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Route 66 Through the East Mojave

Trails and Rails

America has always been a nation in motion: west to the Mississippi after the Revolution, west to the Continental Divide following the Louisiana Purchase, west again to the Pacific Coast after the war with Mexico. Like many of today's highways, Route 66 has its roots in the nation's old pack and wagon roads. The first trails followed paths used for centuries by Native Americans, and so it was that for centuries Mohave Indians travelled between the Colorado River and the Pacific Coast along a well-watered trail about twenty miles north of present Route 66. In 1857 Lieutenant Edward Fitzgerald Beale was commissioned by Congress to survey a possible railroad route along the 35th parallel from Fort Defiance, Arizona, to the Colorado River. Crossing that river at present-day Fort Mohave, Beale followed the Mohave Indian's path across the desert as he made his way to southern California. Known as Beale's Wagon Road, this route established an important communications and transportation link between east and west. Its westward extension between the Colorado River and Los Angeles became what we now call the Mojave Road.

The last third of the nineteenth century brought the railroad into southern California. The Atlantic and Pacific built west through Arizona to Needles, while at the same time the Southern Pacific built east through the California desert to the Colorado River. The Southern Pacific, working east from the town of Mojave through Waterman (now Barstow), in this region followed a route south of the Mojave Road, thereby avoiding the rough terrain through which that trail passed. The railroad skirted the Providence, Old Dad, and Bristol Mountains to the north of here, reaching Needles (about 155 miles east of Barstow) in 1883. In 1884 the Santa Fe Railroad purchased the desert right-of-way from the Southern Pacific, and operated it as the Atlantic and Pacific Railroad, Western Division.

Small towns were established along this route to provide water for the thirsty steam locomotives. Although the towns to the west of our campsite are named in no particular order, starting in Amboy the towns were named alphabetically from west to east: Amboy, Bristol, Chambless, Danby, Edson, Fenner, Goffs, Homer, Ibis, Java. Later, Edson became Essex and Bristol became Bengal. (Moore and Cunningham, 2003) During the Golden Age of rail travel, the Santa Fe Railway ran some of its most famous passenger trains over this route, including the Grand Canyon Limited, the Chief, and the Super Chief.

The turn of the twentieth century brought the advent and increasing popularity of the automobile. Early automobile roads were basically converted wagon roads with little or no improvements. These roads were poorly marked, if they were marked at all. In the first years of the new century, cars were few and far between in the Mojave Desert, where horse and wagon were the primary methods of conveyance. By 1905 a few adventurous motorists had travelled at least some distance across the desert. Usually these people would follow the railroad, as water could be had at regular intervals, the grades encountered would be relatively easy, and if an emergency arose it might be possible to flag down a passing train. (Renner 2016) In “Goffs and Its Schoolhouse” Dennis Casebier tells us that “autoists” would avoid the sandy sections between Ludlow (about 28 miles west of Amboy) and Goffs (about 40 miles east of Amboy) by loading the cars onto the train at one end, and unloading them at the other. He goes on to tell us the earliest recorded account of someone making the entire crossing comes from 1907. (Casebier 1995) A good portion of this route soon became the desert section of the National Old Trails Road.

It was a long, dusty trip across the desert. Through the 1910s and into the twenties conditions along the National Old Trails Road were primitive. Occasionally a few sections

were oiled or macadamized, but in most places the road was merely a two-track path through the sand. In many places there were multiple alignments; motorists took the one that looked best. According to Bischoff, George Greider wrote this description of the route from Cajon Pass out through the desert:

That (concrete) slab lasted all the way to Cajon Pass, and we really moved on that little slab of paving. When we came to the end of it at the top of the rise, the terrain flattened out and the pavement just stopped. There were no signs—nothing—and we just drove off into the sand....We stood there awhile. There were two ruts in the sand from there on. There were a few signs, and through the desert and prairie there were two ruts in the sand for miles and miles, hundreds of

miles. There was not a sign of civilization at all: no roadwork, no fences, no highway.

(Bischoff 2005 from Scott and Kelley 1988)

In 1919 the California Division of Highways acquired responsibility for maintaining the National Old Trails Road—although the actual maintenance was done by San Bernardino County until 1923. (Bischoff 2005) Grading at first was done by horses, mules, and fresno scrapers. Later graders were pulled by small tractors. Ruts continued to be a problem, and the state tried a number of methods to keep the ruts filled in. Early in its use, oil was used as a surface on the National Old Trails Road, but it was largely unsuccessful. The Department of Highways found that if the dust and sand were removed before the oil was applied, it had a higher likelihood of staying in place. Graders and broom drags were used to expose a more stable base, then the oil was applied.

As the popularity of the automobile increased, it became obvious that better roads and a better marking system were needed. However, there was no central organization coordinating any of these efforts, and each local trail or highway association marked roads in its own way. Of course, these random numbering systems created nightmares for early travelers, so in 1924 the Secretary of Agriculture created a board of state and federal highway

authorities to standardize a national highway system. It was Cyrus Avery and Frank Sheets who proposed a highway from Chicago to Los Angeles, connecting various trails that passed through America's heartland and into the west.

