

Santa Fe's *El Capitan* on Raton Pass

Steam helps diesel with the four-month-old Chicago–L.A. coach streamliner on June 26, 1938

Text by Jerry A. Pinkepank • Photo by R. H. Kindig



Fast coach streamliners enjoyed popularity in the late 1930s by giving economy passengers the same speed and some of the amenities enjoyed by patrons of the top all-Pullman trains. Santa Fe's transcontinental entry in this field was *El Capitan*, inaugurated February 22, 1938, with two five-car Budd Company-built sets running twice weekly between Chicago and Los Angeles on a 39¾-hour schedule matching that of the all-Pullman *Super Chief*. From 1937 until an antitrust ruling in 1944 against the Pullman Company, Budd was practically barred from selling sleeping cars by contracts that Pullman had with the railroads, and building trains that lacked sleeping cars became Budd's pre-war specialty, including six 1938 sets for Santa Fe.

1 Raton Pass. The light color of the track is from sand deposited by locomotives fighting a 3.5 percent grade. The 16-mile ascent begins at Trinidad, Colo., milepost 636.7 from Kansas City, and reaches its summit at the west end of the 2,789-foot Raton Pass tunnel at Lynn, N.Mex. There were two summit tunnels until the line was single-tracked and equipped with CTC in 1952, when only the westbound tunnel was kept. Largely because of the grades on Raton, Santa Fe routed most of its transcontinental freight traffic over its flatter line via Amarillo, Texas.

2 Helper locomotive. No. 920 is one of 85 900-class 2-10-2s built by Baldwin in 1903-04. These were the first of their wheel arrangement, which came to be known as the Santa Fe type on all railroads. The 900s were practically identical to ATSF's first three 2-10-0s of 1902, except with trailing trucks added for



Santa Fe 2-10-2 No. 977 exhibits the tandem compound cylinders with which the 900s were built. R. P. Middlebrook, Stan Kistler collection

guidance during lengthy downhill backing moves when in helper service. Built as a tandem compound, No. 920 was rebuilt to simple at Albuquerque Shops in 1920 and scrapped there in 1940. As rebuilt it had 28x32-inch cylinders, 57-inch drivers, 200 lbs. boiler pressure, 280,000 lbs. on drivers, engine weight of 323,300 lbs., and a tractive effort of 74,800 lbs. The 900s' low drivers led to their nickname "cabbage cutters."

3 Road locomotive. No. 6 is a diesel-electric with an A1A-A1A wheel arrangement employing two 900 h.p. Winton 201A engines and GE electrical equipment. Electro-Motive built six such units, later designated model E1A, for the Santa Fe in 1937-38 (with No. 6 being delivered in February '38). There were also three E1B booster units, which were used on the heavier *Super Chief*, but one E1A sufficed on the shorter *El Capitan*. Only Santa Fe had E1s, which differed from their predecessor EA/EB models in



GM's Leland Knickerbocker created the E1's "warbonnet" livery, represented in a 1937 painting by the designer. Mike Iden collection

having Westinghouse electrical equipment. GM designed the famous Santa Fe "warbonnet" paint scheme for the E1. With 117-mph, 52:25 gearing, No. 6 would have been on its short-time rating at the 15-mph pace being made here; its continuous rating of just 16,000 lbs. tractive effort was at 34 mph. Here, then, the helper is doing practically all the work. We can be sure the helper was removed after emerging from the summit tunnel, because its low drivers would not have done well at passenger-train speed on the 6.6-mile, 3.3-percent descent to Raton, even though curves limited that to no more than 40 mph. Scheduled running time for the 22.8 miles from Trinidad to Raton was 1 hour, including the station stop at Raton. Unlike steam

locomotives on transcontinental trains, diesel No. 6 ran through from Chicago to L.A.

4 Baggage-dormitory-chair car. The small baggage area in this combination, or combine, car sufficed for the 182-passenger maximum load on the all-reserved-seat *El Capitan*. The 32 revenue seats handled short-haul passengers and, in the terminology of the day, "colored" passengers. *El Capitan* did not pass through any states that required segregation by law, as did Oklahoma and Texas on the Amarillo line, but in practice Santa Fe coded reservations to racially segregate passengers until ordered by the ICC in 1961 to stop the practice. The car also contained dormitory space for service employees such as dining-car waiters.

5 Chair car for women and children only. This car avoided the problem that women traveling alone often felt they had to purchase parlor car tickets to avoid being seated next to a male stranger. A "Courier-Nurse" was assigned to the train, and she probably spent much of her time in this car, assisting with children. The "*El Cap*" also had a coach porter.

6 Intermediate signal 649.2. Intermediate block signals have a milepost-based number plate, with the tenths rounded to even numbers for eastbound signals and odd numbers for westbound. Matching the number to the track chart for this area places this scene at the 10-degree 15-minute left-hand curve for westbounds centered at milepost 649.15. Stripes have been added to the semaphore blade to help it stand out against a dark background.

7 Lunch-counter dining car. Several railroads found in the Depression that lunch-counter cars attracted passengers who might not want to pay for a full meal in a standard dining car. In this case, a common kitchen could serve both the counter and the tables. Five meals were served on the Chicago-L.A. trip. A 50-cent lunch in 1938 would be \$8.32 in 2015 dollars.

8 Chair car. Like the women's car, this one seated 52 passengers, but without the gen-

der restriction. The low density allowed for large washrooms and generously-reclining seats catering to overnight travel. Similar cars for day service seated 70 or more. Santa Fe used the term "chair car" for coaches equipped with adjustable seats for medium- and long-distance travel. The road partly offset the revenue handicap imposed by low-density seating with a \$5 extra fare (\$83.23 in 2015 dollars), proportioned down for those not riding the whole distance.

9 Chair-observation car. With 50 revenue seats in the car, the lounge area had only 2 seats. Demand for seating on *El Capitan* often exceeded supply, and in 1942 the train was increased to 12 cars and assigned two diesel units. The first *El Cap* was one of several trains built by Budd in 1937-38 that had observation cars with curved but relatively blunt ends; others were Rock Island's *Rockets*; Reading's *Crusader*; and Santa Fe's *Golden Gate*, *San Diegan*, and *Kansas Cityan/Chicagoan*. After 1938, Budd evolved to egg-shaped obs cars with end doors.



The *El Cap* obs cars had 50 revenue seats but only 2 chairs in the rear lounge area. Santa Fe



Rock Island's *Minnesota*, seen at Little Rock in 1961, was a "round-flat"-end car built for the *Kansas City Rocket*. Jerry A. Pinkepank