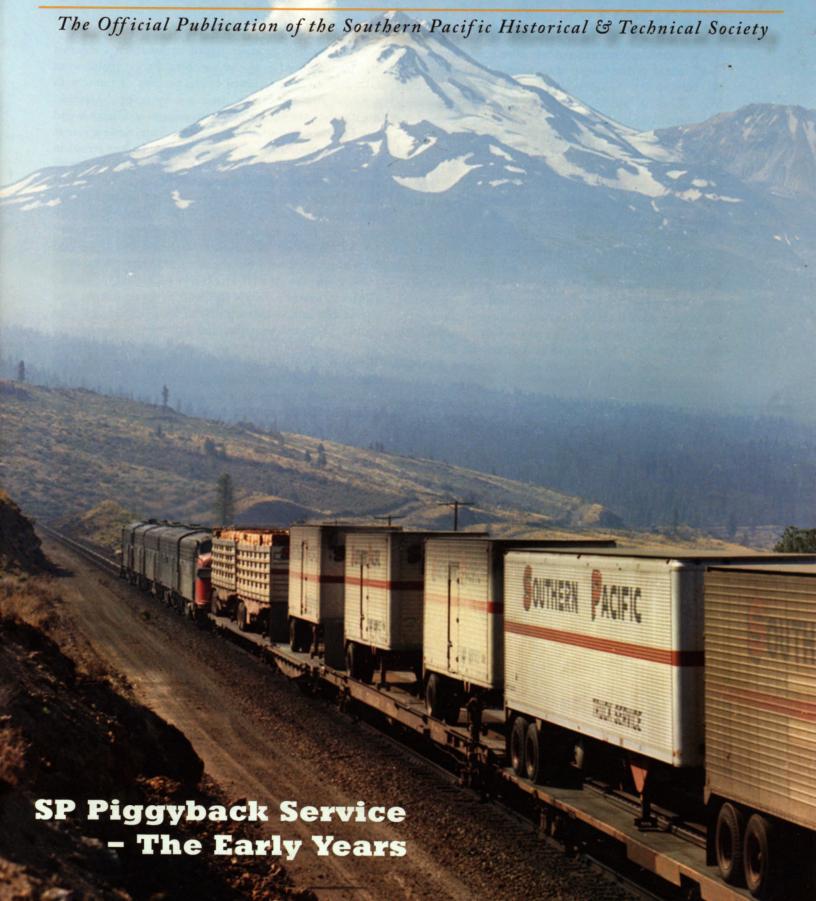
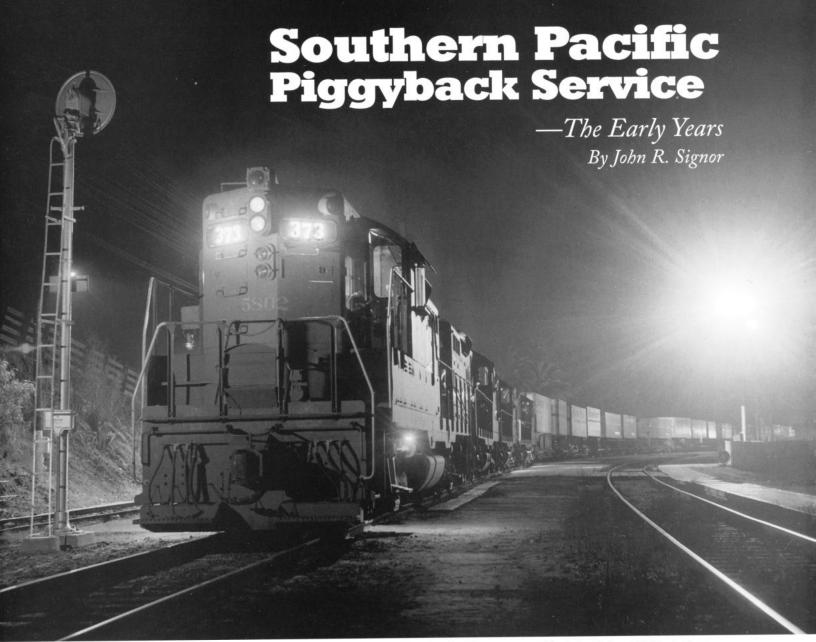


S.P. Trainline



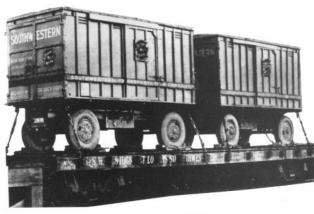


It's just after midnight in December 1959 and train No. 373, the *Coast Merchandise West*, pauses at San Luis Obispo, California, for a crew change midway on its overnight run from Los Angeles to San Francisco. At this point, the train is still comprised of mostly SP and PMT equipment. Note the Clejan-type cars several cars back. —*Richard Steinheimer photo, Southern Pacific Lines*

n the years immediately following World War II, sweeping changes ■ began to affect the railroad industry-even the nature of the traffic being handled. At one time, most jobbers, distributors and mercantile houses maintained large warehouse inventories of commodities brought in by rail by the carload and stored for subsequent sale or distribution. These same receivers began to buy on a just-in-time basis if possible, ordering one day for sale the next without any investment in merchandise inventories or warehouse facilities. This transition called for the expedited handling of carload and less-than-carload business, and in many cases overnight service.

Conventional carload rail service was becoming inadequate due to elapsed time from shipment to delivery and because it was required to load and unload the cars, furnish dunnage and, in many cases, dray to or from team tracks.

In response to this change in shipper requirements, Southern Pacific developed a trailer-flatcar operation supplemented by the highway operations of subsidiaries, Pacific Motor Trucking on the Pacific Lines, Southern Pacific Transport Co. on the Texas lines and Southwest Transportation Co. on the Cotton Belt. SP already had store-door pickup and delivery in major California cities via its trucking



Two years prior to acquisition in 1932, Southern Pacific subsidiary Cotton Belt experimented with trailers on flatcars as did a number of railroads at the time.

