

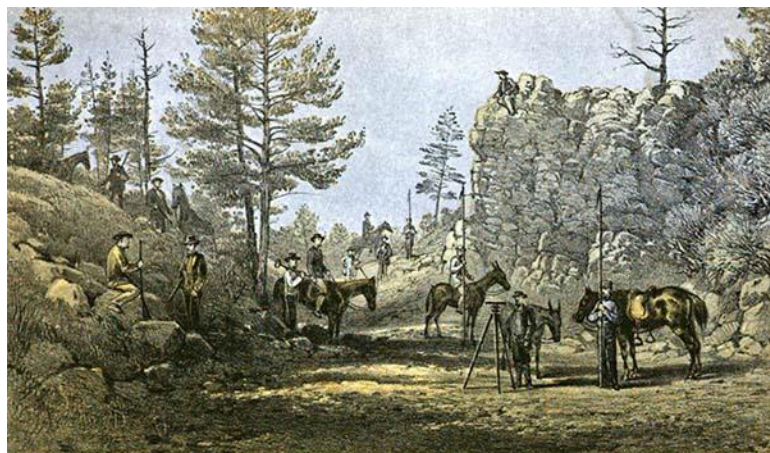
Transportation in and around the San Pedro River Valley in the 19th century

Part 1

By Gerald R Noonan PhD

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From approximately 1846 to 1869 the federal government searched for passages through the West by which wagons and railroads could travel from the Mississippi to the Pacific without crossing difficult terrain (Davis, 2001, p. 27-28). Its general philosophy about road construction (Jackson, 1965, p. xii) emphasized discovering suitable natural passages rather than constructing finished roads.



Surveyors at Work. Lithograph from Bell and Cantab, 1870, unnumbered page between 400-401, 520 abs.

The Mormon Battalion established the first wagon route (Map 1) across southern Arizona in 1846 (Jackson, 1965, p. 21). In May 1857 the Secretary of the Interior appointed James B. Leach as Superintendent of a wagon road that was to be made between El Paso and Fort Yuma and would cross southern Arizona near the 32nd parallel (Davis, 2001, p. 123-128; Jackson, 1965, p. 220-232.) The Secretary also designated N. Henry Hutton as Chief Engineer of

the road. The road (Map 2) was to be 18 feet wide on straight stretches and 25 feet along curves, and workmen were to remove timber, brush, and rocks from the road to facilitate the transit of wagons. A federal survey of possible railroad routes (Map 3) by Lieutenant John G. Parke and his party in 1854 and 1855 revealed additional possible travel routes across and within the San Pedro River Valley.

By the late 1850s travelers going to California had several options (Maps 3-5). They could go through Croton Springs and Nugents Pass to reach the river in the region of Tres Alamos. They then could travel northward along the eastern side of the river to Fort Grant and there turn westward to California. Alternatively, they could journey to Dragoon Springs and then travel southwestward through Quercus Cañon (name then used by federal surveyors and mapmakers for Dragoon Wash) to reach the San Pedro River. They then went northward 6 miles along the eastern side of the San Pedro River to where the Butterfield Overland Mail crossed the river in the region of current day Benson and took a northwest route that joined the California route coming from Fort Grant. By approximately late October 1858, travelers

from the east could shorten their routes by avoiding Quercus Cañon and taking a newly established road directly to the San Pedro Crossing in the region of current day Benson. Persons with destinations such as Tubac or other places south of Tucson sometimes crossed the river where Quercus Cañon intersected it and took a road that went along the northern edge of the Huachuca Mountains and then southwestward to Tubac. The army usually took this route to reach Fort Buchanan.

The first regularly scheduled stagecoach line that crossed the San Pedro River Valley was the San Antonio-San Diego Mail Line. On June 22, 1857 the U.S. Postmaster General awarded to James Birch a contract for carrying mail twice a month between San Antonio and San Diego (Giddings et al., 1957). The agreement provided \$149,800 annual compensation beginning on July 1, 1857 and was to expire on June 30, 1861. The fare from San Antonio to San Diego was \$200 and from San Antonio to El Paso was \$100. Passengers were allowed 30 pounds of personal baggage, not counting blankets and firearms, with a dollar a pound charged for excess baggage between El Paso and San Diego. A coach could carry as much as 600 pounds of mail at a time. People commonly called the stagecoach line the *Jackass Mail* because the 100 miles through the Colorado Desert were traveled on mule back because of the heavy sand.

The stage line route went to Dragoon Springs then southwestward through Quercus Cañon (Dragoon Wash) to the San Pedro River and then went north 6 miles (Map 4; Ormsby, 2007, p. 85; Wood, 1858, p. 17, 40) to the San Pedro Crossing in the current day Benson area. The route crossed the river there and proceeded northwestward toward Tucson. Politics, the start of the Butterfield Overland Mail Company, and a variety of other factors including Indian attacks resulted on October 23, 1858 in the discontinuation of the stage line's service between El Paso and Fort Yuma (Farish, 1916, p. 288; Giddings et al., 1957, p. 235).