Originally proposed as Route 60, Route 66 in California paralleled the Santa Fe Railroad for most of the distance from Needles to Los Angeles. The highway passed through the railroad watering stops on the way and, in many cases, small communities with gas stations and other services developed in these locales. At first the road was unpaved, and followed the National Trails Highway. Temperatures in the summertime were extreme, and veterans knew to travel the desert section from Needles to Barstow at night. Even in the winter time travel in the early days of Route 66 could be perilous, as the possibility of getting stuck in the sand was ever-present along much of the way. By the beginning of the 1930's, however, much of the desert section had been paved, fortuitous because of the increase in traffic the road was about to see.

Route 66 and the Depression Years (Sid Blumner, XSNGH)

To understand the traffic on the road that would occur during the Depression until World War II, it is first necessary to review the economic conditions in the United States that would eventually lead to the migration west that occurred in the 1930's. The so called "Roaring Twenties" brought economic growth to almost all sectors of the economy save our farm sector. The farm sector's last good years ended in about the early twenties as Europe recovered from World War I and the demand for American farm products in Europe declined. By the time of the Great Depression, beginning in October 1929, the agricultural sector of the United States was lagging behind the rest of the economy. Farmers faced foreclosure, and people were losing their homes. Thirty per cent of the total population was unemployed

and, as farmers lost their farms and livelihood, it was difficult for them to find work.

Drought struck the Midwest during the period of the early 1930's. Because of the farming techniques in use at that time, much of the land was subject to wind and water erosion. Soil conservation practices were largely ignored. Beginning in 1932, dust storms swallowed the nation's heartland. Farmers who had not lost their homes and farms due to economic conditions lost the soil on them due to the wind. This created a drought-stricken area in which the top soil had blown away. Many farmers stayed on to fight nature and the economy but many of them began to migrate west to what was considered the promised land of California.

The so-called "Okies" (people from Oklahoma) and "Arkies" (people from Arkansas) began to migrate west to California. (There were people from all over on the move; not just from Oklahoma and Arkansas). Most believed that if they could just get to California they could find work and make a home in the agricultural sector of the state. The migrants packed what belongings they could into some type of transportation, sold what they could not take, and what they could not sell they left behind. Having done this, the migrants took to the road.

Route 66, named the "Mother Road" by John Steinbeck in *The Grapes of Wrath*, was assigned its now famous number in 1926. The Road was paved in California by the time of the Depression. The Road entered California at Needles and followed the original dirt route from Needles to Santa Monica. Route 66 was a two-lane road from Chicago to Santa Monica. Towns and stops were located about every twenty miles. Even with communities and stops every twenty miles or so, Route 66 in the desert area was a lonely, desolate place. After Kingman, Arizona, the migrants found themselves in desert terrain until reaching San Bernardino, California.

By the 1930's, Route 66 was a well-traveled highway. The migrants crossed into

California via the Needles Bridge across the Colorado River (the bridge is still in place but is not used by autos). Often, right after entry they were stopped and confronted by county Sheriffs or State Police. While they could not stop the migrants, these officers discouraged them from entering California whenever possible. This was done for two reasons. First, the agricultural jobs in the Central Valley were limited and there were already more workers than jobs. Secondly, many of the migrants had little or no money and California's welfare system was out of funds and could not aid the migrants. The feeling was that the fewer the people who entered the state with little or no funds the better off the state would be. If the migrants survived the "port of entry" hassle they found themselves in Needles. Needles represented their last major supply stop before the desert. Communities and stops in the desert had only basic supplies and services. Each of these stops represented a little oasis in the desert to the weary migrant.

The migrants tended to travel in groups for mutual support. Each group helped its members. Communities such as Essex, Chambless, Danby, Ludlow, and Barstow and stops such as Siberia (long gone) represented a place where one might be able to get a drink of water and find a mechanic who could fix their transportation. These communities were crowded with cars and trucks that had been abandoned and were used for parts. These vehicles were left behind by their owners who could not afford the repairs. Route 66 was also littered with disabled, abandoned vehicles and household goods tossed aside by people who could no longer transport them. Here and there a grave could be found for those migrants who did not survive the trip. Today we see names spelled in rocks along the side of the road. These are a reminder of a tradition that goes back to the 1930's when the migrants left their marks in the form of rocks to indicate they had been there so they would not be forgotten. It was a

long, hard trip which ended when they got to San Bernardino and were out of the heat and desert. From San Bernardino many of the migrants continued on to Los Angeles. Many traveled Route 99 to the central valley where they hoped to find work.

The migration of those fleeing the Dust Bowl would continue in growing numbers until the United States entered WWII. The New Deal brought aid to the farmers in the Dust Bowl area but it was too late for many. Even with federal aid, faced with the loss of their homes and farms, the outflow continued. Only with our entry into WWII and the influx of these jobless men into the military were many able to get work. Many of their wives found work in the California defense industry. (Thanks Sid!)

