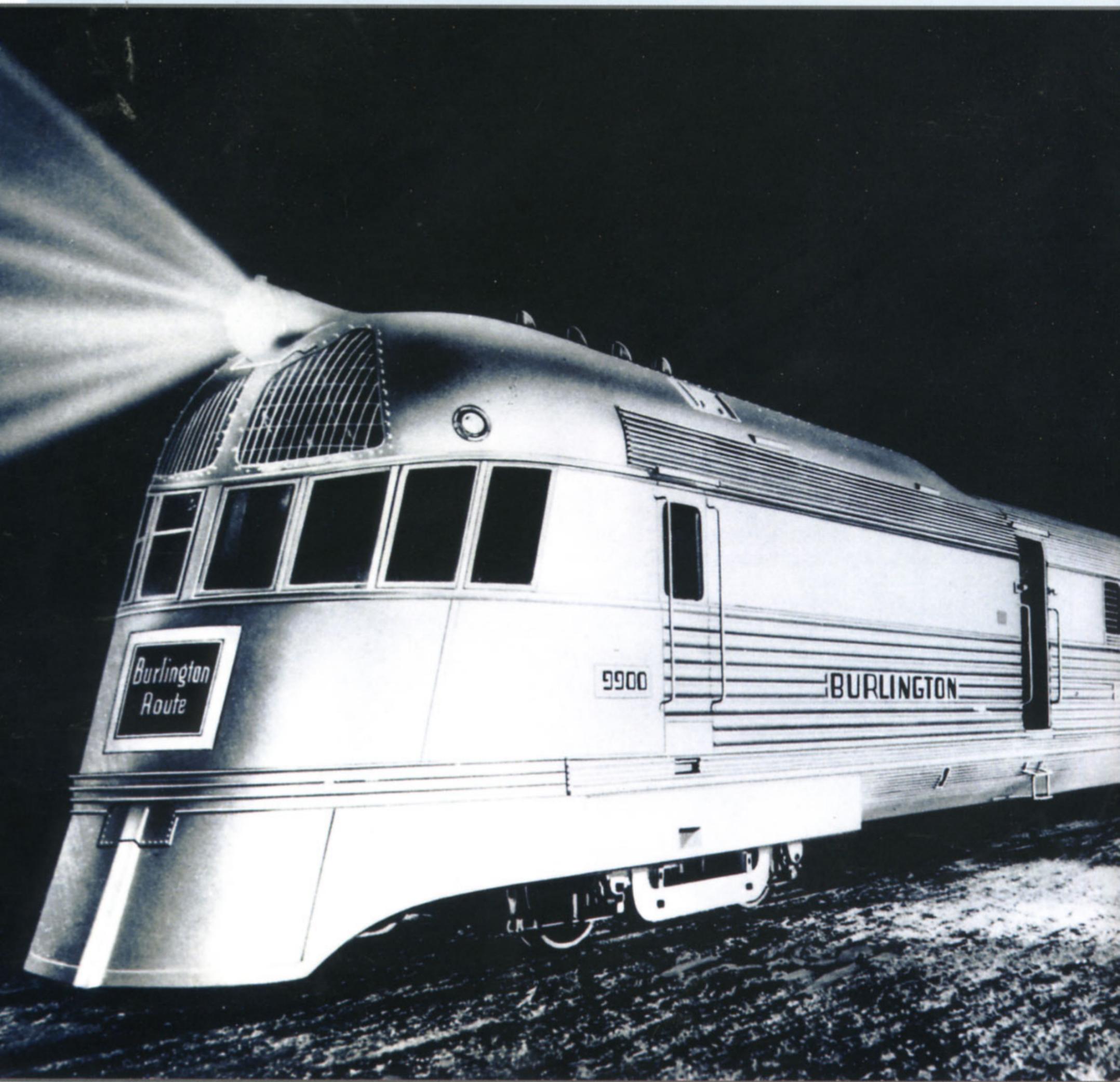
Hurting across the prairie into blue haze and dark air go fifteen all-steel coaches holding a thousand people.

(All the coaches shall be scrap and rust and all the men and women laughing in the diners and sleepers shall pass to ashes.)

*I ask a man in the smoker where he is going and he answers:
"Omaha."*

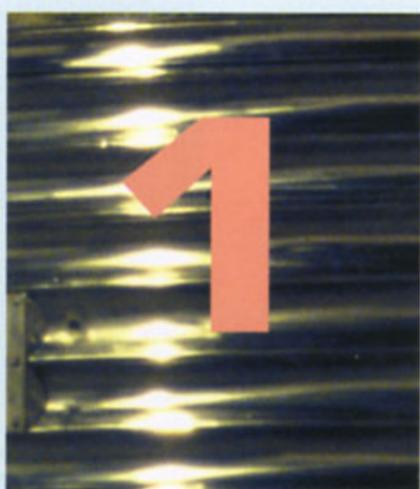
The refreshment menu from the Colorado Room featured a painting of a bouquet of wild roses and lupines. KARL ZIMMERMANN COLLECTION

A PIONEER



The artistry of the airbrush accentuates the stunning modernism of No. 9900, the original Zephyr, in this early publicity photo. The pioneering trainset looks more akin to a space ship than to the steam locomotives and standard coaches it would replace. *BURLINGTON NORTHERN SANTA FE*

IN MANY WAYS



Planning the Burlington Zephyr

In the long history of passenger railroading in America, certain dates stand out. On Christmas Day in 1830, the diminutive *Best Friend of Charleston* became the first steam locomotive to pull a regularly scheduled passenger train in the United States. On May 10, 1869, the golden spike was driven at Promontory, Utah, joining the Central Pacific and the Union Pacific and thus creating the nation's first transcontinental railway. On May 1, 1971, Amtrak assumed the operation of most intercity passenger trains, virtually ending the era of the privately operated passenger train in the United States.

Another date to remember is May 26, 1934, when a little silver train owned by the Chicago, Burlington & Quincy Railroad streaked non-stop across the prairies from Denver to Chicago. This record-setting sprint, made in just over 13

hours, covered 1,015 miles at an average speed of 77.6 miles per hour. The three-car streamliner departed from Denver Union Station before sunrise. Chicago arrival was not at that city's Union Station, where CB&Q trains normally ended their journeys, but at the lakefront site of the Century of Progress Exposition, then in its second year. At 8:09 p.m., the little train swept onto the stage where Edward Hungerford's transportation pageant, "Wings of a Century," was underway. This ceremonial arrival was much anticipated, hugely dramatic, and (as a result) well chronicled.

Burlington's train was called the *Zephyr*, meaning west wind, and on that May day it surely was a wind from the West. When the *Zephyr* breezed into Chicago nonstop from Denver, it irrevocably changed the direction of passenger railroading in the United States.

Bringing this triumphant little train into being took a very particular set of social and economic circumstances, the fortunate alliance of three outstanding companies, and the cooperation of a number of uniquely talented individuals. The three companies were the Chicago-based CB&Q; the Edward G. Budd Manufacturing Company, an auto-body and fledgling railcar builder established in Philadelphia in 1912; and the Electro-Motive Corporation, a subsidiary of General Motors initially based in Cleveland and, from 1934 on, at LaGrange, Illinois, in suburban Chicago. Like three streams rising in distinctly different and distant watersheds, these companies came to a confluence in a particular landscape, then flowed commingled, carrying the *Zephyr* project forward with a strength each lacked singly.

The Burlington Route was not among the nation's greatest passenger-carrying railroads, megasystems like the Pennsylvania Railroad and the New York Central. In fact, the "Q" was relatively modest in size; the closest thing it had to a long-distance passenger-rich route like New York–Chicago (on which PRR and NYC competed fiercely) was Chicago–Denver. On this route, the Burlington faced an array of competition from the Rock Island, the Santa Fe, and the joint operations of Chicago & North Western–Union Pacific. Burlington's strength lay in more regional routes such as Chicago–St. Paul/Minneapolis, and Chicago–Omaha, although the Q faced stiff rivalry in those routes with North Western, Milwaukee Road, and Rock Island.

Nonetheless, Burlington was a player in the long-distance passenger business in partnership with the "Northern Lines"—Great Northern and Northern Pacific, which controlled the CB&Q through 97-percent stock ownership. With an assist from the Spokane, Portland & Seattle (also controlled by GN and NP), trains originating in Chicago on the Burlington could reach Seattle and Portland. (In 1970, all these railroads were merged to become Burlington Northern, finally fulfilling a vision held by GN's James J. Hill, the "Empire Builder," generations earlier.) Initially, however, the aspirations for the *Zephyr* had nothing to do with reaching the West Coast. They were far more modest.

On January 1, 1932, Ralph Budd, the "godfather" of the *Zephyr*, took the helm of the CB&Q. Budd, who was among the railroad industry's most accomplished executives, was born in 1879 in Waterloo, a small industrial city in Iowa. Trained in civil engineering, he worked early in his railroad career as draftsman and then assistant engineer for the Chicago Great Western. In 1916 he became a director of the CB&Q and in 1919 president of the Great Northern, where he had worked since 1912, when Hill had invited him to become assistant to the president.

Budd was a hands-on railroader who also had worked as division engineer at the Rock Island and chief engineer for the Oregon Trunk Railway and then the OT's parent, the SP&S, before going to GN. By the time he took the reins of the Burlington, he was well-known and well-respected in the railroad world—and knew railroad engineering backward and forward.



A Pennsylvania Railroad motorcar stands at Trenton, New Jersey, awaiting passengers from a connecting steam-powered mainline train out of New York City on November 28, 1953. This elderly Brill Company motorcar will take transferring passengers over a secondary line to Camden, New Jersey. Dating from the early twentieth century, motorcars were an early solution to providing economical passenger, mail, and express service along lightly populated lines. Such gas-electrics were the precursor to the first diesel-electric streamliner, Burlington's *Zephyr* 9900. JOHN DZIOBKO



His arrival at the Burlington came in an inauspicious season for the nation's railroads, and for industrial America in general. Triggered by the stock-market crash of October 24, 1929, the Great Depression by 1932 had left 13 million Americans—about a quarter of the workforce—unemployed. In 1930 railroad passenger services overall had begun recording annual losses, and rail revenues in general would plummet to pre-1915 levels. Between 1920 and 1933, passenger-miles—the aggregate number of miles traveled by rail passengers—shrank from 47 to 16 billion. Conditions on the Burlington were no better than elsewhere. For 1932, net income fell to just over \$1.5 million from over \$13 million the previous year—a drop of 89 percent. Just five years before that it had been \$26 million.

Budd saw few opportunities in that climate for Burlington to build its freight business, so he took a good look at the passenger side—which in itself had been in decline for more than a decade. In fact, it was not just the Depression that afflicted passenger railroading in the early 1930s; it was also the growing ascendancy of the competing modes—road and air—which had benefited even more than railroading from the boom times of the Roaring Twenties. In particular, automobile ownership had soared with prosperity, and the federal government was already in the thrall of the highway-builders. Ironically, the railroads for a time totally misjudged the impact that better roads would have on their business, believing that trucks would be feeders of freight to the rails, rather than an eventually lethal competitor for long-haul business.

So, in 1932, Burlington's new president saw his railroad's passenger business in decline, with no shortage of money-losing routes. He saw a population with far fewer dollars available for travel, and with a propensity in any case to spend what was available on cars or airplanes. He saw a railroad industry whose passenger trains were traditional and drab—dark green coaches, black locomotives. They

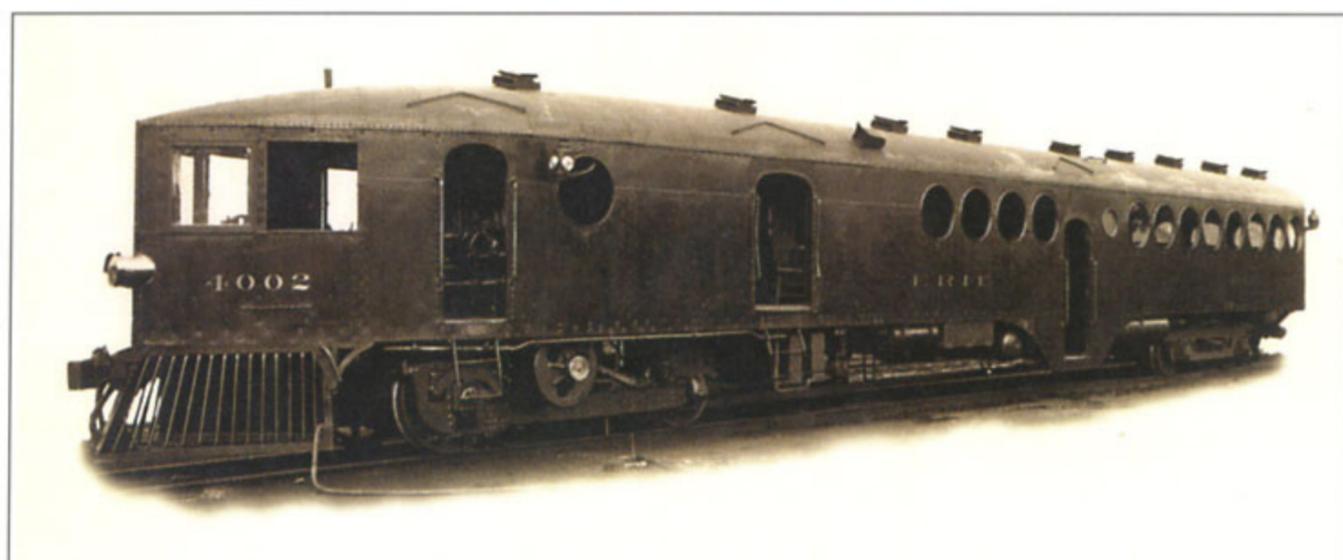
seemed part of the old, failed order—part of the problem, not a solution. What was needed, Budd thought, was some flash and dazzle, along with some economies—and perhaps some extra speed, an attraction of the fledgling air industry.

Streamlining was just the thing to provide all that. Though as a concept it was far from new, the growing centrality of the airplane in the transportation world (and with it the renewed focus on aerodynamics), plus the arrival on the scene of the industrial designer, gave it a boost. As the 1920s

ended, people like Raymond Loewy, Henry Dreyfuss, Otto Kuhler, and Norman Bel Geddes were founding the profession of industrial design, dedicated to making machines, appliances, buildings, and vehicles look better and work better.

The aesthetic these designers promoted was typically sleek, smooth, clean, streamlined. Dreyfuss spoke of "cleanlining." Another descriptive phrase was *Style Moderne*, from the French. Also French-derived is the now-popular term "Art Deco," which comes from the 1925 *Exposition Internationale des Arts Decoratifs Industriels et Modernes* in Paris (but didn't gain currency until decades later).

Art Deco, a style that throughout the 1930s and later (it returned to vogue in the 1980s and 1990s) was important in both in that the graphic and industrial design, is complex and elusive of definition. It is, for one thing, a modernization of classic themes and styles such as Greek, Roman, and Egyptian. On the other hand, it is expressive of speed and the machine age, making it a natural for railroading. It is both shape and ornamentation.



McKeen Motor Cars, the earliest railroad streamliners to be produced in quantity, predate the *Zephyrs* by nearly three decades. Seventy feet long and powered by a 200-horsepower gasoline engine, No. 4002 was one of a trio of McKeen cars delivered to the Erie Railroad. It arrived in 1909 to work the branch line from Salamanca, New York, to Bradford, Pennsylvania, surviving until 1922. Coincidentally (or perhaps predictably), Edward G. Budd was involved with the McKeen cars of this era. Hale & Kilburn, the Philadelphia firm where he was plant foreman at the time, supplied exterior sheathing, seats, and interior trim. DAN BIERNACKI COLLECTION, COURTESY ROBERT E. MOHOWSKI

Streamlining was new, bold, efficient, fast. For things that moved—ships, planes, cars, trains—wind-tunnel testing proved aerodynamic efficiency. For things that didn't—refrigerators, toasters, vacuum cleaners—the sleekness arguably made them easier to clean and maintain, and certainly more pleasing to look at.

This was the state of the design world at the end of September 1932 when, less than a year into his presidency, Ralph Budd visited the Edward G. Budd Manufacturing Company plant to take a ride on a gas-electric railcar, a type of self-propelled (versus locomotive-hauled) vehicle that had been around for decades and already had proved its worth in providing low-cost service on low-density routes. However, Budd's railcars were different from the boxy, heavyweight "doodlebugs" that had been standard issue—mostly Electro-Motive—since 1924, powered by Winton engines (first gasoline and later distillate) linked to General Electric generators and traction motors.

That a second key player in the birth of the *Zephyr* would also be named Budd is a curious coincidence, though Edward was only distantly related to Ralph by blood. Both men were giants in their fields, however, and highly respected—another kind of kinship. Edward Budd was born in 1870 on Delaware's Eastern Shore, of old-line, waspy, well-established parents. His first job was as a machinist's apprentice at William Sellers & Company in Philadelphia, the city that had become the center for iron and steel fabrication in the East. Located adjacent to the Baldwin Locomotive works, Sellers manufactured railway equipment. In 1892, Budd was hired by Bement, Miles & Company, where he moved through the ranks before leaving in 1897, with others, to found the American Pulley Company. There he began to learn the virtues of thin pressed steel.

In 1902 he joined Hale & Kilburn Manufacturing Company as plant foreman. Also a Philadelphia firm, Hale & Kilburn had a longstanding expertise in furniture manufacture, which had come to include railway seats and other equipment. Clients included the Pullman Company, J. G. Brill, and American Car & Foundry. In 1904, Hale & Kilburn introduced the pressed-steel railway car seat—some with welded pedestals, based on a Budd patent (over his career, he would hold more than 100).

All-steel railway coaches had long been promoted in some quarters for their safety, but the railroad industry, known to be conservative in general, was slow to make the transition. Companies were loath, most likely, to render their existing rolling stock obsolete. Some believed that steel cars might attract lightning bolts. (To allay this fear, certain early steel cars had exteriors scribed to resemble wood.) A maverick of the period, the Pennsylvania Railroad bucked such stoic tendencies and announced that, for safety, only steel cars would be used through its new Hudson River tunnels into Manhattan, and that the railroad accordingly expected to buy 1,000 steel coaches and 500 Pullmans. By 1907, when PRR ordered the first of these, Edward Budd was already working to supply pressed-steel panels and other components.

But it was his prescient sense that things were changing in another sector of the transportation world—automobiles—which led Budd to leave Hale & Kilburn in 1912 (taking with him 13 employees) and found the Edward G. Budd Manufacturing Company. For the next decade and a half, during which time Budd's workforce swelled from the original 13 to 4,669, automobile and truck bodies and components were the firm's focus. During this period, Budd entered into some collaborations with Michelin & Cie, the French tire producer, and in 1928 he learned of the development in Germany of stainless steels.

When the Depression hit, dragging down the automobile business, and Edward Budd sought to diversify, he looked to railroading and self-propelled railcars, fabricated of stainless steel. The conundrum here was how to bond that material to itself without breaking down the surface of



Zephyr 9900—renamed *Pioneer Zephyr* in 1936 to differentiate it from newer *Zephyrs* being implemented—looks right at home in front of Chicago, Burlington & Quincy's noble, Beaux Arts-style depot at Omaha. It's 1960. For more than a quarter century, Burlington's 9900 (which would always retain that number despite the name changes) would provide public transportation over a number of different routes in the heart of Burlington country. The power car now has a menacing-looking oscillating Mars headlight, added in the 1940s. JIM NEUBAUER

the metal (as a traditional weld would do), opening it to corrosion. Inspired by a bolt of lightning, the Budd Company's Col. Earl James Wilson Ragsdale solved the riddle.

In its July 1, 1933, issue, *Railway Age* ran a series of articles by various suppliers of railroad equipment under the general title "Research in Many Fields Contributes to Equipment Development." Peter Parke, chief executive of The Pullman Company, had a piece titled "Passenger Car Developments," but Edward Budd's "Railroad Equipment of High Tensile Steel" was more significant and an excellent introduction to his company's preeminence in fabricating railway passenger cars of stainless steel.

"Some years ago," he wrote, "an alloy of iron-chromium-nickel was produced by the Krupp Company and widely introduced as being stainless, first in cutlery and then for ornamental purposes. It is possible that our company was the first to recognize the great value of this material for structural purposes.

● As a color for the exterior of the new train, canary yellow was selected after exhaustive tests. It was chosen as an additional safety measure. Canary yellow can be seen for a greater distance than any other color and its blended combination with golden brown trim constitutes one of the outstanding features of the train.

SUPER SPEED—WITH SAFETY—AND COMFORT

Throughout its relatively brief career, Union Pacific's M-10000 was inevitably a foil to the original *Zephyr*. Though in some ways the three-car trainsets were very similar, in other respects they were very different. One striking difference was exterior appearance, with the *Zephyr*'s unadorned stainless-steel contrasting dramatically with the UP's riveted, colorfully painted train. This early brochure for the M-10000 points out that "canary yellow," its predominate color, was chosen for visibility and thus safety. Aircraft engineers called a shape that cut down on wind resistance a "streamline"—hence the term "streamliner."

KARL ZIMMERMANN COLLECTION

"We first used this material in the manufacture of airplane parts," Budd continued. "It became necessary to develop a method of uniting these sections other than riveting and, since conventional welding procedures destroy the stainless and other characteristics of the material, there has been developed within our company a process known as 'Shotweld'-ing. By this process high tensile steel may be welded together with an efficiency and degree of reliability never attained or attempted by riveted construction."

There, early in the game, from the horse's mouth, is an explanation of how Budd's company developed a technique that would make it the greatest passenger carbuilder of the streamline era. The weld had to be completed in a fraction of a second—a 1/60th to a 1/120th—and accurately recorded on a tape to assure consistency. Without a doubt, Budd products would stand the test of time—a number of cars built in the 1950s were still in operation as of the new millennium—thanks to this unique, patented process.

Mining the company's earlier relationship with Michelin, Budd in September 1931 signed an agreement with Jules Haurvette-Michelin to develop and sell the existing rubber-tired "Micheline" railcar in the United States. The following year, Budd introduced Shotwelding to railcar-building by constructing a single-unit, rubber-tired demonstrator car,

nicknamed the "Green Goose." Powered by an 85-horsepower Junker diesel, his 12-wheel car could carry 40 passengers. Immediately thereafter, Budd sent a 30-passenger version called the *Lafayette* to France, also as a demonstrator, then built a production car for the Reading Company and two for the Pennsylvania Railroad. The pneumatic tires for these cars were actually produced by Goodyear under license from Michelin.

Even more interesting was the *Silver Slipper*, a two-car train delivered to the Texas & Pacific by Budd in October 1933 for service between Fort Worth, Texas, and Texarkana, Arkansas. The power car contained mail and baggage compartments along with two 240-horsepower American-LaFrance gasoline engines and Westinghouse generator sets. The power car wasn't rubber-tired, but the air-conditioned, 76-seat trailer (which contained a "Jim Crow" section to separate the races, a common practice in that time and place) was. Although the *Zephyr* and Union Pacific's M-10000 typically vie for the title of "first streamliner," the nod could actually go to T&P's No. 100—in spite of the fact that its propulsion system proved unreliable and the train lasted less than a year.

Actually, railroad streamlining has a history stretching back many decades beyond the 1930s. In 1865, Reverend Samuel R. Calthrop, a Massachusetts minister as well as inventor, sketched an "air-resisting train." Although he was granted a patent for this primal streamliner—a locomotive, tender, and single coach within a ship-like shell tapered at both ends—nothing came of it. In 1900 the Baltimore & Ohio built (and, disappointed with the results, soon dismantled) a test train called the "Windsplitter," with a wedge-shaped rear end.

However, the most interesting early streamliners were the McKen motorcars. In 1904 William R. McKen, Union Pacific's superintendent of motive power and machinery, was challenged by E. H. Harriman, who controlled the UP, to do something about money-losing branchline passenger trains. Harriman and McKen agreed that the key might be the new internal-combustion engines gaining popularity on the highways. Given his marching orders, McKen completed the

UP's first motorcar, the M-1, in March 1905. Shortly after that, Harriman set up McKen as the independent McKen Motor Car Company, with a plant on UP property at Omaha. By 1917 the firm had built 152 cars, most for Harriman roads, chiefly UP and Southern Pacific.

The McKen cars were ultimately a failure, thanks to the crankiness of their motors, particularly their manual transmissions. They were, however, stylish and visionary, with wedge-shaped noses reminiscent of a ship's prow. (McKen thought this air-flow design would cut wind resistance, but how significant that could have been on the low-speed branch lines for which his cars were primarily intended is open to question.) Most McKen cars had portholes for windows, giving them a unique appearance and furthering the ship analogy.

Like so many stories, this one has an unsurprising circularity. For the sheet metal exterior sheathing, seats, and interior trim for his motorcars—some of them two-car branchline trains—McKen in 1908 had turned to none other than Edward Budd and Hale & Kilburn. In addition to their steel construction, the McKen cars forecast the *Zephyr* in at least one other significant way. On some models, the rounded, windowed rear sections ringed with chairs were uncannily like the *Zephyr's* parlor-observation cars, built some two decades later. Bridging these two was the similar smoking area at the rear of T&P's *Silver Slipper*, delivered by Budd just a year ahead of the *Zephyr*.



Number 9900 was constructed at Budd facilities—initially in Philadelphia and later at nearby Red Lion, Pennsylvania—as were all the *Zephyrs* that would follow. Here the roof assembly of narrowly fluted stainless steels is being lowered into place. "Shotwelding," or electric spot-welding, with no foreign material introduced, was the technique that would make Budd the preeminent carbuilder of the streamliner era that was just beginning.

BURLINGTON NORTHERN SANTA FE



As the original *Zephyr* takes shape, a Budd worker applies a Shotweld to the carbody. The thick cables supply the brief burst of high voltage that will fuse the stainless steel.

*BURLINGTON NORTHERN
SANTA FE*

When Ralph Budd in the fall of 1932 went to the E. G. Budd Company's facilities and rode aboard the Green Goose, he was deeply impressed with the Shotweld process but, it seems, presciently unimpressed by the rubber tires that would ultimately prove a frustrating fiasco for Edward Budd. (Budd traded the foreign patent rights to Shotwelding to Michelin for North American rights to their wheel patents, which involved inflated rubber tires with metal flanges that allowed them to run on standard tracks. This proved an unwise move, as the concept of rubber-tired railcars died with the *Silver Slipper*, not to reemerge until decades later on various metro systems, including Paris and, in North America, Montreal, Quebec.)

Ultimately, Ralph's September visit with Edward (it was their first meeting) led to the Burlington's ordering a "high-speed, light-weight streamline passenger train" from Budd—the train that would later be dubbed the *Zephyr*. As built, it would be three cars long, including the power unit, and measure 197 feet. It would weigh about 100 tons, just

slightly more than a single standard or "heavy-weight" steel passenger car. It would be articulated, with the cars riding on shared trucks (wheel assemblies), reducing weight and enhancing speed—important, since the contract between the Budds called for speeds of 100 miles per hour.

In addition to specifying the all-important Shotweld construction, the contract wisely called for conventional steel wheels, eschewing the rubber tires that would soon to be judged a failure. In June 1933, the final critical piece was put in place when Burlington sent a purchasing order to Electro-Motive for a 600-horsepower Model 201-A diesel power plant for the new train. This decision would prove at least as brilliant as the choice of Budd and Shotwelding, for diesel power was on the cusp of revolutionizing railways. Opting for a diesel prime mover over the already available distillate engine might slow the project down by a month or two, since a practical, compact diesel engine was still in development at EMC. Ralph Budd knew this, having been warned by EMC president Harold L. Hamilton, but Budd made the

right choice, though it allowed UP's distillate-powered M-10000 the distinction of being the first lightweight streamliner.

The *Zephyr* and the M-10000 are inevitably and appropriately lumped together as the prototypical streamliners, appearing within months of each other as they did. In many ways they were identical, or nearly so, in design and intent, but in other ways they were starkly different. Each spawned a famous fleet of trains, and the two fleets grew in similar ways, although with distinct aesthetics clearly linked to the two little progenitors.

Like the *Zephyr*, the M-10000—christened *The Streamliner* when it entered revenue service, a name destined to become generic—was a diminutive, three-car articulated trainset, designed more for fleetness than luxury and initially intended for high-speed, 24-hour Chicago–West Coast trips. (As built, the M-10000 included a fourth car, sleeper *Overland Trail*, which was removed before the train went on tour.) Passenger capacity was 121, substantially more than the *Zephyr*'s 72. At 124 tons, it was a bit heavier. The designation M-10000, which became widely known, followed in the UP's numbering sequence, with "M" indicating "motor-powered," that began back in 1905 with McKeen's M-1.



At the Budd plant, in April 1934, No. 9900 poses for what could be its first portrait (and there would be many, many more to come) as a completed train. BURLINGTON NORTHERN SANTA FE

Union Pacific's streamliner was designed (in collaboration with UP personnel) and built by Pullman-Standard Car & Manufacturing Company. Fabrication was of smooth aluminum panels, which completed a pleasingly competitive paradigm that would last through the years of the streamliners: Budd versus Pullman-Standard, unpainted stainless steel versus painted aluminum or other high-tensile sheet metal. Diesel versus distillate was no contest, though. In fact, the M-10000 was eventually converted to diesel.

Both stainless steel and aluminum had three times the tensile strength of carbon steel, the existing standard. The resulting lighter construction allowed for higher train speeds, greater fuel economy, and less track wear. On the other hand, these high-tensile metals were hugely more expensive than carbon steel, so—even though less material was needed in construction—the economies of their use took time to realize. Eventually, though, the greater durability of Shotwelded stainless steel in particular would easily trump the initial lower cost of carbon steel.

As Budd had its Michelin experimentals and the ultimately embarrassing *Silver Slipper*, which was unceremoniously scrapped and expunged from Budd's publicity materials, so Pullman had its *Railplane*, an experimental railcar built in 1933 in collaboration with the Stout Engineering Laboratories. (William B. Stout was the aeronautical engineer who designed the Ford Tri-Motor, a plane that, with its fluted siding, was actually more reminiscent of the Green Goose than *Railplane*, whose nickname "Hot Dog" couldn't be considered flattering.) True to its official name, this one-of-a-kind, 50-passenger railcar with tubular frame looked a good deal like a wingless airplane. It weighed just 12.5 tons—or 500 pounds per passenger, only a tenth as much as a conventional steel coach.

Railplane was exhibited at the 1933–1934 Century of Progress Exposition, where eventually it would rub shoulders with its successor, the M-10000, as well as its competitor, the *Zephyr*. Along the way, it caught the attention of W. Averill Harriman, then president of the UP, who was intrigued enough to promote the development of the M-10000. It had been his grandfather, E. H. Harriman, who 25 years earlier had sponsored William McKeen's gas-electrics—the M-1 and many of the "M's" that followed.

The M-10000 was a design collaboration involving Stout, Pullman-Standard's in-house engineering staff, and UP personnel led by Everett E. Adams. The spare but elegant interiors of this first streamliner, as well as later trains in the fleet, were designed by Averill's wife, Marie, who ran a New York City art gallery. The walls featured varying shades of blue, ranging from near white to deep ultramarine, separated by horizontal bands of polished aluminum.

Viewed with hindsight, the differences between the *Zephyr* and the M-10000 may outweigh the similarities. For openers, they looked very different from the outside. The *Zephyr* was a silver streak, all shiny in stainless steel, smooth (with its welded construction), sleek (thanks to the power car's "shovel-nose" slant, 23 degrees from vertical, which would be replicated throughout the first generation of *Zephyrs*), and—as a result of its horizontal fluting—speedy-looking.

The M-10000, on the other hand, was colorful, dominated by the Armour yellow still worn by modern-day UP locomotives, seconded by leaf brown (later replaced in the UP color scheme by gray), and banded in red. Its bulky nose, with turreted cab atop and automobile-like grille, was fierce—even military—in appearance, an impression seconded by the



Both the CB&Q and the Edward G. Budd Manufacturing Company realized that, in the first *Zephyr* and those that would follow, they had trains of considerable potential interest to the public. Thus they were aggressive in finding creative and newsworthy ways to portray their revolutionary new streamliners. Among the earliest was this stunt where ten Budd workers wearing tank-style sleeveless shirts boldly lettered "E. G. Budd" and a boy wearing what appears to be a bulldog costume tow 9900 along Reading Company tracks at Manville, New Jersey, on April 17, the day before its christening in Philadelphia. The publicity ploy illustrated the train's lightness as well as the smoothness of its roller-bearing trucks. *BURLINGTON NORTHERN SANTA FE*

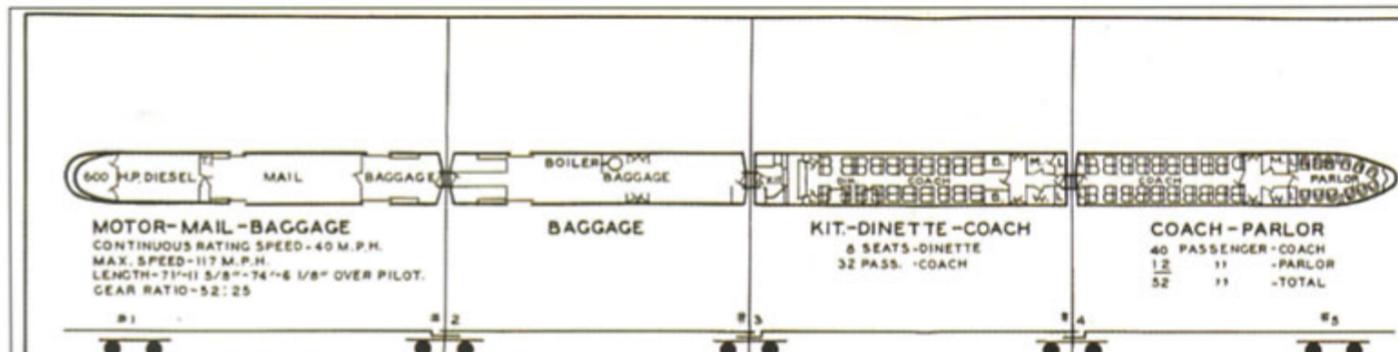
riveted skin. Its aerodynamic shape was wind-tunnel tested, *de rigueur* in those early days of streamlining. The train's tapered fishbelly design and reduced height—11 feet, or 2 feet lower than standard—made the interior less spacious than aboard traditional heavyweight coaches. The M-10000 was willing to concede a certain degree of luxury for speed, as was the *Zephyr*—and as did the airplanes of the day. . . and those that would follow, for that matter. In the early 1930s, planes typically flew at only 150 miles per hour. Since the M-10000 and the *Zephyr* were designed to hit 100, their entering this speed competition had some credibility.

Beyond the basic decisions, the Burlington largely left the overall design of the *Zephyr* up to Budd personnel. Although the Chicago architectural firm of Holabird & Root also consulted, it apparently served more as Burlington's watchdog than significant design partner. Holabird was a personal friend of Ralph Budd's. Since the Budd Company was brand-new to railroad carbuilding, the Burlington president no doubt felt more comfortable with someone he knew sitting in as planning progressed.

Most responsible for the train's exterior design was the Budd Company's Albert Dean, fresh out of the Massachusetts Institute of Technology, Class of 1931. Albert's older brother Walter (M.I.T., 1928), also at Budd, worked on the power plant and running gear. Edward Budd was happy to acknowledge that William McKeen's motorcars, with which he had been involved some 25 years earlier, laid some of the groundwork for the *Zephyr*.

Also involved in the *Zephyr's* design were architects Paul Philippe Cret and John Harbeson, outside consultants who would play a major role in the interior design of virtually all of Budd's trains through the years. A Frenchman who came to this country shortly after the turn of the last century, Paul Cret was dean of the University of Pennsylvania's School of Architecture and head of the Philadelphia architectural firm of Harbeson,

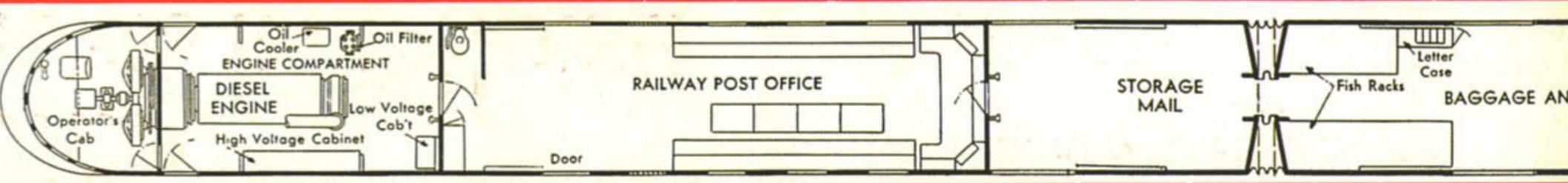
BELOW: The specification sheet and its diagram dates from February 1949, well into the career of the train by then known as the *Pioneer Zephyr*. The four-car consist includes a kitchen-dinette-coach delivered by Budd in 1938, raising the seating capacity to 92 (including eight places in the dinette section). Right below the diagram proper is a schematic rendering of the trucks, indicating those three that straddle pairs of cars. This articulation had numerous advantages, including weight reduction, enhanced riding comfort, easier passage between cars, and elimination of some of the noise and bumping inherent in traditional knuckle couplers. The big disadvantage was lack of consist flexibility. JOE WELSH COLLECTION



PIONEER ZEPHYR					
CONSIST SUMMARY					
TRAIN CAR NO.	TYPE CAR	WEIGHT OF CAR - LBS.		PASSENGER CAPACITY	
		READY TO RUN	NORM. MAX. LOAD	REV.	NON-REV.
1	MOTOR-MAIL-BAGGAGE	100,800	104,900	0	0
2	BAGGAGE	55,600	80,830	0	0
3	KITCHEN-DINETTE-COACH	64,900	82,250	40	0
4	COACH-PARLOR	56,700	62,800	52	0
TOTAL		310,300	380,300	92	0
TOTAL NORMAL MAXIMUM LOAD OF TRAIN = 380,300 [#] = 766 LBS. PER H.P.					
TOTAL WEIGHT OF TRAIN, READY TO RUN, = 310,300 [#] = 647 LBS. PER H.P.					

TRAIN NO. 9900	NAME - PIONEER	CAR NO. 505	500	570		
HORSEPOWER	600	TYPE CAR	BAGGAGE	DINETTE-COACH	COACH-PARLOR	
TRAIN CAR NO.	1	2	3	4		
WEIGHT ON FRONT TRUCKS	WEIGHT ON REAR TRUCKS	PASSENGER CAPACITY	0	40 REV.	52 REV.	
92,300	52,940	WEIGHT OF CAR LIGHT - LBS.	59,350	54,760	32,130	
100,800	55,600	WEIGHT OF CAR READY TO RUN, LBS.	64,900	56,700	32,500	
104,900	80,830	WEIGHT OF CAR NORMAL MAX. LOAD LBS.	82,250	62,800	37,250	
LENGTH OF CAR COUPLED		74'-6 1/2"	58'-8"	64'-0"	64'-0"	
AXLE SIZE		#1X6"X11"	#2-6"X11"ARTIC.	#3-6"X11"ARTIC.	#4-5 1/2"X10"ARTIC.	#5-4 1/4"X8"
FUEL OIL	GALS. 600	COLOR SCHEME				
LUBRICATING OIL	GALS. 80	BUILT BY - BUDD				
COOLING WATER	GALS. 140	YEAR BUILT - 1934				
HEATING BOILER - LBS./HR.	500	BUILDER FLOOR PLAN NO. BUDD SK-5840				
BOILER WATER - GALS.	250	BUDD SK-13799				
BOILER WATER - GALS.	250	BUDD SK-5840				
BUILDER FLOOR PLAN - BUDD SK-5840						
YEAR BUILT	1934					

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NO. 92276 FILE P-1502-10 FEB. 2 1949



Hough, Livingston & Larson. When the Budd Company—then novices in railroad carbuilding—knew help was needed with the aesthetic aspects of its new train, it turned to this local firm. Cret is generally given the credit for narrowing the fluting on the car sides from the broader look of the Green Goose and *Silver Slipper* to the narrower gauge that appeared on the original *Zephyr* and all those that followed, to say nothing of thousands of other Budd-built passenger cars. Beyond that, his participation in the *Zephyr* project apparently was minimal. Largely responsible for the train's interior styling was John Frederick Harbeson, a principal in Cret's firm. It was Harbeson who would go on to design more than 30 streamliners for Budd, many of them *Zephyrs*.

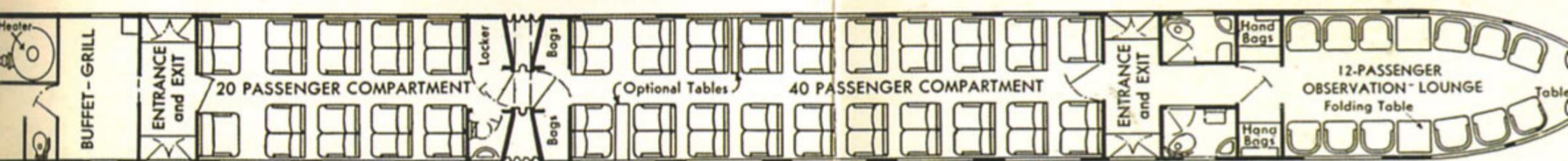
Harbeson's and Cret's contributions were basically cosmetic, however. Decisions about the basic shape and construction of the train were made by the Deans, Ragsdale, Budd, and other in-house personnel at his company. The *Zephyr's* articulation reduced its weight by eliminating two trucks and also made it possible to lower its center of gravity, both important features for a train whose calling card would be speed. Another benefit was that the elimination of slack between the cars made the ride more comfortable. Like those of the M-10000, the *Zephyr's* coaches would be lower than standard, but they would not taper in at the top as the UP train's did, so they would feel more spacious.

In creating the *Zephyr's* famous shovel-nose shape, rounded observation end, and skirted wheels, Albert Dean drew on a variety of previous designs, both North American and European. Twenty years earlier, Wason Car Company in Massachusetts had created motorcar bodies for General Electric with rounded noses much like the *Zephyr's*. McKeen's cars, later motor cars from Brill, and Budd's own Green Goose and *Silver Slipper* all provided some degree of inspiration.

The allocation of interior space within the *Zephyr's* 197 overall feet was driven by the market for which the train was intended. For its initial route, Ralph Budd and his colleagues would choose a passenger service that was losing money but for political and/or governmental regulatory reasons couldn't easily be discontinued. The endpoints had to be close enough for the train to make at least one daily round trip, since (initially, anyway) there would be only one *Zephyr*. This pointed to service along a relatively unpopulated route where the small, fixed consist would not be a detriment and where mail and express might be expected to account for a good deal of the train's revenue. Thus Burlington specified a train with a Railway Post Office compartment, space for 25 tons of baggage and express, and coach seating for approximately 70 passengers.

As built, the power car contained a large RPO section and separate space for storage mail; the second car housed a baggage and express section, a buffet-grill, and coach seating for 20 passengers; and the third car featured a 12-seat observation parlor section along with coach seating for 40. Meals would be prepared in the buffet and served to passengers at their seats on folding trays and tables. The motivation for the *Zephyr's* creation was in large part economy; it was, after all, to be assigned to a money-losing route serving a largely rural region populated by residents who had little discretionary income. Though advertised as a forward-looking enhancement, this type of food service was really about saving money,

The lower floor plan shows the original *Zephyr* as built, with a seating capacity of 72. The large amount of space dedicated to the Railway Post Office and storage mail and baggage and express sections reflect the service for which the train was intended—a secondary route, where mail and express would be an important revenue source. ROBERT P. SCHMIDT COLLECTION





since conventional dining cars had long been (and would remain) a universal source of red ink for railroads.

All told, then, less than half the three-car trainset's total length was devoted to passenger accommodation, and a gratifyingly small portion of it was taken up by the engine compartment. It was gratifying because, as diesel technology had evolved over four decades, size and weight were the hurdles. The Winton 201-A model that rode forward in the *Zephyr's* power car was the first diesel engine that was small, light, and mighty enough to successfully power a high-speed train. It was placed aboard Burlington's *Zephyr* at the very earliest moment of its ripening.

Because the *Zephyr's* distinction was that it was destined to be the first successful over-the-road, high-speed *diesel-electric* train, a brief overview of "diesel-electric" propulsion is in order. Dr. Rudolph Diesel, a brilliant German engineer who disappeared mysteriously at sea in 1913, had patented the diesel in 1892, though it took him five more years to build a successful model. Unlike gasoline and distillate engines, in which the fuel is ignited by electric spark, the diesel is a compression-ignition engine, meaning that the compression itself in the cylinder ignites the fuel. Inherently high-compression, a diesel engine has far more power potential than gasoline, and is more economical. (Gasoline is a highly refined petroleum product; diesel significantly less so. Distillate fuel lies between gasoline and diesel in the spectrum, but—like gasoline—requires spark ignition.)

The evolutionary key to making the diesel engine workable in railroad applications was shrinking the weight-to-power ratio and integrating it with electric traction motors, which are actually what make a diesel-electric locomotive move. Traction motors, which are usually directly linked to the wheels of a railcar or locomotive, were developed in the late 1880s for streetcar systems and by the end of the nineteenth century had found their way into regular ("steam") railway application. In either case, the vehicle drew power either from an energized overhead wire or "third rail" to activate the traction motors, which provided very high torque, smooth acceleration, and virtually no pollution. The expense of an electric power distribution system, however, led to the design of locomotives and railcars that carried their own source of electricity, initially gas or distillate engines, which had come into use around the turn of the twentieth century. General Electric built the first successful gas-electric railway motorcars in 1910.

Diesel-electric locomotives in the United States date back as far as 1918, when GE built three experimental units. Longtime steam-locomotive builder American Locomotive Company (Alco) followed suit with its own diesel-electrics in the 1920s, but all these early locomotives were yard switchers and not always successful. The thread of the story that leads directly to the *Zephyr* begins with the formation, in 1922, of the Electro-

These three color interior views—of the dinette-smoker, looking forward toward the dinette section (ABOVE LEFT), the coach section of the coach-parlor observation (ABOVE), and the observation area of that car (FACING PAGE, UPPER)—were taken after the train's restoration was completed in 1997. Though outstanding, the 9900's restoration varied in a few small details from the train's as-built appearance. The seats in the observation section, for instance, had head cushions, and that area was curtained, as can be seen in the group photograph on the facing page. *THREE PHOTOS, MIKE SCHAFER*



Motive Engineering Company ("Engineering" would later be dropped from the name). In 1924, the Cleveland-based firm began selling gas-electric railcars. The first, which went to Chicago Great Western, had a 175-horsepower Winton Engine Company gas engine, electric controls, generator, and traction motors by General Electric, and carbody by St. Louis Car. This EMC creation would prove far more successful than any previous gas-electric railcars; eventually, more than 400 such boxy "doodlebugs" would serve branch lines across the country. EMC also dabbled in the next step: gas-electric locomotives.



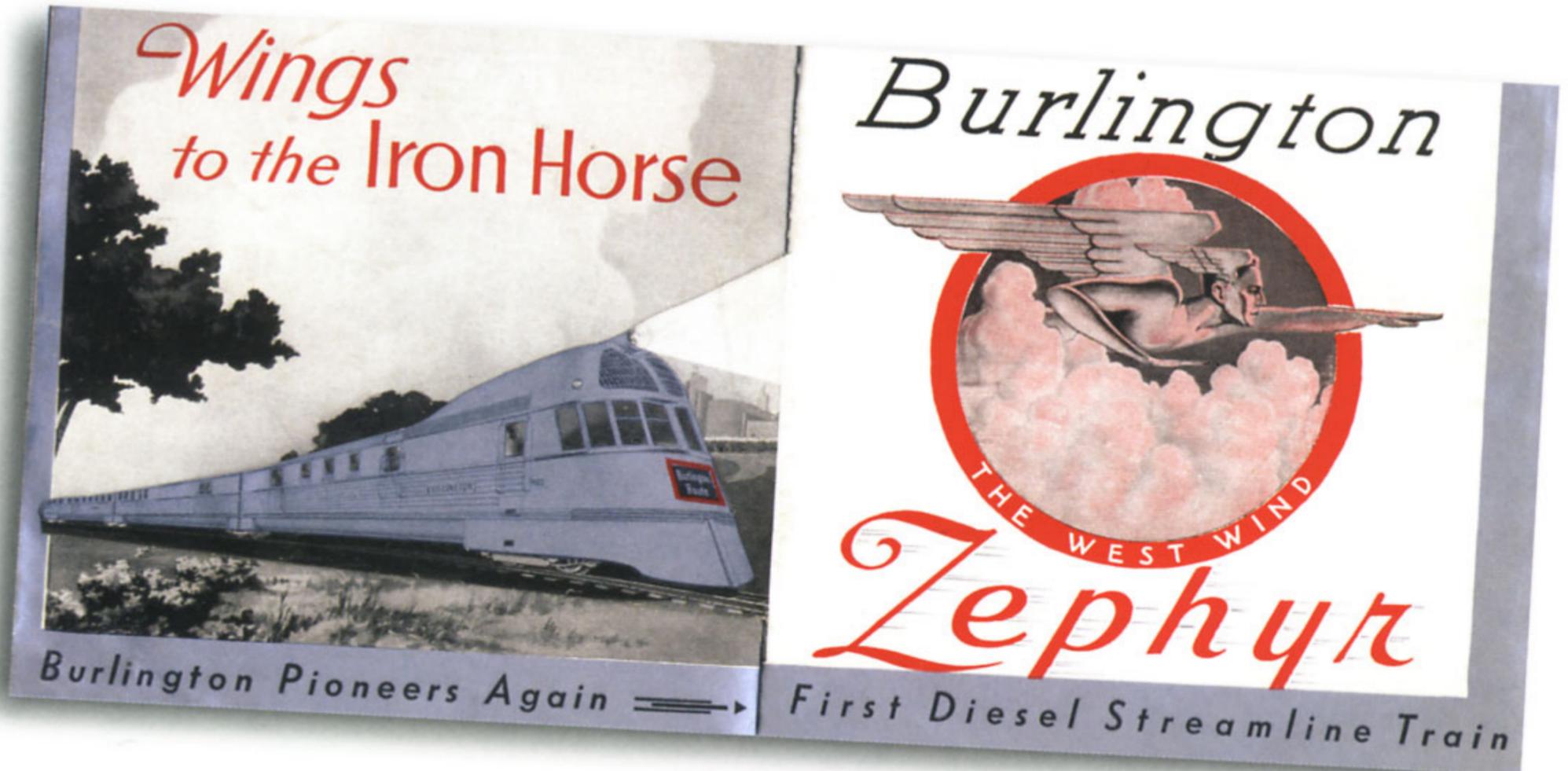
When the Depression hit and railcar sales plummeted, cash-starved EMC and Winton were stalled in their tracks, having gone as far as possible with gasoline engines and later distillate-powered versions. The quantum leap would come when a diesel engine lightweight and compact enough for rail use could be developed; this would take muscle and money, which, as it turned out, the General Motors Corporation would provide. In 1930 GM bought Winton and its principal customer, Electro-Motive, forming from them the Electro-Motive Corporation. (In 1941 this would become the Electro-Motive Division of General Motors, or EMD.)

In marine and stationary use, where weight and size were not such critical considerations, diesel engines had proved themselves decades earlier. Electro-Motive's Hal Hamilton was an important player in the perfection of the diesel for railroad use, but Charles F. Kettering, GM's vice-president of research, was really the key man in the development of the Model 210—a two-cycle, eight-cylinder diesel engine that showed the best promise for transportation application. Previously, Winton's best

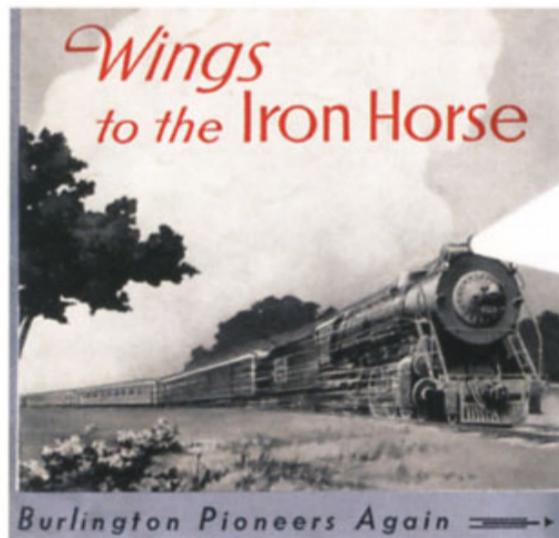
ABOVE: Ralph Budd (seated, third from left), proudly poses with other railroad executives in the parlor section of his brand-new *Zephyr*. His colleagues in this view include H. E. Henshaw, standing immediately to Budd's left; Albert Cotsworth, the Burlington's passenger traffic manager, standing to the right of the flowers; Horace H. Holcomb, vice-president, traffic, seated at Cotsworth's left elbow; Edward Flynn, operating vice-president, at the far right; and, at far left, Fred Gurley, his assistant, who would go on to become president of the Atchison, Topeka & Santa Fe. BURLINGTON NORTHERN SANTA FE

diesel weighed some 60 pounds per horsepower generated; the 201 would cut that ratio by roughly two-thirds. The *Zephyr's* 201-A was an evolutionary version of this, with the bugs largely worked out.

In the spring of 1933, Ralph Budd saw Winton Model 201 stationary diesels generating power at the Century of Progress Exposition and was impressed. Budd asked Kettering if the Burlington could purchase one for its train. Kettering declined, citing their unproven nature, but promised that a tested, refined engine could be ready on a schedule that would not substantially delay the *Zephyr's* completion. With those assurances, Burlington signed on.



This flashy little foldout brochure was used to introduce the *Zephyr*. Opening it "pulled" the streamliner out from behind the steam train, over which it could then be laid—the eclipse that would eventually happen in real life. Though prominently featured in the interior photos, meal service—from a buffet-grill at two pairs of facing seats where a table could be placed—was relatively rudimentary. The array of china and silver on the table is impressive, however. Trays could be affixed for service at other seats. "The mountain comes to Mahomet as meals from the grill are served at tables set up at your chair," according to the brochure. *ROBERT P. SCHMIDT COLLECTION*



The Zephyr

BURLINGTON'S STREAMLINE MOTOR TRAIN

- Built of stainless steel.
- Powered by an eight cylinder two-cycle 660 H.P., oil-burning Diesel engine.
- Rides on articulated trucks.
- Runs on roller bearings.
- Air-conditioned in all passenger compartments.
- Equipped for radio reception.
- Windows of shatter-proof glass.
- Electro-pneumatic brakes.
- It is 197 feet long—Carries 72 passengers.
- After making a coast-to-coast tour, the train will be on exhibition at A Century of Progress Exposition in Chicago.

Burlington Pioneers Again ➡ In Gleaming Stainless Steel ➡



The ingenious electric buffet-grill is a masterpiece in compactness and efficiency.

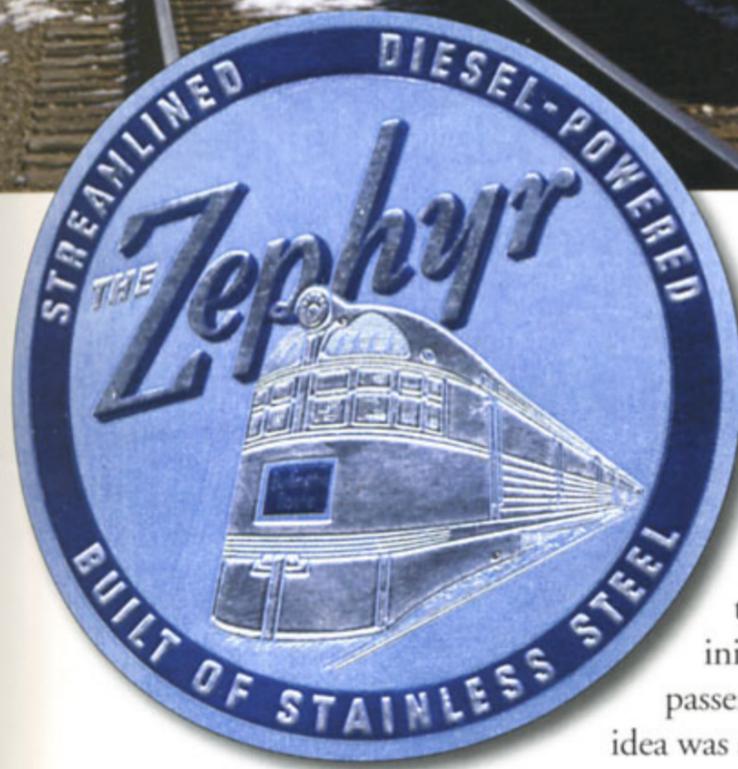


Adjustable chairs in dual-tone shades of pearl-green, glass curtains to match, a rich rug to soften the floor-fall—the 40-passenger compartment is modern as the moment.

The mountain comes to Mahomet as meals from the grill are served upon tables set up at your chair.



A keen little solarium fitted with detached chairs occupies the glass-enclosed rear of the last car.



During much of the time of its development, the train with a now-famous name—*Zephyr*—was nameless. The story of its naming, recounted in detail by Richard C. Overton in his definitive *Burlington Route*, has become a cherished and oft-repeated element of *Zephyr* lore. In the late spring of 1933, a group of Burlington executives met with Ralph Budd in his office to discuss their new train, by then under construction. It was at this meeting that the train's initial service route was chosen. Albert Cotsworth Jr., CB&Q's passenger traffic manager, suggested Kansas City–Omaha. This idea was accepted, but with an Omaha–Lincoln dogleg added, making the total distance 250 miles each way.

