The following information was taken from Sections 5 and 6 of the 1957 Car Builders' Cyclopedia of American Practice published by Simmons-Boardman Publishing Company.

# Passenger Train Cars Domestic ---- United States and Canada

PASSENGER CARS for carrying and serving the traveling public include coaches, parlor, observation, sleeping, dining, kitchen, lunch-counter, buffet, café and club cars. Trains made up of cars providing many combinations of these accommodations afford the comforts and conveniences of the best city hotels. There are also numerous types of cars for moving baggage, mail and merchandise in passenger trains, including refrigerator cars for transporting perishable products.

Among the more recently developed types of passenger-carrying cars are the dome cars, which widen the scope of vision of the traveler, and two-level coaches, which, provide full-length seating in the upper level and space for dressing rooms, lounges and hand baggage below. Two-level cars to increase seating capacity long have been used in suburban passenger service.

To identify and standardize the designations of these various types of passenger train cars the Mechanical Division of the Association of American Railroads has adopted as recommended practice, the following:

### Classification-Designating Letters and Definitions of Passenger Train Cars

A.A.R. Recommended Practice ADOPTED, 1910; REVISED, 1952. (Manual Page L-11)

A passenger train car is defined as a car of suitable construction, equipped to operate in passenger trains, its characteristics to include-(1) All-steel, steel underframe or equivalent construction; (2) Passenger type air brake equipment, or of type to function with other passenger car brakes. This includes AB brake modified for passenger train operation or AB-1-B schedule, with or without quick service valve; (3) Trucks (a) Equalized (with or without pedestals) for distribution of loads to all journals on each side of truck; (b) Suitable spring arrangement, such as combinations of helical and elliptic, or springs in combination with other means for control of vertical action; (c) Provision for cushioning lateral shocks through the use of swing motion, friction or other means; (d) Wrought-steel, cast-steel or steel tired (except plate) wheels; (e) Suitable truck brake; (f) Locking center pin must be provided to lock trucks to car body; (4) Steam and air signal lines; and be in accordance with definitions and designating letters for general passenger equipment cars as follows:

### CLASS "P"-PASSENGER

- PA Passenger Car. A car for ordinary short haul suburban service, with seats and open platforms.
- PAS Coach-Sleeping Cir. A car having two compartments separated by bulkheads, one fitted with sleeping accommodations, the other fitted as classification PB.
- PB Coach or Chair. A car fitted with regular coach seats or reclining chairs, with or without toilet facilities, smoking room, and lounging facilities. May be embodied in two cars operated as a unit.
- PBC Parlor Coach. A compartment car in which the features of both PB and PC cars are combined.
- PBO Coach-Observation. A car fitted with regular coach seats, with toilet facilities and having an observation compartment at one end. Note: When cars of this type have an observation dome, a note should be included in the Official Register of Passenger Train Equipment to show that the cars are equipped with a dome and seats on an upper level.
- PC Passenger, Parlor or Chair Car. A car fitted with individual or movable chairs, and having toilet and washroom facilities. May be equipped with bar. Sometimes provided with barber shop and bath.
- PD Tavern. A car fitted with bar and with tables and seats.
- PDS A car, one end of which is similar to PD, the other end being fitted up for sleeping accommodations.
- PE Emigrant or Colonist Car. A second-class passenger car, with floors either bare or fitted with matting, used expressly for emigrant trade on trains where low rate of fare is charged
- PL Lounge Car. For first class passenger service and of a more luxurious character than a day coach with or without smoking compartment with upholstered movable chairs, settees, etc., and other facilities and conveniences to provide comfort for passengers.
- PO Observation Car. A car having observation compartment at one end and fitted with either berth facilities, parlor chairs or compartments, usually run in first-class service.
- PS Sleeping Car. A car for passenger service having seats that can be made up into berths, and usually having one or more separate stateroom compartments, also toilet and

- washroom facilities for men and women, and smoking compartment for men. Some cars of this class are all compartments, and some compartments and observation combined.
- PSA Dormitory Car. A car for passenger train service equipped with sleeping and toilet facilities for train employees.
- PT Tourist Car. A second-class sleeping-car, fitted usually with cane seats convertible into berths and used mostly on trans-continental trains, cars fitted with smoking compartment, toilet and washroom.
- PV Private car used as officers' or private individual's car and railroad pay car-usually composed of sleeping compartments, dining compartments, observation end and with kitchen, servant's quarters and toilet and bathroom.