—SSW photo, John R. Signor collection

subsidiaries. It was not a big step to transport the trailers, rather than work through freight houses at each end.

The concept of moving highway trailers on flatcars had been around for awhile. The first "modern" style service of this type had been offered on the Chicago North Shore beginning in 1926. During the Depression, similar services were started on the New Haven between Boston and New York, the D&RGW and even the Cotton Belt experimented with the idea.

As designed, SP's trailer-on-flatcar (also called Piggyback or TOFC) operation handled its own carload business on rail billing and used one of its trucking subsidiaries to perform terminal services and certain "in lieu" line haul services. The shipper would notify of the tonnage to be handled and a sufficient number of truck trailers would be dispatched to accommodate it. The PMT driver (on the Pacific Lines) would perform the same loading service as did high-

way carriers. Once loaded, the trailer would be taken to the nearest rail terminal where facilities were available for loading flatcars. The loaded trailer would be driven on to a flatcar and held in place with wheel blocks, stanchion and cables. It wasthen dispatched at passenger train speed to a terminal in the destination area where a PMT tractor would pull the trailer off the flatcar and deliver it to the billed destination. Completing the movement, the driver would assist in unloading.

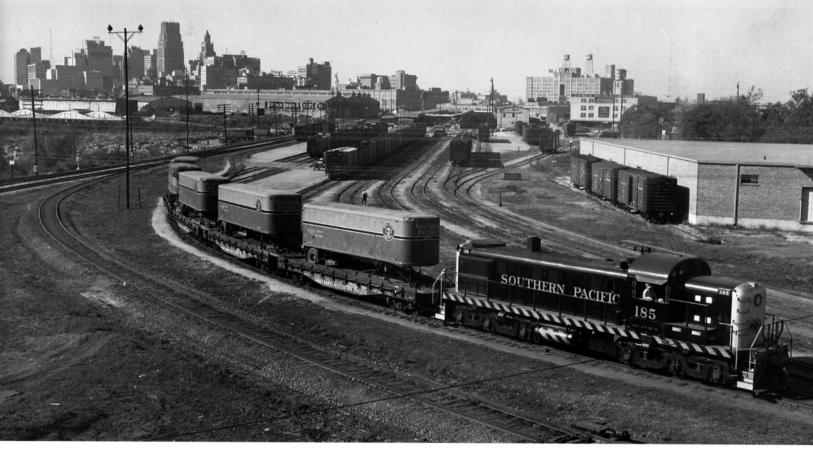
Piggyback Service Inaugurated

The first trailer-flatcar operation on the SP system was inaugurated on the T&NO May 4, 1953, between Houston and Lake Charles, Louisiana, with a pool of 30-foot and 32-foot semi trailers and 16 flatcars converted at the Houston Shops. These were ordinary 40-foot 50-ton flatcars. The old flooring was replaced with new 3-inch creosoted planking. The area where the trailer dolly wheels normally would rest was steel plated. Welded side guide rails, hinged end floor plates to form bridges between cars and tiedown equipment were added. Existing freight trucks were retained but with steel wheels and anti-grab bearings applied. The draft gear was replaced with rubber-snubbed gear.



Southern Pacific Transport Co. International tractor and 30-foot trailer at the San Jacinto Street freight house, Houston, in 1947. Trailers such as this appeared in early TOFC service on the T&NO. –SP photo, John R. Signor collection





On this page and below opposite are early publicity views of T&NO's piggyback operations in the Houston area during the late spring of 1953. The trailers are a mix of *Daylight*-painted vans and earlier SPT equipment. Note security bars on the trailers in the lower view. –All, Southern Pacific, John R. Signor collection





This operation was slightly different than the Pacific Lines model in that it was designed to retain and grow the less-than-carload (LCL) business. Trailers were loaded in delivery order at the San Jacinto Street freight house in Houston. Cutoff was 8:45 p.m. Trailers were then drayed across town to Englewood Yard where they were backed onto flatcars, tied down and dispatched in regular manifest trains. Traffic for Port Arthur was off-loaded at Beaumont. Traffic destined locations on the Lake Charles-La Fayette mainline and the Abbeville and New Iberia Branches





The basic components of early TOFC operations on the Pacific Lines can be seen on this page. Standard 53-foot 6-inch flatcars were used like SP F-70-7 141774 seen, above, shortly after being modified for TOFC service at Bayshore Shops in July 1953. As an extention of Pacific Motor Trucking service, standard PMT 22-foot sidedoor trailers, as seen left, were used. Loading of the cars was accomplished by means of portable ramps, such as this wooden ramp, seen below at River Team Track in Los Angeles in late 1954. - Above, SP photo, courtesy Tony Thompson: left, SP photo, John R. Signor collection; below, Alden A. Armstrong





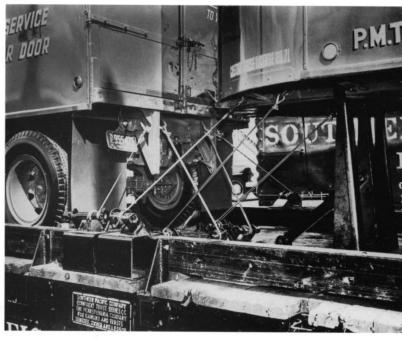
A yard engine prepares to move two recently-modified F-70-7 flatcars loaded with PMT 22-foot trailers at San Luis Obipo in the early summer of 1953. It is speculated that this might have been a test for the suitability of the equipment and tie-down apparatus before the implementation of regular service. —SP photo, John R. Signor collection

was off-loaded at Lake Charles. Truck trailers and trucking to destination were handled by T&NO subsidiary Southern Pacific Transport Co.

