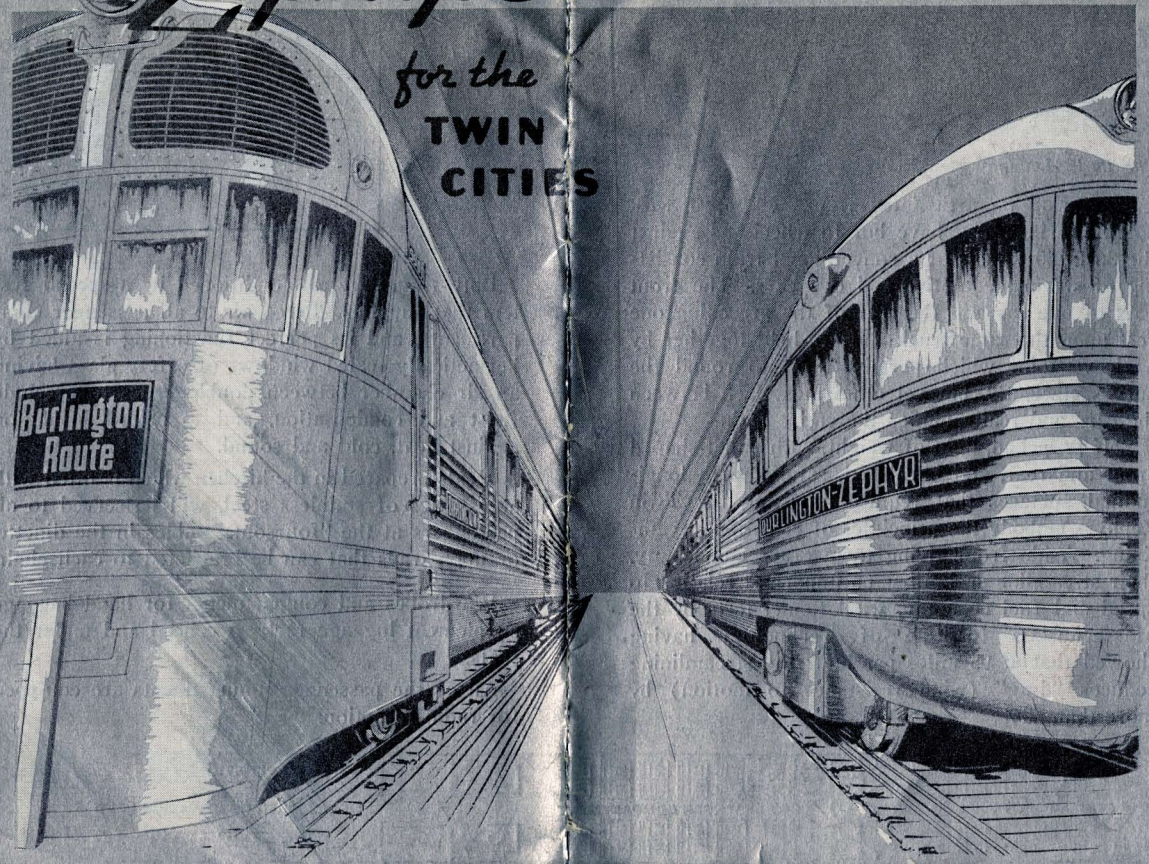
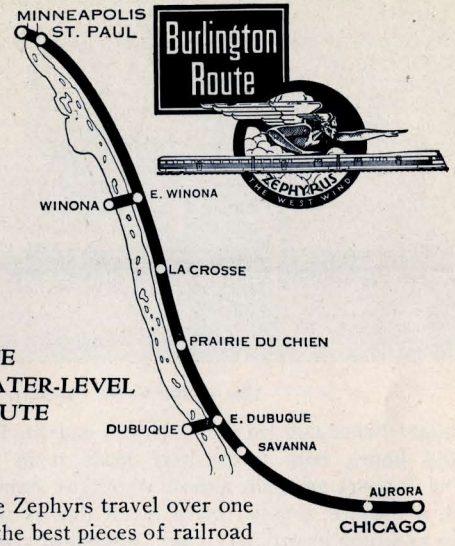
Burlington's

TWIN *Zephyrs* *for the* TWIN CITIES

MINNEAPOLIS
ST PAUL
CHICAGO





THE WATER-LEVEL ROUTE

The Zephyrs travel over one of the best pieces of railroad track in the world.

For almost three-fourths of the way between the Twin Cities and Chicago it follows alongside the Mississippi River, and in all this distance there is no place where the gradient exceeds one-quarter of one per cent . . . literally a "streamline" route.

The Twin Zephyrs are the 2nd and 3rd members of the Burlington's streamline fleet of four such trains which have successfully pioneered the Diesel-train development in America.

The 1st Zephyr was the first Diesel-powered train built in this country, and the first streamline train of any type to enter regular daily service.