### CLASS "D"-DINING

- DA Dining Car. Regular dining car, for the use of passengers in transit fitted with regular kitchen, tables, chairs or seats, with or without bar, carrying cooks and waiters.
- DB Buffet Car. A coach or chair car provided with cooking facilities to prepare and serve meals.
- DC Café Car. A car fitted with kitchen, one compartment used as café where meals or beverages are served and smoking allowed, the other compartment of car fitted with either regular dining room, lunch counter or card room carrying cooks and waiters.
- DCL Lunch Counter Lounge. A car fitted with a lunch counter and kitchen, the other portion equipped with seats or movable chairs. The latter end may be designed as a lounge, observation room or car may be equipped with an observation platform.
- DD Diner Dormitory. A car with the features of a regular diner and also fitted with sleeping accommodations. May be embodied in two cars operated as a unit.
- DE Dining Car for use of patrons, fitted with tables and chairs or seats, but without a kitchen.
- DG Grill Room Car. Very similar to café car.
- DK Dormitory Kitchen Car. One portion provided with a kitchen for preparing food for patrons, the other portion equipped as a dormitory for the use of the crew.

- DKP Kitchen-Car. A car provided with facilities for cooking and preparing food for passengers, the food to be served outside the car. The car may be one of a group operated articulatively with trucks common to the group.
- DL Buffet-Lounge Car. Similar to DB class, except car is provided with compartment to serve as smoking, reading or card room.
- DLC Lunch Counter Car. One portion provided with a kitchen for preparing food for patrons, the other portion equipped with a lunch counter.
- DO Café Observation Car. Car fitted with café at one end, kitchen in center or extreme end, having observation compartment fitted with stationary or movable tables and observation platform at rear.
- DP Dining and Parlor Car. A car fitted with dining compartment, kitchen and compartment for passengers, fitted with chairs, stationary or otherwise, carrying regular cooks and waiters.
- DPA Diner-Lounge. A compartment car in which the features of DA and PL are combined except with pantry instead of kitchen.

# CLASS "C"-COMBINED

- CA Combined Car, Baggage and Passenger. A car having two compartments, one suitable for transporting baggage, the other fitted with seats for passengers and the two compartments separated by bulkheads.
- CAD Combined Car, Baggage and Passenger. A car having two compartments. One suitable for transporting baggage, the other fitted with seats for passengers and equipped for preparing and serving food or refreshments, the two compartments separated by bulkheads.
- CO Combined Passenger, Baggage and Mail. A car having three separate compartments, separated by bulkheads, one compartment suitable for transporting baggage, one for mail fitted with suitable apparatus for sorting and classifying mail, and the other fitted with seats for the transportation of passengers.
- CS Combined Smoking and Baggage Car (Club Car). A car having two compartments, separated by bulkheads suitable, one compartment for transporting baggage, the other fitted with seats or chairs and used as a smoking car; at times equipped with buffet or bar.

- CSA Combined Baggage, Dormitory and Kitchen. A car having three compartments separated by bulkheads, one for baggage, one fitted with sleeping accommodations and one for kitchen.
- CBS Baggage-Dormitory Car. A car having two compartments, separated by bulkheads, one for baggage, the other fitted with accommodations for train employees.
- CSP Combined Mail Storage or Baggage, Dormitory and Passenger. A car having three compartments, separated by bulkheads, one for mail storage or baggage, one fitted with sleeping accommodations for the crew and one fitted with seats for passengers.