On the Pacific Lines, service was inaugurated between the San Francisco Bay Area and Southern California via the Coast Line on July 20, 1953. A second operation (primarily for LCL) was inaugurated from Los Angeles to Phoenix in August 1953, and was subsequently extended to Tucson and as far east as El Paso. Service between the Bay Area and Reno was inaugurated on

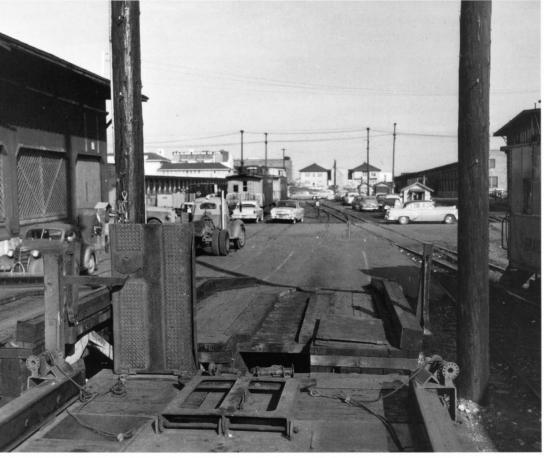
October 31, 1954, with extended service to the Salt Lake City area and Idaho territory via connection with Union Pacific at Wells, Nevada. The same day, SP tied Sacramento, Stockton and San Joaquin Valley points into the system. Service between Los Angeles and San





A PMT tractor backs a trailer onto a waiting flatcar at Los Angeles, left, in July 1953. PMT used a trailer hitch system without a kingpin, which required stanchions and cable tiedowns on flatcars. –SP photos, John R. Signor collection





Train No. 372 is set to go and awaiting power on the makeup tracks at Fourth and Berry Streets, San Francisco, in early 1956. More permanent ramps have been installed by this time. The view, left, is looking in the opposite direction where additional cabooses are available for train No. 374, loading for which has already begun. –Both Southern Pacific, John R. Signor collection

Francisco, and points in Oregon and Western Washington was inaugurated January 31, 1955, via the Coast Line and Shasta Route. The first shipper to utilize the new northwest service was Union Oil Co. at Oleum on the Western Division. Service was also extended to Ukiah on the Northwestern Pacific.

Unlike the T&NO, it was necessary to provide expedited service on the Pacific Lines. Since 1935 SP had operated the *Overnights* on passenger train schedules over the Coast Line between the San Francisco Bay Area and Southern California. By 1953 these were operating as train Nos. 373 and 374, Coast Merchandise East and Coast



Extra 4452 West, an Advance CMW, departs Shops yard Los Angeles on Thursday, April 14, 1955. By the spring of 1955, there was enough TOFC business on the Coast Line to frequently operate an advance section of the CME and CMW. This operation was formalized that summer when train Nos. 371 and 372, Advance CMW/CME, were placed on the time card. Operating out of Shops yard, train No. 371 assumed its timetable schedule at Dayton Avenue Tower at 4:45 p.m. daily, except Friday, Saturday and Sunday. —John E. Shaw



Train No. 372, the Advance Coast Merchandise East, crosses Sixth Street in San Francisco just after 4:00 p.m. in the summer of 1956 as it begins its 470-mile run to Los Angeles. –William D. Middleton

Merchandise West, between the LCL sheds at Fourth and Berry Streets, near Third and Townsend Streets Station, San Francisco, and River Team Track at the Los Angeles freight station. It was natural to place the trailer-flatcar traffic on these trains. Rail distance

from Los Angeles to San Francisco was 470 miles and No. 374 was scheduled to make the trip in 12½ hours.

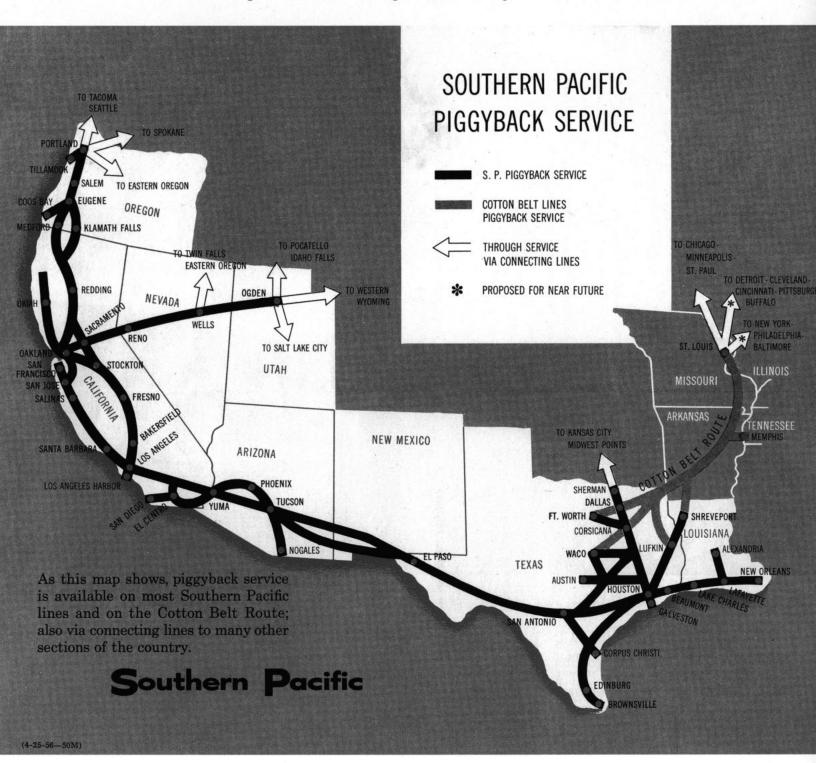
Operations soon outgrew the River Team Track and a new six-ramp TOFC facility was opened in Los Angeles during February 1955 adjacent the Alhambra Avenue Shops on the east side of the Los Angeles River. Similarly, before long, operations at the Fourth and Berry Streets location in San Francisco were transferred to nearby Mission Bay Yard. Additionally, SP established train Nos. 335 and

336 on a 1-hour and 5-minute schedule between First and Webster Streets station Oakland and Santa Clara, via Newark, as Oakland connections for the *CME* and *CMW*, with the division of East and West Bay TOFC taking place at Santa Clara Yard, San Jose. The business grew so rapidly that, by the summer of 1955, it required another dedicated train on the Coast Line called the *Advance Overnight*, train Nos. 371 and 372.

