

# Transport



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## T. C.

(A postscript to the Laurel Canyon story is in order. In 1915, age and progress together caught up with the tiny trolleys, and the electric operation passed into history. Even the Laurel Canyon Utilities Company itself died soon after, as the official corporation records of the state of California record its dissolution on January 10, 1916. Not long thereafter, Charles Spencer Mann passed on, and the Log House was sold, first to actress Bessie Love, and later to C. J. Milliron, president of Los Angeles' Fifth Street Store. Today, all traces of the beginnings of the trolley coach are gone, and the hills around Laurel Canyon no longer ring with the shouts of fascinated onlookers at a bit of history.)

+ + +

Mr. King had a problem. As president and manager of the Merrill Electric Railway and Lighting Company, he was responsible for providing transportation to every corner of the growing Wisconsin town. Now, residents of the Sixth Ward west of the Wisconsin River were petitioning for service to their neighborhood, and it was beginning to appear as if the company would be unable to provide it.

The main rail line in that part of town ended at Cottage Street, and, in order to extend streetcar service, it would be necessary to lay rail on the river bridge and to cross three sets of busy steam road tracks. An engineering survey had pronounced the existing bridge unsuitable to withstand the steady pounding of the heavy rail cars and cost estimates of the necessary steam road crossing work were not at all in line with the anticipated revenue from the extension.

King had these problems in mind as he boarded a Milwaukee Road train for a brief visit to Chicago. As the Wisconsin countryside flashed by the windows, he pondered the difficulties he faced in maintaining the tiny company's high standards of service. A pioneer in the electric railway field, the Merrill company had put its first streetcars in service in 1890, and, despite floods and rough winters, had managed to keep the small system in operation. This latest crisis might spell serious trouble for the firm, and no doubt King spent a restless night as the train sped on toward the Windy City.

Alighting in Chicago the next morning, King spotted an unusual bus waiting at the depot. After a few inquiries, he learned that it was a battery-operated coach used by Carson Pirie Scott & Company to haul passengers between the train stations and their downtown store. It had been engineered by M. S. D. Field, an associate of Thomas Edison.

Always an imaginative man, King reasoned that the principle embodied in the operation of such a storage battery vehicle would apply equally with power from a set of overhead wires. Merrill's streetcars had used a double wire from their inception, and it would be a simple matter to extend this

overhead into the Sixth Ward, using the current it carried to power a rubber tired vehicle instead of a conventional rail car.

Filled with the fervor of fresh enthusiasm, King quickly concluded his business in Chicago and returned to Merrill, eager to apply his ideas toward the solution of his thorniest problem. Upon his arrival he lost no time in contacting Mr. Field to outline his plans. Soon the Field Electric Bus Company had an order for an 18 passenger vehicle, and King's line crews were busy stringing wire out in the Sixth Ward.

At length the ungainly vehicle arrived in the Wisconsin city. King was somewhat disappointed by the dissimilarities he found between it and the vehicle he had seen in Chicago, but he agreed to accept it for service. A boxlike creation, the coach weighed three tons, quite under the maximum considered safe for the Wisconsin River bridge. As a concession to passenger comfort, it was equipped with long, flat springs and solid rubber tires, but these refinements proved quite unable to compete with the rough cobble-stone streets in that part of Merrill.

Powered by a 500 volt, 15 horsepower motor, the coach was to be operated by one man. The motor was directly connected to a driving shaft which transmitted power through a bevel gear to a jack shaft. This, in turn, was connected to the rear driving wheels by a chain. Effective stopping power was provided by two sets of brakes equipped with equalizers. Quite flexible in its touring operation, the little unit could stray from 10 to 12 feet from the center of the overhead wires. With the interchangeability of parts in mind, the "trackless trolley" used a five-step railway controller and resistances similar to those of the company's streetcars.

Service on the new line began in May or June of 1913, and for a while the new unit proved equal to the task. As it was, however, rather crudely designed for the terrain of the 4000' route, it soon began to approach practical obsolescence. No doubt the little vehicle spent many hours in the Merrill shops, during which time residents of the ward were without service entirely. Eventually the cost of maintaining the coach approached the prohibitive level, and the operation was not-too-reluctantly abandoned, probably just before the winter of 1914-15.

