
**Southern California
Railfan Field Guide**

Featuring

**Atchison, Topeka And Sante Fe
Southern Pacific
Union Pacific
Main Lines**

**Trona Rail Road
San Diego Metropolitan Transit Development Board
South Western Portland Cement
Short and Traction Lines**

**SP West Colton
ATSF Barstow
Classification Yards**

**Bakersfield
Barstow
Del Mar
Fullerton
Needles
Oceanside
Riverside
San Bernardino
San Clemente
San Juan Capistrano
San Diego
Passenger Stations and Harvey Houses**

The World-Renowned
**Cajon Pass
Tehachapi Loop
And the Majestic
Mojave Desert**

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Dedication

To my children, Ben and Rebekah; Toni, who helped edit the manuscript; Debbie, who helped edit the Cajon and Tehachapi sections; and George, who introduced me to railfanning.

Revised June, 2004

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This edition of the Southern California Railfan Field Guide is published as a companion to the documentary Tehachapi: End of An Era. While the guide's first edition was accurate at the time of publication, this edition is now entirely inaccurate in several sections.

Author's Preface

I took my first train picture on December 31, 1979. George, who also had an HO train set, was visiting for Christmas vacation and suggested trying something bigger. So after finding nothing at the Union Pacific yard in Long Beach, we headed towards 8th street and saw them: ATSF GP30 3227 and GP35 3416. Dirty, grimy, and slow, they merited three shots each. Later on we drove to New Dock Street and saw UP GP30s 726 and 734B. Another six shots—plus one for the caboose. Just before sunset we caught GP30 3209 and GP35 3305 at Arlington Street in Torrance on Sante Fe's Harbor Sub. Wow, six engines in less than four hours! What a day!

Two years later we visited Cajon Pass with Stewart, a veteran railfan almost twice our combined age. He took us directly to Blue Cut where we waited but ten minutes for a slow north-bound: six units pulling and two helpers pushing just one train! We followed the movement through Cajon, into Sullivan's Curve, and on up to Summit. After lunch Stewart told us about the Pass, how the grade had been re-aligned not too long ago, and the “good old days” of steam. We saw about a dozen trains that day, one every half-hour. The good old days gone? No. For me, they had just started.

George and I visited Tehachapi for the first time during Christmas, 1983. We left Orange County armed with a 1976 Railfan article as our guide. We stopped outside Mojave to watch an SP southbound with a D&RGW GP35 in the consist, pattered around in Bakersfield the next day, and finally made it to the Loop by 2:30 pm the day after that. But soon we had to leave. Two hours of sun was not enough time, so—after another trip to Cajon—we returned, this time on July 4th, 1985.

I met Stan on the second Tehachapi trip. The following President's day we visited Barstow to see ATSF's operation there. Afterwards we had an informal slide show, and Stan complained that getting his photos organized took too much time. We talked about using a computer to organize slide collections. We also talked about the possibility of publishing a guidebook for other railfans. But that was an expensive proposition: at the time typesetting systems cost more than a house.

A lot has happened since then. Who would have predicted the SP being purchased by a regional railroad? The ATSF running a second-string operation? And the UP merging with its allies to emerge more profitable than its California competitors? The solid blue with yellow livery of GP35 3416 in my early photos no longer exists. GP30s no longer ride on UP rails. And the ubiquitous gray with red SP scheme may soon be history. Why wish for the good old days? We live in interesting times!

Whether you are from the East Coast visiting California for the first time or a native who lives with Cajon Pass and Tehachapi virtually in the back yard, I hope you get as much enjoyment from using this guide as I did preparing it for you.

Jason Paul Kazarian
Ridgecrest, California
October 1, 1994
Revised Richardson, Texas
June 5, 2004

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Introduction

Welcome

This field guide, written especially for the railfan hobbyist and photographer, covers most major Atchison, Topeka, and Sante Fe (ATSF), Union Pacific (UP) and Southern Pacific (SP) routes throughout Southern California. Access to and scenery surrounding the ATSF Cajon, Needles, San Diego, and SP Mojave Subdivisions are described to help you plan photographic vantage points in advance. References to selected topological maps published by the United States Geological Survey (USGS) are also included.

For Your Safety

Railfanning is an enjoyable but potentially dangerous hobby. The nature of both trains and the environment around them contribute to personal hazards. So that your trip may be a pleasant one, please keep the following safety tips in mind:

- Pay close attention to what is going on around you.
- As a general rule expect a train on any track in any direction at any time.
- Trains traveling downhill make very little noise until they are visible.
- Continuously exercise caution.

Road Conditions

Southern California has an aging and inadequate highway system staffed by rude and dangerous drivers. Please be careful and drive defensively. Note especially that the following roads to railfan spots are particularly dangerous:

- State Highway 138 between Cajon Junction and Summit has several tight turns; keep a safe distance from large recreational vehicles.
- National Trails Highway between Victorville and Hodge is one lane each direction and routinely frequented by bats from hell.
- Lenwood Road between I-15 and State Highway 58 is a good road, but be mindful of heavy truck traffic.
- Woodford-Tehachapi Road twists and rides close to several cliffs with no guard rails. Low traffic, but some local drivers think it's straight.
- State Highway 58 between Tehachapi and Arvin is usually not a problem, but winter fog can limit visibility to ten feet. California truckers still drive 55 through it, though. NOAA weather radio on scanner frequency 162.55 in Bakersfield or Mojave and 162.400 in the Tehachapi Mountains will broadcast alerts if the fog is a problem.

Desert Warnings

Barstow, Cajon, Hesperia, Mojave, Needles, Trona, and Victorville are all part of the Mojave Desert. Carry one gallon of water (not soda pop, juice, or milk – water) per person for each

day you expect to be away from “civilization.” Drink one cup every ninety minutes. This will prevent dehydration and make the desert seem much more pleasant. Do not visit these areas in Summer without sun protection: lotion, shade (an umbrella or picnic tent), or both.

The biggest danger in Cajon, Hesperia, and (to a lesser extent) Victorville is “weekend warriors” riding dirt bikes and go-carts. They tend to follow the railroad right-of-way and may not stop in time if a curve or cliff blocks their view of you.

Emergency Phone Numbers

If you are involved in or witness an emergency dial 911 from any telephone to summon help. If assistance from the California Highway Patrol is needed, for example after an automobile accident on a state highway or interstate, also call the operator and ask for Zenith 12000. Both of these numbers are toll-free.

Do not depend on mobile phone coverage in isolated areas. This is especially important if you plan to visit isolated areas along the Needles Subdivision.

From the Legal Department

A Note for Scanner Owners

It is a federal violation to divulge the contents of private radio broadcasts or use the information obtained for personal gain or illegal purposes. These restrictions apply to the use of scanner radios. California does not regulate mobile use of scanners.

About Public and Private Land

The Cajon Pass, the land surrounding Trona, and the ATSF main between Klondike and Needles are on public land; these areas are part of the San Bernardino National Forest (SBNF) or California Desert Conservation Area (CDCA). All other areas mentioned are on private land. Please respect private property rights. Observe all “No Trespassing” signs posted. In many cases your access rights to photo locations is limited to the easement along a public road. In the unincorporated areas of Kern County, this easement is one hundred and fifty feet from the center line on both sides.

Unless otherwise mentioned, public land in the SBNF and CDCA is designated for limited use. Motor vehicle access is restricted to approved routes of travel, defined as “any road or trail which is at least two feet wide and shows significant evidence of prior vehicle use.” Please protect the environment by observing this regulation; you’ll also avoid getting stuck as well.

One last word: remember that your safety consciousness and respect for property today may very well determine if that “great photo spot” is off limits tomorrow.

How to Use This Guide

The photo locations described are on or near a paved highway; exceptions are noted. There are other photo opportunities shown on the USGS maps; these, however, are not accessible by passenger car. Use prudence if you visit these areas.

Driving Directions

This guide assumes your tour will start near an urban region. The ATSF Cajon Subdivision is followed from San Bernardino to Barstow, the Needles Subdivision from Barstow to

Needles, the San Diego Subdivision from Fullerton to San Diego, and the SP Mojave Subdivision from Mojave to Bakersfield. Where possible, directions are given for travelers coming the opposite way: you should be able to follow along reading the guide backwards. Also the nearest freeway exit to most photo locations is given in addition to local surface street access.

Important Definitions

Throughout the text several terms have a specific meaning, defined as follows:

- **Station:** This can refer either a building or a sign with the station's name on it. Barstow Station means the location where Casa Del Desert stands. Hesperia Station is nothing more then the sign along Sante Fe Avenue West. But depot, however, always refers to an actual building.
- **MP vs. Milepost:** The abbreviation MP refers to a marker along the tracks. The word mile-post refers to a marker on the road. For example MPs refer to the SP and mileposts refer to Kern County roads along the SP Mojave Subdivision.
- **Spillways and Bridges:** A spillway is sewer pipe covered in concrete; a bridge is a trestle structure. Both do the same thing: allow rain water to flow under the roadbed. Spillways and bridges along the ATSF and SP mains are labeled with their MP.
- **Overpass, Underpass, Subway:** These terms are used at grade separations between surface streets, railroads, and freeways. For example the location where National Trails Highway crosses under the ATSF in Oro Grande may be called an NTH underpass, NTH subway, or ATSF overpass. Likewise the point where National Trails Highway crosses over the ATSF between Danby and Essex can be called an ATSF underpass, ATSF subway, or NTH over-pass. Similar logic is used when talking about freeways and surface streets.

USGS Map References

Where possible locations in the text are correlated with the USGS topological maps. Symbols in parenthesis refer to the nearest US Public Land Survey System township/range and section (printed in red) containing to the feature in question. For example the Tehachapi Loop would be referenced in the text as (Keene, T31S/R32E:27). Note that sections are numbered between 1 and 36 in a weaving fashion, like this:

06	05	04	03	02	01
07	08	09	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

For Further Assistance

If you would like more details about a particular area, contact the government agencies or chambers of commerce listed in the Services Directory sections. I'll also be happy to answer any specific questions; please send an email to rf@lbgeeks.com.

**Atchison, Topeka, and Sante Fe
Cajon Subdivision**

Union Pacific Right-of-Way

Amtrak San Bernardino Passenger Station

ATSF San Bernardino Yards

Ono

Devore

Keenbrook

Blue Cut

Swarthout Canyon

Cajon

Sullivan's Curve

Sante Fe Fire Trail

Summit

Hesperia

Frost Crossover

Victorville

Oro Grande

Helendale

Hodge

Lenwood

Southern Pacific

West Colton Yard

ATSF and UP Riverside Stations

Southwest Portland Cement

ATSF Cajon Subdivision

History

The Cajon Pass was first traversed by settlers in 1851 when Amasa Lymand and Charles Rich led a band of Mormons from Salt Lake City over the Mojave Desert to San Bernardino. Railroad construction through the Pass was first started by the California Southern (a former ATSF subsidiary) under Jacob Victor's direction in early 1884, about four months after passenger service to San Bernardino began. Some 80 years later the SP built through the Pass, allowing trains from West Colton to bypass Los Angeles en route to the San Joaquin Valley.

Today the Pass is a major lifeline for Southern California. Not only do rail shipments to this part of the state come through here, but so also does electricity, gas, and oil. About 50 freight and four passenger trains push through the Pass daily. Excellent photographic opportunities are enhanced by majestic red rock backdrops, formed in part by the San Andreas Fault rift zone.

Orientation

The line runs essentially north to south, but almost due east-west from Alray to Summit. When talking about train movements we use west or south to mean “towards San Bernardino,” and east or north to mean “towards Barstow.” The line is double tracked; when referring to a specific rail pair the term “north track” means the one furthest north or west, while “south track” designates the one furthest south or east.

Let's go for a tour of the ATSF Cajon Subdivision! We'll start at San Bernardino, work north to Sullivan's Curve, travel east to Summit, and follow the mains towards Hesperia. At Victorville we'll continue on through Oro Grande, Helendale, and Hodge; our tour will end at Lenwood. While reading about the photo locations, refer to the USGS and supplemental maps for landmarks and geographic features.

San Bernardino Area

Shops and Yards

San Bernardino was established in the late 1880's and was once a cornerstone of ATSF's California operations before being closed in the early 1990's. Until Barstow Yard was completed in the late 1970's, San Bernardino was the preeminent locomotive maintenance facility in the state. Examples of work performed here include rebuilding F45 and FP45's into SDF45 and SDFP45's, removing cabs from SD45's to make “B” units (5501-5509), and painting the California State Railroad Museum F7 diesels in their original passenger “war bonnet” livery.

Today the activity is much quieter, but three or four local road switchers still hang around. The best place to watch these yards is by foot from the Mount Vernon Avenue overpass. To get here take the I-10 Mount Vernon exit north, the I-215 Second Street exit west, or drive southwest from Ono along Cajon Boulevard (Cajon eventually becomes Mount Vernon). See the San Bernardino supplemental map for details.

Walking along the east side of Mt. Vernon the former diesel service tracks, some storage tracks, and the San Bernardino/Pasadena Subdivision junction can be seen. The storage tracks may contain cars waiting for overhaul elsewhere. The wye marks the point at which the Cajon Subdivision splits: Pasadena continues west, San Bernardino runs south.

On the east side of Mt. Vernon the former diesel shops, more storage tracks, and crew change point can be seen. A closed diesel facility stands where the turntable once was; engines in various states of repair used to get repaired here. The road switchers, usually GP30s and GP35s, sit in the storage tracks near the Amtrak station. At the change point southbounds from Barstow will stop, a crew will unload, and a replacement crew will board. The whole process takes about 15 minutes; during this time you can take some excellent overhead photographs.

Use caution on the Mount Vernon bridge as the sidewalk is narrow and traffic is heavy. Crossing on foot is restricted at certain times during the day; check the signs at either end of the bridge for details.

Amtrak Passenger Station

While visiting the yards, don't forget the Amtrak station. Park in the lot dedicated to the Amtrak terminal on 3rd and K. Four trains are serviced daily: the east and west Southwest Chief and Desert Wind movements. Check the station, your Amtrak agent, or call 1-800-USA-RAIL for a timetable. You can also watch inbound and outbound freights from the station platform.

Ono

Our next stop is Ono, about five miles north of the ATSF facilities in San Bernardino. To get here from the San Bernardino yards just follow Mount Vernon Avenue north. You can also take I-215 north to University Parkway, exit west, then turn right at the grade crossing.

This stretch of the line runs northwest to southeast. The light is good from late morning through the afternoon for photographing southbounds. In summer early mornings and late afternoons northbound traffic is well lit, but at some places telephone poles blocks the view.

The scenery is sparse and desolate; few trees grow in the area. There is, however, some heavy industry, including a cement plant: look for interesting vistas with elevators and loading docks as backdrops. Occasionally an industrial locomotive is on duty at the Cargill facility.

Continuing northwest on Cajon Boulevard, we'll pass the siding of Verdemont where two crossovers allow a train to switch from one track to the other. ATSF southbounds sometimes park here to cool their brakes after riding down from Summit. About 1.0 mile further north the line crosses over the road; stop here for some interesting bridge shots (Devore, T1N/R5W:1).

Devore

Reaching Devore is a bit tricky: continue northwest on Cajon Boulevard, then make a sharp left at Devore Road. Stop near the grade crossing; be careful to park away from the tracks. If you're driving on I-15 take the Devore exit to Cajon Boulevard, drive past the fire station, and turn south (right) on Devore Road. From I-215 exit at Devore Road and turn left. See the Ono to Devore supplemental map for details (Devore, T2N/R5W:33).

Devore is a convenient place to railfan: the SP and ATSF mains are adjacent to one another; seldom do they get closer than this. The scenery is sparse but greener; the crossing gates,

some trees, and the distant San Bernardino mountains can be used as backdrops. The tracks curve somewhat, so the angles are more interesting than at Ono. A nearby roadside restaurant can keep you stocked on “munchies” as necessary, definitely a leisurely approach to the great outdoors!

The light from late morning through afternoon is still best for southbounds; fortunately there are no telephone poles blocking the view of summer early morning and late afternoon northbounds. The ATSF and SP lines both curve to the west, making good shots of southbounds in the early afternoon possible.

Cajon Boulevard stops a few hundred feet north of Devore; I-15 and I-215 are the only routes north of here. To reach Keenbrook, take Devore Road northeast and enter I-15/215 north (to Victorville).

Through Cajon Canyon

Keenbrook

From I-15 take the Kenwood Avenue exit south (down hill) to Cajon Boulevard, turn right at the stop sign, and head northwest. About 2.0 miles later turn west at Keenbrook Road. Cross the stream and railroad tracks, following the road to the right until it ends on a small hill within view of ATSF MP 66. Respect the posted private property signs. Note: the stream presents a difficulty to passenger cars immediately after a rain; in late February, for example, the water is often one foot deep (Cajon, T2N/R6W:13).

The ATSF and SP mains at Keenbrook are also close together, but SP is 25 feet higher. ATSF trains can be seen well in advance from the SP main, but the reverse is not true. The “hotbox” detector south of Hiland (Summit), however, gives advance warning of any approaching southbounds. So camp near the ATSF tracks, moving to the SP's when necessary.

As at Ono and Devore, the light is best for morning through afternoon southbounds. Telephoto lenses, from 135-200 mm, work well on the ATSF main: tight cab shots with the train following behind turn out favorably. Summer early mornings work well for northbounds, but summer late afternoon compositions are hampered as the west side of the tracks is blocked by nearby hills.

Blue Cut

Our next stop is Blue Cut, 1.3 miles north of Keenbrook Road along Cajon Boulevard. Park at the large turnout between a stone guard wall and the highway. The SP main is visible, but disappears behind a hill as it passes the Cut. Northbounds can be seen leaving Keenbrook; southbounds whistle at the Swarthout Canyon Road grade crossing. A gentle breeze keeps the Cut cooler than other parts of the Pass (Cajon, T2N/R6W:13).

The tracks run northeast to southwest through the Cut. Summer early morning light shines in from the east and is well suited for northbounds. Towards mid to late afternoon or in winter the sun shines from the southwest, an ideal condition for southbounds. In the evening, however, the sun moves behind the tracks; lighting is then better for southbounds from Blue Cut's west side.

Swarthout Canyon Road Continuing north we come to Swarthout Canyon Road, about 1.0 mile from Blue Cut along Cajon Boulevard. The entrance is opposite the former Cajon Campground listed on the map. While shown as a dirt road, it is in fact paved. Turn west at this point (Cajon, T2N/R5W:7).

Stop at the ATSF grade crossing. It has an interesting perspective for southbounds rounding the bend. There's not much northern visibility, but the gates will drop about thirty seconds before a train enters the vicinity. In any case, keep room between you and the tracks at all times.

Further south, Swarthout turns and crosses the SP tracks. This crossing, unlike the Sante Fe's, is unguarded. It is also about 500 feet from the ATSF tracks, so photographing both lines at the same time is difficult. The north end of Blue Cut's west side is accessible on foot, not by car; it may be better to park somewhere between the two lines and walk as the need arises.

Lighting along Swarthout is similar to Blue Cut. Access to both sides of the ATSF and SP lines is not restricted by hills, however, allowing good vistas for summer late afternoon photography.

When leaving the area, follow Swarthout back to Cajon Boulevard. The road continuing north over the SP splits and runs into either private property or 4x4 territory.

Cajon

To visit Cajon siding continue north on Cajon Boulevard and turn left just before the interstate. From I-15 take the Kleghorn Canyon exit southwest and turn right at your first opportunity. The access road is east of the tracks; see the Sullivan's Curve supplemental map for details.

Sante Fe uses this siding for storing track maintenance equipment: tie layers, ballast spreaders, and gaging machines are often parked here. The mains diverge at this point: the south track, a shorter but steeper route to Summit (3.5% ruling grade), splits to the east; the north track, a longer, gentler path (2.5%), to the west. The SP main is about one-half mile from the ATSF and will rejoin the north track as it ascends into Sullivan's Curve (Cajon, T3N/R6W:36).

Trains are routed over the north or south track depending on their weight and type. Passenger consists often use the south track, switching to the north track at Summit. "Hotshot" freights, like piggyback specials, also use the south track, as do small trains with three or four engines. Larger freights and most Ups use the north track because they have more tons per operative brake.

The lighting here is different from that at Blue Cut or Swarthout Canyon. Morning southbounds are well lit from the east; afternoon to evening southbounds from the west, especially inside the north track's diverging curve. Unfortunately telephone poles block an otherwise excellent view along the south track.

Sullivan's Curve

Finding your way into Sullivan's Curve is a little tricky. Follow the dirt road from Cajon over the tracks, south and east around the levee, through the stream, and up to the tracks. Follow the maintenance road on the curve's inside and park at 9:00. Avoid the right fork that goes down into a ravine. See the Sullivan's Curve supplemental map for details.