# CLASS "B"-BAGGAGE

- BE Baggage Car. A car constructed and equipped to render it suitable for passenger train service, having side doors for the admittance of baggage or express, with or without windows or end doors.
- BEM Baggage Express Messenger. A car constructed and equipped to render it suitable for passenger train service; having side doors for the admittance of baggage or express, with or without windows or end doors, that complies essentially with phases 1 and 2 of Chapter DV-1175, issued Aug. 2, 1948, minimum compliance to include safety rod, desk and pigeon holes, stationary safe (when required), drinking water, lavatory and toilet, wardrobe with coat hangers and shelf, folding metal braces for portable safe, electric lights, brake valve or cord, signal valve or cord. All such cars to be designated by a five-pointed star 6 in. diameter, to be placed on the exterior of car directly above the designation.
- BH Horse or Horse and Carriage Express. A car constructed and equipped to render it suitable for passenger train service for the transportation of fine stock, with or without stalls (movable or stationary) and with or without space left for carriage or horse equipment.
- BLF Flat Car. A car constructed and equipped for passenger train service, especially to carry containers for the transportation of liquids or other commodities.
- BM Milk Car. A car without means of refrigeration. Constructed and equipped for passenger train service and used primarily for the transportation of milk in cans or bottles.
- BMR Milk Car. An insulated car having ice bunkers or ice boxes, constructed and equipped for passenger train service and used primarily for the transportation of milk in cans or bottles.

- BMT House Car. A car constructed and equipped for passenger train service, used for the transportation of liquids. Equipped with one or more insulated tanks and with or without pumps and compressor. Not equipped with means of refrigeration.
- BP Refrigerator Express. An insulated car constructed and equipped for passenger train service. With or without means of ventilation and provided with refrigerating apparatus.
- BR Refrigerator Express. An insulated car constructed and equipped for passenger train service, having ice bunkers or ice boxes. Designed primarily for use of chunk ice with means of ventilation and suitable to carry any perishable commodity requiring refrigeration or ventilation.
- BS Refrigerator Express. An insulated car constructed and equipped for passenger train service, and having brine tanks. Designed primarily for the combined use of crushed ice and salt, and usually without ventilating devices. Used chiefly for meats and packinghouse products.
- BX Box Express. A box car constructed and equipped to render it suitable for passenger train service, having suitable side doors, with or without end doors or windows.
- Note 1 BX express cars built new, rebuilt or converted from regular freight to BX type cars, including trucks, must be approved by the Committee on Car Construction of the AAR Mechanical Division, and listed in the Official Railway Equipment Register as well as the Official Register of Passenger Equipment. The cars must be numbered in a passenger car series, as per Operation-Transportation Division Circular No T-244.
- BXM Box Express Messenger. A box car constructed and equipped to render it suitable for passenger train service, having suitable side doors for admission of baggage or express, with or without end doors or windows and having same interior equipment for messenger service and stencilling as called for in a BEM car.

# CLASS "M"-MAIL (POSTAL)

- MA Postal Car, for use of United States Mail Service, fitted with side doors, with or without mail-bag hook, and having suitable apparatus for the sorting and classifying of mail in transit, with or without end doors or windows.
- MB Baggage and Mail. A car having two compartments, one for baggage and one for mail, separated by bulkheads; the mail end fitted with suitable apparatus for sorting and classifying mail, and with or without mailbag catchers, with or without end doors or windows, and having suitable side doors.
- MBE Combination Baggage 'Mail and Express Car. A car having three compartments, each entirely separate from the other for handling its individual class of business.
- MBD Combination Mail, Baggage and Dormitory Car. A car having three compartments separated by bulkheads, one compartment for mail fitted with suitable apparatus for sorting and classifying mail, one compartment arranged for baggage and one compartment fitted with dormitory equipment for employees.
- MD Combination Mail and Dormitory Car. A car having two compartments separated by a bulkhead, one compartment for mail fitted with suitable apparatus for sorting and classifying mail, with or without end doors and windows, the other fitted with dormitory equipment for employees.
- MP Postal Car. Suitable for transporting newspapers or large mail packages for United States Mail Service, having side doors and fitted with stanchions, with or without end doors or windows.
- MR Postal Storage Cars. For United States Mail Service, suitable to carry mail in bulk, without appliances for sorting or classifying, fitted with side doors and stanchions and with or without end doors or windows.
- MS Mail and Smoker. A combined car having two separate compartments, separated by bulkheads, one compartment suitable for the transportation, sorting and classifying of mail, the other fitted with seats or chairs to be used by passengers as smoking car.