Figures on costs of the unique operation have survived, and they are worth quoting here:

<u>OPERATING COSTS</u>		<u>MAINTENANCE AND DEPRECIATION</u>	
Operator, per mile	\$0.0240	Bus and line dep., per year	\$600
Electric power	0.0102	Tire renewal, per year	800
Storage, cleaning and supplies	0.0135	Repairs and general expenses	700
	<hr/>		<hr/>
TOTAL	\$0.0477	TOTAL	\$2100
Per Mile Expense:	\$0.0954	Daily Mileage:	120

Though the experiment had lasted but a year and a half, and a new method of serving the Sixth Ward had to be found, the company was able to recover a small part of its investment. A sale was arranged to the West End Street Railway of Boston, which had indicated an interest in an experimental trackless trolley installation of its own, and the little vehicle was soon on its way back east. Whatever the reasons for the cancellation of the West End project may have been are not known, but early 1915 saw a resale of the trolley motor, as it came to be known, to the Massachusetts Highway Service Company of Fairhaven. Soon the tiny trolley was speeding along the shore of Buzzard Bay.

# the railway report

## LOOK UP, LOOK OUT

### An All-Time Roster of U. S. and Canadian Vista-Dome Passenger Trains

The idea for the dome car was supposedly formulated in the mind of a General Motors executive while riding the Exposition Flyer in Glenwood Canyon, Colorado. It was 1945, passenger riding had peaked, and railroad managements such as that of the Burlington were receptive to ideas for new passenger equipment. The idea of a better way to view the beautiful, rugged terrain of the Colorado Rockies and other scenic parts of the country was built into CB&Q prewar streamlined coach 4714, lightweight "Silver Alchemy". Renamed "Silver Dome", the specially-equipped car had a domed center section added with 24 seats for 360° viewing. Placed in experimental service, passenger reaction was such that another car was soon rebuilt similarly and the two cars were regularly assigned to Twin Zephyr service while two complete, new Twin Zephyrs were being built that would have 4 dome coaches and a dome parlor-observation each! These trains were placed in service in December, 1947, and for the next ten years the western roads built about 200 such cars, the last being constructed for the Denver Zephyr and Canadian Pacific's Canadian (along with other trains) in 1956.

Through the years dome equipment was reassigned experimentally, or, as trains were discontinued, leased or sold to other roads as even dome equipment became surplus. Here, then, we list all trains ever operated with dome type passenger equipment. (Special mention is made at this time of the "Silver Vista" glass-roofed car formerly operated on the narrow-gauge Rio Grande, not a conventional dome as we know it. The car is similar to those on the Silver Meteor, listed below, which is glass-roofed because of clearance restrictions, restrictions that prevent most eastern roads from using domed equipment.

**BALTIMORE & OHIO**

- Capitol Limited
- +Columbian
- +Shenandoah

**BURLINGTON**

- California Zephyr
- Twin City Zephyr (AM)
- Twin City Zephyr (PM)
- Black Hawk (not reg. assigned)
- +American Royal Zephyr
- Kansas City Zephyr
- Denver Zephyr
- +Ak-Sar-Ben Zephyr
- (see also NP/GN/SP&S)

**CANADIAN NATIONAL**

- +9/10 Jasper-Prince Rupert (1966)
- Super Continental
- Panorama
- Scotian
- +Ocean

**CANADIAN PACIFIC**

- +Frontenac
- +Viger/Train 142
- Canadian
- +Expo Limited (1967)
- 232/235 Montreal-Ottawa
- 233/234 Montreal-Ottawa
- +Atlantic Limited
- (see also D&H)

**CENTRAL OF GEORGIA**

- Nancy Hanks II
- (see also IC)

**CHESAPEAKE & OHIO**

- +Pere Marquettes (2 roundtrips)

**CHICAGO & NORTH WESTERN**

- +(see UP & SP)