A good name for the new train also would be important, Cotsworth felt, so great was its potential publicity value. Acknowledging that he had no ideas, he suggested looking up the last word in the dictionary, since the new train surely would be the “last word” in passenger railroading. In his dictionary, that word was “zymurgy”—the fermentation process, as in brewing. Another dictionary yielded “zyzzle,” to sputter—even less appropriate.

The end-of-the-alphabet idea stuck with Budd, however, and eventually bore fruit. Renaissance man that he was, he'd recently been reading *The Canterbury Tales*, fourteenth-century poet Geoffrey Chaucer's classic, bawdy narrative concerning an odd assortment of characters making a pilgrimage to Canterbury Cathedral and the stories they told to pass the time en route.

“When Zephyrus with his sweet breath has stirred the new shoots in every wood and field,” reads one of the first lines of the Prologue. Zephyrus, the god of the west wind, here represented a force of rebirth and renewal. Perfect. *Zephyr* it would be.

And less than a year later, on April 7, 1934, came a banner day at the Edward G. Budd Manufacturing Company. That was the roll-out of No. 9900, the *Zephyr*, a train destined to make history.

The original *Zephyr* still looks elegant in this scene at Corning, Iowa—although it was taken in 1960 when the train was 26 years old and making its final revenue run. The observation car carries a tailsign reading *Pioneer Zephyr*, a name that would be applied in 1936 on the second anniversary of No. 9900's entry into revenue service. JIM NEUBAUER; BAGGAGE TAG, MIKE SCHAFFER COLLECTION



Judging by the length of the queue to board, the *Zephyr* is the star attraction at the Burlington display at the 1934 Century of Progress Exposition in Chicago, where the little streamliner ended its famous dawn-to-dusk run from Denver. At the far left, representing state-of-the-art steam locomotive technology, is Hudson 3000 with a suburban train. Partially hidden by trees is a steam locomotive of a much earlier era: No. 35, a wood-burning 4-4-0. *BURLINGTON NORTHERN SANTA FE*



Debut of the Zephyr

The rollout of the *Zephyr*, No. 9900, on April 7, 1934, was dramatic—as well it should have been, considering that the train was destined to change the course of passenger railroading. At the Budd plant in Philadelphia, a dozen workmen pulled the train out of the shop with a rope, as if they were the winners in a tug-of-war. When the little three-car trainset nosed through the doors into the Pennsylvania daylight, it was also rolling into the bright glare of intense publicity and national curiosity. It was the nation's first diesel-powered streamliner (though Union Pacific's M-10000, powered by Winton Model 191-A V12 distillate engine, had claimed the title of being the first streamliner when it debuted on February 12).

The slaking of the public's curiosity about the *Zephyr* began at the Pennsylvania Railroad's Broad Street Station in downtown Philadelphia



just 11 days after the rollout. There, on the afternoon of April 18, elaborate dedicatory ceremonies were held by and for an impressive group of assembled worthies—and for a nationwide radio audience as well, courtesy of a broadcast over the NBC network. Thus was one new technology serving another.

Since the dedication and christening were essentially a radio show, the choice of broadcaster Graham McNamee as emcee was an appropriate one. The cast of speakers was predictable, as were their topics, which involved carloads of mutual congratulation. Among those taking the rostrum at Broad Street were Edward Budd, who praised those who had made the *Zephyr* possible, both within and outside of his company; General Motors president Alfred P. Sloan, who lauded the scientific research that lay behind the train; and William Irvin, president of United States Steel Corporation, who talked about the development of stainless steel.

Present in voice only was General W. W. Atterbury, president of the Pennsylvania Railroad, who spoke from the NBC studios at Radio City in Manhattan in praise of CB&Q president Ralph Budd's "vision, courage, initiative, and genuine railroad executive ability." Gerald Swope, president of General Electric Company, also speaking by radio from New York, unsurprisingly hailed the instrumentality of electricity in the train's success.

Very likely listeners around the nation were most interested in the commentary offered by an announcer for Philadelphia's WLIT, who broadcast from the observation solarium at the train's aft end. Speaking from a passenger's point of view, he offered his first-hand impressions of the pocket streamliner's amenities and style. Appropriately enough, Ralph Budd had the last word, and he summed up the occasion better than anyone else could, underscoring the reason that the new train would be closely watched and much chronicled on its upcoming nationwide tour. "This sleek, glistening, streamlined streak," he said, "symbolizes progress."

Then Marguerite Cotsworth christened the train. The daughter of Albert Cotsworth, Burlington's passenger traffic manager, she was a student at Swathmore College, located in a Philadelphia suburb. When she crashed the bottle into the *Zephyr's* soon-to-be-famous sloped nose, sirens and horns let loose in mad celebratory cacophony. Then the train set out

On April 18, at the Pennsylvania Railroad's Broad Street Station in Philadelphia, not far from the Budd plant, the *Zephyr* is christened.

Anticipation is running high, and the assembled dignitaries watch intently as Marguerite Cotsworth—here in conversation with Edward Budd—prepares to swing the champagne bottle. Marguerite and her sponsor, both carrying bouquets, are among the few women in this predominantly male, fedora-hatted throng.

BURLINGTON NORTHERN
SANTA FE

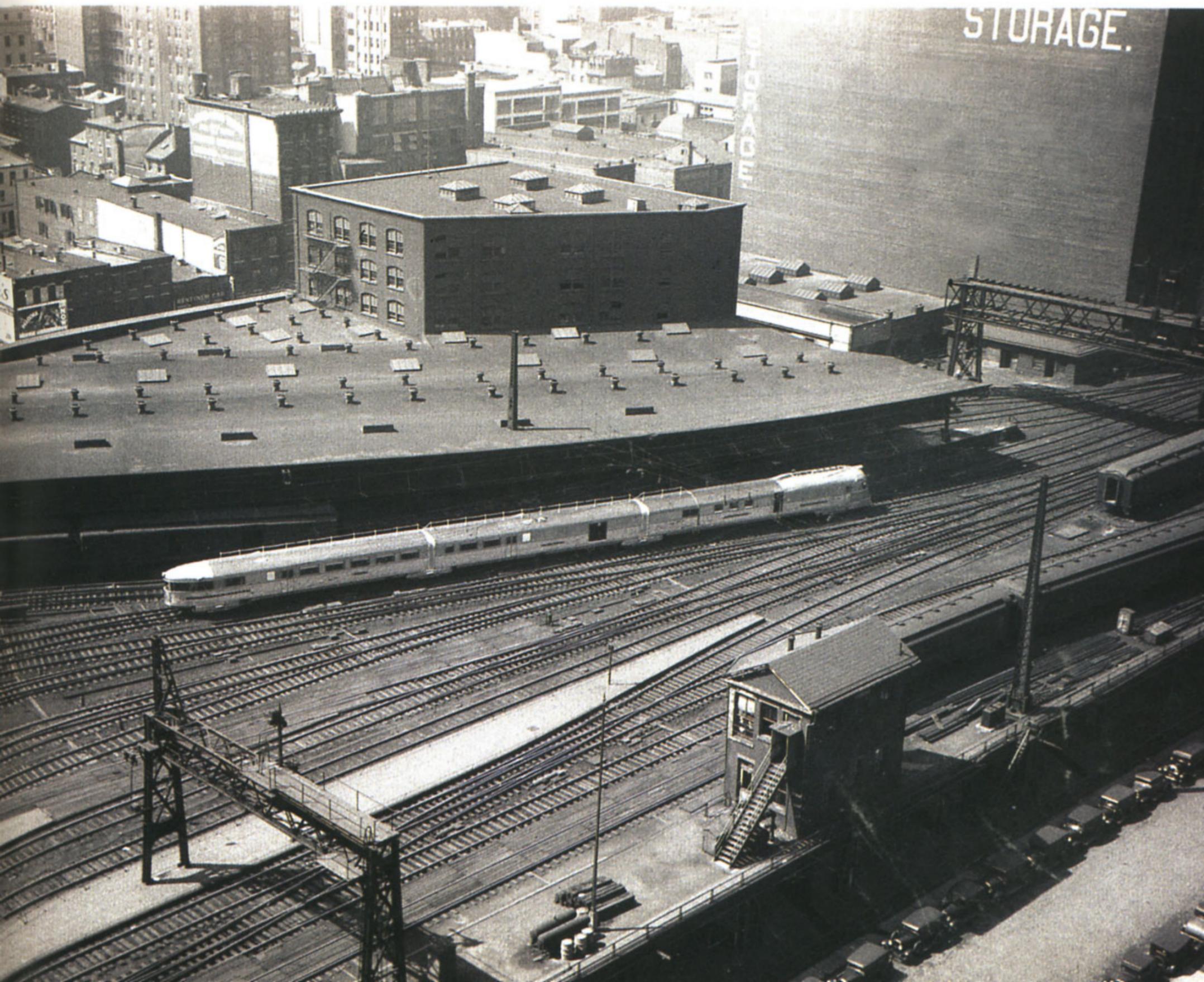
It's April 19, 1934, the day after *Zephyr* 9900 was christened, and the silvery train is shown slipping out of Broad Street Station, seemingly unnoticed. The crowds have departed and people have returned to their work routines. But for 9900, its long, illustrious life has just begun. During the next several days, as the train barnstorms its way home from Philadelphia to the CB&Q at Chicago, it will again be surrounded by curious crowds that have come to find out what "streamliner" and "diesel-electric" are all about. Then it will embark on still more outings, lasting for most of the rest of the year until the train entered revenue service in November 1934. *CAL'S CLASSICS*

on its maiden voyage, a short trip up the Pennsylvania Railroad main line to Paoli, with a Pennsy special train as escort.

This was not, of course, the train's first journey. That had come on April 9 (it had apparently taken two days after the roll-out to successfully fire up the Winton diesel), when the 9900 made a test run on the Reading Railroad between Philadelphia and Perkiomen Junction, hitting a top speed of 104 miles per hour. (The train's specification sheet listed 117 as the potential ceiling.)

The *Zephyr* had been the cover story of the April 14 issue of *Railway Age*. Inside was a lengthy feature story, plus no fewer than 44 pages of advertising by suppliers who in ways large and small were part of the pioneering train. Some of these advertisers, like the Edward G. Budd Manufacturing Company, the Winton Engine Corporation, and General Electric, were predictable; others, like United States Envelope Company (makers of Ajax drinking cups and cabinets), were less expected. Taken together they paint a vivid picture of the complexity of building even this diminutive three-car streamliner.

The Budd Company took an eye-catching two-page, three-color spread. Budd's ad, along with those of United States Steel, the Electric Storage Battery Company, and Republic Steel Corporation, featured blue highlights and striking silver accents, primarily in images of the train itself. Allegheny Steel Company, Winton Engine, GE (provider of



the traction motors), Westinghouse Air Brake Company (“Control of such a train as the *Zephyr* presents a new braking problem . . .”), and Lukenweld Incorporated (provider of engine bed and crankcase) also took two-page spreads.

Full-page ads touted the contributions of numerous other team members, among them Timken (“Every axle journal box on the new ‘*Zephyr*’ train is Timken Tapered Roller Bearing Equipped”), General Steel Castings (“Commonwealth Motor and Trailer Trucks of Proved Designs”), The International Nickel Company (“New speed king of the rails gains light weight and higher strength by using alloys of nickel”), Vapor Car Heating Company (“‘The Burlington *Zephyr*’ is equipped with Vapor Company’s Steam Generating Unit for Heating purposes . . .”), Pittsburgh Plate Glass (Duplate Safety Plate Glass for “Safer, Clearer Windows”), Formica (“This is one of the Formica tops—in a soft blue to match the trimmings—from which passengers will be served their meals”), and Masonite Corporation.

Then there were the half-page advertisements from Railway Express Agency (a service accommodated in the *Zephyr*’s middle car), S. Karpen & Bros. (“Fixed Seating and Movable Seating”), Cyrus J. Holland (Holland Springs—“Easier Riding is just as important as air conditioning”), Electric Service Supplies Co. (Golden Glow headlights), Adams &

Here, Peoria (Illinois) Union Station hosts the *Zephyr*, which is standing on Peoria & Pekin Union Railway tracks. Located at the end of a Burlington branch, Peoria was a busy railroad town. In addition to CB&Q, Union Station was served by the Nickel Plate, Alton Railroad, Chicago & North Western, Pennsylvania Railroad, Toledo, Peoria & Western, Illinois Central, and New York Central System subsidiary Peoria & Eastern. Rock Island had its own depot about half a mile distant. WILLIAM C. JANSSEN, KRAMBLES-PETERSON ARCHIVE





Westlake Company (curtains), Mandel Brothers (suppliers of chairs and tables, along with carpets and linens), and others.

Quarter-page ads humbly completed the insert: National Brake Company, Electric Specialty Company ("This converter furnishes 60 cycles, A.C. from 64 volts D.C. for the broadcast receiver on the Burlington Zephyr"), The Stanley Works ("Ball bearing butt hinges to outside doors of Burlington 'Zephyr'"), and still other advertisers, effectively covering just about every imaginable component of the train's construction.

What an extraordinary shopping list! While marveling at the landmark accomplishments that Shotwelding and diesel design represent, take a moment to think of the task it must have been for Budd—a company just working its way into the railcar-building industry—to assemble and evaluate this huge array of suppliers. Some of their contributions were routine, while others were revolutionary and essential for a high-speed train. Improved brakes from Westinghouse, for instance, allowed stopping from 100 miles per hour within existing block-signal distances. Pittsburgh Plate Glass created glazing safe at higher speeds.

The train that they all helped to create looked like this: small, flashy, glittering, as totally new and different from dark-green heavyweight coaches and bulky black steam locomotives as Manhattan's sleek, silver, soaring Chrysler Building of 1930 was from the stodgy Beaux-Arts buildings that surrounded it. Or as different as Chrysler's 1934 "Airflow," the first mass-produced streamlined automobile, was from its predecessors. The *Zephyr's* basic fabric was "18-8" stainless steel, with 18 percent chromium and 8 percent nickel. It was three times as strong as ordinary carbon steel. Roofs were structural members. Their thin fluting added great strength, as corrugating does to cardboard. The wider fluting on car sides did the same. Roughly 125,000 Shotwelds per car held all this stainless steel together.

Wind-tunnel tests conducted by Professor Shatswell Ober at Massachusetts Institute of Technology suggested that at 95 miles per hour the train's curved surfaces and skirting would cut wind resistance by about half when compared to conventional trains. (However, the gain at low speed was insignificant, a fact that may account for a diminishing focus over the years on the aeronautical advantages of railroad streamlining.)

"It is," boasted the train's inaugural brochure, "novel in design; unique in application of automotive principles new to rail travel; and basically different from conventional trains in structural composition." For all this, the train's interior was relatively no-frills, though it expressed in small touches the streamline aesthetic so thoroughly represented in the exterior. Steel bands accented the ceiling. Walls were painted a restful soft gray and light green; seats were upholstered in a low-pile golden-brown fabric. The highlight of the interior, hands-down, was the observation lounge at the train's end. "A real solarium," according to the brochure, "with wide, curved glass windows all around to afford a 180-degree field of vision; equipped with detached easy chairs, it offers luxurious accommodations equal to the highest class of parlor car service." Those chairs were framed in brushed aluminum, and the gray walls had purple-blue accents. "Trim as a sailboat," the brochure concluded, "speed king of the rails—the *ZEPHYR* strikes the most advanced note in up-to-date transport methods and writes a colorful, interesting, and significant chapter into American railroad history." Indeed it did.

The scope of the *Zephyr's* national tour gives some idea of the keen public interest in the train. After leaving Philadelphia, where more than 24,000 visitors toured, the 9900 headed for Gray's Ferry and Chester, Pennsylvania, then Wilmington, Delaware; Baltimore; and Washington, D. C., before turning north again to Pennsylvania Station and Grand Central Terminal in New York City, via New Jersey: Trenton, New Brunswick, Elizabeth, and Newark. After that, on to New England:

Bridgeport and New Haven, Connecticut, and Providence, en route to Boston. From there 9900 headed west to Worcester and Springfield, Massachusetts, then across New York: Albany, Schenectady, Syracuse, Rochester, and Buffalo. Before reaching home rails in Chicago on May 11, the *Zephyr* would make more than a dozen additional calls, including Detroit, Toledo, Cleveland, Pittsburgh, Cincinnati, and Louisville. On this Eastern tour of 30 cities, the train covered 2,900 miles and welcomed 379,857 guests.

Lots of touring on the CB&Q would follow immediately—16 cities in all with 105,054 visitors, after hosting 34,000 in two days in Chicago. (By the time it entered revenue service in November, No. 9900 would have been displayed in 155 on-line cities and towns.) The run most significant of all, of course, was the dramatic (and thrice nearly embarrassing) dawn-to-dusk nonstop race from Denver Union Station to the Halsted Street commuter station in Chicago, about a mile out of Union Station: 1,015.4 miles in 13 hours, 4 minutes, and 58 seconds, setting new world speed records. This journey would culminate with the *Zephyr's* rolling onto the huge open-air stage at the Century of Progress Exposition as the climax of "Wings of a Century," a transportation pageant. It was Ralph Budd who had come up with this idea, which he accurately predicted would generate huge interest and showcase the *Zephyr's* salient features: speed, efficiency, and economy. Budd brought his proposal to Century of Progress officials; with them, he worked out the details. For maximum effect, the event had to occur on May 26, opening day of the Exposition's second year. That didn't leave much preparation time.

The passage of nearly seven decades, and the technological marvels that have occurred in that period, might lead us to underestimate the audacity and daring of this project, but we shouldn't. In 1934 the fastest scheduled steam passenger train between Denver and Chicago made the trip in 26 hours. Since in running eastbound the *Zephyr* would lose an hour, it would need to make the 1,015-mile trip in 14 hours to leave at dawn and arrive at just the right moment to conclude the pageant. And this with unproven technology, and a new power plant that had logged just a few thousand miles on exhibition tours. To garner the maximum exposure, which after all was the purpose of the run, it had to be widely publicized in advance. Backing out would be impossible, and failure unthinkable.

The *Zephyr* arrived in Denver two days before scheduled departure. "A silver train flashed into a silver state," as a local reporter put it, "floating on rails with all the gentleness of the west wind for which it is named, but traveling with cyclonic speed . . ." On the afternoon before the great day, the train was moved from Denver Union Station to the Burlington's shops for a last inspection—with deeply unnerving results. A cracked motor armature bearing was discovered. It would need replacement, but where could another be found? Nowhere close at hand, it seemed. General Motors had one in Detroit, but it would take days to fly it to Denver.

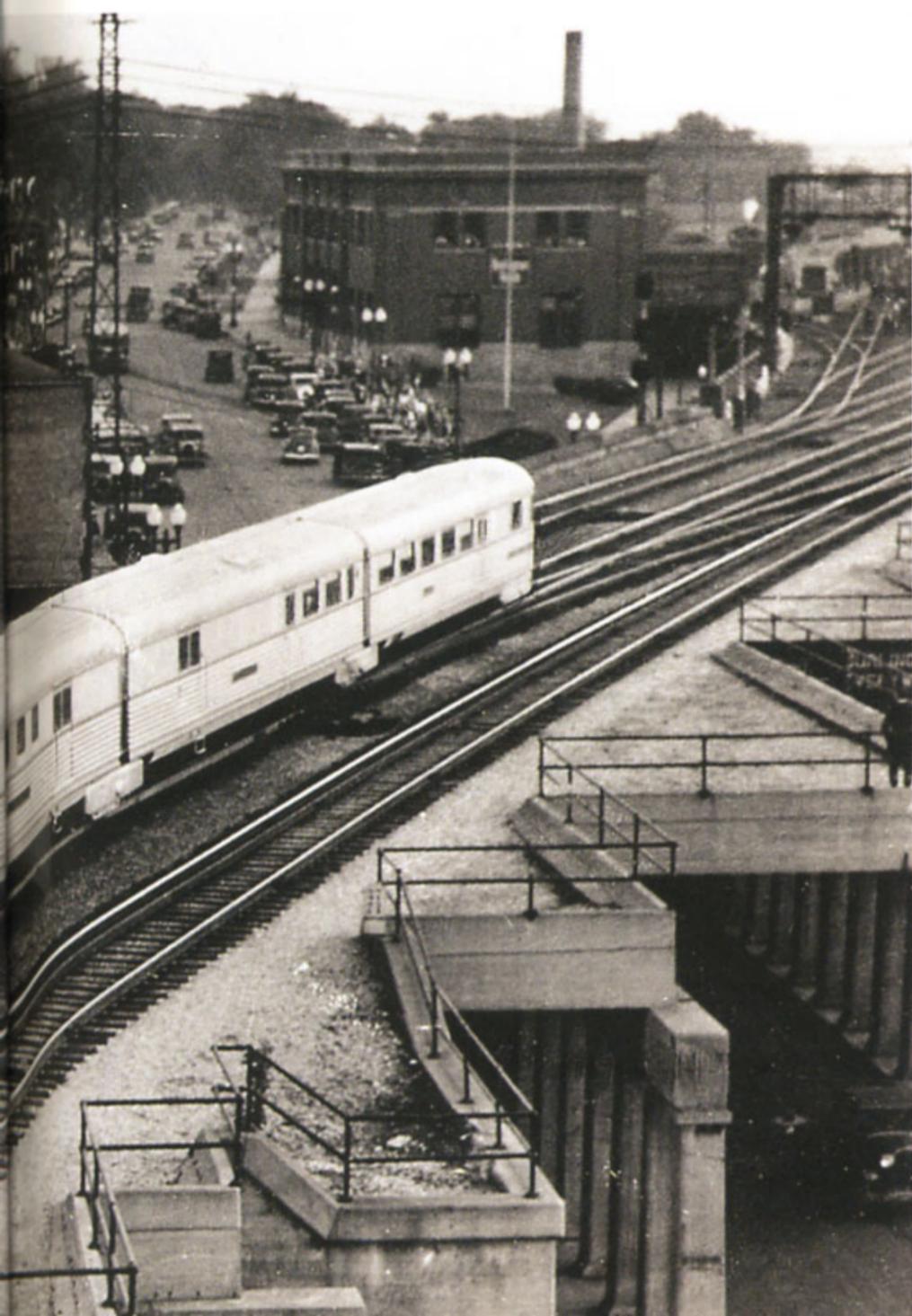
When one was located a little nearer, ironically, it turned out to belong to rival Union Pacific, operator of the M-10000, which had nipped in ahead of the *Zephyr* as the first streamliner—and used the same type of bearing. Ralph Budd called his UP counterpart, Carl Gray, at home and asked for help. Gray agreed, a genuinely magnanimous gesture on his part. (Both Gray and Budd were former presidents of the Great Northern, which may have helped.) Logistical problems remained, however, as the bearing was not in Denver but Omaha. CB&Q Assistant General Manager Lou Lyman carried the part by commercial airline to Cheyenne and then aboard a charter plane to Denver. Even so, it was past midnight when it arrived at the Burlington's shops there.

Hours before, as the bearing was winging its way from Omaha, Ralph Budd had been scheduled to describe the upcoming run in a national radio broadcast. Once he did that, he knew, there would be no

RIGHT: Denver Union Station, May 26, 1934, two minutes after five in the morning, at the threshold of drama. In three minutes, the gentleman now conferring with Winton Engine Company's Ernie Kuehn (9900's primary shepherd in these first days, seen here leaning from the cab) will wave the green flag he's holding (often used at the Indianapolis Speedway) and the nonstop, dawn-to-dusk race to Chicago will be on. The sign on the Western Union clock affixed to the umbrella-shed pillar at the far left reads "The start of the *Zephyr* will break the tape and record the starting time by starting this clock." Three liveried Western Union delivery boys stand nearby. BURLINGTON NORTHERN SANTA FE

BELOW: Its record-breaking journey nearing an end, 9900 glides through Aurora, Illinois (birthplace of the Burlington Route), on the center track of CB&Q's busy suburban main line into Chicago. The brick structure in the background is the Aurora depot. L. E. GRIFFITH, KARL ZIMMERMANN COLLECTION





turning back. In any case, a postponement would have been hugely embarrassing, since thousands of spectators were expected at trackside. It would have been costly, too, since \$50,000 had already been invested in lineside safety considerations. Two flagmen were to protect each of the 1,070 public grade crossings en route, and one each of the 619 private crossings. And there was much more, as reported in *Railway Age*: "The engineering department checked the profile, checked and rechecked the elevation of curves, prepared speed charts showing the permissible rate of speed at every location, and placed markers along the line at every location where speed restriction was necessary." Railroad officials had met with municipal officials and police officers at 164 on-line communities to ensure the train's safe passage. Switches had been spiked all along the way, and moveable objects in proximity to the track—mail-crane arms and water spouts, for instance—wired down.

With all these preparations made, and so much advance publicity already accomplished, Budd took a deep breath and spoke the words of commitment that the radio broadcast carried around the country: "Tomorrow at dawn we'll be on our way." That would have meant 4 a.m., the scheduled time of departure, but feverish overnight work to install the new bearing meant that it was actually 5:05 a.m. before, with the wave of a green flag that had started 15 Memorial Day runnings of the Indianapolis 500, the *Zephyr* left Denver Union Station on its epic journey. At the throttle was Winton's Ernie Kuehn, who had operated the train for most of the miles of its exhibition tour.

Aboard were journalists, broadcasters, many Burlington executives and operating men, Edward G. Budd and others from his company, Winton Engine Company and Electro-Motive Corporation officials, a representative from Westinghouse Air Brake Company, and W. R. "Bill" Freeman, president of the Denver & Salt Lake Railroad. One non-human passenger was much remarked-upon: the donkey Zeph, a gift from the Rocky Mountain News to the Century of Progress Exposition.

Running east from Denver, the *Zephyr* was at first restricted to 50 miles per hour, giving the new bearing a chance to work itself in. Kuehn reportedly lay on the floor of the cab, head hanging out the door, sniffing for the burning smell that would suggest trouble with the bearing—and desperately hoping that it wouldn't come. It didn't, and the train accelerated to 80 miles per hour. All seemed well, as thousands gathered at trackside to wave and cheer.

Then another calamity occurred when someone slammed a door on an electric cable, causing a short-circuit that burned out the starting mechanism. Had not Kuehn instinctively shut down the engine when he smelled burning rubber, this would not have been a problem. He did, however, and it was, because—with the train coasting down a 42-mile grade, losing speed as it went—there was no way to restart the engine. With the speed down to 15 miles per hour and the dream of a nonstop run nearly dashed, Roy Baer, an engineer from Electro-Motive, held the two ends of the severed cable together. The heat generated by the current passing through the cable fused the ends together—and caused drops of melted copper to burn Baer's hands. With a flash of electricity, Winton's 600 horses sprang back to life.

One other quirky crisis nearly ground the nonstop run to a halt. With crowds all along the way, and grade crossings coming at unprecedented close-time intervals because of the high speed, excessive use of the horn had caused the air pressure to drop to a point that automatically set the air brakes. Normal procedure would have been to stop the train and pump the pressure back up, and the engineer began to close the throttle. This time good instincts prevailed for Kuehn, who was in the cab, and he reached for the throttle handle and pulled it out to full. With engine racing against the set brakes, pressure built back and, eventually, the brakes fully released. On

MAIN PHOTO, RIGHT: On June 16, at Orestod (Bond), Colorado, the *Zephyr* helped the D&RGW celebrate the opening of the Dotsero Cutoff, linking the Denver & Salt Lake's Moffat Tunnel route with the D&RGW's main line through the Royal Gorge and over Tennessee Pass. The 9900 is posed on the new Cutoff; in the foreground is the D&SL line to Steamboat Springs. Dotsero is at the western end of the Cutoff. A 1885 survey noted this as ".0", or "dot zero", hence the name. Orestod is Dotsero spelled backward. When the Cutoff opened, D&RGW acquired Denver-Orestod trackage rights over the D&SL, which was merged into the Rio Grande in 1947. Pointed west, No. 9900 will become the first train to make the full Chicago-Oakland journey on this new transcontinental route, presaging the *California Zephyr*, which would come some 15 years later. BURLINGTON NORTHERN SANTA FE

the train rolled, still without stopping; all the way to Chicago.

There, at 7:10 p.m., the *Zephyr* breasted the tape at Halsted Street, completing its nonstop run. Popular story has the train not making any stops at all between Denver and the Century of Progress Exposition itself, but two were necessary in moving the train from Halsted Street to the fairgrounds. Just beyond Halsted Street, the *Zephyr* entered the St. Charles Air Line to reach Illinois Central's lakefront Central Station just off 12th Street. Here the train paused to reverse direction, backing southward on IC tracks to 31st Street. The train stopped again to reverse direction and pull forward onto the temporary trackage leading into the Exposition grounds and onto the open-air stage along the shore of Lake Michigan at 8:09 p.m., just as the Wings of a Century pageant was concluding. Urged along the length of its route by cheering crowds, screaming fire sirens, and pealing church bells, the *Zephyr* ended its journey serenaded by the whistles of hundreds of boats on Lake Michigan. The crowds at the Exposition, their appetites whetted by bulletins of the train's progress sent ahead throughout the day, exploded with enthusiasm when the *Zephyr* finally arrived, then poured out onto the stage to celebrate. Ralph Budd led Zeph off the train, presenting him to officials.

The toting up in the aftermath of this great day was impressive. The longest previous nonstop run had been 401 miles, on Britain's London, Midland & Scottish Railway. At 1,015.4, the *Zephyr* well more than doubled this, and at the same time broke all records for average speed on stretches of 200 miles or more. Maximum speed was 112.5 miles per hour, achieved between Yuma and Wray, Colorado, and the average was 77.6 miles per hour. To make up for slow-downs in the major cities, the train ran for 216 miles at speeds of 90 miles per hour or more.

Two other very salient statistics: Estimates said that some half million people glimpsed the train making its famous sprint—which, after all, was much the point of the project. And the *Zephyr* averaged 2.77 miles-to-the-gallon of diesel fuel, making the total fuel cost of the trip \$14.64. The train was meant to save money, and it looked very much as if it would.

Right after that famous all-day sprint, on May 28, the *Zephyr* ran charters for the Traffic Club of Chicago—six round trips from Chicago to Aurora, with a steam train running opposite, so the number of riders could be doubled by providing a one-way trip on the *Zephyr* and one way behind steam. Participants were also treated to a luncheon, where Edward Budd and Hal Hamilton gave a blow-by-blow description of the Denver-Chicago nonstop adventure.





BELOW: On the way to the ceremonies at Orestod, No. 9900 plunges into the east portal of the Moffat Tunnel. Completed in 1928 (despite what the portal date indicates), the six-mile tunnel replaced D&SL's steep, harrowing climb over Rollins Pass. The new Moffat Tunnel, owned by the City of Denver, slashed travel time between Tolland and Vasquez, Colorado, from hours to minutes. *BURLINGTON ROUTE, KARL ZIMMERMANN COLLECTION*





10TH ANNIVERSARY

First
STREAMLINE TRAIN SERVICE
IN AMERICA

ESTABLISHED BETWEEN
LINCOLN, OMAHA AND KANSAS CITY
NOVEMBER 11TH 1934
BY THE BURLINGTON'S
STAINLESS STEEL

PIONEER ZEPHYR

AMERICA'S FIRST
DIESEL-POWERED
STREAMLINE
TRAIN

NOW IN DAILY SERVICE BETWEEN
LINCOLN AND MCCOOK, NEBR.



Robert B. Grosnick, PhM3/C
U. S. Naval Hospital
General Delivery
San Diego 34, California

TOP: The 9900 is celebrating its 10th birthday at a party held in its honor at Lincoln, Nebraska, on April 10, 1944. As the *Zephyr* eased forward, its pilot severed a cord which caused an eight-foot, stainless-steel knife to descend and slice through a 1,000-pound cake. Standing by are Edward Budd (the white-mustached gentlemen at knife's tip) and Ralph Budd (to left of Edward Budd). BURLINGTON NORTHERN SANTA FE

ABOVE: By the time this cachet was issued to mark ten years of revenue service for the 9900, the trainset was serving in Lincoln-McCook, Nebraska, service making daily round trips as Nos. 21 and 22. The envelope was postmarked aboard on November 11, 1944. KEVIN J. HOLLAND COLLECTION

Then No. 9900 headed west again, strutting its stuff in new territory. Along the way, on June 16, it helped the Denver & Rio Grande Western open the Dotsero Cutoff, an important new link joining the Denver & Salt Lake line through the Moffat Tunnel with the D&RGW's main line over Tennessee Pass, thus creating a new, shorter east-west through route. After a silver spike was driven at Orestod, Colorado, the *Zephyr* led a procession of steam trains over the Cutoff.

After two weeks back on display at the Century of Progress Exposition came a jaunt of special significance—a July 30 test run on the 437-mile passenger-heavy route between Chicago and Minneapolis/St. Paul, the Twin Cities. Running at an average speed of 71 miles per hour, No. 9900 lopped roughly five hours from the best times of the existing steam-hauled trains, making the trip in six hours. This confirmed the wisdom of the railroad's decision to order a pair of *Twin Zephyr* trainsets for that service, near clones of the original *Zephyr*, months before the 9900 even entered regular service.

Then the *Zephyr* headed westward again and, while on a West Coast tour, became a movie star. Shortly after Labor Day, 9900 was filmed as the cornerstone of RKO Radio Picture's movie *Silver Streak*, with Sally Blane and Charles Starrett as its costars.

At last, after preening in front of more than two million interested visitors in 222 cities from coast to coast and logging 30,437 miles, the *Zephyr* finally entered regular service on November 11, 1934. Running daily from Lincoln, Nebraska, to Kansas City via Omaha as eastbound train No. 20 and westbound 21, this assignment was in fact a humble life

for the train that had been a touring prima donna and movie queen. As planned from the beginning, this settled routine was meant to stem losses more than create profits; however, the train, and the rest of the fleet that would follow, would prove more successful by any measure than Ralph Budd and his colleagues had dared to hope.

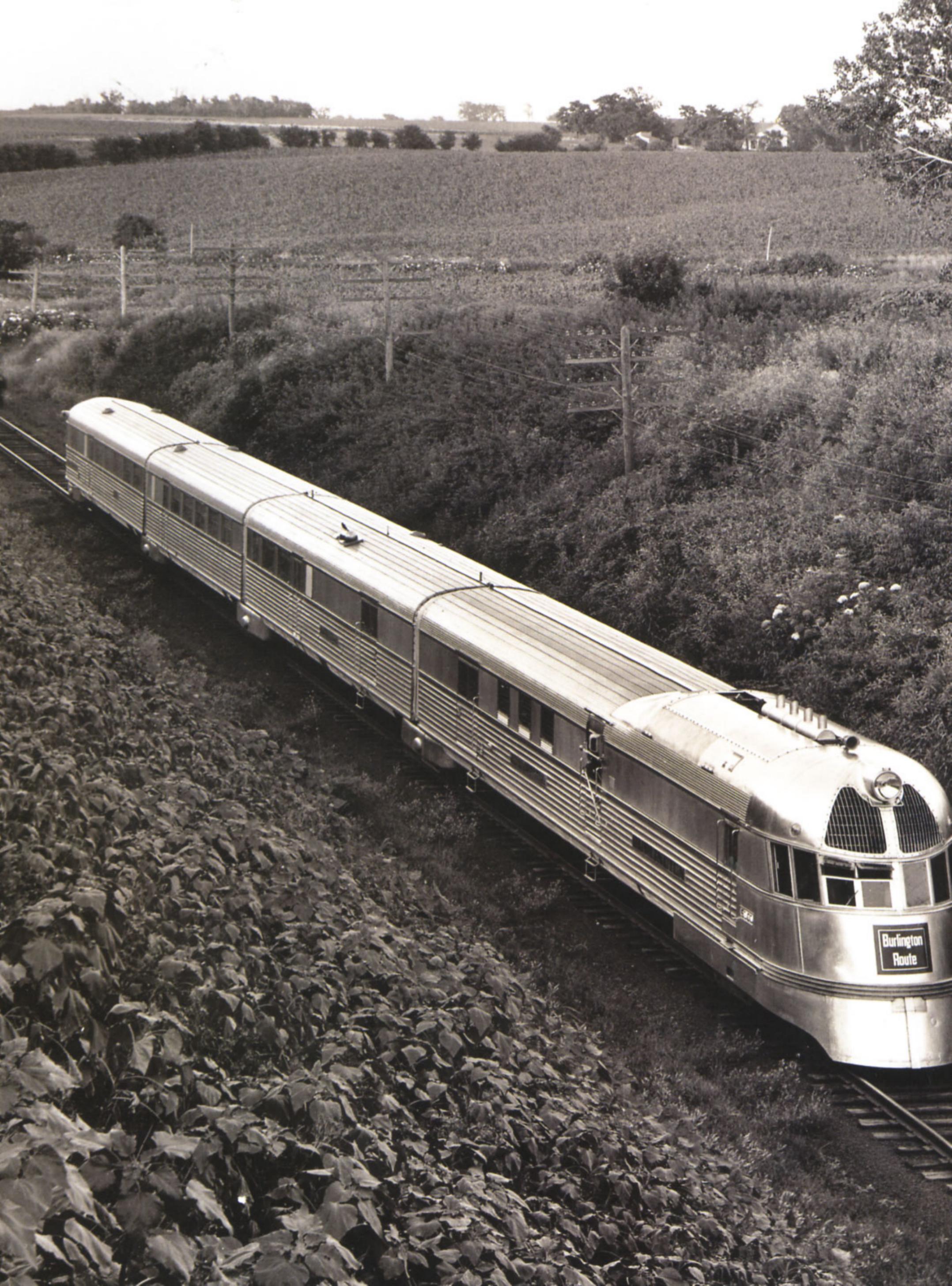
Number 20 left Lincoln at 7:30 in the morning and arrived at Kansas City at 1 p.m., returning in the late afternoon. The run each way was an even 250 miles; 198 miles of that was over cinder ballast and 90-pound rail, specifications no better than average for a main line. The *Zephyr* shone in these conditions, able to run at speeds topping out between 75 and 85 miles per hour as opposed to 60 for steam-hauled trains. This allowed one hour and 50 minutes to be shaved from the Kansas City-bound run, and one hour and 40 minutes in the other direction.

In the *Zephyr's* first two months of service, ridership was 53 to 103 percent above that aboard the steam train it had replaced; standing-room-only crowds were not unusual. Business was so good, in fact, that the Burlington ordered a fourth car for the train, a 40-seat coach, which was delivered in June 1935. This dramatic ridership growth no doubt resulted from a number of factors. Speed was important, of course, though it wasn't just that. In 1936, when a steam train substituted for the *Zephyr* on the same schedule—so that the 9900 could stand in as the *Advance Denver Zephyr*—patronage tumbled 30 percent. There were some enhancements to comfort—low center of gravity smoothing the ride, articulation eliminating coupler noise—but much of the attraction may simply of been the train's radical newness.

While revenues built, expenses shrunk. Fuel costs were 3.9 cents per mile for the *Zephyr*, as opposed to 13.8 cents for a comparable steam train. Total operating expenses were 34 cents a mile as opposed to 64 cents. One

In 1934, No. 9900 revolutionized passenger railroading by proving diesel-electric propulsion reliable for high-speed passenger trains, but the railroads were unconvinced of its merits for freight service. Five years later, Electro-Motive Corporation made that case with the delivery of its FT freight diesels. This view from January 1, 1944, at McCook, Nebraska, shows a nearly-decade-old *Pioneer Zephyr* with No. 100, Burlington's first FT set. There is some unintended irony in this photograph; 11 months after it was taken, a four-unit FT set would rear-end the *Pioneer Zephyr*, killing four passengers and destroying the observation end of the trainset. BURLINGTON ROUTE, KARL ZIMMERMANN COLLECTION





Burlington
Route



key element in the *Zephyr's* economies was that, with its reduced maintenance times and shorter schedules allowed by higher speeds, the one little streamliner could do the work of two steam trains. In early planning, Ralph Budd had projected that savings accruing from 9900's operations would allow for a respectable 15-percent return on the investment of building the train. In the first year the train actually earned \$97,000, which represented an astounding 48 percent return on investment. The *Zephyr* was paid for in 20 months.

On November 10, 1936, the second anniversary of its entry into revenue service, No. 9900 was rechristened *Pioneer Zephyr* to distinguish it from the others in an expanding fleet (chapter 3). The train would have a long and fruitful career. In June 1938 a 40-seat buffet-dinette-chair car was added to the consist, with the 40-seat chair car that had been inserted in 1935 withdrawn and used in other *Zephyr* trains. This left the train-set with 72 coach seats and a dozen parlor seats, plus an eight-seat dinette, which for the first time provided an alternative to at-seat meal service. The *Pioneer Zephyr* soldiered on in regularly scheduled service on a variety of routes until March 20, 1960. Even then an important chapter in its story lay ahead, as it would take up residence as a display at Chicago's Museum of Science and Industry.

In fact, the *Pioneer Zephyr* truly led a charmed life. From the beginning, much was made of the resiliency of Budd's Shotwelded trainsets—No. 9900 and later siblings—in collisions. When brand new and on tour, No. 9900 had been running through Essex, Ontario, with Ernie Kuehn at the throttle. When a truck loaded with scrap iron failed to clear a grade crossing, the *Zephyr* slammed into it (after the truck's driver had leaped to safety), sending iron shards raining all around. The only damage to the train was said to be two small dents.

More-tragic collisions lay ahead, however. On October 2, 1939, the Omaha-bound *Pioneer Zephyr* ran through an open switch at Napier, Missouri, ramming at 50 miles per hour into a steam locomotive waiting on a siding. The engineer and a roadmaster riding in the cab were killed, but no passengers were even seriously hurt. Though the front half of the power unit was reduced to an unrecognizable tangle of metal, Burlington's Aurora Shops (with assists from Budd and Electro-Motive) had the train back on the road within two months, looking good as new.

Then, in November 1944, at Fairmont, Nebraska, the *Pioneer Zephyr* was rear-ended by a new set of Electro-Motive FT freight diesels, demolishing the last car's observation section. Four passengers died and six others were injured. Once again Aurora made the train whole—which it did yet again in April 1949 when, pinch-hitting in Texas, No. 9900 ran into a cement-mixer. And that wasn't the train's last stumble. A year later it collided with a farmer's truck at Longmont, Colorado, sending it back to Aurora yet again. In fact, the train—now lovingly restored and admired in a new (1998) display at Chicago's renowned Museum of Science and Industry—is reminiscent of the thrifty Vermont farmer's "original" axe of familiar anecdote, with its wooden handle often replaced and its metal head replaced at least once.

Union Pacific's M-10000, the train that edged out the *Zephyr* for the title of first streamliner, would have a far shorter life. It spent the bulk of its life in Kansas City–Topeka–Salina, Kansas, service, initially as *The Streamliner* and later as the *City of Salina* when it became necessary to differentiate it from other, newer UP streamliners. It was withdrawn in December 1941 and scrapped shortly thereafter. It was, for one thing, simply a less successful train than the *Zephyr*. For another, the aluminum from which it was built was a valuable wartime resource. That stainless steel was less readily recycled than aluminum couldn't have hurt the *Zephyr's* longevity. But the real story lay in the excellence and durability of Budd's Shotwelded products.

FACING PAGE: Now with a fourth car, a 40-seat coach added in June 1935, the *Pioneer Zephyr* poses near Gretna, Nebraska, for Omaha commercial photographer Louis Bostwick. In this early view, air horns have been relocated to rooftop from behind the air-intake grille, but both engineer's-side front windows remained hinged. The far left window would soon be replaced with fixed glass, while the window just right of the center post would be made hinged. PETER V. TILP COLLECTION

STIFF COMPETITION IN



On April 15, 1935, at Chicago Union Station, Marion and Frances Beeler, twin sisters, hold champagne bottles against the noses of Nos. 9901 and 9902, the *Twin Zephyrs*, simulating for the camera the christening that is about to take place. *BURLINGTON NORTHERN SANTA FE*

THE MIDWEST CORRIDOR



The Twin Zephyrs

Although the original *Zephyr*, the 9900, was placed on a secondary route without significant competition or much potential for exploding ridership, the *Twin Zephyrs*, the next trains in what would become a rapidly expanding fleet, were quite another matter. Ordered in July 1934, well before the first *Zephyr* had even entered regular service, let alone proven itself there, the *Twin Zephyrs* were to compete in the tough Chicago–Twin Cities market, going head-to-head against the trains of the Chicago, Milwaukee, St. Paul & Pacific (The Milwaukee Road) and the Chicago & North Western, along with a few decidedly secondary players.

The *Twin Zephyrs* were in most ways virtual copies of the original *Zephyr*—Budd-built, EMC-powered, three-car, stainless-steel, shovel-nosed, articulated trainsets. At a glance, these

trains, with power cars numbered 9901 and 9902, would have been virtually indistinguishable from 9900. There were a few significant differences, however, particularly regarding the configuration of passenger accommodations—not surprisingly, as they were intended for very different markets.

A word first about power-car numberings, as these designations have become a shorthand method for identifying *Zephyr* trainsets as they proliferated, one particularly useful as they switched services and acquired new names. At the time the *Zephyr* story began, Burlington was assigning 9000-series numbers to all internal-combustion units—locomotives upward from 9000, motorcars from 9450. Not much akin to the existing gas-electric “doodlebug” motorcars that the Burlington then rostered, the *Zephyr* was given the next available number group: 9900.

The external detail that most clearly distinguished Nos. 9901 and 9902 from 9900 was the air-intake grille over the windshields. These were smaller on the new trains, with exactly horizontal bottoms, eliminating the “frowning brow” look on the *Pioneer Zephyr*’s face. The air horns, inside this grille on 9900, were moved to rooftop on the later units (and 9900 soon retrofitted similarly). A more significant though invisible change was the replacement of 9900’s straight air brakes with Westinghouse HSC electro-pneumatic brakes. Providing slightly more responsive and more uniform braking, these were used on future *Zephyrs*, and 9900 eventually received them as well. Fuel capacity was increased slightly, from 600 to 660 gallons.

But it was in accommodations and amenities that the most significant differences lay. For one thing, the Railway Post Office section, not needed on Chicago–Twin Cities *Zephyr* runs (RPO service was handled by standard trains on this route), was eliminated. This allowed the steam boiler to be moved into the power unit’s baggage compartment, along with a kitchen annex, and at the same time shorten the unit by seven feet.



Twin Zephyrs

for the

Twin Cities

CHICAGO
 ↓
 ST. PAUL
 MINNEAPOLIS

Newest members
 of the most
 illustrious
 train family
 in the world



ABOVE: This oversize brochure was issued on April 5 to celebrate the inaugural of Burlington’s new trains. Like all the other publicity surrounding the event, the cover of this elegant and extensive booklet, with its stylized dual images, emphasizes the theme of “twinness.” MIKE SCHAFFER COLLECTION



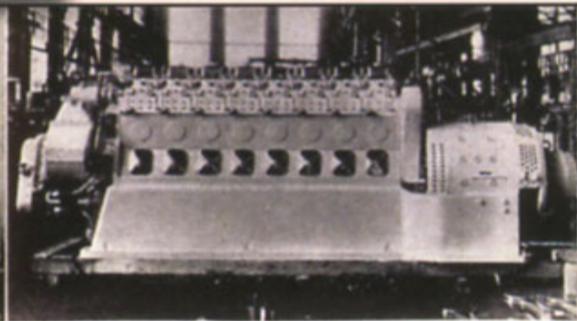
Sheathed in stainless steel.

As the newspapers put it *The Burlington has Twins*. They are the Twin Zephyrs for the Twin Cities.

These second and third members of a growing and very interesting train family are essentially duplicate and triplicate of the widely heralded first Zephyr that was built in 1934 and was the first streamline train in America to be placed in regular daily service.

One of the new Twin Zephyrs makes an afternoon run every day from Chicago, 431 miles northwestward to St. Paul in 6½ hours, and 441 miles to Minneapolis in 7 hours, as the other Twin makes the afternoon run in the opposite direction in the same running time.

The Twins are self-propelled, light-weight, three-car assemblies of stainless steel with bullet-shaped front and rear, and satin-smooth longitudinal surfaces. Aside from giving them grace and beauty, their streamline design has an important scientific relation to speed and fuel economy, wind tunnel tests by the Massachusetts Institute of Technology having showed that at 95 miles per hour its streamline reduces “drag” (wind resistance to motion) by more than 50%.



The power plant.

Their structural material is known as 18-8 stainless steel, a modern non-corrosive alloy consisting of 18% chromium and 8% nickel, that has a tensile strength three times greater than ordinary steel.

In their construction the parts instead of riveted are welded together by an electric method developed by the Budd Mfg. Co. known as *shot weld* which results in “vulcanized” joints and seams which have proved as strong as the metal itself.

The ZEPHYRS run by electric power generated by a 660-horse power, 8-cylinder, 2-cycle Diesel engine designed especially for this type of train by General Motors. It burns ordinary fuel oil and has no spark plugs or ignition system of the sort used in gasoline engines, combustion being accomplished wholly through high compression.

The trains are 197 feet long and have seats for 88 passengers. They are designed for high speed daytime travel, and weigh only 227,000 lbs. which is not very much more than the weight of a single Pullman car.

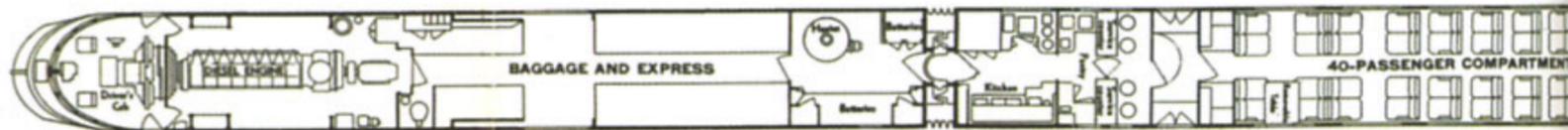


One of the coach compartments.

The Zephyrs ride on articulated trucks equipped with roller bearings, and have only 16 wheels against the 36 to 40 wheels of a conventional train consisting of steam engine and two cars. The front part of one car and the rear of the preceding one rest upon the same truck and are held together by a sleeve joint which permits them to round the curves of the track efficiently, but yet eliminates slack between the cars and really unifies the entire train.

Aside from the big Diesel engine, the first car has floor and wall space for baggage, express and mail. The fore part of the second car contains kitchen, chef’s pantry, and a service counter with seats for four. Next are sixteen seats grouped in “four-ones” facing tables that can be set up at meal time and moved afterward. 24 additional chairs give this car seats for a total of 40 passengers. The forward half of the third car has coach seats for 24, while the rear half is a stunning solarium lounge with detachable chairs for 24 more.

All the seats on the Twin Zephyrs will be reserved individually assigned in advance, and sold by number.



Dining arrangements were far more extensive and elaborate on the *Twin Zephyrs* than on the *Pioneer*. In the new trains, the second car contained a quite-complete kitchen (with coal-fired range, steam tables, warming closet, coal bin, large refrigerator, ice bins, and four-unit coffee urn) and a commodious pantry. The *Pioneer Zephyr*, in comparison, had only a compact buffet grill. Beyond the pantry were counters with stools for four passengers, and beyond that a dinette for 18 passengers, at four removable Formica-topped tables. In addition, aluminum trays could be affixed for at-seat meal service throughout the passenger compartments; annunciator buttons at each seat communicated with the pantry.

Along with kitchen, pantry, and dining area, the second car contained 28 additional coach seats. The third car held 24 more coach seats and, in the rounded observation end, a 24-passenger parlor compartment with individual inward-facing chairs. Décor and furnishings throughout the passenger areas were much as aboard the *Pioneer Zephyr*: stainless-steel moldings above and below the windows, colors running to pastel shades of green, blue, and gray. "Aisle carpets and fine rugs of harmonizing hue, silk glass curtains, duotone chair fabrics," reported the train's inaugural brochure, "make the *Zephyr* as modern as the moment."

Literally speaking, Nos. 9901 and 9902 were the second and third *Zephyrs* built by Budd and EMC, but in a sense they weren't. The answer to this riddle is the *Flying Yankee*, a *Zephyr* in everything but name and ownership (though with interior space allocated differently from the *Zephyrs*) delivered in February 1935 to the Maine Central and Boston & Maine. It was first operated as the *Flying Yankee* between Boston and Bangor, Maine, where it cut travel time by 65 minutes, but inadequate capacity eventually pushed it off that route. The train later ran as

BELOW AND RIGHT: These descriptions, photos, train diagram, and route map are from a smaller contemporary brochure. The cartographer has taken some liberties, most notably in mercilessly squeezing Illinois into about half its width. Schedule, distance, average speed, and running time are shown on the map's borders.

JOE WELSH COLLECTION



The solarium lounge.

Meals prepared in the kitchen which is fitted with accessories of stainless steel, will be served to all passengers at the "foursome" tables, or upon trays that can be bracketed to each chair.

Ultra modern standards govern the design and color treatment of the interior. Pastel tints of green, blue and grey for the side walls and ceiling form a light and pleasing background for the flash of the stainless steel window frames, sills and trim. Carpets and fine rugs of harmonizing hue, silk glass curtains, duotone chair fabrics, make the *Zephyrs* as luxuriously modern as the moment. Reflected lighting from tubular ducts in the ceiling provide scientifically diffused illumination of just the proper intensity for eye level.

The *Zephyrs* are air-conditioned by a special system that supplies filtered and washed air to all passenger compartments. Automatic thermostat control provides the proper degree of warmth or coolness the car around, and forced ventilation results in a complete change of circulation every two minutes. The perfect functioning of the air-conditioning system is

aided by hermetically sealed windows of shatter-proof glass having an air chamber between double panes to preclude frost and condensation, and to afford insulation against heat, cold and sound.

Special compartments for hand baggage supplement luggage racks overhead and under the seats.

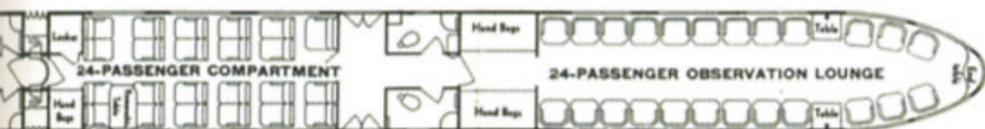
All passenger compartments are equipped for radio reception.

The *Zephyrs* are capable of a cruising speed exceeding 100 miles an hour. The rate of acceleration is so high that a speed of 60 miles an hour can be attained in less than a minute and a half from a standing start. Obviously the matter of deceleration from high speeds is of the utmost importance and has a vital relation to safety in operation, and also to the fast schedules which the trains are called upon to maintain. The *Zephyrs* have a marvelous system of electro-pneumatic brakes especially developed by Westinghouse for such high speed articulated trains.

Schedule of the Zephyrs

NORTHBOUND No. 23		SOUTHBOUND No. 24	
Lv. Chicago	2:00 pm	Lv. Minneapolis	12 Noon
Lv. Aurora	2:35 pm	Lv. St. Paul	12:30 pm
Lv. Savanna	4:13 pm	Lv. East Winona	1:57 pm
Lv. East Dubuque	4:48 pm	Lv. North LaCrosse	2:20 pm
Ar. North LaCrosse	6:25 pm	Lv. East Dubuque	3:55 pm
Ar. East Winona	6:55 pm	Lv. Savanna	4:37 pm
Ar. St. Paul	8:30 pm	Ar. Aurora	6:17 pm
Ar. Minneapolis	9:00 pm	Ar. Chicago	7:00 pm

- ① Stops to receive revenue passengers for the Twin Cities.
- ② Stops to discharge revenue passengers from Chicago, or to receive revenue passengers for the Twin Cities.
- ③ Stops to discharge revenue passengers from Chicago.
- ④ Stops to receive revenue passengers for Chicago.
- ⑤ Stops to discharge revenue passengers from the Twin Cities, or to receive revenue passengers for Chicago.
- ⑥ Stops to discharge revenue passengers from the Twin Cities.



The *Zephyrs* travel over one of the best pieces of railroad double track in the world. It extends across the gently rolling countryside of Northern Illinois; across the beautiful valleys of the Fox and the Rock Rivers, through the locale of the Black Hawk War—and so to Savanna on the Mississippi. From here northward the rails follow the shore of the great river for 300 miles over a grade levelled by the "Father of Waters."

There is no place between Savanna and St. Paul where the track grade exceeds one-quarter of one per cent . . . literally a "streamline" route.

the *Cheshire* and (under sole B&M ownership) as the *Minute Man* between Boston and Troy (Albany), New York, before being retired in 1957 to a museum. As the 2000s got under way, the *Flying Yankee* was undergoing restoration in anticipation of a return to operating service.

Considering the success of the *Zephyrs*, it's perhaps surprising that Budd couldn't sell trains like them to more railroads. In March 1934, for instance, Budd had made a formal proposal to the New York, New Haven & Hartford for a four-unit trainset in most ways like the *Zephyr*: articulated, made of shotwelded stainless steel. The major difference was that, as New Haven specified, it would have been double-ended, which the Budd people found not ideal in terms of streamlining.