Note: the stream bed is covered with loose sand. To avoid getting stuck, first walk across on foot and find a firm path before driving over the wash. Use caution in a passenger car with low ground clearance.

Named after the photographer E. O. Sullivan, the curve is famous for its majestic red rock formations which rise about 300 feet above the tracks. This is the best place along the line to

photograph SP freights, and some prefer the reduced quantity of ATSF trains for the increased quality of scenic beauty. The ATSF and SP tracks are adjacent, but vertically separated by about 15 feet (Cajon, T3N/R6W:35).

Lighting along the curve changes throughout the day. It is good at most times for trains running in both directions, but depends on which side of the tracks and end of the curve you stand at. Many people like to maintain “base camp” at the curve's apex, walking to camera position as the sun moves.

Telephoto lenses from 135-200 mm work well here, compressing the apparent perspective. Trains appear shorter than with a normal (50-55 mm) lens. This effect is also useful for bringing a photograph's apparent foreground and background closer together.

The safest way to leave Sullivan's Curve is back the way you came. There is no easy way to reach Highway 138 otherwise, and a farmer raises bees about 0.5 mile to the north!

Sante Fe Fire Trail

The Forest Service maintains an emergency route for fire fighting equipment that parallels the south ATSF track from Cajon Junction to Summit. You may wish to follow the trail if you have a 4x4; a 4x2 with good ground clearance may also suffice.

To find the fire trail follow the Baldy Mesa dirt road just east of I-15 and north of State Highway 138 at Cajon Junction. You will eventually reach a sign pointing out the trail. Be advised that the route may be substantially different from what is shown on the topographic map: it changes every year due to washouts. Please exercise extreme caution when driving along the trail (Cajon, T3N/R6W:26).

Cajon Pass

Summit

Second only to Sullivan's Curve in notoriety, all three mains rejoin at Summit. The most convenient route to Summit is by following Highway 138 east (a mountain road) from Cajon Junction. Be wary of tight curves; keep some distance from large recreational vehicles. At safe speeds the trip from I-15 to Summit is about twenty minutes.

Summit offers two distinct observation points: an overhead view of the pass and the siding of Summit itself. The overlook is at a slow vehicle turnout located on 138's north edge just past a “Slippery When Wet” sign. From the turnout's west end you can see the north and south tracks curve into the area; a panoramic view of the Summit crossovers is a short walk to the east. Several breaks in the fence offer excellent vantage points (Cajon, T3N/R5W:29).

To reach the Summit siding crossovers continue on 138 east to Summit Road and make a sharp left. Follow this dirt road up to the tracks. Park away from the main, both to protect your car and keep it out of the camera's view. Landmarks in the area include signals, derail tracks, and the crossovers. From the signals trains are visible for a mile in either direction; approaching eastbounds will be heard, however, far before they can be seen (Cajon, T3N/R5W:20).

The tracks run approximately east-west through Summit, so the lighting is decent to excellent throughout the day. From sunrise to early morning the inside of the west curve, best shot from overhead, is well lit. As the day progresses, the west curve's outside receives more light. From late afternoon to sunset light falls almost directly along the crossover, making great “3/4 wedge” shots of westbounds possible.

Summit Valley Road

At Summit the SP main turns northwest and heads towards Palmdale en route to Bakersfield. We'll continue our tour by following the ATSF to Hesperia. Take 138 east for 1.25 miles until reaching Summit Valley Road (Hesperia Road), then turn left. The Silverwood Bait, Beer, and Country Store on the corner serves as a landmark (Cajon, T3N/R5W:27-28).

The line's grade is one percent less steep between Summit and Hesperia than between Ono and Summit, so the speed limit for shorter (8500 feet or less) trains is 70 MPH. The scenery is flat and straight, somewhat like between Ono and Devore, but with sandy hills for a background.

Summit Valley Road is dirt over asphalt: it is paved near Summit, alternates between dirt and asphalt for 4.0 miles, then remains paved just before reaching the Hesperia Airport. At the airport the road turns north, changes its name to Sante Fe Avenue East, and drifts away from the tracks for about 0.5 mile (Hesperia , T3N/R4W:5).

The line runs almost due north-south between the airport and Main Street. Lighting will be excellent for southbounds throughout the day, but poor for northbounds. Because the main is almost ruler straight, you can see approaching headlights up to three and one-half miles away. The speed limit for smaller freights is still 70 MPH; around 11:00 a.m. the southbound "Desert Wind" runs through here at 80 MPH.

The Victor Valley

Hesperia

After passing the airport follow the tracks for about 2.0 miles until reaching the Main Street overpass. Sante Fe Avenue East will soon end, so turn right on Yucca Street and right again on C Avenue. If you would like to fuel or food up turn left on Main, otherwise turn right, go over the tracks, turn right again on Second Avenue, right on Yucca Street, then left to head north on Hesperia Road. See the Hesperia supplemental map for details (Hesperia, T4N/R4W:21).

From Hesperia Station follow the tracks north for another three miles. The first mile and a half is as ruler straight as before, but then the main starts to curve east. Turn right at Sante Fe Avenue West and follow the tracks for another 1.5 miles. Unfortunately telephone poles are in the way, but you should have no problem pulling off the road if a train approaches (Hesperia, T4N/R4W:9).

Sante Fe Avenue West eventually comes to an end. At Sequoia Road stop the car, get out, and check under the bridge for an approaching train: the line can't be seen past the overpass. If nothing is coming turn left onto Sequoia, right on Hesperia Road, and head north to Bear Valley Cutoff (Hesperia, T4N/R4W:3).

Frost Flyover

One of the more interesting parts of the entire subdivision, the south track flies over the north at Frost to allow left handed running into Cajon. East of Frost trains running northbound use the north track; west the south track. This is done so southbounds will use the longer, less steep path between Summit and Cajon via Sullivan's Curve.

To reach Frost from Sequoia, drive 2.0 miles past Bear Valley Cutoff to Coad Road and turn right. From I-15 exit at Bear Valley Cutoff east, turn left at Hesperia, and continue to Coad instead. Follow Coad through two "S" turns until the pavement ends, turn left onto a soft

dirt road, take the first right fork, then hug the left edge of the road until reaching the flyover. The MP 39.4 spillway promotes a wash where your car can get stuck: stay away from that. See the Victorville supplemental map for details (Hesperia, T5N/R4W:27; Victorville, T5N/R4W:22).

The flyover cuts through the heart of Victorville's development, so photo opportunities are somewhat restricted. The sun shines directly into the overpass tunnel during the afternoon, lighting southbounds well. There is also a safe area to stand away from the bottom track and shoot directly into the tunnel.

Frost from the East

In the morning, however, the sun shines on Frost's eastern side, so photo opportunities are better from another perspective. To get there take Bear Valley Cutoff east and turn left onto Ridgecrest Road. Continue north until the road's name changes to Yates Road. Then park and walk onto a vacant lot overlooking the flyover. Note: land north of the Ridgecrest and Yates junction is private property.

From this vantage point you can stand on a rise and see the north track crossing over the bridge to become the south track. Trains are well lit during morning hours and the curve adds an interesting visual element. From Ridgecrest Road a 135-200 mm lens will capture southbounds well; to use a 50 mm or wide angle you'll need to take a short hike down to the tracks (Victorville, T5N/R4W:23).

Victorville

Our next stop is Victorville, one of the busiest stations on the subdivision. With UP helpers cutting in and out, two cement plants constantly eating, an Amtrak stop, and trains meeting frequently, dull moments are rare.

Forrest Park, maintained by the City of Victorville, offers a nice place to park the car, eat lunch, get some water, and sit in the shade. To get here take Hesperia Road north to D Street/Highway 18, turn left at the stop sign, right at 6th Street, and immediately right again. Drive around to the east side of the playground; park in the lot. From I-15 take the D Street exit east to 6th and turn left. See the Victorville supplemental map for details (Victorville, T5N/R4W:10).

West of the 6th street grade crossing at least two UP helpers sit on call; if they're not around something is up. A two man ATSF freight office is nearby; movements in and out of the South West Portland Cement (SWPC) and Riverside Cement plants are coordinated here. Several hopper car strings sit ready to serve the SWPC plant in the background.

To the east is the Victorville station sign, privately owned ATSF caboose 999270, and the Highway 18 overpass. The Amtrak stop (there's no depot) is just behind the park proper; two Desert Wind movements stop here during daylight hours. The area is fairly busy at all times with autos, trucks, and trains)please use caution while walking about.

It pays to monitor the ATSF road channel while sitting at the park: the subdivision dispatcher is constantly resolving the "messes" which inevitably happen. There is also a link between the ATSF and the UP on 160.190; you sometimes can get advance notice of UP movements on that frequency.

Oro Grande Vicinity

MP 32 Cut

About five miles northwest of Forrest Park lies the town of Oro Grande. It is home to Riverside Portland Cement, another major ATSF customer. A bit more rural than Victorville, the area has three excellent photo opportunities.

The first is a cut south of Oro Grande proper. To get there follow D Street northwest past the interstate; D eventually becomes National Trails Highway (NTH). Or from I-15 exit at NTH and turn left. Drive over the Mojave River truss bridge, continue on about 0.7 of a mile, and park on the left side of the road across from the spillway at MP 32.8. Note: NTH is a busy road, so be careful crossing and park as far as possible from the shoulder (Victorville, T6N/R4W:30).

Several large boulders sit on the east side of NTH; walk towards them. A 135-200 mm lens provides good framing of southbounds passing Signals 321-324; the view is well lit in the afternoon. Notice that the rocks are covered with a grayish-white powder: this byproduct of cement manufacturing is carried by the wind from the Riverside plant. It's the closest thing to snow you'll see in the desert!

MP 32 Grade Crossing

Further northbound along NTH is the Mill Street Grade Crossing at MP 32. To get there continue on NTH for about 1.5 miles, then turn right at your earliest opportunity. Go over the tracks and pull well off the road into the vacant lot on your right (Victorville, T6N/R4W:19).

Looking south the signals and cut described earlier are visible. Looking north you can see some houses, the cement plant, a tall smoke stack, and a few hopper car strings. The lighting will be best for afternoon southbounds because the line runs northwest to southeast; summer early morning and late afternoon northbounds are also well lit. Sometimes a local switch job, usually two ATSF GP35s, will work the plant, shuffling hoppers for an hour or two.

Griffith Henshaw Memorial Playground

What does a kid growing up in a factory town out in the desert do for enjoyment? Shoot a howitzer, drive a tank, fly a jet, and be an engineer aboard UP Mikado 2564. At least kids in Oro Grande can!

All that and more can be found in the Griffith Henshaw Memorial Playground at State and 3rd Street. To get there turn left at the grade crossing, head north on Mill Street, then turn right on State. Continue until reaching 3rd; the park is in the southwest corner on your right. Park in the lot near State, enter the park, and have a look at the Mike. She's in fairly decent shape, and photographs well with a 28 mm lens. More than likely she'll be covered with cement dust, but the stuff does come off after a decent rain. This is a nice place to stop for a picnic lunch; if you're still a kid at heart enjoy playing around as well!

Riverside Cement Plant

The plant itself provides an interesting backdrop for southbounds in the afternoon sun, but unfortunately there is no parking anywhere near it. If you would like to try catching a train going by, continue north on NTH from the grade crossing towards the plant. Turn left at your first opportunity and park next to the gas station (Victorville, T6N/R4W:18).

Pack your photo gear with a 135-200 mm lens and walk about 0.5 mile north. You'll come to a small rise about parallel with the four large loading tanks immediately east of the tracks. From here you can shoot southbounds as they round a shallow curve past the tanks. Walk about another 0.25 mile further, and you can get some nice overhead shots of the ATSF overpass.

Because of heavy traffic on NTH, narrow shoulders, and the real possibility of getting sideswiped by a cement truck, I can't recommend parking anywhere closer to the plant or the ATSF overpass. For your own safety please walk.

Following the Mojave River

La Delta to Bryman

North of Oro Grande the mains pretty much follow the Mojave River's gentle grade through private ranch land where photo opportunities are hard to come by. In addition the line is running almost due north-south, so the lighting is acceptable only for southbounds—excepting summer early morning and late afternoon northbounds, of course. Five rural grade crossings, however, are accessible from public streets along the way; you can reach any of them by following NTH and turning west where appropriate.

The first, near the La Delta community, is Robinson Ranch Road, 3.5 miles north of the Oro Grande ATSF overpass. Next is Bryman Road, 0.75 mile further north. Turn left at Bryman, cross the tracks, and turn right. Follow the main for about 1.5 miles on the pavement; when the road ends turn right again and head west back to NTH. Turner Road is 1.0 mile further; Darghty Road another 0.75 mile (Helendale, T6N/R4W:6, T7N/R4W:18-19).

All of these grade crossings are unprotected by automatic signals. Only a weather-worn 4x4 stud with an “X” and stop sign bolted to it stand guard. As such they all possess a certain charm, especially since the land is wide open without too many buildings or structures in the way. A reminder: the maximum authorized speed for short freights along this stretch is 70 MPH. Please use extra caution as these crossings are unguarded.

Helendale

The line's topography changes dramatically for the better just north of Helendale. Instead of running due north-south, the mains curve towards the right and proceed northeast to southwest. So lighting for morning northbounds is fairly decent, especially in summer.

The best vista is not at the siding itself, but from a hill just a half mile north. Follow NTH towards Helendale to an abandoned service station at 27075 National Trails Highway. Turn west onto a dirt road leading to the siding. Park near the trees, pack up your photo gear, and walk one-quarter mile north to a small hill. Being mindful of overhead power lines, cross the hill over to its right lobe. It may take some doing, but what a view! Refer to the Helendale supplemental map for details (Helendale, T8N/R4W:29).

To the east you can see the dry Mojave River bed, some distant ranch lands, and the Iron Mountain range. The elevated perspective gives a good view of signals 201-204; they will alert you of approaching northbounds. To the west you can see Helendale Siding itself, some open grazing areas, a few trees, and the community of Silver Lake. Lighting will be excellent for shooting southbounds throughout the day, and summer early morning northbounds as well.

Wild Crossing

Further north along NTH is Wild Crossing, so named because it was once home to a five point intersection of mining trails. To get there follow NTH north from Helendale for about 3.75 miles, turn left at Indian Trail, and head north. Just before the grade crossing is a dirt maintenance road: turn right on it, head east about 0.5 mile, and park opposite the ranch house on a hill to the north. Note the stop sign on Indian Trail at the grade crossing in addition to the automatic gates (Wild Crossing, T8N/R4W:14).

The main curves north towards Hodge; several small ranch buildings can be seen. Looking west the main curve south, then north around some rocks towards Helendale; the area is covered with creosote bushes. Sunlight is ideal for eastbounds in the morning and westbounds in the afternoon. Eastbounds are best photographed, however, from the other side of the tracks: you can walk across, but steep dirt hills make that a precarious stint.

The area has extreme eastern visibility: headlights of approaching westbounds can be seen almost to the Barstow city limit. Binoculars are especially useful for determining if that bright spot is really a train, or just glint from a passing car.

Hodge Curves

Further north along National Trails Highway is a pair of curves just past Hodge between MP 10.3 and 11.9. On flat land close to the road, their layout is similar to those at Wild Crossing: the shallower, eastern curve is well lit for morning eastbounds while the western one is best for afternoon westbounds.

Follow Indian Trail south, turn left on NTH, and proceed northeast for about 6.5 miles. Look for a green, single-story apartment building with a black satellite dish on your right. At that point there will be a clump of trees adjacent to a dirt road on the left. Pull off and park under the trees (Hodge, T8N/R3W:4).

From here the Shadow Mountains in the western background are quite visible. The eastern view is barren, with the Waterman Hills, Mitchel Range, and Calico Mountains just peeking over the horizon. Lenses of 100-200 mm work well in this area by helping to eliminate keystone distortion: since the ground is somewhat lower than the ballasted roadbed there is a tendency to tilt the camera up. The best vistas at each curve's apex are about one mile apart, so a telephoto lens will also save some shoe leather.

Hinkley Road

The grade crossing at Hinkley Road, our next photo spot, is quite different from what we've seen so far. Visibility is restricted in both directions; that part of the main which can be seen is straight. However crossing gates, a signal box, and two bi-directional signals numbered 101-104 offer some interesting hardware for your compositions.

Just a mile from Wild Crossing on NTH, continue northeast towards Barstow and turn left at Hinkley Road. About 0.25 mile further you'll see a "Bump 5 MPH" sign; in front of it is a large, flat dirt area that's a good place to park. A hill makes an ideal spot to photograph from; you can walk up it, but be mindful of overhead power lines (Hodge, T9N/R3W:34).

Lighting for most of the day will favor westbounds from mid-morning to late afternoon. But in the early morning an eastbound passing by the signals will make a deserving subject with the Iron Mountains in the background. In any case the Hinkley Road grade crossing, because of the visibility constraints, presents a challenging composition)the results, however, are worth it.

Lenwood Road

Most of the photo spots we've seen since Helendale have been at or near plenty of curves. That adds aesthetics to the scene, but at the expense of something die-hard railfans covet more: speed. Lenwood Road, on the other hand, is flat and straight. The line here looks similar to that between La Delta and Bryan with two notable exceptions: the tracks run northeast to southwest (instead of due north-south) and the crossing is protected by automatic gates.

Finding the Lenwood Road grade crossing is straight forward. Take Hinkley Road south then turn left: you are now on Main Street (Hinkley is the junction between NTH and Main). Continue northeast for 4.5 miles, turn north on Lenwood, and park at the southwest corner of the crossing. Pull well out of the way of traffic as the road is a major truck route. Or from I-15 just take the Lenwood Road exit north directly to the crossing.

Lighting will be good for morning eastbounds and afternoon westbounds, as is true with most stretches that run essentially east-west. The background is uncluttered; with the exception of a small warehouse on the northeast corner there is no building around. The speed limit through here is 79 MPH for Amtrak, 55 MPH for large freights, and 70 MPH for freights weighing less than 5500 tons. Trains using a crossover towards the west will slow to 50, but the others will run full tilt. Enjoy!

End of the Line

I hope you've enjoyed this trek along ATSF's Cajon Subdivision, covering 75 miles of track from San Bernardino to Lenwood. From this point you can head east and visit ATSF's Barstow operations. Another option is to follow Lenwood Road north to State Highway 58, then drive west towards Mojave and the Tehachapi Loop. If you're going back to San Bernardino via Los Angeles or San Diego, consider visiting SP's West Colton Yard, the ATSF/UP Riverside passenger stations, and Victorville's Southwest Portland Cement short line, all discussed on the following pages.

Colton And Riverside

General

While not part of the Cajon Subdivision proper, there are two sites worthy of attention within the San Bernardino metropolitan area. They are the SP West Colton Classification Yard, and the Riverside passenger stations (no longer in service). Following are driving directions and advice on where to watch. Both merit a visit of an hour or two.

SP West Colton Classification Yard

One of the largest of its type in the country—certainly SP's largest in the state—the West Colton Classification Yard is a 24 hour a day, seven day a week operation. In addition to the yard, Colton boasts a complete diesel service facility and car shop.

Located just south of I-10 and traversing the city limits of Rialto, Bloomington, and Colton, the yard is within a short distance of the Pepper Avenue, Riverside Avenue, and Cedar Avenue off-ramps. To get here from the Pass take I-15 south to I-215, then head west on I-10 for about three miles to the Pepper exit. If you would rather follow the tracks take Cajon Boulevard south until it becomes Mount Vernon Avenue, go past the ATSF San Bernardino Shops and Yards, and get on I-10 west. See the San Bernardino and West Colton supplemental maps for details.

The departure yard is best viewed from Pepper where five or six tracks merge into one. It's not uncommon to see the entire yard put on hold waiting for an incoming westbound; you may hear comments on the scanner about a “slowpoke” from the eastbound engineers!

The diesel service and classification tracks are close to Riverside's west side. Motive power scheduled for running repairs is routed through the service facility. Although it incorporates an engine washer, most units set out for departure are still dirty. A few local GP7s help assemble trains as they scurry back and forth. Note: Riverside has a sidewalk only on the east side, so observation on the west is limited to just the overpass ends.

Cedar offers the best perspective of the cresting operation. Afternoon lighting is excellent for photographing inbound as they are classified. A chicken wire fence covers the overpass, but ends before an ideal place to photograph the hump and speed retarders. SP crews inspect inbound on orange go-carts in the receiving yard just east of Cedar; summer morning light shines directly on this operation.

Riverside Stations

Although no longer serving passengers, the ATSF and UP stations still stand in Riverside. The UP's is currently under restoration by a private owner; before this effort the building was in shambles. The Sante Fe, well maintained by ATSF standards, is typical of New Mexican style architecture with whitewashed walls and a red tile roof. To reach these stations take I-215 south to Highway 91 south, exit at 7th Street, then drive east to Commerce Street. ATSF San Bernardino Subdivision and UP trains travel through here; with luck you'll see one pass by.