## DELAWARE &amp; HUDSON

Laurentian

## DENVER, RIO GRANDE &amp; WESTERN

California Zephyr  
Yampa Valley  
+Royal Gorge  
(see also MP)

## FLORIDA EAST COAST

+(see IC and Penn-Central)

## GREAT NORTHERN

Empire Builder  
+Western Star (1960)  
(see also SP&S)

## ILLINOIS CENTRAL

+Panama Limited (winter 1963-64)  
City of Miami  
City of New Orleans

## LOUISVILLE &amp; NASHVILLE

(see Penn-Central)

## MILWAUKEE ROAD

+Olympian Hiawatha  
AM Hiawatha  
PM Hiawatha  
+Varsity (1963)  
+Traveler/#23 (1963)  
+58/46 Chicago-Milwaukee (1963) ?  
+27/12 Chicago-Milwaukee (1963) ?

## MISSOURI PACIFIC

+Colorado Eagle  
+Texas Eagles  
+Missouri River Eagle  
(see also D&RGW/T&P)

## NAPIERVILLE JUNCTION

(see D&amp;H)

## NORFOLK &amp; WESTERN (incl. WABASH)

+City of Kansas City (1959)  
+Banner Blue  
+Blue Bird  
Powhatan Arrow  
(see also UP)

## NORTHERN PACIFIC

North Coast Limited  
(see also SP&S)

## PENN-CENTRAL

South Wind (winter seasons)  
(see also SCL/FEC)

## RICHMOND, FREDERICKSBURG &amp; POTOMAC

(see SCL)

## SANTA FE

Super Chief  
Chief  
El Capitan  
San Francisco Chief  
Chicagoan/Kansas City Chief

## SEABOARD COAST LINE

+Florida Special (1965-66)  
Silver Meteor  
(see also PC/IC)

## SOUTHERN PACIFIC

+City of San Francisco (SP only)  
+Shasta Daylight  
+San Joaquin Daylight  
Coast Daylight (summer seasons)  
+San Francisco Overland (1961)  
(see also UP)

## SOUTHERN RAILWAY

(see CofGa)

## SPOKANE, PORTLAND &amp; SEATTLE

(see NP/GN)

## TEXAS &amp; PACIFIC

+Texas Eagle(s)  
(see MP)

## UNION PACIFIC

+City of Denver (1962)  
+City of Denver/Portland  
City of Portland  
City of St. Louis  
City of San Francisco  
City of Los Angeles  
Challenger  
+457/458 Seattle-Portland

## WESTERN PACIFIC

California Zephyr

All trains are R/T listings  
+Indicates dome no longer operating  
(and/or train no longer operating)  
(Year) Domes run only at this time

air/lines international1967 AIRLINE EQUIPMENT ACQUISITIONS AND ORDERS (Continued)

BRANIFF INTERNATIONAL (U. S.)

3 Sud Aviation Concordes

BRITISH EUROPEAN AIRWAYS (U. K.)

18 BAC 11-500s (Stretched craft)

BAVARIA FLUGGESELLSCHAFT (Germany)

2 BAC 111 (option on third)

CRUZEIRO DO SUL (Brazil)

8 YS-11A (Japanese turbo-prop units)

CAPITOL INTERNATIONAL (U. S. Charter)

3 DC-8-30 from Braniff International (Panagra)

CIMBER AIR (Denmark)

1 Nord 262

CATHAY PACIFIC (Hong Kong)

2 Convair 880 (from Viasa of Venezuela)

CANADIAN PACIFIC (Canada)

1 Boeing 737

7 Boeing 727

CALEDONIAN AIRWAYS (New Caledonia)

2 Boeing 707-320C

CIVIL AERONAUTICS BOARD (U. S. Regulatory Agency)

1 Beechcraft King Air A90 (for use by Bureau of Safety)

CUBANA AIRWAYS (Cuba)

6 An-24 (USSR)

COMPANHIA ARGENTINA DE AERO TAXI (Argentina)

2 Beagle B-206-S (British)

CHINA - AIR (Formosa)

1 Boeing 727-100

COLLEGE OF AIR TRAINING (U. K.)