Bay Area traffic destined the Pacific Northwest was loaded at Richmond and added to the connecting traffic from Southern California and handled on a new train, No. 378, the *Pacific Coast Expediter*, operating from West Oakland to Portland, a rail distance of 714 miles, on a 20-hour 15-minute schedule. On the run to Phoenix, SP had been operating train Nos. 370 and 371, the *Arizona Overnight*, since 1939. TOFC traffic was added to train No. 370 out of Los Angeles in 1953. What little westbound traffic there was wound up cut into expedited trains on the Sunset Route, and train No. 371 was annulled.

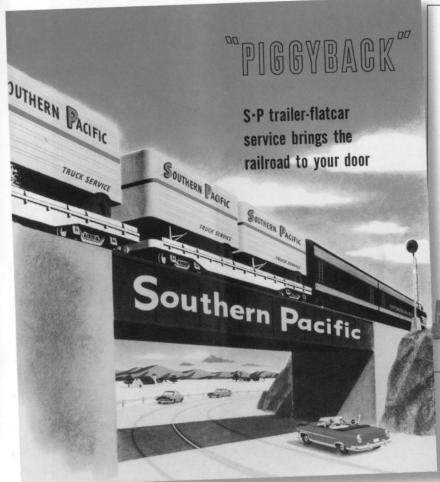
Cotton Belt begin trailer-flatcar service in August 1954 between points on its own lines and interline with the T&NO and connections at East St. Louis. In addition to handling trailers of its subsidiary Southwest Transportation Co., from the beginning it handled trailers of highway carriers moving in interchange.

By November 1954, T&NO TOFC service had expanded to 193 22-foot, 24-foot, 30-foot and 32-foot semi-trailers and 58 40-foot flatcars and 17 52-foot flatcars. At that time 34 trailers were on daily schedules from Houston to Skidmore (Corpus Chrisiti), two to San Antonio, three





A 25-car No. 372, Advance Coast Merchandise East, hustles through Burlingame at column one speed, ahead of the commuter fleet on August 1, 1955. The peninsula commuters were still largely steam powered at the time. –Stan Kistler



how does piggyback work?

All you have to do is call your Southern Pacific District or Local Freight Agent and we will arrange to have the pickup made.

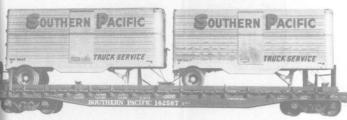
After your freight has been loaded into a semi-trailer, it is pulled by a tractor to the railroad's loading ramp.

At the ramp, the semi-trailer is backed onto a specially equipped flatcar and secured for movement to destination.

Only the semi-trailers (one or more to a car) move on the flatcars. The power unit or tractor stays behind.

At destination, another tractor backs up the unloading ramp, hooks onto the semi-trailer, pulls it off the flatcar, down the ramp, and it's on its way to your consignee's door.

Picture story on the next two pages follows the movement of a typical overnight piggyback shipment.



This brochure was prepared in April 1956 as SP piggyback service was beginning to hit its stride. The "pup" trailers still dominated the service. —John R. Signor collection

to Ennis (Dallas-Fort Worth), three to Lake Charles, two to Lafayette and one to Avondale (New Orleans).

TOFC Operations, October 1955

Some idea of the size and scope of SP's TOFC operations 2½ years after start up can be determined from a speech given by SP's G.E. Miller, manager specialized operations, in front of shippers and traffic representatives

in October 1955. At that time most of SP's trailer-flatcar traffic was carload business handled in closed semi-trailer equipment 24-feet or 35-feet in length. SP was using 1,200 semi-trailers and 268 flatcars on both the Pacific Lines and the T&NO. On the Pacific Lines, the flatcars were initially standard F-70-7 53-foot 6-inch cars of rivited construction, which had been modified at SP's Bayshore Shops, by equipping

them with steel or timber side guard rails, wheel chucks, stanchions, cable winches and runway aprons. However, by 1955 these had largely been returned to regular service and all-welded F-70-10 flatcars had been substituted. These cars were loaded with two 24-foot orone 35-foot trailer per car. Because of tunnel clearance restrictions, trailers could not exceed 12 feet 2 inches in height, as measured from the pavement surface. At that time, SP also had some flatbed trailers of the same lengths for special commodities such as steel, pulpboard in rolls, etc. They also had some 35-foot insulated semi-trailers equipped with Thermo-King refrig-

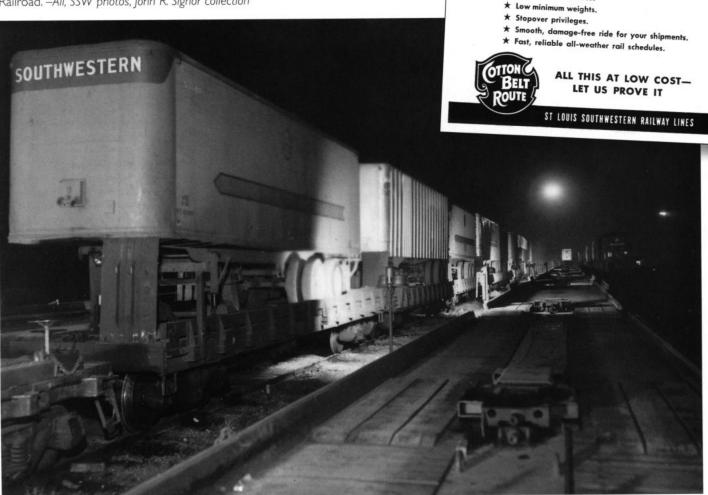
COTTON BELT

PIGGY BACK

★ Door-to-door service.