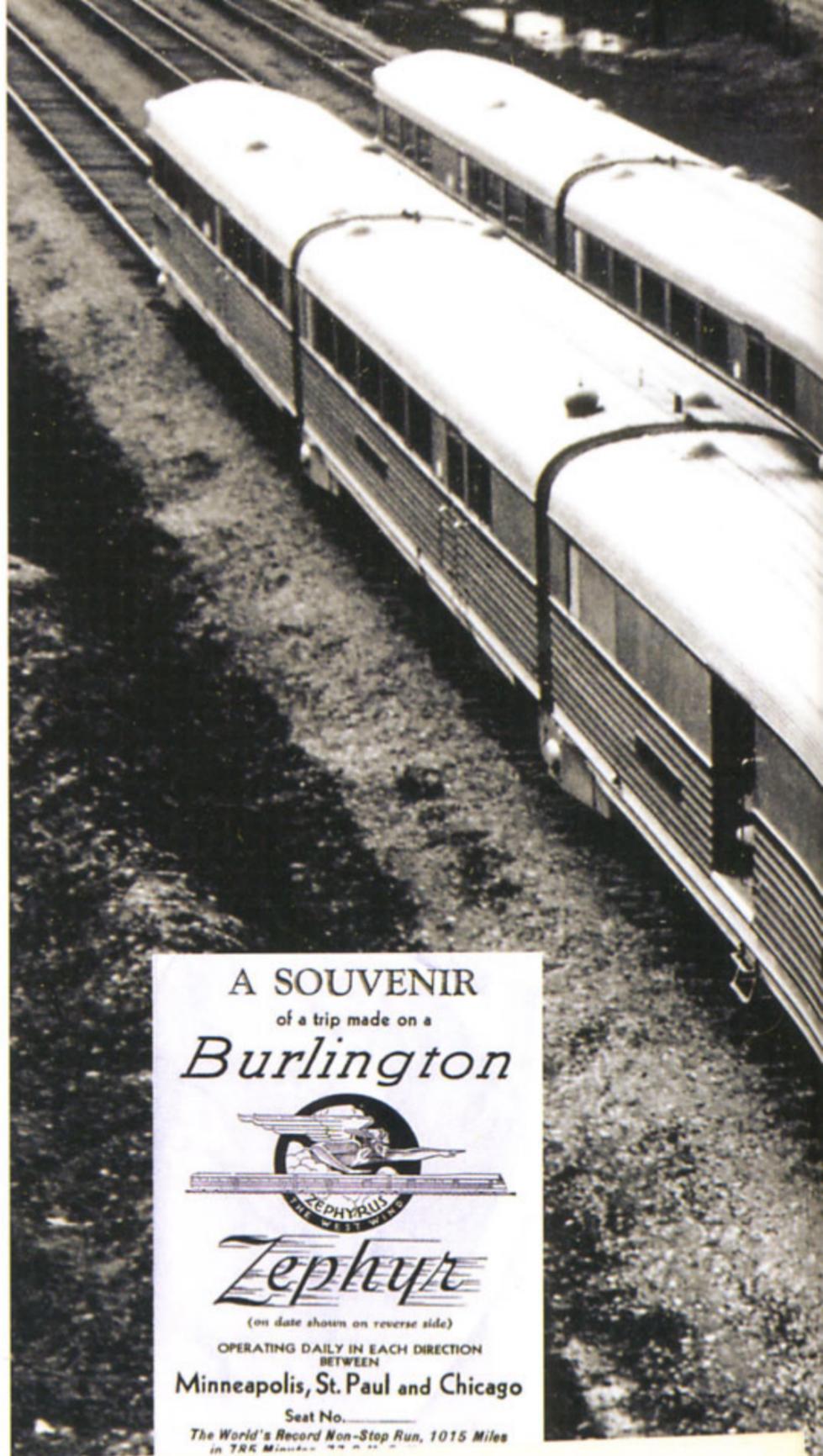
"While the present satisfactory frontal development," the proposal read, presumably referring to the shovel-nose shape, "does not constitute a good rear end formation, it is, at least, a fair compromise between the ideal and a conventional car end." In any case, Budd didn't get the order. Instead, New Haven opted for what became the *Comet*, a bidirectional, diesel-powered, articulated, three-car trainset of aluminum alloy made by Goodyear-Zeppelin, a German-American consortium more focused on airship than railway manufacture.

But Budd had certainly won the heart of the CB&Q. On March 23, 1935, *Twin Zephyr* No. 9901 rolled out of the Budd plant and departed for a demonstration tour of the South, an area of the country that the original *Zephyr* had missed the previous year. Running on the Pennsylvania Railroad, Richmond, Fredericksburg & Potomac, and Seaboard Air Line, the *Twin Zephyr* trainset visited Washington, D.C.; Richmond, Virginia; Raleigh, North Carolina; Columbia, South Carolina; Savannah, Georgia; and, in Florida, Jacksonville, Ocala, Winter Haven, Sebring, West Palm Beach, Miami, Tampa, St. Petersburg, and Sarasota.

From there 9901 headed for home rails where, on April 6, it made a test run from Chicago to St. Paul, covering the 431 miles in 5 hours and 31 minutes. Average speed was 77.65 miles per hour, topping out at 104. This provided assurance that the carded timing for the trains when they were inaugurated a few weeks hence—6 hours and 30 minutes to St. Paul and 7 hours to Minneapolis—would be easily attainable. After the test run, the train barnstormed through the Midwest, stopping at (among other cities) Burlington, Iowa, and Hannibal, Missouri, which would become the end points for the already-ordered *Mark Twain Zephyr*. Then it breezed into Kansas City, which along with St. Louis would, in December of the following year, become the endpoints of the *Ozark State Zephyr*, operated with 9902, by then bumped from the *Twin Zephyr* run by a new, larger trainset.

Burlington publicists had a field day with the inaugural festivities for the *Twin Zephyrs*, seizing the theme of "twinness" and playing it out to great effect. "The Burlington has Twins" was apparently the gist of more than one newspaper headline.

The first step was getting the twin trainsets together. Number 9902, the second completed, had left the Budd plant on April 9, heading for Chicago via Pittsburgh and arriving there two days later. Then the fun began. On April 14, the two met for the first time as completed trains, at Aurora, 38 miles from Chicago. Forty-four sets of human twins helped celebrate this uniting of the stainless-steel pair. Ranging in age from 3 to 73 and all coming from towns and cities along the Burlington, the twins boarded No. 9902 in Chicago for Aurora, where 9901 arrived from its Midwestern tour. From there the *Twin Zephyrs* ran side-by-side back to Chicago on the CB&Q's famous high-speed, three-track suburban main line, each train carrying one of each pair of twins.



A SOUVENIR
of a trip made on a
Burlington

Zephyr
(on date shown on reverse side)
OPERATING DAILY IN EACH DIRECTION
BETWEEN
Minneapolis, St. Paul and Chicago
Seat No. _____
The World's Record Non-Stop Run, 1015 Miles
in 7:15 Minutes

TWIN *Zephyrs*
TO THE TWIN CITIES
CHICAGO • ST. PAUL • MINNEAPOLIS



SCHEDULE
Twice Daily

NORTHBOUND			
Lv. Chicago	8:00 am	4:00 pm	
Ar. St. Paul	2:30 pm	10:25 pm	
Ar. Minneapolis	3:00 pm	10:59 pm	
SOUTHBOUND			
Lv. Minneapolis	8:00 am	4:00 pm	
Lv. St. Paul	8:30 am	4:30 pm	
Ar. Chicago	3:00 pm	10:59 pm	

AMERICA'S *Distinctive* TRAINS



ABOVE: On April 14, the *Twin Zephyrs* are pacing each other, headed for Chicago on the three-track speedway from Aurora. Aboard each *Zephyr* is half of 44 pairs of twins who helped the Burlington celebrate the arrival of its new trains. BURLINGTON NORTHERN SANTA FE

POSTCARD, FACING PAGE: A postcard touts the twice-daily schedule for the *Twin Zephyrs*, instituted due to demand less than two months after the trains' inauguration. The turn time at both ends was just one hour flat, testimony to the precise timekeeping the Burlington could count on in that era. KARL ZIMMERMANN COLLECTION. TICKET: Early travel on the *Zephyrs* was special enough to justify a souvenir. JOE WELSH COLLECTION

At the christening the next day at Chicago Union Station, twins again held center stage: 13-year-olds Marion and Frances Beeler simultaneously broke bottles of champagne over the noses of the *Twins*. With 120 members of the Chicago Association of Commerce as passengers, both trains then left on nonstop runs to St. Paul. (Because the line beyond Aurora to the Twin Cities was not entirely double-tracked, they could not leave town in side-by-side fashion.) After luncheon celebrations there, the trains returned to Chicago, where they spent the next day on display. On April 17 the trains began earning their keep, carrying 1,144 fare-paying riders on Chicago–Aurora excursions. (During the *Twin Zephyrs* first month of regular operation, similar excursions would be operated during a train's 7 p.m.–2 p.m. Chicago layover.) After that, as a pair as always during exhibition, 9901 and 9902 spent a day on display at Great Northern Station in Minneapolis and one at St. Paul's Union Depot. Then 9902 "deadheaded" to Chicago so that the *Twin Zephyrs* could begin regular service the following day, April 21, 1935.

Northbound, *Twin Zephyr* No. 23 left Chicago at 2 p.m. and arrived at Minneapolis at 9 p.m. Southbound train 24 left Minneapolis at noon and arrived in Chicago at 7 p.m. Initially, the *Twin Zephyrs* were intended for through passengers, not "shorts," who would be accommodated on conventional trains. In fact, both northbound and southbound, North La Crosse, Wisconsin, was the only regular stop (other, of course, than St. Paul); other stops were to receive or discharge passenger to or from endpoints only or, as was initially the case with Savanna, Illinois, to change train and engine crews.

The *Twin Zephyrs* were not extra-fare trains, though they were all-reserved. A coach seat from Chicago to St. Paul, for instance, cost \$7.93 one way, \$14.28 round trip. The 24 parlor lounge seats in the solarium required a supplemental fare. The enhanced meal service on the *Twin Zephyrs* (dinner or buffet service offered throughout the journey) represented an upgrade in amenities from those initially offered aboard the *Pioneer Zephyr*. This direction, moving from trains that emphasized speed and economy to ones that offered luxury as well, would continue as the *Zephyr* fleet evolved.

The *Twin Zephyrs* were an immediate hit, running on the Burlington's scenic Mississippi River line, "Where nature smiles 300 miles," according to the company publicity. During the trains' first three weeks of operation, 3,539 passengers traveled, for an average load of 85 per trip. On average, 42 passengers were turned away daily for lack of space—an inherent problem of fixed-consist trains like the early *Zephyrs*. Burlington responded on June 2 by doubling operational frequencies, with each train making a daily round trip. *Morning Zephyrs* would leave each endpoint at 8 a.m., *Afternoon Zephyrs* at 4 p.m.

This helped but, over the summer, demand for space on the *Zephyrs* still far outstripped supply. Occasionally, the Burlington ran steam-powered second sections of the *Twin Zephyrs*, 30 minutes behind the first. Otherwise, ticket agents would try to direct prospective passengers to other CB&Q services. Sometimes, however, they defected to the competition.

And what of that competition, running on The Milwaukee Road and the Chicago & North Western? North Western had gotten the jump



on the high-speed sweepstakes to the Twin Cities with its January 2, 1935, inauguration of the "400." A conventional train comprising upgraded heavyweight rolling stock—full diner, coaches, and parlor cars pulled by 4-6-2 Pacific-type steam locomotives converted from coal to oil-burning for this service—it made the Chicago–Twin Cities run in seven hours, specifically 408½ miles in 410 minutes, inspiring the train's unusual number-as-a-name.

With the field largely to itself, the "400" averaged about 150 passenger each way daily during its first six months of operation. (The train was originally six cars long but a seventh was soon added and sometimes an eighth, as the train was not hamstrung by a fixed, articulated consist. Parlor seats were much in demand, so an extra parlor car was a frequent addition). During the second half of 1935, with competition in place on the Burlington and later The Milwaukee Road, these numbers dropped slightly. That competition from CMStP&P had arrived on May 29 in the form of the first of its *Hiawathas*.

The trains were hauled by oil-burning steam locomotives, high-wheeled 4-4-2 Atlantic-types ordered from the American Locomotive Company for this purpose. The first steam locomotives built streamlined (others had been retrofitted with shrouding earlier), these dramatic-looking speedsters covered the 410 miles between Chicago Union Station and St. Paul Union Depot in six and one-half hours—exactly the same as the *Twin Zephyr* and the "400", which had had its Chicago–Twin Cities timing cut to 6 hours 30 minutes on April 28. Why steam when diesel-electric power was speedily becoming the popular mode for new streamliners? Steam was better suited to the conventional-size (and heavier) *Hiawatha* equipment.

With business booming on the Twin Cities route, and with the competition fielding trains more substantial than the little three-car *Zephyrs*, the obvious answer for Burlington was to offer longer trains with more amenities. Management arranged to do just that, and on December 18, 1936, a pair of new seven-car *Twin Zephyrs* (power units included in the count, as always in integrated trainsets) took over from their smaller

Competition for patronage between Chicago and the Twin Cities was fierce, and The Milwaukee Road's sleek, colorful *Hiawathas* were worthy contenders with the *Zephyrs* and Chicago & North Western's "400s". Here, looking elegant behind 4-4-2 No. 1, built by Alco and styled by Otto Kuhler, train 101, the westbound *Hiawatha*, rockets nonstop through Wisconsin Dells on September 24, 1935. A. W. JOHNSON, KRAMBLES-PETERSON ARCHIVE



Number 511, one of three experimental 1,800-horsepower box-cab locomotives built by EMC in 1935, leaves Great Northern Station in Minneapolis with the southbound *Afternoon Zephyr*, train 24. While Nos. 9904 and 9905 were being completed, the 511 was used to protect one of the *Twin Zephyr* schedules (actually running with *Denver Zephyr* cars). After that, the silver-painted unit was retained by CB&Q until August 1937 as back-up power for the *Twin Zephyrs* and *Denver Zephyr* and, occasionally to haul short, heavyweight, coaches-only second sections of the *DZ*.
 G. P. GARDE, ROBERT P. SCHMIDT COLLECTION

predecessors, freeing them up for other services. (These new trains still were not big enough, and an eighth car—a dinette-coach—would be added in September 1937.) With power units 9904 and 9905, these new *Twins* were actually the seventh and eighth *Zephyrs* to hit the rails. (No. 9903, the *Mark Twain Zephyr*, had entered service in October 1935, and Nos. 9906 and 9907, the *Denver Zephyr*, on November 8, 1936, a month ahead of the new *Twin Zephyrs* and just a few pages away in this story.)

“Heritage from the gods,” is how the Burlington described its new *Twin Zephyrs* in a booklet issued shortly after they entered service. “Glorified in stainless steel are the power and wisdom of Jupiter,” it read, “the metallurgy of Vulcan, the beauty of Venus, the handicraft of Minerva, the legendary virtues of a dozen deities, plus the supernal, silent speed of Pegasus and Zephyrus. Each shining car is a shrine to the god or goddess whose name it commemorates.”



This view of a *Twin Zephyr* arriving in Chicago amid a sea of standard heavyweight cars suggests just how revolutionary the original *Zephyrs* really were. Burlington’s 14th Street coach yard is at right, and the Pennsylvania Railroad’s 12th Street coach yard to the left.
 B. L. STONE, KRAMBLES-PETERSON ARCHIVE



HERITAGE FROM THE GODS

ABOVE AND BELOW: With the gods and goddesses of endurance, strength, comfort, speed, beauty, power, and achievement hovering in the sky, Burlington's "Train of the Gods" and, behind it, "Train of the Goddesses"—twinned as always—make a noble image on this brochure cover. These excerpts from inside highlight the *Zephyr's* parlor section (aft) and cocktail lounge (forward). MIKE SCHAFER COLLECTION



Wide windows of the parlor-lounge invite travelers to view the entrancing panoramas of the Mississippi.



DELIGHTFUL RELAXATION

ART and science have labored together and given freely to create the two delightful parlor cars that crown the new Twin Zephyr's passenger accommodations. Together they provide 47 commodious seats for parlor travelers, plus a luxurious private drawing room and a congenial observation lounge.

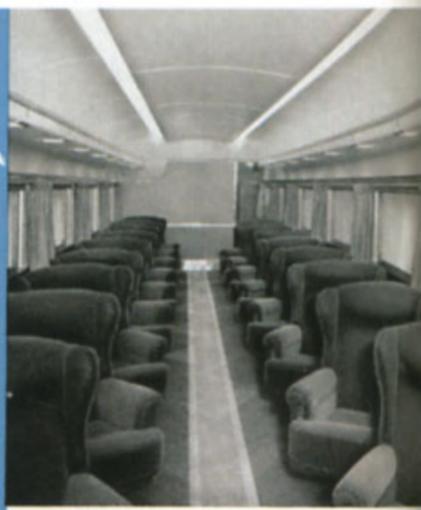
Both cars are richly decorated and appointed. The restful fawn color of the roomy, reclining parlor chairs and the coconut brown and sand color of the walls is enlivened by cheery red drapes at the broad windows and a ceiling of oyster white. Soft, indirect illumination from overhead ducts is supplemented by diffused light from individual fixtures built into the underside of the overhead baggage racks. Large compartments for passengers' luggage and wraps, and modernly appointed men's and women's rest rooms are located in each car.

Six movable easy chairs upholstered in browns and tans in the rounded, wide-

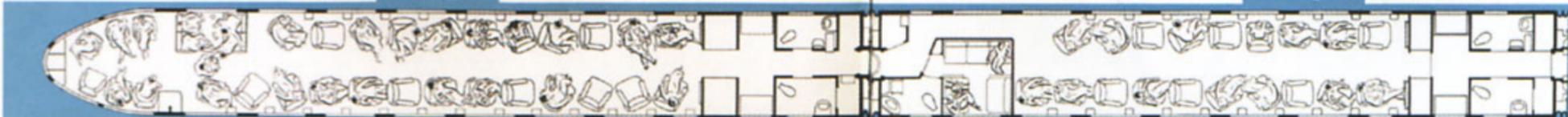
windowed end of the train, afford a vantage point from which parlor car passengers may behold the unrolling of the majestic and ever changing panoramas of the scenic Mississippi River route. The rear car, in which passengers may smoke, also contains a congenial nook with black topped card table.

The drawing room, which is furnished with a pair of Pullman-type seats, a longitudinal sofa, and individual radio, affords luxurious privacy for daytime travel. The upholstery is a richly striped plush, lower walls are slate colored, and walnut walls are surmounted by a peach-shaded ceiling. An adjoining private dressing room, contains wash stand, vanity table and lavatory.

The parlor cars have telephone connection with the diner, through which table reservations can be made or refreshments ordered. Both of these cars are equipped with radio-telephone outlets.



Comforts, styling and appointments represent the utmost art and science could lavish upon travel.



Jupiter PARLOR-LOUNGE Juno Mercury PARLOR CAR Diana



Together with the *Denver Zephyr*, the new *Twin Zephyrs*—by now also known as the *Morning Zephyr* and *Afternoon Zephyr*—represented the *Zephyr* concept grown up or, in an odd way, regressing. In significant aspects, these trains returned to expectations of comfort and service more typical of the older conventional trains than the revolutionary *Pioneer Zephyr* and Union Pacific's M-10000.

Both new trains were substantially longer than the earlier "pocket" streamliners—the *DZ* with its 12 cars, the new *Twins* with at first seven and later eight cars. Both had stand-alone, non-articulated power units, "A" (with a crew cab) and "B" (booster, no operating cab, but controlled from the A unit) units in the case of the *DZ*. The *Twins'* power unit was the same as the *DZ's* A-unit: 1,800 horsepower from a pair of EMC/Winton V-12 201-A engines. These power units were interchangeable—and in fact were at times interchanged—in that they could pull trains, even heavyweight, other than those for which they were built. Both trains had full-size, full-service dining cars—very similar, though the fully articulated

ABOVE: In Chicago, in the short, one-hour turnaround-time allowed by the timetable, the *Morning Zephyr* is being wyeed at Union Avenue interlocking plant near 18th Street, preparatory for its return to Minneapolis as the *Afternoon Zephyr*. The St. Charles Air Line, used by *Zephyr* 9900 during its move from Halsted Street station (behind the photographer) to the Century of Progress Exposition during the dawn-to-dusk run from Denver, looms behind the *Twin Zephyr*. GEORGE SPEIR



Miles and minutes pass in a twinkling in this smart, cosmopolitan cocktail lounge with its sparkling bar and cleverly arranged tables for companionable twosomes, threesomes and foursomes.



COSMOPOLITAN RENDEZVOUS

FOR those who enjoy an appetizing highball or an after-dinner liqueur, or would while away minutes and miles with congenial friends over a foaming stein, the new *Twin Zephyrs* offer a gay, cosmopolitan cocktail lounge.

Here is to be found a smart, quarter-circle bar with mahogany top behind which glitters a back bar of plate glass and stainless steel encompassing an edge-lighted mirror of etched, peach-tinted glass.

Hand-buffed tan leather chairs with tubular stainless steel frames furnish informal seating arrangements for twos and threes at black-top tables, while two built-in half-moon sofas afford chummy nooks for foursomes. Separated from the cocktail lounge proper by an aluminum grille is an annex with seats for four more foursomes.

The decorative treatment of the lounge is as gay and modern as its atmosphere.

Floors are covered with inlaid design linoleum. Sidewalls are gray Harewood, the wainscoting is a rust shade and the ceiling peach. There are cheerful red-striped tan drapes and greenish-gray Venetian blinds with bright tapes and cords at the windows. Soft illumination comes from column lights in vertical fixtures, from overhead ducts, and from bulbs concealed in a cove over the bar. Music may be had from the radio-phonograph.

An expert attendant with a select stock of liquors is equipped to produce a complete variety of refreshments, while a telephone at his elbow commands instant light lunch service from the dining car and informs travelers when their tables are ready.

The cocktail lounge affords a sociable rendezvous for both coach and parlor car passengers.



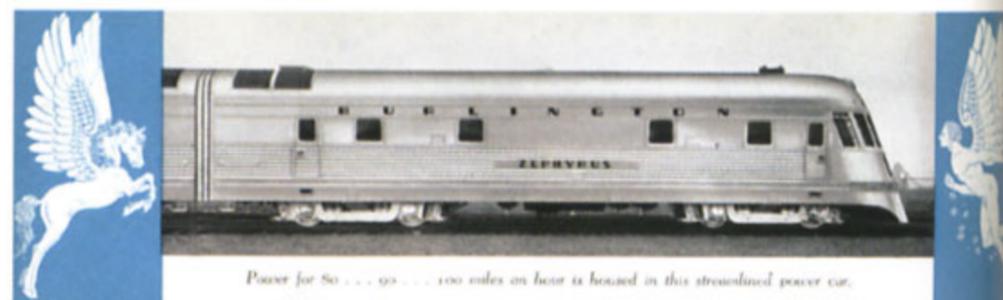


Twin Zephyrs diners seated 32 and the partially-articulated *DZ* cars 40.

In spite of these evolutionary directions, both trains were very clearly members of the Budd-built *Zephyr* fleet: Shotwelded, fluted stainless-steel, shovel-nose power car. The 1936 *Twin Zephyrs* remained fully articulated (save for the power cars), though the longer *Denver Zephyr* had moved to semi-articulation in which only pairs or triplets of cars were articulated. In keeping with the practice begun with the *Mark Twain Zephyr* and continued with the *DZ*, all cars including the power units were named. While the *DZ* began the *Silver*-naming convention that would continue throughout the *Zephyr* years, the *Twin Zephyrs* mined the biographical nomenclature of classical mythology, creating a "Train of Gods" and a "Train of Goddesses." Power cars were *Zephyrus* and *Pegasus*, cocktail lounges *Apollo* and *Venus*, coaches *Neptune* and *Vesta*, *Mars* and *Minerva*, dinette-coaches (added in 1937) *Cupid* and *Psyche*, diners *Vulcan* and *Ceres*, parlor cars *Mercury* and *Diana*, and parlor-lounges *Jupiter* and *Juno*. (Built a dozen years later, baggage cars *Olympus* and *Argo* would be added to the consist in February 1948, after the trainsets' reassignment as the Chicago–Omaha–Lincoln *Nebraska Zephyr*.)

These were lovely trains, well able to meet the challenges of the fully equipped *Hiawathas* and "400s." The parlor-lounges had 6 movable (and unreserved) chairs in the rounded observation end, an unreserved card table for 4, and 24 swiveling parlor seats. The parlor car had an additional 19 swivel chairs plus a drawing room seating 7 that featured a dressing room and radio. (In 1942, the parlor seats were replaced by 42 coach seats, though the drawing room was retained.)

The full-length, 36-seat diners in the two consists each had its own color scheme, described this way in the train's brochure: "One, the 'Vulcan', has chairs upholstered in ivory leather, silver-gray carpets, blue-gray



Power for 80 . . . 95 . . . 100 miles an hour is housed in this streamlined power car.



Looking along the Zephyr's 1800-horsepower Diesel engine toward the broad-windowed engineer's cab.

NIMBLE POWER . . . EFFORTLESS SPEED

MORE than twice the length and with three times the passenger capacity of the spectacular three-car *Zephyrs* they supersede, the new *Twin Zephyrs* develop three times more power and can equal or exceed the brilliant performance of their smaller predecessors.

Housed in the streamlined power car behind the wide-windowed engineer's cab, with its ingenious devices to insure safety and smooth operation, is the 1800-horsepower Diesel-electric

TOP: Train 22, the southbound *Morning Zephyr*, rolls through Rochelle, Illinois, on August 31, 1947, when the articulated trainsets from 1936 had less than four months remaining in *Twin Zephyr* service. However, they would have another career ahead of them as the *Nebraska Zephyr* after replacement on the Chicago–Twin Cities run by the nation's first Vista-Dome trains. In the left background is Rochelle Tower, where the Chicago & North Western's Chicago–Omaha main crossed the CB&Q. JIM SCRIBBINS



walls and ceiling, light gray Venetian blinds, and ivory trimmed buffet with blue tinted mirror. The other car, the 'Ceres,' has chairs upholstered in red Morocco, light chocolate lower walls and gray-green upper walls, terra cotta Venetian blinds, and matte black buffet with peach tinted mirror." The adjacent dinette-coach had tables for 8 and coach seating for 40; the other coaches each had seating for 60.

At the front of the train was the cocktail lounge (perhaps inspired by the one on the *Hiawathas*, which occupied the same position in its consist). The *Twin Zephyrs'* car, stylish with mahogany, glass, stainless steel, and mirrors, had a quarter-circle bar, curved banquette seating, and tables for four. Like the rest of the train's interiors, it was the work of designers Paul Cret and John Harbeson.

"For those who enjoy an appetizing highball or an after-dinner liqueur," the brochure promised, "or would while away minutes and miles with congenial friends over a foaming stein, the *Twin Zephyrs* offer a gay, cosmopolitan cocktail lounge." A telephone connected the cocktail lounge, and the parlor-observation as well, with the diner, so passengers could make dinner reservations.

For daytime travel, the *Twin Zephyrs* of 1936 combined the speed, sleekness and modernity of the earlier *Zephyrs* with the style, comfort, convenience, and pampering that had always been the hallmarks of the best passenger trains.

BELOW: This fetching winter view of a *Twin Zephyr* sweeping along the bluffs of the Mississippi River adorned the cover of menus for the *Nebraska Zephyr* and other trains. This particular menu was issued in 1948 when a complete prime rib dinner could be had for \$2.50. ROBERT P. SCHMIDT COLLECTION

plant that supplies electricity for the motors that propel the train. The plant consists of two V-type, 900-horsepower, 2-cycle Diesel engines with direct-connected generators. Each power unit operates independently of the other, and one may be shut down for maintenance or repair without halting the train.

Shape, material, methods of construction and light weight combine to produce extraordinary safety and superlative performance.

A trio of Diesel-powered generators, independent of the train's tractive power, are situated in the forward end of the cocktail lounge car. They insure efficient and uniform operation of the train's extensive air-conditioning and lighting systems whether the train is standing, starting or running at full speed.

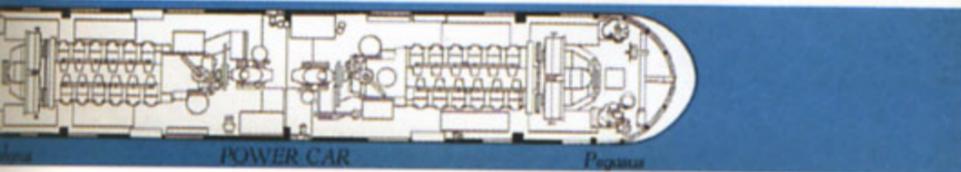
Like previous *Zephyr* trains, the new *Twin Zephyrs* are scientifically streamlined, cruise easily at 80 to 90 miles an hour and are capable of speeds well over 100. They are built of non-

corrosive stainless steel "by far the strongest and most permanent of all modern alloys"—and are fabricated by the rivetless "Shotweld" process. Thereby is attained the doubly desirable combination of great strength and extreme lightness.

Articulation—the resting of the ends of abutting cars upon the same truck—is employed throughout except between the power car and the cocktail lounge where a "tight-lock" coupler is used. This not only greatly reduces the necessary number of wheels but causes the whole train to handle as a single unit. Roller bearings and special electro-pneumatic brakes still further contribute to velvety operation of the train.

Low-slung design, hydraulic shock absorbers on trucks, the generous use of rubber and scientific sound-insulation result in an ease and quiet of riding that make high speeds imperceptible.

Windows are double-width *Zephyr* type consisting of double panes of safety glass hermetically sealed and treated to prevent frosting or fogging.



BROCHURE, FACING PAGE AND ABOVE: *Twin Zephyr* power cars *Pegasus* and *Zephyrus* each contained two 900-horsepower prime movers, one linked (electrically, not mechanically) to each truck's traction motors. This arrangement, which would be continued on Electro-Motive's E-series locomotives beginning in 1937, increased reliability. If one power plant should fail, the remaining one could at least continue moving the train to its terminal, albeit at reduced speeds. All previous little *Zephyrs* had single 600-horsepower engines. MIKE SCHAFFER COLLECTION



THE SILVER



Silver King leads a 14-car (including two power units) Denver Zephyr, after the addition, in 1938, of a dinette-coach and, in 1939, a fifth Pullman. PETER V. TILP COLLECTION



Overnighting by Zephyr

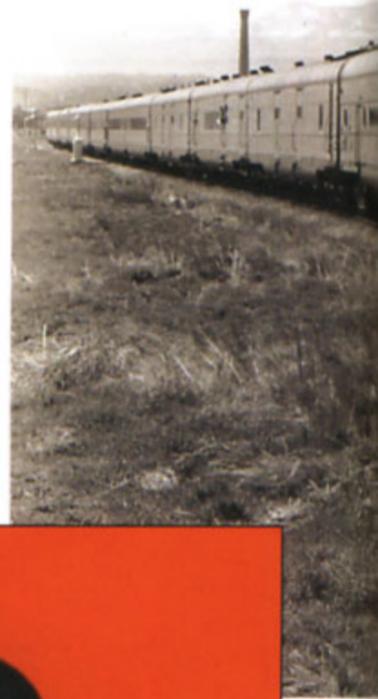
The *Denver Zephyr* of 1936 was another pioneer among *Zephyrs*. It was the first overnight *Zephyr* and thus the first to carry sleeping cars. It was the first *Zephyr* with double-unit, cab-booster (“A” and “B” units) locomotion. It introduced the convention of naming all cars with the prefix “Silver,” so appropriate for these trains of gleaming stainless steel. It took the first tentative step away from articulation. And, the *Denver Zephyr’s* route was more than twice as long as any of its brethren.

Nevertheless, the *Denver Zephyr’s* first incarnation was a holding action, a *Pioneer* but not a pioneer. For on May 31, 1936, when Burlington introduced Chicago–Denver streamliner service, it was not with the 12-car, sleeper-and-diner-carrying luxury consists that would soon carry the *Denver Zephyr* banner, but with far more

Spartan three-car trains: the *Pioneer Zephyr* and the *Mark Twain Zephyr*, borrowed for this service. The explanation for this anomaly, not surprisingly, was competition—head-to-head, with Union Pacific, CB&Q's chief rival on the Chicago–Denver route.

The Chicago–Denver mail contract held by the Burlington was an important part of this story, as an internal Burlington memorandum from May 9, 1936, passed along by *Zephyr* scholar John W. Schultz makes clear. “Confidentially,” it read, “we understand that the sixteen-hour streamline service via the Union Pacific will be established June 7th and since our streamline trains will not be ready until sometime in July, we are planning to use two of our coach *Zephyrs* having mail compartments in this sixteen-hour Chicago–Denver service in order to hold the mail which we have handled for so many years and which, if temporarily diverted to a faster service via the Union Pacific, might easily stay there.” As it turned out, July delivery for the new *DZs* was a wildly optimistic estimate.

As the first two chapters of this book reveal, Burlington and UP had jockeyed for streamliner primacy right from the beginning. UP's M-10000 had edged out the original *Zephyr* as the first streamliner by a



An early brochure for the original *Denver Zephyr* emphasizes the daily operation and overnight schedules. The train was indeed elegant, benefiting from the fine aesthetic sense of Paul Cret and John Harbeson, the design consultants retained by the Edward G. Budd Manufacturing Company. KEVIN J. HOLLAND COLLECTION

OVERNIGHT • EVERYNIGHT

Burlington's **DENVER ZEPHYR**

BETWEEN CHICAGO AND DENVER

few months when it was introduced on February 12, 1934—but only by being fitted with a Winton distillate engine, inferior to the 201-A diesel it could have had by waiting, as the *Zephyr* did. On the other hand, the M-10000 did not begin revenue service—as a Kansas City–Topeka–Salina, Kansas, run and having been named *The Streamliner* (later renamed *City of Salina*)—until January 31, 1935, allowing the *Zephyr* to claim this first when went into regularly scheduled service on November 11, 1934, between Kansas City and Lincoln, Nebraska.

But UP was quicker than CB&Q to commit to the long-distance streamliner, having ordered its first, the M-10001, even before the M-10000 was delivered. On June 6, 1935, this new seven-car articulated train—looking very much like a stretched version of the M-10000—entered service as the *City of Portland*. In May 1935 came the *City of Los Angeles* and the next month the *City of San Francisco*, followed shortly by the *City of Denver*. The Portland, Los Angeles, and San Francisco trains (all of which originated in Chicago) were single consists and therefore



departed from Chicago's North Western Terminal roughly once every six days. "The Streamliner *City of San Francisco* will make five sailings every month from the 'port' of Chicago and the 'port' of San Francisco," read an early brochure. Though the first *City* trains no doubt did have some of the pomp and grandeur of the great ocean liners, the ship analogy was perhaps as much as anything a way to sugar over the inconvenience of an occasional schedule.

On the other hand, with two trainsets, M-10004 and M-10005, the *City of Denver* would offer daily service in both directions, and this was far from the only characteristic UP's Denver train would share with Burlington's. Like the *Denver Zephyr*, the *City of Denver* would abandon total articulation in favor of partial, with only three pairs of cars sharing common trucks. Unlike the M-10000 through M-10003, it would have a round-end observation car with lounge seats, an amenity embraced by the *Zephyrs* from the beginning and a significant missed opportunity for the first UP streamliners. It would be 12 cars long including power units, the same as the *Denver Zephyr's* original consist. The *City of Denver* carried

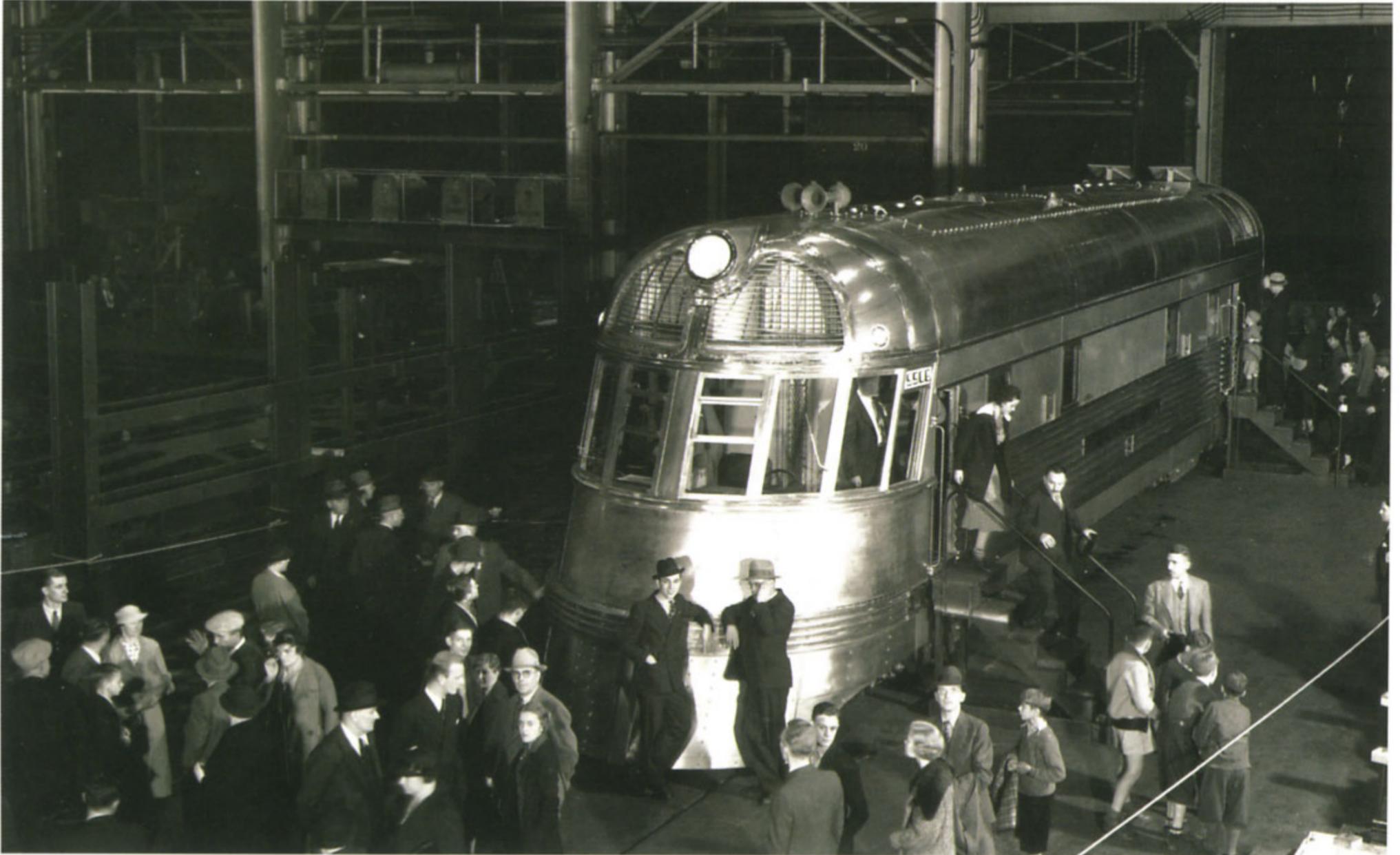
Union Pacific's Pullman-Standard- and Electro-Motive-built *City of Denver* was the *Denver Zephyr's* main competition. The partially articulated trainset posing here on the outskirts of Denver circa 1940 had by then been redesignated CD-05 (for *City of Denver*, and as the fifth-built of UP's streamliners). Delivered in 1936 as the M-10005, it was ready for service months ahead of the *Denver Zephyr*, causing CB&Q to scramble and field an *Advance Denver Zephyr* using *Zephyr* trainsets 9900 and 9903. The *City of Denver's* nose heralds reflect Chicago & North Western's partnership in the train's operation. UNION PACIFIC, KARL ZIMMERMANN COLLECTION



Burlington used its celebrity *Zephyr*, the 9900, to launch a number of new *Zephyr* services before new equipment was actually ready. To prevent rival UP from a jump on high-speed, overnight Chicago-Colorado service (as well as to protect its Midwest-Colorado mail contracts), Burlington employed the 9900 and the 9903 (the *Mark Twain Zephyr*) to launch the *Advance Denver Zephyr* on May 31, 1936, serving in that capacity until the new *DZ* trainsets were delivered later that year. Inaugural celebrations for the *ADZ* at Chicago Union Station included the railroad's wood-burning 4-4-0 No. 35 and a still-gleaming 9900. Joining the festivities were two *Zephyrettes*, wearing light-colored uniforms in this scene. They were the first hostesses to serve on the *Zephyr* fleet. BURLINGTON ROUTE, HENRY AUCHSTETTER COLLECTION

two chair cars, four Pullmans (including a sleeper-lounge observation car), a dining-cocktail lounge car, and a "Frontier Shack" tavern-baggage car at the front of the train. A replica of a Western barroom, this lounge was wood-paneled and hung with WANTED posters and pictures recalling the region's history.

As overnight trains, the UP and Burlington streamliners would naturally have similar schedules—and, as a competitive necessity, identical timings. Eastbound, for instance, as of July 1936, the *City of Denver* left Denver at 4:45 p.m. and arrived in Chicago at 9:35 a.m. The *Advance*



ABOVE: In September 1936, No. 9906A, *Silver King*, still under construction, is displayed at the Electro-Motive Corporation plant at LaGrange, Illinois, near Chicago. KEVIN J. HOLLAND COLLECTION



LEFT: At the *Denver Zephyr* christening, Ralph Budd stands next to Virginia Roper (bouquet in arms), who for the occasion was selected Silver Queen in a *Denver Post* contest. The other women, also winners, comprise her court. At the far right is Albert Cotsworth, Burlington's then-passenger traffic manager. BURLINGTON NORTHERN SANTA FE



On June 4, 1939, *Silver King* and *Silver Queen* stand idling at Denver Union Station while the *Denver Zephyr* loads for its 4 p.m. departure. R. H. KINDIG, ROBERT P. SCHMIDT COLLECTION

Denver Zephyr left at 4 p.m. and arrived at 8:50 a.m. Union Pacific's train had been inaugurated on June 18, two and a half weeks after Burlington's little place-holding stand-in. The *Advance Denver Zephyrs* had only 60 seats, which were virtually always sold out, with a waiting list. During the period when these trains held the fort, waiting for their bigger brothers to arrive, 98 percent of their trips were completed on time, a remarkable achievement, especially considering that their schedules were hugely shorter than those of the steam trains they replaced.

Roughly five months later, the real *Denver Zephyr* equipment arrived, and a beautiful train it was—and fast, too. Proving that fact was a speed run made westbound—“uphill,” unlike the original *Zephyr's* nonstop sprint, since Denver is the “Mile High City.” On October 23, A-B motive-power set No. 9906 and an abbreviated consist of six *DZ* cars left Chicago at 7 a.m., arriving at Denver at 6:12 p.m.—12 hours, 12 minutes, and 27 seconds later (to be exact). This nonstop run, which set new world speed records, was made at an average speed of 83.33 miles per hour, bettering *Zephyr* 9900's pace by nearly 6 miles per hour. The train's top speed was clocked near Brush, Colorado: 116 miles per hour.

But the *Denver Zephyr*—touted by the railroad as “America's Distinctive Trains”—added much more than a few miles per hour to the *Zephyr* portfolio. The train had everything it would need to successfully compete with the *City of Denver*. One thing it had that the UP's train didn't was the excellence of Budd construction—that Shotwelded stainless steel that ensured beauty, strength, and longevity.

The silvery shine of that stainless steel was recognized for the first time in the naming of the *Denver Zephyr* cars, beginning a tradition that would continue until the end of *Zephyr*-building, which came in 1956 with the completion of the second edition of the *Denver Zephyr*. All the cars, including the power units (or, more properly, locomotives in the case of the *Denver Zephyr* and second *Twin Zephyrs*), would have *Silver*-prefix names.

On the *Denver Zephyr*, with a sexism that no doubt went unquestioned in 1936, the A-unit diesels were *Silver King* and *Silver Knight* and the B-units *Silver Queen* and *Silver Princess*. Behind the locomotives was an auxiliary-power (for train lighting and climate control) car with a Railway Post Office and baggage space: *Silver Courier* or *Silver Herald*. Next came

Continued on page 64

TO BREAK THE DAY IN

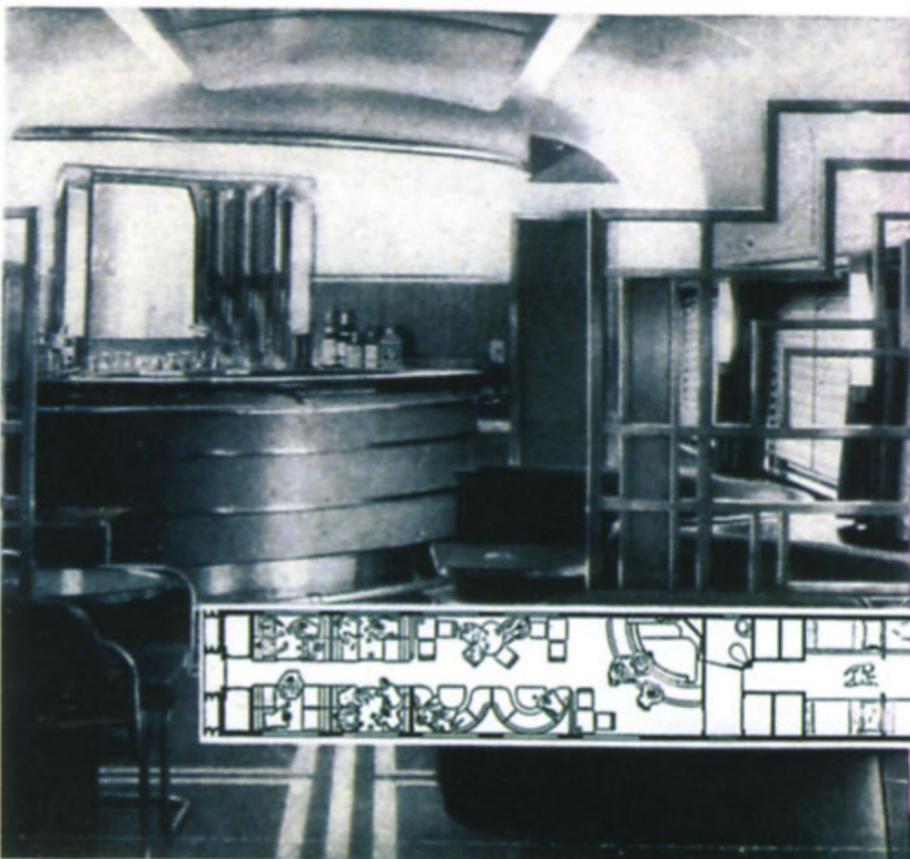
Luxurious Case

COCKTAIL LOUNGE

The cocktail lounge seats 34 guests. It is distinguished by its smart, gay coloring, green Venetian blinds and completely modern informality. At one end is a beautiful quarter-circle bar of mahogany trimmed in stainless steel, with a sparkling back bar. Intimate half-

moon sofas and modernistic chairs of tubular chromium steel, all leather covered, provide unique seating arrangements. An artistic metal grill separates the lounge proper from the annex, where aisle seats are hinged for easy access. A radio-phonograph supplies a musical background for this gay rendezvous.

Car Names: *Silver Bar, Silver Lining.*



RADIOS

Radios are available for private use in bedrooms, compartments and drawing rooms.

DINING CAR

Soft color combined with spaciousness make the dining car exquisitely inviting. Forty people can be served at once at the ten tables. Venetian blinds at every window give distinction and complete privacy. The dining car of each train has an entirely different color scheme. Telephone connection with cocktail lounge and observation lounge for table reservations and service.

Car Names: *Silver Service, Silver Grill.*

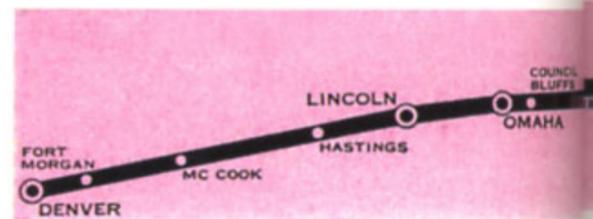


Luxurious SLEEPING ACCOMMODATIONS

ON THE Zephyrs

BEDROOMS—COMPARTMENTS
DRAWING ROOMS—BERTHS
RECLINING CHAIRS

These pages from one of the first *Denver Zephyr* promotional brochures continued the tradition of showing illustrations of car interiors, including floor plans. The Art Deco cocktail lounge (left) would set the style for future *Zephyrs*. The forward half of the lounge car had dormitory space for the crew and a baggage compartment. Sleeping-car descriptions (right) were something new to



The New DENVER ZEPHYR Overnight between Chicago and Denver

The New Denver Zephyrs run between Chicago and Denver in just overnight, saving a full business day each direction. Westbound they span 1,034 miles in 15 hours, eastbound 1,039 miles in 15 hours. The New Denver Zephyrs and their predecessor, the Advance Denver Zephyrs, have achieved the most amazing on-time performance records in railroad history.

- A. COTSWORTH, Jr., Passenger Traffic Manager
547 W. Jackson Blvd., Chicago, Ill.
- S. J. OWENS, General Agent, Passenger Traffic
179 W. Jackson St., Chicago, Ill.
- F. W. JOHNSON, General Agent, Passenger Traffic
901 Seventeenth St., Denver, Colo.



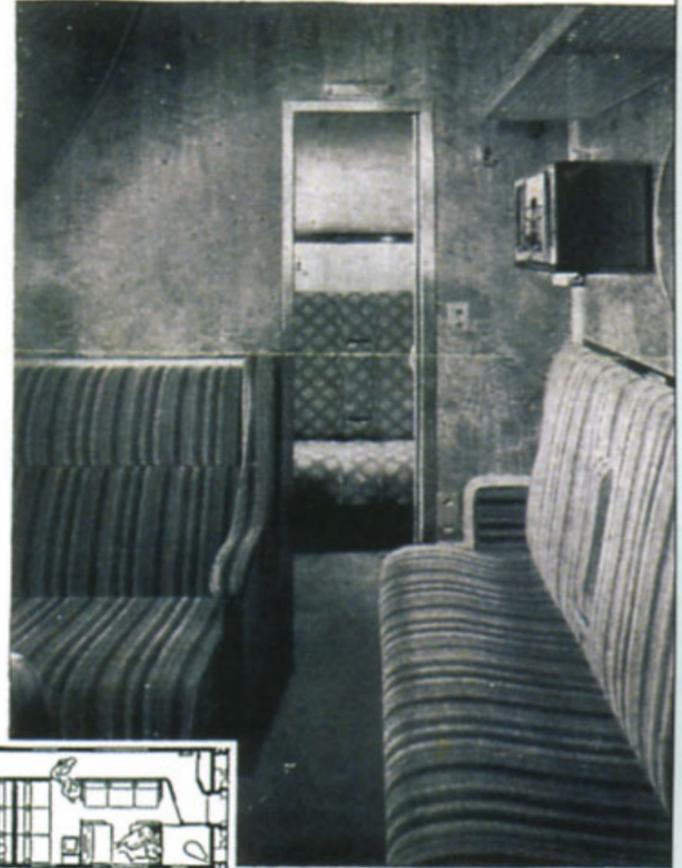
EVERY TYPE OF

Sleeping accommodation
FOR THE MOST EXACTING TRAVELERS

ALL-ROOM CAR

Sleeping accommodations on the new Denver Zephyrs—now available for the first time on any Burlington Zephyr train—are unusually complete and luxurious. Especially distinctive is the all-room car, where six bedrooms, three compartments and a drawing room are available. These are so designed that five spacious two-room combinations can be obtained at a moment's notice, by means of sliding partitions. Each room is individually decorated and is equipped with private toilet facilities, illuminated electric clock, individual temperature control, and outlet for personal electrical appliances. Radios are available for private use in this car, obtained from the porter without charge. Meal and cocktail service can also be provided, right in your own room.

Car Names: Silver Threads, Silver Sides.



Each of these Denver Zephyrs carries four Pullmans—an all-room car and three 12-section sleepers . . . all available at the prevailing low first-class rail and Pullman fares. The new Denver Zephyrs are not extra fare trains.

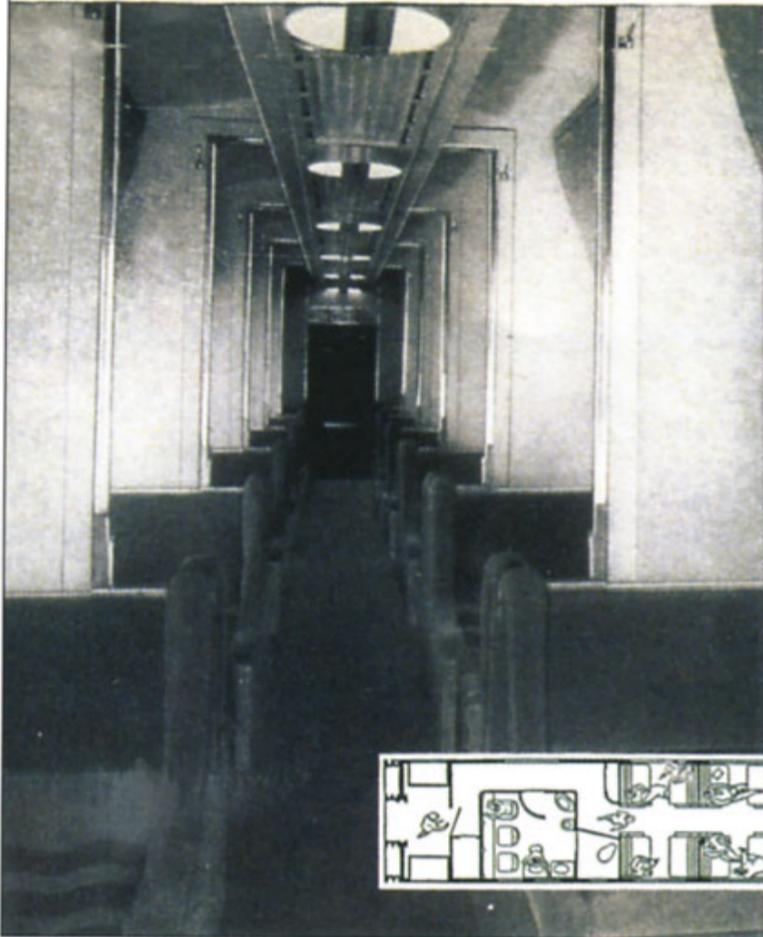


ELECTRIC OUTLETS
Delightfully new are the 110 volt A.C. outlets for your personal electrical appliances in rooms and sleeping car dressing rooms.

12-SECTION CARS

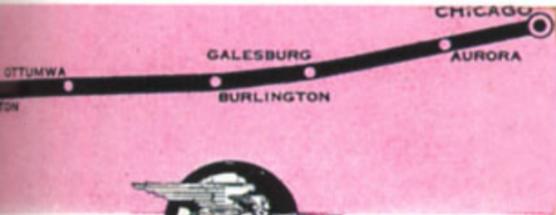
In each of the three 12-section sleeping cars the walls, ceilings and upholstery have been designed with individual color schemes. Berths are wider and longer than conventional (four sections 6 feet 8 inches long, for tall travelers), with wonderfully comfortable mattresses. Lower berths have blue night lights and air conditioning outlets . . . the latter in upper berths also. Spacious dressing rooms and outlets for standard electrical appliances.

Car Names: Silver State, Silver Tip, Silver Tone; Silver Skates, Silver Screen, Silver Arrow.



Zephyr promotion, as the Denver Zephyr was Burlington's first overnight streamliner. These would be the cars that sparked a clash between carbuilder Budd, Burlington, and The Pullman Company that eventually led to the break-up of Pullman. It would also open the gates for other carbuilders to construct sleeping cars.

JOE WELSH COLLECTION



DAILY SCHEDULE — Corrected to July 25, 1937

Westbound—Read down	Eastbound—Read up
5:30 PM Lv. Chicago (CST)	Ar. 8:38 AM
6:04 PM Lv. Aurora	Ar. M
7:42 PM Lv. Galesburg	Ar. 6:21 AM
8:24 PM Lv. Burlington	Lv. 5:41 AM
9:32 PM Lv. Ottumwa	Lv. 4:30 AM
11:22 PM Lv. Creston	Lv. 2:36 AM
1:03 AM Ar. Council Bluffs	
1:15 AM Ar. Omaha	Lv. 12:47 AM
2:15 AM Ar. Lincoln	Lv. 11:45 PM
3:48 AM Ar. Hastings	Lv. 10:20 PM
5:38 AM Ar. McCook (CST)	Lv. 8:30 PM
q Ar. Ft. Morgan (MT)	Lv. y
8:30 AM Ar. Denver (MT)	Lv. 4:00 PM

e—Stops to receive revenue passengers for Omaha or beyond.
q—Stops to discharge passengers from Missouri River or East.
y—Stops to receive revenue passengers for Missouri River or East.
M—Stops to discharge revenue passengers from Denver.
Schedule subject to change without notice.

Continued from page 61

baggage-dormitory-cocktail lounge cars *Silver Lining* or *Silver Bar*.