Southwest Portland Cement

Overview

Southwest Portland Cement (SWPC) runs a private railroad, a remnant of several forerunners which once crossed the Victor Valley. Chartered in 1915 as the Mojave Northern (MN), the line was purchased by SWPC in the mid 1930's. The Los Angeles Department of Water and Power Owens Valley Aqueduct project demanded building a new quarry along the old MN right of way. Though this boom is gone three trains per shift still run every day, a total of 63 movements each week. The operation is proximate to the Cajon Subdivision and offers an accessible "something different" from traditional mainline railroading.

River View Plant

SWPC's operation runs on private property, so permission must be obtained from the main plant in Victorville. Take 6th Street past Forrest Park to E, follow the road left, and continue about 0.8 mile past the I-15 overpass to the main gate. Ask the guard for permission to photograph trains from Quarry Road and when the next train is. SWPC employees are acutely safety conscious, so volunteer that you obtained permission from the River Plant when (not if) someone stops you (Victorville, T5N/R4W:4).

Stoddard Wells Road

Our SWPC tour begins at the intersection of Stoddard Wells Road and Quarry Road. From E Street take I-15 north to the second Stoddard Wells exit, turn left, and continue north 3.1 miles to Quarry. Park at the northeast corner of the grade crossing (Victorville, T6N/R4W:24).

The grade crossing has signals but no gates: listen for approaching trains. SWPC's main runs due east-west; lighting is best for morning eastbounds and afternoon westbounds. Made of jointed rail, the tracks are covered so deep in clinker that ties cannot be seen. Spacious and open, the area is surrounded by hills that were once mined in hopes of gold. The line runs ruler-straight parallel to Quarry, almost uncomfortably close. A sign points out the way to the SWPC quarry plant; others remind you that the route is on private property. Be on the lookout for trucks running between the River and Quarry Plants.

Bell Mountain

Continuing east we come to the grade crossing at Bell Mountain Road, about 0.55 mile from Stoddard Wells. The area looks similar, but it's easier to safely park out of traffic's way. Note that there are stop signs on Quarry: Bell Mountain has the right of way. About 2.15 miles further Quarry forks for truck and auto traffic. Take the right fork to follow the tracks.

MP 10.5 Cut

The best place to photograph SWPC action is at a small cut around MP 10.5, 1.25 miles from the fork. Pull well off the road and walk up a hill overlooking the tracks, taking care to not interfere with the line's operation. The view west is majestic: a gentle curve sweeps through the desert below; Silver Mountain provides an excellent backdrop. Looking east you can see Side winder Mountain surrounding SWPC's quarry as the line straightens out. Because of the line's topography morning eastbounds will photograph exceptionally well here.

Quarry Plant

The line ends inside the Quarry Plant about 2.9 miles from the cut. Do not go in past the main entrance sign. Instead use binoculars to watch operations at the elevators. If a train is being loaded it will pull far enough away at times for some interesting photographs, so hang around if any activity is going on.

Cajon Subdivision Services Directory

Gas

Area	Brand	Location/Cross Street
Ono	Shell	University Parkway west of I-215
	Arco	Kenwood Avenue between I-15 and Cajon
Cajon	Texaco	I-15 and State Highway 138
	Union 76	I-15 and State Highway 138
Summit	Generic	Summit Valley and 138
Hesperia (Along Main)	Arco	C Avenue
	Chevron	I Avenue
	7-11	C Avenue
Victorville (Along 7th Street)	Arco	D Street
	Arco	D Street and I-15
	Chevron	La Paz Drive
	Shell	Lorine
	Texaco	Green Tree Boulevard
	Texaco	La Paz Drive
	Texaco	Mojave Drive
	Union 76	Victor Street
Silver Lakes	Generic	Vista Road and Fremont Mountain-Helendale Road
	Whiting	Brothers Main Street and Lenwood Road

Price note: the Silverwood Country Store has the lowest gas prices in the Cajon Pass, the Arco stations in Victorville the lowest along the entire subdivision.

Food

Area	Name	Location/Cross Street	
Ono	Jack in the Box	University Parkway west of I-215	
	Papa's Pantry	University Parkway west of I-215	
Devore	Roadside Café	Devore Road within sight of tracks	
Summit	Country Store	Summit Valley Road and State Highway 138	
Hesperia (Along Main)	Bob's Big Boy	I Avenue	
	Jack in the Box	I Avenue	
	Mc Donald's	G Avenue	
	Naugle's	G Avenue	
	Sizzler	E Avenue	
	Vons Grocery	I Avenue	
	Wendy's	Between C and E Avenues	
Victorville (Along 7th Street)	Burger King	Sands Street	
		Carl's Jr.	Lorine Drive
	Del Taco	Victor Street	
	Denny's	Green Tree Boulevard	
	El Pollo Loco	Sands Street	
	Jack-in-the-Box	La Paz Drive	
	Kentucky Fried	Green Tree Boulevard	
	Mc Donald's	Victor Street	
	Taco Bell	Lacy Street	
	Vons Grocery	La Paz Drive	

Wendy's Sage Street

Lodging

Nationwide reservation numbers for the hotel chains are as follows: Day's Inn, 800/325-2525; Econo Lodge, 800/424-4777; Motel 6, 505/891-6161; Travelodge, 800/255-3050. Prices shown are for one adult.

<u>Area</u>	<u>Name</u>	<u>Location</u>
Adelanto	Day's Inn	#ADTBA, 11628 Bartlett Ave, 92301, 619/246-8777. US 395 and Bartlett, \$35-39.
San Bernardino	Econo Lodge	#CA263, 668 Fairway Drive, 92408, 714/825-7750. I-215 Orange Show Road exit west, \$34-38.
	Motel 6	#246, 111 Redlands Boulevard, 92408, 714/825-6666. I-10 Waterman exit south, then west, \$23.
Ono	Motel 6	#488, 1960 Ostrem's Way, 92407, 714/887-8191. I-215 University Parkway exit west, then south, \$25.
Victorville	Motel 6	#106, 16901 Stoddard Wells Rd, 92392, 619/243-0666. Southern I-15 Stoddard Wells Road exit north, \$20.
	Travelodge	#0156, 16868 Stoddard Wells, 92392, 619/241-1577. Southern I-15 Stoddard Wells Road exit north, \$27-28.

Camping

There are two options for those wishing to camp in the Cajon area. One is to stay some distance away from the pass in the SBNF Applewhite Campground. To get there, take I-15 south past Devore to Sierra Avenue/Lytle Creek Road, then exit north and drive eight miles. Another option is to camp in the Pass; this is allowed with a free permit from the District Ranger's office (five miles north on Lytle Creek), open from 8:00-4:30 daily.

Permits for camping in undeveloped areas may also be obtained by mail up to 90 days in advance; write to the SBNF, Cajon Ranger District, Star Route, Box 100, Fontana, CA 92336. Request a permit for undeveloped area camping; include the dates that you wish to stay.

If you would like to camp in the Victorville area and don't mind staying near the tracks, consider the Mojave Narrows Regional Park operated by the San Bernardino County Regional Parks Department. Rates are \$10.00 per night exclusive of hookups. To reach the park follow Ridgecrest Road to Yates; see the Victorville supplemental map for details.

For Further Information

Forest Supervisor
San Bernardino National Forest
144 North Mountain View Avenue
San Bernardino, CA 92408
714/383-5588

Victorville Chamber of Commerce
14173 Green Tree Boulevard
Victorville, CA 92392 619/245-6506

Cajon Subdivision Milepost Table

Landmark

ATSF MP

SP MP

San Bernardino	81.5	
Fifth Street	80.8	
Bench		489.8
SP Detector		488.6
SP Detector		486.8
Ono	75.0	
Verdemont	73.9	
Dike		481.0
Devore	71.0	*481.9
Keenbrook	69.4	*478.0
SP Detector		475.1
Blue Cut	*65.1	
Swarthout Canyon Crossing	*64.2	
Cajon	62.8	
Sullivan's Curve	X63.0	
Alray	X59.7	
Canyon		470.0
SP Detector		475.1
Summit (ATSF)/Hiland (SP)	55.9	463.0
Martinez Spur	54.2	
Lugo	50.1	
ATSF Detector	48.5	
Hesperia	45.1	
Frost Grade Separation	*39.3	
Victorville (5th and D)	36.7	
Mill Street Grade Crossing	32.0	
Oro Grande	31.5	
Helendale	21.1	
Hodge	13.6	
Hodge Curves	*11.1	
Lenwood	6.7	
Colton Yard		494.2
San Bernardino Yard	0.0	
Riverside Station	9.8	

*Approximate location. Information obtained from SP and ATSF Timetables.

Atchison, Topeka, And Sante Fe Barstow Operations

West Yard
Visitor's Viewpoint
First Avenue Bridge
Casa Del Desierto
East Yard

ATSF Barstow Operations

History

Barstow Station opened for business soon after the California Southern (CS) reached the Atlantic and Pacific (A&P) in January 1886. The CS, a wholly-owned ATSF subsidiary, was formed to break the Southern Pacific (SP) California monopoly by building from San Diego through Temecula to the Mojave Desert, and there connecting with the A&P, another ATSF subsidiary. Named after William Barstow Strong, then Sante Fe's president, the town grew significantly after ATSF purchased the Mojave to Needles main from SP in December 1911. Since Sante Fe fed its passengers at trackside restaurants instead of in diner cars, several Harvey House hotel and "eating stations" were built at Barstow. Casa Del Desierto, the fourth such house, was completed in March 1911 and still stands today.

By the late 1960's Sante Fe already had three computerized classification yards: Chicago, Illinois; Kansas City, Kansas; and Pueblo, Colorado. A fourth, however, was needed; Barstow was chosen as the ideal site. Six hundred acres of land, 113 miles of track, 320 switches, and \$50 million later, the new yard (east of the former one) opened for business in the early 1970's.

Today Barstow is one of the busiest points on the Sante Fe system. All traffic in and out of California must pass through it; the Cajon and Mojave Subdivisions meet here as well. All consists leaving the state, with the exception of Los Angeles and Richmond "hotshots," are formed here. Barstow is huge: its capacity is over 120,000 cars—over 11,000 miles worth.

Area Overview

Most of the land in Barstow is private ATSF property. There are, however, a few railfan spots that are either on public property or open to public access without special permission from the railroad: West Yard, Visitor's Viewpoint, First Avenue, Casa Del Desierto, Mojave Drive, and East Yard, and Yucca Avenue. Directions to and descriptions of these points are given in the following paragraphs.

Please resist the temptation to visit areas other than these. While the ATSF places more than their fair share of "No Trespassing" signs, in actuality they do not harass railfans: respect the signs, don't hop fences, and you won't have any problems.

Photo Locations

West Yard

The Cajon and Mojave Subdivisions merge at West Yard to form the Needles Subdivision, Sante Fe's sole route in and out of the state. Eastbounds from Southern California and the San Joaquin Valley arrive at Barstow for sorting; westbounds, either through freights or locally assembled, depart. Movements are continuous, about two per hour throughout the day.

To get here from Cajon Pass take I-15 north, exit at Lenwood Road, continue north to Main Street, then turn right. From Tehachapi take State Highway 58 east to Lenwood Road, turn right, continue south to Main Street, then turn left. Drive about 1.5 miles east along Main, then turn left onto Citrine Road. From Needles take I-15's second Main Street exit (past

Barstow Road), turn left, follow Main west for about 1.8 miles, then turn right on Citrine. See the Barstow supplemental map for details.

Park on Citrine's left side in front of the ATSF overpass, pulling up a maintenance access road. Don't drive up to the roadbed, however, because there is no turning room to get back down. Stay off Citrine's east side; it is well marked as private property. Walk up the hill to the old roadbed, abandoned when Barstow's classification yard was built. Standing here you can see both subdivisions, the overpass, yard status signals, and the West Yard station sign. The Calico Mountains are in the background; to the extreme east is a pair of signals, just barely visible, controlling the Cajon/Mojave subdivision point.

West Yard is an excellent place to spend the afternoon: departing westbounds are well illuminated. Sunset is especially interesting, as the orange light brings out the rust, red, and pink colors in the roadbed and mountains.

Visitor's Viewpoint

Trespassing within the Barstow complex is not allowed. The ATSF, however, has set aside a small asphalt pad for visitors to observe hump operations. It's not much of an area, about 10' x 30', but you could not ask for a better location!

Located on the west side of town, take Main Street east from either Citrine Avenue 3.5 miles or the western I-15 Main Street exit 0.5 miles to Avenue H, then turn left. Drive past the yard's main entrance, follow the left-hand bend, look for a "No Trespassing" sign with a "Visitor's Viewpoint" sign below it, then turn left onto the asphalt pad and park.

In the mornings light shines directly on the crest and, with a 200-300 mm lens, offers an excellent view of the hump's locomotive set. Consisting of a GP35 with a slug, this tandem spends the day shoving consists into the bowl. You can watch cars hit the main and several subsequent retarders as they drift towards the classification tracks. The afternoon sun illuminates the bowl, bypass, and eastern receiving yard entrance tracks: sunset eastbounds photograph well.

If you have not yet had the opportunity, watch for a while to see how a modern classification yard works. First the hump set pushes a train backwards over the crest at 3 MPH. Cars are uncoupled, usually one (but sometimes two) at a time, and coast down into the classification area, called the bowl. Retarders squeeze the car's wheels to control its speed; a network of switches orchestrated by computer directs the car to an appropriate track. So, for example, all Phoenix cars eventually find their way to track 28, regardless of what train they came in on.

First Avenue Bridge

One of the more popular railfan spots in Barstow, the First Avenue Bridge affords an unobstructed overhead view of the original (pre-1970) yard including classification tracks and the Casa Del Desierto Amtrak station (formerly a Harvey House restaurant). It offers an ideal place to catch westbounds heading into Barstow, especially Amtrak's Desert Wind.

From Visitor's Viewpoint take Avenue H back to Main Street, turn left, head east about 1.5 miles, then turn left again onto First Avenue. From I-15 exit at Barstow Road, drive north about 1.0 mile, turn left onto Main Street, go west about 0.5 miles, then turn right onto First. Park in front of the bridge near Hutchison, being careful to stay out of the red zone.

There is a sidewalk only on the east side, well positioned for photographing westbounds (forget videos: the bridge shakes too much from passing traffic). But good eastbound shots from the bridge are therefore difficult, but not impossible. A 135 mm lens works well shooting east; adding a tele-converter lets you shoot west through the trusses with fair results. An 80-200 mm zoom will also do the trick, a 100-300 mm one even better.

Photos are possible from the bridge's west side, but only as a “hit or miss” proposition. Engine sets pop into view every now and then while sorting consists from the departure yard, but you can't get closer to them. Walk to the vacant lot catty-corner from Hutchison, then towards the bridge up to the chain link fence. Try shooting over the fence with a 135-200 mm lens. Another GP35 and matching slug are regulars here; watch for them.

Casa Del Desierto

Originally built in 1911, the fourth Barstow Harvey House still stands today, albeit under repair. A majestic structure, her grandeur speaks of an age when the Sante Fe was a financial power house, not just another “me too” company as today. To visit the station follow First over the bridge, then take your next right. Park in the lot near a small park with some grass and trees; it is then a short walk to the platform.

Closer inspection reveals that a major restoration effort is underway. The brick walls have been strengthened; new steel windows have been added. The main waiting room is fenced while work is in progress, but the structure's west wing has been renovated as a Greyhound bus terminal. Visit the rest rooms: they still have original fixtures and tile!

The City of Barstow approved a special 0.25% local sales tax to help raise \$1.2 million for the renovation. The State of California also approved some financial assistance. So soon Casa Del Desierto will regain its status as the Mojave Desert's premier transportation hub. Progress to date is encouraging.

East Yard

Our second to last observation spot in Barstow is the point where all tracks coalesce down to two mains at the yard's eastern boundary. Here outbounds leave as consolidated consists for eastern destinations. Arrivals trudge in the receiving yard tracks or, if it's a “hot shot,” zip by on the mains.

Follow First south to Main Street, turn left, drive east about 4.0 miles, then turn left onto Mojave Avenue. From I-15 or I-40 exit at East Main Street and head west to Mojave. Drive north until Mojave ends in a tee, turn right at A Street, and drive to the end of the cul-de-sac. Park off the road in front of the ATSF underpass. Immediately north and east is a large hill; walk up to its crest for a view down into the East Yard. Respect the ATSF “No Trespassing” signs.

Just as West Yard is a good place to spend the afternoon, East Yard is good for mornings. From sunrise to about noon lighting is excellent for departing westbounds—except in summer, when the light is north of the tracks until 1000. A 135-200 mm lens works well for motive power portraits; a 50 will take in the general scene (including a signal bridge). You may find a 300-500 mm lens useful for shooting consists that park at Casa Del Desierto waiting for departure orders, but that is an extreme case.

Other Area Attractions

While not directly pertaining to the railroad, there are two museums in Barstow that merit your attention: The Desert Information Center and the Mojave River Valley Museum.

The Desert Information Center, at 831 Barstow Road (between Main Street and I-15), houses both the Chamber of Commerce and Bureau of Land Management (BLM) offices. The center contains exhibits on desert ecosystems; elementary students through adults will enjoy it. CDCA access maps showing boundaries between private and public land are available for \$2.50 each; a Barstow city map is also for sale at \$0.50.

The Mojave River Valley Museum, 270 Virginia Way, sits west of the Fire Station on Barstow Road (just north of I-15). Containing exhibits on early area history, several Indian artifacts, and a friendly staff that remembers the way it was, it is well worth a trip. The museum has a small gift shop with several books; Barstow Depots and Harvey Houses is a bargain at \$3.50. See the Bibliography section for more details on this pamphlet.

**Atchison, Topeka and Sante Fe
Needles Subdivision**

Daggett
Newberry
Hector
Klondike
Siberia
Amboy
Cadiz
Danby
Essex
Fenner
Goffs
Homer
Bannock
Arrowhead Junction
Klinefelter
Needles

ATSF Needles Subdivision

History

Sante Fe's Needles Subdivision through the Mojave Desert was built, ironically, by California rival Southern Pacific (SP). In February 1882 the SP started construction of its Colorado Division from Mojave to Needles, finishing it by April 1883. That August the Atlantic and Pacific, jointly owned by the ATSF and the Saint Louis and San Francisco Railroad (Frisco, now part of Burlington Northern), finished building from Sante Fe, New Mexico to the SP main at Needles. Twenty-eight years later SP sold the Colorado Division to the A&P for \$7.2 million plus ATSF's Sonora Railway to Mexico, finally giving the Sante Fe an entrance into California.

Today the Needles Subdivision on Sante Fe's busiest main line. Spanning 167.9 miles across desolate yet breathtaking land, the line passes by at least ten minor mountain ranges. The track's topography ranges from ruler-straight to tight curves, offering plenty of scenic variety. Because of its vastness and diversity, plan to railfan here at least two days. With twenty-five trains during daylight, it will be time well spent.

Desert Safety Tips

After a trip you'll agree that the Mojave's emptiness directly contributes to its beauty. But just because the area is desolate does not mean there are no dangers. As a precaution, check in with a Bureau of Land Management (BLM) office in either Barstow or Needles to find out about fire and flash flood hazard conditions. The following are BLM desert safety warnings:

- **Mines:** stay clear of abandoned mines and open shafts. Poisonous gases inside shafts and caves are life-threatening.
- **Fire:** potential wildfires are a serious concern. Please do not start a campfire or run a gas stove without first checking in at a BLM office: a permit may be required. Also avoid driving through or parking in tall grass or brush, as hot exhaust pipes and catalytic converters can ignite the dry material.
- **Toxic Waste:** while dumping hazardous chemicals is illegal, remember that the Mojave covers 25 million acres, much of which is not patrolled. Stay clear of suspicious drums, bags, or strong odors. Visible fumes and dead plants or animals indicate immediate danger.
- **Crime:** again, the desert covers vast areas, so be careful around strangers. At the very least lock your vehicle when unattended. Most of the land between Hector and Needles is public property, so be suspicious if your presence is unwelcome.
- **Water:** as you might suspect, the problem is lack of it. Before venturing off obtain sufficient water and fuel at either Barstow or Needles. Note that there are no service stations along I-40 between Ludlow and Needles, a distance of 100 miles.
- **Explosives:** although you probably won't see one along the railroad right-of-way, sometimes unexploded ordnance from military operations litter the desert. If you find

anything that looks like ammunition or a bomb, leave the area immediately and contact the BLM.

Use common sense, be on your guard, and you'll have an enjoyable trip. And please let a BLM office know if you see or suspect any illegal activity.