Cotton Belt joined the modern piggyback movement in August 1954 handling subsidiary Southwestern Transportation Co.'s equipment as well as those of highway operators in interchange. In the view, below, taken at East St. Louis in late 1954, SWT trailers are in evidence, as well as other carriers, including Pennsylvania Railroad. –All, SSW photos, John R. Signor collection



in early 1956. Southern Pacific's trucking subsidiaries began taking delivery of 35-foot vans in 1956 from American, Brown, Fruehauf, Hobbs, Lufkin, Strick, Trailmobile, Utility and others. By this time, SP had adopted the all-aluminum finish with an orange stripe and block lettering. Early versions retained the circular medallion, but on later versions the block lettering was repeated on the ends. Solid trains of SP equipment were the norm due to SP's adopting a trailer hitch system without a kingpin, which inhibited interchange of equipment. -SP photo, John R. Signor collection







Above: Train No. 90 rolls into Glendale a few minutes late as train No. 371, the Advance Coast Merchandise West streaks past on the westward main in 1955. For a few years, steam and modern piggyback service coexisted on Southern Pacific's Pacific Lines. —Alden A. Armstrong

Officials inspect a 24-foot "pup" trailer in the new aluminum paint scheme on train No. 372 at San Francisco in February 1955. From left they were J. J. Jordan, superintendent Coast Division; J. J. Corcoran, general chairman Southern Pacific Lines for the Brotherhood of Railroad Trainmen and E. G. Davis, terminal superintendent, Coast Division, at San Francisco. —SP photo, John R. Signor collection

erator units for commodities requiring refrigeration or cooling.

As of October 1955, business on the SP system was running about 2,085 cars, or the equivalent of 4,169 24-foot trailers per month. Principal commodities were beer, sugar, roofing, pulpboard, dessert preparations, candy and confectionery, glass bottles, tile, petroleum products, soap, iron and steel articles and blanket-wrapped furniture. The total movement of loaded trailers handled on the system was growing rapidly. In 1953, the total number of trailers handled on the system (excluding SSW) was 3,849. This had grown

to 21,225 in 1954, would nearly triple to 61,575 units in 1955 and rise to 70,328 trailers in 1956.

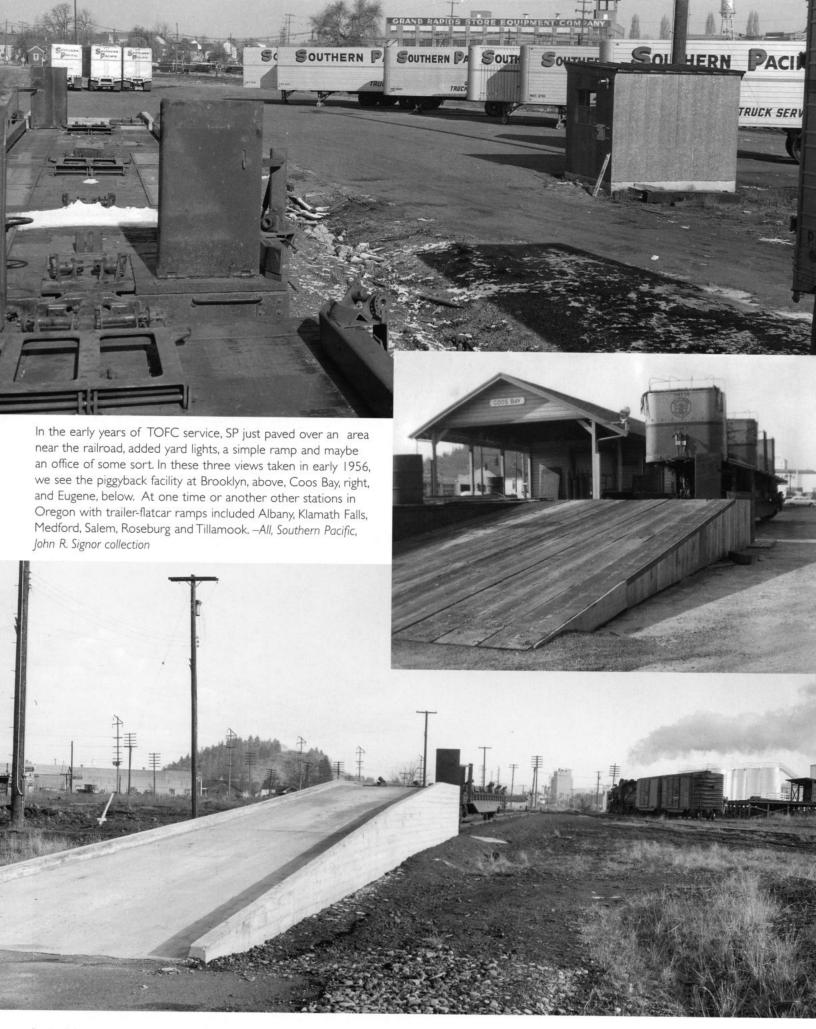
In the early years of SP's TOFC service, ramps were located at numerous stations around the system from Los Angeles, San Francisco, Oakland, Dallas, Houston, East St. Louis and other major points to such widely dispersed and isolated stations as Coos Bay, Oregon, Mount Shasta, Salinas and El Centro, California, Yuma, Arizona, Edinburg, Skidmore and Waco, Texas, Lake Charles and Shreveport, Louisiana and Pine Bluff, Camden and Texarkana, Arkansas.

Trailer-flatcar rates were comparable to common carrier highway truck rates. However, TOFC service was more costly than conventional box car or flatcar movement. Eastern railroads were routinely operating piggyback services for highway common carriers. SP had studied this type of operation, but considered it to be subsidizing the truckers at a cost at or below their costs. Therefore it was deemed preferable to handle its own trailer-flatcar service exclusively and reserve the right to handle highway common carrier equipment at a later date.