Four new and larger Zephyrs are now under construction. As a background they have the Burlington's unrivaled record of almost a million miles of Diesel-service performed by the first four Zephyrs.

SCHEDULE OF THE ZEPHYRS

SOUTHBOUND	Morning Zephyr	Afternoon Zephyr
Lv. Minneapolis ...	8:00 am	4:00 pm
Lv. St. Paul.....	8:30 am	4:30 pm
Lv. E. Winona.... ①	9:58 am	*f* 5:58 pm
Lv. La Crosse.....	10:28 am	6:28 pm
Lv. Pra. du Chien.. ①	11:18 am	*f* 7:18 pm
Lv. E. Dubuque.... ①	12:05 pm	8:05 pm
Lv. Savanna..... ①	12:42 pm	8:42 pm
Ar. Aurora..... ②	2:21 pm	② 10:20 pm
Ar. Chicago (C.T.).	3:00 pm	10:59 pm
Ar. Chicago (E.T.).	4:00 pm	11:59 pm

NORTHBOUND	Morning Zephyr	Afternoon Zephyr
Lv. Chicago (C.T.).	8:00 am	4:00 pm
Lv. Chicago (E.T.).	9:00 am	5:00 pm
Lv. Aurora. (C.T.). ③	8:35 am	③ 4:35 pm
Lv. Savanna.....	10:09 am	④ 6:09 pm
Lv. E. Dubuque....	10:46 am	④ 6:46 pm
Ar. Pra. du Chien..	*f* 11:30 am	④ 7:30 pm
Ar. La Crosse.....	12:23 pm	8:23 pm
Ar. E. Winona.....	*f* 12:53 pm	④ 8:53 pm
Ar. St. Paul.....	2:30 pm	10:29 pm
Ar. Minneapolis ...	3:00 pm	10:59 pm

f—Flag stop.

① Stops to discharge revenue passengers from St. Paul or beyond, or to receive revenue passengers for Aurora or beyond.

② Stops to discharge revenue passengers.

③ Stops to receive revenue passengers.

④ Stops to discharge revenue passengers from Aurora or beyond, or to receive revenue passengers for St. Paul or beyond.

BURLINGTON'S FLEET OF STEAM TRAINS

→ Completely Air-Conditioned ←

Southbound	BLACK HAWK	EMPIRE BUILDER	NORTH COAST LIMITED
Lv. Minneapolis.....	9:00 pm	10:05 pm	10:20 pm
Lv. St. Paul.....	9:40 pm	10:55 pm	11:00 pm
Ar. Chicago (Central Time).....	7:50 am	8:45 am	8:50 am
Ar. Chicago (Eastern Time).....	8:50 am	9:45 am	9:50 am

Northbound	BLACK HAWK	NORTH COAST LIMITED	EMPIRE BUILDER
Lv. Chicago (Central Time).....	9:00 pm	11:00 pm	11:15 pm
Lv. Chicago (Eastern Time).....	10:00 pm	12:00 pm	12:15 am
Ar. St. Paul.....	7:15 am	8:15 am	8:30 am
Ar. Minneapolis.....	7:55 am	9:05 am	9:20 am

ONE WAY AND ROUND TRIP FARE

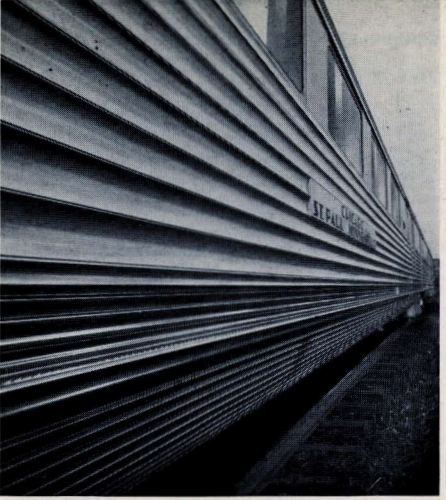
The Zephyrs are not excess fare trains.

However, all of the seats, *both coach and parlor lounge*, are reserved; individually assigned in advance and sold by number.

Tickets at the lowest coach fares are honored in the 64 coach seats, but passengers having accommodations in the parlor-lounge should hold transportation good for Pullman or parlor car travel.

★See last column for Parlor Seat Fares.