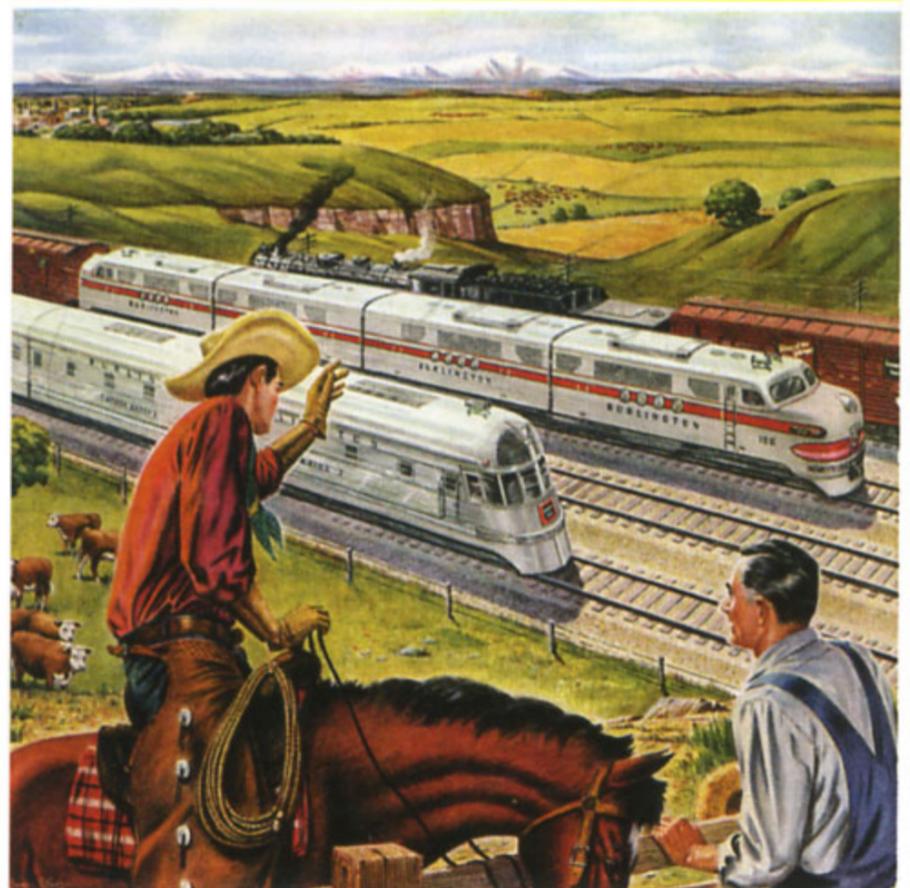
Then came an articulated trio: a 64-seat chair car (*Silver City* or *Silver Spruce*), a 38-seat chair car (*Silver Lake* or *Silver Plume*), and a 40-seat diner (*Silver Grill* or *Silver Service*). Following were two sets of paired sleepers. The first linked two 12-section cars (*Silver State* and *Silver Tip* or *Silver Skates* and *Silver Screen*). The next paired another 12-section sleeper (*Silver Arrow* or *Silver Tone*) with a 3-compartment 1-drawing room 6-double-bed-room car (*Silver Sides* or *Silver Threads*). Bringing up the rear was a buffet-lounge observation car with 10 parlor seats: *Silver Flash* or *Silver Streak*.

The 1,800-horsepower A-units *Silver King* and *Silver Knight* were identical to *Zephyrus* and *Pegasus*, which would power the new seven-car *Twin Zephyrs* when they were inaugurated less than six weeks after the *DZ*. These four locomotives were Electro-Motive Corporation's first non-articulated single-ended units; mechanically and electronically, they were modeled on a pair of 1,800-horsepower double-ended (control cab at each end) box-cab demonstrator units, Nos. 511 and 512, built by EMC in August 1935. These units tested on the Burlington; then, in September 1936, No. 511—painted silver to match Budd-built stainless-steel rolling stock—was leased to CB&Q to power one expanded *Twin Zephyr* trainset comprised of some of the first-completed *DZ* cars (other than sleepers) as well as, briefly, some heavyweight cars.

The *Denver Zephyr* B-units, *Silver Queen* and *Silver Princess*, each generated 1,200 horsepower from their single V-16 201-A engines. Together, then, each *DZ* locomotive pair produced 3,000 horsepower, plenty to move a train of 10 cars (which would soon grow to 11 and then 12). At the front of the consist, contained in two cars, were auxiliary generators (with four diesel-electric generator sets to provide power for air-conditioning, lighting, and other electrical needs), an RPO section and a baggage area also accommodating Railway Express Agency business, and crew space for a dozen in triple-deck bunks. Occupying half of the second car was the cocktail lounge, a snazzy watering hole with bar, curved banquettes, tables with movable chairs, and an annex with four tables for four with facing, fixed seating. "An artistic metal grill separates the lounge proper from the annex," according to a brochure, "where aisle seats are hinged for easy access. A radio-phonograph supplies a musical background for this gay rendezvous."

In total, the *DZ*'s two coaches could seat 102. The car with the smaller capacity, 38, featured a commodious ladies' lounge. The three section sleepers accommodated 72 passengers all told, and the all-room sleeper another 21. For travelers who wished Pullman luxury but were not traveling overnight, the observation car held 10 swiveling parlor seats.

The all-room sleeper had some fine features. The six bedrooms, three compartments and drawing room were designed (according to the train's brochure) so that "five spacious two-room combinations can be obtained at a moment's notice, by means of sliding partitions. Each room is individually decorated and is equipped with private toilet facilities, illuminated



ABOVE: This 1954 dinner-menu cover with a Western flair shows the *Denver Zephyr* paralleling a freight train powered by Electro-Motive FTs. ROBERT P. SCHMIDT COLLECTION

**Ease and Elegance
IN THE PARLOR LOUNGE**

The bright parlor-lounge car at the rear of each train immediately following the sleeping cars, has a casual lounging place for Pullman passengers. Without question, this is one of the most elegant in the entire train... a masterpiece of the designer's art. A glass partition divides the car into two sections. The rear is a lovely solarium-lounge with corking rock and a grouping of brightly-colored, high-back and easy chairs encircling the gracefully rounded end. A refreshment bar is located "amidships." At the front a telephone connection with the dining car, over which reservations can be made.

The forward half is the parlor car section in which are ten four-colored easy chairs, a writing desk and nook for card playing. Reds and browns predominate in carpets, upholstery and walls. Bright, white-striped rose drapes radiate further cheerfulness and cordiality. Double-width windows, extending around both sides and the rear, reveal an unobstructed panorama of the ever-changing countryside. Soft radio music adds charm to the cozy atmosphere while an electric clock silently marks the swift passage of minutes and miles. The car accommodates 41 passengers. Names of Cars: Silver Flash, Silver Streak.



LEFT AND ABOVE: An early DZ brochure promotes the "Ease and Elegance" of the parlor-lounge observation; the photo at left was used within the brochure. No tennis shoes and sweatshirts in this crowd! BROCHURE, KEVIN J. HOLLAND COLLECTION; PHOTO, BURLINGTON ROUTE, WILLIAM F. HOWES JR. COLLECTION

BELOW: This mid-1950s folder shows a Denver Zephyr in transition. An Electro-Motive E8 is on the point, but the booster behind it—as well as the rest of the train—is original DZ equipment from 1936. The Vista-Dome-carrying DZ of 1956 is not far away. ROBERT P. SCHMIDT COLLECTION

**Yes, the most popular train between
CHICAGO-OMAHA-LINCOLN-DENVER
is Burlington's
DENVER Zephyr**



THE
DENVER Zephyr
OFFERS ALL THIS!

- ✓ Shortest route, Chicago-Denver! Burlington all the way
- ✓ Stainless steel... streamlined!
- ✓ Articulated for smoother riding!
- ✓ Varied Pullman accommodations! Private rooms (single, double, en suite) Standard berths
- ✓ Restful reclining-seat coaches—seats reserved!
- ✓ Full-length observation-lounge car!
- ✓ Distinctive Burlington meals!

- Week after week, month after month, the Burlington's DENVER ZEPHYR proves itself the most popular train between Chicago and Denver. And there's good reason!
- This stainless steel, streamlined train carries the finest equipment... is expertly operated over a thousand-mile steel boulevard, designed and built for modern high-speed railroading. The DENVER ZEPHYR'S modern design... the luxury of its appointments... the service of friendly, hand-picked crews, all contribute much to the pleasure of your trip.
- Experienced travelers agree, the smooth-riding DENVER ZEPHYR, with its early morning arrivals at Chicago and Denver, is the ideal train for the business man or vacationist.
- On your next trip between Chicago and Denver, ride the DENVER ZEPHYR... you'll discover why so many people say, "You just can't beat the Zephyr Fleet."

Tops in Travel... Chicago-Omaha-Lincoln-Denver

WESTBOUND	Nebraska Zephyr	The Coloradoan	*California Zephyr	Denver Zephyr	Ak-Sar-Ben Zephyr
Lv. Chicago.....	9:30 am	11:20 am	3:30 pm	5:00 pm	10:15 pm
Ar. Omaha.....	5:30 pm	9:00 pm	11:45 pm	12:30 am	7:45 am
Ar. Lincoln.....	6:40 pm	11:20 pm	1:04 am	1:45 am	9:25 am
Ar. Denver.....	.....	8:10 am	8:20 am	8:30 am	.....
EASTBOUND	Denver Zephyr	*California Zephyr	The Coloradoan	Nebraska Zephyr	Ak-Sar-Ben Zephyr
Lv. Denver.....	4:00 pm	7:15 pm	8:45 pm	.....	.....
Lv. Lincoln.....	12:11 am	3:55 am	7:30 am	11:15 am	9:00 pm
Lv. Omaha.....	1:15 am	5:00 am	9:30 am	12:30 pm	10:30 pm
Ar. Chicago.....	9:00 am	1:30 pm	6:30 pm	8:45 pm	7:45 am

*Featuring Vista-Dome Cars.

THERE'S NO EXTRA FARE ON ANY **Burlington** TRAIN!

electric clock, individual temperature control, and outlet for personal electrical appliances. Radios are available for private use in this car, obtained from the porter without charge. Meal and cocktail service can also be provided, right in your own room."

But who would want to stay in his room when there were three elegant public venues for eating, drinking, socializing, relaxing, and enjoying the scenery? In addition to the cocktail lounge all the way forward, there was the 40-seat dining car located between the coaches and the sleepers and the 22-seat lounge in *Silver Flash* or *Silver Streak's* rounded observation end, with a "clever refreshment bar where light menus are served and dining car reservations can be made by telephone"—a service also available from the cocktail lounge.

The introduction of Budd-built sleeping cars on the *Denver Zephyr* sparked a bitter feud between car builders, one that would radically alter a long-established empire within the American railroad industry. For many decades The Pullman Company had had a hammerlock hold on the sleeping-car business. It built the cars. It owned the cars. And it operated the cars, providing staff in the form of porters and conductors and collecting fares directly from patrons. Not surprisingly, Pullman was not eager to let this comfortable monopoly slip away.

Budd's delivery of those eight sleepers to CB&Q in 1936 (with two more to come in 1939) set in motion a war of words—and threats by Pullman. Edward Budd called his products "the finest sleeping cars that have ever been built"; it's easy to imagine how this heady (if perhaps accurate) proclamation from an upstart David building his first sleeping cars would have rankled the Goliath that had been building sleepers for 70 years. Pull-

man responded by claiming that the cars might not be safe and threatening not to operate them for that reason. Santa Fe was also in the Pullman doghouse for buying Budd sleepers for its new *Super Chief* of 1937.

Pullman grudgingly agreed to operate the *Super Chief* and *Denver Zephyr* cars (which were always railroad-owned) but insisted on inserting a "hold-harmless" clause in the contracts for those trains, relieving Pullman of any responsibility should the cars have defects. This looked bad to other railroads, discouraging them for a time from buying Budd sleepers. Frustrated and angry, Edward Budd gave up on sleeper construction for the time being.

Making matters worse, Pullman flat out demanded that Burlington and Santa Fe buy no further sleepers from Budd if they wished to participate in the Pullman sleeping-car pool. Both railroads caved in. Santa Fe in the next two years ordered 67 lightweight sleeping cars, all from Pullman-Standard. After the DZ but before World War II, Burlington would inaugurate two more *Zephyrs* that offered sleeping-car service; both utilized heavyweight cars painted silver to better blend with the Budd stainless steel that proliferated elsewhere in the consists.

The final victory belonged to CB&Q, Santa Fe, and Budd, however, as the U. S. Justice Department in July 1940 filed an anti-trust suit against Pullman in Philadelphia's District Court, claiming an illegal monopoly. Burlington, Santa Fe, and Budd were the principals behind the litigation.



Roughly four years later the case was concluded, and Pullman was ordered to separate Pullman-Standard Car Manufacturing Co. from The Pullman Company, which owned and operated the cars. Pullman, Inc., the umbrella company, opted to sell its cars to the railroads, then lease them back for operation. In any case, the way was cleared for Burlington (and Santa Fe and any other railroads) to buy Budd sleepers to its heart's content, which it did, in great numbers, after World War II.

The first of the two new *Denver Zephyrs*, minus the its power-car set, had left the Budd plant in Philadelphia and traveled up the Pennsylvania Railroad to New York (presumably behind a PRR GG1 electric locomotive), where it was exhibited at Pennsylvania Station and Grand Central Terminal before moving on to Chicago to unite with power-set 9906. On October 24, one day after that train made its high-speed, nonstop run west to the Mile High City, it was christened at Denver Union Station. Jane Garlow, granddaughter of William F. Cody (better known as Buffalo Bill), did the honors on horseback, swinging a beribboned bottle of champagne into 9906's sloped nose. Ralph Budd spoke, as did B. F. Stapleton, mayor of Denver. The other trainset, 9907, was christened in Chicago on November 8, the day it entered revenue service. Albert Cotsworth Jr.—Burlington's passenger traffic manager and father of Marguerite, who had christened the original train—officiated, and Jane Garlow once again swung the bubbly from the saddle.

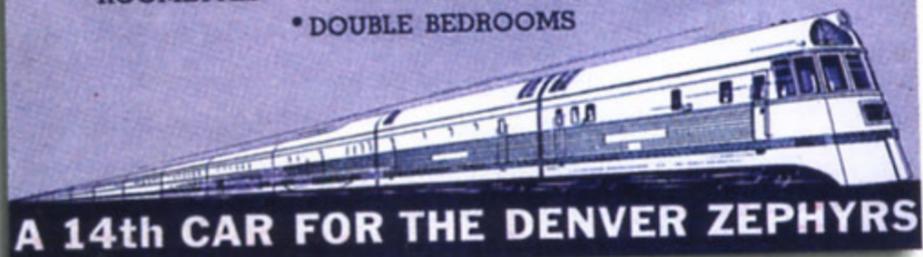
The trains were a success from the beginning, saving a "full business day in each direction," as Burlington bragged. (So of course did UP's *City of Denver*.) Among the amenities featured were the "Zephyrettes," young women who acted as hostesses, welcoming passengers on board, arranging bridge games, sending wires, and generally making travel on the *Denver Zephyr* more gracious. The second *Twin Zephyrs* also featured Zephyrettes, as did the *Sam Houston Zephyr* and *Ozark State Zephyr*. (World War II would put them out of business, but they'd return with the inauguration of the *California Zephyr* in 1949 with expanded duties.)

Before long, more capacity was needed aboard the *DZ*. In May 1938, therefore, a summer-only car was added to each of the two consists—64-seat dinette-chair car *Silver Beam* or *Silver Bell*. (From World War II onward, these cars stayed in service year-round.) In April 1939, yet another car was added to each consist, and an unusual one at that: 4-roomette 4-chambrette 1-drawing room 6-double bedroom *Silver Moon* or *Silver Slipper*. This brought to six the types of sleeping accommodations available aboard the train.

The introduction in 1939 of a fifth sleeper to the *DZ* was deemed important enough to merit publication of a special leaflet. This unique car offered no fewer than five different types of accommodation. Both roomettes and "chambrettes," four of each, were new to the train, added in response to a growing demand for private accommodations for single travelers. The roomette would become a staple of rail travel. The slightly more spacious and expensive chambrette would prove a failed experiment. *JOE WELSH COLLECTION*

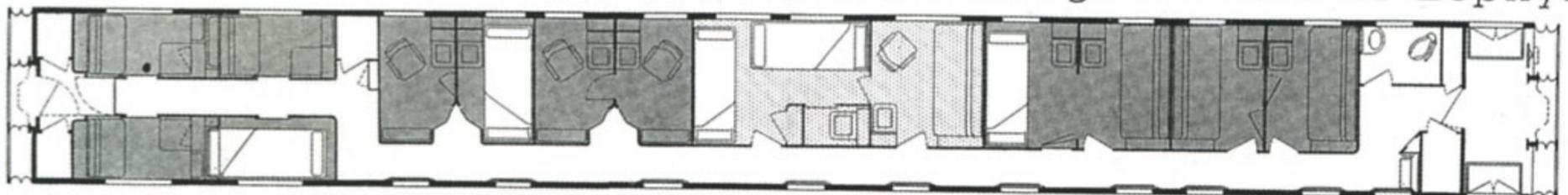
NEW TRAVEL LUXURY between CHICAGO and DENVER

- CHAMBRETTES
- ROOMETTES
- DE LUXE DRAWING ROOM
- DE LUXE COMPARTMENT
- DOUBLE BEDROOMS



A 14th CAR FOR THE DENVER ZEPHYRS

A Beautiful New 14-Room Car for the Burlington's Denver Zephyr



THE ROOMETTE is a small, completely enclosed, private room containing a disappearing single bed. For daytime use, the passenger has a sofa seat with ample space for lounging, individual toilet facilities, wardrobe and luggage rack. The bed can be folded up or down without leaving privacy of room. Available for 140% of lower berth fare (\$10.70 between Chicago and Denver).

THE CHAMBRETTE is an innovation in private room accommodations for individual occupancy being introduced by the Burlington. The Chambrette (pronounced "shom-bret") contains a disappearing bed, comfortable arm chair, private toilet facilities available at all times, ample dressing space, wardrobe and luggage rack. Available at 160% of lower berth fare (\$12.20 Chicago-Denver).

THE DE LUXE DRAWING ROOM offers extraordinary spaciousness and convenience. For day travel, it provides two movable easy chairs and a luxurious sofa. For night use, one bed folds out of the wall, and the sofa (with upper berth above) provides two more full beds. A private toilet adjoins the Drawing Room. Other features include wardrobe, luggage rack and individual radio.

THE DE LUXE COMPARTMENT offers added spaciousness through rearrangement of its facilities. For daytime, there is a luxurious sofa and movable easy chair. For night use, the sofa is converted into a bed and an upper berth (at right angle to sofa) folds down from above the window. The Compartment provides private toilet facilities, wardrobe, luggage rack and individual radio.

THE BEDROOM offers delightful private room facilities for one or two persons at moderate cost. For day travel, it provides a luxurious sofa. At night, the sofa is converted into a bed and an upper berth may be let down from above. Complete private toilet facilities, ample dressing space, wardrobe, and luggage rack. A bedroom costs \$13.75 between Chicago and Denver for one person, \$15.25 for two. Two bedrooms may be had en suite.

This was the *Denver Zephyr* that would soldier on essentially unchanged for two full decades after its inauguration, until it was replaced by new *DZ* equipment in 1956. The two original trainsets each were withdrawn one at a time for major renovation in 1948 and early 1949; substitute consists relied heavily on newly delivered cars destined for the *California Zephyr* that were then awaiting that train's inauguration.

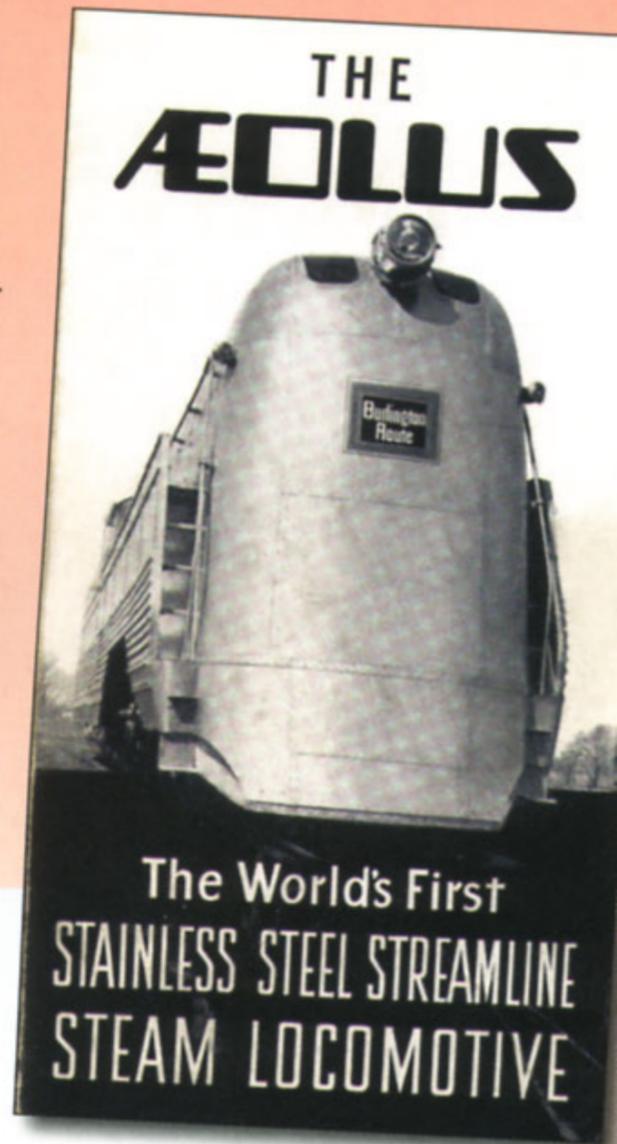
Even after being bumped from *Denver Zephyr* service in 1956, the original trains had plenty of life in them. They'd operate for another decade as the *Texas Zephyr*.

SILVER SUBSTITUTES

A *eolus*—there were two of them, actually—represented the *Zephyrs*' only dabbling with steam locomotion. Converted from S4-class 4-6-4s, they were intended as substitute locomotives for the *Twin Zephyrs* and *Denver Zephyr* when their regular power units were withdrawn for shopping or repairs. The first *Aeolus* was completed in April 1937 (allowing leased box-cab No. 511 to be returned to EMC that summer), the second in February 1938. In keeping with the theme begun with *Zephyrus* and continued with the "Train of the Gods" and "Train of the Goddesses," the locomotives were named for the keeper of the winds in Greek mythology. In the photograph, *Aeolus* stands at Denver Union Station with the *Denver Zephyr* in tow. "Cat's whiskers" and an *Aeolus* logo have been added since the locomotive rolled out of West Burlington (Iowa) Shops and the Burlington Route herald dropped to make way for it.

BELOW: The railroad published a brochure for its first *Aeolus* streamlined steam locomotive KEVIN J. HOLLAND COLLECTION

BELOW: Its regularly assigned motive power unavailable, one of the *Zephyr* fleet's two substitute *Aeolus* steam locomotives is pinch-hitting on this day's eastbound *DZ*, awaiting departure from Denver. PETER V. TILP COLLECTION



THE EPONYMOUS



In the spring of 1952, at the new station under construction at West Quincy, Missouri—a major CB&Q junction, across the Mississippi River from Quincy, Illinois—the southbound *Mark Twain Zephyr* pauses for servicing late in its peripatetic career. Its sleek observation end proudly pays homage, in bust and signature, to its namesake. PHIL WEIBLER



Twain, Houston, and Kin

In the mid-1930s the *Zephyr* fleet was growing rapidly—in numbers and also, by 1936, in consist size, with the *Denver Zephyr* and the second *Twin Zephyrs*. Before the bigger trains hit the rails, however, there would be another “pocket” streamliner, very close to a copy of the first *Zephyr* (later renamed *Pioneer Zephyr*) and the initial *Twin Zephyrs*—an articulated stainless-steel train with shovel-nosed power unit No. 9903 and a rounded observation end. That train was the *Mark Twain Zephyr*, inaugurated on October 28, 1935. Like *Zephyr* 9900, it was intended to improve the bottom line on a lightly traveled, money-losing route that couldn't be discontinued.

As it happened, this route—Burlington, Iowa, to St. Louis—passed through Hannibal, Missouri, author and humorist Mark Twain's

THE MARK TWAIN *Zephyr*

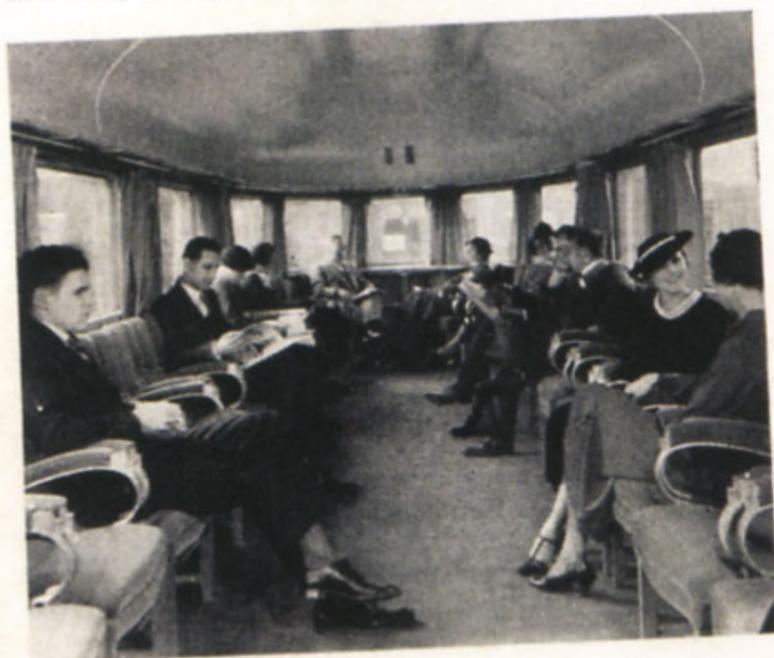
ST. LOUIS-HANNIBAL-QUINCY-KEOKUK-BURLINGTON

Northbound	DAILY SCHEDULE		Southbound
9:05 am	Lv. St. Louis	Ar.	9:15 pm
11:58 am	Lv. Hannibal	Ar.	6:12 pm
12:28 pm	Lv. Quincy	Ar.	5:30 pm
1:20 pm	Lv. Keokuk	Ar.	4:29 pm
2:25 pm	Ar. Burlington	Lv.	3:30 pm

Through a region whose history, romance and beauty were immortalized by Samuel Langhorne Clemens (Mark Twain), the Mark Twain Zephyr makes a daily round trip along the west bank of the Mississippi River between St. Louis and Burlington, Iowa.

Appropriately, the four cars of the train bear the names of Mark Twain's best-known fiction characters—Tom Sawyer, Huckleberry Finn, Becky Thatcher and Injun Joe.

The Mark Twain Zephyr accommodates 76 coach passengers and 16 parlor-lounge passengers. Interiors are rich and colorful, windows are double width. Radio, and tasty meal service in dinette.



ABOVE: This brochure was issued in 1937, when all the truly first-generation Zephyrs were in service. Aboard each, the parlor-observation space was the place to be. ROBERT D. TURNER COLLECTION

Spring is in the air at West Quincy, Missouri, in 1952 as southbound Burlington-St. Louis train 44, featuring Mark Twain Zephyr equipment, makes a servicing stop. By this time, the train had acquired an impressive set of headlights, including a Mars oscillating warning light. PHIL WEIBLER

boyhood home. The year, 1935, was the centennial of his birth. Thus honoring him with a train proved an ideal conceit, especially considering that the name *Zephyr* was itself a literary allusion. And naming the cars for characters in Twain's *The Adventures of Tom Sawyer*, among the most famous of novels for young readers, took this good idea to its perfect conclusion.

Samuel L. Clemens was born on November 30, 1935, in Florida, Missouri, not far from Hannibal, where he would move as a young boy and spend his childhood; Hannibal, therefore, would become the model for St. Petersburg in *Tom Sawyer* and later *The Adventures of Huckleberry Finn*, a far more serious novel that many consider to be the American masterpiece. Clemens' adventurous career included years as a Mississippi River pilot, when he acquired the pen name "Mark Twain." (This was a leadsmen's call to the wheelhouse when sounding the river; "mark twain," or two fathoms, meant water safe for navigation.) So for a train serving Hannibal and paralleling the Mississippi River, which the *Mark Twain Zephyr* would, the CB&Q had hit upon the perfect handle.

Mark Twain's train was the first of the Zephyrs with named cars. The power unit was *Injun Joe*, named for an ill-fated renegade in *Tom Sawyer*. (This was no doubt an intentional pun, and a delightful one, since "injun" is a near homonym for "engine.") The baggage car was *Becky Thatcher*, for Tom's girlfriend; the third car, with kitchen, pantry, dinette, and 20 coach seats, was *Huckleberry Finn*, a character in *Tom Sawyer* who also had the book of his own; and the observation car, *Tom Sawyer*, honored the clever young man who got others to whitewash the fence.





Indicative of the type of business expected for the *Mark Twain Zephyr* was the provision of a full car for baggage and express, along with a fully equipped RPO space and an area for storage mail in the power car. On the other hand, the passenger accommodations were reminiscent of the increased luxury of the first *Twins*, with full pantry and kitchen and a 16-seat dinette (tables placed at mealtime, removed afterward) in the third car. (Absent, however, were the lunch counters with four stools with which the *Twins* were equipped.) As aboard the earlier *Zephyrs*, meals could also be served at the coach seats on aluminum trays affixed for that purpose. For a small train off the main line, the *Mark Twain Zephyr* offered surprisingly full à la carte and “club” (table d’hôte) menus.

The fourth car had a 40-seat passenger compartment with coach seating, separated by restrooms and luggage storage from a 16-place parlor lounge—clearly the place to ride for those who could afford the extra fare, or “transportation good for Pullman or parlor car travel,” according to a timetable notice. From the outside, this car offered a distinctive touch setting this trainset aside from its three otherwise similar predecessors: a tail-

sign on the rounded observation end consisting of a bronze cameo plaque of the author seen in profile and, below that, a replica of his signature.

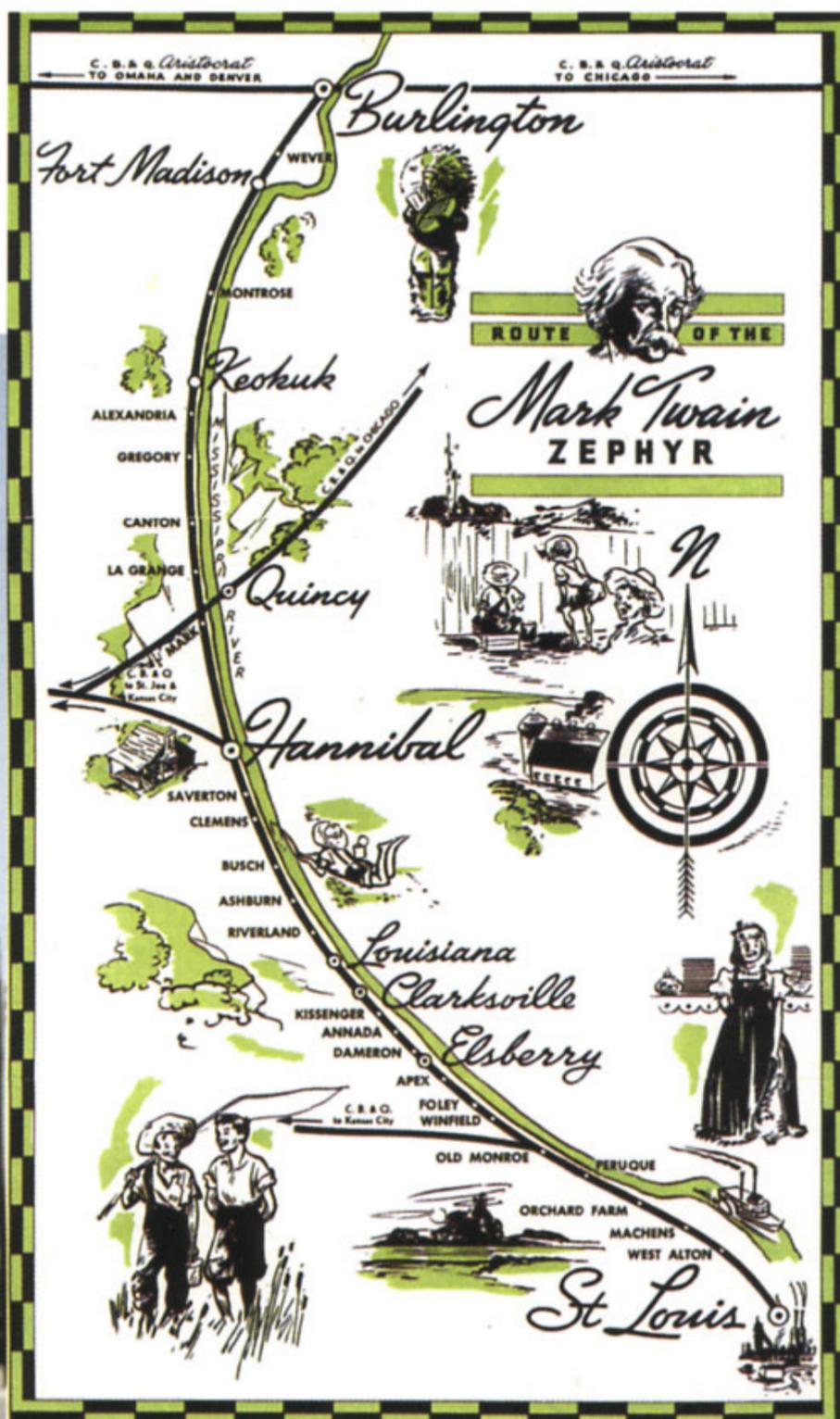
The *Mark Twain Zephyr* left the Budd plant on October 8, heading for Chicago via the Pennsylvania Railroad, Lehigh Valley, and New York Central. Among the handful of exhibition stops made along the way, perhaps the most interesting was at Bethlehem, Pennsylvania, where executives and workers at Bethlehem Steel visited the train, as did students from Lehigh University.

On October 25, just a month and a few days short of 100 years after Samuel Clemens’ birth, his train was christened in his hometown of Hannibal by his granddaughter, Nina Gabrilowitsch. Just two days before that, No. 9903—with its baggage car removed at West Burlington Shops for the occasion—made a speed test run over a recently rebuilt stretch of line in Nebraska. Between McCook and Oxford, these tracks, washed out the previous May by Republican River floodwaters, had been re-engineered. They were now, Burlington thought, as good as any in America and safe at speeds up to 150 miles per hour. On a tangent there, the temporarily three-car 9903 hit 122 miles per hour, a speed record.

When the *Mark Twain Zephyr* entered regular service on October 28 on the 221-mile route between Burlington and St. Louis, its pace would be decidedly more moderate. Running as train No. 43, the designation of the steam run it replaced, the *MTZ* left St. Louis at 7:50 a.m. and arrived at Burlington at 2:25 p.m., leaving there at 3:20 p.m. to head back south as No. 44 for a 10:28 p.m. St. Louis arrival. (These timings were slower than first projected and, in fact, were quite quickly tightened up significantly.) At Burlington, the *Mark Twain Zephyr* made good connections with the

Aristocrat, one of Burlington’s premier trains, for Chicago to the east and Omaha, Lincoln, and Denver to the west.

The four nearly identical little *Zephyrs*—Nos. 9900–9903—were moved about often during their lifetimes, changing assignments and sometimes swapping extra cars. They found a comfortable home plying secondary lines in the Midwest and Southwest—which was, after all, the



Adorning the map of the *MTZ*'s route are personifications of its cars: Injun Joe, Becky Thatcher, Huck Finn, and Tom Sawyer. JOE WELSH COLLECTION

MARK TWAIN ZEPHYR					
CONSIST SUMMARY					
TRAIN CAR NO.	TYPE CAR	WEIGHT OF CAR - LBS.		PASSENGER CAPACITY	
		READY TO RUN	NORM. MAX. LOAD	REV.	NON-REV.
1	DIESEL LOCOMOTIVE	94910	101870	0	0
2	MAIL-BAGGAGE	50860	82110	0	0
3	BAGGAGE	18490	79700	0	0
4	BUFFET-DINETTE-COACH	84080	82485	20	16
5	COACH-PARLOR	51850	56275	56	0
TOTAL		289960	362440	76	16
TOTAL NORMAL MAXIMUM LOAD OF TRAIN - 362,440 ¹ 756 LBS. PER H.P.					
TOTAL WEIGHT OF TRAIN, READY TO RUN, - 289,960 ² - 605 LBS. PER H.P.					

TRAIN NO. 9903	NAME - INJUN JOE	506	BECKY THATCHER	551	HUCKLEBERRY FINN	572	TOM SAWYER
HORSEPOWER -	600	TYPE CAR -	BAGGAGE	BUFFET-DINETTE-COACH	COACH-PARLOR		
TRAIN-CAR NO.	1	2	3	4			
WEIGHT ON FRONT TRUCKS	WEIGHT ON REAR TRUCKS	PASSENGER CAPACITY		20 REV. 16 NON-REV.		56 REV.	
90900	WEIGHT OF CAR LIGHT - LBS.	47,900	52370	50,150	31,400		
94910	WEIGHT OF CAR READY TO RUN - LBS.	50,860	58,490	54,050	31,850		
101,870	WEIGHT OF CAR NORMAL MAX. LOAD - LBS.	82,110	79,700	62,485	36,275		
LENGTH OF CAR COUPLED	76'-7 $\frac{1}{2}$ "	64'-0"	64'-0"	75'-5"			
*1-6"X11"	AXLE SIZE	*2-5 $\frac{1}{2}$ "X10"ARTIC.	*3-5 $\frac{1}{2}$ "X10"ARTIC.	*4-5"X9"ARTIC.	*5-4 $\frac{1}{2}$ "X8"		
FUEL OIL -	GALS. 680	COLOR SCHEME					
LUBRICATING OIL	GALS. 80	BUILT BY -	BUDD	BUDD	BUDD		
COOLING WATER	GALS. 140	YEAR BUILT -	1935	1935	1935		
HEATING BOILER - LBS./HR.	500	BUILDER FLOOR PLAN NO. -	BUDD SK. 11-333	BUDD SK. 11-333	BUDD SK. 11-333		
BOILER WATER - GALS.	488						
BUILDER FLOOR PLAN NO. -	BUDD SK. 11-333						
YEAR BUILT	1935						

C. B. & Q. R. R. CO.	
OFFICE OF VICE PRESIDENT - OPERATION	CHICAGO, ILL.
NO. 92277 - FILE P-1502-10	JAN. 26 TH 1949

role intended for the original *Zephyr*, to which they were all so much akin. The *Mark Twain Zephyr* stayed close to home for most of its successful 23-year career; in fact, when it ran its last miles in May 1958, it was on its original Burlington-St. Louis route.

However, it had been borrowed soon after entering service, on May 31, 1936, to become the *Advance Denver Zephyr*, running between Chicago and Denver to get the jump on Union Pacific's *City of Denver* while Budd was finishing up the "real" *Denver Zephyr*. (Number 9903's running mate in this assignment had been 9900.) Then the train pinch-hit briefly as the *Twin Zephyr*, taking over for the partial *Denver Zephyr* consist that had been temporarily assigned to the Chicago-Twin Cities route. In September 1938, No. 9903 was moved to the *Ozark State Zephyr* run (more of that shortly) between St. Louis and Kansas City. For four years in the mid-1950s, shortly before its retirement, the train ran from St. Joseph, Missouri, to Quincy and Galesburg, Illinois.

When the second *Twin Zephyrs*, Nos. 9904 and 9905, took over the Chicago-Twin Cities run on December 18, 1936, that left the original *Twins*, Nos. 9901 and 9902, available for reassignment. Actually, 9901 had been freed up earlier, when the first six cars of one of the new *Denver Zephyr* equipment sets, along with an 1,800-horsepower box-cab diesel-electric owned by Electro-Motive Corporation, had taken over one of the two sides of the Chicago-Minneapolis *Twin Zephyr* runs. That allowed No. 9901 to head for Texas to inaugurate, on October 1, Houston-Dallas-Fort Worth service as the *Sam Houston Zephyr*, the first diesel-electric streamliner in the Southwest. As Mark Twain was an appropriate honoree for a train serving Hannibal and running along the Mississippi River levees, so was Sam Houston, the quintessential Texas hero, for a train serving his namesake city. Frontiersman and commander of Texas revolutionary troops (*he* remembered the Alamo), Houston was the first president of the Texas republic.

His train was actually operated by the Burlington-Rock Island Railroad, jointly owned by CB&Q subsidiary Forth Worth & Denver City and Chicago, Rock Island & Pacific's Texas subsidiary, Chicago, Rock Island & Gulf. (The B-RI was operated by Burlington and Rock Island in alternating five-year periods.) The *Zephyr* left Houston at 8:15 in the morning and arrived Fort Worth at 1:10 p.m.; southbound, it left Fort Worth at 4 p.m. for a 9 p.m. Houston arrival. The one-way trip was 250 miles, and the *Zephyr* made it in less than 250 minutes—an impressive

The *Mark Twain Zephyr's* 9:05 a.m. departure from St. Louis and 2:55 p.m. arrival at Burlington made lunch the featured meal aboard the northbound run, though breakfast was also served. Southbound was the direction for dinner. JOE WELSH COLLECTION



ZEPHYR LUNCHEON SELECTIONS—a la Carte

- Green or Ripe Olives, 20 Pickles, 15
- Tomato Juice, 20
- Consommé, Hot or Cold, Cup, 20
- Broiled Fish, Maître D'Hotel, 75
- Cold Boiled Ham, Potato Salad, 50
- Veal Cutlets with Macaroni, au Gratin, 65
- Swiss Steak with Spaghetti, 50
- Cold Salad and Fruit Plate, 50
- Baked Beans with Brown Bread, 40
- Comed Beef Hash, Poached Egg, 50
- Ham or Bacon and Eggs, 70
- Fresh Seasonal Vegetable, 20
- Potatoes: Mashed or Boiled, 20
- Chicken Salad with Mayonnaise Dressing, 60
- Fruit or Crab Meat Salad, 40
- Lettuce or Tomato Salad, 25
- Sandwiches: Cheese, Ox Tongue, Boiled or Fried Ham or Fried Egg, 20
- Bread and Butter or Toast, 10
- Ice Cream with Wafers, 25
- Melon, 25
- Berries with Cream, 25
- Pie, 15; with Cheese, 20; A la Mode, 25
- Rice Custard Pudding, 20
- Strawberry Preserves, 20
- Cheese with Crackers or Ry-Krisp, 20
- Coffee, Tea or Cocoa (Pot), 20
- Coffee, Cup, 10
- Individual Bottle Milk, 15

ZEPHYR CLUB LUNCHEONS

- No. 1—50 Cents
- Sandwich: Cheese, Ox Tongue, Boiled or Fried Ham, Cottage Cheese and Jelly
- Sandwich, or Fried Egg
- Pie, Ice Cream, or Rice Custard Pudding
- Coffee, Tea, Cocoa, Milk
- No. 2—65 Cents
- Comed Beef Hash—Poached Egg
- or Baked Beans with Brown Bread
- or Swiss Steak with Spaghetti
- or Special Omelette, Zephyr
- or Chicken Salad Sandwich, or Cold Boiled Ham, Potato Salad
- Pie, Ice Cream, or Rice Custard Pudding
- Coffee, Tea, Cocoa, Milk
- Bread and Butter
- No. 3—75 Cents
- Salad and Fruit Plate Luncheon, or Broiled Fresh Fish, Maître d'Hotel
- or Veal Cutlets with Macaroni, au Gratin
- Fresh Seasonal Vegetable
- Pie, Ice Cream, or Rice Custard Pudding
- Coffee, Tea, Cocoa, Milk
- Bread and Butter

Steward in charge of this car is _____
S.M.T.

FACING PAGE, TOP: A general-arrangement diagram for the *Mark Twain Zephyr* updated to January 1949 provided the operating department with the train's basic specifications. JOE WELSH COLLECTION

clip. In addition to speed, the train offered amenities—meals in the dinette section, and “Zephyrette” hostess service. One significant modification to 9901 was needed before it entered this new service: the addition of 16 seats in the baggage compartment to comply with the “Jim Crow” laws in Texas that decreed that the races be seated separately aboard passenger trains. In addition, the Burlington Route nose herald was replaced by one reading “*Sam Houston Zephyr*” in the same style and color, and the lettering of the power car’s flanks was changed to read BURLINGTON-ROCK ISLAND. Before No. 9902 subbed in this service from November 1938 to June 1939, it received a similar seating modification, herald, lettering and, more importantly, on July 8, the additional 40-seat coach that had been built in 1935 for the original *Zephyr*. Later, 9901 returned to *Sam Houston Zephyr* service while 9902, on December 3, 1938, became the *Texas Rocket* on the same route, with nose herald reflecting its new name.

On a sad note, the 9901 became the only member of Burlington’s shovel-nose fleet to meet an untimely end when, still in *Sam Houston Zephyr* service, it was destroyed by fire on December 19, 1944. While the train was running southbound at Dacus, Texas, fire broke out underneath the power car and at the coupling to the second car, the dinette-coach. By the time it was extinguished, the power car was a total loss and the dinette-coach had sustained damage later estimated at \$20,000. Apparently, shoddy maintenance had let oil residue accumulate on traction motors, trucks, and fuel tanks, and under the diaphragm linking the first two units. Something ignited it, and 9901 was history. Though CB&Q considered replacing the power car, or using the rear two cars on other trains, neither ever happened.

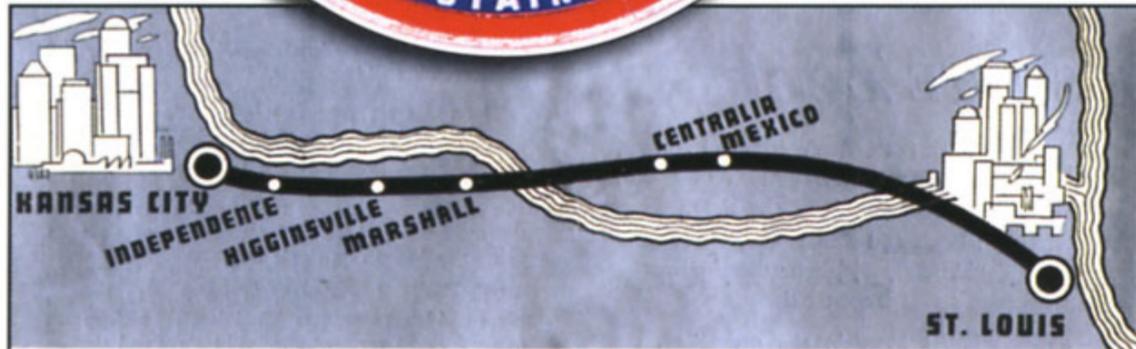
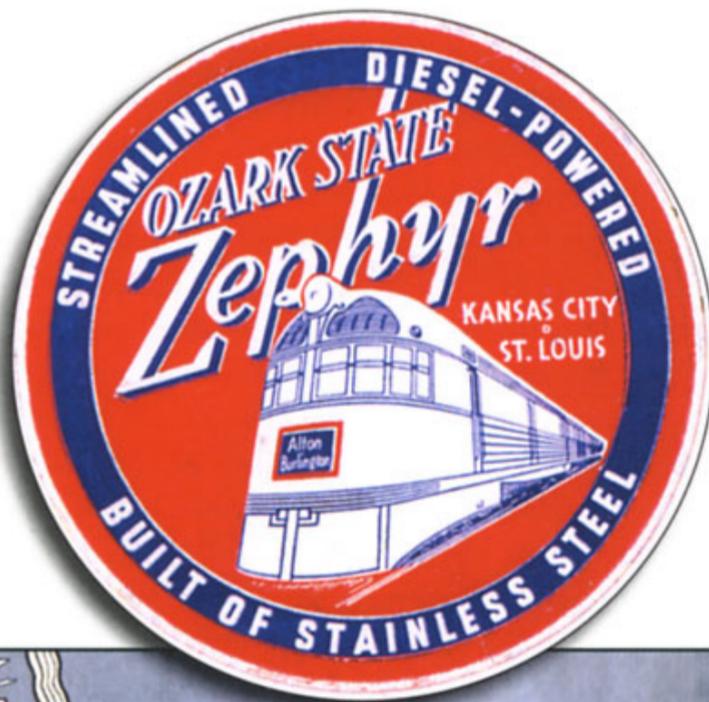
When the *Sam Houston Zephyr* had begun service in October 1936, yet another new train was in the offing. After Nos. 9904 and 9905 took over *Twin Zephyr* service on December 18, No. 9902 was at liberty to begin *Ozark State Zephyr* service, operated by the CB&Q across Missouri—the Ozark State—between St. Louis and Kansas City. Since the “Q” didn’t have its own direct line all the way through between those two

In one of the more attractive publicity renderings to appear on *Zephyr* postcards, Mark Twain’s river (and train, northbound) are shown near his childhood home. WILLIAM F. HOWES JR. COLLECTION

Mark Twain Zephyr along the Mississippi, Hannibal, Missouri



The *Ozark State Zephyr* ran the width of its eponymous state, Missouri, as the stylized map in this brochure suggests. The train's overnight counterpart was the steam-powered, standard Pullman-equipped *Night Hawk*; its schedule is also shown. The brochure dates from the period beginning in September 1938 when No. 9903 (the *Mark Twain Zephyr* equipment) joined No. 9902 to provide twice-daily service in each direction between St. Louis and Kansas City as the *Morning Zephyr* and *Afternoon Zephyr* (with a nod to the *Twin Zephyrs*, which were given those same monikers after double-daily service began between Chicago and Minneapolis). *JOE WELSH COLLECTION*



The OZARK STATE Zephyrs

Westbound		DAILY SCHEDULE		Eastbound	
Morning Zephyr	Afternoon Zephyr	Lx.	Ar.	Morning Zephyr	Afternoon Zephyr
9:00am	3:00pm	ST. LOUIS	Ar.	2:15pm	9:30pm
a	a	Washington Ave.	Ar.	b	b
11:03am	5:03pm	Mexico	Ar.	12:12pm	7:27pm
11:18am	5:18pm	Centralia	Ar.	11:54am	7:10pm
11:50am	5:50pm	Glasgow	Ar.	11:06am	6:20pm
12:20pm	6:20pm	Marshall	Ar.	10:42am	5:57pm
c	c	Higginsville	Ar.	10:08am	5:23pm
1:55pm	7:55pm	Independence	Lx.	9:18am	4:34pm
2:15pm	8:15pm	KANSAS CITY	Lx.	9:00am	4:15pm

ONE-WAY AND ROUND TRIP FARES

	ONE WAY		ROUND TRIP		Parlor Seat One-Way
	Coach	First Class	Coach	First Class	
Between Kansas City and Higginsville	\$1.09	\$1.63	\$2.10	\$2.45	\$.55
Marshall	1.69	2.52	3.25	3.80	.55
Centralia	2.97	4.45	5.65	6.70	.55
Mexico	3.26	4.88	6.20	7.35	.80
St. Louis	5.58	8.36	10.65	12.55	1.05
Between St. Louis and Mexico	2.34	3.50	4.45	5.25	.55
Centralia	2.63	3.93	5.00	5.90	.55
Marshall	3.92	5.86	7.45	8.80	.80
Higginsville	4.50	6.75	8.55	10.15	1.00
Independence	5.39	8.08	10.25	12.15	1.05
Kansas City	5.58	8.36	10.65	12.55	1.05

The NIGHT HAWK

Completely Air-Conditioned
A convenient midnight-to-dawn steam train between St. Louis and Kansas City with de luxe chair cars and through St. Louis-Kansas City-St. Joseph Pullmans (drawing room, compartments and sections). Pullmans ready for occupancy in St. Louis at 9:30pm; in Kansas City at 10:00pm.

Westbound	DAILY SCHEDULE	Eastbound
12:15am	Lv. St. Louis	Ar. 7:45am
7:45am	Ar. Kansas City	Lv. 11:45pm
9:52am	Ar. St. Joseph	Lv. 7:47pm

One-way Pullman fares between St. Louis and Kansas City or St. Joseph:
Upper berth.....\$2.00 Lower berth.....\$2.65
Compartment (two or more persons).....7.35
Drawing room (two or more persons).....9.45

ST. LOUIS TICKET OFFICES
The Alton Railroad 126 North Broadway Phone Central 0500
Burlington Route 122 North Broadway Phone Central 6160
St. Louis Union Depot Phone Garfield 6600

KANSAS CITY TICKET OFFICES
The Alton Railroad 206 E. 11th St. Phone Victor 6500
Burlington Route 1011 Grand Avenue Phone Victor 6710
Kansas City Union Station Phone Harrison 6000



points, the train utilized trackage rights over the Alton Railroad between Francis, Missouri, and Kansas City, making it effectively a joint operation. Just two days after leaving Twin Cities service, the 9902 began making its new run, 279 miles each way, leaving St. Louis at 8:30 a.m. and arriving Kansas city at 2 p.m. The eastbound return left at 4 p.m., arriving St. Louis at 9:30 p.m. No. 9902 received a nose herald reading ALTON-BURLINGTON, with similar lettering on power-car sides. The *Ozark State Zephyr* began double-daily service in September 1938 when No. 9903 (sans baggage car) was moved to join 9902 on that run.

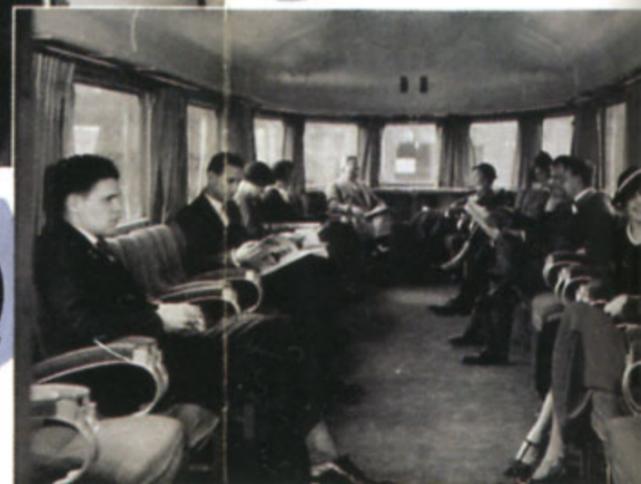
With all four of the small *Zephyrs* spoken for, and the *Denver Zephyr* and new *Twin Zephyrs* firmly entrenched, any more *Zephyr* service would require newly built equipment. That came in 1939 with the *General Pershing Zephyr*. A transitional train, it was the last of the shovel-noses and the first fully non-articulated *Zephyr*—at once a last hurrah and very much a harbinger of things to come.

By September 1938, when the *General Pershing Zephyr* was ordered from Budd to upgrade service on the successful St. Louis-Kansas City route (and, simultaneously, two additional sleepers were ordered for the *Denver Zephyr*), close to two years had passed since the delivery of the last of the previous *Zephyrs*, and some facts had become indisputable, especially to a management team as perceptive as Burlington's. The paramount lesson learned was that—for all its virtues, which in retrospect may not have

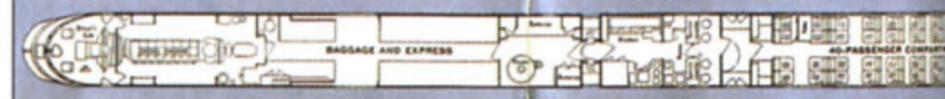


The C

Across the
forth like a g
comfort and o
Traversi
it inaugurates
also provides t
the first trans-



ABOVE — Coaches are colorful and restful.
RIGHT — The parlor lounge is roomy and luxurious.



THE OZARK STATE
Zephyrs
MORNING • AFTERNOON

DIESEL POWERED • STREAMLINED
BUILT OF STAINLESS STEEL

ST. LOUIS • KANSAS CITY

K STATE Zephyr

Missouri the Ozark State Zephyr flashes back and forth as a steel shuttle weaving a new pattern of speed, into the transportation fabric of the state.

Between St. Louis and Kansas City twice daily, train service between Missouri's two largest cities, the first intercity Diesel-powered transportation and the first of glittering stainless steel.

Self-propelled, light-weight and streamlined, the Ozark State Zephyr consists of four cars, is 247 feet long, and accommodates 88 coach and 22 parlor-lounge passengers. Special features include a train hostess devoting particular attention to women and children traveling alone, coach and parlor car porters, and tasty meal service at economy prices in a dinette seating 20 guests. Both coach and parlor car seats are reserved and individually assigned by number.

The interior finish of the Ozark State Zephyr is a rich color harmony without ornamentation designed to achieve a pleasing restfulness. Upholstery and carpeting are in soft, complementary shades, and cheerful drapes edge the double-width windows. Coach seats are adjustable to two comfortable positions, while the parlor-lounge in the rounded end of the train is furnished with movable easy chairs and tables supplied with latest magazines. All passenger compartments are equipped for radio reception and are completely air-conditioned. Wardrobes, and compartments for hand baggage supplement overhead racks and space under seats. Night illumination is ample and glareless.

The Ozark State Zephyr is built of non-corrosive stainless steel, "by far the strongest and most per-

seemed all that great—articulation implied more negatives than positives. True, articulation with its shared wheelsets did lower the weight of the train, which had a number of genuine benefits, including economy, speed, and reduced track wear. Not only that, the elimination of "slack" inherent in traditional knuckle coupling made for a smoother ride.

The downside of the articulated consists' lack of flexibility was far more compelling, however. Train length could not be modified to meet either short- or long-term fluctuations in demand for seats, nor could a train's make-up—coach versus parlor seats, for example—respond to changing market conditions. And a breakdown to any car of the train, including the power unit, put the whole consist on the shelf. (In fairness, however, this needs be noted: At a symposium held by the American Society of Civil Engineers in July 1938, just two months before the *General Pershing Zephyr* was ordered, Ralph Budd presented a paper in which he cited an availability record of 95 percent for the *Zephyrs* up to that time.)

But on the Burlington as well as elsewhere in the industry, articulation was out, with the *General Pershing Zephyr* leading the way. Though this train may have looked at a glance much like its predecessor *Zephyrs*, close examination showed that it was different in many ways. Look first at the power unit. Though some significant negatives of the shovel-nose design had come to the fore—crew safety in particular, an issue pressed by the operating unions—Burlington chose to hold on once more to the look that still unified its *Zephyr* fleet. But even at that, the *General Pershing Zephyr's* power car No. 9908 was an odd duck, with one foot clearly in the future.