Orientation

The Needles Subdivision runs almost due east-west; exceptions are between Klondike and Klinefelter, where it runs north to south, and between Cadiz and Goffs, where it runs southwest to northeast. When describing train movements the direction west means “towards Barstow” and east means “towards Needles.” North and south do not have fixed meanings: they depend on the geographic context.

Let's go for a tour of Sante Fe's Needles Subdivision! Starting at Daggett we'll travel through Minneola and Newberry along National Trails Highway (NTH, formerly Route 66). At Newberry Springs we'll take I-40 east, visit Hector Siding, then get back on the interstate until Ludlow. At that point we'll follow NTH again, visit Klondike, Siberia, Amboy, Cadiz, and Danby. There we'll switch to Goffs Road, visit Fenner, Goffs, Homer, Bannock, and Arrowhead Junction. We'll transition to US 95 south, visit Klinefelter, arrive back at I-40, and end the tour in Needles. All told we'll drive over 200 miles through old railroad towns, ranch lands, once prosperous villages, and the desert itself.

Daggett and Vicinity

Our Needles Subdivision tour starts at Nebo Street and National Trails Highway (NTH), just west of the US Marine Corps Nebo Supply Center. Take I-40 east from Barstow or west from Daggett, then exit north on Nebo Street. Follow the road's curve right onto National Trails Highway, look for a dirt road leading up to a private railroad crossing. See the Daggett supplemental map for details (Newberry Springs, T9N/R1W:13).

Nebo Grade Crossing

Our first photo spot is an unguarded, private grade crossing between Daggett and the Nebo Depot. To the west you can see the main curve by several warehouses in the background; the crossing sits on this curve's apex. To the east you can see two signal bridges (one newly constructed, the other may be dismantled), the Calico Mountains, and the Cady Mountains (just peeking over the horizon). Telephone poles hug both sides of the tracks, but they do not interfere with the photo line.

Lighting conditions are excellent for morning eastbounds and afternoon westbounds, as the sun is south of the line throughout the day. The orange tint at sunset and sunrise will bring out rust, red, and pink hues in the roadbed, ground, and distant mountains. Because the Needles Subdivision runs essentially east-west these comments apply to most of the photo locations described. Only exceptions, if any, will be noted in the subsequent paragraphs.

The line slopes gently downhill from Daggett to the grade crossing, so you can see the headlights of an approaching westbound several miles away. You can also see UP movements between Yermo and Daggett with the naked eye. The view of eastbounds out of Barstow, however, is somewhat limited.

Daggett

Originally called Calico Junction, the SP established a depot, telegraph office, and eating station here in October 1882. The town was renamed Daggett in February 1883 when a local merchant suggested the change to the Post Office. The Stone Hotel, one of the original settlement's remnants, is a landmark registered with the San Bernardino County Museum.

There are several places to park in the area. One of the more convenient spots is at the UP grade crossing on Sante Fe Avenue. From the Nebo Road grade crossing take NTH east, then turn left on Daggett-Yermo Road. From I-40 exit A Street north and cross NTH where the road's name changes. At Sante Fe turn right, drive 0.6 miles up to the crossing, and park off the road. See the Daggett supplemental map for details (Newberry Springs, T9N/R1E:21).

Three distinct photo spots are within a short walk from the UP grade crossing: the Daggett overhead signals, the UP/ATSF junction, and the crossing itself. You can see the signals from the crossing about 0.25 mile away; the junction is just a few hundred feet south.

The vista at Daggett in the background. An abandoned sanding station and other aluminum-sided buildings stand along the north track; several trees are behind them. A green pump car shed occupies the south track's foreground along with the overhead signals. These structures can be integrated into your compositions for a "railroad" touch.

The ATSF/UP junction background, unfortunately, is not that interesting. Two electric power plants can be seen, including the main tower at Solar One, but they are far enough away to neither add to nor subtract from the overall scene. However a 135-200 mm lens results in tight motive power shots of oncoming westbounds with good results.

Just north of the UP grade crossing, UP MP 159, is perhaps Daggett's most photogenic spot. The Calico Mountains form an impressive backdrop. Since the UP main descends a slight grade from Yermo to Daggett, approaching trains are visible for several miles. Most UP daylight movements are southbounds and well lit throughout the day. A 200 mm lens will frame point shots quite well as they pass some signals. Tryt's overhead signals looks pretty much like MP 738.6 with one notable difference: several structures at this composition with Amtrak's southbound Desert Wind, due around 10:00 a.m. daily.

East Daggett

There are three routes between Daggett and our next two stops in Minneola: Sante Fe Avenue, National Trails Highway, and I-40. Sante Fe follows closest to, but north of, the tracks; photos taken from the street will be backlit. NTH runs south of, but up to 0.5 mile away from, the tracks. I-40 is, of course, the fastest route. Along NTH is the Solar One Visitor's Center. Run by Southern California Edison (the local electric utility), it contains exhibits about building and operating the world's first solar power plant. Stop in, especially if you're an electric locomotive or traction modeler: the center may provide a few ideas.

Through the Mojave Valley

For the next fifteen miles or so, we'll be following the ATSF through the Mojave Valley. Civilization starts to fade out along the way: you'll see a farm or two, an airport, some industrial plants, a flat yard, and a gas station. At Hector siding the trackside accouterments disappear, so the railroad blends with the rest of the Mojave Desert.

Minneola

The mains run almost ruler-straight from Daggett to Hector, passing the Barstow-Daggett Airport in Minneola. Supporting a National Guard detachment, the airport is bounded by Hidden Springs and Minneola Roads; the right-of-way forms its southern boundary. It's an interesting spot to railfan near because a helicopter or two buzzing about provides entertainment when no trains are around (Newberry Springs, T9N/R2E:28-30).

Hidden Springs and Minneola have two almost identical grade crossings; it is nearly impossible to tell them apart from the surrounding scenery. Both offer a convenient spot to park the car and take in 70 MPH cruisers. Although it doesn't go through during daylight, Amtrak's Southwest Limited is authorized for 90 MPH, 25 MPH faster than the nearby Interstate.

To reach Hidden Springs Road take either Sante Fe Avenue or National Trails Highway east from Daggett or the I-40 exit north. To get to Minneola Road you must follow NTH east another 2.1 miles, then turn left. Be sure to park out of traffic's way at these crossings.

Newberry

Serving three industrial plants, the ATSF has a small yard at Newberry. This yard is also used to cut out cars with dragging equipment: if the hotbox detector at MP 733.3 catches a defect on an approaching eastbound, you can bet it will stop here.

Getting to Newberry is a little bit tricky as it's "off the beaten path," so to speak. From Minneola Road follow NTH east 3.5 miles and turn left on Pioneer Road or take the I-40 NTH Newberry Springs exit north and turn right on Pioneer. Drive east another mile, turn left onto Mountain View Road, and park near the grade crossing (Newberry Springs, T9N/R3E:32).

One obvious difference is there's quite a bit of "stuff" around Newberry compared to the vistas at Minneola and West Daggett. Two manufacturing plants offer plenty of drums, towers, and plumbing for an industrial background; several tank and box cars are scattered around. A switch job sometimes visits between 1600-1700. Newberry is an ideal place to enjoy late afternoons as the local will keep you entertained if no westbounds are in sight.

Back to I-40

To continue our Needles Subdivision tour we'll need to eventually get on I-40 east. You can either take Pioneer back to the freeway, or follow the tracks and visit the Newberry Springs Road grade crossing.

To directly get on I-40, take Mountain View south back to Pioneer, turn right, drive a mile to NTH, turn left, and follow the signs to the eastbound freeway entrance. To visit the grade crossing (which looks like those in Minneola) turn left on Pioneer, drive east for about one mile, then turn left on Newberry Springs Road. The safest place to park is on Palo Verde Lane, a dirt road heading east just north of the crossing.

To get on I-40 from the crossing head south on Newberry Springs, go over the interstate (sorry, there is no on ramp here), turn left on NTH, drive east 3.4 miles, and enter the freeway at Fort Cady Road. Before entering, however, check your gas gage; if it's near empty, add a few gallons at the nearby Whiting Brothers gas station. The next station is about 25 miles away and far more expensive (Newberry Springs, T8N/R3E:1).

Hector

As you drive east along I-40 look out for a sign stating that Ludlow is 29 miles away. About 8.2 miles later exit at Hector Road, then drive north. The pavement ends shortly; one mile later you'll reach the tracks (Newberry Springs, T8N/R5E:15).

Hector Siding is more typical of the scenery throughout the eastern Mojave Desert. You're surrounded by mountains: the Newberry and Calico Mountains on the west, the Cadys to the east. The terrain is greener than one might expect: several Joshua and Yucca trees dot the land, which itself is covered by creosote bushes. And a few green trees hug the tracks, a reminder that this station was once manned.

Hector is desolate, but it's a peaceful desolation. Even though the interstate is nearby, you probably won't see another person around. Sunrises and sunsets are magnificent to watch as the orange light creeps over the Mountains into the valley floor. The land on Hector Road just north of the tracks is a BLM limited use area; camping is permitted here provided that you don't drive your vehicle off the dirt road.

Skirting the Bristol Mountains

The ATSF mains have been running straight and level since Daggett. But as the line navigates the Bristol Mountains, it starts to gracefully curve and climb. This area presents photo opportunities not available elsewhere: if you have limited time to spend railfanning the Needles District, concentrate efforts here.

East Ludlow Grade Crossing

Between Hector and Ludlow there are two paved roads: I-40 and National Trails Highway. Neither of these parallel the tracks, so we'll drive along the interstate to our next stop. Take Hector Road south back to I-40, enter east, take the Ludlow exit 17 miles later south to NTH, then turn left. Follow the tracks east for about 2.5 miles, then park at the grade crossing near MP 691 (Newberry Springs, T7N/R8E:5).

The view around MP 691 looks similar to that at Hector. There are not many obstructions; mountains surround the region. The tracks curve towards you to the east, blocking views of oncoming westbounds. But not to worry: a hotbox detector at MP 690.3 will give you plenty of advance warning should one be near (Newberry Springs, T7N/R8E:3).

This crossing marks our point of departure from following I-40 to traveling along what was once the primary national highway across much of the western states: the venerable Route 66. Vestiges of old towns, restaurants, businesses, and so on that died after I-40 was completed still remain. These buildings have been well preserved due to the desert's dry climate, so keep your eyes open for some interesting photo opportunities.

Klondike

After MP 691 the mains curve south and diverge at MP 683: the north track takes a long, shallow path; the south track a shorter, steeper route. The result looks very much like that at Cajon Junction: Klondike is almost a dead ringer for Sullivan's Curve.

Getting into Klondike's curve is rather difficult as no maintained road to it exists. You can, however, get to the divergence point at MP 683 fairly easily. To do so take NTH southeast past the grade crossing for about 6.9 miles where you'll drive over a highway bridge labeled "A10 37 2F SNB40." Three-tenths of a mile later turn left onto a dirt road, head north for

0.2 mile, and park at the hill near some telephone poles. See the Ash Hill to Amboy supplemental map for details (Newberry Springs, T7N/R9E:23).

The hill is about 200 feet short of the actual divergence point, but the road gets rougher further on. With great caution walk east over both mains to the north track for the best view. From there you should be able to find a safe photo spot adequate for either line.

Klondike offers, unfortunately, poor westbound lighting. Eastbounds are well illuminated throughout the day because they head almost due south. But westbounds are backlit except at sunset or sunrise when light fills in from the side. As a result obtaining good photographs at the divergence point is technically challenging: count on your light meter being fooled.

South Klondike

The point at which the mains rejoin, however, offers better photo opportunities. Here the line has moved from due north-south to a gentler northwest-southeast slope. Lighting is good for eastbounds most any time and acceptable for westbounds in summer mornings and afternoons. It is also much safer to get into shooting position as you won't have to walk across the tracks.

From Klondike get back to NTH, turn left, drive east for 3.0 miles, look for another dirt access road, and turn left again. This time you can drive up to the tracks; there is plenty of room for parking a safe distance away (Newberry Springs/Amboy, T6N/R9E:1).

Both mains curve in from the right and run downhill to the junction, so it's easy to get dramatic results of an approaching eastbound. Telephone poles line the tracks, but they do not clutter the foreground. And the Bristol Mountains with an average elevation of 3500 feet occupy the northern background, with the Bullions still visible to the south.

The junction here has excellent photographic potential. Trains using the north track are restricted to 35 MPH, so there is more time to prepare compositions than most other places along the subdivision. Telephotos can be used to emphasize curves; normals and wide angles for the illusion of a long, straight stretch. The background is sparse but mountains and bushes keep it interesting. And finally there is plenty of railroad hardware about-several switch stands, speed limit signs, and signals-for adding flavor to photo essays.

Siberia

Humorously named after its Russian counterpart, Sante Fe's Siberia is just as desolate, but it almost never snows! A palm tree and ruined shanty are all that remain of the settlement. Surrounded by the Bristol Mountains, Siberia does not look like flat, barren desert, but more like the area between Alray and Summit in the Cajon Pass.

There are two ways to reach Siberia from South Klondike. Either follow the ATSF maintenance road along the tracks for a ways or take the dirt access road back to NTH, turn left, drive 0.4 miles to another access road, turn left again, and drive up to Siberia. The distance spent on dirt roads is the same, but the NTH route is smoother (Amboy, T6N/R10E:7).

The tracks run about 30E northwest to southeast at this point; lighting is fairly decent for trains traveling in either direction throughout the day. The mains curve towards you at either end, so the view is unobstructed for about two miles along the tracks in both directions.

If you like to experiment with unconventional compositions, try this during the morning: put on a 24-28 mm lens with a polarizer, walk to the palm tree, and frame the shot so that the tree occupies the photo's right half. Darken the sky as much as possible (this also brings out deeper greens in the tree), wait for an approaching eastbound, and fire away. When the pictures come back ask some railfan buddies if they can figure out where the shot was taken. No fair if they're Southern California natives or have read this guide!

Lava Hills Curves

As the mains continue on towards Amboy they follow the Lava Hills (foothills of the Bristol Mountains) and “snake” around several photogenic curves. Lighting is usually excellent through here: you can generally find a spot along a curve where the sun makes a wedge angle regardless of the time of day.

We're going to visit four spots in these foothills: the MP 674.3 bridge, MP 674, MP 673, and the MP 672.4 bridge. These are all near a pipeline maintenance road, so we'll be driving about two miles in soft dirt. Please check the road on foot before driving on it, however, as flash floods and high winds frequently cause severe erosion. Also keep watching the south track for an oncoming train.

MP 674.3 Bridge

Our first stop along the Lava Hills is a tight curve crossing the MP 674.3 bridge. From Siberia get back on NTH, turn left, and drive east about 1.6 miles. You'll see an access road on your left; follow it on up to the bridge. Park where it's convenient, but do not stop in loose sand. See the Ash Hill to Amboy supplemental map for details (Amboy, T6N/R10E:17).

Looking west the tracks curve out of view away from you; the scene is rather stark and cramped. The eastern landscape, however, is more appealing, primarily due to the Lava Hills breaking up the monotony. Although the foreground is clipped by the MP 674 curve, westbounds can be seen approaching from several miles away.

MP 674

Just a little ways east along the maintenance road is MP 674 with its companion bridge at MP 674.0. The western view looks almost identical to that at MP 674.3 except that the curve is not as tight. But the eastern landscape looks much different: the Lava Hills are more pronounced; you can see further along the tracks.

Unlike before the eastern view is not clipped by a curve: you can instead see down to MP 673 and beyond. The eastbound grade drops about 0.5%, enough to let you see the main for several miles. The best perspective east is actually from the north track opposite the ubiquitous telephone poles, a good place for catching afternoon to sunset westbounds.

MP 673

Following the maintenance road a mile further east we arrive at, not too surprisingly, MP 673. Here the tracks are much closer to the Lava Hills. The view looks like MP 674 backwards: tracks to the west curve slowly towards you and are visible for a mile or so. To the east they curve away from you, clipping the foreground about one mile away. And the best view east is from the south track from sunrise to late morning, the opposite of MP 674.

MP 672.4

Bridge Although it's not much farther along, the view east from MP 672.4's bridge adds an additional curve to the scene. The resulting perspective looks like a backwards "S," as opposed to a straight foreground and curved background. The western surroundings look the same, so staying at MP 673 versus MP 672.4 may be decided by which is better lit by the sun at any point in time. Note: watch out for low telephone lines (Amboy, T6N/R10E:22).

From this point the line starts to straighten out: there are no more interesting curves further along the way. So head back to NTH, turn left, head east for 11.2 miles to the Amboy grade crossing, and park where it's convenient.

Railroad Ghost Towns

At one time, this portion of National Trails Highway was fairly busy; Route 66 was the only way in and out of Southern California. Now the only industries that remain are the railroad and a small chemical plant. They employ just enough people to keep this portion of the Mojave from drying up completely.

Amboy

Once a busy town when Route 66 was the primary east-west highway (before I-40 was completed), Amboy is now home to about twenty people. Some buildings, a few trees, and a tank car farm are all that remain. Founded in 1858, the town still caters to the railroad by providing a "watering hole" for two road switchers on local assignment (Amboy, T5N/R12E:5).

Although the area looks different, the grade at Amboy is similar to that at Minneola: flat and straight for as far as the eye can see. In fact headlights from oncoming westbounds are visible seven miles in advance: it's a downhill view to the next curve.

Amboy is surrounded by mountains. From the crossing you can see the Cady, Bristol, Marble, Clipper, Old Woman, and Ship ranges. The effect is very much like sitting in the bottom of a bowl covered by an endless blue sky. In winter the sun shines through high clouds: a polarizer will bring out their beauty.

There is no access road to the tracks between Amboy and our next stop, so before moving on check around for nearby movements. A hotbox detector at 665.0 will alert you to approaching eastbounds 3.0 miles away and binoculars should help spot any approaching westbounds.

By the way, entire town of Amboy is for sale: land, buildings, businesses, and the Mayor's job! A Palm Springs real estate agent is handling the transaction; call 619/321-8821 for more details.

Cadiz

Your first reaction to Cadiz will probably be, "Funny, this doesn't look like the desert!" Surrounded on either side by thick, green trees, the landscape is still well maintained. And for good reason: more people live at Cadiz than any other point along the subdivision between Daggett and Needles.

From Amboy drive east along NTH for 10.75 miles, turn right at the country gas station on Cadiz Road, then drive 1.2 miles to the main grade crossing. Here you can see the trees

mentioned earlier, as well as the Ship Mountains in the eastern background. If you're driving from Danby head west along NTH for 14.6 miles instead (Amboy, T6N/R12E:3, T5N/R12E:15).

Cadiz still supports some activity because it is the junction of the Needles and Parker Subdivisions: Needles, of course, is on the mainline which continues to Chicago; Parker is the branch that serves Phoenix. A local between Ripley and Barstow operates once a day each direction, collecting a random assortment of loads from the line's smaller businesses. That and a few trackside crews keep Cadiz a normally quiet but occasionally busy place.

Fenner Valley

Between Cadiz and Goffs the main changes direction from running essentially east-west to northeast-southwest. As a result lighting in the Fenner Valley is excellent for westbounds throughout the day, and acceptable for eastbounds only in the early morning during spring and summer. Comments will deal with views towards the northeast; backlit vistas will be ignored.

Danby

Of all the stations in the Fenner Valley, and perhaps the entire subdivision, Danby has the most charm. Remnants of several shacks and what looks like a prospector's town offer interesting subjects to photograph when the line is still. The Old Woman Mountains in the background complement the area's decidedly rural, western look.

Danby is easily reached by driving 14.6 miles east from Cadiz or 11.25 miles west from Goffs Road along NTH, then turning southeast on Danby Road. Well-maintained with gravel over dirt, the grade crossing is 1.6 miles from the highway. There is plenty of room to park; trees provide some shade (Amboy, T7N/R15E:36, T6N/R16E:6).

It's not by accident the siding looks as it does: Danby Road continues on into the mountains, home to the several mines. The railroad was the prospector's link to civilization; at one time there was no other transportation out of this area. Looking around you can almost imagine a lucky miner boarding at Danby, heading towards Los Angeles to spend his fortune!

National Trails Highway Overpass

Our next stop offers a substantial change in perspective: while the photos we've taken so far have been at ground level, the overpass will give us a bird's eye view of trains passing below. From Danby turn right on NTH and drive 11.5 miles east past Goffs Road. From I-40 take the Goffs Road exit south about four miles to NTH then turn left. Don't park on the bridge itself, rather stay as far to the right as possible on the ramp leading up to it. You can safely stand on the bridge at either end behind the rolled metal crash barrier (Amboy, T8N/R17E:29).