# **CLASS "I"-INSTRUCTION**

IA Instruction Cars for use of employees, usually run from one point to another in passenger trains.

Note Instruction cars, being used in non-revenue railway service only are illustrated in Section 4. "Railway Service Cars."

Note If it is so desired, a small letter "e" can be placed after the larger designated letters to indicate electric lighting, a small letter "g" for gas lighting, and a small letter "o" for oil lighting; also figures showing approximate length of car or length of baggage or mail compartment.

# **Motor Passenger Trains and Cars**

In addition to the foregoing passenger train cars there are other types of passenger equipment used in electric train operation or provided with other means of self-propulsion-M-U. electric motor, internal combustion (Diesel or gasoline) engine and operated either in short trains or as independent units. These cars are described in Section 6, "Motor Trains and Cars."

# Motor Cars and Trains Self-Propelled; Diesel, Gasoline and Electric

THE USE OF MOTOR CARS is quite extensive in city rapid transit, suburban, and branch line service. In densely populated districts where smoke and other features of steam operation are objectionable, electric motor cars operated from power transmission lines are generally employed.

For lighter traffic on main lines and branch line service, motor cars equipped with internal-combustion engines are frequently used. Most cars of this type are driven by the interposition of electric transmission between the engine and driven axles, while others use some form of mechanical or hydraulic drive.

Electric motor cars lend themselves to operation in trains with multiple-unit control. Such trains are operated on most electrified steam railroads, particularly in suburban service. A more recent development is the multiple unit operation of RDC cars in trains of several units. Such a six-car train, designed to be kept intact, is in service on the New York, New Haven & Hartford. This train is illustrated in Section 5, Passenger Train Cars.

Motor cars are classified by the Association of American Railroads as follows:

A.A.R. Recommended Practice-ADOPTED 1910, REVISED 1953 (Manual L-14 and L-14-a)

### CLASS "E."

- EA Electric Street Railway Service Car, direct current, for transportation of passengers; without automatic couplings.
- EB Electric Baggage Car, for long hauls or suburban service, multiple unit with automatic couplings and air brakes and suitable for the transportation of baggage. Third rail, trolley or pantograph contact.
- EC Electric Combined. A car for long hauls or suburban service, multiple unit with automatic couplings and air brakes. This car is. made up of two compartments, separated by bulkhead, one suitable for transportation of baggage and the other fitted with seats or chairs for the use of passengers. Third rail, trolley or pantograph contact.
- ED Rail Motor Car. Car propelled by internal combustion engines either directly or engines serving to run dynamo to furnish electricity for axle motors. With or without baggage or mail compartment or both.
- EG Gasoline Motor Propelled Car, for inspection or private use, or use in suburban service, hauling one or more trailers.
- EM Electric Mail Car, for use in United States Mail Service, fitted with side doors, with or without mail hook, and suitable apparatus for the sorting and classifying of mail en route, With or without end doors or windows.
- EP Electric Passenger Car, for long hauls or suburban service, multiple unit and fitted with automatic couplings and air brakes. Third rail, trolley or pantograph contact.
- ES Electric Passenger Car. For long hauls or suburban service; multiple unit, and fitted with automatic couplings and air brakes. Operating power, storage battery.
- ET Electric Passenger Trailer. A non-powered unit fitted with automatic couplings and air brakes for use in multiple unit service in combination with electric powered motor cars.