TRANE

Weather Magic

OCTOBER 1956

Santa Fe's Search for Passenger Comfort

WHILE THE railroads might not be able to compete with the speed of flight or the flexibility of bus transportation, they are able to provide more in comfortable travel. Billions of man-hours have been spent in research to provide more luxury at less cost for railway passengers.

Many of the greatest advances in increased comfort and decreased operating cost may be found aboard the new Hi-Level El Capitan. El Capitan has had a long and distinguished record of service to chair car passengers. Since 1938, when it was first inaugurated, it has transported nearly 2½ million passengers. During its history, increasing popularity has created the need to provide space for more passengers. The first remedy was an increase in cars and in departure times.

Another remedy, considered for several years, was a double-level car. This would allow the full length of the upper level to be used for seating, while additional facilities such as washrooms and baggage compartments could be located on the first level.

Two carefully planned prototype double-level cars were built and placed in experimental service by Santa Fe. These cars proved eminently successful in passenger acceptance. Train travelers enjoyed the better view and appreciated the further isolation from rail vibration and noise afforded by seats at a higher level.

In mid-summer of this year, Santa Fe introduced its first Hi-Level El Capitan . . . the first train of its kind. Seats in the Hi-Level chair cars are four feet higher than the floor of a conventional chair car. Spacious windows provide a panoramic view of the scenery. The passenger gets more for his travel dollar and at the same time the railroad achieves increased economy. Each Hi-Level chair car seats 28 more people than the single level conventional type chair car.

Greater comfort and lower operating cost have also been achieved by Santa Fe by its selection of the air conditioning equipment for the Hi-Level cars. As they did earlier for their mechanical temperature control cars for transporting perishable foods and their full-length dome cars, Santa Fe chose Trane equipment for the Hi-Level train.

The Hi-Level coaches each use two 8-ton air conditioning systems. Each component of the Trane system was designed with the unusual railway requirements in mind. The Trane Reciprocating Compressor is constructed to absorb increased punishment of high head pressures, high hot gas temperatures and high compression ratios which can result in railway service. It is equipped with hydraulically operated multi-stage cylinder unloaders which automatically respond to reduced cooling loads within the car. Power consumption is greatly reduced under moderate conditions.

The Trane Condenser is also tailored to Santa Fe's requirements. Since the railway operates through the southwest where extremely high dry bulb temperatures are encountered, Trane designed a practical dry condenser which promises to reverse the trend of railroads toward wet condensers. This unit was designed to provide low service and maintenance costs as compared to the heavy expense of operating and maintaining wet condensers.

Trane is proud to have contributed to greater passenger comfort and lower operating cost on the Santa Fe Railway.

A Santa Fe Railway "first," the El Capitan Hi-Level cars have Trane air conditioning systems.