In 1955 eight C-40-3 cupola cabooses were painted to match the silver-sided trailers then being delivered for SP's burgeoning TOFC service, an example of which is SP 1181, seen right, freshly painted in August 1955 at Bayshore. Others known to have been painted silver included SP 1031, 1096, 1097, 1147 and 1201. In the winter of 1955-56 SP staged the publicity photo, above, between Broadway and Millbrae to show off the new look. —Both, SP photos, John R. Signor collection





Right: This portable ramp was placed at Mount Shasta, California in 1956. Temporary ramps (usually seasonal) were located at one time at Delano, Exeter, Firebaugh and Huron on the San Joaquin Division and Dixie and Willcox, Arizona, on the Tucson Division. Other minor ramp locations in California included Chico, El Centro, Fresno, Redding, Salinas, San Diego, San Luis Obispo and Santa Barbara. –SP photo, John R. Signor collection

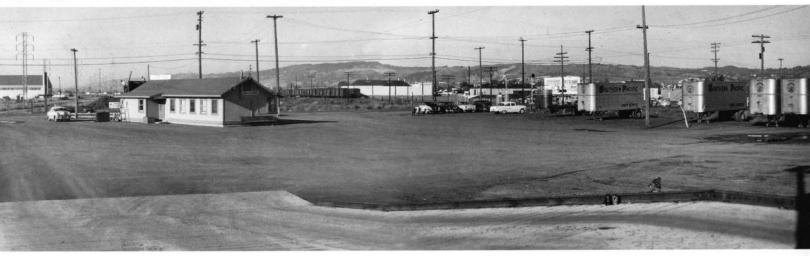






Left and above: This two-track ramp alongside the Cal-P mainlines at Richmond, seen in early 1956, served as the primary Bay Area piggyback staging location until the TOFC complex was completed along Middle Harbor Road in West Oakland in March 1959.

—SP photos, John R. Signor collection



Mulford, seen above in 1956, was just south of Oakland on the Western Division's Newark line serving the rapidly-expanding San Leandro industrial district. The ramp here was discontinued when the West Oakland TOFC facility was opened. At right, there is an air of permanency to this recently-built concrete ramp at San Jose. —SP photos, John R. Signor collection





Operations soon outgrew the River Team Track at Los Angeles and a new six-ramp TOFC facility was opened during February 1955 adjacent the Alhambra Avenue Shops on the east side of the Los Angeles River. The Shops ramp, and the adjacent PMT facility, seen here in these early 1956 views, was the largest dedicated trailer-flatcar complex on the Pacific Lines and was expanded many times in succeeding years to encompass not only the entire area once occupied by the Alhambra Avenue roundhouse and Los Angeles Shops, but the adjacent Mission Road coach yard. -Three photos, Southern Pacific, John R. Signor collection





The Clejan Cars

In August 1956 SP authorized \$1,750,000 for 150 791/2 foot flatcars that weighed less than the 53-foot cars then in operation, which would carry two 35-foot or three 24-foot trailers. Consisting of two parallel "I" beams running the length of the car, unique clamping devices operated by hand crack eliminated the need for tie-down cables. The design was pioneered by French engineer M. Deodat Clejan. These cars were built at SP's Sacramento Shops. Unveiled for the press at San Francisco on May 14, 1957, the first 12 of these cars entered revenue service on June 17, 1957 on No. 373 from San Francisco.

In December 1956 SP started handling sacked U.S. Mail in trailers from San Francisco to Tully Air Force Base near Los Angeles for distribution by the Post Office to 118 cities.

Service on the Cotton Belt also was expanding. As of February 1957, SSW had 80 42-foot flatcars, 35 new trailers and 12 ramps on line at East St. Louis, Jonesboro, North Little Rock, Pine Bluff, Camden, Shreveport, Texarkana, Dallas, Fort Worth, Tyler and Waco. Additional ramps were soon added at Corsicana, Lufkin and Memphis.



New F-50-17 Class 79-foot 6-inch Clejantype TOFC cars take shape on the assembly line at Car Shop 9 in Sacramento during early 1957. The open framwork of the car can clearly be seen. The clamping device unique to this type of car is seen above. The first of these new cars went into service out of San Francisco in mid-June 1957. —Both Southern Pacific Lines, courtesy Tony Thompson



New 85-foot Clejan cars are proudly displayed on this Southern Pacific brochure released in February 1959. —John R. Signor collection





An SP Clejan car with two 35-foot PMT trailers is seen at Mojave, California, on October 19, 1958. Since there was no ramp here, or TOFC service in the immediate area, perhaps it was a bad order set out earlier that morning by No. 375, the *Starpacer*. During 1958, in a landmark decision, Congress authorized 40-foot trailers, which would render the 79-foot cars obsolete. Most of the Clejans would soon be converted to auto-rack cars. –*Dick Kuelbs photo, courtesy Rod Loder*



TNO 24776 is seen at Ennis, Texas, on the Dallas Division, January 15, 1961, with a single 32-foot trailer SPT 9154. By the end of 1960, all of the F-70-10 53-foot 6-inch TOFC flat cars had been returned to general service on the Pacific Lines. A few, however, remained in TOFC service on the T&NO for a few more years. —Dick Kuelbs photo, courtesy Rod Loder

During June 1957 SP began handling trailers from three highway common carriers on an experimental basis between California and the Pacific Northwest. SP was able to interchange older TOFC flatcars with other railroads at Portland, but unable to interchange the new Clejan type cars. How-

ever Northern Pacific quickly made the necessary adjustments in order to be able to accommodate these type cars for through movement to Seattle and Tacoma.

By November 1957, SP was providing piggyback services over 7,528 route miles. Average monthly volume had increased to 6,118 trailers with a total investment in equipment and facilities of \$8.5 million. Southern Pacific's TOFC operation was now considered the largest in the United States, with Pennsylvania Railroad's TOFC operation running a close second.

That year SP participated in two

of the first transcontinental interline TOFC movements: a printing press shipped from Hoboken, New Jersey, to Santa Ana, California via Delaware, Lackawana & Western-Nickel Plate-SSW-T&NO-SP, and a pharmaceutical shipment via the same routing. In each case, the piggybacks entered the SP system at East St. Louis.