THE SAM HOUSTON Zephyr

HOUSTON - DALLAS - FORT WORTH

Northbound	DAILY SCHEDULE		Southbound
8:15 am	Lv. Houston	Ar.	9:10 pm
12:25 pm	Ar. Dallas	Lv.	5:00 pm
1:15 pm	Ar. Fort Worth	Lv.	4:00 pm

Through a region redolent with memories of Sam Houston, "liberator" of Texas and first president of the Republic of Texas, the Sam Houston Zephyr flashes on a daily round trip between Houston and Dallas-Fort Worth. Between Houston and Dallas it runs the 250 miles in 250 minutes—exactly a mile a minute. Parlor-lounge seats 22, chair cars 64, colored compartment 16. Hostess . . . dinette . . . radio. All seats reserved and individually assigned.



ABOVE LEFT: The nose of the *Sam Houston Zephyr* carried the train's name in emblematic form that mimicked the familiar Burlington Route herald. BURLINGTON NORTHERN SANTA FE

ABOVE: The *Sam Houston Zephyr's* page of the 1937 omnibus brochure shows an elegantly and profusely set dinette table and touts the presence of a hostess, or Zephyrette, a feature introduced on this train, the second *Twin Zephyrs*, and the *Denver Zephyr*. ROBERT D. TURNER COLLECTION

manent of all modern alloys," fabricated by the rivetless "Shotweld" process.

The train is propelled by electric power generated by a 660-horsepower, 8-cylinder, 2-cycle Diesel engine burning non-explosive fuel oil. The Zephyr is completely articulated—the ends of adjoining cars resting on the same truck—thereby reducing the number of wheels and causing the whole train to start and stop as a single unit.

Its streamline design, in addition to lending grace and beauty, reduces "wind drag" at high speeds as much as 50 per cent. Roller bearings and electro-pneumatic brakes contribute to velvety starting and stopping. Low center of gravity and scientific balance make high speeds imperceptible to passengers.

In inaugurating this St. Louis-Kansas City service by the Ozark State Zephyr, the Alton-Burlington gave particular attention to convenient departure and arrival hours. Westbound, the Zephyr provides an agreeable morning departure from St. Louis and an early afternoon arrival in Kansas City. Eastbound, a late afternoon departure from Kansas City is combined with a 9:30 p.m. arrival in St. Louis. Convenient connections are made at both terminals with fast trains to many parts of the United States, in many instances permitting travelers to save a whole business day.

Although the Ozark State Zephyr gives extra comfort, extra speed and extra convenience, it is not an excess fare train.

In addition to the ultra-modern day service of the Ozark State Zephyr, the Alton-Burlington offers fine overnight service between St. Louis and Kansas City through The Nighthawks, modern, air-conditioned steam trains leaving each terminus one minute before midnight and arriving at the other early the next morning.

That "foot" was its Blomberg power truck, an innovation that would be an Electro-Motive Corporation (Electro-Motive Division of GM as of January 1941) staple for years to come.

Because the train was to be short, not requiring 1,800-horsepower locomotives like the *Twin Zephyrs'* and *Denver Zephyr's* 9904-9907-series power cars, Burlington opted for a 1,000-horsepower unit that, like 9900-9903, had a single forward power truck and space for baggage or mail. In fact, No. 9908 was arguably more a motorized baggage car than a locomotive (accounting for the fact that it was built at the Budd plant and then sent to EMC for the installation of the engine). Actually, the rear half of the unit looks just like a Budd baggage car, riding on a passenger-car truck. Like the other cars in the train (but unlike any of



THE FORGOTTEN ZEPHYR



In the above photo at West Hinsdale, Illinois, in 1948, the 9902 speeds eastward over CB&Q's splendid triple-track main line between Chicago and Aurora, Illinois. The photo, as submitted, was labeled "*Twin Cities Zephyr*." Of course, the 9902 and its then-defunct mate, 9901 (destroyed by fire in 1944), were indeed built for *Twin Zephyr* service, in 1935, but by 1948 the 9902 had been off the Chicago–Twin Cities run for over a decade.

The answer is that 9902 here is serving as itself. In 1945, Burlington introduced yet another *Zephyr* service—one whose history seems to have largely been overlooked by passenger-train historians—between Chicago and Ottumwa, Iowa. Curiously, rather than naming this new service the *Iowa Zephyr* or perhaps *Corn King Zephyr* or other label indicative of its routing, the railroad simply chose to name the run *Zephyr 9902*, number and all. And that's how it sometimes appeared in public timetables and the *Official Guide of the Railways*.

In 1947, trainset 9902's assignment was revised to that of a Chicago–Hannibal run, via Burlington, Iowa—a service in which it would remain until 1954. Westbound as train No. 5, *Zephyr 9902* left Chicago in late afternoon and arrived Hannibal before midnight. Eastbound as train 2, it left Hannibal in early morning for a by-noon arrival in Chicago. The train was nicknamed by some as the "Baby Zephyr," undoubtedly in reference to its much larger contemporaries on the main line, such as the *California Zephyr* and the 14-car *Denver Zephyrs*.

The lower photo illustrates what happens when a fixed, articulated trainset is down for repairs or maintenance. Here, the *Zephyr 9902* schedule is being protected by a steam-powered mini-domeliner!—Mike Schafer

ABOVE: A four-car (including power car) 9902 rips eastbound along the Burlington main line at West Hinsdale on March 24, 1948, serving on a run simply named for the equipment set that usually protected the schedule: *Zephyr 9902*. C. H. KERRIGAN, ROBERT P. SCHMIDT COLLECTION

LEFT: With *Zephyr 9902* (the equipment, not the named run) standing in for the 9900 at the Chicago Railroad Fair, it was unavailable to protect its Chicago–Hannibal assignment as train 5, *Zephyr 9902*, on August 22, 1949, at LaGrange, Illinois. Pinch-hitting for the shovel-nose train is CB&Q 4-6-4 No. 4004, a conventional Budd-built *Zephyr* coach, one of Burlington's two home-built dome coaches, and what appears to be a heavyweight cafe-lounge. JIM SCRIBBINS



the earlier *Zephyrs*), a strip of narrow fluting runs between the window band and the roof. This would be the style for all future *Zephyrs*, as well as thousands of Budd-built cars that would run on other railroads.

The Blomberg truck—a six-wheel A-1-A (indicating two powered axles sandwiching a non-powered axle) truck designed by Martin Blomberg, an EMC engineer—was designed to discourage “hunting,” the tendency for wheels of locomotives, particularly those with long wheel-bases, to ride up on the rail on curves rather than tracking smoothly around them. Since at 78 feet 4 inches No. 9908 would be substantially longer than the non-articulated units powering the *Twin Zephyrs* and *Denver Zephyr*, this new truck seemed a good fit. It was the first use of a Blomberg truck on the Burlington, with many, many more to come, particularly on future *Zephyr* motive power.

The *General Pershing Zephyr* set new directions in other ways as well. A newly designed EMC 567 engine replaced the Winton 201-A found in the earlier trains. All trucks but the Blomberg had disc brakes, which would be standard equipment on all future *Zephyrs*. The coaches used fluorescent lighting throughout (including blue night lights, which provided a glow familiar to generations of sleeping-car passengers). Each coach had its own diesel-electric generator for electricity.

Most importantly, each coach was an independent unit, which could be mixed and matched, added and subtracted as business warranted. Budd had delivered its first stand-alone stainless-steel chair car to the Santa Fe in 1936. Burlington subsidiaries Colorado & Southern and Forth Worth & Denver City were running similar Budd cars by 1937, and in 1938 some had been added to the Chicago–Denver *Aristocrat*, so the technology was proven.

In addition to the baggage-power unit, the original



LEFT: On April 30, 1939, Ralph Budd speaks in St. Louis at the *General Pershing Zephyr's* inaugural ceremony, which was broadcast live over WBPA. Radio was nearly as new and exciting as streamlining at the time, and *Zephyr* inaugurals were often aired. Miss Mae Pershing, General Pershing's sister, christened the train. BURLINGTON NORTHERN SANTA FE

BELOW: The *General's* general-arrangement diagram, updated to 1949, noting that the equipment shown is no longer operated as grouped. JOE WELSH COLLECTION

GENERAL PERSHING ZEPHYR									
CONSIST SUMMARY									
TRAIN CAR NO.	TYPE CAR	WEIGHT OF CAR-LBS.		PASSENGER CAPACITY					
		READY TO RUN	NORM. MAX. LOAD	REV.	NON-REV.				
1	DIESEL LOCOMOTIVE	201820	227650	0	0				
2	COACH	116850	128050	70	0				
3	COACH	111400	119700	52	0				
4	DINING-PARLOR-LOUNGE	137400	144500	22	24				
TOTAL		567470	619900	144	24				
TOTAL NORMAL MAXIMUM LOAD OF TRAIN - 619,900* - 947 LBS. PER HP									
TOTAL WEIGHT OF TRAIN, READY TO RUN, - 567,470* - 659 LBS. PER H.P.									
NOTE: THE EQUIPMENT IN THIS TRAIN IS NOT NOW OPERATED AS SHOWN ON THE DIAGRAM BUT IS ASSIGNED TO OTHER SERVICE.									

TRAIN NO. 9908	NAME-SILVER CHARGER	4705	SILVER LEAF	4706	SILVER EAGLE	301	SILVER STAR
HORSEPOWER	1000	TYPE CAR		COACH		DINING-PARLOR-LOUNGE	
TRAIN CAR NO.	1	2	3	4			
PASSENGER CAPACITY	0	70 REV	52 REV	22 REV - 24 NON-REV.			
WEIGHT OF CAR	-LIGHT-LBS. 189830	114,400	109,200	127,600			
WEIGHT OF CAR READY TO RUN - LBS.	201,820	116,850	111,400	137,400			
WEIGHT OF CAR NORMAL MAX. LOAD - LBS.	227,650	128,050	119,700	144,500			
LENGTH OF CAR - COUPLED	78'-4"	88'-8"	79'-8"	88'-7"			
AXLE SIZE	# 2-6" X 11"	# 3-5 1/2" X 10"	# 4-5 1/2" X 10"	# 5-5 1/2" X 10"	# 6-5 1/2" X 10"	# 7-6" X 11"	# 8-5 1/2" X 10"
FUEL OIL	GALS. 630	COLOR SCHEME					
LUBRICATING OIL	GALS. 100	BUILT BY - BUDD		BUDD		BUDD	
COOLING WATER	GALS. 180	YEAR BUILT 1939		1939		1939	
HEATING BOILER - LBS./HR.	1600	BUILDER FLOOR PLAN NO. BUDD SK-15151		BUDD SK-15152		BUDD SK-15153	
SOILER WATER - GALS.	540						
BUILDER FLOOR PLAN NO. BUDD SK-15150							
YEAR BUILT	1939						



The brochure featured on these pages, with General John J. Pershing's four stars on the cover, highlights the usual *Zephyr* amenities. *Silver Star*, the splendid diner-parlor-observation, contained most of them. While the *General Pershing Zephyr* replaced the *Ozark State Zephyr*, *The Mark Twain Zephyr* stayed on as its running mate in twice-daily daylight service, and the *Night Hawk* remained as their overnight counterpart. JOE WELSH COLLECTION



General Pershing Zephyr had two coaches—one with 70 seats, the other with 52 and a full men's lounge—and a diner-parlor observation, the train's most distinguished car. With a substantial kitchen, pantry, and dining room seating 24, it was well-equipped to serve full meals. The parlor section in the rounded end, with 22 movable seats, was handsomely appointed, again thanks to Paul Cret and John Harbeson.

Like Samuel Clemens, John J. Pershing was a famous and distinguished Missourian, born near Laclede, not far from the tracks over which his train would travel. Railroading was in General Pershing's history; his father had been a section foreman on the Hannibal & St. Joseph Railroad, which became part of the Burlington. Only the fifth general in the U. S. Army up till then (the others were Washington, Grant, Sherman, and Sheridan), Pershing was most famous as the Commander of the Allied Expeditionary Forces in World War I.

The naming of the cars in his train reflected his career, as well as continuing the "Silver" convention begun with the *Denver Zephyr*. Appropriately for an "iron horse," power car 9908, *Silver Charger*, was named for Pershing's horse, Charger, during his time as a cavalryman. The chair cars were named *Silver Leaf* and *Silver Eagle*, and the diner-parlor-observation *Silver Star*. Leaf, eagle, and stars (one to four) are emblems of army rank—lieutenant colonel, colonel, and general respectively. The rounded observation end's tail sign, though lacking the bronze likeness of the train's

The photograph above of the *General Pershing Zephyr* was taken near Lisle, Illinois, in suburban Chicago, while the train was making exhibition runs before heading west to enter revenue service between St. Louis and Kansas City on April 30, 1939. In spite of *Silver Charger's* shovel-nose prow, this is clearly a different kind of *Zephyr*—articulation-free, with each car an independent unit. BURLINGTON NORTHERN SANTA FE



THREE GREAT TRAINS DAILY between ST. LOUIS and KANSAS CITY

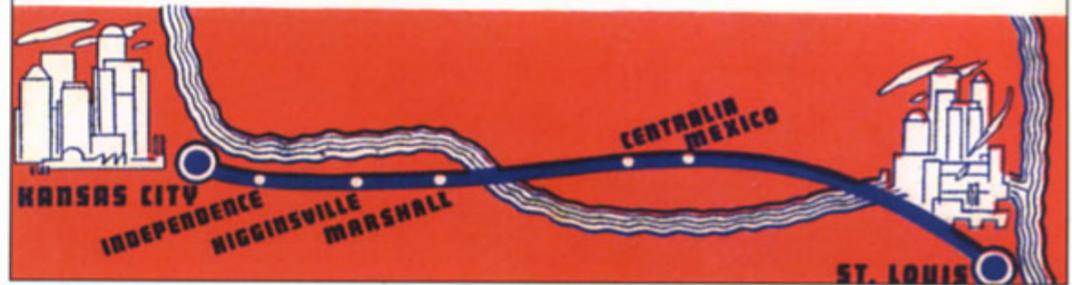
WESTWARD—Read Down				EASTWARD—Read Up			
NIGHT HAWK	GEN. PERSHING ZEPHYR Com. June 10	MARK TWAIN ZEPHYR April 30 to June 9	MARK TWAIN ZEPHYR	DAILY SCHEDULE	GEN. PERSHING ZEPHYR April 30 to June 9	MARK TWAIN ZEPHYR June 10	NIGHT HAWK
12:15 AM	2:00 PM	3:00 PM	9:00 AM	Lv. ST. LOUIS	Ar. 1:00 PM	1:00 PM	9:10 PM
7:45 AM	7:00 PM	8:00 PM	2:00 PM	Ar. KANSAS CITY	Lv. 8:00 AM	8:00 AM	4:30 PM
8:15 AM	7:15 PM	8:30 PM	2:30 PM	Lv. Kansas City	Ar. 7:15 AM	7:45 AM	12:55 PM
9:52 AM	8:30 PM	10:05 PM	3:47 PM	Ar. St. Joseph	Lv. 5:20 AM	6:30 AM	11:34 AM
1:10 PM			6:20 PM	Ar. Omaha	Lv. 11:55 PM		9:00 AM
5:35 PM	11:25 PM	2:00 AM	7:55 PM	Ar. Lincoln	Lv. 12:30 AM	3:30 AM	7:30 AM
				Lv. Lincoln	Ar. 1:45 AM	6:20 AM	1:20 PM
6:00 AM	7:55 AM	12:15 PM		Ar. Denver	Lv. 4:00 PM	4:10 PM	7:30 PM

a—Pullman ready for occupancy 9:30 PM.
b—Pullman ready for occupancy 10:00 PM.
GENERAL PERSHING ZEPHYR — Luxurious coaches and observation-parlor car; tasty, low-cost meals. Commencing June 10, the General Pershing Zephyr will operate between St. Louis, Kansas City and Lincoln, carrying St. Louis - San Francisco standard Pullman and St. Louis - Denver coach for movement west of Lincoln on the "Exposition Flyer".
MARK TWAIN ZEPHYR — Luxurious coaches and parlor-observation-lounge between St. Louis and Kansas City.
The NIGHT HAWK — Standard Pullmans and de luxe chair car between St. Louis and Kansas City; also standard Pullman between St. Louis and St. Joseph.

All trains completely air-conditioned

ALTON and BURLINGTON TRAVEL OFFICES

ST. LOUIS		KANSAS CITY	
The Alton Railroad	Burlington Route	The Alton Railroad	Burlington Route
324 N. Broadway Phone: Central 0500	322 N. Broadway Phone: Central 4140	304 E. 11th St. Phone: Victor 4500	11th & Grand Ave. Phone: Victor 4710
St. Louis Union Depot Phone: Garfield 6400		Kansas City Union Station Phone: Harrison 4000	



The GENERAL PERSHING ZEPHYR — America's Newest Train

ALTON-BURLINGTON present "America's Newest Train" — the streamline, diesel-powered GENERAL PERSHING ZEPHYR, honoring an illustrious son of Missouri and introducing striking developments in the comfort, pleasure and safety of rail service. Together with the MARK TWAIN ZEPHYR, named to honor another famous Missourian, it inaugurates five-hour service twice daily between St. Louis and Kansas City, commencing April 30.

The GENERAL PERSHING ZEPHYR introduces four great new developments in rail transportation:

- (1) A braking system that entirely forsakes the conventional brake shoe and, instead, applies the braking effort to specially-designed heat-radiating discs located between the wheels. The GENERAL PERSHING ZEPHYR can be brought to a smooth, comfortable stop in a fraction of the distance required to halt the comparable conventional train.
- (2) The first installation of fluorescent lighting, science's closest approach to soft, natural daylight, on a complete train.
- (3) Vastly improved air-conditioning, whereby both temperature and humidity are automatically modulated with respect to outside atmospheric conditions so that passengers entering or leaving cars experience no temperature shocks. All air entering the cars is purified by passing ultra violet sterilization lamps.
- (4) Each car carries its own diesel-electric plant, housed in a sound-proof compartment beneath the floor, assuring perfect, constant operation of its lighting and air-conditioning facilities regardless of whether the car is moving, standing, or detached from train.

The GENERAL PERSHING ZEPHYR consists of four streamlined stainless steel cars, bearing names of a military flavor, as follows:

- Silver Charger**—A power car of 1000-HP containing diesel-electric units capable of propelling the train at more than 100 miles an hour, together with express and baggage compartments.
- Silver Leaf**—A 70-passenger luxury coach decorated in a warm combination of restful colors with browns predominating. It contains a spacious women's lounge and dressing rooms, luggage lockers, and men's dressing rooms. (A Silver Leaf, worn on the shoulder straps, is the insignia of a Lieutenant Colonel).

- Silver Eagle**—A 32-passenger luxury coach decorated in a pleasing symphony of hennas and tans. It contains spacious lounges for men and women, at opposite ends of car. (A Silver Eagle is the insignia of a Colonel).
- Silver Star**—A dining parlor car containing complete kitchen, a 24-seat dining room, and an observation parlor-lounge accommodating 22 passengers in vari-colored easy chairs. (Silver stars are the insignia of generals—one, a Brigadier General; two, a Major General; three, a Lieutenant General, and four, a General).

All GENERAL PERSHING ZEPHYR cars are fully carpeted, and have double-width windows fitted with fog-proof safety glass. Cars are joined by slack-controlling "tight-lock" couplers; roll stabilizers on trucks eliminate swaying tendencies on curves, and rubber is employed at strategic points to dampen noise and vibration.

The GENERAL PERSHING ZEPHYR and the MARK TWAIN ZEPHYR provide unprecedented fast and convenient service across Missouri—morning and afternoon in both directions—with excellent connections at St. Louis and Kansas City with fast trains to various parts of the United States.

This double daily Zephyr service affords extra speed, extra comfort and extra convenience without extra fare.

Alton-Burlington also offer attractive overnight service between St. Louis and Kansas City—the air-conditioned NIGHT HAWK, carrying de luxe chair cars and St. Louis-Kansas City-St. Joseph standard Pullmans.



Above: Spacious, colorful coach
 Circle: Luxurious women's lounge
 Lower left: Roomy observation-lounge
 Lower right: Inviting dining room



namesake sported by the *Mark Twain Zephyr*, was otherwise similar. *Silver Star's* bullet end carried an illuminated replica of General Pershing's signature, bordered by columns of stars. In addition, the train name was written in red on both side of the motor unit's nose.

The first passengers to experience the *General Pershing Zephyr* were members of the Chicago Association of Commerce, who on April 11, 1939, made an all-day round-trip excursion from Chicago to Quincy, Illinois, via Burlington, Iowa, where businessmen from that city joined the rolling party. Revenue service began on April 30, between St. Louis and Kansas City, with the new train replacing the *Ozark State Zephyr*. As No. 32, the *GPZ* left Kansas City at 8 a.m. and arrived in St. Louis at 1 p.m. Departure for No. 33 was at 3 p.m. for an 8 p.m. arrival at Kansas City.



The *Mark Twain Zephyr*, which had moved to this route the year before sans its name, stayed as *General Pershing's* running mate and had its name restored—trains honoring two great Missouri sons sharing a service.

In less than two months the *General Pershing Zephyr* would demonstrate clearly the benefits of a flexible consist. On June 10, 1939, the Burlington, Denver & Rio Grande Western, and Western Pacific inaugurated the Chicago–Denver–Salt Lake City–

San Francisco *Exposition Flyer* to cater to visitors to the Golden Gate International Exposition, held on Treasure Island in San Francisco Bay. This was the first scheduled transcontinental passenger train on the new (1934) Moffat Tunnel Route through the Colorado Rockies and the first jointly operated by those three carriers.

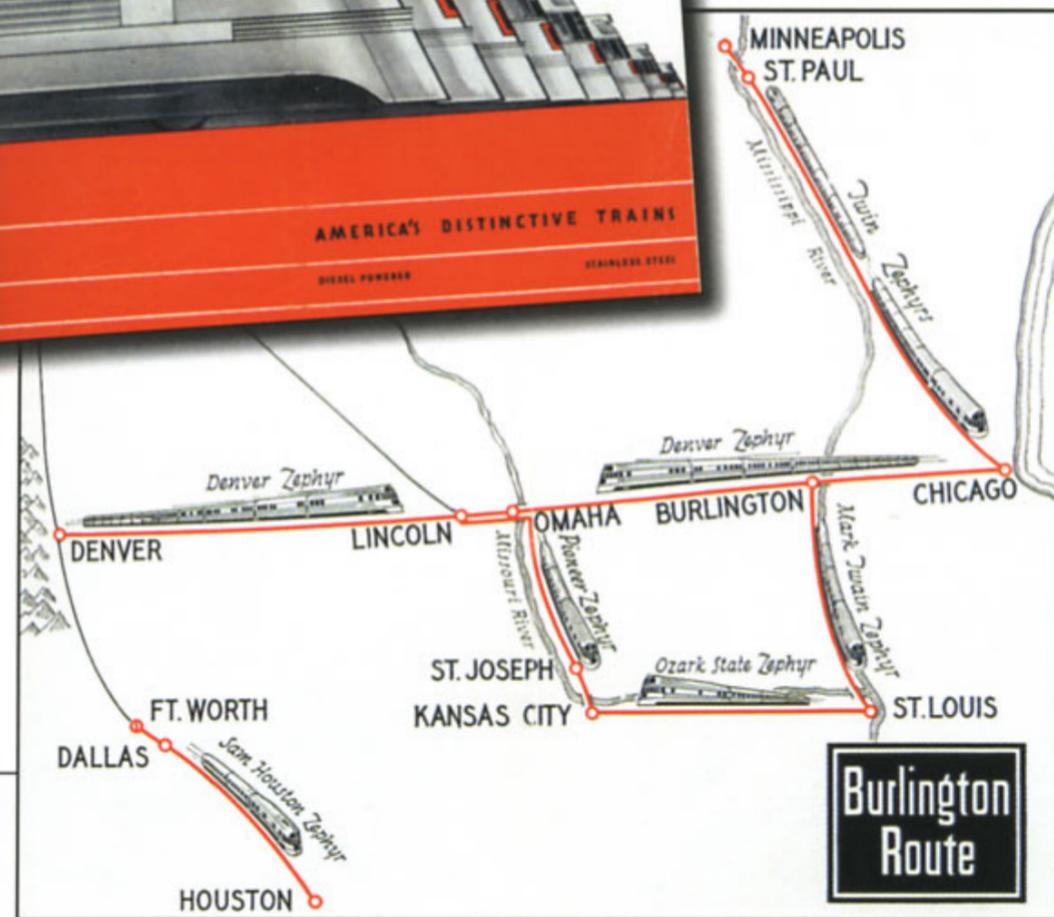
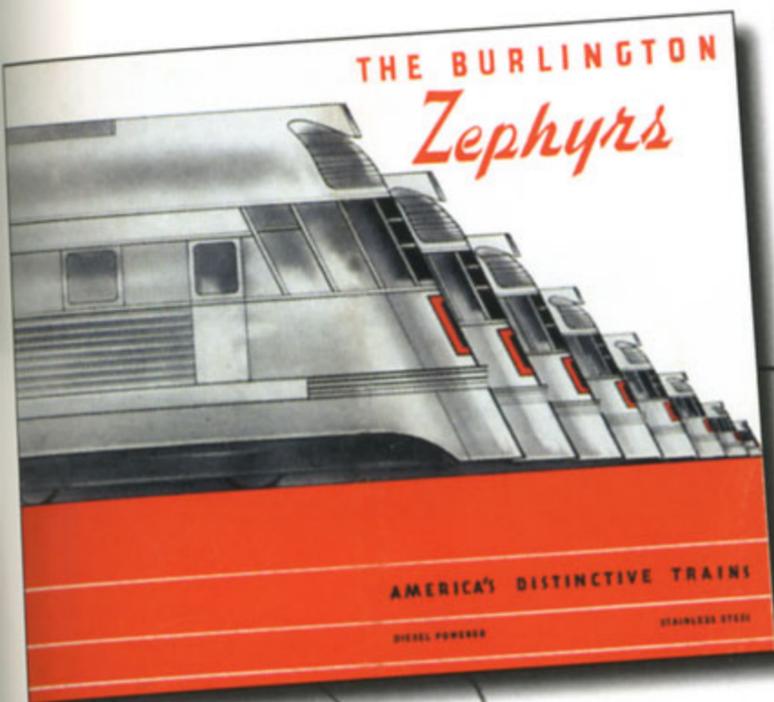
On the same day the *Exposition Flyer* was launched, the *General Pershing Zephyr's* run was extended 195 miles north and west from Kansas City to Lincoln, over the route of the *Pioneer Zephyr*. This allowed the *GPZ* to connect with the *Flyer*, handing over a heavyweight Pullman out of St. Louis for San Francisco as well as one of the *Zephyr's* lightweight chair cars for Denver. To get No. 33 to Lincoln at 11:25 p.m., in time to make the connection, its St. Louis–Kansas City schedule was advanced by one hour. Number 32's eastbound departure from Lincoln was at 3:30 a.m., which required no change in the Kansas City–St. Louis timings.

It soon became apparent that *Silver Charger's* 1,000 horses were inadequate to maintain schedule with the extra burden of an 80-ton standard

These interiors of *Silver Star* show the car as it looked in 1963, with "soft goods" changed since it entered service 14 years earlier. The portrait of General Pershing still hung at the forward end of the parlor-observation section. ALAN BRADLEY

sleeper. By mid June 1940, therefore, *Silver Bullet* (a new Electro-Motive E5 passenger diesel) and baggage car *Silver Light*, both built for the *Silver Streak Zephyr* (see the following chapter), were swapped for *Silver Charger*, which was reassigned elsewhere.

So, the *General Pershing Zephyr* signaled the end of one era and the beginning of another—notably one with increased flexibility in terms of equipment utilization thanks to the absence of restrictions inherent in train articulation. No new power-car-led articulated *Zephyrs* would be built after the *Twin Zephyrs* of late 1936. Yet, most of the shovel-nosed locomotives and power cars would be around for years to come, as would articulated *Zephyr* trainsets. The era of slanted (and, later, bulldog) noses and individual-car *Zephyrs* was at hand.



LEFT: The 1937 brochure highlighting "America's Distinctive Train's" had as its centerfold a playful map that graphically showed the extent of the *Zephyr* network at that time. Routes still to come: Chicago–Quincy–Kansas City, Denver–Dallas, Minneapolis/St. Paul–Burlington–St. Louis, and Denver to the West Coast. ROBERT D. TURNER COLLECTION

BELOW: In the fall of 1952, both the *Pioneer Zephyr* and the *Mark Twain Zephyr* stand at the soon-to-be-retired depot at Quincy, Illinois. The *Pioneer Zephyr* equipment was operating a daily round trip to Galesburg as nameless Nos. 6 and 11, and the *Mark Twain Zephyr* was back on its original Burlington–St. Louis run. PHIL WEIBLER

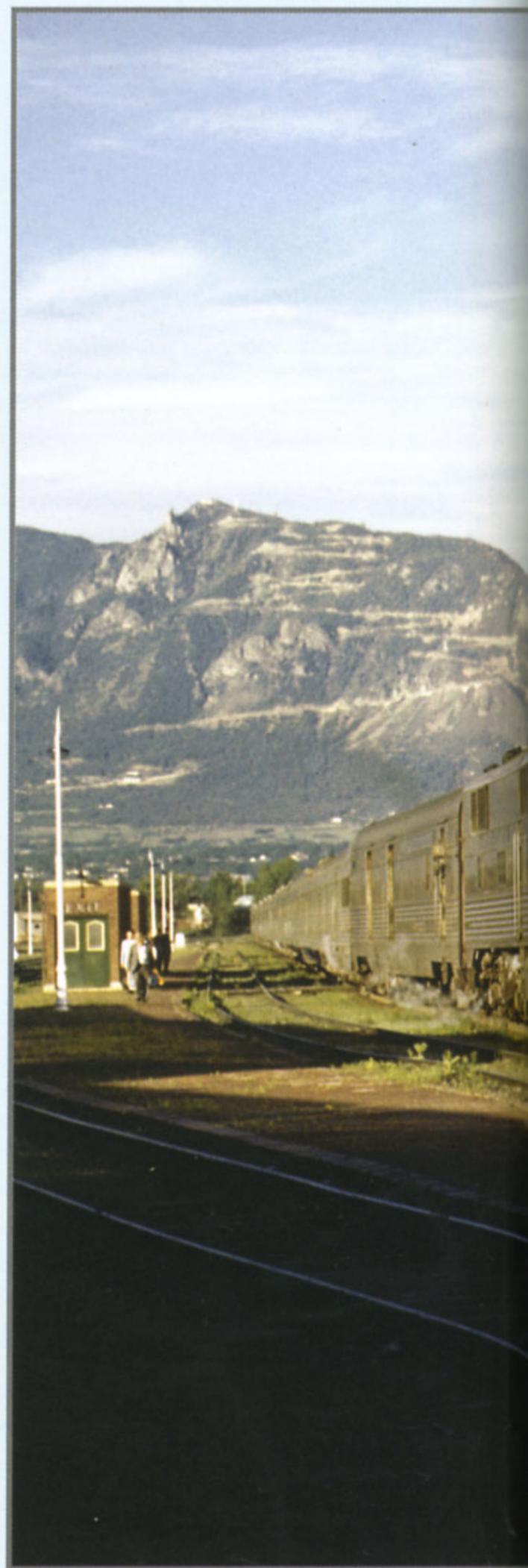


6

A New Face
for the Fleet

If the *General Pershing Zephyr* of 1939 began the transition from old to new by abandoning articulation, the *Silver Streak Zephyr* of the following year completed the break by deserting the shovel-nose look that had characterized the *Zephyrs* from the beginning.

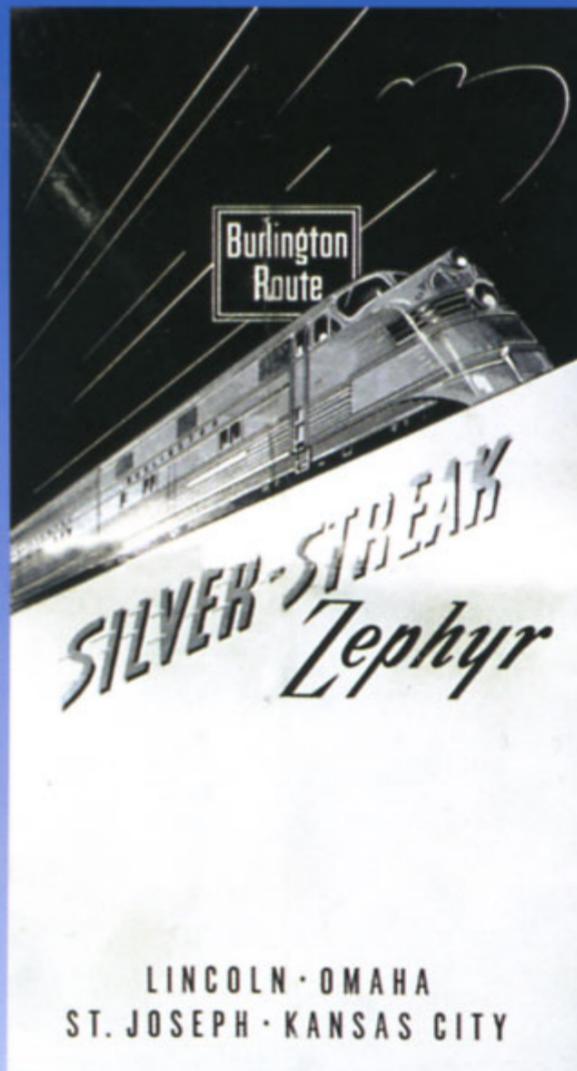
As a replacement on the Kansas City–Omaha–Lincoln run for the *Pioneer Zephyr* trainset, which was then reassigned to Lincoln–McCook, Nebraska, service, the *Silver Streak Zephyr* was an example of life imitating art—a train assuming the name of the movie that had been shot in 1934 starring the original *Zephyr*. In fact, the train's handle had nothing to do with the film; rather, it came from a railroad-sponsored contest to name the train. The winning entry made no reference to the movie, nor did the railroad in its advertising.





On a sunny afternoon in June 1959, E5 No. 9950A, *Silver Racer*, and an E5 booster pause at the Santa Fe station in Pueblo, Colorado, with train No. 2, the northboundbound *Texas Zephyr*. Clad in an armor of stainless steel, slant-nosed Electro-Motive E5 passenger diesels were the new order of business at the head end of new *Zephyrs* beginning in 1940. JOHN DZIOBKO

This brochure, issued at the time of the *Silver Streak Zephyr's* 1940 inaugural, has graphics that elegantly emphasize speed. MARTIN BRENNAN COLLECTION



WAY OF THE SILVER STREAK ZEPHYR

DAILY SCHEDULE

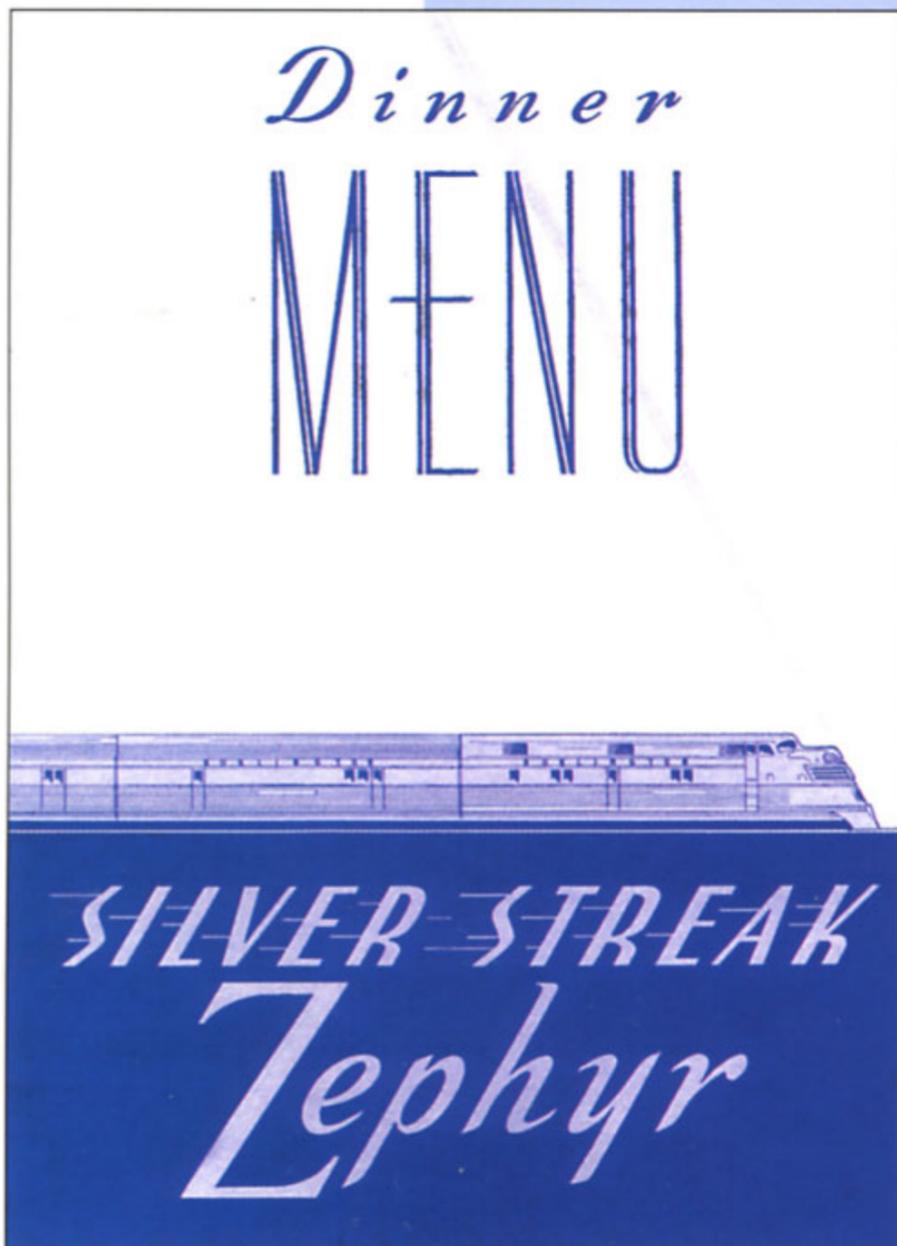
SOUTHBOUND—Read down		NORTHBOUND	
7:30 AM	Lv. LINCOLN	7:30 AM	Ar. LINCOLN
8:25 AM	Ar. OMAHA	8:25 AM	Lv. OMAHA
9:00 AM	Lv. Council Bluffs Transfer	9:00 AM	Ar. Council Bluffs Transfer
9:14 AM	Ar. COUNCIL BLUFFS	9:14 AM	Lv. COUNCIL BLUFFS
9:55 AM	Lv. Payne	9:55 AM	Ar. Payne
10:10 AM	Lv. Nebraska City	10:10 AM	Ar. Nebraska City
9:55 AM	Lv. Nebraska City	9:55 AM	Ar. Nebraska City
9:50 AM	Lv. Payne	9:50 AM	Ar. Payne
9:55 AM	Lv. Payne	9:55 AM	Ar. Payne
10:05 AM	Lv. Hamburg	10:05 AM	Ar. Hamburg
10:25 AM	Lv. Langdon	10:25 AM	Ar. Langdon
10:34 AM	Lv. Corning	10:34 AM	Ar. Corning
10:40 AM	Lv. Craig	10:40 AM	Ar. Craig
10:49 AM	Lv. Bigelow	10:49 AM	Ar. Bigelow
11:28 AM	Ar. ST. JOSEPH	11:28 AM	Lv. ST. JOSEPH
11:54 AM	Lv. ST. JOSEPH	11:54 AM	Ar. ST. JOSEPH
11:54 AM	Ar. Armour	11:54 AM	Lv. Armour
11:21 PM	Lv. Atchison	11:21 PM	Ar. Atchison
11:24 AM	Lv. Atchison	11:24 AM	Ar. Atchison
11:54 AM	Lv. Armour	11:54 AM	Ar. Armour
12:30 PM	Ar. Leavenworth	12:30 PM	Lv. Leavenworth
11:10 AM	Lv. Leavenworth	11:10 AM	Ar. Leavenworth
12:14 PM	Lv. Beverly	12:14 PM	Ar. Beverly
12:50 PM	Ar. KANSAS CITY	12:50 PM	Lv. KANSAS CITY
4:10 PM	Lv. Kansas City	4:10 PM	Ar. Kansas City
9:30 PM	Ar. St. Louis	9:30 PM	Lv. St. Louis

L—Flag Stop. T—Motor Car.

THE BURLINGTON ZEPHYR FLEETS

America's Distinctive Trains

THE DENVER ZEPHYRS (2) Chicago-Omaha-Lincoln-Denver	THE TWIN ZEPHYRS (2) Chicago-St. Paul-Minneapolis
THE GEN. PERSHING ZEPHYR St. Louis-Kansas City	THE SAM HOUSTON ZEPHYR Houston-Dallas-Fort Worth
THE PIONEER ZEPHYR St. Louis-Kansas City	THE TEXAS ROCKET Houston-Dallas-Fort Worth
THE MARK TWAIN ZEPHYR St. Louis-Burlington	THE SILVER STREAK ZEPHYR Lincoln-Omaha-St. Joseph-Kansas City



The *Silver Streak Zephyr's* 1942 dinner menu dramatizes the slope of the new E5 diesels. JOE WELSH COLLECTION

Inaugurated on April 15, 1940, the *Silver Streak Zephyr* sported a five-car consist pulled by locomotive No. 9909, a 2,000-horsepower unit built by Electro-Motive Corporation and dubbed *Silver Bullet*. Like the *Pioneer Zephyr*, the train was head-end heavy, with a baggage car (*Silver Light*) and a baggage-RPO (*Silver Sheen*), trailed by two 52-seat coaches (*Silver Gleam* and *Silver Glow*) and dining-parlor-observation *Silver Spirit*. The chair cars and observation were much akin to cars built for the *General Pershing Zephyr*.

Silver Bullet was Burlington's first purchase of an Electro-Motive E-series passenger diesel, a new locomotive type that Electro-Motive Corporation had introduced in 1937. Electro-Motive's E-unit-series (initially the "E" stood for "eighteen-hundred horsepower") was destined to be enormously successful—eventually most U.S. passenger-carrying railroads, including Amtrak, would own them—and E-units would be Burlington's primary form of *Zephyr* power until the railroad's demise in 1970. The 9909 was an E5A, a member of a group of early E-units whose hallmark was a steeply slanted nose. Baltimore & Ohio was first with its EA and EB units, Santa Fe soon followed suit with E1As and E1Bs, and other roads took it from there with model E3s on up to E9s. The E5 model, which had stainless-steel fluting and side panels and low carbody windows, was unique to the Burlington Lines (CB&Q, C&S, FW&DC) and would come to number 11 A-units and 5 B-units. With their stainless steel and slanted noses, they made a graceful transition from the shovel-nose power of the earlier *Zephyrs*. The E5s received some cosmetic touches to underline that affinity: Three horizontal black (later, red) stripes astride the bottom headlight suggested a shovel-nose's front band of windshields while painted triangular swatches of horizontal lines bracketing their top headlights mimicked the air vents that flanked the headlights of the shovel-noses.

Just as articulation had been abandoned for practical reasons, so had the shovel-nose carbody design. In this case the primary reason was safety, and, not surprisingly, the Brotherhood of Locomotive Engineers was alert to the problem and influential in seeing that a change was made. Without question, the engineer and fireman aboard a shovel-nose unit

Burlington's New **SILVER-STREAK** Zephyr

As a worthy successor to the illustrious Pioneer Zephyr, which introduced streamline train service to America six years ago and now goes on to a new assignment, the Burlington proudly presents the tenth and newest of its glistening stainless steel fleet—The SILVER STREAK ZEPHYR.

Flashing up and down the rich Missouri River valley on its daily round-trip between Lincoln and Kansas City, this spectacular new six-car Zephyr is, indeed, a "silver streak" setting new high standards for fast, luxurious transportation for the progressive people whose hearty reception of America's first diesel-powered train launched the streamline era.

Silver Streamer—roomier, more powerful, more beautiful and more efficient than its distinguished predecessor, the SILVER STREAK ZEPHYR consists of six units, as follows:

Silver Bullet—A 7500-HP diesel-electric locomotive capable of propelling the train at more than 100 miles an hour.

Silver Sheen—A combination Railway Post Office and express car.

Silver Light—A full-length express car.

Silver Gleam—A luxurious 52-passenger chair car decorated with combinations of tans, chocolates and burgundies, with daintily-appointed women's room done in rose grays and men's room with wine leather upholstery.

Silver Glow—A luxurious 52-passenger chair car decorated with a pleasant symphony of tan, brown and rust shades. It has a spacious women's room and men's room.

Silver Spirit—A dining-parlor car containing complete

kitchen for the preparation of delectable Burlington meals, a charming 24-seat dining room, and an observation parlor lounge with vari-colored easy chairs for the accommodation of 22 passengers.

Mechanically, the SILVER STREAK ZEPHYR is the last word, embodying the fruits of Burlington's 8½ million miles of Zephyr experience. It is equipped with the new disc-type braking system, which permits it to be brought to a smooth stop in a fraction of the distance required to halt a conventional train. Windows are double-width, front- and rear-ward. All-weatherproof windows provide absolute protection against glare and outside weather. Night illumination is soft, yet abundant. Cars are joined together with slack-controlling "bite-lock" couplers, while roll stabilizers on trucks eliminate swaying tendencies on curves, and rubber is employed at strategic points to dampen noise and vibration.

In addition to affording fast, de luxe service between Lincoln, Omaha, Council Bluffs, St. Joseph and Kansas City, the SILVER STREAK ZEPHYR makes convenient connections at Kansas City with the Zephyrs to and from St. Louis, and with various fast trains to and from the South and Southwest.

The tenth and latest member of a distinguished Zephyr fleet, the SILVER STREAK ZEPHYR offers extra speed, extra comfort and extra convenience without extra fare.



Above: Observation parlor-lounge



Left: Attractive dining room



Below: Spacious, luxurious coach

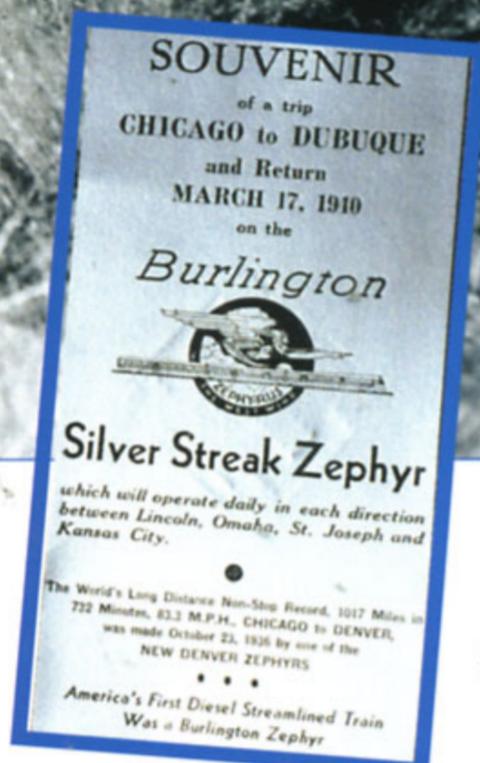


BELOW: On March 17, 1940, before being placed in regular service just less than a month later, the *Silver Streak Zephyr* operated a round-trip excursion between Chicago and Dubuque, Iowa. Headed for Dubuque, that train is seen here racing westbound between Waterman and Shabbona, Illinois, behind E5 *Silver Bullet*. It has just crossed C&NW's Sycamore-Spring Valley, Illinois, line, watched over by the tower in the background.

SHABBONA-LEE-ROLLO HISTORICAL MUSEUM



INSET: This souvenir ticket was handed out during the special *Silver Streak Zephyr* excursion between Chicago and Dubuque, Iowa, on March 17, 1940. MARTIN BRENNAN COLLECTION





Outside looking in: the *Silver Streak Zephyr* tailsign that punctuated diner-parlor observation car *Silver Spirit*. Note that "Zephyr" was left off the name. PHIL WEIBLER

were extremely vulnerable in a collision, whether with truck or other train. Riding all the way forward as they did, they had nothing to protect them—no boiler, as would have been the case aboard a steam locomotive, nor nose, as would be the case with EMC's new cab-unit designs.

In the early years of *Zephyr* operation, the CB&Q had been pleased to note that, though these lightweight trains were involved in grade-crossing accidents with roughly the same frequency as other trains, on balance fewer injuries and less property damage resulted. However, 9900's fatal accident in October 1939 at Napier, Missouri, made the crew's vulnerability inescapable and unacceptable. In addition, the engineer's low and far-forward position could make the onrushing track dangerously hypnotic.

For these reasons, Burlington signed a formal agreement with the Brotherhood to buy no further locomotives of shovel-nose design. The railroad might well have been heading that way on its own, since Elec-

tro-Motive was by then producing the E-series cab units that before long would go into mass production—with the economies that that implies.

It turned out, however, that the shovel-nose look had not vanished forever from the Kansas City–Lincoln run, for by mid June 1940, 1,000-horsepower *Silver Charger*—the last of the shovel-noses—had replaced *Silver Bullet* (and baggage car *Silver Light*) on the *Silver Streak Zephyr*. Later, after 9901's death by fire at Dacus, the *Silver Bullet* was moved to the *Sam Houston Zephyr*, with a consist of five leased conventional streamlined cars from CB&Q's general-service pool: baggage car *Silver Light*, 52-seat chair

ABOVE: Inside looking out: the interior of *Silver Spirit*, the diner-parlor observation originally assigned to the *Silver Streak Zephyr*, seen here with reupholstered parlor chairs some two decades after it entered service.

ALAN BRADLEY

cars *Silver Crown*, *Silver Trail*, and *Silver Chariot*, and dining-parlor-observation *Silver Hours*. (Set aside at the vestibule end of *Silver Crown* were 14 seats for African-American passengers, separated from the balance of the car's interior by a five-foot-high partition.) This kind of shuffling, both of locomotives and of cars, would become increasingly common as the *Zephyr* fleet continued to expand, now free of the lockstep constraints of permanently coupled trainsets.

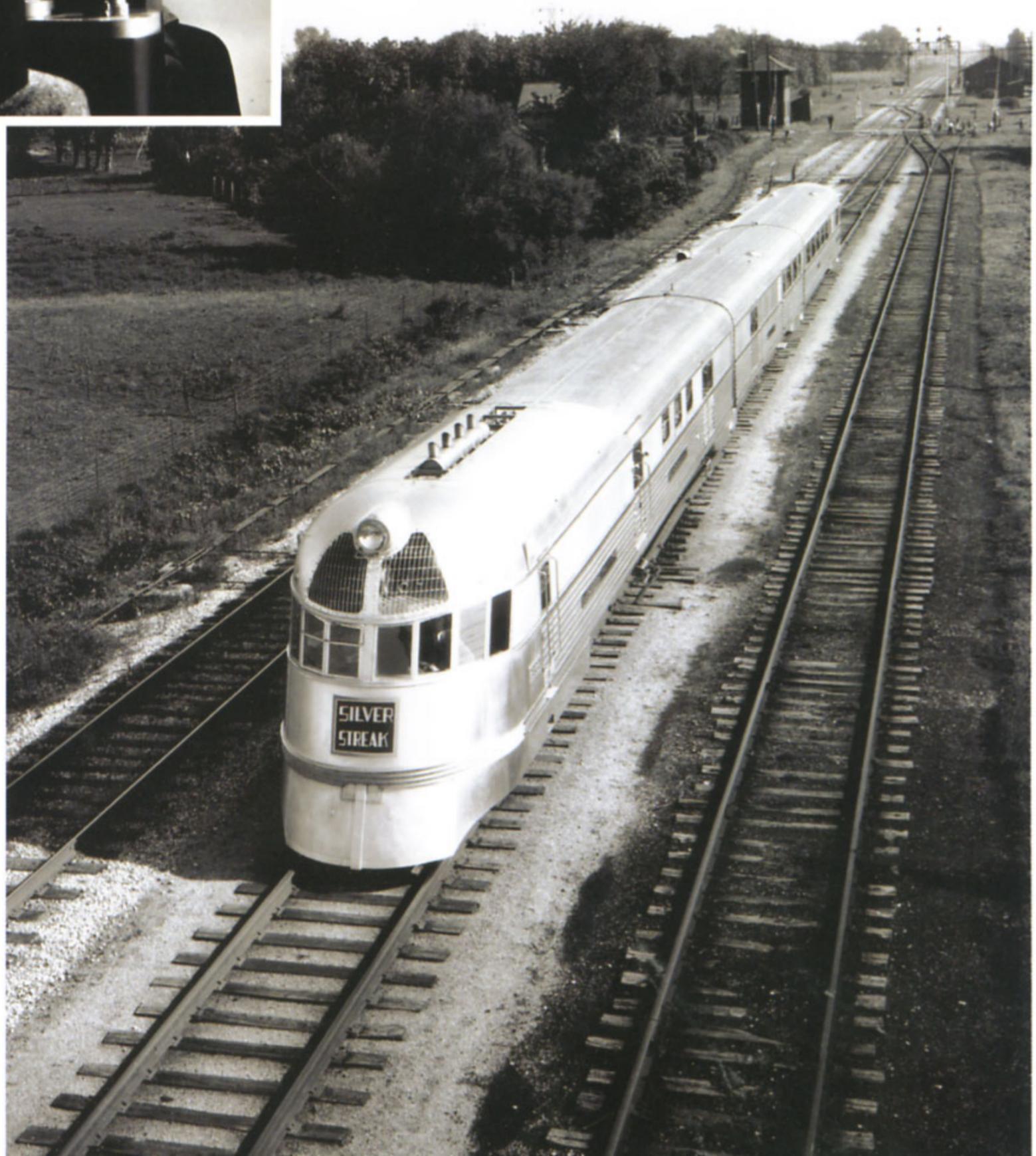
Next to be inaugurated, on August 23, 1940, was the Denver–Dallas *Texas Zephyr*, which actually traveled over two CB&Q subsidiaries, the Colorado & Southern and the Fort Worth & Denver City. Locomotives and cars for this train were assigned to those railroads in roughly equal numbers. The “Zephyrizing” of the Denver–Dallas service had actually begun in November 1937 with the arrival of six 52-seat chair cars, among Budd's first non-articulated coaches. They were FW&DC *Silver Fox*, *Silver Bow*, *Silver Ore*, and *Silver Top* and Colorado & Southern *Silver Mine* and *Silver Spur*.



There was a *Silver Streak* before 1940, but only in the mind of Hollywood. In September 1934, when the original *Zephyr* was new, it starred in RKO Radio Picture's “*Silver Streak*,” a movie starring Sally Blane and Charles Starrett. For that role it had a nose herald affixed with the fictional train's name.

BURLINGTON NORTHERN
SANTA FE

INSET: There is tension in No. 9900's cab as the film moves toward its climax. BURLINGTON NORTHERN SANTA FE





E5s Nos. 9950A, *Silver Racer*, and 9950B, *Silver Steed*, were built for *Texas Zephyr* service, along with another pair, FW&DC 9980-A, *Silver Chief*, and 9980B, *Silver Warrior*. The "C&S" below the cab windows identifies these as belonging to CB&Q subsidiary Colorado & Southern. The E5s began Burlington's commitment to EMD E-units, which would be the nearly universal power for all future *Zephyrs*. EMD, KEVIN J. HOLLAND COLLECTION

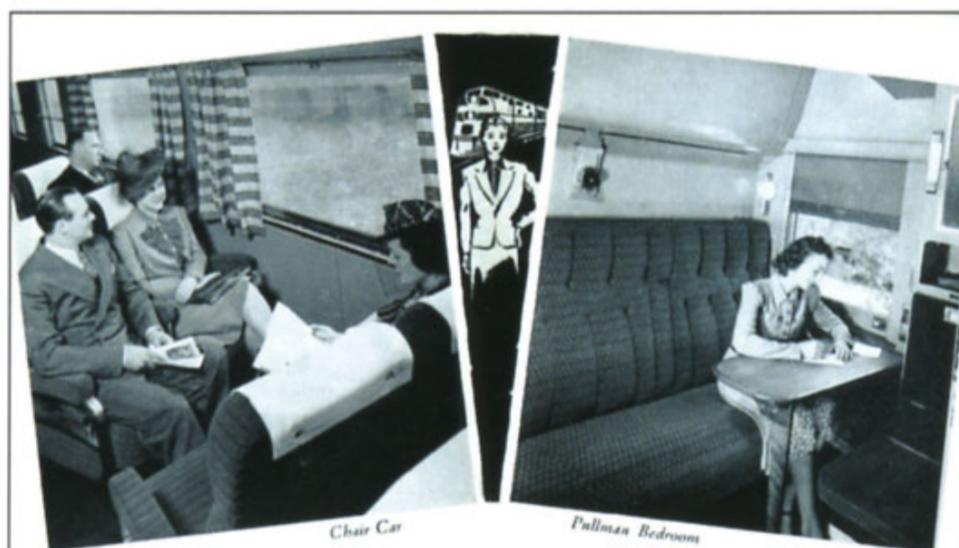
THE TEXAS Zephyrs
DIESEL POWERED

Convenient
Afternoon Departure with
Early Morning Arrival
in DENVER

Burlington Lines
In Daily Service
Between
DALLAS • FORT WORTH • DENVER

FORT WORTH AND DENVER CITY RAILWAY

ABOVE AND RIGHT: The *Texas Zephyr* introductory brochure included a photograph of a double bedroom aboard the train's updated heavyweight Pullman sleeper. The coach scene, however, showed the interiors of new lightweight cars from Budd. ROBERT P. SCHMIDT COLLECTION



BEAUTIFULLY APPOINTED, SPACIOUS—the Ultimate in Riding Comfort

From Dallas and Fort Worth to Denver,
The **TEXAS Zephyrs**
Diesel-Powered

glide smoothly and swiftly northward across the great rolling plains and historic cattle trails of the Texas Panhandle. On through Trinidad, stamping grounds of the famous Indian Scout Kit Carson—through industrial Pueblo, charming Colorado Springs and its famous Pikes Peak region, thence skirting the main front range of the majestic Rockies into beautiful mile-high Denver.