After the War: Glory Days

The end of World War II saw an expansion of the American economy that was unprecedented. After twelve years of depression and four years of war, Americans had money in their pockets and they were ready to spend. Gas rationing was over, and Ford, GM, Packard and Chrysler shifted their production lines from war materiel back to automobiles. Americans were ready to roll. Soldiers who had been stationed “out west” in California were among the first to travel Route 66 for leisure. Either by train or by truck, these men had seen the country through which the Mother Road passed, and were ready to take their time and travel the route at a more leisurely pace. But the greatest boon to travel during the post-war years was the explosion in westward migration, as millions of people moved from the east to California to take advantage of the growing job market there. Businesses along Route 66, for four years dependent almost entirely on military traffic, began to take advantage of the growth in tourism and migration. Two factors that led to the growth of Route 66 as a cultural icon were Bobby Troup’s 1946 song “Get Your Kicks on Route 66” and, a few months later, Jack D. Rittenhouse’s “A Guidebook To Route 66.”

Both Troupe and Rittenhouse had traveled along the increasingly famous highway during the war. Troupe's song was recorded by Nat King Cole and was an overnight sensation (Bischoff 2005):

If you ever plan to motor west
Travel my way, take the highway that is best
Get your kicks on Route sixty six

It winds from Chicago to LA
More than two thousand miles all the way
Get your kicks on Route sixty six

Now you go through Saint Looney
Joplin, Missouri
And Oklahoma City is mighty pretty
You see Amarillo
Gallup, New Mexico
Flagstaff, Arizona
Don't forget Winona
Kingman, Barstow, San Bernardino

Won't you get hip to this timely tip
When you make that California trip
Get your kicks on Route sixty six
Won't you get hip to this timely tip
When you make that California trip

Get your kicks on Route sixty six
Get your kicks on Route sixty six
Get your kicks on Route sixty six

Troup and his wife wrote most of the song on a ten-day journey from Pennsylvania to California, where Troup was hoping to make it big as a song writer. It worked.

Rittenhouse's Guidebook included information on points of interest, eating establishments, mileages between towns, and road conditions. All this and more for only one dollar! The combination of Troup's song and Rittenhouse's guidebook was to make Route 66 a household name, synonymous with travel west.

The increase in traffic along the Mother Road led to an increase in roadside businesses and attractions. Those businesses that had survived the lean depression and war years now began to thrive, while at the same time new businesses sprang up all along the highway. The competition between restaurants, tourist attractions (like the alligator farm and the world's largest ball of string), and curio shops (such as the famous Two Arrows Trading Post near Hollbrook, Arizona) became fierce. Auto courts, which before the war had been little more than overnight parking spots for weary travelers, began to be replaced by "motor-hotels," or motels. And each business did its best to make sure it was well seen by motorists, trying to outdo each other with bill boards, bright colors, and modern or outlandish designs (ever sleep in a tipi? Try the Wigwam motels in Holbrook or San Bernardino). The towns through the East Mojave were no different; businesses in Ludlow, Bagdad, and especially Amboy served motorists day and night in cafes, gas stations, and motels. In addition, the Mother Road continued to be a cultural icon. Bobby Troup's song was recorded in the fifties by Perry Como and in the sixties by the Rolling Stones. There was even a TV show that gave the highway star billing: "Route 66" was the story of two young men travelling the country in an always new Corvette convertible, and starred Martin Milner and George Maharis (whose character was later replaced by Glenn Cobett). Although "Route 66" never really featured the real Route 66, it added to the image of the Main Street of America. The period from 1946 until 1972 was truly the Golden Age of Route 66.

It was during this time that Buster Burris, son-in-law of Roy Cowl, expanded Amboy to the point that it became the largest Route 66 stop between Needles and Barstow. Roy opened a gas station and garage in 1938—the original "Roy's," and after the war he and Buster expanded the business: the original garage was converted into a café, and a new garage was built. Buster brought power to Amboy on his own, installing power poles along the highway from Barstow. Buster and

Roy also opened the motel. Amboy flourished, its population reaching 250. This was enough to support a school, a Saint Raymond's Catholic church (which we will plaque on this trip), and several other businesses.

Increased traffic along Route 66 had its downside: an increase in traffic accidents. Most of the highway, and all of it from Needles to Barstow, was still a narrow, two-lane road. As the volume of traffic passing along the highway through the California desert rose, the number of serious traffic incidents, many of them fatal, rose proportionately. Adding to the problem was the increase in performance of passenger cars, and the increase in size of commercial trucks. A fast, powerful sedan attempting to pass a large semi-truck along the many narrow stretches of Route 66 often led to gruesome results. Furthermore, there wasn't much help available on this stretch of the road. For many years, there was just one CHP officer patrolling Route 66 from Needles to Barstow: Walter Terry. Stationed in Barstow, Terry rode his Harley Davidson back and forth between the Los Angeles County Line and the Nevada border, responding to emergencies, helping those in need, and bringing others to justice. He started on his beat in 1937, and retired in 1967. For many years, his Harley had no radio, so Patrolman Terry used the dispatch telephones along the Santa Fe Railway to call in emergencies. (Bischoff 2005) But even travelling at top speed, it might be a long time before Terry, or anyone else for that matter, could get to the scene of an accident. Buster Burris recalled,

Most of these accidents we had out here, no first aid would have helped. They was bad (sic). We all carried wood saws because the bridge railings were wooden and people would miss the bridge and the railings would go through the car, the firewall, and the driver's chest. We'd saw it off in front and back and pull them out. Some I've gone to where you just take a sack. It's gruesome....Out here when 66 was full of people, they was head on. (Bischoff 2005, from Scott and Kelly 1988)

Despite the wrecks, Route 66 continued to be the Main Street of America. But it was not to last. The road continued to deteriorate, safety concerns increased with each accident, congestion increased. It was clear that the Mother Road's days were numbered.