The view from up here is dramatic: you can see north to the interstate and south about halfway to Danby. The Old Woman mountains are prominent in the southern background, and the Piutes towards the north. The bridge is fairly high above the tracks, so 100-135 mm lenses are probably as wide as you'll want to go. Also hotbox detectors at MP 628.1 and MP 612.4 will keep you posted of approaching east and westbounds accordingly. ATSF detectors use low output transmitters, but the elevation will aid reception.

As a safety reminder don't U-turn on the bridge, but instead continue with the traffic flow along NTH until finding a clear area. Then pull off the road, check both directions, and turn back on.

MP 619.6 Wash Bridge

Just south of the I-40 Goffs Road exit is a massive wash bridge at MP 619.6. About five engines long, it stands as a testimony to the power of desert flash floods. Shored by large rocks mixed with concrete, it's obvious that several wooden bridges died before this one was built.

From the NTH Overpass head back to Goffs Road, turn right, and drive four miles north; from I-40 exit at Goffs Road south and drive about 0.5 mile. Look for some signals near a Dip sign; an access road up to the tracks is nearby. There's plenty of room to drive around and park as the road goes up to the wash.

Fenner

Used primarily for storing trackside maintenance equipment, Fenner Station is just a half-mile north of I-40 on Goffs Road. Unlike Amboy, Cadiz, or Danby it's not much to look at: no trees or buildings remain; all that's left is a crossover and PBX phone. Unfortunately most of the line between here and Goffs looks the same: blank, desolate, uninteresting (Amboy, T9N/R17E:35).

Fenner's main merit is the proximity of Goffs Road. Unlike the stations between Ludlow and Danby, a paved road follows the tracks from here to Arrowhead Junction. So if a particular landscape does cross your fancy, just pull off the road (be careful of the surrounding brush) and go exploring.

Signals 6141-6142

Midway between Fenner and Goffs a pair of signals with Goffs Butte and the Piute Mountains in the background does, however, present an interesting photo opportunity. About 3.8 miles northeast of Fenner and 3.9 miles southeast of Goffs, Signals 6141 and 6142 stand guard within sight of MP 613. Some dirt access roads are nearby, but you may find it more convenient to pull off the road and walk into position.

The mains curve gently towards you from the left in the distant background; on the right are the mountains. Telephone poles line the tracks on the opposite side, so they are not in the way. A 135 mm lens will catch an eastbound at the signals with enough of the Piutes showing to keep it interesting. At sunset the light will bring out the peak's natural colors.

Goffs

Once a busy station due to mine traffic from the nearby Vontrigger Hills, Goffs today serves as a maintenance way station. One or two mobile homes, a water tank, crew quarters, old wooden loading docks, and a general store remain; a microwave relay tower and some construction equipment sit nearby (Amboy, T10N/R18E:26).

About 7.7 miles northeast of I-40 and 15 miles west of US 95, the station also marks another transition of the line's topography. The tracks run southwest to northeast through the Fenner Valley to Goffs, but due east-west from Goffs to Arrowhead Junction. East of Goffs trains will be well lit throughout the day, best for morning westbounds and afternoon eastbounds.

Because of this transition, the line curves tightly at Goffs. Trains are visible only about 0.75 mile or so in either direction. However the crossing gates and hotbox detector at MP 607.5 should give enough advance warning of any impending movements.

Along the Sacramento Wash

Just like between Fenner and Goffs, the line is again closely paralleled by Goffs Road between Goffs and Arrowhead Junction. It's a simple matter to stop for a picture of an oncoming train. Unlike the north Fenner Valley, this portion of the line just north of the Sacramento Wash has several interesting photo locations: descriptions of these follow below.

West Homer

Goffs Road runs about 0.5 mile south of the tracks through the Piute Mountain foothills. But 5.8 miles later the road rejoins the ATSF main near Signals 6031-6034. There is a large open dirt area to park on; the tracks are a short walk away.

The western mains curve away from you at the signals; the Piutes are prominent in the background. Telephone poles line the south track but won't clutter the western view, fortunately, of an oncoming eastbound. The view east is quite different: the long, barren landscape is bounded by the Dead Mountains off in the distance. Telephoto lenses around 100-135 mm work well for the western vista; lighting is best at sunrise to mid-morning for eastbounds crossing by the Piutes.

Homer

About 1.6 miles further east along Goffs Road is Homer Station, 6.85 miles west of Arrowhead Junction. A private crossing, guarded only by a stop sign, stands on a dirt road leading up to the tracks. This is a good place to park the car.

Not much remains at Homer; in fact nothing remains at all! There are no signals or structures present, just a 6700' jointed rail siding which hasn't seen a great deal of use. The locale seems like that at Hector Siding, except there are far fewer surrounding mountains. Visibility is rather unrestricted, as you can almost see for two or more miles in each direction.

Bannock

Like its western cousin, Bannock is also a desolate station without trackside structures. Other than some signals, a crossover, and a siding, not much is here. Though it's 4.5 miles further along Goffs Road, the eastern view is similar to that at Homer. It appears less abandoned, however, primarily because the Dead Mountains occupy more of the background. And as West Homer is a good place to railfan at sunrise, Bannock is well suited to sunsets greeting the evening westbounds (Bannock, T10N/R20E:26).

Arrowhead Junction

At the intersection of US 95 and Goffs Road, Arrowhead Junction marks the second point where the mains separate. Similar to Klondike, the north track takes a long but gentle grade; the south a short but steep route. The divergence point, however, is easily reached from paved roads: it's about 100 yards west of the grade crossing. Visibility west is clear to Bannock. Although the vista east is not straight, you should be able to see approaching westbounds up to 1.25 miles away on the north track. And just as at Bannock, the Dead Mountains form an impressive western backdrop, making this another ideal place to spend an afternoon or watch sunsets (Bannock, T10N/R21E:19).

From here south the tracks essentially follow US 95 except they run about one mile apart from each other. A dirt road on the Bannock map is shown between 95 and where the mains rejoin at Ibis. If your car has sufficient ground clearance it may be passable; try it at your own risk (Bannock, T10N/R21E:20).

Klinefelter

Although the Dead Mountains rise to a height of only around 500 feet along the ATSF's route, they do so rather quickly. To avoid this grade the tracks curve and run north-south until Klinefelter, where they turn east-west again. About 4.65 miles south of Arrowhead Junction and 1.75 miles north of I-40 is the Klinefelter crossing on US 95's east side. Pull up to the stop sign and park; don't go into the nearby ranch which is private property (Bannock, T9N/R21E:2).

The main starts to curve away from you about 0.25 mile north of the crossing; it continues east around the Dead Mountain range's southern extent. Lighting is acceptable for eastbounds throughout the day, exactly the opposite of what is needed for westbounds.

South Klinefelter

Better westbound shots can be had about one mile south of Klinefelter where US 95 again begins to diverge from the tracks. Here you can see the mains sweep around the mountains on its way to Java. There are several hills to stand on for an elevated perspective; approaching eastbounds are visible for 1.5 miles or so. A Westbound's headlight can be seen for a brief moment as it crosses under I-40 about three miles away. About the only compositional problem you'll have is jockeying the telephone poles lining the south track, but decent shots can be taken between them (Bannock, T9N/R21E:2).

On to Needles

South Klinefelter is the last photo spot we'll visit outside Needles. I-40 is the only paved road near the line, and it's illegal, of course, to stop on an interstate for a photograph. So take US 95 south to I-40, enter east, and exit Business Route 40 at River Street. See the Needles supplemental map for details.

Broadway Overpass

One of the more interesting photo spots within the Needles city limits is the Broadway Overpass near Walnut. Take River Street through town, follow the Business Route 40 signs to Broadway, then turn right. About 0.15 mile later turn left onto Walnut and park the car. Pack a 100-135 mm lens and walk along Broadway over the tracks; use caution as the sidewalk is just barely wide enough. A fence blocks the view, but there's more than ample room between the bars to poke a lens through!

I-40 blocks the west side of Broadway, but the view east is unobstructed. You can see consists waiting for departure orders at the crew change office. Lighting is best for westbounds in the afternoon; during the mornings only the train's side, not its front, is well lit.

Needles Harvey House

While not as majestic as Barstow's Casa Del Desierto, Needle's own Harvey House is in better shape. The building is fenced off and windows are boarded up, but at least the basic structure is not crumbling to pieces. The station is best viewed from Front Street between F and G. Follow Broadway south from Walnut, then turn left towards the tracks after stopping at J Street. Turn right on Front and stop at the park in front of the building. Several palm

trees and “pawn shop” style street lamps decorate the park; you can get just about all of the building in with a 35 mm from the southwest corner of F and Front.

Crew Change Office

Our final stop is the crew change office east of the main station. Follow Front east to D Street, then park in a nearby vacant lot. All trains must stop here before entering or leaving the Kingman Subdivision, so roster shot opportunities are excellent. Scanner traffic is busy with communication between crews and dispatchers; as a result you can generally get advance notice of any imminent movements. Surrounding palm trees and a clear, blue sky (a far cry from San Bernardino on the Cajon Subdivision) add a nice photographic touch.

End of the Line

We hope you've enjoyed this tour of ATSF's Needles Subdivision. If you're interested in other sights around the area visit the Needles Chamber of Commerce at Front and G or take US 95 south of I-40 to the BLM Needles Resource Area Office at 101 Spikes Road. Both are open during business hours.

Needles Subdivision Services Directory

Gas

<u>Area</u>	<u>Brand</u>	<u>Location/Cross Street</u>
Barstow	All	Follow Main Street through town
Newberry Springs	Whiting Brothers	I-40 Cady Road exit Cadiz
	BP	Cadiz Road and NTH (not always open)
Ludlow	Chevron	I-40 Ludlow exit
Goffs	Generic	Goffs Road
Needles	Arco	I-40 River Road exit
	BP	I-40 US 95 South exit
	Chevron	I-40 River Road exit
	Texaco	I-40 River Road exit
	Whiting Brothers	I-40 River Road exit

Price note: Needles stations at the I-40 River Road exit are substantially lower than all other stations along the subdivision, including those at J street or US 95!

Food

<u>Area</u>	<u>Name</u>	<u>Location/Cross Street</u>
Barstow	All	Follow Main Street through town
Newberry Springs	Whiting Brothers	I-40 Cady Road exit, store at gas station
Goffs	General Store	Goffs Road
Needles	Bashas (Grocery)	I-40 US 95 South exit
	Burger King	I-40 US 95 South exit
	Carl's Jr.	I-40 River Road exit
	Denny's	I-40 J Street exit
	Mc Donald's	I-40 J Street exit

Lodging

Nationwide reservation numbers for the hotel chains are as follows: Day's Inn, 800/325-2525; Econolodge or Friendship Inn, 800/424-4777; Motel 6, 505/891-6161; Sleep Inn, 800/2212222; Travelodge, 800/255-3050. Prices shown are for one adult.

<u>Area</u>	<u>Name</u>	<u>Location</u>
Barstow	Motel 6	#164, 31951 East Main Street, 92311, 619/256-0653. I-40 Marine Corps Logistics Center exit, \$22.
	Motel 6	#1355, 150 Yucca Avenue, 92311, 619/256-1752. I-15/I-40 East Main Street exit north, then east, \$22.
	Sleep Inn	#CA170, 1861 West Main St, 92311, 619/256-1300. I-15 West Main Street exit, west of Avenue H, \$33-38.
Needles	Day's Inn	#EEDPS, 1111 Pashard Street, 92363, 619/326-5660. I-40 West Broadway exit, \$40-50.
	Motel 6	#222, 1420 J Street, 92363, 619/326-3399. I-40 J Street exit south, on west side, \$23.
	Motel 6	#1364, 1215 Hospitality Lane, 92623, 619/326-5131. I-40 J Street exit south, on east side, \$23.

Travelodge

#0940, 1900 West Broadway, 92363, 619/326-3824.
Business 40 between O and P, \$40-45.

Camping

As a general rule camping is permitted on public lands throughout the CDCA. For more information contact a BLM Office below:

California Desert District Office
1695 Spruce Street
Riverside, CA 92507
714/351-6394

Barstow Resource Area Office
831 Barstow Road
Barstow, CA 92311
619/256-3591

Needles Resource Area Office
101 West Spikes Road
Needles, CA 92363
619/326-3896

For Further Information

Barstow Chamber of Commerce
831 Barstow Road
Barstow, CA 92311
619/256-8617

Needles Chamber of Commerce
Front and G Streets
Needles, CA 92363

Needles Subdivision Milepost Table

Landmark	Milepost
Needles	578.0
H Street Grade Crossing	578.1
West Needles	580.2
Java	585.6
Ibis	592.3
Arrowhead Junction	595.1
Bannock	597.0
Private RR Crossing	598.1
Homer	601.5
Hotbox Detector, North Track	607.5
Goffs	609.1
Hotbox Detector, South Track	612.4
Fenner	618.7
Sunflower Road Grade Crossing	625.7
Essex	626.2
Hotbox Detector, Both Tracks	628.1
Danby	634.7
Cadiz Road Grade Crossing	647.0
Cadiz	648.1
Saltus	658.4
Amboy	661.5
Hotbox Detector, Both Tracks	665.0
Bagdad	669.3
Siberia	676.6
Klondike	682.0
Ash Hill	686.7
Hotbox Detector, Both Tracks	690.3
Ludlow NTH Grade Crossing	691.0
Ludlow	693.1
Lavic	702.7
Pisgah	706.6
Hotbox Detector, Both Tracks	711.1
Hector	712.8
Newberry Springs Road Grade Crossing	724.8
Newberry Yard	725.6
Minneola	732.5
Airport Spur	732.6
Hidden Springs Road	733.0
Hotbox Detector, Both Tracks	733.3
Solar One Power Plant	735.0
Cool Water	735.9
Daggett	737.3
Nebo	741.6
East Barstow	743.6
Barstow	745.9

Information obtained from ATSF Timetable.

**Southern Pacific
Mojave Subdivision
Atchison, Topeka, And Sante Fe Right-of-Way**

Mojave
Monolith
Tehachapi
Marcel
Walong
The Tehachapi Loop
Woodford
Keene
Bealville
Caliente
Ilmon
Bena
Sandcut
SP Bakersfield Yard
ATSF Bakersfield Yard
Amtrak Bakersfield Station

SP Mojave Subdivision

History

Southern Pacific (SP) began construction over the Tehachapi mountains in 1874 under the supervision of William Hood. On average the ruling grade is 1.5%, but at some spots (from Woodford to Walong, for example) the “as the crow flies” grade runs as high as 11%. Hood's route now includes 19 tunnels (numbered from west to east) and the world-famous Tehachapi Loop. In 1899 SP granted trackage rights to rival Atchison, Topeka, and Sante Fe (ATSF) after the latter proposed building a competing line through the southern Tehachapi Mountains.

The Loop itself was completed in 1876. It has a circumference of 3800 feet, somewhat shorter than an average SP freight train. The ruling grade is 2%; there is 77 feet between tracks at the cross-over point. The Loop contains a full siding, enough to hold a large train at Walong.

The line has several other outstanding features. A personal favorite is Caliente's Curve: here eastbounds from Bakersfield make a 180E turn and proceed due west to Mojave, flanges squealing on rail all the way! Also noteworthy are the tunnels above Bealville where exiting SP diesels belch black smoke, just like their steam counterparts (the ATSF units are a bit cleaner, being better maintained). While the main is not double-tracked, long sidings allow the SP dispatcher to simultaneously service several trains in both directions.

Orientation

The line runs essentially east to west, but almost due north-south through Mojave. At the Loop it runs northwest to southeast. When describing train movements we use the word eastbound to mean “towards Mojave” and westbound to mean “towards Bakersfield.” Note that eastbounds physically travel west at three places along the line: Cliff, Caliente, and Walong.

Kern County roads have milepost markers at frequent intervals: these are referenced in the text. Mileposts have a three digit and letter code followed by the distance from the road's origin. For example, 481 V 487 is 4.87 miles from Highline along Woodford-Tehachapi. White with a black stripe on top, markers referred to include the following:

Code	Name	Origin
481 V	Woodford-Tehachapi Road	Highline Road
443 X	Caliente-Bodfish Road	Bena Road
226 G	Bena Road/Edison Highway	State Highway 58

Note that the term MP designates a railroad marker, milepost a highway marker.

Let's go for a tour of SP's Mojave subdivision! We'll start at Mojave, work north to Tehachapi, check on the Loop at Walong, see the Curve at Caliente, and visit the SP and ATSF yards in Bakersfield. While reading the sections following, please refer to the USGS and supplemental maps for landmarks and geographic features.

Climbing to Summit

Mojave

Billed as the “transportation hub of southwest Kern County,” Mojave is a modern-day oasis. At the intersection of State Highways 14 and 58, the city is today for automobiles what it was for steam engines years ago: a rest stop with all the necessities. There are plenty of gas stations, restaurants, motels, grocery stores, and so on. See the Mojave supplemental map for details.

SP has a radio relay tower at Sierra Highway and Inyo Street. A small yard consolidates the local freight traffic, mostly from nearby cement and potash plants. Two diesels are usually on assignment for yard switching and local hauling. A wye south of the city on Highway 14 marks the division between SP's and ATSF's mains. The ATSF detector at MP 813 announces trains 1.4 miles before they reach the SP main (Mojave, T11N/R12W:17,20).

Monolith

Highway 58 follows the main as it gradually climbs west to the pass' summit. About fifteen minutes after leaving Mojave you'll pass a lone wooden sanding shed near Cash Creek, a relic from steam days (several newer concrete shanties have replaced the rest). Just past the shed is the Sand Canyon exit from 58, 11.4 miles from Mojave. Exit here, turn north, then immediately left onto Tehachapi Boulevard; we'll follow the rails to town (Monolith, T32S/R34E:27).

This particular stretch of the line is long and flat. The main gently curves from the freeway to the Calaveras Cement Company plant, then runs straight through town. A grade crossing stands just east of the plant; from this point Tehachapi Boulevard runs parallel and south of the line. Late morning to mid-afternoon lighting is well suited for eastbounds to Mojave (Monolith, T32S/R34E:30).

Further along Tehachapi Boulevard is another Highway 58 exit at the Tehachapi Pass Summit. Two sidings parallel the main; SP frequently cuts helpers and assembles locals here. This is a rather nice place to catch a westbound in the sunset before dinner: as the red clay in the background mountains glows (Tehachapi North, T32S/R33E:23).

Driving Through Town

Tehachapi

Continuing 1.8 miles into town, you may see the local Maintenance of Way (MOW) train near Hayes Street (unless it's on duty). Consisting of an SP SD40-T, a crane car, a few flat cars, and a caboose, it circulates along the line making minor repairs.

A park dedicated to the community contributions of the railroad is located between Davis and Robinson Streets. A preserved water tank from steam days is on display. An operating semaphore stands beside the Chamber of Commerce building. Walk up, flip the levers, and dream about days gone by! See the Tehachapi City supplemental map for details.

Continue west then turn north on Green Street to visit the Tehachapi Depot. SP still maintains the building; it houses a freight office but is no longer used as a crew change point. A signal tower behind the depot will alert you of approaching trains (Tehachapi North, T32S/R33E:21).

The Tehachapi Museum, at 301 South Green. is open Tuesdays and Thursdays from 9:00 until noon, Saturdays and Sundays from noon until 4:00. The museum concentrates on area history and Tehachapi's indigenous Indian population. Several photographs of floods and earthquakes which have plagued the line, as well as the original SP stations, are on display. Stop by if you get a chance.

Valley Boulevard

Let's proceed to Woodford-Tehachapi Road which takes us into the mountains by following Tehachapi Boulevard to Tucker Road. We'll pass the Best Western Mountain Inn along the way; an HO scale model of the Loop is on display in the restaurant's lobby. About 1.2 miles west of Green turn left on Tucker, then right on Valley Boulevard (State Highway 202). From State Highway 58 take the 202 exit south and turn right on Tucker instead. Continue west on Valley, then turn north on Woodford-Tehachapi Road (Tehachapi North, T32S/R33E:20).

Woodford-Tehachapi Road

This road takes us from Tehachapi to Keene following the tracks closer than any other paved street. It was the main route to Bakersfield before Highway 58 was built. You'll see milepost markers (white with a black stripe on top) along the way at frequent intervals; we'll refer to these as landmarks for various turnouts off the road. See the Tehachapi Area map for details.

The first 2.0 miles or so north of Valley is a hilly but straight path to the mountains; after that Woodford-Tehachapi starts twisting. Reduce speed to 5-10 miles per hour before driving off the asphalt at any point: some of the turnouts are not that long (or wide).

The Tehachapi Mountains

About 5.6 miles north on Woodford-Tehachapi you'll see a turnout between mileposts 650 and 675 with a good view of the "S" curves leading into Marcel. This is the first spot you can stop and look down into the valley, as the other interesting photo spots are now occupied by custom homes. Try photographing from this site with a 300 mm lens.