Excellent connections with fast trains for all points.

Whether you go chair car or Pullman, you'll enjoy the luxurious, air-conditioned comfort and friendly, efficient service of the smart new **TEXAS Zephyrs**.

EXTRA COMFORT AT NO EXTRA FARE

CONDENSED DAILY SCHEDULE

Northbound (Read Down)	(B.-R. I. R. R.)	Southbound (Read Up)
8:15 am Lv. Houston		Ar. 12:15 pm
	TEXAS Zephyrs	
2:00 pm Lv. Dallas		Ar. 7:45 am
3:00 pm Lv. Fort Worth		Ar. 6:35 am
5:25 pm Lv. Wichita Falls		Ar. 4:15 am
10:00 pm Lv. Amarillo		Ar. 11:35 pm
11:50 pm Lv. Dalhart		Ar. 10:02 pm
2:42 am Ar. Trinidad		Lv. 5:35 pm
4:51 am Ar. Pueblo		Lv. 3:30 pm
5:52 am Ar. Colorado Springs		Lv. 2:40 pm
7:45 am Ar. Denver		Lv. 1:00 pm

F. D. DAGGETT
General Passenger Agent
Fort Worth, Texas

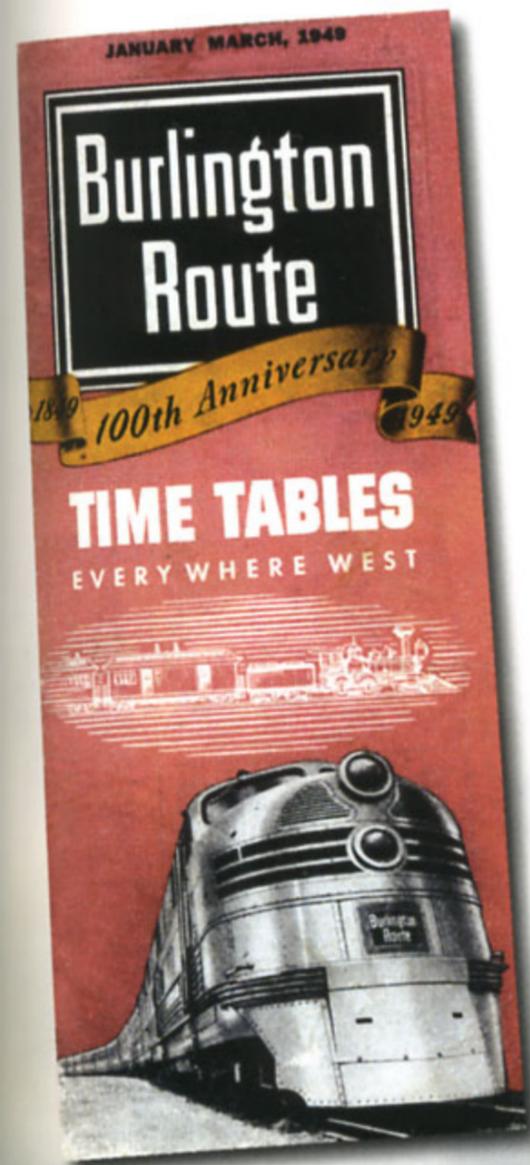
Printed in U. S. A.
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(For *Texas Zephyr* service, *Silver Fox* and *Silver Spur* were hurriedly modified to dinette chair cars by the addition of kitchenette-pantries.) Bracketing these cars (three in each consist) to make up the *Texas Zephyr* would be six new cars outshopped by Budd.

In front came baggage-Railway Post Office cars *Silver Messenger* or *Silver Tidings* (nice word-plays on the RPO function) and baggage-dormitory-chair cars *Silver Mesa* or *Silver Peak*, each with 16 revenue seats to comply with Texas' segregation laws. Trailing were dining-lounge-observation cars *Silver Tray* or *Silver Bowl*. With 32-seat dining section and 23 seats in the rear lounge, these cars were reminiscent of the *General Pershing Zephyr's Silver Spirit* but somewhat differently configured. One member of each of these pairs was a C&S car, and one an FW&DC. Rounding out the consist were the two 1937 chari cars that had been rebuilt with small dinettes.

The *Texas Zephyr* would be an overnight train, and its sleeping-car situation problematic. On the one hand, in the wake of the *Denver Zephyr* brouhaha, Pullman had forbidden the Burlington to order additional sleepers from Budd. On the other, CB&Q's loyalty to Budd was so thorough that the railroad was loath to order lightweight cars from Pullman; beyond that, they no doubt knew that the anti-trust suit was imminent as it planned its new *Zephyr*, so they saw the virtue of temporizing. The solution? Take existing heavyweight Pullmans, significantly

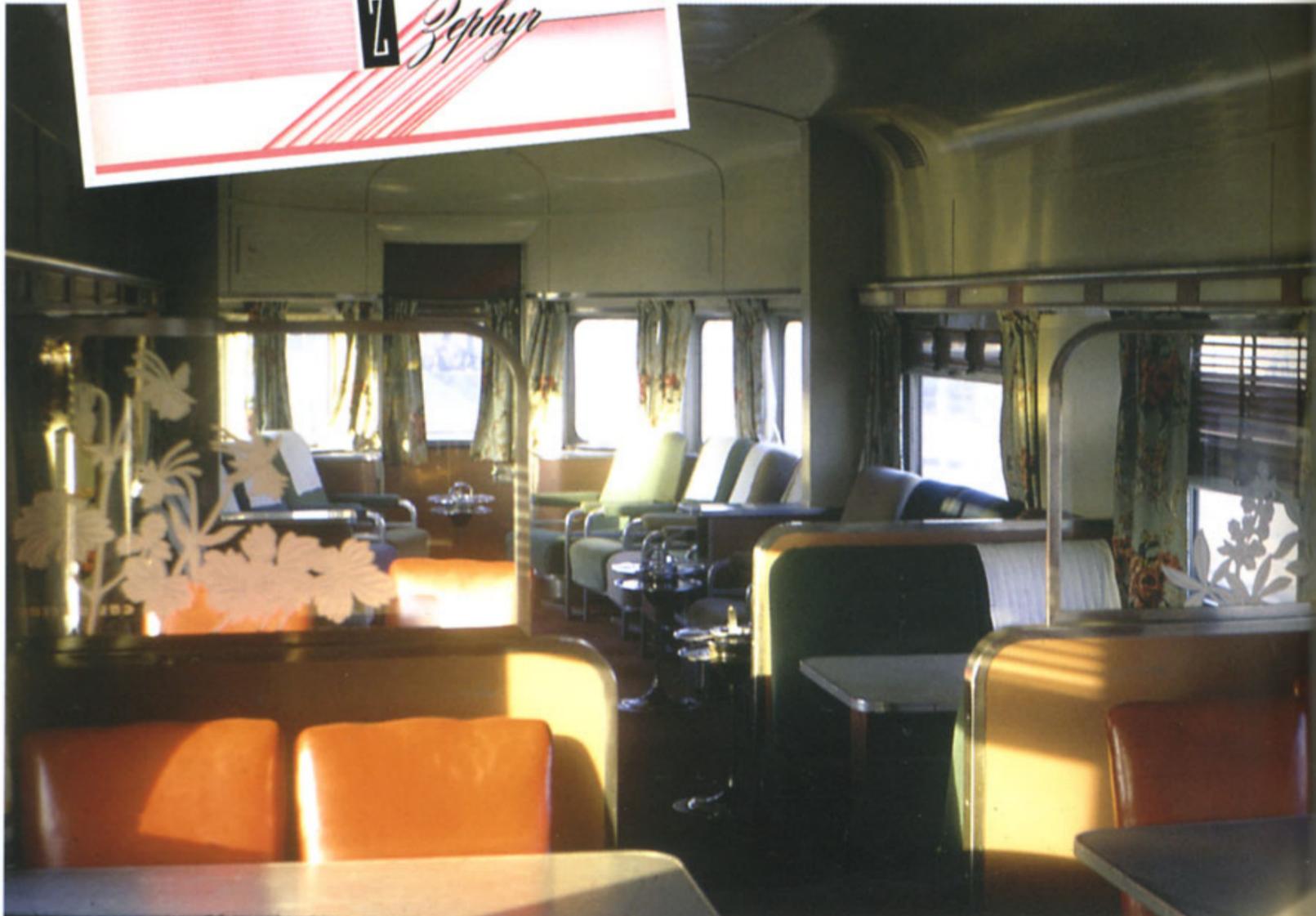
BELOW AND INSET: After former *Twin Zephyr* No. 9901 was destroyed by fire in December 1944, the *Sam Houston Zephyr*, seen here in a publicity photo that was used on the cover of Burlington's timetables well into the 1960s, went from shovel-nose to slant-nose, commandeering E5 *Silver Bullet* from the *Silver Streak Zephyr*, along with *Silver Light*, its baggage car. The consist typically included chair cars *Silver Crown*, *Silver Chariot*, and *Silver Trail*, and dining-parlor-observation *Silver Hours*. BURLINGTON NORTHERN SANTA FE





A Texas Zephyr menu from 1966.
WILLIAM F. HOWES JR. COLLECTION

These two views, taken decades after the car's delivery from Budd in 1940 for Texas Zephyr service, capture the comfortable and spacious feeling of Silver Tray and Silver Bowl. Unlike their immediate predecessor, the General Pershing Zephyr's Silver Star, these cars merged the 32-seat dining section with the 23-seat lounge in a single open space. Aboard the GPZ's car, restrooms and lockers intervened to create two completely separate spaces. ALAN BRADLEY



upgrade them and paint them silver to match Budd's stainless cars, and run those, three to a consist. Since the *Texas Zephyr* had no direct rail competition, this expedient worked well enough.

Two 12-section 1-drawing room cars, *Parkdale* and *Levant*, were rebuilt by Pullman to 8-section 5-double-bedroom configuration and renamed *Castle Crest* and *Castle Range*. The 12-section 1-drawing room *McWhorter* and *McLeish* were simply renamed *Spanish Crest* and *Spanish Range*, and 10-section 1-drawing room 1-compartment *Gull Lake* and *Bear Lake* were renamed *Lariat Crest* and *Lariat Range*. Numerous improvements were made in the rebuilding, including installation of Tite-Lock couplers, electro-pneumatic brake equipment, folding steps and trap doors, and full-width diaphragms.

Power for the *Texas Zephyrs* were two A-B E5 sets, *Silver Racer/Silver Steed* and *Silver Chief/Silver Warrior*. In a tradition that dates from

This *Texas Zephyr* advertisement from June 1957 coincides with the introduction of the semi-articulated ex-*Denver Zephyr* consists in this service. Although 1,200-horsepower B-unit *Silver Queen* or *Silver Princess* remains in the doctored photo in the ad, the 1,800-horsepower A-unit (*Silver King* or *Silver Knight*) has been supplanted by a 2,250-horsepower E8. Made while the train was still running as the *DZ*, this image was another favorite of the publicity department, which had no hesitation about printing it in reverse in some applications. The schedule shows a southbound connection at Dallas for Houston aboard the *Twin Star Rocket*; northbound, the *Sam Houston Zephyr* did the honors. WILLIAM F. HOWES JR. COLLECTION

FOR FINER, FASTER TRAVEL

DENVER-COLORADO SPRINGS-FORT WORTH-DALLAS

with connecting streamlined service between Dallas and HOUSTON

THE TEXAS ZEPHYR

In Service
June 16, 1957



OFFERS ALL THIS:

- ↓ The only direct rail route
- ↓ Excellent connections at Denver, Fort Worth and Dallas for California and the Pacific Northwest... for Houston, Austin, San Antonio, Shreveport, New Orleans, Corpus Christi, the Rio Grande Valley and the Gulf Coast
- ↓ Stainless Steel... streamlined... articulated for smoother riding
- ↓ Restful reclining chair-coach seats
- ↓ Lounge for coach passengers
- ↓ Varied Pullman accommodations: Private rooms (single, double or en suite)... Standard berths
- ↓ Distinctive Burlington meals
- ↓ Full-length parlor-observation-lounge car

NEW FASTER SCHEDULES!

Southbound	Northbound
Lv Denver..... 1:00 pm	Lv Houston..... †8:35 am
Lv Colorado Springs.. 2:40 pm	Ar Dallas..... 12:47 pm
Lv Pueblo..... 3:31 pm	Lv Dallas..... 1:30 pm
Ar Dalhart..... 9:52 pm	Lv Fort Worth..... 2:45 pm
Ar Amarillo..... 11:25 pm	Lv Wichita Falls..... 5:04 pm
Lv Amarillo..... 11:45 pm	Lv Childress..... 7:00 pm
Ar Childress..... 1:50 am	Ar Amarillo..... 9:00 pm
Ar Wichita Falls..... 3:54 am	Lv Amarillo..... 9:20 pm
Ar Fort Worth..... 6:10 am	Lv Dalhart..... 11:03 pm
Ar Dallas..... 7:20 am	Ar Pueblo..... 3:53 am
Lv Dallas..... *9:25 am	Ar Colorado Springs.. 5:00 am
Ar Houston..... 1:35 pm	Ar Denver..... †6:40 am

*Twin Star Rocket †Sam Houston Zephyr ‡Pullmans may be occupied until 7:00 am

★ New speed... new convenience... new comfort—they're all exciting new features of the *TEXAS ZEPHYR*!

The *Texas Zephyr* now offers a variety of accommodations—including roomettes, duplex single rooms, bedrooms, compartments, drawing rooms and en suite combinations... as well as standard berths and reclining chair-coach seats.

For cool, clean, comfortable travel between Colorado and Texas—it's the *Texas Zephyr*!

CONVENIENT EVENING DEPARTURES

<p>Southbound: Lv Denver 8:00 pm, Lv Colorado Springs 9:44 pm, Lv Pueblo 11:08 pm, ar Dalhart 6:30 am, ar Amarillo 8:00 am, ar Childress 10:33 am, ar Wichita Falls 12:50 pm, ar Fort Worth 3:30 pm, ar Dallas 4:40 pm. <i>Sam Houston Zephyr</i> Lv Dallas 5:00 pm, ar Houston 9:15 pm</p>	<p>Northbound: <i>Twin Star Rocket</i> Lv Houston 5:00 pm, ar Dallas 9:00 pm. Evening train Lv Dallas 9:30 pm, Lv Fort Worth 10:45 pm, Lv Wichita Falls 1:40 am, Lv Childress 4:50 am, Lv Amarillo 8:00 am, Lv Dalhart 9:51 am, ar Pueblo 2:42 pm, ar Colorado Springs 4:00 pm, ar Denver 5:40 pm</p>
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For further information or reservations, contact any Burlington Lines representative... or

<p>COLORADO AND SOUTHERN RAILWAY C. W. PLAGEMANN, General Passenger Agent Denver, Colorado</p>	<p>FORT WORTH AND DENVER RAILWAY R. H. KIMBLE, General Passenger Agent Fort Worth, Texas</p>
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MONEY-SAVING FAMILY FARES

...an important extra plus on all Burlington Lines trains





ABOVE AND RIGHT: Under a churning Colorado sky, an Electro-Motive E8A and E5B gallop along the Denver & Rio Grande Western south of Fountain with an abbreviated southbound *Texas Zephyr* in October 1965. By this time, the *Texas Zephyr's* ex-*Denver Zephyr* semi-articulated equipment from 1936 had been supplanted by conventional lightweight cars.

the shovel-nose era and was continued with the *Silver Streak Zephyr*, "*Texas Zephyr*" was bannered on *Silver Racer* and *Silver Chief's* gracefully sloped prows.

The *Texas Zephyr* would be 17 years old before it had a major personality change. This occurred in 1957 when the partially articulated *Denver Zephyr* trainsets from 1936, made available when the *DZ* was re-equipped in 1956, began heading in a different direction from Denver as the *Texas Zephyr*. Though these cars had by then run off multiple millions of miles, they were still stylish, and lightweight sleepers remained at a premium on the Burlington. The displaced *DZ* trainsets were longer than the *Texas Zephyr* consists they replaced, however, and almost at once they were recognized as too much of a good thing. First to be discarded was the articulated section-sleeper pair, and then the dinette-coach that had been added to the *DZ* in 1938. Next casualty was the second articulated set of sleepers, a section car and a room car, leaving only the final sleeper added to the *DZ* consist, the 4-roomette 4-chambrette 1-drawing room 6-double bedroom car. Then the parlor-observation was dropped seasonally, and for good in the fall of 1963. Showing their age at last, ex-*DZ* cars were retired in January 1965, replaced by conventional lightweight cars—including some of those that had begun *Texas Zephyr* service back in 1940, bringing matters full-circle.

Just before year's end, on December 11, 1940, the next *Zephyr* after the *Texas* was inaugurated with relatively little fanfare. The Lincoln–Chicago





A single pre-war coach, postwar sleeper, and 1940-built diner-lounge observation *Silver Bowl* are more than sufficient to accommodate the light passenger loadings on the *Texas Zephyr* at this late date. Although Denver–Dallas was a captive market for the Burlington, the *Texas Zephyr* was an early casualty, ending service in 1966.

BOTH PHOTOS,
GEORGE SPEIR

Ak-Sar-Ben Zephyr—No. 12, running eastbound only—was a mixed-consist train carded at nine hours for the 551-mile daylight run. Departure from Lincoln was at 11:10 a.m. for a Chicago arrival at 8:15 p.m. It was paired with the *Advance Flyer*, No. 39, westbound only, leaving Chicago at 12:35 p.m. and arriving in Lincoln at 9:50 p.m. (The “Flyer” of which it was in advance was the *Exposition Flyer*, on whose time it ran as far west as Burlington.) The *Ak-Sar-Ben Zephyr* and *Advance Flyer* were inaugurated the same day as—and were Burlington’s competitive response to—Milwaukee’s new Chicago–Omaha–Sioux City/Sioux Falls *Midwest Hiawatha*. Even after the debut of the *Ak-Sar-Ben Zephyr*, the existing heavyweight *Ak-Sar-Ben* (which, of course, is “Nebraska” spelled backward) continued on its overnight schedule in both directions between Chicago and Lincoln.

The *Ak-Sar-Ben Zephyr* and *Advance Flyer* featured parlor, lounge, and dining service. The trains continued in this format until 1947 when they were replaced by the “new” *Nebraska Zephyr*—the trainsets that had been introduced in 1936 as the *Twin Zephyrs*. The *Ak-Sar-Ben Zephyr* name would reappear in 1953, however, when the overnight heavyweight flagship, the *Ak-Sar-Ben*, still running in both directions on the Lincoln–Omaha–Chicago route, received some lightweight equipment, including dome cars (see chapter 9).

On January 7, 1941, less than a month after the first *Ak-Sar-Ben Zephyr* was inaugurated, another arrow was placed in the *Zephyr* quiver—and also the quiver of the Chicago, Rock Island & Pacific’s *Rockets*,



another fleet of Midwestern streamliners that had evolved in much the same manner as the *Zephyrs*, though with some significant differences. The *Rockets* date from the late summer of 1937 when Budd delivered six partially articulated, three- and four-car consists to Rock Island—trainsets not unlike the *Zephyrs*. They were powered by independent EMC diesel locomotives, however, a distinct departure from the early *Zephyr* practice of power cars integral to their trains. Rock Island's 1,200-horsepower TA diesels were a four-axle cousin to the larger E-units that had been introduced earlier in 1937.

Initial assignments for these trains were the *Peoria Rocket* and *Des Moines Rocket* (both from Chicago to their respective namesakes), the Fort Worth–Houston *Texas Rocket*, the *Denver Rocket* (from Kansas City) and the *Kansas City Rocket* (from Minneapolis/St. Paul). By the time the *Zephyr-Rocket* was inaugurated in 1941, CRI&P already had two sleeper-carrying overnight *Rockets*: the Memphis–Amarillo, Texas, *Choctaw Rocket* and the Chicago–Denver/Colorado Springs *Rocky Mountain Rocket*, a worthy competitor to the *Denver Zephyr* and *City of Denver*. The *Rockets* had been intended to help breath new life into a railroad in receivership and disrepair, and to a significant extent they were succeeding.

The new *Zephyr-Rocket* was a St. Louis–Minneapolis overnight service operated jointly by Burlington and Rock Island. Although other roads had participated in the operation of earlier *Zephyrs*—the Alton in the *Ozark State* and later the *General Pershing*

Zephyr and the Rock Island itself in the *Sam Houston Zephyr* and *Texas Rocket*—these trains remained purely *Zephyrs* in equipment. On the other hand, the *Zephyr-Rocket* truly merged two notable passenger-train traditions. The train ran on Rock Island rails from the Twin Cities to Burlington, 365.6 miles, and on the CB&Q from there to St. Louis, 221 miles. Minneapolis departure initially was at 5 p.m. and arrival in St. Louis at 7 a.m. Northbound, the train left St. Louis at 5:30 p.m. and arrived in Minneapolis at 7:30 a.m. Each railroad provided a diesel for the operation; initially, Burlington assigned E5 No. 9913, *Silver Wings*, to this run.

The train carried both a full baggage car and a baggage-mail; Burlington's contribution was *Silver Express* and *Silver Mail*. (Flexibility and flux had become the order of the day after articulated, permanently coupled trainsets were abandoned by Burlington. In less than two years *Silver Mail* would be moved to regular assignment on the *Silver Streak Zephyr*.) There was a lightweight 52-seat chair car in each consist, Burlington's being *Silver Castle* before it became a dome car. The train also carried a lightweight dining-parlor observation car. Both were Rock Island-owned, Pullman-Standard products: *St. Louis* and *St. Paul*.



The ZEPHYR-ROCKETS

Two great railroads, the Burlington Route and the Rock Island Lines, have co-operated and co-ordinated to establish the Zephyr-Rockets, linking two of the great Mississippi Valley's most important centers with the finest direct rail service in history.

In addition to linking St. Louis and the twin cities of St. Paul and Minneapolis with overnight service, these new, streamline, diesel-powered trains render a superfine transportation service to a number of important intermediate cities, including Quincy, Keokuk, Burlington, Cedar Rapids, Waterloo and Albert Lea.

CHAIR CARS on the Zephyr-Rockets are unusually spacious and comfortable. The deeply upholstered chairs are adjustable, windows are double wide, and night lighting is ample for reading yet may be subdued for sleeping.



DRESSING ROOMS are unusually light and commodious in Zephyr-Rocket chair cars and Pullmans. Here is found every facility for the toilette, including outlets for 110-volt AC electrical appliances, broad mirrors, spotless washbasins.

DINING is an event on the Zephyr-Rockets, pleasing surroundings combining with delicious cuisine and impeccable service to assure extraordinary dining enjoyment at most reasonable prices.

The route of the Zephyr-Rockets is both scenic and historic. Between St. Louis and Burlington it hugs the wooded, palisaded shores of the broad Mississippi, thorofare of Indian, explorer, trapper, missionary and trader since the dawn of history. The northern sector lies through the fertile, substantial farmlands of Iowa and Minnesota, dotted here and there by lakes and attractive towns and cities.

While the Zephyr-Rockets' fast, overnight schedules are ideal for commercial travel, they are likewise especially convenient for the summer vacationist en route to the Minnesota lakes or Northwoods, or the winter traveler hurrying to the balmy Southland that lies beyond St. Louis.

Enjoy this fast Zephyr-Rocket service whenever or wherever you travel between St. Louis and the Twin Cities . . . no extra fare.

PULLMANS on the Zephyr-Rockets offer double bed-rooms, an innovation in the St. Louis-Twin Cities service, as well as beautifully appointed sections.

THE OBSERVATION-LOUNGE with its restful, individual chairs, radio, magazine library and buffet service is an inviting gathering place for Pullman passengers as well as those desiring parlor car accommodations.



FACING PAGE: Though the *Zephyr-Rocket* was never among either Burlington's nor Rock Island's most elite trains, the photographs in this inaugural brochure suggest an amplitude of homey comforts. The Pullman views of accommodations made up for day use show sections and double bedrooms opened en-suite. JOE WELSH COLLECTION

Since the *Zephyr-Rocket* was to be an overnight service, the thorny question of sleepers arose again; as with the *Texas Zephyr*, the solution was to use reconditioned heavyweights. Again, the lack of direct rail competition helped make this work. Thus 10-section 3-double bedroom *Clan Gregor* and *Villa Anita* were renovated to become *Minneapolis* and *Cedar Rapids*. By July patronage was strong enough to require a second sleeper, so 10-section 2-drawing room *Teton Peak* and *Costella Peak* were rebuilt as 8-section 1-drawing room 3-double bedroom *Zephyr Tower* and *Rocket Tower*. (In 1948, after the anti-trust ruling led Pullman to sell its cars to the individual railroads, Burlington acquired *Minneapolis* and *Zephyr Tower* and Rock Island *Cedar Rapids* and *Rocket Tower*.)

The lightweight *Zephyr* equipment for this train, as well as for the *Ak-Sar-Ben Zephyr* and *Advance Flyer*, came from a fleet of Budd-built pool-service cars that Burlington had been acquiring from February 1938 onward. These included, in addition to the cars originally assigned to the *Zephyr-Rocket*, 52-seat chair cars *Silver Gleam*, *Silver Glow*, *Silver Birch*, *Silver Brook*, *Silver Cloud*, *Silver Crest*, *Silver Crown*, *Silver Forest*, *Silver Alchemy* (a car destined for great fame, under a different name), and *Silver Cascade*; dining-parlor-observations *Silver Hours* and *Silver Fountain*; baggage-mail car *Silver Sheen*; and baggage cars *Silver Light* and *Silver Chest*. Chair cars *Silver Chariot*, *Silver Trail*, and *Silver Spring* and 48-seat dining cars *Silver Pheasant*, *Silver Inn*, and *Silver Spoon*, though built for the Chicago-Denver *Aristocrat*, almost immediately began appearing on the *Twin Zephyrs* to amplify the fixed consist articulated trainsets.

Though planning was already underway for further expansion of the *Zephyr* fleet, including a lightweight train on the *Exposition Flyer* route to California, the arrival of World War II made all those plans hypothetical. Instead, the *Zephyrs*, along with the rest of the nation's passenger trains, hunkered down to move military and civilian personnel in volume and with expedition. Luxury went on the back burner. But after the war it would be pulled forward again. In fact, the greatest days for the *Zephyr* fleet by most accounts still lay ahead.

On July 3, 1961, the northbound *Zephyr-Rocket* leaves St. Louis with Rock Island's E6A No. 628 in charge. (CRI&P and CB&Q alternated power, which ran through over the length of the train's route.) Twenty years into its career, the train appears to retain most of its passenger amenities, though it has become a head-end-heavy maid-of-all-work. The excavation in the foreground is for the Gateway Arch park. R. R. WALLIN, ROBERT P. SCHMIDT COLLECTION



PIONEERING DOMES



New Zephyrs, New Profile

The word “pioneer” has a way of cropping up in the *Zephyr* story, and it unquestionably does just that once again with the all-new 1947 *Twin Zephyrs*, which were truly extraordinary trains. What made them so were the Vista-Dome cars they introduced, which were arguably the last great innovation in American passenger railroading. The *Twin Zephyrs*’ domes missed being the first production domes by six months or so, but they were the first by far to enter revenue service

Although the Burlington had never lost its enthusiasm for expanding and enhancing its *Zephyr* fleet, World War II inevitably placed any such plans on hold for the duration of the conflict. Ironically, this actually proved to be a good thing. In 1945, when CB&Q did place its postwar orders for new *Zephyrs* (with Budd,





On May 1, 1955, the northbound *Morning Zephyr*—one of the two daily *Twin Zephyrs*, also sometimes called the *Twin Cities Zephyrs*—leaves Savanna, Illinois. Though the automobiles of the day are also aerodynamically styled, they look staid and clunky compared to the sleek, fluted stainless-steel of the *Zephyr*—an aesthetic then more than two decades old. JIM NEUBAUER

naturally), bringing years of planning closer to fruition, the railroad was able to feature the charismatic dome cars that would be so much a part of all the *Zephyrs* to come—and had not even been conceived until the previous year.

Burlington was entrenched in the dome-car story almost from the beginning, though the genesis of these splendid sightseeing vehicles did not occur on its rails. The creative spark flashed on July 4, 1944, deep in the heart of Colorado's Glenwood Canyon, where Denver & Rio Grande Western (now Union Pacific) rails follow the Colorado River. On that day, Cyrus R. Osborn, a vice-president of General Motors and general manager of its Electro-Motive Division, was riding from Denver to Salt Lake City in the cab of one of his company's FT diesels. This route—already plied by the Burlington-Rio Grande-Western Pacific *Exposition Flyer*, a Chicago–Oakland, California, train eventually to be replaced by the *California Zephyr*—is among the country's most scenic, and Osborn was duly impressed, not only by the grandeur of the landscape but by the excellence of his viewing perch.

"If people knew what they could see from here," Osborn said to the engineer, "they would pay \$500 just to sit in the fireman's seat from Chicago to the coast." The idea didn't leave Osborn, and that evening, at the Hotel Utah in Salt Lake, he pulled a sheet of stationery from his room's writing desk and sketched out a rudimentary dome car, with a raised observatory and a ramp leading up to it. He took this idea back to his office in LaGrange, Illinois, where EMD's engineering department determined that the concept was feasible. Harley Earl, vice-president in

**A THRILLING INNOVATION
IN TRAVEL ENJOYMENT!**



● Here is the first presentation of the penthouse idea in railroad transportation . . . an exciting Burlington innovation designed to bring you a new travel thrill.

An entirely new perspective in modern train travel has been attained in the unusual design of this demonstration car. Built into the roof is the Vista-Dome, the top and sides of which are laminated, heat and ray-resisting glass. Here are twenty-four deep-cushioned seats where passengers, with heads and shoulders well above the train's roof line, may ride in luxurious comfort while enjoying an unobstructed panorama of American countryside. Modern air-conditioning controls the temperature and ventilation.

This unique car, embodying the most outstanding feature of General Motors' sensational "Astra-Line" designs, has been created from one of Burlington's streamline, stainless steel Zephyr coaches during the course of routine wartime reconditioning.

The Vista-Dome car is being operated in regular service on crack trains on various parts of the Burlington system. If travelers are as enthusiastic about it as we believe they will be, the Burlington expects to have a fleet of such cars in the future—that will include a multitude of improvements and innovations which wartime conditions made impossible to include in this preliminary model.

THE UNIQUE "Vista Dome" CAR



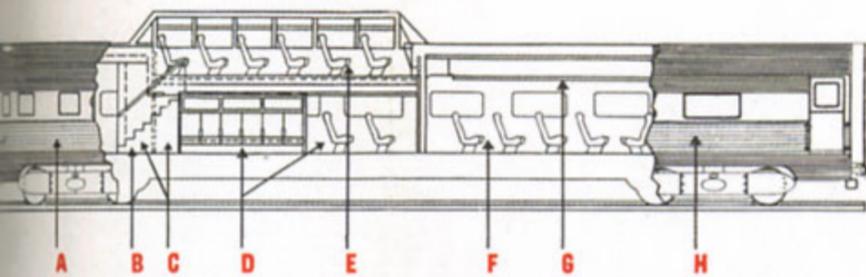
ABOVE: *Silver Dome* provides a good view of the Rock River at Oregon, Illinois. KARL ZIMMERMANN COLLECTION

ABOVE AND ABOVE RIGHT: This brochure, prepared to introduce *Silver Dome*, uses art for illustration, presumably because modifications to coach *Silver Alchemy* were still in progress. The scene along the Mississippi shows the dome behind a shovel-nose power car. The cutaway views make clear the improvement the production cars with dropped floors under the dome would represent over the retrofitted *Silver Dome*. The new mode, for which GM *Train of Tomorrow* designers get a nod in the brochure text, might have included a full-sleeper Vista-Dome, which CB&Q never chose to order. KARL ZIMMERMANN COLLECTION

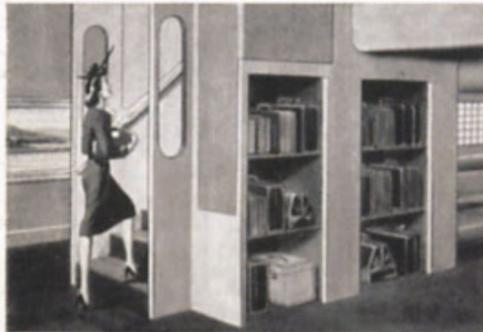
BELOW: Though 25 years have passed since *Silver Dome* rolled out of Aurora Shops with "something added," the first dome of all still looks youthful as it serves in 1970 on Burlington Northern's Quincy local. ROBERT P. SCHMIDT



HERE'S AN X-RAY VIEW OF THE BURLINGTON'S "Vista Dome" CAR



Women's Washroom.
Enclosed stairway, with double hand rails and individually lighted steps, leads to the Vista-Dome.
Storage compartments on each side of stairway provide space for luggage of passengers seated in and under the Vista-Dome.
Sixteen seats located directly under the Vista-Dome. Six face the windows on one side; six face the opposite side and four face forward. This arrangement, together with the Vista-Dome, increased the seating capacity of this car from 52 to 58 passengers.
The Vista-Dome, with seats for 24 passengers. Here, under a canopy of laminated, heat and ray-resisting glass, travelers enjoy an unobstructed panorama of the country through which they glide.
Main floor section with conventional seating arrangement as in original car.
Overhead luggage rack as in original car.
Men's Washroom.



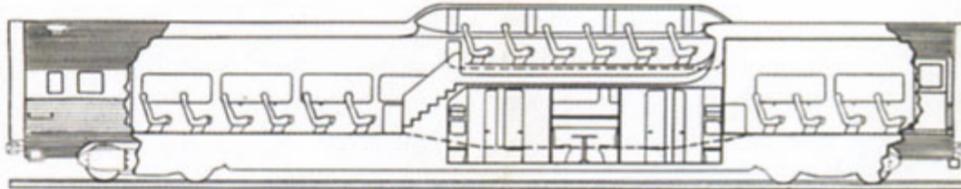
A short, well-lighted stairway affords easy access to the Vista-Dome from the main floor of the car.

AND HERE ARE PLANS FOR "Vista Dome" CARS OF THE FUTURE

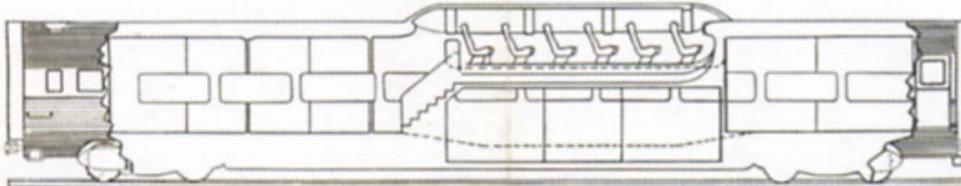
● Already, ideas for even finer cars of this type have come from the drawing boards of General Motors' designers . . . to be progressed when new passenger car construction is possible.

Preliminary plans provide for multiple-level sleeping and lounge cars, as well as coaches, affording full head room on all levels, thus giving new roominess and added comfort . . . plus thrilling penthouse perspective.

Shown below are conceptions of two such cars of the future. Notice the lowered central portion, to give ample ceiling height under the dome section.



Above is a design for future chair cars featuring "the penthouse view". The plan indicates seats for 42 passengers on the "main floor" and 24 in the Vista-Dome. The washrooms and a lounge are located off a side aisle directly below the dome. The lowered floor level would provide ample head room in and below the Vista-Dome.



Shown above is a tentative design for a sleeping car of the future. It would provide a seat in the Vista-Dome for each occupant of the car. A variety of floor plans are envisioned, providing a wide range of accommodations. The drawing shows how ample head room would be obtained by lowering the floor level directly beneath the Vista-Dome.

HERE ARE GREAT DAYS AHEAD FOR TRAVELING AMERICA ★ ★ ★



LEFT: On the *Twin Zephyr's* production domes, curved glass was a substantial enhancement. The windshield-wipers on the front windows were a failed and thus short-lived experiment. KARL ZIMMERMANN COLLECTION

BELOW: The forward vantage from a Budd dome allowed for unparalleled vistas, such as this view of the Chicago skyline (and the Pennsylvania Railroad's *General* in the coach yard) from aboard the *Morning Zephyr* arriving from Minneapolis in 1958. Look closely at Burlington's coach yard at left and note one of CB&Q's two homebuilt, flat-glass domes, *Silver Dome* or *Silver Castle*. JIM NEUBAUER





ABOVE: Running near Western Avenue on July 23, 1952, the *Afternoon Zephyr* is Twin Cities-bound with the Chicago skyline in the background. Business is good, so the consist carries the extra parlor car built in 1949; a flat-top car, it's marshalled toward the rear, between the diner and the Vista-Dome parlor-observation. With an E5A&B set pulling the as-intended consist—with five Vista-Domes, full dining and lounge service, and parlor cars—this was the *Twin Cities Zephyr* at its zenith. Some passenger-train historians consider this edition of the *Twin Zephyr* the epitome of what a postwar day streamliner should be. Apparently the Wabash Railroad agreed. Its Chicago–St. Louis Budd-built “Domeliner” *Blue Bird* of 1950 had a nearly identical consist. *T. H. DESNOYERS, KRAMBLES-PETERSON ARCHIVE*

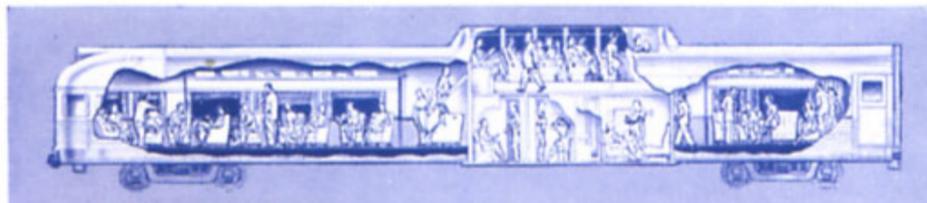
RIGHT: With five domes, a full dining car, and a spiffy cocktail lounge, the *Twin Zephyrs* offered an extraordinary amount and variety of non-revenue space, all of which is graphically shown in this cutaway folder. *WILLIAM F. HOWES COLLECTION*

Now—a Real Travel Thrill . . .

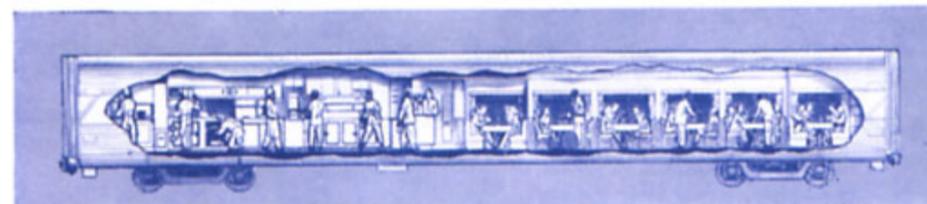
BURLINGTON'S
TWIN *Zephyrs*
featuring Vista-Dome Cars

Welcome to the Twin Zephyrs—a thrilling innovation in train travel. Enjoy the comfort, speed and convenience which have made the Zephyr fleet famous the world over. Thrill to an added feature—the amazing Vista-Dome cars, which give you a new appreciation of the natural beauties of the Upper Mississippi River. From a Vista-Dome seat you discover new beauties of river, hill and valley—an utterly new conception of train travel.

NOTE—Vista-Domes are excellent locations for taking pictures. For black and white, open one full stop above normal exposure. For color pictures, hold light meter against Dome glass for correct exposure. If light meter is not used, open one full stop above normal. Filters are not recommended, as color of Dome glass cannot be entirely eliminated.



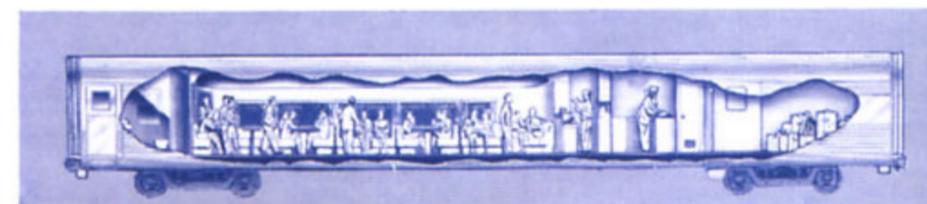
PARLOR-OBSERVATION CAR—Outstanding luxury travel . . . comfortable occasional chairs, and a smart drawing-room with seats for five. The spacious Vista-Dome is built into the roof. Here, enclosed in non-glare, heat-resistant safety glass, are 24 deep-cushioned seats where parlor car passengers may enjoy a “penthouse view” of the famous Mississippi River scenery.



DINING CAR—Foods to tempt your appetite . . . served in pleasant surroundings with a background of constantly changing scenery. A surprising variety of dishes, piping-hot or crispy-cool make meal time a real time aboard the Zephyr.



VISTA-DOME COACHES—New comfort, beauty and convenience—plus the amazing Vista-Domes, similar to the one in the parlor-observation car. Fluorescent, non-glare illumination . . . full carpeting . . . reclining and rotating seats with individual arm rests.



THE CLUB-LOUNGE CAR—A gay, comfortable rendezvous where all of the train's passengers are invited to sip or snack. Varied seating arrangements include nooks for foursomes, intimate tables for two and overstuffed lounges with serving tables. A telephone at the bar enables passengers to ascertain if seats are available before going to the diner.



ABOVE: Just like their predecessors, the Vista-Dome *Twin Zephyrs* typically appeared in pairs in promotional art, as on the cover of this inaugural brochure.

JOE WELSH COLLECTION

charge of parent General Motors' Styling Section, took up the project, which GM would get squarely behind.

Thus, the General Motors *Train of Tomorrow* project was born, culminating in the May 1947 roll-out from Pullman-Standard of an elegant demonstration train with coach, diner, sleeper, and observation lounge, all equipped with domes—"Astra-Domes," as GM dubbed them. The *Train of Tomorrow* then went barnstorming around the country, promoting the resurgence of passenger railroading after the hard years of World War II. The train was pulled by an EMD E7 diesel; air-conditioning was by GM's Frigidaire Division, anti-friction journal-box bearings by its Hyatt Bearings Division, and generating equipment by its Detroit Diesel Division and Delco Products Division. This explains General Motors' involvement in the train, which it never had any intention of building itself.

Ralph Budd was also interested in the dome-car concept—very interested—but in 1944 he saw no reason why it should take years to develop a prototype. A friend of Osborn's, Budd had been among the first to see sketches of this radically new passenger-car concept. Budd's interest had been further whetted by the pre-construction models and drawings of the *Train of Tomorrow* that he'd studied when they were displayed to railroad executives. Budd decided to move immediately on the idea, which he believed could have a major impact on passenger railroading.

Thus he told H. H. Urbach, Burlington's mechanical chief, to take whatever coach happened to be in the railroad's Aurora Shops at the time and see that it emerged with "something added." That coach happened to be No. 4714, *Silver Alchemy*, a 52-seat car built by Budd in 1940 for a general pool of cars intended for any *Zephyr* service. Using some concepts being developed for the *Train of Tomorrow*, and with help from Budd's Col. E. J. Ragsdale, the shop forces at Aurora created the first dome car. In June

BELOW: The northbound *Afternoon Zephyr* is speeding through LaGrange, Illinois, in this August 1949 view. Only for a few years, and then only occasionally, could you see dome cars trailing shovel-nose power units.

JIM SCRIBBINS



1945, when the car rolled out of the shops, its name board read—in the distinctive Art Deco lettering that characterized all the *Zephyrs* from beginning to end—*Silver Dome*. The previously ordinary *Silver Alchemy* now had fame thrust upon it. It was, in a sense, base metal turned to gold, by the alchemists at Budd and Burlington.

As a retrofit, *Silver Dome* of necessity embodied a number of compromises—and, in addition, at least one stemming from the time of its construction, with manufacturers still geared up for the war effort. That compromise was the use of flat glass in the dome, instead of the (unavailable at the time) curved panels that all purpose-built Burlington domes would have—in common with all domes ever built by Budd, and there would be plenty. The other major difference between *Silver Dome* and all the dome cars, with one exception, that would follow in the *Zephyr* fleet (and all domes ever built, in fact, except Southern Pacific's homemade cars) was the lack of a depressed floor under the dome.

Since such a structural modification to an existing car was impossible, *Silver Dome* had jump seats under the dome that faced outward rather than forward in traditional theater-style. Passengers walking through the car passed between those seats and the windows, with headroom provided by a raised platform under the seats in the dome. Though this worked, it was far from ideal. Aside from the distraction to passengers in those seats from people passing in front of them, this arrangement dramatically reduced revenue-seating capacity.

Burlington publicity statements released before *Silver Dome's* completion touted an increase in seating capacity from 52 to 58, "an important help in accommodating heavy wartime traffic." This assumed that the dome seats would be sold as assigned revenue places, however, which they never were. Like most dome-owning railroads, the Burlington would, as a general policy (except in instances of overcrowding), treat dome seating as lounging space. In fact, revenue seating was actually decreased from 52 to 34, since dome seating totaled 24—as it would in all production domes to come for the *Zephyr* fleet.

But in spite of what seem shortcomings in retrospect, *Silver Dome* was a huge hit when it tested on various Burlington trains, and by the end of 1945 Burlington (and future *California Zephyr* partners Rio Grande



ABOVE: The baggage-club-lounge cars on the 1947 *Twin Zephyrs* provided buffet and beverage service. BOB JOHNSTON

BELOW: This splendid three-dimensional billboard at St. Paul, Minnesota, promoted the *Twin Zephyrs*. In the mid 1960s, when this photograph was made, promotion was ever more sorely needed. JIM BOYD





On this summer day in 1959, No. 21, the Twin Cities-bound *Morning Zephyr*, leaves Chicago Union Station behind an unusual motive-power combination: an A-B-A set of E5s. The E5s were rarely run as threesomes. The train appears to be unusually heavy, with three flattop coaches separating the baggage-club lounge from the Vista-Dome chair cars that are still under the confines of the Chicago Post Office building. *GEORGE SPEIR*

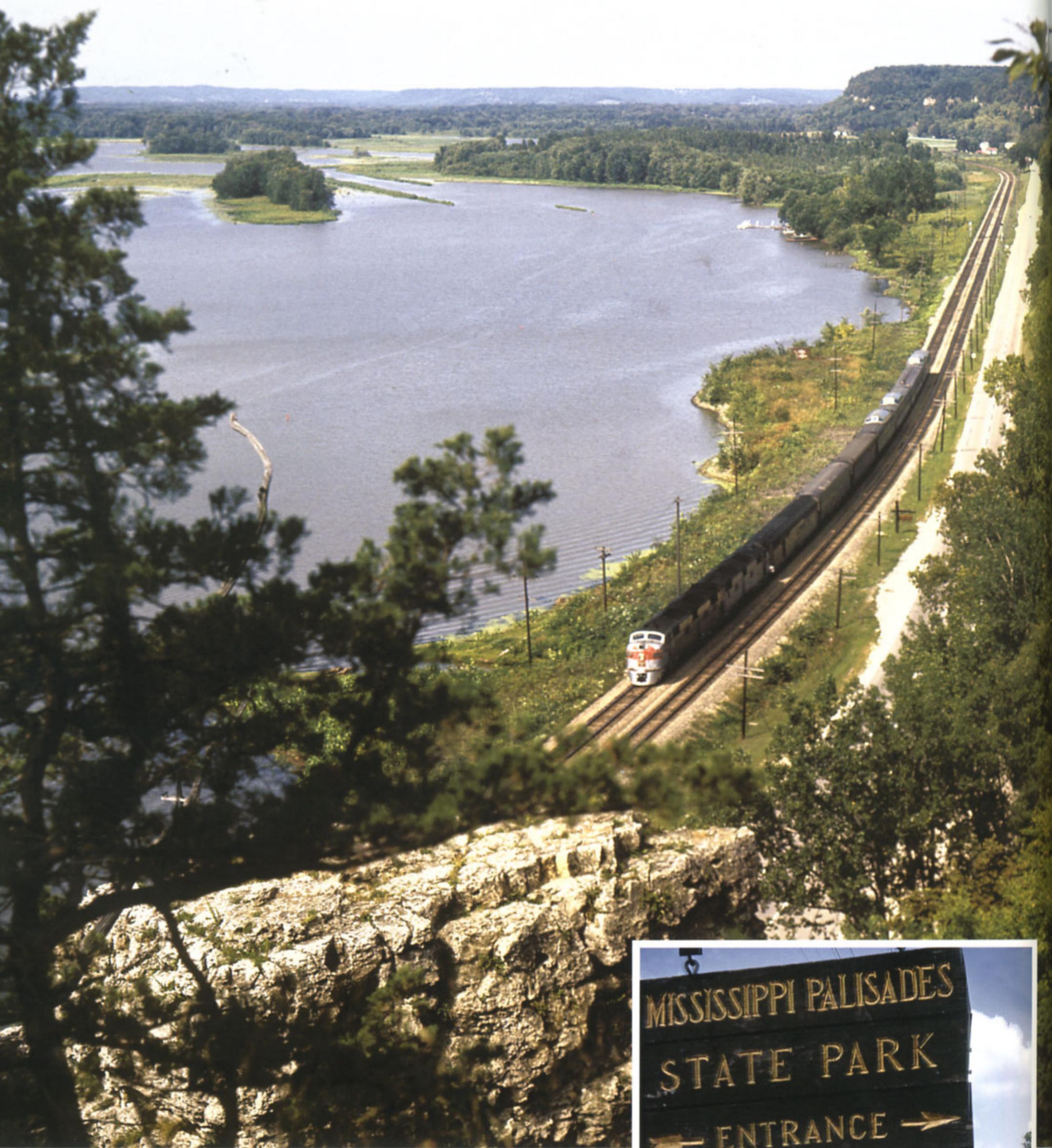
and Western Pacific) had ordered 40 domes, all based on prototype *Silver Dome*. Of these, ten would be for the *Twin Zephyrs*—two trainsets—making them not only the first regularly scheduled dome trains but the most dome-rich daytime train ever. As delivered by the Budd Company (successor to the Edward G. Budd Manufacturing Co., in 1946), before being expanded and eventually altered over time, these dome-carrying *Twin Zephyrs* were exquisite trains.

Most special of all, of course, were the five Vista-Domes: four chair cars (*Silver Bluff*, *Silver Glade*, *Silver Island*, *Silver River*, *Silver Stream*, *Silver Wave*, *Silver Scene*, *Silver Vision*, in the two consists) and, the jewel in the crown, a parlor-observation lounge—*Silver View* or *Silver Vista*, aptly named. This car's parlor section featured comfortable occasional chairs in the rear of the car and a five-seat drawing room forward.

Budd designers and engineers had “gone to school” on *Silver Dome* and had found ways to make the new cars far more efficient and attractive than the prototype. The Budd Company's biggest hurdle was to maintain the structural integrity of the dome cars, since—in the Shotwelded construction that made its cars so durable—the roof and full sides, not just the floors and walls up to the windows, carried the load of the car and withstood compressive forces. In March 1947, with a number of railroad executives present, Budd's first production dome car was squeezed and poked and pushed in various ways at the carbuilder's test laboratory. The car passed its stress test with flying colors, and it led the way for 155 more dome cars that would roll out of Budd's Red Lion plant over the next decade, many of them for the *Zephyrs*.

The *Twin Zephyrs*' coaches would have 54 revenue seats on the main level, all forward-facing. (Two of the cars, *Silver Bluff* and *Silver Glade*, contained a conductor's desk and crew locker and thus seated only 50.) A major design difference in the production cars was that the area under the dome was depressed below standard floor level, a feature impossible in retrofitted *Silver Dome*. This allowed a step-down, step-up pass-through corridor under the dome section as well as spacious men's and women's

Continued on page 108



ABOVE: In the summer of 1964, the southbound *Morning Zephyr* cruises through the Mississippi Palisades just above Savanna, Illinois. *JIM BOYD*

RIGHT: Heavy with summer travelers on July 18, 1959, the southbound *Morning Zephyr* with several extra cars behind two E7s and an E5 passes the entrance sign for the state park, long a popular vantage point for railroad photographers. *JIM NEUBAUER*





ABOVE AND BELOW: The northbound *Morning Zephyr* glides along the Mississippi north of Savanna in 1961. By this time, cars from the under-performing *Kansas City Zephyr* were sometimes used to bolster equipment needs for the *Twin Zephyrs*, which drew respectable passenger loadings well into the 1960s. Among the cars commonly pressed into use were the *KCZ*'s flat-end parlor-observation cars, one of which trails 21 on this day. JIM NEUBAUER







With an E5 on the point and observation *Silver View* bringing up the rear, train 21, the northbound *Morning Zephyr*, breezes along Illinois route 84 and the Mississippi River on July 14, 1957. For years, No. 21 held the title of being one of the fastest trains in North America in terms of start-to-stop average speeds. JIM NEUBAUER

Continued from page 103

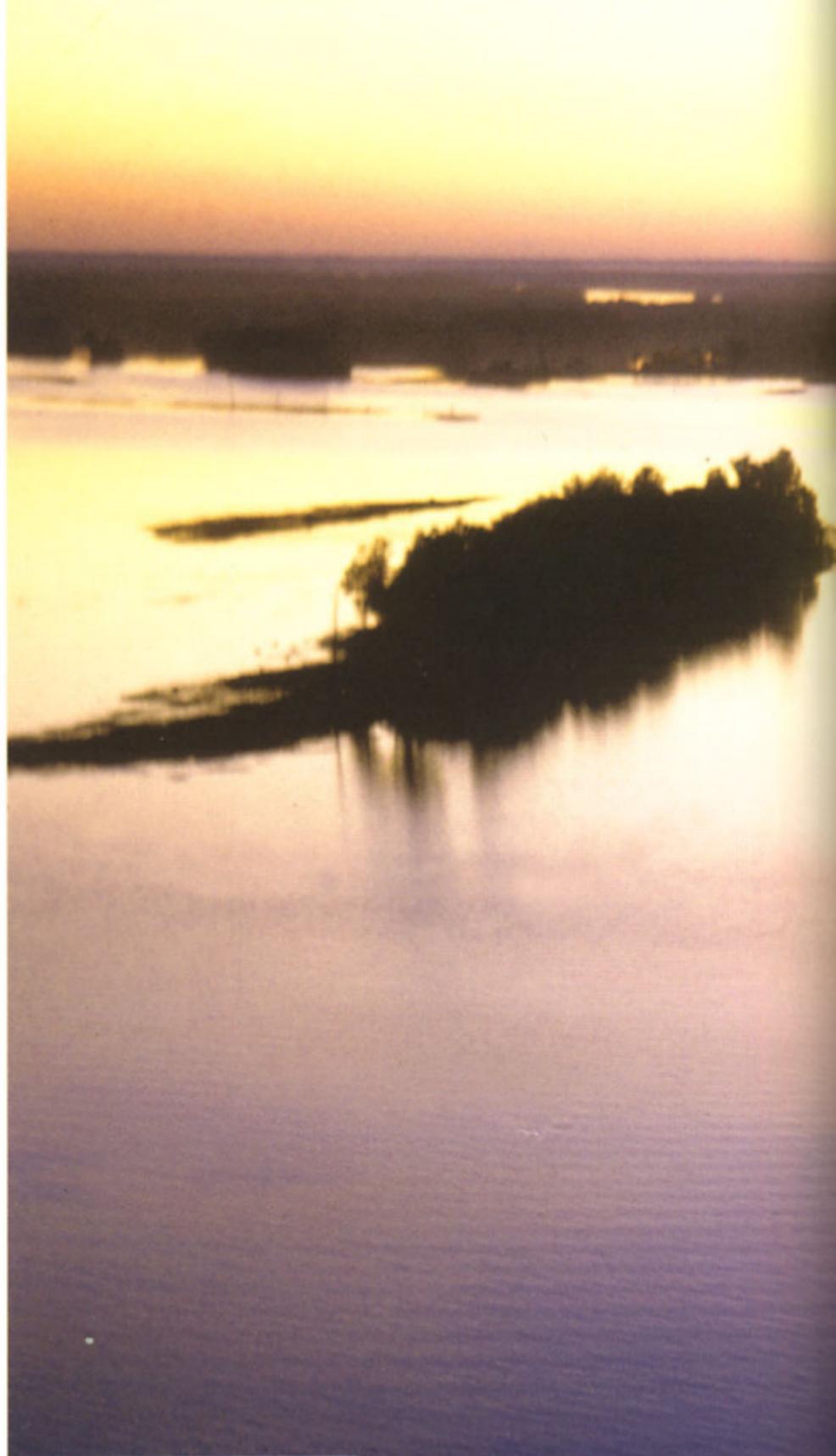
restrooms; their relocation from the ends of the main level, where they were aboard *Silver Dome*, allowed the dramatic increase in seating. And all Budd production domes were made of curved glass, another dramatic improvement over the prototype.

The non-dome cars in the *Twin Zephyrs'* consists were handsome too. All the way forward was baggage-club lounge *Silver Buffet* or *Silver Salon*, where passengers could sample snacks or beverages. Lacking the quarter-round bar that had been popular in the early years after Prohibition, and the chic cocktail-lounge ambiance that went with it, the room featured intimate tables for two, nooks for four, and overstuffed lounge chairs. *Silver Feast* and *Silver Salver*, the 48-seat dining cars, with ornamented glass partitions separating banquette seating at both ends of the car from the main middle section, were stylish. Remarkably, every single car in the consist carried some non-revenue seating. Locomotives for the train would be E5A and E5B pairs.