Death and Rebirth

The creation of the Interstate Highway System in 1956 marked the beginning of the end for Route 66. By the mid-fifties it was clear that the largely two-lane road could no longer handle the increased traffic and heavier and faster cars and trucks. More modern four-lane roads built to the standards of the Interstate Highway system began to replace sections of the Mother Road. At first, rural sections were improved or abandoned; then cities and towns were bypassed. Probably the first to be affected were owners of roadside tourist services. Later, as Interstate 40 bypassed Siberia, Bagdad, and Amboy, gas stations, motels, and cafes were forced to close their doors:

Business owners along the route usually remember the exact time of day the Interstate opened around their towns. Most compare the experience to the closing of a water faucet. One day hundreds of cars passed in front of their businesses; the next day only a dozen or so might pass. Businesses struggled, but most eventually failed, and by the late 1970s most of the route had been replaced. On October 13, 1984, Williams, Arizona became the last town along Route 66 to succumb, and in 1985 the fabled U.S. Highway 66 was officially decommissioned and all remaining signage removed (Olsen 2004).

The story does not end here, however. Americans have a love for their past, and the nostalgia for Route 66 is no exception. Not long after the decommissioning of the Mother Road, Americans started to turn off the busy Interstate and take a step back in time to a slower pace. Some of today's travelers are graying baby-boomers who want to relive past adventures, or want to share with their children the excitement of traveling the old road.

Many others want to explore the abandoned towns and oases to get an understanding of what life was like in another time. While many businesses and towns along the route are long closed, some still survive. Roy's Café in Amboy is one such place. Roy's has changed hands more than once in the past twenty years and for a time its future, and that of Amboy, was in doubt. Fortunately, though, Mr. Albert Okura (our host for this weekend's Vituscan Trip) purchased the town, along with its famous café, in April 2005. The café serves as a souvenir shop and a nice place to buy a cold drink, and gas flows again from the pumps outside. Amboy has been preserved an icon of Route 66 history. Route 66 offers a path to the past, and for many is still the preferred route through the East Mojave Desert, including the Vituscan Missionaries!

Ludlow and the Tonopah and Tidewater

The tale of how William Tell Coleman discovered borax and eventually sold his claims to Francis Marion "Borax" Smith has been told elsewhere in other Billy Holcomb keepsakes. Here we will focus on the second of the three railroads that concern our Vituscan trip, the Tonopah and Tidewater (in case you forgot, the first one was the Atlantic and Pacific, which later became the Santa Fe).

Death Valley Country

The story of the Tonopah and Tidewater can be said to start in the Death Valley country, about 150 miles north of our Vituscan trip. With Calico's ore reserves running out, Francis Smith turned to his borax claims in the country east of Death Valley. There he acquired from William Coleman the Lila C, named for Coleman's daughter, about 8 miles southwest of present Death Valley Junction. The location, however, made development of his claim quite difficult. The closest

possible railhead was at Ivanpah, to which the California Eastern was planning to extend its line. This was over one hundred miles from the Lila C. While it was possible to use mule teams to transport the borax to Ivanpah (as had been done in the 1880's from Harmony Borax works in Death Valley to the railroad at Mojave), Smith preferred building his own railroad. However, railroads are expensive, and Smith's financial backers were very nervous about the idea. So Smith decided on an alternative: grade a road from the Lila C to Ivanpah suitable for the use of the steam traction engines that had been employed at Borate. Calculating the traction engines would fail, Smith would already have a graded road bed for a railroad. Sure enough, Smith's traction engine broke down only fourteen miles into its maiden trip from Ivanpah Valley.

And so it was that on July 19, 1904 the Tonopah and Tidewater Railroad was incorporated in the state of New Jersey, where the Borax Company had offices and a refinery. (Myrick 1992) The name itself evoked an image of a railroad empire that would span the desert from Tonopah in west central Nevada to San Diego on the Mexican border. As it was, however, Smith was really focused on getting rails built from the Lila C to a railhead. Tonopah and San Diego could come later.

At the same time Smith was planning his railroad, Senator William Clark was reaching the final stages of construction on his San Pedro, Los Angeles, and Salt Lake Railroad. Over a snifter of brandy at a social club in San Francisco, Clark suggested to Smith that he join his T & T rails with the SP LA & SL at Las Vegas. This would provide the shortest route to the Lila C—significantly shorter than other routes that Smith was surveying, including starting points at Ivanpah and Soda Spring. The key members of Smith's team were his superintendent, John Ryan, his assistant, Wash Cahill, and his engineer, Clarence Rasor. All three of these men played a key part in the history of the T & T, and their names are still seen on maps of the Mojave Desert and the Death Valley Country.