Marcel

A dirt road that leads down to Marcel is near milepost 696, 2.1 miles from the first turnout. Drive off the asphalt at 26698 Woodford-Tehachapi and turn immediately left; avoid entering private property. Continue down in low gear, take the left fork, and park under the oak trees across from the siding (Keene, T31S/R32E:34).

Marcel's siding is now directly in front of you; here a westbound train will sometimes rest "in the hole," waiting for an eastbound to pass. The surrounding oak trees provide an interesting foreground: this is an opportunity for some "up close and personal" shots. There is not much visibility up or down the line, but the detector at 355.2 sounds off before westbounds approach.

A turnout between mileposts 723 and 734, 0.3 mile further on Woodford-Tehachapi, sits under a tandem telephone pole with a good view of Marcel. To the south is a pair of signals; to the north, Tunnel 10 (T10). The signals control eastern access; westbounds wait around the bend. Another 0.3 mile north, near 759, is a close-up view into T10. This spot has interesting photo possibilities for 200-300 mm lenses.

The Tehachapi Loop

Historical Marker

A monument overlooking the Loop stands on Woodford-Tehachapi Road near milepost 806. The inscription reads:

From this spot may be seen a portion of the world-renowned Loop. It was completed in 1876 under the direction of William Hood, Southern Pacific Railroad engineer. In gaining elevation around central hill of loop a 4000 foot train will cross 77 feet above its rear cars in tunnel below.

This site offers the best overall view of the Loop. You can see how a westbound climbs up, around, and over itself, like a coiled garden hose. A 28 mm lens will take in the entire scene.

Be careful driving near the monument: on weekends families bring small children to see the trains; usually two or three large cars are parked nearby.

Walong (The Loop)

The Loop is reached via a dirt road shown on the Keene map at T31S/R32E:28, 0.75 mile north of the marker. Milepost 870 on the southbound lane is closest to the entrance. Follow the road up to-but not over-the tracks. Park south of the outer curve, near the Benchmark (BM) shown on the map. Please respect private property inside the Loop; do not hop any fences.

The best lighting for photographs changes throughout the day as the sun moves from east to west. Since the Loop is circular, however, a good angle (one with the sun at your back) is available just about any time. Two areas deserve special recognition: the west siding signals and the oak tree near the cross-over.

In the morning the sun shines to the west. At this time an eastbound at the siding signal will be lit at a 3/4 wedge angle. There is a small hill (sheet rock, actually) quite close to some telephone lines which you can stand on to get an elevated perspective. The perspective works well with 50-135 mm lenses and 80 mm lenses on medium format cameras. With a 200 mm lens you can catch westbounds descending the hill as they approach the cross-over tunnel (T9).

As the day wears on the sun shifts to a southwestern position. From the oak tree near the cross-over lighting is best for westbounds ascending the hill. With a 200 mm lens you can get a good shot as a train just rounds the hill; as she comes closer 50-100 mm lenses become more appropriate.

Lower Loop

Let's wander down to the lower end of the Loop's crossing. Go back down the dirt road; follow it as far as possible until just reaching Woodford-Tehachapi, but don't drive on just yet.

From here Signal 3507 is visible somewhat beyond the fences. This is an excellent spot for motive power shots: the track elevation is uphill; with a 200 mm lens the engines appear to bear down on you. The lighting is best when the sun shines from the southwest, around mid-after-noon. Be prepared for the eastbound SP "TankTrain," at the Loop around 4:30 p.m. daily.

Woodford and Keene

Woodford Siding

Just north of the Loop is the lesser known siding of Woodford. One of the few places along the line where you can see and hear approaching trains far in advance, the area is well lit through- out the day. Two access points are near mileposts 950 and 967, 0.75 and 0.85 mile from Walong respectively (Keene, T31S/R32E:28).

Woodford has a straight segment running due east-west which curves north at both ends. In the morning sun shines up the west curve; at noon, along the straight; in late afternoon, up the east curve. Some changes have been made since the Keene map was published: one of the sidings has been extended; two water tanks now sit closer to the west curve.

There are several small hills south of the tracks allowing an elevated view of the parade. The best general shooting position is just west of the water tanks. An 80-135 mm lens from here will provide good coverage of both directions. Near milepost 967 and back in the trees is an excellent vantage point for eastbounds rounding the midpoint of the west curve; from here a 200 mm lens makes a tight, clean shot.

Spend a day at Woodford and you'll witness at least one meet. Dispatchers tend to place trains "in the hole" here instead of at Walong due to the gentler grade and wider curves. Typically an eastbound will slowly pull into the siding and wait near the switch. Soon after a westbound (sometimes a helper set) will come down in some haste from the Loop. When all is clear the eastbound pulls out the slack and proceeds on up. Sometimes it works in the opposite direction: I've seen two westbounds share the siding, waiting for an eastbound "hotshot."

Woodford Signal Tower

Two locations at Woodford become apropos as the light changes during the day. Towards late afternoon a large hill across from Woodford's signal tower (a sharp right just after milepost 977) is an ideal place to catch afternoon westbounds. Unfortunately it's not a good vantage point for eastbounds due to the track angle. Across the tracks within walking distance is a small hill near MP 349; at times this is the only place around Woodford well lit for eastbounds.

South Keene

The community of Keene is divided in half by Highway 58: a few houses, the fire department, and a new post office sit to the north; several farms and residences to the south. The tracks south of 58 to the Woodford signal tower are the straightest since Tehachapi, offering some unique photo opportunities.

An SP maintenance shed, looking just like the prototype for Atlas' Trackside Shanty kit, sits north of milepost 1003, 0.9 mile from Woodford. Avoid driving over the large rocks; they can scrape your car's undercarriage! This spot is well suited to head-on shots; grass growing nearby supplies a colorful background. You might also catch the local MOW train here if it was not in town (Keene, T31S/R32E:21).

North of milepost 1018 is a pylon from a bridge that used to cross Tehachapi Creek; on the other side of 58 is a counterpart. Standing on the pylon 135-200 mm lenses frame eastbounds well as they cross under the freeway heading for Woodford. The light will be best for this

from mid to late afternoon. Note: because Woodford-Tehachapi is quite narrow, park at the county refuse station and walk into position (Keene, T31S/R32E:20).

On to Bealville and Caliente

There is no easy access route to the tracks that does not cross private property north of the 58 overpass. Let's proceed then from here to Bealville: drive 1.3 miles north past the overpass, take Highway 58 west (to Bakersfield), and exit north at Bealville Road.

The Bealville-Caliente area is different from Marcel-Walong-Woodford in several respects. For one thing there is less vegetation: compare the amount of green tint on the Bena vs. Keene maps. Trains are spaced farther apart: since most meets occur between Woodford and Marcel, action in Bealville and Caliente is more spread out. The area is quieter, too: less auto traffic, fewer railfans. The photographic craftsman will appreciate the extra preparation time and not having to rush between trains.

Bealville

About half a mile north of Highway 58 is the grade crossing on Bealville Road. There are three distinct vantage points within walking distance: the crossing itself, the western mountain tunnels, and a large hill to the east. Note: the Township/Range grid is not shown on the Bena map.

Photo opportunities along the crossing are varied. To the east are some small hills south of the tracks; a short walk away is the west face of Tunnel 3 (T3). Several fences delineating private property constrict the area, blocking better perspectives. Northeast from T3 is T4, almost directly overhead (both tunnels are shown on the Oiler Peak topo map). Although it faces northwest, eastbounds exit T4 nose first. The average SP train with five or six older units in the lead belches thick, black diesel smoke clouds upon leaving the tunnel. You can catch the action with a 300 mm lens; unfortunately there is no road anywhere nearer to this scene.

West of the crossing on the main's south side is a dirt road leading to a large hill. About 1000 feet from Bealville Road, the hill is the best location for general photography in the area. Since visibility to the left is poor, however, this spot is good only for catching afternoon westbounds.

Caliente

Bealville Road continues north and intersects Caliente-Bodfish road. To reach Caliente Curve continue straight; to visit T1 and T2 turn left. See the Caliente supplemental map for details.

Just south of the intersection is a box bridge overpass. Several dirt roads on either side lead up to the tracks. West of Bealville Road is a hill offering a sweeping view down to the curve, best for eastbounds in the afternoon sun. Note it is safer to park close to the road and walk into position.

The Curve itself offers several photo opportunities throughout the day; at any given hour a train will be heading directly into the sun somewhere along the Curve. A dirt road is accessible near the Caliente grade crossing; follow this to the east or west for a change of perspective.

Caliente-Bodfish Road

Head west on Caliente-Bodfish until reaching the oak trees near milepost 443 X 434. From here two steep dirt roads go up to the main: the west fork heads for T1, the east for the Bealville Road overpass. You may want to park your car near the oak trees and walk up due to the grade. See the Caliente supplemental map for details.

The best photo opportunities vary throughout the day here as well. The morning sun lights T1's northeast face, a good time to catch westbounds heading east down to Caliente. Afternoon light is optimum for eastbounds coming up from the Curve; a good view is from the south side of the tracks near the bridge.

Heading Towards Tunnel 2 Further west along Caliente-Bodfish is a turnout just past milepost 395 that has a view directly into the Curve's north end. Afternoon westbounds leaving Caliente facing into the sun are well lit from here; telephoto lenses in the 135-200 mm range serve well.

The road continues southwest, moves away from the line, then returns to a turnout somewhat past milepost 285. The north face of T2 is close by; in the distance the south face of T1, several signals, and MP 337 are visible. Some telephone poles interfere with the view, but are not that obtrusive. Afternoon shots of eastbounds leaving T1 and entering T2 offer the best results.

From here the line travels southeast towards Bealville, beyond reach of paved roads. Follow Caliente-Bodfish southwest until it intersects with Bena Road, then turn north. About 3.5 miles farther up the road, the line comes back into view again at Ilmon.

Ilmon

Near 226 G 775 on Bena Road is a small hill south of the tracks offering a general view of the line as it approaches Ilmon. The Caliente Creek wash lies to the north between the road and the main. The wash is filled with deadwood in the winter, but covered with grass in the spring.

The tracks cross the creek via another box bridge similar to the one at Caliente. North of milepost 778 is an excellent view of the bridge looking directly towards MP 330. The track angle is best for afternoon westbounds lit by the setting sun. A turnout at 806 is better for morning work, giving a well-lit view of early eastbounds.

The last photo opportunity before Bena Road becomes Edison Highway is at milepost 829. The line runs pretty much east-west at this point, so the lighting is best for morning eastbounds and afternoon westbounds. Signal 3295 is close by. Note: exercise caution around the power lines.

Along Edison Highway

The final run to Bakersfield is again different from other places we've visited. The traffic density is not as high: dispatchers work to keep this part of the line free for high speeds. The tracks are straight and flat, quite a contrast from the twists at Caliente. A farming atmosphere permeates the surrounding scenery: agriculture is the big business surrounding Bakersfield and, for that matter, most of California's San Joaquin (pronounced "wah-keen") Valley.

Helper Siding

Leaving the Bena fertilizer plant, Edison Highway continues west to Bakersfield. At milepost 1126, just past Signal 3269 (visible from the highway), is a siding for SP helpers on call for the climb to Tehachapi. There's usually a few SD40T's, sometimes an SD45, in a set of four units. If they're not sitting in the hole a westbound may be coming soon!

Sandcut

A little closer to Edison is the siding of Sandcut. A hill east of milepost 1240 surrounds an "S" curve on the main, the first we've seen in quite a while. From here you can see east to Bena and as far west as the air is clear! The curve's "knee" points due south, so the sun illuminates westbounds in the morning and eastbounds in the evening quite well (Edison, T30S/R30E:17).

Further west at MP 325 is the Sandcut shanty and signal tower. An orange grove behind these structures offers some green scenery. Towards sunset the light shines at a wedge angle on approaching westbounds; it makes a nice place to catch "the last train" before heading to Bakersfield after the sun is gone (Edison, T30S/R30E:8).

Bakersfield

Edison Highway becomes Truxtun Avenue just after the Arvin Branch grade crossing. A short distance later turn northwest on Sumner Avenue to reach the SP Bakersfield Yards. At Miller Street and Sumner is Kern Junction, the junction between SP and ATSF mains. ATSF westbounds will split off and head for their yard; SP trains will change crews here. Eastbound Sante Fe trains will call the SP Mountain Dispatcher for permission to enter the junction. See the Bakersfield supplemental map for details.

SP's Bakersfield Yard is, unfortunately, a shell of its former self before the ATSF-SP fiasco. Now the yard is barren with just enough resources to support the local area; six years ago it was a major haven to SP motive power. It will be interesting to see if this situation changes under the new SP/Denver and Rio Grande Western (D&RGW) merger. Near Baker Avenue and Sumner is the former SP Bakersfield passenger station, fenced off and in poor shape.

ATSF's yard, fortunately, is much healthier. To reach it follow Sumner until it intersects with Union Avenue, turn right, immediately left on 24th, left again on F, then park in the Amtrak station lot at 16th. Crews busily assemble cars into inbound consists; resulting trains head to Barstow for reclassification.

The Amtrak Station supports six San Joaquin trains daily. The California Department of Transportation helped support two extra trains starting December 17, 1989. The schedule until October 24, 1992 is:

Train	Direction	Time
711	North	0515
703	North	1120
708	South	1330
709	North	1540
704	South	1750
710	South	1117

End of the Line

We hope you've enjoyed this trek along SP's Mojave Subdivision. Be sure to visit the nearby Trona Railway. Details follow in the next section.

Trona Railway

History

While prospecting with his brother Dennis south of the Panamint Mountains in 1862, John W. Searles discovered a dry lake bed in an unnamed valley. He scooped a handful of crystals into his ore sack for future study, not knowing what the white stuff was. Ten years later, after seeing Francis “Borax” Smith refine similar crystals, Searles backtracked and staked claim to 640 acres on what is now Searles Lake, the nation's second largest sodium borax deposit, literally a chemical gold mine.

By 1874 the San Bernardino Borax Mining Company (SBBMC) sold one million pounds of borax for \$200,000 during its first year of operation. Owned by the Searles brothers and their associates, it was the first of several concerns that “harvested” the lake. Searles eventually sold his company to “Borax” Smith's Pacific Coast Borax Company, owner of the Death Valley Harmony mine and promoter of the eighteen mule and two horse team. Smith wanted to corner the borax market, so he promptly shut down SBBMC's operations.

After a dozen more ventures tried and failed to profitably obtain borax from the lake's surface, the American Trona Company, backed by a British gold mining firm, built the 31 mile Trona Railway, established the town of Trona, and spent \$3 million developing the first successful evaporative recovery process. This allowed obtaining potash from the semi-liquid brine buried deep under the lake bed. The development of this process, inaugurated in 1915, made mining Searles Lake's \$200 billion reserves commercially viable.

Today North American Chemical Company (NACC) owns all Searles Lake mining operations. NACC purchased the Westend, Argus, and Trona plants for \$210 million from Kerr-McGee Chemical Corporation. These plants annually produce 500,000 tons of industrial chemicals worth \$58,000,000.

A historical footnote significant to HO modelers is that Kerr-McGee purchased the Trona plant from American Chemical and Potash Company, immortalized as a Suydam kit.

The Trona Railway, an NACC subsidiary, ships 10,000 cars (200 miles worth) a year to Searles Station and receives another 5,800 cars of supplies. Because of boron's criticality to the manufacturing of glass, fiberglass, porcelain, insulation, metal plating, and fertilizers (to name a few), the Trona will be busy for a long time to come.

Orientation

The Trona Railway runs essentially southwest to northeast from Searles Station near US Highway 395 across the Spangler Hills. It then turns and runs due north-south from the Trona Pinnacles through Westend, Argus, and Trona. South of Westend the line runs over public land administered by the Bureau of Land Management (BLM); north of the plant the tracks run through private property.

It is not safe to stop along Trona Road except at the photo locations mentioned: there is simply not enough space to pull off the road and park. A bicycle path, however, follows the road from the Westend plant all the way through Trona; you can stop just about anywhere on a bike as long as you don't hop any private property fences.

Photo Opportunities

In reality there are two separate operations which call Trona home: switching by the Trona Railway and road jobs over the SP Lone Pine branch. Every business day motive power shuffles cars between the Trona and Argus plants. Sometimes they make a run down to the Westend plant, leaving at 7:00 a.m and arriving back at 9:30 a.m. SP road trains run at night, but are formed near the Trona Road grade crossing and prepared the following day for departure that evening. These are separate events, but if you visit on a Friday you can see them both.

Searles Station

Milepost zero on the Trona Railway, the connection with SP at Searles is the best place to spend a Saturday afternoon. An outbound SP road train prepared the day before can usually be found idling at the grade crossing. Ready to go with six to eight C-C motors on the point, the train waits for a crew to come out in the late afternoon.

Searles Station is equidistant from Mojave or Barstow, about a 90 minute drive away. From Mojave take State Highway 14 north, follow the SP Lone Pine branch for 20.2 miles to Red Rock-Randsburg Road, then turn right. Continue 12.3 miles east onto Garlock Road, then turn left. Garlock ends 8.5 miles later at US 395; at that point turn left, drive north 3.1 miles, turn right on Searles Station Cutoff Road, then drive to the grade crossing and park. If you're coming from Tehachapi or Bakersfield, take the Randsburg Cutoff from 58 to 14 instead.

From Barstow take Highway 58 west to Kramer Junction, then turn right on US 395. Drive north through Red Mountain and Johannesburg for 35.1 miles, then turn right again on Searles Station Cutoff Road. Along the way you'll cross the SP Lone Pine Branch/US 395 grade crossing; it's 3.4 miles from Searles Station Cutoff. From Cajon and Victorville take US 395 north directly to Kramer Junction instead.

Usually the SP road train is parked just north of the crossing. Ore cars are stacked behind the power as far as the eye can see; the train is usually about 1.5 miles long. With a grimy mix of SP and sometimes D&RGW power posing for roster shots, the scene looks like a full size model railroad. While similar fare exists elsewhere on the system, rarely is it this cooperative.

Two SP B-B motors and several box cars assigned to Searles Station sometimes sit south of the crossing. A diesel sanding station is here, remnant of the shoo-fly through the Summit Range. The shoo-fly was pressed into emergency service after an early 1980's fire in nearby Tunnel 29, but the tracks have since been removed. Since the roadbed runs through public land you can drive on it in a 4 x 4; it appears on the BLM Red Mountain map.

About one-half mile north of the crossing is a well-preserved steam engine water filling tank. Part of the Trona line, a soft dirt road on the east side leads up to the tank. Don't drive beyond it, however, as the road gets even softer further on. Stay off other dirt roads in the Spangler Hills area: most of them are motorcycle trails which are not suitable even for a 4 x 4.

Administrative Offices

A trip to Trona during business hours will be well worth the time. Before visiting, however, obtain permission from the Trona Railway's administrative offices building. Located between

Alameda and Center on Main Street in Trona, follow Searles Station Cutoff Road east of the crossing to Trona Road, turn left, drive north about six miles, turn right on State Highway 178, and continue on to Center Street past the Trona Road Grade Crossing. The trip will take about 40 minutes from Searles; see the Searles Station and Trona supplemental maps for details.

Once at the administration building step inside and ask for permission to enter the railway plant. The receptionist will probably direct you to the superintendent who usually grants such request. Ask what the day's schedule holds, in case there are any special movements.

No, that Alco was not your imagination. Kerr-McGee runs two Baldwin S-12 switchers, an Alco RSD12, S7, and an EMD SW1500 deep inside the confines of its Argus and Trona plants. These engines bring hoppers from the loading stations into the Trona Railway yard for shuffling into road train sections. You can't get permission to photograph them (wandering around chemical plants without proper dress and training is dangerous), but you can snap a picture through the fence. Put a lens on, open up to f 4, and—viola!—the chicken wire won't interfere with the photo.

Plant Entrance

After obtaining permission head for the Trona Railway Plant Entrance on Trona Road about 0.5 mile south of Center. Pull into the parking lot and stop on the gravel in front of the railroad tie bumpers. You should be able to see the Baldwins switching in the yard.

Lighting in the yard is best in the morning as the sun shines in from the east. In winter the Baldwins are lit at almost a perfect wedge angle; in summer the sides are well lit but the fronts are somewhat in the shadow. In the afternoon the sun swings to the track's other side, so the locomotives become backlit.

Because you can essentially walk up to the Baldwins, lenses from 50 mm on work well for portrait use. However telephotos are sometimes useful to isolate an engine's forward hood from its surroundings.

Trona Road Grade Crossing

One of two public areas accessible by car, the Trona Grade Crossing is about 0.5 mile south of the Plant Entrance. The safest place to park is at the crossing's northwest corner, just in front of the flashing lights.