To bolster the availability of parlor accommodations, Budd built two conventional—that is, non-dome—parlor cars, *Silver Parlor* and *Silver Chair*, for the *Twin Zephyrs* in 1949. When in service, they were positioned behind the diner and ahead of the Vista-Dome parlor-observation car.

With World War II serving as a watershed, the *Twin Zephyr* cars very clearly looked ahead to the new-built *Zephyrs* to come: the *California Zephyr*, *Kansas City Zephyr*, *American Royal Zephyr*, and *Denver Zephyr*. These trains' dome coaches and diners would be near-duplicates of the *Twin Zephyrs'* cars. Decorative touches were one way that Burlington attempted to individualize cars that had some cookie-cutter sameness; for instance, each of the *Twin Zephyrs'* Vista-Domes would have a bulkhead mural depicting a relevant historical scene. These murals were the work of Kathryn Fligg, a Philadelphia artist. Similar ornamentation would appear on the under-dome bulkheads of later *Zephyrs* as well; Mary Lawser would do the work aboard the *California Zephyr* cars, whose construction at Budd overlapped work on the *Twin Zephyrs*.

The new *Twin Zephyrs* entered service on December 19, 1947, operating twice-daily service between Chicago and Minneapolis/St. Paul as the



LEFT: It's a frigid morning in Savanna as No. 21 pauses for passengers and a crew change. The trainman is bundled against the brittle air blowing in off the nearby Mississippi.

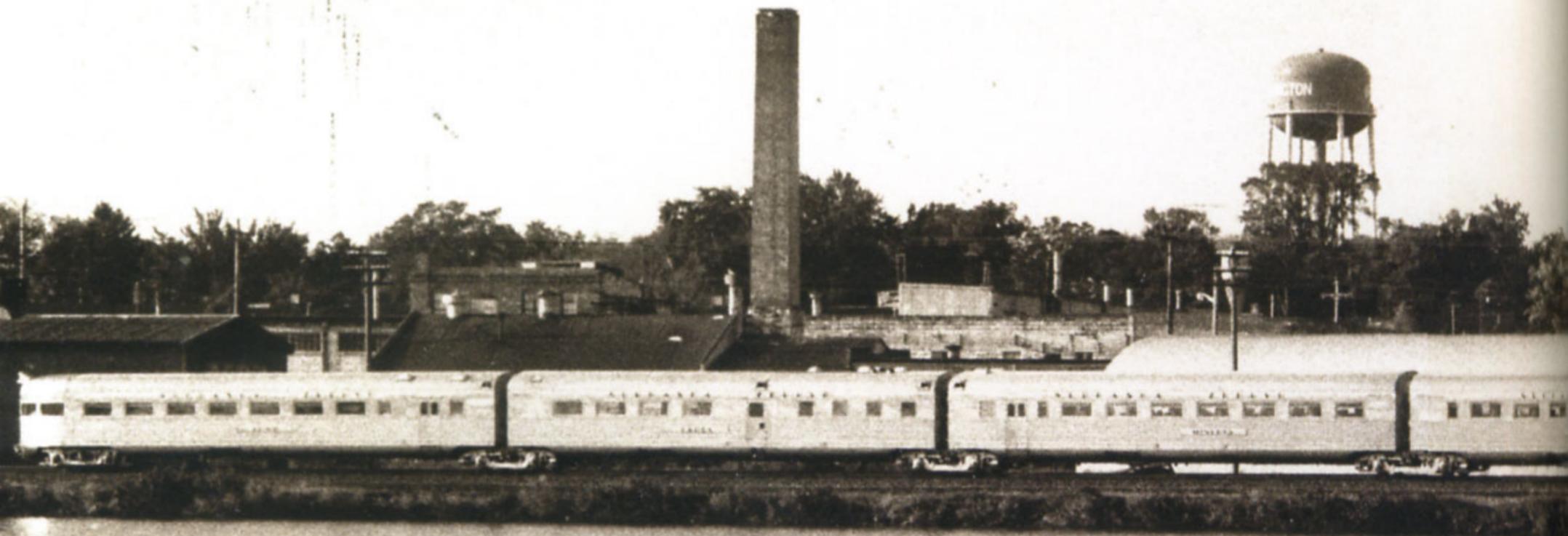
JIM NEUBAUER



Morning Zephyr and the *Afternoon Zephyr*, as their predecessors had done. (Adding to the already existing confusion of nomenclature—*Twin Zephyrs* versus *Morning* and *Afternoon Zephyrs*—was the fact that the trains by now were sometimes called the *Twin Cities Zephyrs*.)

At ceremonies at the Great Northern Station in Minneapolis, the train had been christened by Margaret Youngdahl, daughter of the governor of Minnesota, after which it carried members of the Minneapolis Chamber of Commerce and St. Paul Association of Commerce to St. Paul for a luncheon at the Minnesota Club. Predictably and appropriately, the principal speakers were Ralph Budd, Edward G. Budd, and Cyrus Osborn. Previously, the two trainsets had offered excursions between St. Paul and Minneapolis and between Chicago and Aurora. Aboard the latter, Marshall

The Mississippi River is placid at twilight as a 30-minute-late southbound *Afternoon Zephyr*—a blur of headlights and dome tops along highway 84—races toward Savanna. It's 8:50 p.m. on June 21, 1965, nearly the longest day of the year. JIM NEUBAUER



THE NEBRASKA Zephyr

New Zephyr Service
between
CHICAGO-OMAHA-LINCOLN

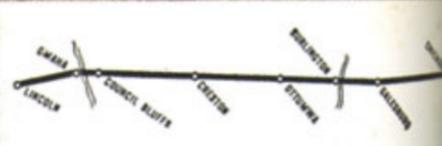
The fabled virtues of the gods and goddesses being embodied in The Nebraska Zephyrs, each car bears the name of one of the outstanding figures of mythology, as follows:

Train of the Gods
 Baggage Car—OLYMPUS
 Cocktail Lounge—APOLLO
 Coach—NEPTUNE
 Coach—MARS
 Diner—VULCAN
 Coach—MERCURY
 Parlor-Lounge—JUPITER

Train of the Goddesses
 Cocktail Lounge—VENUS
 Coach—VESTA
 Coach—MINERVA
 Diner—CERES
 Coach—DIANA
 Parlor-Lounge—JUNO

NEBRASKA Zephyr FACTS

Cars 2 1/4 inches wider inside than conventional equipment.
 Completely streamlined, reducing "wind drag" at 95 miles an hour, more than 50%. Steps fold into sides of cars; doors and windows are flush with exteriors.
 Insulated to exclude sound, heat and cold.
 Steps automatically illuminated when doors opened.
 Automatically-controlled braking prevents wheels locking and assures smooth stops under all conditions.
 All passenger cars articulated—ends of adjoining cars rest on same truck. Reduces number of wheels and eliminates vestibules. "Tight-lock" coupler controls slack between power car and train.
 Telephone service between the diner and cocktail lounge car enables passengers to make table reservations in advance. Radio reception in all cars.
 "Air curtain" in diner prevents kitchen aromas from entering dining room.
 Superior strength of stainless steel, fabricated by rivetless "Shotweld" process, makes Zephyrs light and super-safe. Weight approximately half as much as comparable standard steam train, and can be accelerated faster and stopped quicker.
 Electrically-operated by power supplied by V-type, 2-cycle Diesel engines with direct-connected generators.



THE NEBRASKA Zephyr

Completely Streamlined
 Diesel-Powered • Stainless Steel

Fast, Daytime Service

WESTBOUND

Lv. Chicago	12:45 P.M.
Ar. Omaha	9:15 P.M.
Ar. Lincoln	10:30 P.M.

EASTBOUND

Lv. Lincoln	11:00 A.M.
Lv. Omaha	12:15 P.M.
Ar. Chicago	8:45 P.M.



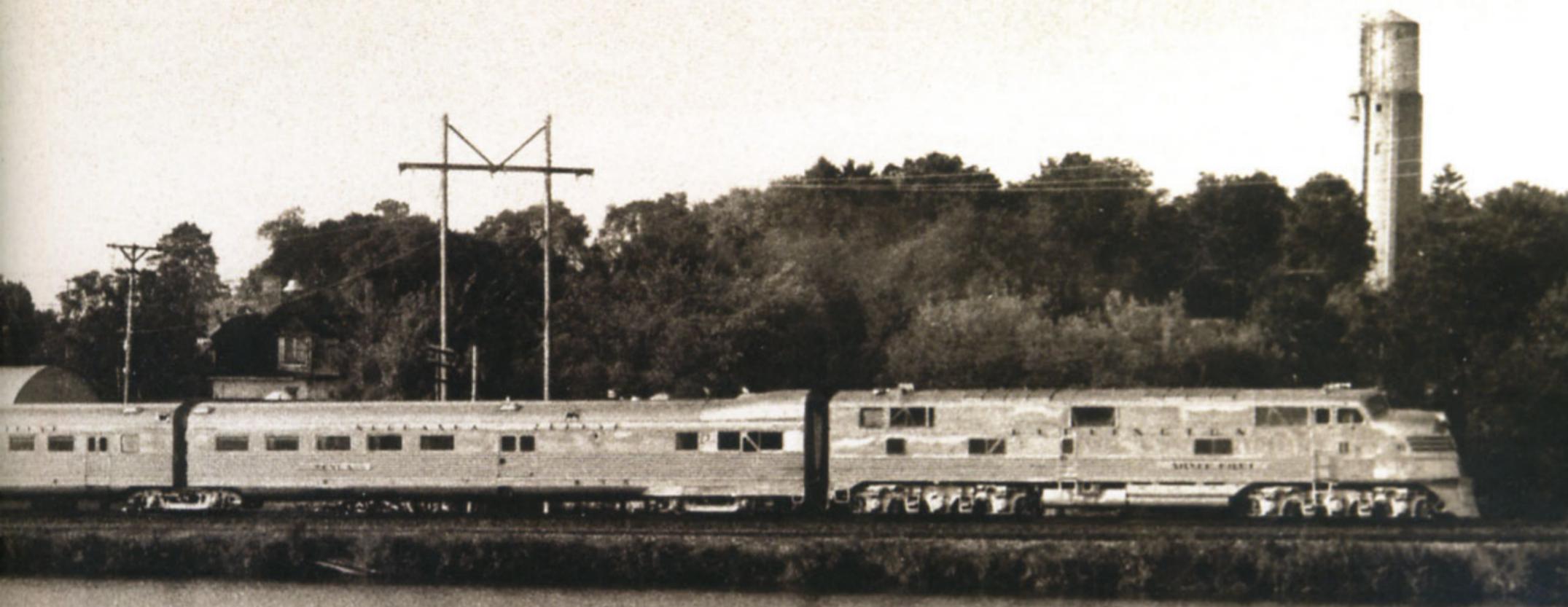
4-18 23M

Getting the most out of its investment in rolling stock, Burlington in 1947 repackaged the 1936 *Twin Zephyr* articulated trainsets as the "new" *Nebraska Zephyr*. As was the tradition, brochures trumpeted this newest addition to the *Zephyr* fleet. Shovel-nose power units were featured in the artwork even though the train was as often as not pulled by E-units.

MIKE SCHAFER COLLECTION

Field's, the famous Chicago department store, offered a fashion show, sponsored by the Junior League of Chicago.

Like all the other *Zephyrs*, these new *Twins* would not have consists that were carved in stone. Cars would require rotation out for maintenance, for one thing. This kept *Silver Dome* busy, and it often showed up in *Morning* and *Afternoon Zephyr* consists, subbing for an out-of-service Budd-built dome or accommodating ridership swells. And, oddly enough, *Silver Dome* would gain an identical sibling four years after its own birth. In June 1949, after 40 production domes had been built for the *Twin*



Spaciousness and comfort are the keynotes of the delightful parlor car.



The sparkling beauty of the dining car provides a fitting atmosphere for delicious meals.

The NEBRASKA Zephyr

One of America's Distinctive Trains

The Nebraska Zephyr brings new comfort, convenience and luxury to Burlington's daytime travelers between Chicago, Omaha and Lincoln. Diesel-powered, streamlined and built of stainless steel, the Nebraska Zephyr combines the smooth speed, for which all Zephyrs are famous, with spaciousness, comfort and elegance.

The Nebraska Zephyr is composed of a richly-appointed parlor car providing a spacious private drawing-room (berth can be made down if desired) and a cozy observation-lounge . . . a beautiful dining car . . . three chair coaches . . . a smartly-styled cocktail lounge . . . and a powerful Diesel-electric locomotive.

Throughout this completely air-conditioned train, colorful decoration adds a cheerful note to sleek, modern design. Windows, with sills at elbow height, are double-width, mist-proof and frost-

proof. Seats are scientifically designed for maximum comfort. Lighting is restfully diffused. Telephone service between the diner and cocktail lounge car enables passengers to make advance table reservations. Radio reception in all cars.

Each of the two trains required for this service makes one daily trip between Chicago, Omaha and Lincoln—a distance of 551 miles. Diesel-powered for smooth, effortless speed, they cruise at 80 to 90 miles per hour.

Articulation and tight-lock coupling eliminate slack between cars and afford velvet-smooth starting and stopping. Roller bearings, low center of gravity, electro-pneumatic brakes, a smooth roadbed—all are reflected in the superb riding comfort of this train.

Porter service is available to coach and parlor car passengers.

The Nebraska Zephyr Is Not An Extra-Fare Train!



Chair coaches are richly upholstered, colorfully decorated and fully carpeted. Double-width windows afford full view.



The smart cocktail lounge has a quarter-circle refreshment bar, tables and built-in seats.

Zephyrs and the *California Zephyr*, *Silver Castle*—its name unchanged—rolled out of the shops at Aurora with a flat-glass bubble atop just like the one that crowned *Silver Dome*, a car with which it also shared all the shortcomings inherent in retrofitting. After much management debate, apparently, Burlington had seized on this as a quick and inexpensive way to produce an extra dome car to handle group movements.

As with the trains they replaced, the new *Twins* had stringent schedules—among the fastest start-to-stop running times in North America—with short turnaround times at terminals. The northbound *Morning Zephyr*

TOP: The "Train of the Goddesses" *Nebraska Zephyr* set is now owned—and operated—by the Illinois Railway Museum and is considered one of its star attractions. Occasionally, the train ventures away from museum property on charter runs, such as this excursion over the Wisconsin Central in September 1993. With E5 *Silver Pilot* living up to its name, the train makes a handsome sight running along Echo Lake at Burlington, Wisconsin. BOB BANKE



Early in its career, the westbound *Nebraska Zephyr* bounds through Chicago's western suburbs behind E5 9915-A, *Silver Carrier*. A conventional baggage car illustrates the difference in height between older, articulated equipment and post-1936 *Zephyr* cars. Photos of the NZ running as a separate train between Chicago and Galesburg are uncommon, as it was generally consolidated with the *Kansas City Zephyr* between those two points beginning early in the 1950s.

ED CRIST, ANDOVER JUNCTION PUBLICATIONS COLLECTION

out of Chicago, for example, arrived Minneapolis at 3 p.m. (1948 schedule) and was immediately turned and cleaned to become the southbound *Afternoon Zephyr* to Chicago, departing at 3:30 p.m. At Chicago, the southbound *Morning Zephyr* turned to become that day's northbound *Afternoon Zephyr* within a scheduled 1-hour and 20-minute layover time. Routine servicing of the equipment was done during either trainset's overnight layover at both terminals after having arrived as *Afternoon Zephyrs*. By the mid-1960s, the quick turns at Minneapolis would prove impractical, requiring the Burlington to assemble a pseudo "third" *Twin Zephyr* trainset. How the railroad accomplished this is a topic in chapter 10.*

Given the excellence and toughness of Budd products, it is unsurprising that the 1936 *Twin Zephyrs*, when replaced by the new Vista-Dome version, had many years left in them. Thus these trainsets were refurbished and rechristened *Nebraska Zephyr* for daylight service between Chicago and Lincoln via Ottumwa, Iowa, and Omaha. In the process of being reconditioned, both trainsets traded their *Twin Zephyr* tail signs for those that said *Nebraska Zephyr*; in addition, the train name was painted on the letterboard of each car.

In the Chicago–Omaha–Lincoln corridor, the "Train of Gods" and "Train of Goddesses" soldiered on fruitfully for almost two more decades, each set making the 551-mile one-way trip each day. Early in the train's career, it ran on a speedy, limited-stop schedule averaging better than 50 miles per hour between Chicago and Omaha. For example, in the late 1940s, the westbound *Nebraska Zephyr* made only one stop (Kewaunee, Illinois) between Chicago and Galesburg, Illinois, 162 miles out of Chicago Union Station.

The *Nebraska Zephyr* trainsets wound up being the last shovel-nose-era articulated *Zephyr* equipment to operate on the Burlington in scheduled service. Eventually the "Gods" trainset was sold to Saudi Arabia, where it operated in regular service into the twenty-first century. The "Goddess" set, handsomely reconditioned, is in the collection of the Illinois Railway Museum near Chicago. It occasionally operates—behind restored Electro-Motive E5 No. 9911-A, *Silver Pilot*—on the museum's multi-mile main line and from time to time ventures beyond the museum on trips over "real" railroads to regional train shows and festivals for display. It still looks as good as ever.

RIGHT: Nearing the end of their eastward trek to Chicago on a September evening in 1967, the combined *Nebraska Zephyr* and *Kansas City Zephyr* pause at LaGrange Road, the suburban Chicago stop for many Burlington intercity trains. GEORGE SPEIR



ABOVE: A glimpse inside the *Nebraska Zephyr* shows one of the parlor observation cars as it appeared in the mid-1960s. The empty seats were indicative of the plight of American passenger trains in general and not just the *Zephyrs*. ALAN BRADLEY

BELOW: The *Nebraska Zephyr's* cocktail lounge—shown in 1964—was at the forward end of the train. Beyond the door marked “employees only” was a head-end power generator for train lighting and climate control. ALAN BRADLEY



The California Zephyr



As the 1940s drew to a close, and America luxuriated in a world with comforts restored and the threat of war for a time remote, the greatest of all *Zephyrs* was at hand—a country-spanning silver train that took all the characteristics of the earlier *Zephyrs* (save perhaps speed) and bettered them. From the *Pioneer Zephyr* and all the rest it took the Shotwelded stainless-steel construction and aesthetic. From the first *Denver Zephyr* it took sleepers, and from that train and the *Twin Zephyrs* elegant dining. Also from the *DZ* (and *Twin Cities*, *Sam Houston*, and *Ozark State Zephyrs*, along with its immediate predecessor, the *Exposition Flyer*) it took hostesses—the *Zephyrettes*, whom the *California Zephyr* would make famous. From the third *Twin Zephyrs* it took Vista-Domes.



TRAIN IN THE COUNTRY



Number 18, the eastbound *California Zephyr*, has just left Fraser Canyon as it sweeps through Tabernash, Colorado, in the summer of 1969. Though in its last year of service, the *CZ* retains its classic consist, with five Vista-Domes. Just a few miles ahead is the Moffat Tunnel. LAUREL ZIMMERMANN



ABOVE: In 1949, gentlemen wore suits and ties to travel, even in coach—or so CZ publicists would have had us believe. In the photo, a Mary Lawser mural adorns the bulkhead of a Vista-Dome coach. *BURLINGTON ROUTE, KARL ZIMMERMANN COLLECTION*

TOP: The *Exposition Flyer*—seen here on March 24, 1948, westbound at West Hinsdale, Illinois—was the CZ's direct ancestor. The Vista-Dome coach three cars back was the first CZ car to be placed in *Flyer* service—and this was its first day of operation. Before the CZ itself was inaugurated roughly a year later, many of its cars would be temporarily assigned to the *Exposition Flyer*. *C. H. KERRIGAN*

ABOVE: This illustration, plus the ones on the following four pages, are from an elaborate, oversize booklet issued for the train's inaugural. The cutaway drawings were state-of-the-art for rail-travel promotion. *MIKE SCHAFER COLLECTION*

But the *California Zephyr* added other things, creating an unprecedented train. It added partners new to the *Zephyrs*, the Rio Grande and Western Pacific. It added scope, by making a two-night journey of consequence. And, most important of all, it added inspiring scenery (not that the *Twin Zephyrs* didn't have some), and a schedule especially tailored to put it in front of passengers in daylight. The CZ was, in fact, touted as the first and only long-distance train to do that.

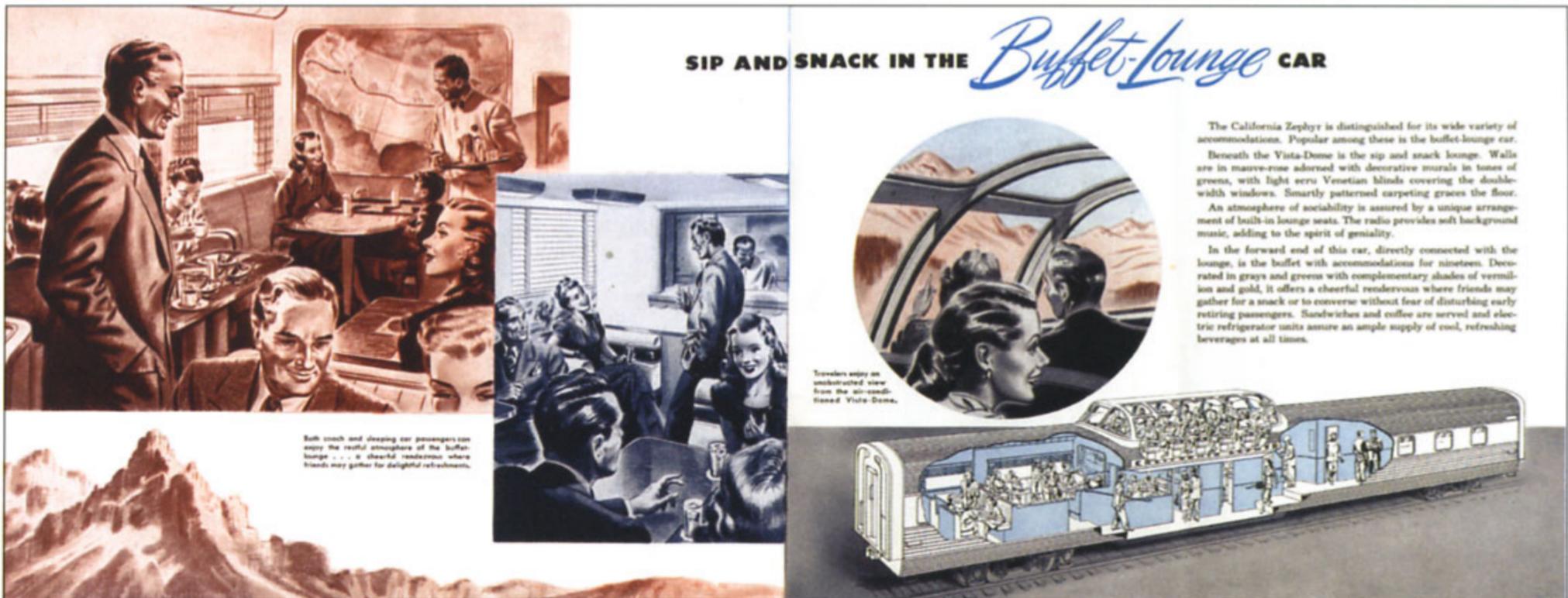
Of course, the CZ was not the first high-quality train to the West Coast run by Burlington with partners, since—in addition to operating the *Exposition Flyer*—the railroad had collaborated with Northern Pacific to operate the *North Coast Limited* and with Great Northern on the *Empire Builder*, both trains to the Pacific Northwest. But those weren't *Zephyrs*, and their personalities were dominated by NP and GN. The CZ, in contrast, was very much a *Zephyr*, with Burlington Route written all over it.

When it made its first trip on March 20, 1949, it had been much anticipated, and for a long time. Its immediate predecessor, the Chicago–San Francisco *Exposition Flyer*, had been inaugurated roughly a decade

earlier, on June 10, 1939, and within a few months plans for a streamlined version had been bandied about by the operating partners, CB&Q, D&RGW, and WP. World War II intervened, but in October 1945, executives of the three railroads formally agreed to share proportionally by mileage the expenses of building a new streamliner, and to allocate car ownership in that same ratio. This would make Burlington the biggest player, since, of the CZ's 2,532 route-miles, 1,034 would be over the Burlington, from Chicago to Denver. Rio Grande's Denver-Salt Lake City mileage would be 570, and WP's from Salt Lake to San Francisco 928.

Shortly after signing the agreement, the triumvirate placed an order with Budd, the particulars of which would be refined and altered somewhat before it was completed. In final form the order totaled 66 cars that divided up this way: 6 baggage cars, 18 Vista-Dome chair cars, 6 Vista-Dome dormitory-buffet lounges, 6 48-seat dining cars, 18 10-roomette 6-double bedroom sleepers, 6 16-section sleepers, and 6 3-double bedroom 1-drawing-room lounge observation cars with Vista-Dome. Divided up another way, it was 11 cars per consist (one more than had been originally projected). Divided up yet another way it was 27 cars owned by Burlington, 24 by Western Pacific, and 15 by Rio Grande.

BELOW: As built (and shown in the brochure) the buffet-lounge car was intended to purvey only snacks and beverages. Later, its facilities were upgraded to serve economical light meals. MIKE SCHAFER COLLECTION



LEFT: In late 1959 and into 1960, the main section of the CZ's buffet-lounges was transformed into the Cable Car Room, with glass-encased models of the famous San Francisco cars, a photomural representing the view from the end of one, and carpets woven to suggest tracks in the street—all features visible in this 1969 photograph. Food-preparation facilities were improved at the same time. ROBERT P. SCHMIDT

A WIDE RANGE OF ACCOMMODATIONS FROM WHICH TO CHOOSE...

The California Zephyr has three all-room cars, each having six double bedrooms and ten roomettes and a distinctively-styled car with sixteen semi-private sections—two of which are 6 feet 8 inches long, "tailor-made" for the tall traveler.

Each room has toilet facilities (those in the bedrooms are enclosed), circulating, electrically-refrigerated drinking water, radio, individual temperature control and 110-volt outlets for electrical appliances. All rooms have double-width windows and the roomette beds can be lowered with door closed. Various en suite combinations of rooms can be arranged.

The color harmony in the all-room cars is a restful blending of rose-tan, petal beige and shades of gray in combination with aches of russet and soft greens. In the section car, rose-tan, Norway blue, petal beige and green predominate. Venetian blinds and foam-type cushioning add to the charm and comfort of these cars.

Private rooms are spacious, comfortable and luxurious. Various en suite combinations can be arranged for families or friends traveling together.

Baths in the semi-private section car are convenient in comfort.

Dining rooms are attractive, well-equipped and convenient.



Actually, there was a 67th car, a 10-6 sleeper, *Silver Rapids*, owned by the Pennsylvania Railroad. The explanation for this anomaly was the coast-to-coast through sleeper service begun in 1946 by Pennsy, New York Central, Baltimore & Ohio, Santa Fe, Union Pacific, Chicago & North Western, Southern Pacific, and Rock Island, as well as Burlington, Rio Grande, and Western Pacific, on their *Exposition Flyer*. The *California Zephyr* would inherit this car when the *CZ* replaced the *Flyer*, and a 19th 10-6 sleeper would be required to protect this "car line," as Pullman referred to its individual car assignments. *Silver Rapids* looked just like all its mates, with "*California Zephyr*" spread across the letterboard above the windows. At the car ends, however, in smaller letters, where the 66 others read "CB&Q," "D&RGW," or "WP," this one said "PRR." (Since New York Central alternated with the Pennsylvania in forwarding the through car to New York City, it leased a Rio Grande sleeper to discharge its obligation to the pool.)

CZ cars began to arrive from the Budd Company early in 1948, posing the question of how to use them until the full complement was delivered. Perhaps recalling

the *Advance Denver Zephyr* run with the *Pioneer Zephyr* and *Mark Twain Zephyr* trainsets in 1936 while the real *DZ* was being completed, Ralph Budd for a time liked the idea of an *Advance California Zephyr*. (The success of a pair of postwar coaches-only New York–Chicago streamliners, New York Central's *Pacemaker* and Pennsylvania Railroad's *Trailblazer*, may have encouraged this thinking.) Operating twice a week, this train would have used six Vista-Dome chair cars, with a baggage car set up for meal service. This idea was dropped, in favor of a more practical one: feeding the cars into the *Exposition Flyer* consists.

Thus on March 24, 1948, roughly a year before the *CZ*'s eventual inauguration, the first *California Zephyr* Vista-Dome coach entered revenue service, on No. 39, the westbound *Exposition Flyer*. Another dome began operating eastbound the next day. More coaches, plus sleepers and baggage cars, would follow, though not the diners, Vista-Dome buffet-lounges, and Vista-Dome sleeper-observation lounges. These feature cars were withheld for the inauguration of the real train, while the dome-coaches were advertised as a special feature of the *Flyer* in the year they graced it.

Probably the most significant pre-inaugural operation with *CZ* cars occurred on October 26, 1948, when the railroads assembled an imitation

ABOVE: This brochure touts "a wide range of accommodations from which to choose," but the *CZ*'s three original all-room cars offered just roomettes and bedrooms. In 1952, a fourth all-room sleeper was added, with six double bedrooms and five compartments, adding another style of accommodation to the mix. The train's only drawing room was in the Vista-Dome sleeper-lounge observation, shown on the facing page.

MIKE SCHAFFER COLLECTION

LEFT: By the time of the *CZ*'s inauguration, open sections were falling out of favor with the traveling public. Thus the train's 16-section sleepers, shown here, were withdrawn from service before they were a decade old. They eventually returned as 48-seat chair cars for use at times of peak demand. BURLINGTON ROUTE, KARL ZIMMERMANN COLLECTION



LOUNGE · OBSERVATION CAR

Carpeted and individually-lighted steps from the lounge lead to the distinctive air-conditioned Vista-Dome—tastefully decorated in tones of sandalwood. Here, enclosed in shatter-proof, glare-resistant glass, are twenty-four deep-cushioned seats, where passengers may ride in comfort and enjoy a complete view in every direction.

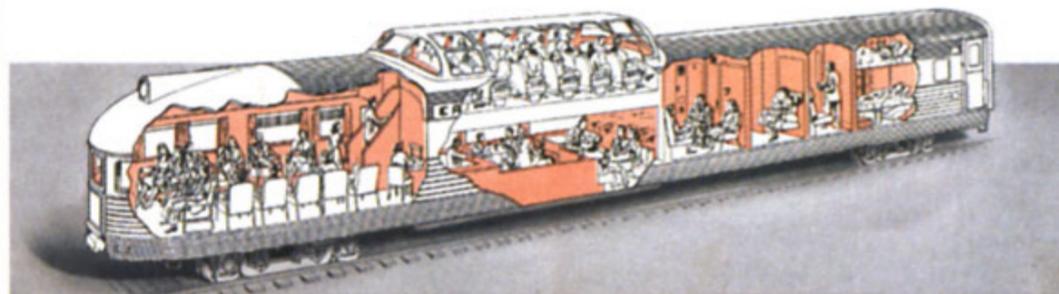
Nestled beneath the Dome is a buffet. Tastefully decorated in rose and gray-green, it provides a delightful rendezvous in which to speed the miles and minutes. At one end of the buffet is a refreshment counter with carved linoleum base and back bar of stainless steel and etched mirrors. Electric refrigeration units assure an ample supply of cool, refreshing beverages at all times. The buffet has a telephone connection with the dining car, over which table reservations can be made.

Forward from the buffet are three bedrooms and a drawing-room, each having enclosed toilet facilities. Each room is attractively decorated in harmonious shades of rose-tan, petal beige, taupe and ashes of roses.

This car is completely carpeted and windows are equipped with Venetian blinds—those in the observation-lounge having drapes of gold and white.



Nestled beneath the Dome is a buffet—a delightful rendezvous in which to speed the miles and minutes.



ABOVE: Though the *California Zephyr's* demise is only weeks away in this view made aboard No. 17 in early 1970, the train's observation car is as inviting as ever. The two rear-facing love seats at the far end were the choicest spots. *MIKE SCHAFER*

LEFT: CB&Q's *Silver Penthouse* is on the rear of the eastbound *CZ* at James, California, in July 1969. *MIKE SCHAFER*

California Zephyr to test if the schedule projected on paper was workable in practice. With eight *CZ* cars—an impressive seven Vista-Dome coaches, two sleepers, a baggage car, and a CB&Q diner similar to the *CZ*'s as yet undelivered ones—this train slipped unheralded out of Chicago and ran the planned 17-hour, 50-minute schedule to Denver. After a brief lay-over there, the ersatz *CZ* continued on to Oakland.

The schedule thus confirmed had the westbound *CZ*, No. 17, leaving Chicago at 3:30 p.m. and running across the Great Plains at night, arriving in Denver at 8:20 the next morning. An 8:40 departure provided a full day of spectacular Rocky Mountain scenery across Colorado and into Utah, for a 10:05 p.m. arrival at Salt Lake City. An overnight traverse of the Nevada desert brought the train to Portola, California, at 7:42 a.m.—ready to spend a glorious morning snaking through the Feather River Canyon. San Francisco arrival was at 4:50 p.m.

This was, in fact, a tightened (by 6 hours and 15 minutes) version of the final *Exposition Flyer* westbound schedule, which had been scenery-friendly to start with. Eastbound was an entirely different matter, however, as the *Flyer* ran through California's Feather River Canyon and much of Colorado in the dark. Here the *CZ* started from scratch, virtually flopping the *Flyer's* schedule. Number 18 left San Francisco at 9 a.m. (as opposed to the *Flyer's* 6 p.m.), running through Feather River Canyon in the bright afternoon. Salt Lake departure was at 5:40 a.m., leading up to an extraordinary day of unparalleled scenery, beginning with the looping climb over 7,440-foot Soldier Summit in Utah's Wasatch Range (seen in daylight westbound only in the long days of summer).

After a sprint across the Utah desert, the *CZ* reached the Colorado River in late morning. By the time it left the river at Granby, 238 miles later, the train would have slipped through Ruby, Glenwood, Red, Gore, and Byers canyons. It would have traversed the Dotsero Cutoff, the opening of which the original *Zephyr* had been on hand to help celebrate in the summer of 1934 (see chapter 2).

Even with the Colorado River left behind, the spectacle would be far from over. Still ahead were the cozy confines of the canyon of the Fraser River, and then 6.21-mile-long Moffat Tunnel, where the rails crossed the Continental Divide at 9,239 feet. Then would come South Boulder Canyon, and finally the spectacular, winding descent down the Front Range into Denver. And, for the through passenger, these scenic riches would have come on the heels of the previous day's Feather River Smorgasbord: Clio Viaduct, Williams Loop, Keddie Wye, the Honeymoon Tunnels, and much more.

The *California Zephyr's* calling card would always be this scenery, but the train itself was second to none, and the service aboard it unexcelled. By the time its cars were in the planning, Budd had more than a decade of experience in building increasingly luxurious passenger trains, and it showed, both in aesthetics and conveniences. The *CZ* would be wired throughout for public address announcements, radio,

and wire-recorded music, with dials for channel selection in each sleeping accommodation. Aboard the 10-roomette 6-double bedroom sleepers, corridor windows were placed just opposite bedroom doors for viewing of



LUNCHEON

ADDS ZEST TO YOUR EVERY MEAL

Your first glimpse of this exquisite dining car tells you that here is modern design at its best. The pleasing interior arrangement provides thirty-two seats in the main dining room, flanked by four cozy semi-private dining nooks, each accommodating four people.

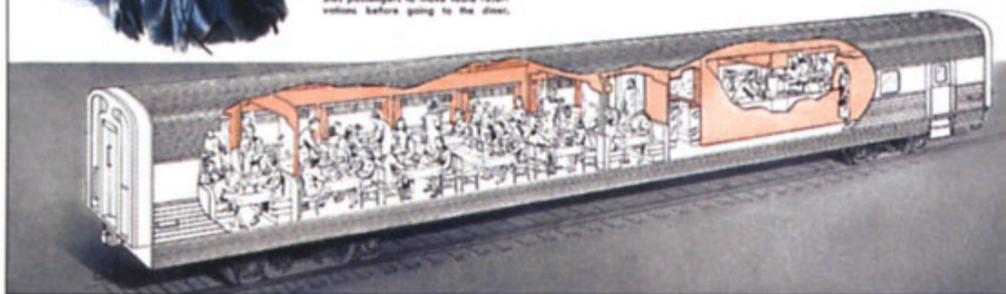
Here you enjoy an atmosphere of congeniality which puts you in an ideal mood for the culinary treats it has to offer. Tempting food is served with skill and courtesy that bespeaks a friendly welcome—and a background of constantly changing scenery adds further zest to every meal.



Telephone service between the diner and the lounge-observation car enables passengers to make table reservations before going to the diner.

Restful fluorescent lighting lends enchantment to the sculptured floral reliefs above the arches and the blended pastels of gray-green, rose and ecru in the walls and ceiling. The chairs are upholstered in rose-red leather and the carpeting is pale green. At the windows, green Venetian blinds and contrasting red, green and cream drapes blend with the over-all color motif of this beautiful car.

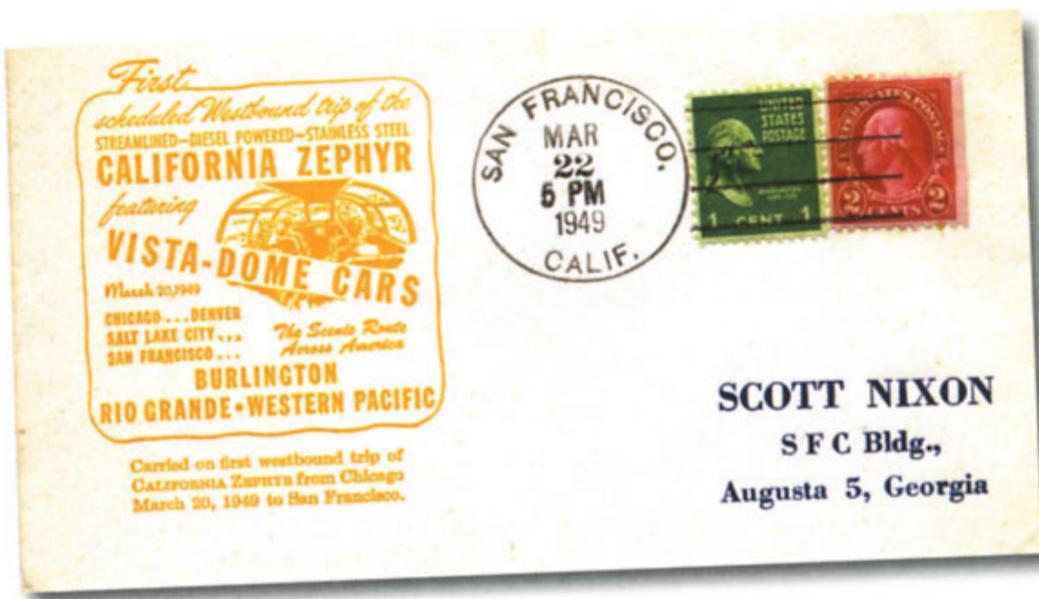
In the gleaming, stainless steel kitchen, the finest foods are expertly blended into delicious meals. Opposite the range and broiler are separate electric refrigerators, with temperatures regulated to meet all U. S. Public Health requirements, for dairy products, meats, fresh fruits and vegetables. An ingenious "air curtain" at the entrance to the chef's pantry dissipates all kitchen odors and heat. Special air-conditioning provides even temperature in the dining car at all times.



ABOVE: This Art Deco-inspired luncheon menu, issued in 1950, showed artist-concept *CZ*'s powered by E5s meeting in Colorado's Glenwood Canyon (where, if both were on time, they were indeed scheduled to meet).

KARL ZIMMERMANN COLLECTION

LEFT: *CZ* diners were similar to other full-service diners in the *Zephyr* fleet. MIKE SCHAFFER COLLECTION



LEFT: Since the *California Zephyr* consist never included a Railway Post Office car, the cachets issued for its inaugural and carried on the first westbound trip were postmarked in San Francisco on March 22, 1949, the day of arrival. *KARL ZIMMERMANN COLLECTION*

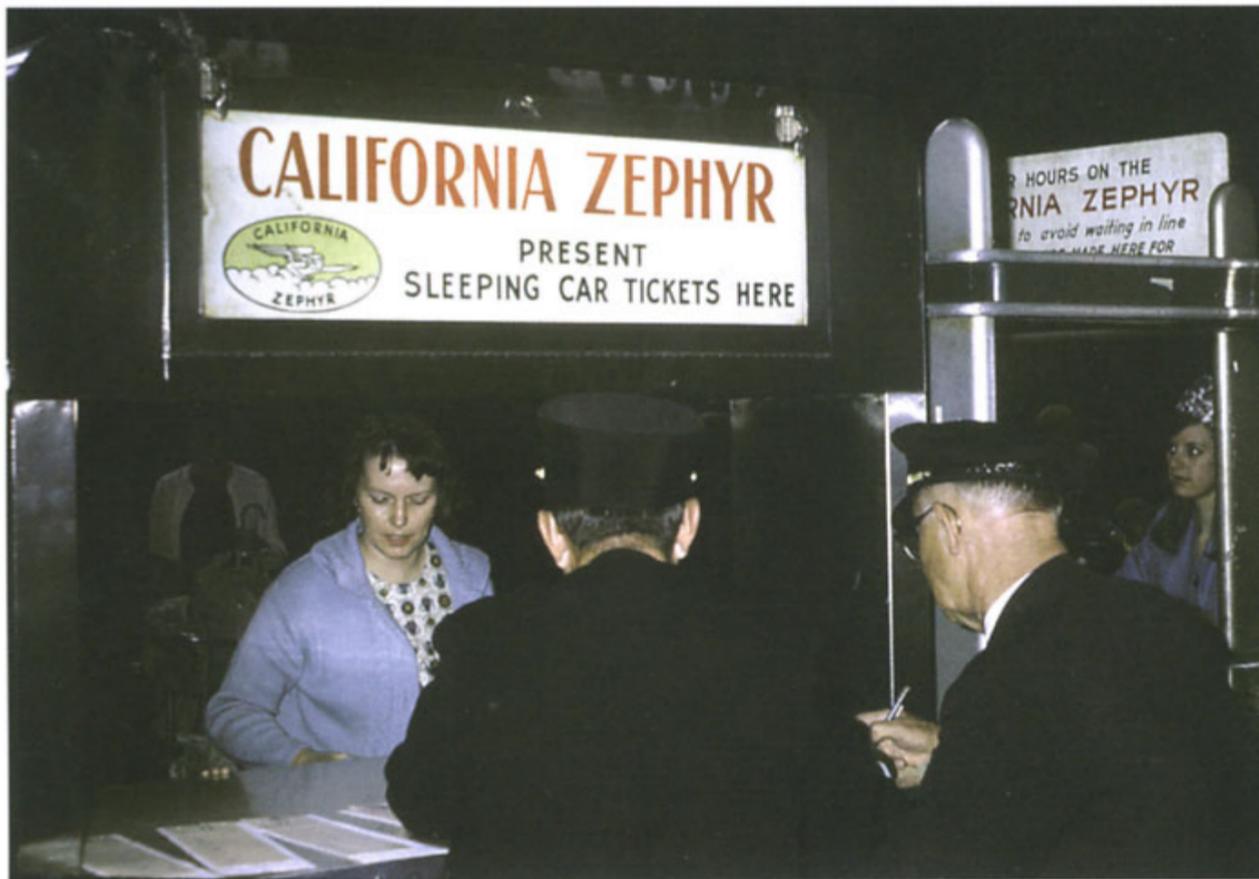
offside scenery. The foot of the roomette beds were narrowed, so they could be raised or lowered without the occupant's having to step into the corridor. On the other hand, one special feature that didn't last was the Women's and Children's Coach, a short-lived concept that reserved the forward 18-seat section of the first coach for mothers and their baby-boom infants, with a swinging door in the corridor providing privacy.

Since the CZ cars were ordered at virtually the same time as the final *Twin Zephyr* stock, they were naturally much akin. The Vista-Dome coaches, for instance, all had 24 dome seats, restrooms under the dome, murals on the bulkheads, carpeting throughout, and both drapes and Venetian blinds. However, since they were designed for long-distance travel, the CZ cars had only 46 main-level revenue seats (reclining, with leg and foot rests) compared to the *Twin Zephyr's* 54. The two trains' 48-seat diners were virtually identical in arrangement and décor.

Text continued on page 125

BELOW: On March 19, 1949, on San Francisco's Embarcadero, Warner Brothers actress Eleanor Parker spoke the traditional words—"I christen thee the *California Zephyr*"—before wielding the equally traditional bottle of champagne. *BOTH PHOTOS, WESTERN PACIFIC, KARL ZIMMERMANN COLLECTION*



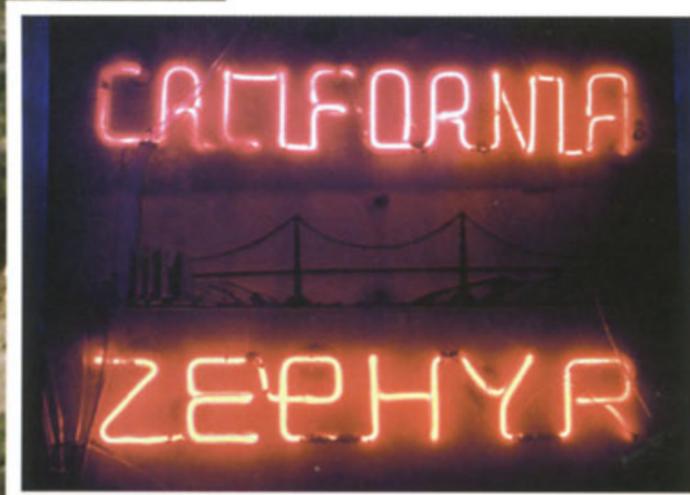


Chicago Union Station was still a busy gateway for *Zephyr* passengers in 1967 as crews readied for summer travelers soon to descend on the Pullman check-in counters—a ritual for all the great overnight streamliners using CUS. BOB JOHNSTON



The *California Zephyr* is newly minted in this 1949 postcard view of No. 18 at Galesburg, Illinois. (According to an imprint on the back, the card—printed with the linen finish popular at the time—was distributed by the Illinois Camera Shop right in Galesburg.) Passenger-version F3s, as shown in this scene, hauled the train over the Burlington only briefly, soon replaced by the E-units that were the railroad's passenger stalwarts. MIKE SCHAFER COLLECTION





The *California Zephyr's* neon tailsign was distinctive, depicting San Francisco's Golden Gate Bridge against the appropriate background hue.
BOB JOHNSTON

In the summer of 1968, feather-emblem Western Pacific F-units lead the eastbound *CZ* along the Middle Fork of the Feather River, which eastbound trains followed after leaving Spring Garden Tunnel. The consist is short one Vista-Dome coach but carries two flat-top coaches in compensation.
ROGER COOK



TOP: Alco's rangy PA-PB units provided glamorous power for the *CZ* over the Rio Grande segment of its run in the early years. This short-lived *Zephyr* scheme of silver with Grande Gold nose was the second dress worn by the D&RGW Alcos. Before that came a yellow-on-black scheme and, later, two variant schemes of silver and aspen gold striped in black. RIO GRANDE COLLECTION: STATE HISTORICAL SOCIETY OF COLORADO, KARL ZIMMERMANN COLLECTION

ABOVE: The Zephyrettes, who served on a number of the *Zephyrs*, found their greatest fame on the *CZ*. They were particularly attentive to children, as Mary Pittman is here during the Easter season. D&RGW, KARL ZIMMERMANN COLLECTION

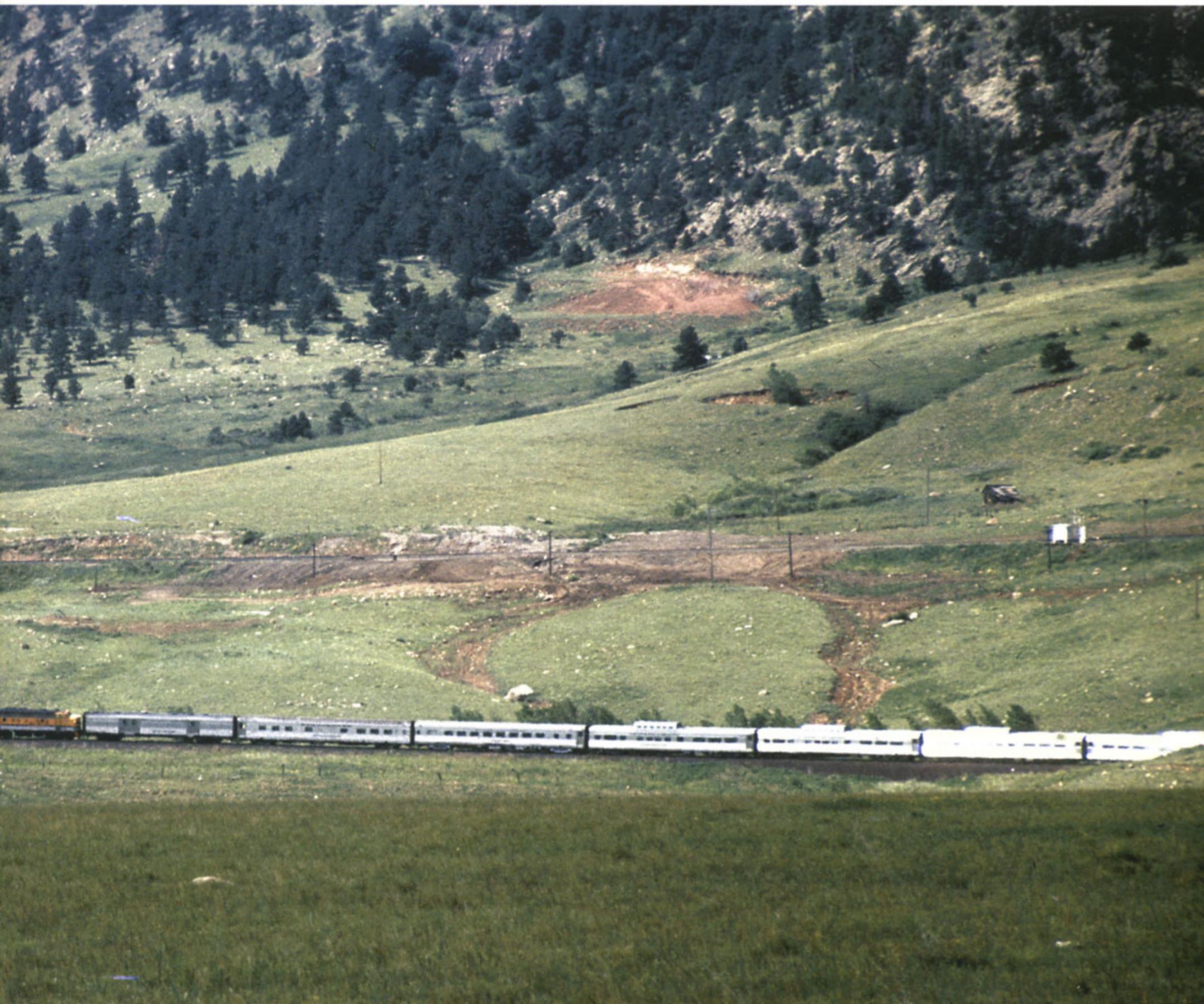


BELOW: It's July 5, 1969, and No. 17 is running about 45 minutes late out of Denver as it climbs into the Front Range of the Rocky Mountains along D&RGW's old Denver & Salt Lake line—the Moffat Tunnel Route. The gleaming domeliner is swinging around "Big Ten" loops south of Boulder to gain elevation in a confined area. A few minutes hence, the train will be at the upper-level track, where silver-painted signal-equipment cabins mark the start of Fireclay siding. A few miles farther north, the main line will turn west into the face of the Front Range to enter Boulder Canyon, following Boulder Creek toward the Moffat Tunnel. It's a bright Colorado morning, and passengers on board are just beginning a day-long feast of scenery as spectacular as any in the world. MIKE SCHAFER

At a glance, the Vista-Dome observations looked as if they had identical exteriors, with their gracefully tapered observation ends. However, the *Twins'* cars carried their domes forward of center and the *CZs* aft. The interiors, of course, were completely different. "The car that had everything," Budd called the *CZs* observation, with justifiable pride. In addition to three double bedrooms, there was a splendid drawing room, with sofa and two movable chairs, three berths, and a private shower—a true rarity, installed after the train's inaugural.

Under the standard Budd 24-seat dome was a cozy cocktail lounge with high windows, separated from the corridor by a wall of glass. A mural by Russell Patterson covered the bulkhead and exterior wall; the front of the small bar was a linoleum cut. The rear lounge had a writing desk and chair, nine inward-facing club chairs, and—best for viewing—a pair of rear-facing love seats back in the tapering boat-tail. These cars were given names that suggested the heavenward view—*Silver Sky*, *Silver Planet*, *Silver Crescent*, and *Silver Horizon*—or the elevated pampering of the viewer—*Silver Penthouse* and *Silver Solarium*.

The Vista-Dome buffet-dormitory was a new design. A 15-berth crew dormitory with shower and toilet was at the back of the car. Under the dome was a small galley and lounge, while the main level forward was devoted to a larger lounge with banquettes, tables, and booths.





ABOVE: On a summer day in 1969, the eastbound *California Zephyr* approaches 1,500-foot-deep Gore Canyon, perhaps the most spectacular of the many chasms cut by the Colorado River that would provide a future pathway for the CZ. LAUREL ZIMMERMANN

By late winter 1948–1949, when the last of these glorious cars were being delivered by Budd, the earlier arrivals were pulled from the *Exposition Flyer*; finally, all were assembled into six 11-car consists as intended by the designers and planners at Budd and Burlington. The inaugural was set for March 20, and three consists, one on each railroad, set out for a bit of pre-inaugural barnstorming. Each railroad used its own diner, Vista-Dome buffet-dormitory, and Vista-Dome sleeper-observation lounge, plus whatever coaches and sleepers were at hand when pulled from *Exposition Flyer* service.

The great ceremonial day came on March 19, with a CZ consist strung out along the Embarcadero in San Francisco—the train's only visit to that city. (In regular service, the CZ's western terminal, initially, was "Oakland Mole" where connection was made with trans-bay ferries to and from San Francisco). The Embarcadero Ferry Building provided a handsome backdrop, and sunshine flared through cloudy skies in time to wash Warner Brothers actress Eleanor Parker in crisp light as she broke a bottle of champagne over the feather-bedecked nose of Western Pacific No. 802, an Electro Motive Division F3. (F-units would power the CZ on WP throughout its career. On D&RGW, Alco PAs did the honors at first, giving way in time to F-units, which are better suited for mountain climbing than E-units. On CB&Q, the original locomotives were F3s, rare on the railroad, which quickly gave way to the succession of E-units that typically held down Burlington's passenger assignments.)

The next day the CZs were in motion—and they'd stay there for exactly 21 wonderful years, for most of that time undergoing surprisingly few changes. True, the initial plan was to segregate equipment by owning railroad—two Burlington trains, two WP, one Rio Grande, and one mixed—but shopping and other exigencies soon mingled the cars. No harm done there, however, and for many years the 11-car consist did

RIGHT: At Winter Park, Colorado, a noted ski area, No. 18 plunges into the West Portal of 6.21-mile long Moffat Tunnel, opened in 1928 by the Denver & Salt Lake to circumvent the 4-percent climb up "Giant's Ladder" to Rollins Pass. Inside the tunnel, the train will crest the Continental Divide at an altitude of 9,239 feet. RANDY IMFELD



MOFFAT
TUNNEL

1926

1927

SUNSET
LOWERS

BELOW: Bathed by the sun of an April morning in 1968, the westbound *California Zephyr* sweeps through Reno Junction, California, where WP's 33-mile branch down into Reno, Nevada, joins the main line. Number 17, which has a Rio Grande coach (from that railroad's recently discontinued *Prospector* streamliner) substituting for an absent dome coach, has spent the night racing across the deserts of Utah and Nevada. It has just crossed into the Golden State and shortly will enter the awe-inspiring Feather River Canyon. ROGER COOK

remain nearly inviolate, preserving the comfortable ratio between revenue places and dome, lounge, and diner seats—and keeping the public-address continuity unbroken. This was important, because one of the *Zephyrettes'* chief duties, along with taking dinner reservations, was to provide along-the-way commentary, supplementing the “Vista-Dome Views” brochures that were provided throughout the train's career.

Most changes that did occur were subtle. The first came in 1952 with the addition one 6-double bedroom 5-compartment sleeper per train, named for birds—*Silver Dove*, *Silver Quail*, *Silver Thrush*, *Silver Crane*, *Silver Swallow*, *Silver Gull*. That addition reflected the fast-growing preference among Pullman passengers for private rooms that would eventually doom the 16-section sleepers. Before that happened, however, the train would gain a seventh 16-section car, along with two more 10-6 sleepers and a seventh Vista-Dome sleeper-lounge observation, *Silver Lookout*. Lettered “*California Zephyr*” and like the existing cars in décor (and p.a. wiring), these were all owned by CB&Q; the *CZ's* long Chicago layover allowed them to be pooled in Chicago–Lincoln *Ak-Sar-Ben Zephyr* service, thus doing double duty.



RIGHT: A derailment on the Moffat Tunnel line has forced the westbound CZ out of Denver on July 19, 1969, to detour between Denver and Dotsero via the Royal Gorge Route and Tennessee Pass. That train is shown winding through Eagle Canyon near Redcliff, Colorado. Unbeknownst to the photographer, this book's author was aboard the train.