A Doublecross

By late May 1905, Ryan, Cahill, and Rasor had established a base of supply at Las Vegas for the accumulation of survey, grading, and rail-laying operations. A month later, the grading had been completed northward nine miles. However, unbeknownst to Smith and his managers, Senator Clark was having a change of heart. Why not, he thought, build his own railroad to the boom towns in western Nevada? Thus was born the Las Vegas and Tonopah Railroad, which would run up the western edge of Nevada to the town of Gold Center, and would serve the mining towns of Rhyolite and Bullfrog. This, of course, Clark kept a secret from Smith.

Although Clark did not publicize his new road, portents of trouble for the T & T were in the air, including high transportation charges for T & T ties and other equipment, but it was not until August of 1905 that Smith and his men became fully aware of Clark's change of plans. The T & T was denied permission to join its rails with the SP LA & SL in Las Vegas. Smith was mortified. Telegrams to Clark went unanswered, as he was in Paris. The Borax King had no choice but to order his work crews to stop construction until he could come up with another plan. Fortunately, the Santa Fe Railroad was willing to listen to a proposal by Smith to link up with the AT & SF rails at Ludlow. An agreement was reached, and by late August Ryan had all of the T & T's equipment shipped to Ludlow. Although the summer heat was intense, grading began in earnest. However, the line of the T & T to Gold Center, Nevada, just south of Beatty, would now be 167 miles long rather than the original 118 miles from Las Vegas.

Construction

By November tracks had been laid through Ludlow and started to run northward through Broadwell Dry Lake toward Silver Lake. The grading through this section was fairly easy, and progress was steady; the cooler weather of fall and winter helped matters considerably. The T & T crossed the San Pedro, Los Angeles, and Salt Lake Railroad at a point designated as “Crucero,” the Spanish word for cross. From Crucero the tracks were laid across Soda Lake to Rasor (site of a Billy Holcomb plaque), then on through present-day Baker and across Silver Dry Lake. Here the tracks were laid directly across the lake bottom (as at Broadwell)—a decision the T & T management would regret in the future, as Silver Dry Lake is not always dry. The town of Silver Lake was reached in March, 1906, and the grading and track-laying crews continued northward. Riggs and Valjean were established, and by May the line was completed through to Dumont. That’s when the trouble started.

Amargosa Canyon

It was just over a dozen miles from Dumont to Tecopa. But the route that was surveyed required the railroad to build through the Amargosa Canyon. This required the use of several major cuts along the canyon walls, as well as the construction of three large trestles. Progress slowed to a snail’s pace. In addition to the difficulty of building through the canyon, the torrid desert heat started to take effect. Workers began to desert. In an attempt to keep the project in motion, 100 Japanese laborers were brought up from Los Angeles. According to Myrick:

Subsequent investigation a few days later revealed that of the 100 men on the job, only 17 were working and (to use the words of Wash Cahill) “out of those 17, only 8 were handling picks and shovels. The other 9 were spraying them with water, using that precise, skilled, and unlovely method that old-time Chinese laundrymen used on clothes for ironing—a mouthful of water and a well-aimed ‘whoosh’ sprinkled each coolie as fast as human spray could operate.” (Myrick 1992)

Later in the summer, Mexican laborers were hired. However, they developed the unusual habit of working fifteen days, then departing for Los Angeles for a fifteen day rest. While this was fine for the Mexican laborers, it created a continual rotation of workers that was very difficult to manage. (Myrick 1992) To the consternation of Francis Smith, Clark's Las Vegas and Tonopah entered Gold Center in October of 1906; Smith's men were still moiled in the Amargosa Canyon. On December 4, the LV &T ran its first through passenger train to Rhyolite, which had become the supply hub for prospectors heading to the boomtowns and mining camps of Lee-Echo, Greenwater, Furnace, Keane Wonder, Skidoo, Harrisburg, Pioneer, and Mayflower. (Serpico 2013) Finally, in May 1907, one year since construction in the Canyon began, the T & T entered Tecopa. It had taken twelve months to construct twelve miles of road. Waiting at Tecopa were 600 tons of silver-lead ore from the Noonday, Gunsight, and Columbia mines—"sacked and stacked...awaiting transshipment to Salt Lake smelters via the SP, LA & SL interchange at Crucero." (Serpico 2013) In fact, freight revenue began to increase along the line as more and more mining operations met T & T trains at several stations to ship ore and collect supplies.

With the Amargosa Canyon conquered, construction proceeded at a rapid pace. The Lila C was producing, and the railroad was getting closer. In August the tracks arrived at Death Valley Junction, at which point the spur to the Lila C proceeded 8 miles southwest. 122 miles from Ludlow, Smith finally had his connection to his borax mine. The ore could now proceed by rail to Ludlow, where it would be switched over to the Santa Fe for the trip to San Pedro.

Approximately fifty miles remained. This distance was covered fairly quickly as the rails were laid over the relatively level Amargosa Valley. However, a lack of rails delayed work for a time. (Myrick 1992) Then, on October 30, 1907, fourteen months and 167 miles after construction commenced at Ludlow, the last spike was driven at Gold Center. The Tonopah and Tidewater,

which was the first to start building north, was the last to arrive. But, unlike the arrival of the Las Vegas and Tonopah a year before, there was no fanfare for the T & T. On October 18, 1907, shares in United Copper collapsed. On the 21st, there was a run on the Knickerbocker Trust Company which forced its closure. The resulting financial panic of 1907 threw the country into a severe economic downturn. The boomtowns of Rhyolite and Bullfrog were drying up as capital for mining investment disappeared. Even Tonopah and Goldfield, which had started the Nevada mining boom, were looking at hard times. Finally, Beatty, Rhyolite, and Bullfrog were now served by no less than three railroads: the T & T, the LV & T, and the Bullfrog and Goldfield. How many rail lines did a dying mining district need?