Road trains are formed on Mondays, Wednesdays, and Fridays by SP power operating within the Argus and Trona plant outbound yards. These trains must occasionally dip outside the plant boundaries because of the hopper strings' length, and the grade crossing is an excellent place to catch the action.

South Trona Road

There is another area on public property to railfan from. Follow Trona Road south past the grade crossing for 2.5 miles then turn left onto South Trona Road. The pavement ends near A Street; park where it's convenient (Westend, T25S/R43E:31).

Just north of the road within walking distance are some abandoned building foundations, a testimony to the area's unstable history. Standing on these concrete pads you have an excellent view as the tracks curve by Searles Lake's perimeter. Using binoculars you can see the grade crossing, plant entrance, administration building, and potash plants in Trona.

Unfortunately a barbed wire fence stands in the photo line, but it's low enough so you can shoot over it. A 35-50 mm lens provides a panoramic view of the line with the Argus Range in the background; a 100-135 mm gives a better closeup of the track's curvature. Lighting is not too good for the morning run to Westend, but on the run back is usually more acceptable.

Pinnacle Yard

Only under very rare circumstances do trains venture south of Westend onto public land near the Trona Pinnacles. If they do, however, be prepared for some excellent photographic opportunities.

Two grade crossings bound a small hopper storage yard just north of the Trona Pinnacles. To get there take Trona Road 3.1 miles south of South Trona Road, then turn left onto Pinnacle Road, which is graded dirt. Continue on for about 0.5 mile until coming to a fork; take the left fork to visit the north crossing, the right to visit the south (Westend, T26S/R43E:17).

Lighting is excellent throughout the day for any car shuffling movements. Since this area is public property feel free to move around, but don't interfere with the railroad's operations. Even if there is no train in the area you may want to try photographing some hoppers against the barren landscape; the Argus and Slate Ranges make interesting backdrops.

Other Things to See

By all means consider visiting some of the more historical sites in this section of the Mojave Desert. The Trona Pinnacles, about ten miles south of the grade crossings on Pinnacle Road, offer proof that the entire Searles Valley was once covered by salt water: they look like beach rocks. The Spangler Hills Open Area offers a large chunk of scenic desert to drive around in and enjoy. And the mining towns of Randsburg and Johannesburg still stand to remind us of the riches that were here at the turn of the century. The ATSF used to have a branch running from Kramer Junction to Johannesburg: you can drive on the old roadbed shown on the BLM's Red Mountain Map, \$2.50 from any BLM office.

Mojave Subdivision Services Directory

The Tehachapi motels and restaurants listed here are near the main routes through town described in the Photo Locations section. For other suggestions, stop by the Chamber of Commerce bulletin board on Tehachapi Boulevard, near the park semaphore.

Gas

Area	Brand	Location/Cross Street
Mojave (All along Sierra Highway)	Arco	Oak Creek Street
	BP	Sierra Highway
	Chevron	Panamint Street
	Exxon	Oak Creek Street
	Giant Truck Stop	SP Lone Pine Branch
	Shell	Cerro Gordo Street
	Texaco	Shasta Street
	Union	Highway 14
Tehachapi	BP	Valley and Woodford-Tehachapi
	Exxon	Valley and Golden Hills
	Texaco	Valley and Woodford-Tehachapi
Keene	Generic	Woodford-Tehachapi and State Highway 58
Ridgecrest	Arco	North of Junction 178/Business 395

Price note: Gas costs less in Bakersfield and Ridgecrest than other places.

Food

Area	Name	Location/Cross Street	
Mojave (All along Sierra Highway)	Arby's	State Highway 14 North	
	Carl's Jr.	Inyo Street	
	Del Taco	State Highway 14 North	
	KFC	Nadaeu Street	
	McDonald's	Belshaw Street	
	Subway	State Highway 14 North	
	Taco Bell	State Highway 58 East	
	Wendy's	Inyo Street	
	Tehachapi	Brewer's Café	860 East Tehachapi Boulevard
		Burger Spot	208 West Tehachapi Boulevard, 805/822-3145
Dominoes Pizza		Valley west of Tucker	
Flour Mill		410 East Tehachapi Boulevard, 805/822-1128	
4 Boys Pizza		20403 Valley, 805/822-1101	
Golden China		119 East F Street, 805/822-8250	
Jack-In-The-Box		SW Corner Valley and Tucker	
Kelcy's		110 West Tehachapi Boulevard, 805/822-4207	
RB's Whistle Stop		211 West Tehachapi Boulevard, 805/822-8119	
Sizzler		Valley between Tucker and Woodford-Tehachapi	
Ridgecrest	Subway	SW Corner Valley and Tucker	
	Stockyard Inn	118 East F Street, 805/822-44436	
	Yogurt Plaza 108	East Tehachapi Boulevard, 805/822-9711	
	Carl's Jr.	South China Lake Boulevard and Church	

Denny's	State Highway 178 and China Lake Boulevard
Pizza Hut	1245 North China Lake Boulevard
Sizzler	South of State Highway 178 on Norma Street
Texas Cattle Co.	1429 North China Lake along Business 395/178

Lodging

Nationwide reservation numbers for the hotel chains are as follows: Best Western, 800/528-1234; Day's Inn, 800/325-2525; Econolodge or Friendship Inn, 800/424-4777; Motel 6, 505/891-6161; Travelodge, 800/255-3050. Prices shown are for one adult.

Area	Chain/Name	Location/Cross Street
Bakersfield	Best Western	889 Oak Street, 93304, 805/324-9686. Highway 99 California Avenue exit east, \$40-50.
	Econo Lodge	#CA235, 2700 White Lane, 93304, 805/832-3111. Highway 58 south to 99 White Lane exit east, \$32-39.
	Motel 6	#12, 350 Oak Street, 93304, 805/326-1222. Highway 99 California Avenue exit east, then south, \$24.
	Motel 6	#329, 2727 White Lane, 805/834-2828. 58 south to 99 White Lane exit east, \$24.
	Motel 6	#1019, 8223 East Brunage, 93307, 805/366-7231. Junction 58 and 184, \$25.
	Motel 6	#1322, 1350 Easton Drive, 93309, 805/327-1686. Highway 99 to California Avenue exit west, then north, \$24.
Mojave	Econo Lodge	#CA250, 2145 Highway 58, 93501, 805/824-9508. Highway 58 east of 14 (to Barstow), \$28-36.
	Friendship Inn	#CA225, 15620 Sierra Highway, 93501, 805/824-4523. Near Trinity Street, \$25-32.
	Motel 6	#359, 16958 State Route 58, 93501, 805/824-4571. North junction 58 and 14, \$23
Tehachapi	Best Western	416 West Tehachapi Boulevard, 93561, 805/822-5591. Between Green and Tucker, \$45-55.
	The. Mtn. Lodge	Woodford-Tehachapi Road, 805/822-4488. 1.6 miles north of Valley (closest to loop).
	Travelodge	#0565, 500 Steuber Road, 93561, 805/822-1337. At Tehachapi Summit, \$49-56.
Ridgecrest	Econo Lodge	#CA294, 201 Inyokern Road, 93555, 619/446-2551. Intersection Inyokern and China Lake, \$39-52.
	Motel 6	#244, 535 S China Lake Blvd, 93555, 619/375-6868. Highway 395 Ridgecrest exit north, \$22.

Stores

Area	Name	Location/Cross Street
Mojave	Stater Bros.	State Highway 14 North (to Bishop)
	Thompson's	State Highway 58 East (to Barstow)
	K-Mart	State Highway 14 North (to Bishop)
	Thrifty Drug	State Highway 14 North (to Bishop)
Tehachapi	Chief Auto	Valley and Tucker
	K-Mart	Tehachapi Boulevard between Green and Tucker

	Old Towne Mkt	Valley and Woodford-Tehachapi
	Save-Mart	Valley and Tucker
	Tehachapi Auto	426 East Tehachapi Boulevard
	Tehachapi Market	Green and F
	Thrifty Drug	SW Corner Valley and Tucker
	Valley Foods	Valley and Aspen
Ridgecrest	K-Mart	North China Lake Boulevard and Drummond

Camping

Two public campsites are in the Tehachapi area, Tehachapi Mountain Park, at the end of Water Canyon Road, 805/822-4632 and Brite Lake, 22902 Banducci Road, 805/822-3228. The former is operated by Kern County and has rather primitive facilities; the latter is run by the Tehachapi Valley Recreation and Parks District and features full facilities, including RV hook-ups at \$10.00 a night. Both parks are open for overnight camping from March to October.

For Further Information

US Bureau of Land Management
 Ridgecrest Resource Area Office
 300 South Richmond Road
 Ridgecrest, CA 93555
 619/375-7125

Mojave Chamber of Commerce
 15836 Sierra Highway
 Mojave, CA 93501
 805/824-2481

Ridgecrest Chamber of Commerce
 400 North China Lake Boulevard
 Ridgecrest, CA 93555
 619/375-8331

Greater Tehachapi Chamber of Commerce
 (Tehachapi Boulevard between Hayes and Green)
 Post Office Box 401
 Tehachapi, CA 93561
 805/822-4180

Mojave Subdivision Milepost Table

Landmark	Milepost
Mojave Station	380.7
Mojave Detector	377.0
Cameron	370.4
Monolith Cement Plant	*366.5
Monolith Grade Crossing	*365.8
Monolith Detector	363.8
Summit Switch	362.4
Snyder Avenue	*361.0
Tehachapi Depot	360.5
Best Western Mountain Inn	*360.0
Cable	356.7
Cable Detector	355.2
Marcel	354.1
Walong	351.8
Walong Detector	350.6
Woodford	348.8
Rowen	345.5
Rowen Detector	344.1
Bealville Detector	340.7
Bealville	339.5
Caliente Grade Crossing	335.5
Caliente	335.2
Ilmon	331.3
Bena Detector	328.6
Bena	327.9
Helper Siding	*326.5
Sandcut	325.0
Comanche Boulevard	*322.0
Edison	320.1
Edison City Limit	*319.0
Edison Detector	318.8
Vinland Road	*318.0
Highway 184	*317.0
Magunden	316.6
Sterling Road	*316.0
Truxtun Avenue	*315.0
Kern Junction	313.6
Bakersfield Station	312.9

*Approximate location. Information obtained from SP Western Region Timetable.

ATSF San Diego Subdivision

Fullerton
Anaheim
Santa Ana
San Juan Capistrano
San Clemente
Oceanside
Del Mar
San Diego

ATSF San Diego Subdivision

History

San Diego was a booming town by 1845, primarily due to its status as a natural harbor. Excepting San Francisco, no other California city could boast a bay that protected ships during ocean storms. The Citizens Railroad Committee of San Diego (CRCSD) was formed to promote a rail link, hoping to significantly boost the harbor's commercial value. Thirty-three years and several contacts later Jay Gould, one of Southern Pacific (SP) "big four," declined extending the Los Angeles branch to San Diego, stating, "I don't build railroads, I buy them." CRCSD was forced to look elsewhere, approached the Atchison, Topeka, and Sante Fe (ATSF), and got an agreement. Sante Fe, looking for opportunities to crack the SP California monopoly, formed the Colorado and Southern subsidiary in 1881 to build a line from San Diego to the Atlantic and Pacific's terminus at The Needles.

Construction started at National City, now the subdivision's terminus. The line continued north towards Oceanside, pretty much following the same route as today's main. At Oceanside, however, the line took a different path east through Fallbrook, Temecula, Perris, and Riverside, reaching Colton in August 1882. After fighting SP in court for a year, the ATSF obtained the right to cross the SP main at Colton and reached San Bernardino by September 1883.

Sante Fe's troubles came that winter after 40 inches of rain fell, washing out Temecula Canyon. In its haste to reach The Needles, the railroad ignored warnings from local farmers; they told surveyors that such flooding was frequent. The line was repaired and destroyed again soon after. In November 1886, the ATSF formed the San Bernardino and San Diego Railway Company to build a new line from Fullerton to Oceanside. So the San Diego Subdivision as we now know it was completed in August 1888, a full forty-three years after CRCSD started promoting their harbor.

Today the Subdivision hosts Amtrak's busiest route outside the North East Corridor. Eight passenger trains each direction make the trip from Union Station in Los Angeles to San Diego in two hours and forty-five minutes, about one-half an hour faster than driving during non-rush hour. Only one freight train, however, regularly runs along the Subdivision.

The San Diego station itself is one of the best maintained anywhere on the ATSF system, a far cry from disasters like Barstow's Casa Del Desierto. Many stations along the line are also well maintained, benefiting from significant community involvement. Further the passenger operations are unique: nowhere else in California will you find Amfleet cars and push-pull trains. All told, the San Diego Subdivision hosts frequent passenger movements at their Sante Fe best.

Orientation

As mentioned earlier the line runs north-south from Los Angeles to San Diego, following the coast throughout San Diego County. Our tour will be restricted to stations in metropolitan areas, but alternate driving directions following the tracks between Oceanside and Del Mar are given. And the Metropolitan Transit Development Board's "Tijuana Trolley" connects Downtown San Diego to the Mexican Border.

Don't forget to ride Amtrak if you have the time. You can leave Union Station, for example, at 8:00 a.m. and be back by 2:30 p.m. If you have less time, a round trip from San Diego to Oceanside takes three hours and covers the most scenic part of the line.

Orange County Stations

Fullerton

Our San Diego Subdivision tour begins at Fullerton, a junction with the San Bernardino Subdivision. Fullerton is unique, having both passenger and significant freight traffic: in addition to the San Diegans, several freights en route to Cajon Pass via the Santa Ana River pass by here.

Fullerton Station is located just west of Harbor Boulevard between Chapman and Orangethorpe Avenues. From Los Angeles County take I-5 south to 91 east and exit north on Harbor Boulevard. From San Bernardino and Riverside Counties take I-215 south to 91 west instead, and from Orange or San Diego County take I-5 north to the 57 north, then west on 91. Drive north on Harbor under the ATSF and UP overpasses, then turn right on Sante Fe Avenue.

The station is well maintained and also serves as an Orange County Transportation District "park and ride" bus terminal. Several years ago the depot was restored and put to use as a major mass transit center for the county: many bus routes use the station as a hub. There's even a small park for picnicking.

Towards the east an overhead signal bridge displays the status of the San Diego/San Bernardino junction (which is not visible from the platform). A well-groomed lawn fronts the ATSF station. The former UP station has been converted to a restaurant; it's visible to the west just beyond a fence. Further down the line on the overpass are some sidings, usually occupied by two road switchers assigned to the area.

Anaheim and Santa Ana

Before venturing on to more scenic spots you may want to visit the Anaheim and Santa Ana stations "just because." To do so take Harbor Boulevard south to the 91 east, then take the 57 south to I-5 south.

Anaheim is easily reached by exiting west at Katella avenue. It's not much of a station, just a mobile-home type structure. Within walking distance of Anaheim Stadium, however, fans can ride Amtrak to the ball game! Continuing back on I-5 south, exit at Grand Avenue/Santa Ana Boulevard and follow the signs to the Santa Ana Station. The original station was similar in architecture to Oceanside, but it has been replaced with a magnificent bus and rail terminal.

San Juan Capistrano

Almost every kid in California has heard of San Juan Capistrano, home of the legendary migratory swallows. The famous mission still stands, as does some of ATSF's original station. While the latter has been converted to a restaurant, parts of the old building do remain.

The simplest way to reach San Juan Capistrano station is to follow I-5 to Ortega Highway 74 west and follow the signs. If you're not in a rush, however, you can drive along surface streets following the tracks to the station. Traveling southbound take the I-5 exit at Avery Parkway, turn right then immediately left, follow Camino Capistrano south to Verdugo Street, then turn right towards the station. Traveling northbound from San Clemente take Avenida Rosa north, turn left on El Camino Real, and turn right on Doheny Park Road.

You'll eventually merge with Camino Capistrano, so turn left on Verdugo Street to the station.

The platform entrance is at the station's north end where you're greeted by an ATSF caboose. Follow the "To Trains" signs towards the platform; several boxcars with refurbished interiors housing small shops line the way. A restaurant has replaced the station's former waiting room. Amtrak tickets are sold at a small, separate office within walking distance: the local businesses that paid to restore the station now occupy it.

At the Verdugo Street grade crossing a classic scene still remains. The original bell tower has been preserved and looks much like it did in the late 1800's. The surrounding gardens are first rate, well maintained, as is the rest of the property. San Juan Capistrano station is an excellent example of what happens when businesses and the railroad cooperate for preservation's sake.

San Clemente

Unique but typically Southern Californian, San Clemente station sits right on the beach. Not much to look at and easy to miss, the actual structure is only 3' x 5'; that, a white line, and the station sign are the only things indicating a train will stop here. But stop they do, twice a day southbound and once a day northbound. You can leave Union Station at 8:00, reach the beach by 9:30, leave around 4:00, and be back by 5:30. Try that in a car someday!

Driving in San Clemente is like wandering through a labyrinth: streets are close together and curve every which way. But since the city is built on a hill, all roads going down lead to the beach. To get here exit I-5 and head south at Avenida Rosa. To follow the tracks from San Juan Capistrano turn right from Verdugo Way onto Camino Capistrano south, take the right fork for Doheny Park Road, merge with El Camino Real, then turn right on Avenida Rosa. Bring a few quarters as parking is metered. To get to the station walk in the pedestrian tunnel under the tracks and look for automatic crossing gates along the line.

Although only three trains actually stop at San Clemente, all movements pass through here, so photographic opportunities are ample. The speed limit is 40 MPH; trains slow down for pedestrians, but not too much! And if you're really fortunate, an LA-SD freight will go by.

Leaving San Clemente Station can be a problem because of the maze. Follow any street on up to El Camino Real and turn right. When you find an I-5 entrance, head south.

San Diego County Stations

Oceanside

After passing by the San Onofre Nuclear Power Plant and Camp Pendleton Marine Corps Base, we come Oceanside, a typical New Mexican style station. Painted white with orange window frames and a sporting a red tile roof, it's in poor shape compared with other stations along the line, but far better off than other ATSF stations now operated by Amtrak.

To get here from San Clemente/I-5 southbound exit at Hill Street S21, turn right on 8th, left on Cleveland Street, then on to the station. From Carlsbad/I-5 northbound exit at Oceanside Boulevard west, turn right on Cleveland, and continue north to the station. If you're in a hurry take the I-5 Mission Avenue exit and follow the signs to the station.

The tracks run essentially northwest to southeast through here, and continue to do so along the rest of the line. As a result lighting is excellent for southbounds throughout the day, and acceptable for northbounds early mornings or late evenings. Several palm trees decorate the

station tracks, which sometimes hold overflow from a nearby yard. Local road switchers on assignment for Camp Pendleton and Fallbrook sometimes roam about.

Following the Surf Line From this point south the main follows a route through some of the most exclusive real estate in California. When the ATSF built through here the land was worth essentially nothing, but now the entire stretch is dotted with condominiums along the shore. The area is popular because it offers a beautiful view of the Pacific Ocean.

To follow the Surf Line from Oceanside Station take Cleveland south to 1st Street, turn left, turn right on Hill, and stay on San Diego County 21 (S21) to Del Mar. The road changes its name several times: first Hill, then Carlsbad Boulevard, 1st Street, and Camino Del Mar. You'll pass through the town of Encinitas which used to have a passenger station before Amtrak took over. Several bridges over lagoons dot the way; stop and take pictures if you like. All told the drive will take about one hour.

Del Mar

Compared to any other station on the Subdivision, Del Mar is different: it's built of brick, not cement; it is pristine; it is well maintained by the railroad. While most stations along the line have received community support to keep them going, Sante Fe has kept up Del Mar by itself. Why? Perhaps the Del Mar city council forced them to, or perhaps the business of horse race gamblers is welcomed. Whatever the reason, Del Mar is immaculate.

To reach the station from I-5 southbound exit at Via De La Valle S6 west, turn right then immediately left at Jimmy Durante/Turf Boulevard, and merge with Camino Del Mar. From I-5 northbound exit Del Mar Heights, turn left, continue towards the ocean, then turn right on Camino Del Mar. At 15th street turn west; the station is two blocks away.

Unfortunately the surrounding vista is obstructed: towards the north the tracks curve west just past the S21 overpass; south of the station the main curves east. The shore is nearby, but you can't walk up to it without trespassing. The best photo opportunity is probably north of the station, as southbound trains cross under S21.

Sorrento Valley

From Oceanside to Del Mar the line has been crowded by urban development; it will continue that way into downtown San Diego. But a short stretch of the main goes through a more pastoral setting via Sorrento Valley and the Miramar Hills. For the time being, though, we'll meander down there instead of following the interstate.