MIKE SCHAFER





Later in the decade, however, the section sleepers would disappear, returning in the early 1960s during times of high travel demand as flat-top 48-seat chair cars that ran at the head of the train. This was part of a “New Look for the *California Zephyr*” program, first discussed by the railroads in 1957, that eventually led to little but the sprucing up the cars’ interiors. The most notable innovation was the “Cable Car Room” conversion of the mid-train Vista-Dome buffet-dormitory. The lounge was redesigned to resemble the interior of the famous San Francisco cable cars, with wall-sized photomurals of city views, glass-boxed models of cable cars, and carpeting woven to suggest cobblestones and rails. The galley was upgraded so that light meals could be served, relieving peak-season pressure on the dining car.

One significant (and generally unremarked) negative change occurred in April 1960 when the *CZ* was combined between Omaha and Denver with the *Coloradoan*, a Chicago–Denver secondary train. This

ABOVE: At Salt Lake City on the night of July 7, 1969, the westbound *CZ* has just swapped its set of Rio Grande locomotives for WP’s, the latter wearing a later-day, simplified, featherless paint scheme. MIKE SCHAFER; LIGHTING ASSISTANCE BY JIM BOYD

RIGHT: At Western Pacific’s Oakland, California, station at Third and Washington streets on July 17, 1969, No. 18 boards passengers, with Third Street serving as an ersatz platform. Minutes earlier, the train began its journey at WP’s Oakland yard, where San Francisco passengers had been bussed to trainside.

MIKE SCHAFER



added a variety of head-end cars—RPOs, storage mail, and express, many of them heavyweights—to the *CZ*. That and numerous added local stops compromised train-handling and timekeeping, resulting in missed eastward connections in Chicago. In 1966 the RPOs vanished, and by 1968 all the head-end business and most of the additional stops were gone too.

In spite of this downgrading, ridership on the *CZ* held up remarkably well through the mid 1960s, though after that it began to slip—enough so that Western Pacific, the financially shakiest of the three partners, applied in 1966 to the Interstate Commerce Commission for permission to discontinue its portion of the run. Rio Grande asked the same in 1969. The ICC finally acceded, but not before calling the train “a unique national asset.”

The final Burlington-Rio Grande-Western Pacific *California Zephyrs* departed Chicago on March 20, 1970, and Oakland on March 21; westbound 17 thus departed and arrived its endpoints, 21 years to the day of the *CZ*'s inaugural runs. It was great in death as in life; many feel that the *CZ*'s loss was a major catalyst in the eventual creation of Amtrak—a carrier that would revive the train in 1983.

This properly valedictory vista photographed from the shoulder of U.S. Route 6 shows the westbound *Zephyr* as a shimmering, golden strand descending Soldier Summit in Utah, late on the evening of July 18, 1969. MIKE SCHAFER



ZENITH OF THE



Although it's August 16, 1970, almost a half year after the Burlington Northern merger—making this *Denver Zephyr* BN (rather than CB&Q) No. 1—it remains a glorious train, very much as delivered by Budd in 1956. This summer-heavy consist features three domes, sleepers, Slumbercoach, diner—nearly all the amenities that made the train a classic. The parlor-observation is *Silver Veranda*. ROBERT P. SCHMIDT



Burlington's 1950s Optimism

The enormous acclaim and success of the *California Zephyr* led the Burlington to plan expansion of its overnight Vista-Dome fleet. The final flowering would come in 1956 with a new *Denver Zephyr*, a splendid train that introduced the Slumbercoach—a budget sleeper—and a distinctive personality typified by the Chuck Wagon buffet-lounge and the Colorado Room, a stylish cocktail lounge under the parlor-observation's dome.

The year 1956 was a pivotal one in *Zephyr* history. To start with—and this in itself would have been enough to earn that designation—the *DZ's* would be the last *Zephyr* cars ever built. More notably, the *DZ* was destined to receive the dubious distinction of being American railroading's final all-new (head-end cars excluded) passenger train before the Amtrak era that began

RIGHT: The brochure for the new "twins" on Burlington's newly shortened Chicago-Kansas City route claimed "a travel triumph of beauty, comfort and convenience." KCZ equipment was featured against the red panel; the ARZs against the green panel. Schedules for both were shown.

MIKE SCHAFER COLLECTION

The
KANSAS CITY
Zephyr

The Parlor-Observation lounge offers deeply cushioned occasional chairs.

Chair seats are richly upholstered and colorfully decorated.

Both Parlor Car and Coach Passengers may enjoy the Vista-Domes.

This cheerful diner adds zest to your meal.

BURLINGTON OFFERS TWO LUXURIOUS VISTA-DOME TRAINS

between
CHICAGO - KANSAS CITY - ST. JOSEPH

Burlington's Zephyrs between Chicago and Kansas City-St. Joseph are distinctively designed for your comfort and convenience. The moment you step aboard, a sense of well-being suggests the comfort and luxury which awaits you. Gay, colorful interiors add a cheerful note to the sleek modern design. Throughout these trains you find air conditioning to perfection; humidity and temperature control adjustable to the season and weather. Double width, mist and frost-proof windows with sills at elbow height . . . Venetian blinds . . . carpeted floors . . . fluorescent lighting . . . adjustable leg and

foot rests in coaches—all the comforts of home designed to make your hours enroute so enjoyable that you will be reluctant to leave at journey's end. Coach seats are not reserved. The most distinctive of the many innovations are the spacious Vista-Domes in the Parlor-Observation car and Chair Coach on the Kansas City Zephyr and the Buffet-Lounge car on the American Royal Zephyr. Each of these Domes has 24 deep-cushioned seats, enclosed with non-glare, heat-resistant safety glass. Here you may relax and enjoy unobstructed views of the passing countryside.

WESTBOUND		FAST DAILY SCHEDULES		EASTBOUND	
American Royal Zephyr	Kansas City Zephyr			Kansas City Zephyr	American Royal Zephyr
10:00 PM	12:30 PM	lv Chicago.....Ar		8:00 PM	7:30 AM
A10:15 PM	.....	lv La Grange, La Grange Rd. Ar		8:38 PM	07:09 AM
10:35 PM	1:07 PM	lv Aurora.....Ar		C7:15 PM	6:40 AM
12:40 AM	2:58 PM	lv Galesburg.....Ar		5:30 PM	4:40 AM
3:25 AM	4:55 PM	lv Quincy (West Station).....lv		3:45 PM	2:20 AM
4:48 AM	5:58 PM	lv Macon.....lv		2:32 PM	12:38 AM
5:28 AM	6:40 PM	Ar Brookfield.....lv		1:57 PM	11:55 PM
7:30 AM	8:30 PM	Ar Kansas City.....lv		12:15 PM	10:00 PM
8:20 AM	*9:45 PM	Ar St. Joseph.....lv		*10:50 AM	8:30 PM

A—Stops to receive revenue passengers for Missouri River points or beyond when notified at Chicago.
B—Stops to let off revenue passengers from west of Aurora.
C—Stops to let off revenue passengers from Quincy or beyond.
D—Stops to let off revenue passengers from Missouri River points or beyond.
*Connecting service between Brookfield and St. Joseph.

in 1971. The arrival of the Vista-Dome *Denver Zephyr* would free up the 1936 consists to take over the *Texas Zephyr* run, upgrading that train's equipment. Arguably, then, the new *DZ* was the high-water mark of *Zephyr* service, with more *Zephyr* cars running than ever before—or ever again. On the other hand, the first planned withdrawal of *Zephyr* equipment had occurred earlier in 1956 when, in April of that year, shovel-nose trainset No. 9902 had been dismantled. (That former *Twin's* twin, 9901, had been retired a dozen years earlier after being seriously damaged by fire.) From then on, *Zephyr* news was more likely to be about retrenchment than expansion.

But before the new *DZs* arrived on the property, one new and one upgraded Chicago-Kansas City train as well as a Chicago-Omaha-Lincoln overnight train received *Zephyr* status. All three were inaugurated on February 1, 1953. The Chicago-Kansas City service improvement was catalyzed by the opening late the previous October of an important new piece of the CB&Q, the \$16-million Centennial Cut-Off, or "Kansas City Short-Cut." Previously, the CB&Q's route to Kansas City from Chicago (completed as the Hannibal & St. Joseph between its namesake cities in 1859 and extended subsequently) had headed due west from Brookfield, Missouri, to Cameron Junction (en route to St. Joe), then south to Kansas City. By joining pieces of two branch lines with 49 miles of new railroad, essentially creating the hypotenuse of a triangle with the old lines being the sides, the Burlington created a route to Kansas City that was 22 miles shorter. Length was just a small part of the advantage, however. The new line was more level (no grade over 0.8 percent), far straighter (no curve of over one degree, compared with 131 such curves on the old line), and better built, with 112-pound rail. The net result: While passenger trains took three hours and 35 minutes from Brookfield to Kansas City on the old route via Cameron Junction, the *Zephyrs* would make the same run via the Cut-Off in one hour and 40 minutes—less than half the time, a saving of nearly two hours.

So that was the speedway. The *Zephyrs* that would ply it were the *Kansas City Zephyr*, an all-new daylight train, and the overnight *American Royal Zephyr*, the existing *American Royal* with replacement lightweight cars. Both trains would carry Vista-Domes: the *KCZ* two and the *ARZ* one

The *Kansas City Zephyr* was the posher train, on the strength of its 48-seat dining cars *Silver Inn* and *Silver Manor* (like the *CZs* diners, and the *Twin Zephyrs*) and Vista-Dome parlor-observations *Silver Tower* and *Silver Terrace*. This pair set a new direction for CB&Q "obs" cars in having blunt observation ends, not the gracefully tapered "boat-tails" that had characterized all previous *Zephyrs* through the *CZ*. In accommodations,

Luxurious Modern Thrilling

Burlington's

VISTA-DOME TRAINS

THE KANSAS CITY ZEPHYR

THE AMERICAN ROYAL ZEPHYR

DAILY BETWEEN

CHICAGO

KANSAS CITY • ST. JOSEPH



The
AMERICAN ROYAL
Zephyr

Berths provide single occupancy accommodations for overnight travelers.



Berths in the semi-private sections are revolutions in comfort.



Berths are spacious, comfortable and luxurious.



Relax in a reclining coach seat—adjustable leg rests.



The *Kansas City Zephyr* that swung past the photographer at Quincy, Illinois, not long after its 1953 inaugural carries the consist intended by the planners. Passenger-version F3s that originally had been intended for the *California Zephyr* head up this day's run. The *KCZ* never lived up to expectations, and before long some of its rolling stock was shuffled off to other services, notably the *Twin Zephyrs*. *BOTH PHOTOS, PHILIP A. WEIBLER*



ABOVE: On this late-summer day in 1958, the *Kansas City Zephyr* running west through Sandwich, Illinois, is a mirror image of its intended consist arrangement. Behind the heavyweight RPO is a backward-running Vista-Dome parlor-observation (a *Twin Zephyr* car, actually), diner, Vista-Dome coach-dormitory-buffet lounge, and two heavyweight coaches. The dome parlor-observation car was being operated backward to facilitate the subtraction of extra, Chicago–West Quincy chair cars at West Quincy, Missouri. JIM NEUBAUER

however, these *KCZ* cars were similar to the *Twin Zephyrs*' 1947 observations, with restrooms under the domes, a 20-seat parlor section aft, and a seven-seat parlor section and five-passenger drawing room forward. Following the practice set on the *Twin Zephyrs* and *CZ*, historical murals adorned the bulkheads.

The *KCZ*'s second Vista-Dome, *Silver Garden* or *Silver Patio*, was somewhat akin to the *CZ*'s dormitory-buffet lounge cars, providing light meal and beverage service and sleeping space for the crew. The *KCZ*'s cars also contained coach seating for 24 (since the crew dorm could be very small, and there was no need for the steward's and *Zephyrette*'s accommodations included in the *CZ* cars). The main-level coffee-shop section provided seating for 17 at booths and curved banquettes. Under the dome was a six-seat lounge and the buffet from which breakfasts, snacks, and beverages appeared. The forward end of the car held the crew dormitory and the coach seats.

Rounding out the consists were baggage-mail cars *Silver Pouch* and *Silver Mail* (the latter a pre-war pool car), a pair of 52-seat chair cars, initially *Silver Spring* and *Silver Cascade* (also from that pool, these cars augmented the regular consist on Fridays and Sundays), and two of four new 50-seat chair cars, one per train: *Silver Shield*, *Silver Shaft*, *Silver Sword*, or *Silver Spear*. (The other pair was assigned to the overnight train between Chicago and St. Joseph.)

The westbound *Kansas City Zephyr*, No. 35, left Chicago at 12:30 p.m. and arrived Kansas City at 8:45 p.m., giving passengers plenty of time for both lunch and a leisurely dinner in the train's elegant dining car. From Brookfield, there was connecting service to St. Joseph (provided initially by the *Pioneer Zephyr* and *Mark Twain Zephyr* trainsets in reassigned service), arriving at 9:55 p.m. Eastbound, No. 36 left Kansas City at 12:01 p.m. and arrived in Chicago at 8 p.m. The connection from St. Joseph left at 1 p.m.

The *American Royal Zephyr*, Nos. 55 and 56, ran an essentially reciprocal schedule, and one identical in both directions, leaving either terminal at 10 p.m. and arriving their opposite endpoints at 7:55 a.m. These timings were nearly two hours more generous than that the *KCZ*'s. On an overnight corridor-type train, end-to-end speed usually isn't as critical as

Burlington's
VISTA-DOME *Zephyr*
 Tops in Travel between
CHICAGO and KANSAS CITY

Christening of the Kansas City and American Royal Zephyrs in Kansas City, January 31, 1953.

ABOVE: This brochure issued in 1954 includes a copy of a letter from J. J. Alms—then-General Passenger Traffic Manager of the Burlington—dated January 31, 1954, heralding the first anniversary of the *Zephyr* service between Chicago and Kansas City. The accommodations and amenities descriptions were coded to their respective trains. Unfortunately, the luxuries were inadequate to dislodge Santa Fe as the major passenger player on that route. MIKE SCHAFFER COLLECTION

195

JOSEPH



Reclining coach seats with adjustable leg rests invite relaxation. (KCZ-ARZ)



Chair cushions are richly upholstered and colorfully decorated. (KCZ-ARZ)



Vista-Dome Parlor-Observation-Lounge for luxurious day travel. (KCZ)



Vista-Dome Buffet-Lounge—for sipping, smoking, sight-seeing. (KCZ-ARZ)



Private rooms provide private room for overnight travel. (ARZ)



Bedrooms are spacious, and luxurious—here are two in a suite. (ARZ)



Distinctive dining car, serving famous Burlington Meals. (KCZ)

NOTE KCZ indicates Kansas City Zephyr equipment. ARZ indicates American Royal Zephyr equipment.

There's NO EXTRA FARE ON ANY Burlington TRAIN!



ABOVE: *Silver Garden* was one of the pair of Vista-Domes built for mid-train service on both the *Kansas City Zephyr* and *American Royal Zephyr*. The cars held 24 main-level coach seats, a small crew dormitory, and a buffet lounge. The Burlington streamliners never thrived on the Chicago-Kansas City route, so stiff was competition from Santa Fe's *Chiefs*, and by the late 1960s these cars had been moved to the overnight *Black Hawk* between Chicago and the Twin Cities. BURLINGTON ROUTE, KEVIN J. HOLLAND COLLECTION

BELOW: In this publicity photograph taken aboard one of the KCZ/ARZ's Vista-Dome dormitory-buffet lounge coaches, most of the models are in the midst of something: cup raised, glass poised, salt shaker in hand, descent from the dome interrupted. BURLINGTON ROUTE, WILLIAM F. HOWES COLLECTION



convenient arrival and departure times. In this case, the 7:55 a.m. terminal arrival times were certainly more travel-friendly than 5:55 a.m. In addition, Nos. 55 and 56 had head-end work at some stations, something that 35 and 36 did not.

Because of the schedules' brevity and timings, cars could be used on both trains, and the railroad did just that with the Vista-Dome chair-dormitory-buffet lounge and the 50-seat coach. With the westbound *Kansas City Zephyr's* 8:45 p.m. arrival time at Kansas City, for example, these two cars could be turned back on the eastbound *American Royal Zephyr* the same night. Since the *ARZ* left at 10 p.m. and thus missed both lunch and dinner times, the *KCZ's* diner was superfluous and not included; breakfast was adequately provided in *Silver Garden* and *Silver Patio*. (These cars were useful to both trains, for partially different reasons. The dome was better for the daylight *KCZ*, and the small crew dorm needed only by the *ARZ*.)

As an overnight train, the *American Royal Zephyr* naturally carried sleepers—two Chicago–Kansas City cars and a Chicago–St. Joseph car moving in a connecting train from Brookfield, which arrived in St. Joe at 8:45 a.m. and left at 8:30 p.m. These cars, built

BELOW: In 1968, *Silver Terrace* retained on the bulkhead of its forward parlor section a mural depicting Burlington's introduction of the world's first mail-sorting car, the event that was the genesis of Railway Post Office service. ROBERT P. SCHMIDT

BELOW: No. 35, the westbound-*Kansas City Zephyr*, pauses at Galesburg in the summer of 1965. In front of Vista-Dome parlor-observation *Silver Tower* (probably serving as a Chicago–West Quincy chair car rather than a parlor) are three Pullman-Standard ex-“400” coaches purchased from Chicago & North Western by Burlington in 1963. The *Nebraska Zephyr* is barely visible to the right. ALAN BRADLEY





for this service, were 10-6s *Silver Dale* and *Silver Slope* (operating Chicago–Kansas City) and 6-section 6-roomette 4-double bedroom *Silver Flower*, *Silver Hyacinth*, *Silver Iris*, and *Silver Tulip* (one pair operating Chicago–Kansas City, the other Chicago–St. Joe). Identical cars were ordered at the same time for the overnight Chicago–Twin Cities *Black Hawk*. There was also a through coach, one of four new 50-seat chair cars, to and from St. Joseph.

The 1953 *Ak-Sar-Ben Zephyr* ushered in what would arguably be the pinnacle of overnight streamliner service between Chicago and Omaha and certainly Lincoln, Nebraska, the state capital—a city that was pretty much a captive market for the Burlington. This was accomplished with an interesting twist involving the *California Zephyr*.

ABOVE: This modest, idiosyncratic little train is actually a leg of the *Kansas City Zephyr* operation: No. 4, the *KCZ* connection, seen here leaving St. Joseph for Brookfield on February 15, 1958. Behind Electro-Motive motorcar 9767 is *Silver Pendulum*, a rare “pendulum coach” built by Pacific Railway Equipment Company and added to the Burlington roster in 1942. The car featured the pendulum principle of suspension, allowing for higher-speed travel with less side-thrust on curves. MONTY POWELL, ROBERT P. SCHMIDT COLLECTION



LEFT: Both the *American Royal* and *Ak-Sar-Ben* had pre-*Zephyr* lives. Here the pair waits between assignments at Burlington's 14th Street yard in Chicago. The *Ak-Sar-Ben* took its name from an Omaha philanthropic organization, the Knights of the Ak-Sar-Ben, a mythical monarchy that is, of course, Nebraska spelled backward. CAL'S CLASSICS

The 1953 launch was actually the second incarnation of the *Ak-Sar-Ben Zephyr* name, which from 1940 to 1947 had been applied to an eastbound-only, mostly lightweight day run between Lincoln and Chicago. (Westbound between those points, this streamliner served as the *Advance [Exposition] Flyer*.) The “new,” overnight *Ak-Sar-Ben Zephyr* of 1953 initially comprised a combination of older lightweight *Zephyr* equipment (mostly coaches) built in 1939–1940 and five cars built new in 1952 for what was known as “co-ordinated *Ak-Sar-Ben Zephyr* and *California Zephyr Service*”: two 10-6 sleepers, *Silver Crag* and *Silver Chasm*; 16-section sleeper *Silver Cedar*; diner *Silver Cuisine*; and Vista-Dome sleeper-lounge observation *Silver Lookout*. In reality, these five cars were simply dispersed into the large pool of equipment used to protect the daily Chicago–Oakland schedules of the CZ, but their addition allowed the railroad to re-equip both the west- and eastbound overnight Chicago–Lincoln runs of Q’s longstanding overnight flagship, the *Ak-Sar-Ben*, through judicious equipment rotation. The advertised consist for the new overnigher called for an unspecified number of chair coaches, two 10-6 sleepers, one 16-section sleeper, and a 3-bedroom 1-drawing-room lounge car (which was in fact a CZ Vista-Dome sleeper-lounge observation car) and a “diner-lounge” (in reality a full diner with selected tables set aside for beverage service only).

The rotation worked like this. After an eastbound CZ arrived Chicago at 1:30 p.m. (1953 schedules), the train’s diner, two of its 10-6 sleepers, the section sleeper, and the signature Vista-Dome sleeper-lounge observation car were pulled from the consist, turned, cleaned, and integrated with the head-end cars and coaches of that night’s westbound *Ak-Sar-Ben Zephyr*, due out of

On a June night in 1967, the combined *Ak-Sar-Ben Zephyr* and *American Royal Zephyr* stand on Track 26 in Chicago Union Station awaiting their 10:45 p.m. departure. The observation car is *Silver Star*, built in 1939 for the *General Pershing Zephyr*. Directly ahead of it is one of CB&Q’s two home-built domes. BOTH PHOTOS, BOB JOHNSTON





The Budd Company issued ads featuring Leslie Regan paintings to introduce its new streamliners—such as the *Kansas City Zephyr*, seen here with Vista-Dome parlor-observation *Silver Terrace*. KARL ZIMMERMANN COLLECTION

Lucky Travelers

● Kansas City and Chicago are big cities. A lot of people want to travel back and forth between them. The Burlington Railroad, always alert to serve the public in a first-class manner, asked us to build two more of the famous stainless steel Burlington Zephyrs.

These trains, sleek and swift and shining, complete with Vista-Dome cars and the very latest in decor and equipment, now go into daily service. Kansas City Zephyrs by day, American Royal Zephyrs by night.

Thus advances the tradition of superlative passenger service, begun with the Budd-originated Pioneer Zephyr two decades ago, continued with the Twin-Cities Zephyrs, the Denver Zephyrs, the California Zephyrs and scores of other trains on America's foremost railroads.

All Budd-built, all stainless steel, with the strength and safety that only this fabulous metal can give.

The Budd Company, Philadelphia, Detroit, Gary.

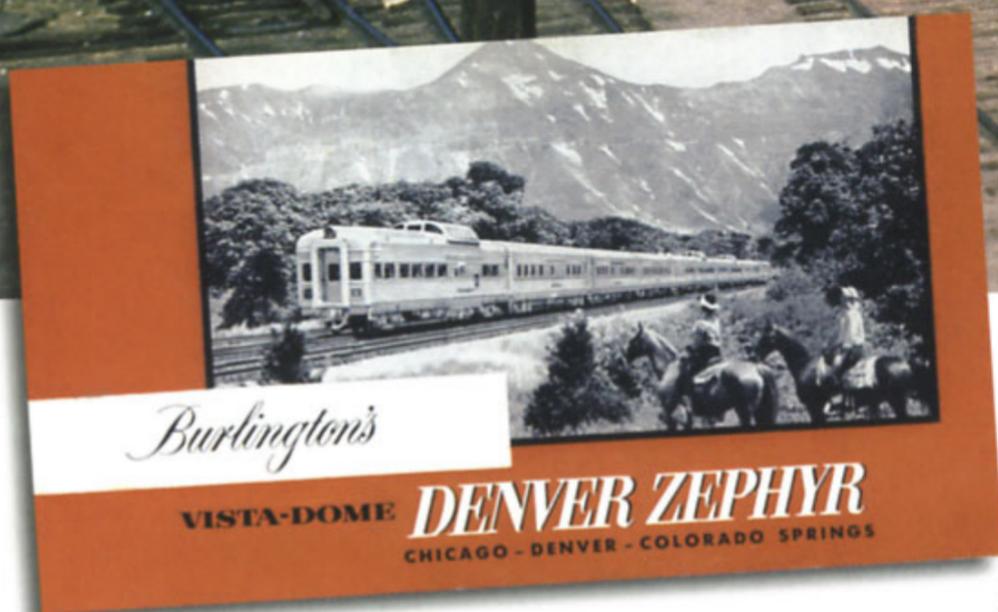
Budd

PIONEERS IN BETTER TRANSPORTATION

Chicago Union Station at 10:15 p.m. After an eastbound *Ak-Sar-Ben Zephyr's* 7:45 a.m. Chicago arrival, its diner, two 10-6s, section sleeper, and Vista-Dome sleeper-lounge observation car were separated from the train, cleaned, turned and integrated into the consist of that afternoon's westbound *CZ* consist, scheduled out of Chicago at 3:30 p.m. Theoretically, with the *CZ* schedule that was in place at this time, an eastbound arriving *CZ* could have been turned and cleaned in two hours and sent back out as the same day's westbound train, but this was unrealistic. Transcontinental trains—especially those handled jointly by cooperating carriers—aren't always known for impeccable timekeeping; further, more time was needed at the Chicago terminal for interior and exterior cleaning, turning, and



DZ interior captions.



routine car maintenance. Prior to the *Ak-Sar-Ben Zephyr* coordination plan, an entire *California Zephyr* consist laid over in Chicago, largely idle, for nearly 24 hours—not an ideal scenario

for optimum equipment utilization.

The new Chicago–Kansas City *Zephyrs* faced formidable—and eventually lethal—competition, mostly in the form of Santa Fe’s splendid fleet of streamliners—six in each direction—that raced over the 451 miles between Chicago and Kansas City in as little as 7 hours and 20 minutes. Santa Fe offered frequency (eight trains total, each way, in 1953), speed, domes, and an unparalleled reputation for quality service and luxury throughout its system. The Chicago–Omaha market was hardly a cakewalk either, with competition from Chicago & North Western–Union Pacific’s array of transcons and the *City of Denver*, Milwaukee Road’s *Midwest Hiawatha* and overnight *Arrow*, and Rock Island’s *Corn Belt Rocket* and *Rocky Mountain Rocket*—the latter also serving Lincoln.

A little more than three and a half years after the *Kansas City Zephyr*, *American Royal Zephyr*, and *Ak-Sar-Ben Zephyr* entered service, came the new version of the *Denver Zephyr*, inaugurated on October 28, 1956. Logically enough, this train borrowed and refined aspects of earlier *Zephyr* service, while innovating in some important ways. Most significant was the introduction of the Slumbercoach: *Silver Slumber*, *Silver Siesta*, *Silver Rest*, and *Silver Repose*. With 24 single rooms and eight double, these cars provided budget accommodations for 40 travelers in compact, Spartan rooms with private toilet and washbasin. Though the cars were operated by Pullman and staffed with Pullman porters, they required only a coach

Though selected cars from the *Denver Zephyr* ran through from Denver to Colorado Springs on a daily basis, an entire *DZ* consist visited there only once—for display on October 22, 1956, six days before the train’s inauguration. BILL ELEY COLLECTION VIA ROBERT P. SCHMIDT; BROCHURE, MIKE SCHAFER COLLECTION



(not first-class) ticket for travel, plus a \$7.50 supplement for a single room and \$13.50 for a double. The single rooms were “duplexed”: staggered, with every other one two steps up from the aisle. Though no-frills, these cars provided a bed and privacy at modest cost and proved very popular.

Another innovation of the 1956 *DZ* was through service beyond Denver to Colorado Springs, with four cars carried in the consist of the Rio Grande’s Denver–Salt Lake City *Royal Gorge*, which ran along the pre-Moffat Tunnel/Dotsero Cutoff main line via the Royal Gorge and Tennessee Pass. One Slumbercoach, along with a chair car, 10-roomette 6-double bedroom sleeper, and Vista-Dome dormitory-buffet lounge ran these extra 75 miles to Colorado Springs.

In addition to Slumbercoaches and through cars, what set the *Denver Zephyr* apart from its predecessors was a nicely articulated sense of Colorado and Western culture in its décor and ornamentation. In the sleepers—10-roomette 6-double bedroom *Silver Terrain*, *Silver Hollow*, *Silver Channel*, *Silver Plateau*, *Silver Boulder*, *Silver Ridge*, *Silver Vale*, *Silver Basin*, and 6-double bedroom 5-compartment *Silver Pelican* and *Silver Swan* (named for birds, as were the 1952 *CZ* cars of that configuration)—hung paintings of Colorado mountain wildflowers: columbine, lupine, fringed gentian, wild rose, and others. (These paintings were reproduced on the dining car’s dinner menus, and passengers had but to ask the steward for a complementary set of prints.)

Even the colors throughout the train were meant to be indigenous. According to pre-inaugural publicity, “the deep blues of Colorado lakes and skies, the cool greens of her forests, the rich warm shades of her rocks and soil are all reflected in the interior color arrangements.” These were the details of dining-car decor, as an example: “The ceilings of the main buffet section are a vivid red in compatible color with the rose-blue-brown feather pattern of the carpeting. Drapes are charcoal with the venetian blinds and other accessories a light turtle egg. The dining chairs are upholstered



Flanked by Denver Mayor Ben Stapleton and his wife, Burlington president Harry C. Murphy and—holding a D-bar-Z branding iron—equestrian Polly Schaffer, a freshman at Colorado A&M, see to it that the *Denver Zephyr* is properly branded at its inaugural. *BURLINGTON NORTHERN SANTA FE*



Nobody, children or adults, looks particularly happy aboard this *Denver Zephyr* Vista-Dome parlor-observation car. However, this publicity photo reveals an anomaly among Budd domes: a dome section equipped with bench-type seating, similar to the angled seats introduced a year earlier on a fleet of dome cars that American Car & Foundry built for the Union Pacific. *BURLINGTON NORTHERN SANTA FE*

RIGHT: This family aboard the *Denver Zephyr* has two double bedrooms opened up en suite, producing a spacious accommodation for two adults and two children. *BURLINGTON NORTHERN SANTA FE*



in rose-copper leather with blue leather piping." In layout—booths at both ends of the room partitioned off by decorated glass panels—and all particulars other than décor, these cars (*Silver Tureen* and *Silver Chef*) were essentially identical to the diners built for the immediately previous *Zephyrs*.

More distinctive was the venue for less formal meals: the Chuck Wagon car, *Silver Kettle* or *Silver Cup*. Unique in décor, they also improved on the *CZ* and *KCZIARZ* Vista-Dome buffet lounges by providing a lunch-counter section seating a dozen for increased overall capacity and a kitchen large enough for preparation of full meals. In this car the Western and Colorado themes received their fullest and most playful expression. The "DZ" brand was everywhere: on the top of the lunch counter and tables, on the clever die-cut menus, on the distinctive china exclusive to the car, on paper napkins and sugar packets, and on souvenir glass ashtrays.

In the 19-seat coffee shop, eight attractive woodcarvings by Colorado sculptor Lorn Wallace told the story of roundup, chuck-wagon life. The smaller four, each about two feet tall, were located on the panels between the windows. The scope of the works is suggested by the titles: "Night Herd," "Potato Peeler," "Camp Music," "Come an' Get It," "Nature's Chuck Wagon," "Branding Time," "Chuck Wagon," and "Eating time." Two large murals by Mary Lawser (who had done the bulkhead art for the *CZ*) furthered the chuck-wagon story. In keeping with the rustic Western theme, light fixtures and the lunch counter's back-bar framing were copper. In addition to the traditional 24-seat dome, the car also contained a large crew dormitory.

As was consistently the case with the *Zephyrs* (and most other trains ever built, actually), the observation cars—*Silver Chateau* and *Silver*

The *DZ* was one of only a handful of trains nationwide to offer the economy of the Slumbercoach. The "coach" in the name implied economy, but these cars—also known as the "Sleepercoach" or "Siestacoach" on other carriers—were in fact sleeping cars with ultra compact room arrangements.
KEVIN J. HOLLAND
COLLECTION

Mural and menu both convey a Western round-up flavor aboard the *DZ's Chuck Wagon*. Note the brands on the tabletops. *ROBERT P. SCHMIDT; MENU, ROBERT P. SCHMIDT COLLECTION*



BELOW: The main dining section of the 1956 *DZ* featured tables for two as well as the traditional foursomes. Separated by etched-glass partitions, booth seating was available at either end of the main dining room. This view is from 1969.
ROBERT P. SCHMIDT



LOWER RIGHT: The lounge section of the DZ's parlor-lounge observation car is shown in 1969 from the dome stairway looking aft. By this time, the obs car occasionally suffered the indignity of being positioned within the train rather than at the end, thus having the rearward view obscured—in this case by sleeper *Silver Ravine*. ROBERT P. SCHMIDT

Veranda—were the highlight of the DZ consist. Like the *Kansas City Zephyr* observations, they were blunt-ended; they differed from those cars, however, in dedicating the prime, rear-most space to a lounge for all first-class passengers, rather than assigned revenue parlor-car seats. (There were 11 of those at the front of the car, in a section featuring another Lawser mural, along with a five-passenger drawing room with private toilet.) Under the Vista-Dome was the Colorado Room, a snug space for cocktails with booths for two and four and seating on a curved banquette. The room's decorative highlight was a mural of the Rockies' Front Range by Russell Paterson. Like the dining-car's dinner menu, the room's beverage guide featured the sleeping cars' wildflower paintings.

BELOW: The eastbound *Denver Zephyr*, train 10, shares the platforms of Denver Union Station with its arch-rival, Union Pacific's *City of Denver*, on June 23, 1964. JOHN SWAJKART, ROBERT P. SCHMIDT COLLECTION





The *Denver Zephyr's* Vista-Dome parlor-observation car featured the Colorado Room under the dome, as shown here. With its Western murals, the Colorado Room was a signature feature of the first-class section of the train. ROBERT P. SCHMIDT

The *DZ* carried three chair cars—two 50-seat flat-tops (drawn from a pool of five cars for the two consists, *Silver Rein*, *Silver Halter*, *Silver Bit*, *Silver Blanket*, and *Silver Cinch*) and one 46-seat Vista-Dome car, *Silver Buckle* or *Silver Brand*.

The westbound *Denver Zephyr*, still holding the prestige designation No. 1, left Chicago at 5 p.m. and arrived in Denver at 8:30 a.m. The Colorado Springs cars headed south, skirting the Front Range, at 9 a.m. as part of the *Royal Gorge*, for a 10:45 a.m. arrival. Eastbound No. 10 left Denver at 4 p.m. and arrived Chicago at 9 a.m. The *Royal Gorge* connection left Colorado Springs at 1:10 p.m. for a 2:50 p.m. Denver arrival. (The hour and ten minute buffer in Denver in this direction compared to the 30 minutes allowed for switching westbound was no doubt to accommodate the possibility of a late-running *Royal Gorge*. If that train was too late entirely, the through *DZ* cars were operated from Colorado Springs as a separate movement.)

So thus it was, with this fine Vista-Dome *DZ*, that the *Zephyr* evolution came to an end. In retrospect, its 22-year time line seems if anything short, so many great trains did it produce. Now all that lay ahead for this fleet of silver trains were too-few years of stability, to be followed—eventually and inevitably—by a period of decline and dissolution.



Toward a Silver Sunset

Ralph Budd was the nurturer of *Zephyrs*, a true believer in what they could accomplish. From the original *Zephyr* of 1934 through the *California Zephyr* of 1949, he was instigator, planner, supporter, cheerleader. Even after his retirement in August 1949, the pro-*Zephyr* energy that he generated rolled on, for his successor, Harry C. Murphy, was also his disciple.

An operating man, Murphy had *Zephyr* roots that ran deep. In his role as system superintendent of safety, he had been aboard the first *Zephyr's* famous dawn-to-dusk non-stop run in 1934. And though he supervised the retrenchment of some local passenger services during his tenure, and oversaw some train combinings and equipment downgrades of long-distance services, he by and large kept the faith when it came



PRESERVATION



Burlington Northern's northbound *Morning Zephyr* at Savanna, Illinois, in the summer of 1970 illustrates how cost-cutting had become the "Way of the Zephyrs" by this time. The train's original baggage-tavern car had become the sole source of food and beverage service. First-class parlor service had been eliminated, as had half of the original allotment of Vista-Dome coaches. MIKE SCHAFER

RIGHT: In 1968, the *Kansas City Zephyr* was truncated to a new life as a nameless Chicago–Quincy local but was still combined with the *Nebraska Zephyr* between Chicago and Galesburg. In this October 1968 scene near Naperville in suburban Chicago, the combined trains have more mail and express cars than revenue passenger equipment. By this time, the *NZ* had lost its 1936 articulated equipment but gained—on this day's run at least—a dome coach (in this case one of Burlington's home-built versions).

ROBERT P. SCHMIDT

to the silver streamliners, approving the substantial investment needed to put on the rails the *Kansas City Zephyr* and *American Royal Zephyr* (trains that as it turned out never were very successful), the *Ak-Sar-Ben Zephyr*, and later the new *Denver Zephyr*.

On the other hand, prescient as he may have been, and justified by subsequent trends and events, Louis W. Menk was considered by some to be the assassin. When he took the reins of the Burlington from Murphy on October 1, 1965, fresh from decimating Frisco's passenger service

as president and chairman of the board, the guns turned irrevocably on the *Zephyrs*. No fan of passenger trains in any guise, Menk from the beginning saw them (quite accurately, as it turned out) as a drain on resources and—flying in the face of then-conventional wisdom—useless as a marketing and public relations tool, since riders were typically not shippers. "I made no secret that I wasn't a railfan," Menk later told Fred Frailey, who reported the conversation in his excellent book *Twilight of the Great Trains*.

Undeniably an outstanding railroad executive and much admired in the industry, Menk made up his mind early about passenger trains. He brought in a consultant, William Carpenter, to study the railroad's passenger services, which some still-pro-passenger Burlington officials saw, reasonably enough, as a self-fulfilling prophecy. Menk moved Herbert Wallace, number two man in the Passenger Department and the *Zephyrs'* most articulate and energetic supporter, to the freight side, leading to his resignation.

The aggressive train-off campaign that Carpenter favored was delayed, however, as Menk left the Burlington after exactly one year at the helm (and with the railroad in much better financial shape than he found it) to head up the Northern Pacific, which, with Great Northern, controlled CB&Q. This positioned him for leadership when the long-proposed Burlington Northern merger finally occurred on March 2, 1970. Menk became BN's chairman and CEO—and in this role finished the job of diminishing and downgrading the *Zephyrs*—to the extent that changing circumstances hadn't taken care of it already—that he'd begun five years earlier. William J. Quinn, who came from heading the Milwaukee Road to take over from Menk at Burlington, lacked the outgoing leader's sense of mission when it came to pursuing train-offs. (Not only that, Carpenter's own studies for the year 1964 had shown that, on an avoidable-cost basis, CB&Q's intercity passenger trains made \$4.5 million, and that even the few money-losing *Zephyrs* lost very little. Biggest winner was the *Denver Zephyr*, which netted nearly \$1.7 million.)

But with or without Menk directly in charge, the handwriting had been on the wall for some time, and one by one the *Zephyrs* began to fall—some to combinings with other trains, some to downgrading, some to truncating, others to outright discontinuance. Train consolidation, at least during off-travel periods, had affected the *Twin Zephyrs* since the 1950s. December 1960 timetables, for example, show the northbound *Afternoon Zephyr* being combined out of Chicago with the *Empire Builder* as far as St. Paul. Southbound, the *Afternoon Zephyr* was combined with Great Northern's Seattle–Chicago *Western Star* east of St. Paul. Varied combining arrangements would continue on the Chicago–Twin Cities route right to the end in 1971. Similarly, the *Kansas City Zephyr* had been combined east of Galesburg with the *Nebraska Zephyr* off and on since the 1950s and permanently since 1962.





In 1964, the operating format of the *Twin Cities Zephyrs* changed markedly because of schedule alterations, requiring the *Twin Zephyr* equipment sets to be bolstered with extra cars. Previously, train 21, the northbound *Morning Zephyr* out of Chicago, arrived Minneapolis at 3:50 p.m. whereupon it was turned and cleaned to become train 24, the southbound *Afternoon Zephyr* out of Minneapolis at 4:30 p.m. However, with 21's new Minneapolis arrival time set at 2:50 p.m. and No. 24's departure at 2:55 p.m., there was not enough time to turn 21 to become 24 the same day. Under the new arrangement, 21 dropped its diner, selected coaches, and the baggage-buffet-lounge at St. Paul, where there would be enough time to turn them back on the same day's No. 24. Train 21 then continued to Minneapolis with a dome parlor-observation car and Minneapolis coaches, all of which would overnight there to become the next day's 24. Meanwhile, an extra dome parlor-observation car and coaches departed Minneapolis as 24, picking up the diner, St. Paul coaches, and baggage-buffet-lounge at

St. Paul that that day's 21 had dropped. The extra dome parlor-observation and coaches required for this new exercise generally came from the *Kansas City Zephyr*, an underachiever that Burlington management chose to make the sacrificial lamb in terms of its 1953 intended consist. The *KCZ* then got whatever 14th Street Coach Yard in Chicago could pull together as a substitute, which often was a pre-war diner-parlor-lounge observation car.

This new complex protocol allowed Burlington to operate 21 and 24 on any given day with one diner and one dining-car crew (crews having become an especially significant cost in train operation) and yet give train 24 a more marketable, earlier southbound run. However, to facilitate the subtracting/adding of cars at St. Paul, 21 now left Chicago with the dome-parlor-obs facing backward at the forward end of the train behind the baggage car. Aesthetics had given way to practicality, even under Burlington's Murphy administration.

Alas, the *KCZ* was one of the first trains to come into the Menk administration's crosshairs, since it never had performed up to expectations. On April 10, 1968, it was gone altogether as a through service, having been truncated at West Quincy, Missouri. As with many another train in the later half of the 1960s, loss of lucrative mail contracts was a major factor in its demise. The *Nebraska Zephyr* itself was crippled that way, though it survived over part of its original route, but sans its ex-*Twin Zephyr* "Train of the Gods" and "Train of the Goddesses" articulated sets. Meanwhile, the overnight *Ak-Sar-Ben Zephyr* lost its sleepers.

In April 1967, the by-then-nameless and coach-only St. Louis-Twin Cities overnighter, formerly the *Zephyr-Rocket*, was discontinued. Later that year, the eastbound *Morning Zephyr* and westbound *Afternoon Zephyr* were combined with NP's *North Coast Limited* and GN's *Empire Builder* (those two transcons already having been combined on the Chicago-Twin Cities portion of their runs). After various shrinkages, combinations, and downgradings, the *Texas Zephyr* died definitively on September 10, 1967—a bad year for the *Zephyrs*. (The other Texas-based *Zephyr*, the *Sam Houston*, had been axed the previous year.)

By 1967, of course, the very public and very important tug-of-war over the *California Zephyr* was well underway. It had begun in September 1966 when the Western Pacific asked the Interstate Commerce Commission for permission to discontinue its leg of the *CZ*. Myron M. Christy, WP's president, claimed losses ranging from \$816,700 to almost \$2.8 million, depending on the accounting procedure used. The ICC's "avoidable

ABOVE: The combining between selected points of trains that had similar schedules was an early way to keep train-operating costs at bay, particularly crew wages—in postwar times, the most expensive aspect of a train's operation, freight or passenger. Train consolidations were particularly plentiful between Chicago and the Twin Cities. In the summer of 1970, the combined *Empire Builder* and *Morning Zephyr* eases away from St. Paul Union Depot. Only the first two passenger-carrying cars—a Vista-Dome coach and a straight coach—represent this day's *Morning Zephyr*. However, passengers aboard this emaciated *Twin Zephyr* could use the *Empire Builder's* dining, lounge, and first-class facilities. W. BRENNAN, ROBERT P. SCHMIDT COLLECTION



ABOVE: CB&Q five-bedroom-lounge observation car 483, built in 1948 as part of Burlington's contribution to Northern Pacific's *North Coast Limited*, is at the rear of a combined *Afternoon Zephyr-Western Star* at Aurora, Illinois, in August 1968. The car ahead is one of the former *KCZ Vista-Dome* parlor-observation cars; beyond is a heavyweight coach and three *Vista-Dome* coaches. ROBERT P. SCHMIDT

CZ's equipment was aging and would need replacement soon.

"We believe that our experience of chronic and worsening losses despite our long-time best efforts to overcome them," he said, "imposes on the public an obligation to permit us to discontinue a service which is uneconomic, which is beyond our ability to make viable, and is an unreasonable burden on our ability to otherwise serve the public well." The ICC disagreed, first ordering an extension of service while it deliberated; then, in February 1967, it denied the railroad's request, telling it to run the train another year and suggesting ways to improve the income statement. When the year was up, WP tried again, and again was rebuffed, with the ICC citing the railroad's lack of promotion (desperately needed to combat the bad publicity inherent in the discontinuance notices) and other factors.

But subsequent print and radio advertising, some of it quite clever, proved too little too late. By 1968, *CZ* load factors that had held up so remarkably had finally begun to dive; in 1965 there had been 164,502 riders, in 1968 just 122,228. Losses mounted, and service standards declined: Lateness was the norm, equipment was allowed to deteriorate, and enroute car-washing at Denver and Portola were eliminated. When, on May 12, 1969, D&RGW joined its voice to WP's and asked to discontinue its portion of the run, it seemed that the end was nearing. In February 1970—on Friday the 13th—WP got its wish, but not the Rio Grande, at least not wholly. The ICC said WP was off the hook, while D&RGW and Southern Pacific (whose request to discontinue the San Francisco–Ogden, Utah, leg of its *City of San Francisco* was considered in tandem with the WP's and D&RGW's) could drop train frequencies from daily to tri-weekly.

On March 23, 1970, when No. 18 sighed to a stop on track 24 of Chicago Union Station, the *California Zephyr* of matched, dedicated

costs" formula suggested a loss of \$859,119. The variety and range of these numbers indicate the difficulty in assessing just what burden passenger operations did place on a railroad. In the WP's case, Christy thought the burden was untenably large, especially considering that (in his view) the

ABOVE: A domeless *Morning Zephyr* would have been unthinkable a few years earlier, but in this August 1967 scene, train 21 is indeed all "flat." However, the reason is well justified. The train is shown making a passenger stop at the CB&Q depot in Rockford, Illinois, in the middle of a multi-day, complex detouring of the *Twin Zephyrs* (as well as the *Black Hawk*, *Mainstreeter*, and *Western Star*) between Rochelle and East Dubuque, Illinois. Much-delayed trains wrought havoc on equipment turnarounds, requiring extra consists to be cobbled together from whatever equipment was available—including heavyweight cars—at Chicago and the Twin Cities. On today's 21, a Great Northern lounge-observation serves as a parlor car. MIKE SCHAFER



equipment, of Zephyrettes, of impeccable service, of Feather River Canyon, was dead. Its immediate survivor was dubbed simply “California Service” on the Burlington segment of its run, a cobbled-together, tri-weekly mish-mash made up of Chicago–Omaha trains 11 and 12—the nameless remains of the *Nebraska Zephyr*—extended to Denver (and given a Chuck Wagon buffet but no dining car); a more or less intact CZ-style consist to Salt Lake operating as the *Rio Grande Zephyr*; and a single 10-6 sleeper, dome coach, and flat-top coach continuing the 37 miles north to Ogden for an across-the-platform connection to the *City of San Francisco*.

This travesty of the CZ continued for a little more than a year until Amtrak took over most of the nation’s passenger trains that survived past the passenger-train bloodbath of April 30 and May 1, 1971, when about half of the country’s passenger trains were discontinued and most of the rest assumed by Amtrak. This quasi-public new railroad, formally known as the National Railroad Passenger Corporation, was an ambivalent set-up designed (depending on whom you ask) either to save at least some remnant of America’s long-distance rail passenger service or to give it a blame-free burial. In any event, the very public discontinuance proceedings and eventual death of the *California Zephyr* caught the attention of the press and politicians, poignantly helping make the case for Amtrak.

How ironic, then, that the best surviving segment of the CZ wouldn’t become part of this national network after all, at least not for a dozen years. Apparently unwilling to cede any control of its busy single-track line through the Rockies, Rio Grande at the proverbial eleventh hour chose not to join Amtrak. As a result, it was, by the new Amtrak law, obliged to continue running its *Rio Grande Zephyr* tri-weekly between Denver and Salt Lake. It was a snazzy little domeliner made up of its ex-CZ equipment plus a combination baggage-chair car that had run on its erstwhile Denver–Salt Lake City overnight *Prospector*. The RGZ—with full dining service and as many as six domes (three was more typical)—became a great favorite of fans and travelers. The post-Amtrak RGZ was not a through service, of course, but over the years it did offer connections to Amtrak at either Denver or Salt Lake (though never both simultaneously).

ABOVE: It’s autumn in the Midwest as well as in the *Zephyr* era as Burlington Northern train 11—the nameless remnant of the *Nebraska Zephyr* carrying *California Service* through cars for Salt Lake City and Ogden, Utah—hightails it through Highlands, Illinois, in September 1970. A green BN coach and blue Great Northern car midway in the consist are the only obvious signs of the BN megamerger that had occurred earlier in the year. MIKE SCHAFFER



Arriving some five hours late, the final southbound *Afternoon Zephyr* idles at Chicago Union Station just before dawn on “Amtrak Day,” May 1, 1971. The long, dome-heavy consist is misleading: Most cars, including a Slumbercoach, were deadheading back to Chicago for Amtrak use. ROBERT P. SCHMIDT



Caught off guard by Rio Grande's last-minute flip-flop, Amtrak's Chicago–Oakland train appeared its May 1, 1971, timetable as the *California Zephyr* and showed a Rio Grande routing. However, from Day One, Amtrak was forced to run its CZ between Denver and Ogden via the relatively featureless Union Pacific rather than the spectacularly scenic Rio Grande. With the issuance of its July 11, 1971, public timetable, Amtrak renamed its Chicago–Oakland train the *City of San Francisco*. With its Chicago–Denver routing still on former CB&Q tracks, the train still had *Zephyr* blood lines, so on November 14, 1971, it was rechristened again, this time as the *San Francisco Zephyr*, paying homage to two Chicago–California streamliners that once had been rivals.

In 1983 Rio Grande finally decided to join the party, and the name *California Zephyr* reappeared in the Amtrak timetable, as did the Rio Grande portion of the original train's route. Into the 21st century, that remains the living piece of the *Zephyr* legacy—a train of double-deck Superliner cars that is still scheduled for scenery: the Colorado Rockies, and now the former Southern Pacific Donner Pass route over the Sierras instead of Western Pacific's Feather River Canyon.

Ironically, the much-maligned *American Royal Zephyr* survives, if you stretch the point a mite, in the form of Amtrak's daily Chicago–Quincy *Illinois Zephyr*. Though certainly not an overnight train, the *IZ*'s evening westbound/morning eastbound schedules are reminiscent of those of the *American Royal Zephyr*. And in the early days of Amtrak, the *Illinois Zephyr* even carried former Burlington Vista-Dome cars.

Zephyrs also live on in the preservation or even continued operation of some of their cars, most notably, the *Pioneer Zephyr*—an exhibit at Chicago's Museum of Science and Industry since its retirement in 1960. The 9900 recently received a loving and thorough restoration at Northern Rail Car in Milwaukee. In 1997, the train was returned to the museum and the following year given a new, prominent display space at the

If there is a "living legacy" of the Burlington's *Zephyrs* in the 2000s, it is Amtrak's *California Zephyr*, shown winding along Colorado's Fraser Canyon during its leisurely all-day sojourn through the Rocky Mountains. Its schedule is remarkably similar to that of the original train, spending daylight hours among the scenic, spellbinding vistas of the American West. Although the westernmost portion of the route is different than that of the original CZ, the spirit remains. *KARL ZIMMERMANN*

main underground entrance. Not far away, at the Illinois Railway Museum in Union, the “Train of the Goddesses” is preserved (though sans power car) and sometimes operates—with former CB&Q E5A 9911-A, no less. The “Train of the Gods” survived at least into the early 2000s—and may still be extant somewhere in Saudi Arabia. *Silver Charger*, the last of the shovel-nose power cars, is at the National Museum of Transport in St. Louis. The *Mark Twain Zephyr* also survives, in deteriorated condition, but with possibilities of restoration being pondered.

A number of individual *Zephyr* cars are owned by individuals or museums, and some of them operate frequently. Among the most active is ex-CB&Q CZ observation *Silver Solarium*. No car has been preserved with more attention to detail and authenticity than the former WP sister car, the *Silver Crescent*, at the Gold Coast Railway Museum in Florida. Here, even the windshield-wipers on the dome windows have been restored.

And, finally, a few postwar *Zephyr* veterans remain in regularly scheduled Amtrak service. Shortly after its May 1, 1971, startup, Amtrak acquired many former *Zephyr* cars of all types—sleepers, coaches, diners, and parlors, including Vista-Domes. Most of these cars were sold off after Amtrak re-equipped many of its long-distance trains with Superliners and Viewliners in the late 1970s and 1980s, but a few former Burlington cars were retained—notably diners—and heavily upgraded. As of 2004, for example, rail passengers could still dine in *Silver Cuisine* (although the name has vanished from the car) in Amtrak service east of Chicago.

So the *Zephyrs* remain at least a muted presence, impressing today’s museum visitors with their sleek, trend-setting glamour and travelers aboard Amtrak’s *California Zephyr* with the wisdom of scheduling a train for scenery. The alliance of Budd, Burlington, and Electro-Motive created a unique fleet of trains—shovel-nosed, slant-nosed, or bulldog-nosed, all fluted stainless, all superb. Long will they roll in the memories of those who rode them.

Although no longer operable, the original *Zephyr*, No. 9900, underwent a remarkable makeover in the late 1990s as part of Chicago’s Museum of Science and Industry’s revamping of the train’s permanent display there. Here, on September 8, 1997, workers at Northern Rail Car in Milwaukee mimic the train’s 1934 “tug-of-war” (see page 23) as 9900 is unveiled for the second time in its long life. MIKE SCHAFER



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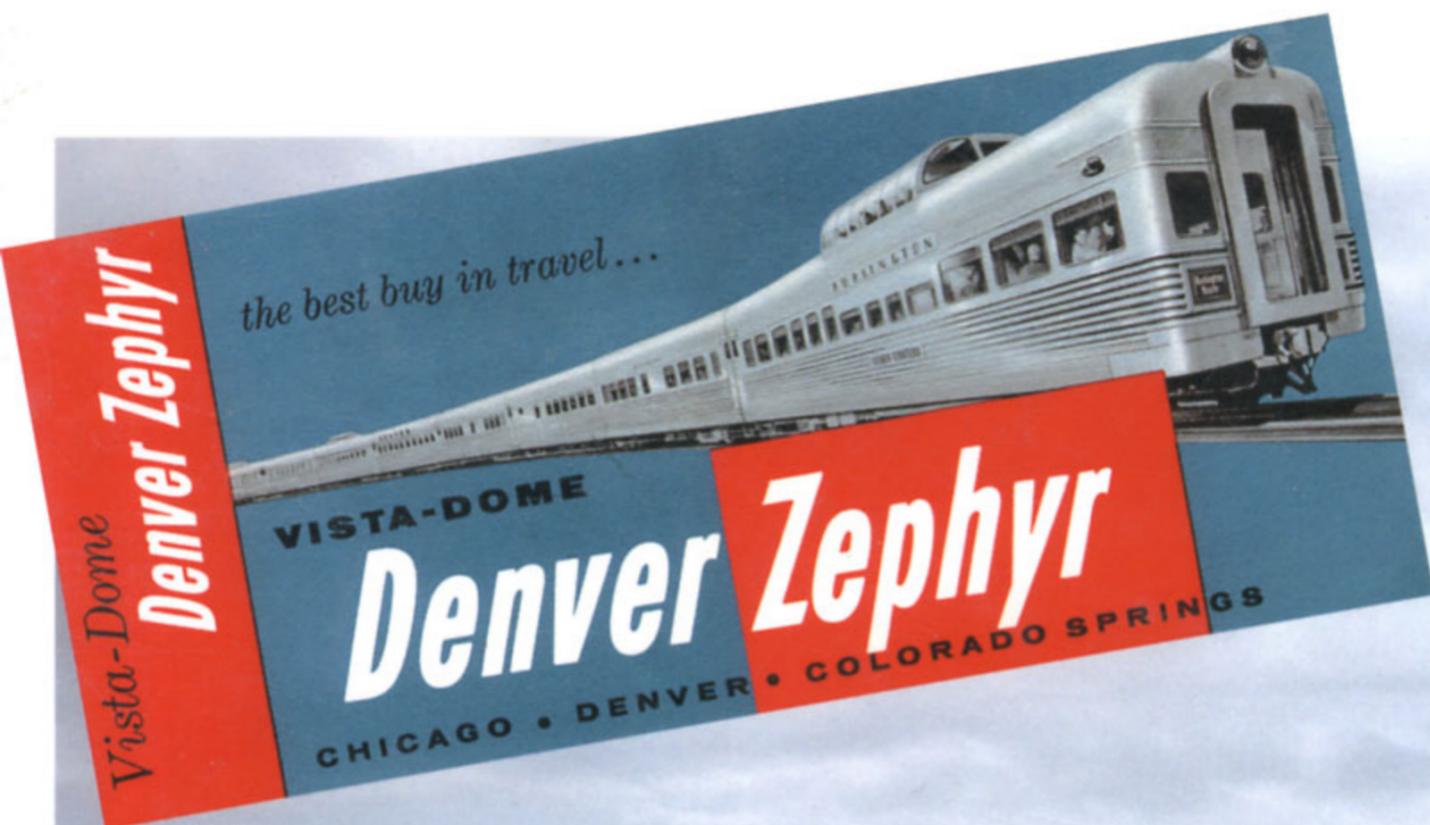
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