Actually, the T & T was in better shape than its competitors. According to Serpico, although it was the last to arrive in Gold Center, the Tonopah and Tidewater had a well-founded reason for its business: the borax reserves at the Lila C and, later, at New Ryan. The T & T was thus bankrolled by Pacific Coast Borax and Borax Consolidated. While it was announced that construction on the T & T would not proceed further than Gold Center, arrangements were made with the Bullfrog and Goldfield for use of yards, trackage, and depots at Beatty, Rhyolite, and Bullfrog. The T & T was also the shortest route to the coast, and it undercut the price of a ticket on the LV & T: a round trip ticket on the T & T cost \$26.00 compared to over thirty on Clark's line. (Faye 2001)

Things were not so bright for the Bullfrog and Goldfield line, the T & T's connection to Rhyolite and points north, including the prosperous mining town of Goldfield. In late 1907 the Tonopah and Goldfield Railroad assumed operation and financial responsibility for the B & G (Serpico 2013). By spring, 1908, the Bullfrog and Goldfield's financial situation was continuing to deteriorate, and the burden on the T & G was too much. However, the T & T needed the B &

G's facilities to serve the Bullfrog District and to maintain access to Goldfield. Therefore, in May, the T & T started to "adopt" the Bullfrog and Goldfield. By June, the roads had been combined under the Tonopah and Tidewater Company, a holding company created expressly for this purpose. It was now possible to take the "T & T All the Way" from Ludlow through to Goldfield.

Rain, and Other Liquids

Desert flashfloods were an intermittent, although serious, problem. The tremendous volume of water released by a downpour could rapidly turn a dry stream bed into a raging torrent. While many culverts were built across the line at stream crossings, many times these were either inadequate or simply in the wrong place. In August 1908 a cloudburst sent water rushing down the Amargosa River, undermining the track and causing a wreck in which three men were killed. In the spring of 1910 the Mojave River flowed all the way through Soda Dry Lake (not dry anymore!) to Silver Lake. The trains were able to move through the water slowly, but it became necessary to raise the track level by about a half a foot. But as the local Indians said, "Rains come once, rains come again." (Faye 2001)

In "Railroads of Nevada and Eastern California" David Myrick relates a few anecdotes caused by "Liquids of a different kind...many stories have circulated of engine crews famous for bringing their train into Beatty purely because the flanged wheel followed the steel rail." (Myrick 1992) He further relates:

One such crew "landed" its train without too much difficulty at the Beatty station, but then ran into "rough seas." Following usual procedure, the engine was uncoupled from the train and run to the water tank to replenish the tender supply. By some strange coincidence the end of track came too soon and the engine landed on the ground. Rerailing was accomplished only after the application of superhuman efforts (accompanied by additional liquid refreshment)...In the act of groping for the (water tank) spout, the fireman managed to fall off the tender; but apparently his internal liquids helped to absorb the shock, for he recovered sufficiently to clamber back up on the tender to complete the chore. (Satisfactory...Myrick 1992)

Heavy rains once again invaded southern California in 1916. Silver Lake filled, as it had six years previously, fulfilling the Indian's prophecy. The line from Crucero to Tecopa was so disrupted by this flooding and by other washouts caused by winter storms that it was necessary, for several months, to detour around the affected area. Passengers and freight were forced to take the San Pedro, Los Angeles, and Salt Lake Railroad to Las Vegas, then board the LV & T to Beatty, then south on the T & T to Tecopa. In the meantime, the T & T relocated its mainline to the east side of Silver Lake. The warehouses and town soon followed.

Including the line from Beatty to Goldfield, the Tonopah and Tidewater extended over 250 miles. As such it became a lifeline for miners, businesses, and residents of the region. The T & T was the shortest route to the port of Los Angeles, and much freight came along the Santa Fe from San Pedro to the desert region along it. The transfer point was Ludlow. One such shipment of freight included a few crates of frog legs bound for the saloons and eateries of Goldfield. Unfortunately, the Santa Fe train on which the delicacies were riding missed the northbound connection on the T & T at Ludlow. What was the express agent to do? If he waited for the next Goldfield-bound T & T train, the frog legs would surely spoil. His solution was breathtaking: he sold the legs three for a dollar to the townspeople of Ludlow. As the story goes, quite a few other shipments of frog legs also mysteriously "missed their connection" at Ludlow and had to be consumed. However, it wasn't long before the express company investigated the loss of their shipments, and subsequent shipments of frog legs arrived at Goldfield by another route.