On August 18, 1958, SP inaugurated dedicated high-speed merchandise and TOFC service between Southern California and the Pacific Northwest via the San Joaquin Valley. Originating

at the Los Angeles Shops TOFC complex, train No. 375, the *Starpacer*, (376 north of Sacramento) departed Los Angeles at 12:01 a.m. on a 30½-hour schedule to Portland, providing second morning arrival in Portland and early third morning at Seattle and Tacoma shaving an incredible 21 hours off the previous best freight service time over the route. In the opposite direction SP operated the *TOFC Special*, also known as the "Extra East" on the San Joaquin Division, and later, it received its own first class schedule between Bakers-

field and Dayton Avenue Tower, os Angeles, No. 340, in the 1970s. Traffic in this market grew to the extent that an *Advance Starpacer*, Nos. 365–366, was placed in service in 1965.

Also in 1958, SP established interline service between Chicago and Oakland via Rock Island and Denver & Rio Grande Western for common carrier Plan I traffic from highway operator Consolidated Freightways, which sparked a court challenge by the teamsters union.

The investment in rolling stock and facilities to support the TOFC operation continued with 100 new 85-foot Clejan-type cars ordered in October 1958. At that time, SP still felt that the Clejan system best suited its particular operating requirements, not only for high-speed operation at terminals, but also because of the Clejan's lighter weight-approximately 10 tons lighter than conventional cars of comparable length. New centralized piggyback facilities were opened at West Oakland at the foot of Adeline Street along Middle Harbor Road on March 4, 1959. Previously, East Bay TOFC had been handled at Richmond and Mulford.

Also in 1959, SP began testing PMT auto loader trailers in TOFC service in conjunction with General Motors. Piggyback ramps were set up at Raymer on the Coast Line just

| | SOUTHERN | PACI | FIC | Piggy | BACK | EQUIPMENT |
|-------|--------------|------|-------|--------|-------|-----------|
| Class | Road Numbers | No. | Built | Length | Notes | |
| 77 | / TTN 10 | | | | 4 | |

| Ciuss | Roua Ivamoers | 1VO. | Duitt | Length | INOTES |
|---------|------------------|--------|---------|--------|----------------------------------|
| F-50-16 | TNO 24650-24749 | 100* | 1949 | 41' | AC&F, modified 1953-54 |
| F-70-6 | TNO 24550-24649 | 100* | 1948 | 53 | AC&F, modified 1953-54 |
| F-70-7 | SP 140500-142549 | 2,050* | 1949-50 | 53'6" | AC&F rivited, modified 1953 |
| F-70-10 | SP 142550-143549 | 1,000* | 1953-54 | 53'6" | SGS welded, modified 1954-55 |
| F-50-17 | SP 510500-510649 | 100 | 1957 | 79'6" | SP SGS Clejan |
| F-50-18 | SP 511000-511099 | 100 | 1959 | 85' | GATC Clejan |
| F-50-19 | SP 511300-511321 | 22 | 1960 | 85' | GATC R-85 Clejan, 2nd hand |
| | SP 510475-510479 | 5 | 1961 | 79'6" | Ex-New Haven Clejan 2nd hand |
| F-70-14 | SP 511100-511299 | 200 | 1960 | 85' | GATC |
| F-70-15 | SP 512000-512099 | 100 | 1960 | 85' | GATC G-85 |
| F-70-17 | SP 513000-513049 | 50 | 1960 | 85' | AC&F |
| | SP 512100-512149 | 50 | 1960 | 85' | GATC |
| | SP 513181-513230 | 50 | 1962 | 85' | Ex-SP 512100-149 rebuilt to G-85 |
| | SP 513051-513150 | 100 | 1961 | 85' | Bethlehem Steel |
| | SP 512150-512249 | 100 | 1961 | 85' | GATC G-85 |
| | SP 513151-513180 | 30 | 1962 | 85' | Bethlehem Steel |
| | SP 513500-513549 | 50 | 1962-63 | 85' | GATC G-85 |
| | | | | | |

* Unknown number of cars from these classes modified for TOFC service.





In from San Francisco via the Coast Line, train No. 374, the Coast Merchandise East, (often referred to as the "Zipper" or the "Ghost") passes Taylor Yard in Los Angeles behind several recently-delivered ALCo RS32s. Just minutes away from the Shops TOFC terminal, No. 374 was scheduled to arrive at Dayton Avenue Tower at 7:15 a.m., and the Shops about 15 minutes later. Between Dayton Avenue Tower and the shops, TOFC trains could operate via the east bank line or the Bullring and the Links to avoid congestion if necessary. Thus TOFC trains originating or terminating at the Shops TOFC facility for the Coast or Valley Lines only assumed their first class schedules at Dayton Avenue Tower for movement on the Ventura Subdivision mainline and beyond. —SP photo, John R. Signor collection

Just before sunset on a long summer day in 1957, train No. 371, the Advance Coast Merchandise West, rumbles across the 1,753-foot Santa Clara River bridge east of Montalvo, MP 404.24 on the Ventura Subdivision of the Los Angeles Division. In view is a long string of Sacramento-built Clejan cars with twin 35-foot trailers. —Robert Hale photo, M.D. McCarter Collection







In late 1959, prior to the development of the auto-rack car—or as SP called them, "Auto-Packs"—Southern Pacific began handling finished automobiles in speciallydesigned PMT auto loaders mounted on Clejan flatcars. In these two views, the first trainload of new 1960 General Motors automobiles has arrived at the West Oakland piggyback terminal on December 16, 1959. SP and General Motors executives were on hand to check the shipments of Pontiacs, Oldsmobiles and Buicks that had been assembled at GM's South Gate plant in Southern California. Once unloaded from the flatcars, it was a simple matter to truck the automobiles to various Bay Area dealers. Compare the difference in design between the PMT trailer above (note Clejan wheel immediately behind tractor wheel) and the more utilitarian designs at left. -SP photos, John R. Signor collection

Train No. 336, the Oakland Coast Merchandise East, departs West Oakland at 6:10 p.m. in 1962 behind a pair of ALCo RSIIs. Trailing the power is a string of Clejan flatcars loaded with PMT Auto-Packs, themselves loaded with automobiles from East Bay assembly plants. Sometime between 1970 and 1974, Nos. 335 and 336 were discontinued and No. 374 began originating at West Oakland operating via Decoto in order to pick up at the General Motors assembly plant located at Warm Springs. -Bob Morris





The explosion of piggyback traffic on the SP after 1960 is illustrated by this lineup of trailers at the Shops piggyback facility in Los Angeles in July 1961. From left are trailers from the Burlington, Pennsylvania, Union Pacific and Rock Island railroads, and from commercial highway operators Di Salvo, Ringsby and Willig, as well as several shipper-owned trailers. – Morris Abowitz, courtesy Bill Sheehan

north of Los Angeles where a major General Motors assembly plant was located, and at Southgate. Movement of finished automobiles in this manner appears to have been confined to the Coast Line.