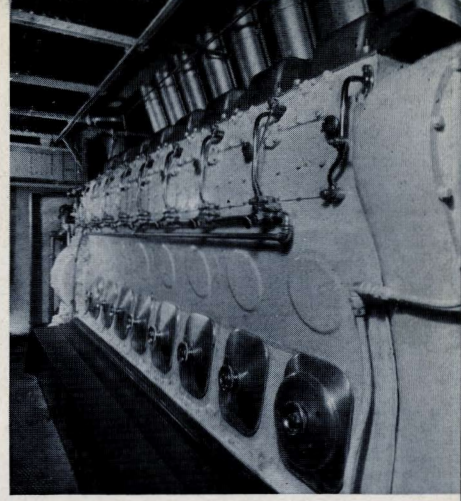
Between MINNEAPOLIS and	One Way in Coaches	★One Way in Parlor Lounge	Round Trip in Coaches 10-day Limit	★Round Trip Parlor Lounge 10-day Limit	Seat in Parlor Lounge
La Crosse.....	$2.87	$ 4.29	$ 5.17	$ 5.75	$ .35
Pra. du Chien.....	4.05	6.07	7.29	8.10	.60
East Dubuque.....	5.15	7.71	9.27	10.30	.75
Dubuque.....	5.15	7.71	9.27	10.30	.75
Savanna.....	5.93	8.89	10.68	11.90	1.00
Aurora.....	8.08	12.11	14.55	16.15	1.00
Chicago.....	8.15	12.21	14.67	16.30	1.00
Between ST. PAUL and					
La Crosse.....	2.66	3.98	4.79	5.35	.35
Pra. du Chien.....	3.84	5.75	6.92	7.70	.60
East Dubuque.....	4.93	7.38	8.88	9.85	.75
Dubuque.....	4.93	7.38	8.88	9.85	.75
Savanna.....	5.73	8.58	10.32	11.45	1.00
Aurora.....	7.88	11.81	14.19	15.75	1.00
Chicago.....	7.93	11.89	14.28	15.90	1.00
Between CHICAGO and					
Savanna.....	2.77	4.15	4.99	5.55	.50
East Dubuque.....	3.57	5.34	6.43	7.15	.50
Dubuque.....	3.63	5.44	6.54	7.30	.50
Pra. du Chien.....	4.54	6.81	8.18	9.10	.75
La Crosse.....	5.27	7.89	9.49	10.55	.75
Winona.....	5.93	8.89	10.68	11.90	.75
St. Paul.....	7.93	11.89	14.28	15.90	1.00
Minneapolis.....	8.15	12.21	14.67	16.30	1.00



Sheathed in stainless steel

One of the Coach Compartments

The Parlor-Lounge



The Power Plant

Like silver arrows sprung from a giant bow, the TWIN ZEPHYRS — *the wonder trains* — sail smoothly in their swift flight between Minneapolis, St. Paul and Chicago over the Burlington's water-level route.

One of the Zephyrs leaves the Twin Cities in the morning for Chicago, returning to St. Paul and Minneapolis the same evening, while the other runs from Chicago to the Twin Cities and back on a similar schedule. Each train travels 882 miles per day.

They are the only Diesel-powered trains operating between these cities, and the only trains of any type that make the round trip daily.

They travel at a higher average speed than any other trains in America. Over several stretches of track the Zephyrs are called upon to go 90 miles an hour, and are easily capable of more than 100 miles an hour. Scheduled between Chicago and St. Paul in 6½ hours, both trains have made it in 5½.

The Zephyrs are built almost wholly of stainless steel, a modern, non-corrosive metal that is three times as strong as ordinary steel. Instead of riveted their parts are electric-welded by a special precision method resulting in "vulcanized" seams and joints which have proved as strong as the metal itself.

The trains are propelled by electric power generated by a 600 horse-power, 8-cylinder, 2-cycle Diesel engine designed especially for this type of train by General Motors. It burns ordinary, non-explosive fuel oil and has no spark plugs or ignition system of the sort used in gasoline engines, combustion being accomplished wholly through high compression.

197 feet long, with seats for 88 passengers, the Zephyrs are designed for high-speed day-time travel, and weigh only 227,000 lbs. which is not very much more than the weight of one Pullman.

They ride on articulated trucks equipped with roller bearings, and have but 16 wheels as against the 36 to 40 wheels of a conventional train consisting of steam locomotive 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 efficiently, but yet eliminates slack between the cars and really unifies the entire train.

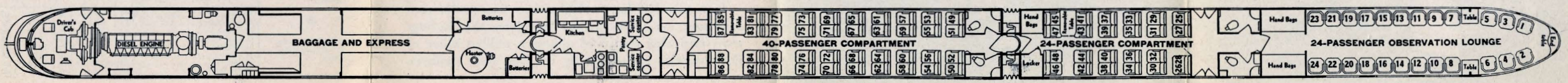
Self-propelled, light of weight, with bullet-shaped front and rear, and burnished, satin-smooth longitudinal surfaces that require no paint, the Twin Zephyrs embody the principles of scientific streamlining. Aside from giving them grace and beauty, their streamline design has an important relation to speed and fuel economy, wind tunnel tests by the Massachusetts Institute of Technology having showed that at 95 miles per hour the streamlining reduces "drag" (wind resistance to motion) by more than 50%.

Both trains are air-conditioned by a special system that supplies filtered air to all passenger compartments, and its perfect functioning is aided by hermetically sealed windows of safety glass having an air chamber between double panes to preclude frost and condensation, and to afford insulation against heat, cold and sound.

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

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

All of the passenger compartments are equipped for radio reception.



Floor Plan of the Twin Zephyrs