Beginning of the End

The Tonopah and Tidewater never really prospered during the years of its existence. In fact, most years it lost money. However, the T & T was first and foremost an industrial road, created specifically for the transportation of borax from the mines at Old and New Ryan to market. As

such it was subsidized by its parent companies, Borax Consolidated and Pacific Coast Borax. Things began to change, however, by 1927. Borax mining in the Death Valley country was coming to an end as the ore started to run out. In addition, Pacific Coast Borax began to develop its claims at Boron, between Mojave and Barstow. These claims had been located years before, and the quality of the ore and its proximity to an already established railroad made it financially more feasible than the Death Valley mines.

Unfortunately, not even the tourist trade could not keep the inevitable from occurring. Passenger traffic, which had not been heavy to begin with, began to decline late in the 1920's. In 1928 Pullman service was operated from Los Angeles to Beatty three times a week; by 1930 there was only one train a week, leaving on Thursdays and returning on Sundays. (Myrick 1992) October 1929 saw the stock market crash and the beginning of the Great Depression. However, the T & T still hung on, its managers hopeful that the next big boom was just around the corner. Beyond shipping clay, bentonite, and talc, nothing really developed. But hope remained.

By 1933 economy was the name of the game for the T & T. In a major-cost saving move, the tracks from Ludlow to Crucero were abandoned, and the Tonopah and Tidewater offices and shops were moved to Death Valley Junction. The last train between Ludlow and Crucero ran on December 8, 1933. The tracks remained between these points in case they were needed. But that was not to be. For the next seven years the T & T operated from Crucero north, but declining passenger and freight income and destruction of track by the heavy rains of 1938 combined to seal the fate of the Nevada Shortline. In December of that year an application was made with the Interstate Commerce Commission to cease operating the Tonopah and Tidewater Railroad. Abandonment was authorized and was to become effective on December 31, 1939. Due to local

protests this was postponed to April 1, then April 15, 1940. No material evidence was introduced to extend the protests any further, and on June 14, 1940, the last train ran on the T & T.

Tracks and equipment were left in place under a maintenance arrangement. But with the coming of World War II, even the rails, now quiet, did not stay in place long. The War Department requisitioned the steel rails, and thirteen months after the last train, contractors Sharp and Fellows began taking them up, starting at the Beatty end. The job was completed to Ludlow a year later. Ties were quickly used for a variety of purposes throughout the region.

Today Highway 127 parallels much of the T & T right-of-way north of Interstate 15. Further south at Ludlow the Clamper can still plainly see the old road bed, as well as the remains of telegraph poles along the road north out of town as it heads toward Crucero. There are significant remains of the T&T at Ludlow, including the “balloon track” (rails have been removed) coming into town and the pits and foundations of the locomotive shops. Here and there a railroad spike can still be found, and if a Clamper listens carefully, he can still here the lonesome whistle of the T & T blowing in the distance.

The Bagdad-Chase Mine and the Ludlow & Southern Railroad

West of Barstow about thirty miles is Kramer Junction. North of Kramer Junction about 28 miles the Yellow Astre Mine at Randsburg once produced some of the richest ore in southern California. Joining the two points was the Randsburg Railroad, which was owned by a group of eastern financiers connected with the New York Central Railroad. These financiers also owned the Randsburg-Santa Fe Reduction Company’s fifty-stamp mill in Barstow. And it was these financiers who paid John Suter \$100,000 for his mining properties eight miles south of Ludlow.

John Suter was a roadmaster for the Atlantic and Pacific Railroad (a subsidiary of the Santa Fe; it was entirely absorbed into the Santa Fe in 1897) who was tasked with searching the hills south of Ludlow for water to be used by the railroad. Instead of water he found chrysocolla, a copper ore that often contains gold. Suter's discovery may have been made as early as 1888 (according to Myrick) or as late as 1898 (according to Ross). In any case, by 1900 the secret was out, and Suter formed John Suter and Company and began mining. (Ross 2009) Suter's Bagdad mine became the principal producer of the mining district of the same name. Suter also owned the Roosevelt mine in the vicinity of the Bagdad mine, and it wasn't long before he had 10-20 men working for him. These men needed a place to live, and soon the little community of Camp Rochester was established, attracting other rainbow chasers to the district.

Why Suter allowed the option on his claims to be executed is not known—perhaps he was simply satisfied with the \$100,000 paid to him. It is known that soon after the purchase was finalized the Bagdad Mining and Milling Company was organized and production was started soon thereafter. Members of the board of directors for the new company included former senator Chauncey Depew, John Beckley, Benjamin Chase, and J.H. Stedman. E.H. Stagg became the general manager. These men were aware of the challenges of desert mining, as they already owned the Randsburg Railway and the mill at Barstow. In fact, that mill (the Randsburg-Santa Fe Reduction Mill) played prominently in the plans of the Bagdad Mining and Milling Company. At first the plan of moving the mill from Barstow to Rochester was discussed, but instead it was decided to build a shortline railroad from the mines to Ludlow, where the ore would be loaded onto west-bound Santa Fe trains for processing at Barstow.