With the influx of new business, SP's support of the Clejan cars evaporated. SP had joined the GATX car pool based on Clejan or Clejan-compatible flat cars, which included New Haven, KCS and Erie. A stop gap was the GATX G-85 car, which could carry both Clejan and non-Clejan trailers. SP ordered 100 of these new for delivery in the spring of 1960. But as interchange traffic increased the Clejan was more and more of a problem. One by one the roads in the GATX pool drifted away and joined Trailer Train. SP did so in 1960. Within a few years SP's Clejans were converted to autorack cars.

By early 1960, SP's investment in TOFC had grown to \$14 million. SP and subsidiaries now owned 623 TOFC flatcars. The scope of SP's TOFC business had broadened. Where in the beginning, SP had handled traffic using its own trucking subsidiaries exclusively, the traffic was divided between several different plans. Plan I, which began in June 1957, was handling highway trailers owned by certain common carrier truck companies. This amounted to 318,081 tons annually. Plan II, in which railroadowned trailers were handled door to door amounted to 591,843 tons. Plan IV, which began in July 1958 in connection with movements of shipper-leased trailers-like freight forwarders-to



The time consuming operation of loading and unloading flatcars circus style was circumvented by the FWD Piggy Packer. Seen in operation at Los Angeles Shops piggyback yard in October 1966, the Model 70, jointly developed by Southern Pacific Assistant General Superintendent of Transportation Jack Sherbourne, trailer-flatcar crews and FWD, could hoist 70,000 pounds and took normally 5 minutes to unload a car, or 2½ minutes per trailer. —SP photo, John R. Signor collection

and from Chicago, East St. Louis and Memphis, amounted to 204,780 tons. In addition, 3,317 tons of U.S. mail were handled. Plan III was not offered by SP.

During 1962, 400 new Tempco highway mechanical refrigerator trailers were acquired by affiliate Pacific Fruit Express.

As can be imagined, all this success was not sitting well with highway operators. During 1962, at the urging of the trucking industry, the Interstate Com-

merce Commission began an investigation "to explore new approaches" to TOFC regulation. That investigation culminated in a new order issued in March 1964, which forced the railroads to offer their services to truckers on an open tariff basis. Prior to the order, the railroads could accept or refuse piggyback traffic tendered them by truck lines. This order was reversed by a three-judge court in August 1965. The truck line officials were disappointed



In the spring of 1962, train No. 375, the *Starpacer*, scheduled out of Los Angeles at 11:45 p.m., rolls past Fresno Yard the next morning at 7:20 a.m. with a string of PMT auto loaders on Clejan flatcars. An advance 375, running as an extra, preceded the train by an hour that morning. A frequent occurrence, the Los Angeles-Portland traffic had grown to the extent that it was formalized in 1965 when an *Advance Starpacer*, Nos. 365-366, was placed in service. –*Bob Morris*



Westward train No. 375 became an eastward train at Elvas Tower near Sacramento, but curiously retained its odd number between Elvas and Roseville, 17.7 miles. Departing Roseville, at 12:15 p.m. via the East Valley line, it became train No. 376 for the remainder of the trip to Portland and is seen here at the Mott-Azalea crossover above Dunsmuir about 7:00 p.m. in the spring of 1964. No. 376 was scheduled to arrive at Brooklyn Yard in Portland at 6:30 a.m. the following morning. —Bob Morris



Downtown San Francisco rises in the distance as No. 374, the *Coast Merchandise East*, prepares for an on-time departure at 6:35 p.m. from Mission Bay track 136 in the summer of 1966. The short train will fill out with expedited traffic from the East Bay off No. 336 at Santa Clara Yard in San Jose. Within a few years the train will originate at West Oakland. —SP photo, John R. Signor collection

in the federal court's ruling. One big trucker was quoted as saying, "While I am sure there will be an appeal, there in no question that this decision will hurt. Quite frankly, we have been hurt by piggyback." To which SP President D.J. Russell responded "Piggyback has given us a means for really giving the truckers a fight on their own ground. If they can't compete, that's just too bad. Maybe they will see how we felt all that time."

At the time of the federal court's ruling, SP's company-owned piggyback operation was at its zenith employing over 1,500 piggyback flatcars, 3,500 trailers and ramp facilities located at some 60 locations. In addition, jointly-owned (with UP) subsidiary Pacific Fruit Express had over 1,000 40-foot refrigerator trailers in service.

Unfortunately, the American Trucking Association and interested truckers brought the suit to the Supreme Court which, in a 6-3 decision, upheld the ICC in May 1967. Piggyback



In 1965, as SP operations began to integrate into the national system, a trailing Z was added to PMT/SPT/SWT unit reporting marks and existing piggyback trailers were renumbered to comply with the AAR six-digit number system. Here, a pair of SPTZ trailers, one 35-feet and the other 40-feet 2-inches, are mounted to a Texas-Mexican 85-foot TOFC flatcar, circa 1966. –SP photo, John R. Signor collection

had played a key role in stemming the long, nearly uninterrupted decline in Southern Pacific's share of intercity freight. Now it was forced by ICC mandate to—in effect—share a portion of its windfall with competitors.

But, despite adverse regulations, there was a new era on the horizon.

Even as the days of solid trains of SP-owned trailers streaking through the night began to fade, new technologies were on the rise. Southern Pacific had begun experimenting with containers in 1962 and, as usual, would be at the forefront in development of this new technology.