Leaving the station, turn right onto Camino Del Mar south, left on Carmel Valley Road, then right on Sorrento Valley Road. Follow the road as it parallels the tracks under I-5 to a dead end. Around here are several open, green fields which make great photo spots. This area is thirty timetable minutes from the San Diego station. So, for example, a train leaving Downtown at 11:00 will pass by at 11:30; same for a train arriving Downtown at noon.

You might wonder how a setting like this still survives given the growth of the surrounding area. It's due to two factors: first, most of the land is zoned for commercial industrial parks. Second, a local farmer has held on to his acreage, thus stifling growth. Enjoy it while it lasts.

San Diego

Without a doubt, the Downtown station is the grandest on Sante Fe's California routes, perhaps the entire system. Although it never fell to real decay, a renewal project backed by the arrival of the Tijuana Trolley brought fresh paint and a cleaning crew to the station.

Best of all, the trashy newsstands that used to be outside are no longer on the property, so we can see the station in much of its original glory.

To reach the station take I-5 south past the Sorrento Valley Road through downtown, exit at 2nd street, then turn right on Ash Street. From 163 south exit on Ash instead. Continue west on Ash, then turn left on Kettner Boulevard. Continue south to Broadway, turn right past the main station entrance, then turn right again on Pacific Avenue. Park on Pacific (try to find a spot without a meter) then walk to the station. See the Downtown San Diego supplemental map for details.

The view outside has not changed all that much in the past twenty years. To the north is the former Bekins warehouse, to the south a Pacific Gas and Electric power plant. The best photographic perspective outside is from across Broadway with a 35mm lens framed vertically; in the afternoon the building is well illuminated. Inside the waiting room chandeliers, windows, tile, and benches glisten; try a 28mm lens and an exposure of 1/30 at f2.8 with Kodachrome 64.

By the way, the Pacific Southwest Railway Museum regularly displays two passenger cars along Harbor Drive just north of Broadway, within walking distance from the station.

End of the Line

We hope you've enjoyed this tour of the ATSF's San Diego Subdivision. While in the area check out the La Mesa Depot and Campo Museum run by the Pacific Southwest Railway Museum. See the Museum Directory for details.

The Tijuana Trolley

History

The City of San Diego owes its modern trolley car system to State Senator James Mills, who wrote a 1974 ballot measure that diverted gasoline tax revenues to light rail development. He also backed legislation forming the Metropolitan Transit Development Board (MTDB), the agency responsible for operating the Tijuana Trolley.

Mills used “uncommon common sense” in authoring the bill by including a provision that the money had to be used within five years. He was disgusted with Los Angeles' Metro Rail experience: it spent twenty years making studies for federal funds. Mills thought the “use it or lose it” clause would cause local governments to streamline the approval process.

San Diego's city council, however, balked at the initial trolley proposal. MTDB Chair and councilwomen Maureen O'Connor (now mayor of San Diego) and Vice Chair Judy Bauer fought to keep the proposal alive. The council eventually gave in after Ms. O'Connor whittled SP's asking price of \$80 million for the San Diego and Arizona Eastern right-of-way down to \$18.1 million. The Tijuana Trolley opened for revenue service on July 26, 1981, built without any federal funding assistance.

Route Description

The MTDB's original line starts at C Street and Kettner Boulevard, just across from the Amtrak Station. Going due east and turning south at 12th Street downtown, the tracks eventually follow Harbor Boulevard through National City and Chula Vista. The line ends in San Ysidro at the Customs Building.

MTDB has also opened an El Cajon Branch. This portion of the line splits off the Imperial Avenue Station onto SD&AE's former Lakeside Branch. It travels through the borough of Encanto and the city of Lemon Grove, and ends at the El Cajon Transit Center near the La Mesa Depot.

How to Ride the Trolley

MTDB learned a lot from San Francisco's Bay Area Rapid Transit (BART) project: some functions, such as handling tickets, are automated, but engineers manually control the trolleys. Tickets are purchased from vending machines at each station. The fare is \$2.00 each way, so be sure to have plenty of quarters handy. Tickets are good for two hours travel in one direction and a free transfer to any MTDB bus route.

This generous stopover policy is ideal for the photographing railfan: if you see an interesting station simply get off and take a picture of the next arriving trolley, usually fifteen minutes away. Trolleys run from 5:30-8:30 daily, so there are plenty of daylight photo opportunities.

San Diego Subdivision Milepost Table

Landmark	Milepost
National City	273.1
22nd Street	296.3
San Diego	267.5
Old Town	264.2
Elvira	257.9
Miramar	253.0
Sorrento	249.1
Del Mar	244.0
Solana Beach	241.9
Encinitas	238.1
Ponto	233.8
Gas Company Spur	231.3
Carlsbad	229.3
Escondido Junction	227.2
Oceanside	226.4
Fallbrook Junction	225.1
Stuart	221.7
San Onofre	209.2
San Clemente	204.8
Serra	199.8
San Juan Capistrano	197.2
Galivan	192.6
El Toro	188.1
Valencia	182.9
Tustin	179.5
Irvine	179.1
East Santa Ana	176.6
Santa Ana	175.2
Orange	172.6
Anaheim Stadium	170.5
SP Crossing	169.8
Anaheim	167.8
House 1	166.6
Fullerton	165.0


Information obtained from the ATSF Timetable.

Note: there are no hotbox detectors along the San Diego Subdivision.



Appendices

Museum Directory
Frequency Directory
Scanner Notes
References and Bibliography
Climate Data
Supplemental Maps



Museum Directory

Pacific Southwest Railway Museum

4695 Nebo Drive
La Mesa, CA 92041
619/697-7762

Locations

The PSRW operates two exhibit centers: the La Mesa Depot (in the San Diego metropolitan area) and the Campo Museum (mid-county near the Mexican border). The depot is on Nebo Drive in La Mesa. From Downtown San Diego take I-5 south to State Highway 94 east, exit Spring Street north, turn left on Finley, and left again on Nebo. Or ride the Tijuana Trolley to La Mesa along the El Cajon branch.

The Campo Museum is about two hours from Downtown. Take the Cabrillo Freeway 163 north to I-8, drive east about one hour, exit south at Buckman Springs Road, turn right on State Highway 94, and follow the signs. Maps to the museum are available at the La Mesa Depot. The depot is PSRW's in-town office and is open during normal business hours. The museum is open from 0900-1700 weekends and holidays except Thanksgiving and Christmas.

Exhibits and Operations

The museum owns two industrial steam locomotives: Coos Bay Lumber Co. #11, a 2-8-0 logger, and Mojave Northern #3, an 0-6-0T. The 2-8-0 operates; #3 is on display at La Mesa. The Campo ride is 16 miles round trip, departs at 1200 and 1430, and costs \$8.00 for adults.

PSRW is famous for its fleet of four restored passenger cars, including ATSF Observation 1509 and UP Coach 576. These occasionally ride a San Diegan to Union Station for excursions. PSRW also sponsors a railfan patrol which cooperates with law enforcement agencies in combating vandalism against trains. Contact the PSRW if you're interested in joining.

Travel Town

5200 Zoo Drive
Los Angeles, CA
213/662-5874

Location

Travel Town is operated by the City of Los Angeles Recreation and Parks Department (RPD) in Griffith Park, just north of Downtown LA. Take the Ventura Freeway 134 west of I-5 to the Forest Lawn Drive, exit south, turn onto Zoo Drive, and continue to the entrance. Hours are weekdays 1000-1600, weekends until 1700. During summer, closing time is one hour later.

Exhibits

In the late 1940's Charles Atkins proposed obtaining a steam locomotive for Griffith Park's miniature railroad. After discussions with the RPD the idea grew into organizing a full-size static display. Steam was drawing to a close at the time, so several railroads were willing to

make donations. As a result, Travel Town boasts the largest steam locomotive collection west of the Mississippi, dedicated on December 14, 1952. Griffith Park, the Planetarium, and the Los Angeles Zoo are nearby. Admission to Travel Town is free but donations are accepted.

The Southern California Scenic Railway Association, a volunteer association dedicated to restoring Travel Town's collection, is currently working on ATSF railway motorcar M177.

Western Pacific 2-8-0 #2 is the next scheduled project. For more details contact the SCSRA at 7414 South Synalan Avenue, Whittier, CA 90606, 213/696-2427.

Laws Railroad Museum and Historic Site

Post Office Box 363
Bishop, CA 93514
619/873-5950

Location

Laws is a former mining community near Bishop. About three hours from Mojave, take State Highway 14 north to the US 395 junction, continue past Lone Pine to Bishop, follow US 6 north 4.5 miles to the junction of Silver Canyon Road, then turn right 0.5 miles later into the museum. It is open from 1000-1600 daily.

Exhibits

Laws was an endpoint of SP's former Keeler-Laws narrow gage railroad which ran from Laws through Dolomite and met the Lone Pine branch at Oweyno. The Slim Princess Narrow Gauge Train featuring 4-6-0 #9 and its original consist are preserved. The Laws Depot, a Wells Fargo building, several Indian artifacts, mining exhibits, and former Post Office are also on display.

Orange Empire Railway Museum

Post Office Box 548
Perris, CA 92370-0548
714/657-2605

Location

The ATSF route through Perris was once a part of its San Diego Subdivision through Temecula Canyon. As such, it's an ideal place for a railroad museum, located on the fastest route from Cajon Pass to San Diego! About one hour south of San Bernardino, two hours east of San Juan Capistrano, and three hours north of San Diego, Perris is in the heart of Southern California Sante Fe Country.

Take I-215 south from San Bernardino, Ortega Highway 74 east from San Juan Capistrano, or I-15 to I-215 north from San Diego to Perris. Exit I-215 at 4th Street West (74) and turn left on A Street. From San Juan Capistrano take State Highway 74 to A and turn right instead. The museum is open weekends and major holidays from 1100-1700 or until dusk in winter. There is no charge for admission except on special event days; a donation is requested for rides.

Exhibits and Operations

Formed in 1975 by combining the California Southern Railroad Museum and Orange Empire Trolley Museum, the OERM's collection consists of both mainline railroad and electric traction equipment. Major locomotives include Ventura County Rail Road 2-6-2 #2, Mojave Northern 0-6-0T #2, SP Alco 1000 #1474, USAF GE 44 Tonner #8580, and Pacific Electric B-B #1624. Traction includes a veritable fleet of PE red cars, Los Angeles Railway "Sowbelly" 936, Bakersfield & Kern Electric #4, and several San Francisco electric buses. OERM has also fully restored an ATSF Railway Post Office car, and gives guided tours of it on weekends.

The OERM operates a local electric loop on the property and now has a connection with the ATSF at the Perris Depot for mainline runs. Special events include the Spring and Fall Rail Festivals held the last full weekend in April and October, respectively.

Frequency Directory

Railroads

The following radio frequencies have been collected from magazine articles, directories, and railfans. All frequencies have been field verified, except those followed by an asterisk (*). Entries with a pound sign (#) are of little use in locating trains.

Road	Frequency	Usage
MTDB (Trolley)	160.665	Road
	161.565	Car-to-car
Sante Fe	161.205#	Police department
	160.260	PBX channel 3
	160.335	PBX channel 4
	160.560	Secondary road channel
	160.650	Main road channel
	161.190	Bakersfield vans, ATSF/UP Cajon link
	161.370	Bakersfield yard and car checkers
Southern Pacific	160.275*	Bakersfield car department
	160.470	Colton hump
	160.485*	Monolith Dispatcher link, dupes 161.550
	160.620	Colton utility
	160.845	Colton hump
	160.890	Running Springs PBX channel
	160.950	Oak Mountain PBX channel
	161.100	Colton trim switching
	161.400#	Administration, police, MOW
	161.430	Colton, Bakersfield, and Mojave Yards
Trona Railway	161.550	Main road channel
	160.190	Main road channel
Union Pacific	161.550	SP road channel
	160.290	PBX
	160.515	Road 2
	160.740	Road 1 and Dispatcher
	161.190	UP/ATSF Victorville Link

Note: By agreement the ATSF and SP crews monitor each other's road channels between Kern Junction and Mojave.

Public Service

These frequencies have been selected from the Betty Bearcat Frequency Directory, Western Edition (see the references section). If possible, monitor them to keep apprised of possible emergency situations.

<u>Agency</u>	<u>Frequency</u>	<u>Usage</u>
Bakersfield	153.950*	Fire department dispatching
	154.070	Fire department
	154.920*	Police 3
	155.190	Police 2
	155.310	Police 1
NOAA Weather	162.400	Bear Mountain, Tehachapi
	162.550	Los Angeles, Mojave, Bakersfield

Note: Reception of NOAA Weather Radio at 162.550 MHz with only a "rubber ducky" antenna is possible in the Cajon Pass between San Bernardino and Devore. From Keenbrook on, however, an external antenna is needed. Reception is not possible north of Hesperia, along the Needles Subdivision, or the Trona Railway. See Antenna Hints in the Scanner Tips section for details.

Scanner Tips

What to Listen For

A scanner covering 160.215-161.650 MHz is useful for monitoring railroad communications to determine where trains are located in the area. The three most useful classes of traffic include road, Private Branch Exchange (PBX), and track side warning devices (hotbox detectors).

Road channel traffic consists mostly of conversations from engineer to dispatcher, usually to obtain permission for entering or leaving the main. Verbal train orders granting right-of-way include the train number (lead engine number), location, and time as part of a required format. If your scanner has the ability, place a delay on all road channels to hear both sides of the conversation.

Private Branch Exchange (PBX) channels carry internal telephone traffic between offices and operational crews. Conversations range from an MOW train calling for permission to repair the main to administrative offices contacting each other. The information obtained concerns train movements one to two hours in advance. Also, the PBX is used to coordinate emergencies, such as derailments.

Track side warning detectors (hotbox detectors) verify that all wheel bearings are operating within safety limits. A detector measures the temperature of each axle and reports, using a synthesized voice, its milepost and the number of overheated journals, if any. For example, the detector at Hiland will sound off, "SP detector, milepost four-seven-five-point-one, no defects, no defects," each time a train safely passes by. If your scanner has the capability, place road frequencies in a priority channel to insure reception of detector reports. See the various Milepost Tables for exact detector locations.

Antenna Notes

Most hand-held scanners are supplied with flexible, or "rubber ducky," antennas which limit signal reception to a twenty-five mile radius, less in the mountains. A scanner's range can be greatly increased when hooked to an external antenna. There are two methods for doing this: using an antenna designed for scanners or connecting to a car radio's FM antenna.

A scanner antenna, such as Radio Shack's #20-012 (\$30.00), placed on the trunk or roof will provide the best reception for all frequency bands. Another alternative is to "patch" the scanner into a car FM radio antenna using an antenna splitter (RS #12-1313, \$2.00), an extension cable (RS #12-1314, \$1.50), and, if necessary, a Motorola to BNC adapter (RS #278-117, \$2.50). This arrangement works well for VHF frequencies (108-174 MHz), but not UHF (406-512 MHz). Radio Shack also sells a telescopic antenna for scanners with BNC connectors (20-008, 8.00) which, when extended to a length of 36.5", provides better railroad frequencies reception than a factory supplied antenna.

Note: the performance of a hand-held scanner can be improved by placing it on or holding it above a metal surface, such as a car roof or hood. Also, Radio Shack part numbers are included for reference only: other manufacturers produce compatible components.

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Books

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Compendium of American Railroad Radio Frequencies, Gary L. Sturm, Mark J. Landgraf, 1988. Gary L. Sturm, 7629 Westford Court, Fort Wayne, IN 46825. National listings of railroad, industrial, mass transit, museum, and tourist frequencies. Includes technical explanations, geographic locations.

North American Railways, Brian Hollingsworth and Patrick Whitehouse, 1977. Bison Books, no address printed. History of US and Canadian railways from genesis to present. Photos of SP's Keeler-Laws branch and Engine #9 on page 90.

Railway Odyssey: A Guidebook to the Orange Empire Railway Museum, Paul Hammond, 1987. Orange Empire Railway Museum, Post Office Box 548, Perris, CA 92730, 714/657-2605. History of the museum, extensive photos, and a roster of preserved equipment. Well worth the price.

Sante Fe: Steel Rails Through California, Donald Duke and Stan Kistler, 1963. Golden West Books, Post Office Box 80250, San Marino, CA 91108-8250. A history about the ATSF's rite of passage through California. The text covers the line's construction, including subsidiary railroads which were eventually purchased by the ATSF.

Western Region Timetable, Southern Pacific Transportation Company, 1987. Current edition available from Carl Loucks, 199 Wayland Street, North Haven, CT 06473, 203-288-3675. SP's operating rules, lines, mileposts, and detectors for Oregon, California, and Arizona.

Catalogs

Radio Shack Catalog. Obtain one from any Radio Shack store. See index for information regarding scanners and antennas.

Scanner World, USA. Scanner World, 10 New Scotland Avenue, Albany, NY 12208, 518-4369606. Free catalog of scanners, CB radios, antennas, books, and accessories.

USGS California Index, USGS Western Distribution Branch, Building 41, Federal Center, Box 25286, Denver, CO 80225. Free index showing coverage of standard USGS maps is available by writing to the above address. Specify state (for example California) of interest.

Maps

California Road Atlas and Driver's Guide. Thomas Brothers Maps, 17731 Cowan, Irvine, CA 92714, 714-863-1984 or 800-432-8430 in California. Excellent guide to the state, includes both highway and detailed city maps. Shows rail main lines outside metropolitan areas. Index to campgrounds, museums, and so on. Available at most California book and discount stores; published every other year.

Orange County, San Bernardino County, Riverside County, and San Diego County Road Atlases and Driver's Guides. Ibid. These street maps show finer detail as well as all railroad tracks, including those in densely populated areas.

Rand McNally Road Atlas. Rand McNally & Company, Post Office Box 7600, Chicago, IL 60680. Published annually; available at most book and discount stores nationwide. Highly recommended for cross-country driving vacations.

Magazine Articles

All of the following articles appeared in *Railfan and Railroad Magazine*, Post Office Box 700, Newton, NJ 07860-0700. Write to this address for information on obtaining back issues.

Four Cows Over Tehachapi, David C. Lustig, May 1986, pages 32-37. Documents an ATSF PR run from Mojave to Kern Junction. Descriptions of the line and its operations.

Baldwins on the Trona, David C. Lustig, November 1987, pages 51-60. Detailed description of the Trona Railroad's operations near Searles, serviced by SP's Lone Pine branch.

One Day on Cajon, Bruce Kelly, March 1988, pages 30-39. Several photographs of the various photo locations described in this guide. Well worth obtaining, unfortunately this back issue is in short supply.

Fifty Years of San Diegans, David C. Lustig, June 1988, pages 45-55. An overview of Sante Fe's Surf Line on the 50th anniversary of passenger service.

Steinheimer's Weekend Workshop, David C. Lustig, January 1989, pages 48-51. Richard Stienheimer hosts John Sistrunk on a photographic seminar with the Mojave Subdivision as the subject matter. One photograph each of Bealville and Caliente.

Victorville's Cement Hauler, David C. Lustig, May 1989, pages 47-53. Description and photos of SWPC's operations, see map on page 49.

Public Relations Brochures

Barstow: Sante Fe's Modern Oasis, estimated 1975. The Atchison, Topeka, and Sante Fe Railway Company, 80 East Jackson Boulevard, Chicago, IL 60604. Overview of the building and operation of Barstow's electronic classification yard.

Milepost 100, 1968. Ibid. PR piece celebrating the first 100 years of the ATSF's operation. Good overview of corporate history.

Searles Lake, 1989. Kerr-McGee Chemical Corporation, Post Office Box 25861, Oklahoma City, OK 73125. History of Searles Lake from John W. Searles' 1872 discovery to the present. Explains how the lake is currently mined.

Southern Pacific's Computerized West Colton Classification Yard, estimated 1977. SP, no address given. Overview of SP's West Colton Yard, published soon after opening.

Newspaper Articles

Trolley Transit Gets New Life in San Diego, William E. Blundell, January 19, 1981. The Wall Street Journal, Dow Jones and Company, New York. History of the Tijuana Trolley, written about six months before the line opened.

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This guide was prepared with data from the above listed references and several USGS topological maps. Field data was collected on several occasions between 1989 through 1994.

In 1994, the manuscript was originally prepared with WordPerfect 5.1 and printed on a Hewlett-Packard (HP) LaserJet III using the CG Times typeface. Supplemental maps were drafted with Software Publishing Corporation's Harvard Graphics 2.1.

The 2004 edition is distributed as an Adobe Acrobat Portable Document Format (PDF) file. It is set using a derivative of Century Schoolbook and prepared with Open Office, GhostScript, and GSView.

Mojave's climate data was stolen from the National Oceanic and Atmospheric Administration (NOAA) 1987 Annual Summary, Volume 91 No. B.

Your comments about this guide are invited. Please send them to rf@lbgeeks.com or visit our web site at <http://lbgeeks.com/rf>.