The Ludlow and Southern Railway was incorporated in July 1902 (surveying actually began two months earlier). The L & S was to be built with economy in mind: rolling stock and rails

were to be bought used to save money, with some of the equipment coming from the New York Central. The easiest route was to be taken, which happened to be in a dry wash. It was simply assumed the occasional cloudburst would destroy some of the route: the damage would be quickly and easily (and cheaply) repaired with more used equipment. Grading began in November of 1902, and in the first months of 1903 ties were laid and second-hand rails from the Santa Fe were installed. By June the construction was finished. The total cost was \$80,000. (Myrick 1992)

With the completion of the Ludlow and Southern, production at the Bagdad mines could proceed in earnest. Other mines were added to the properties held by the Bagdad Mining and Milling Company: the Gentry, the Roosevelt, and others were combined into and operated as a single company. What was to be known as the Bagdad Chase Mine became San Bernardino County's largest gold and copper producer. By 1910 over 4.5 million dollars of gold came from the mines at the end of the L & S. According to Myrick, by 1950 over one-half of the County's total production of gold in the previous seventy years came from the Bagdad Chase. (Myrick 1992)

Most employees of the Bagdad Chase lived in Rochester. In addition to overseeing the work at the mines, General Manager E.H Stagg ran Rochester as well. In order to avoid the problems created by too much alcohol, Stagg made Rochester a dry town. No liquor was allowed in the company town, and none was to be transported on the railroad. Fortunately (or maybe not) the miners could seek their diversions at Ludlow (eight miles away) or at Ragtown, about four miles away. While "higher quality" entertainment was available at Ludlow, Ragtown was closer, and sometimes one must take what one can get. Often miners from Rochester would hitch a ride on the Ludlow and Southern and jump off at Ragtown; they would either walk back or wait for the southbound train back to Rochester.

For those wishing to make the eight-mile trek, Ludlow offered more entertainment. Ludlow at the time was an important railroad center, as it was a major stop on the Santa Fe mainline as well as the headquarters of the Tonopah and Tidewater Railroad (which we discussed earlier in this history). The T & T tracks came into town by way of a “balloon track” from the northwest. The balloon track looped through the shops and yards of the T & T before rejoining its own mainline, allowing southbound traffic to turn 180 degrees without the need for a turntable. And, of course, Ludlow was the terminus of the Ludlow and Southern, thereby making the little town the center of three standard-gauge railroads. Ludlow also became important to early automobile travel across the Mojave Desert. Those travelling along the route of the Santa Fe by car encountered heavy sand between Ludlow and Goffs, so oftentimes east-bound cars were loaded onto flatcars for the trip to Goffs. Autos loaded onto the west-bound train at Goffs were likewise unloaded at Ludlow.

Miners from Rochester (or Stedman as it was later called) could ride to Ludlow in a coach that was supposedly the private car of former senator and past president of the New York Central Chauncey Depew. This car also functioned as the required caboose for the L & S trains. (Ross 2009) The train left early in the afternoon every day, took forty minutes to cover the eight miles (averaging a whopping 12 miles per hour) and returned to Stedman in the early evening. This allowed the miners about two hours to enjoy themselves, often in one of “Mother” Preston’s establishments. These included a pool hall, restaurant, saloon, and general store. Space limits the tale of Ma Preston, but suffice it to say that she was a lady of very generous proportions. She could drink, cuss, and play poker with the best of them. Ma could at times be seen hoisting a railroad tie or a side of beef over her shoulder and walking back to her store. She was an outstanding business woman, and by the time she and her husband retired to her home-country of France, she had amassed a sizeable retirement fund.

The most profitable years of the Bagdad Chase ended in 1910. In fact, the mines shut down for a short time in that year. Ownership passed to the Pacific Mines Corporation, which worked to modernize the mines by installing electric lights and air-powered rock drills. In addition, the ore was shipped east from Ludlow to Clarkdale Arizona, rather than west to Barstow for milling. The mill at Barstow accepted only gold ore—a waste because there was a high content of copper and silver in the Bagdad ore. The mill at Clarkdale could process all three metals. As a result, production increased. Pacific Mines also bought the L & S, and concluded an arrangement with the Tonopah and Tidewater Railroad to perform the required maintenance on the short line. This also increased profitability.

Unfortunately, all good things, including this tale, come to an end. By 1916 the mine was no longer turning a profit, and mining ceased. In the same year, the Ludlow and Southern ceased operations as a common carrier. The mines and the railroad went into receivership, although both operated sporadically over the next two decades. In fact, due to the siliceous nature of its ore (that means that the ore can be used as a flux in metal smelting), during World War II the Bagdad Chase was one of only four gold mines in California that was permitted to continue to operate. (Myrick 1992) The railroad fell into disuse, and by 1931 the locomotives had either been dismantled, sold, or destroyed by fire. In 1932 a cloudburst washed away a mile of track, and in the summer of 1935 the remaining tracks were taken up and sold to a sugar plantation in the Philippines. As for the Bagdad Chase Mine, it operated until 1954, at which time it was shut down again. In the intervening years a number of owners controlled the property, most recently being Bagdad Chase Incorporated. In 1972 B.C.I. opened a pit on the property and extracted ore until 1975. In 1987 Bentley Resources of Vancouver announced plans for an active mining operation, including the opening of three pits. However, these plans never came to fruition. Since then a number of others

have expressed an interest in reopening the mines—perhaps they too are just chasing the rainbow, or perhaps one of them may find the next bonanza.

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S A T I S F A C T O R Y