12 Beech Barons

CONTINENTAL AIRLINES (C. S. A.)

5 Boeing 727-200

5 DC-9C (Cargo units)

## DELTA AIR LINES (U. S.)

- 12 DC-9-30 (options on 12 more)
- 4 DC-8-61 (options on 2 more)

## EASTERN AIR LINES (U. S.)

- 6 Sud Aviation Concorde
- 2 DC-8-63
- 5 DC-8-61
- 12 DC-9-30

## ETHIOPIAN AIR LINES (Ethiopia)

- 1 Boeing 707-320C

## EXECUTIVE JET AVIATION, INC.

- 2 Boeing 707-320C
- 2 Boeing 727

## FALCON AIR CHARTER (Sweden)

- 3 744 Viscounts (from Phillipine Airlines)

## FIJI AIRWAYS (Fiji Islands)

- 1 Hawker-Siddeley HS-748

## FLYING TIGER LINE (U. S.)

- 7 DC-8-63F
- 2 1049 Constellation (from Trans International; sold to China Airlines)

## FRONTIER AIRLINES (U. S.)

- 2 Convair 340 (from United Air Lines)

## HUGHES AIRCRAFT COMPANY (U. S.)

- 1 Hawker-Siddeley HS-125

## IBERIA AIRLINES (Spain)

- 6 DH Caravelle

## ICELANDAIR (Iceland)

- 1 F-27 Mk 200

## INDIAN GOVERNMENT (India)

- 3 TU-124 (USSR; for executive use)

## INTERIOR AIRWAYS (Alaska)

- 1 Constellation (bought from, sold to and leased from Flying Tiger)

## IRAN NATIONAL AIRLINES (Iran)

- 2 Boeing 727-320C

## JAPAN AIR LINES

- 1 Boeing 727
- 6 Boeing 747

# For The Record

## STATISTICS      FOR      FEBRUARY      1968

### I - FARE INCREASES

#### Twin City Lines, Inc., Minneapolis - St. Paul, Minnesota (2/3/68)

<u>RATE</u>	<u>OLD</u>	<u>NEW</u>
Student Fare (Minimum)	10¢	20¢
Suburban Zone Fare	5¢	10¢
Suburban Minimum Fare	15¢	25¢
Adult Base Fare	25¢	25¢

#### Omaha Transit Company, Omaha, Nebraska (2/68)

Adult Base Fare	25¢	30¢
Downtown Zone Fare	15¢	10¢
Children's Fare	10¢	10¢
Student Fare	15¢	15¢
Transfer Charge	2¢	2¢

#### Grand Rapids City Coach Lines, Grand Rapids, Michigan (2/1/68)

Adult Base Fare	30¢	35¢
Ticket Rate	10/\$2.75	10/\$3.25

#### Dallas Transit System, Dallas, Texas (Pending)

Adult Base Fare	23¢	25¢
Token Rate	4/85¢	Eliminated
Zone Fare	5¢	5¢
Children's Zone Fare	2¢	2¢
Children's Base Fare	10¢	10¢

#### D. C. Transit System, Washington, D. C. (2/68)

Adult Base Fare	25¢	27¢
Token Rate	4/98¢	4/\$1.00

#### Ottawa Transportation Commission, Ottawa, Ontario (2/68)

Adult Base Fare	20¢	25¢
Strip Tickets	3/50¢	4/85¢
Book Tickets	20/\$3.00	15/\$3.00
Children's Base Fare	15¢	20¢
Children's Ticket Rate	7/\$1.00	7/\$1.00

#### City Utilities Transportation Dept., Springfield, Missouri (Pending)

Adult Base Fare	15¢	25¢
Token Rate	14¢	24¢
Children's Fare	10¢	15¢
Student Ticket Rate	12¢	20¢

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**THE COVER:** One of the newest operators in the Midwest, Tom-A-Hawk Transit, Inc., began servicing the Aurora, Illinois area with 10 Flxettes February 1, assuming for the city the operations of the former Aurora City Lines. This is unit #106.