

taking over from the *Ocean Limited* the over-night coach and sleeping car service between Montreal and Campbellton, N.B., and providing direct connections to Gaspé. A five-car stainless steel streamliner, the *Champlain*, was placed in operation between Montreal and Quebec City; this train, operating in CN-CP pool service, covers the distance between the two cities in just three hours and 15 minutes. It comprises two parlour cars, one diner-lounge and two coaches. Ten glass-topped passenger lounge cars have been acquired, six of them combining sleeping accommodation and a lounge section with a partially glassed roof at the rear; they will go into service on the *Ocean Limited* and the *Scotian*, which operate between Montreal and Halifax. The other four *Sceneramic* cars are double-decked with glass roofs over the entire length, accommodating 68 seats and a downstairs lounge with facilities for light meals and refreshments; they are in service through the Rocky Mountains territory on *Super Continental* and *Panorama* trains.

Today's lounge cars on long-distance trains provide a cruise atmosphere with ultra-modern decor, separate refreshment areas and dining car service catering to all tastes. Coach seats, on certain trains, are reserved without charge, special attendants are on duty to serve the passengers and coach lounges have been introduced.

Tickets can be sent to passengers by mail in response to telephoned requests and, as a result of *Charge-a-trip* and *Go-now-pay-later* schemes and CN-Air Canada credit cards, ready cash is not a requirement. Large groups, such as clubs and lodges, may charter coaches or sleeping cars, receiving not only the advantages of reduced fares but also privacy. Package tours, ranging from a week end special to deluxe 21-day vacations, are available and in 1963 a *Car-go-Rail* scheme was introduced allowing passengers to ship their personal automobiles for use at destination.

To provide speedier ticketing for travellers, faster handling by ticket sellers, easier ticket collection and improved accounting procedures, more than 200 separate ticket forms have been retired and replaced with nine consolidated forms.

All passenger reservation bureaux across Canada are connected by fast telecommunications networks.

Freight Services.—The CN railway system has been completely dieselized; main transcontinental trackage is almost completely under Centralized Traffic Control signalling. With the construction of electronic hump classification yards to replace flat yards, major strides have been made toward solving problems of freight delays in terminals. Four hump yards have been constructed at strategic points across Canada—Moncton, N.B., Winnipeg, Man., Montreal, Que., and Toronto, Ont. A coast-to-coast data processing network and increased use of computers and allied electronic equipment provides for internal efficiency.

The railway, through a broad research and development program, is in constant search for improved methods of transportation and endeavours to keep abreast of new technical developments, such as transportation of solids by pipeline, new forms of motive power and developments in cybernetics, with a view to their application to the railway wherever considered advantageous. Long-range planning is an essential part of this process. This program, although directed primarily toward improving the efficiency and competitive position of the CN itself, at the same time makes a substantial contribution to the country's transportation industry generally. One example is the development, by company engineers, of an electronic scale for weighing moving freight cars. This scale has a high degree of accuracy, meets all government regulations and can calculate within three seconds the weight of a car travelling between 10 and 12 miles an hour and weighing up to 250 tons. British and United States companies are seeking the manufacturing rights.

Railway specialists have worked closely with industrial traffic executives in many fields of planning, design and acquisition of special equipment. This Customer Research Service makes available to customers the fund of technical 'know-how' and skills available within the railway organization. It deals with total distribution problems; to fit the right type of equipment to the particular service required may merely result in the better use of existing equipment or it may require the provision of a completely new kind of