The Overland Mail Company began service shortly before the San Antonio-San Diego Mail Line ended its route within the state (Winther, 1957). After dealing with much political maneuvering by bidders, politicians, and businessmen, U.S. Postmaster General Aaron Venable Brown signed a contract on September 11, 1857 with John Butterfield and his associates to carry mail between San Francisco and St. Louis and Memphis (Winther, 1957). The contract specified that letter mail was to be carried twice weekly each way over the prescribed route, with each trip not taking more than 25 days. Mail was to be delivered at post offices enroute. The contract called for the use of four horse coaches or wagons, and service was to begin within 12 months. The government agreed to pay \$600,000 per year for a period of six years. This was a very large sum of money for that time. In terms of 2014 labor costs the sum was (MW, 2015) the equivalent of \$119,000,000.00 (using figures for unskilled wages) or \$235,000,000.00 (using figures for more skilled wages). Adjustment of the 1858 figure to reflect the relative share of Gross Domestic Product yields a sum of \$2,550,000,000.00 because the 1858 economy was much smaller than that of 2014.

Butterfield and his associates organized a firm known legally as "The Overland Mail Company." The company made use of existing railroad and wagon road facilities. This meant that the portion of the journey done by wagon extended only within a 160 miles of St. Louis and ended at the railroad terminal in Tipton, Missouri. The company transported the mail by railroad over the remaining 160 miles. Map 4 shows the route in and near the San Pedro River Valley.

The company expended about \$1 million before service began (Winther, 1957). It quickly established station sites, searched for water and dug wells, arranged to haul water to places without it, graded some portions of the route, and built bridges as needed. The company also arranged for the sending of forage and grain to the stations along the route. It employed approximately 800 men to operate the line and used more than 1000 horses and 500 mules, approximately 250 stagecoaches and special mail wagons, large numbers of freight wagons and water wagons, harnesses, food, and assorted equipment and supplies. Employees included superintendents, station keepers, blacksmiths, herders, roustabouts, and most importantly stage drivers and conductors.



Transferring passengers & mail from Butterfield Overland Mail coach to Celerity wagon. (From Calif. Dept. Parks & Recreation.)

The Overland Mail

Company used two types of stages (Ahnert, 2013; Dixon and Kasson, 1859; Ormsby, 2007, p. 18; Winther, 1957, p. 95-96). On approximately 30% of its route it employed a stagecoach that had a strong sub-frame covered by colorfully decorated wooden paneling and equipped with comfortably padded seats. The strong roof often had a metal railing around its outer edges and could carry luggage and passengers. The back of the stage

had a platform for carrying mailbags and luggage. Mail and passengers were consolidated at Fort Smith and transferred to a Celerity Coach for the trip from Fort Smith to Los Angeles (Ahnert, 2013, p. 10). From Los Angeles to San Francisco passengers generally rode in the larger and more comfortable stagecoaches The Celerity Coach, or in popular parlance the “mud-wagon,” was a lightweight vehicle designed for rough conditions, including sand and steep inclines. It was basically a buckboard with a low panel across the bottom edge and a wooden bench type seat at the front for the driver and conductor. Inside the wagon there were three more wooden bench seats for passengers. Wooden staves held up the thin canvas top to which there were attached canvas curtains that could be let down as desired.

The company at first used wild mules and horses between Fort Smith, Arkansas and Los Angeles, California (Ahnert, 2013, p. 14), with more wild mules than wild horses being used. Near the end of the stage service through Arizona the company may have switched mostly to tame draft animals.

Waterman L. Ormsby, a special correspondent for the New York Herald was the first passenger from St. Louis to San Francisco, and arrived in San Francisco on Sunday, October 10 (Ormsby, 2007, p. vii, 17-18, 129-130). During most of the trip Ormsby was the only passenger and therefore had a somewhat more comfortable experience than that accorded later travelers. The stage traveled day and night, with brief breaks to change horses or mules or to allow the passengers a quick meal. In Springfield, everyone changed from a coach to one of the

Celerity coaches. Despite hardships endured during the trip Ormsby concluded, "To many Americans who travel for pleasure this route will be a favorite."

Some passengers had less favorable opinions, often because of overcrowding. The Englishman William Tallack described his journey from San Francisco to St. Louis a few months before the secession of the South (Tallack, 1865). The first portion of the trip was in a conventional stage wagon that held nine passengers inside, three at the rear, three in front, and three on a movable seat whose back was a leather strap. The passengers fitted inside by sitting close and dovetailing their knees. The outside of the coach had the driver and conductor and a varying number of passengers. Tallack remarked that "by popular permission, an American vehicle is never 'full,' there being always room for 'one more.'"

In the San Joaquin valley Tallack and fellow passengers changed to a "mud wagon." On the fourth day the stage reached Tejon Pass at the southern end of the central valley. Passengers ate a late supper at approximately midnight and then shifted into a different wagon at approximately 1 AM. Tallack recollected:

we tumbled hastily into our new wagon, wrapping ourselves up in coats or blankets nearly as they came to hand, waiting till morning for more light and leisure to see which was our own. By means of a blanket each, in addition to an overcoat, we managed to settle down warmly and closely together for a jolting but sound slumber. What with mail-bags and passengers, we were so tightly squeezed that there was scarcely room for any jerking about separately in our places, but we were kept steady and compact, only shaking "in one piece" with the vehicle itself.

Tallack remarked that immediately east of Tucson stations were far apart:

Thus, after leaving Tucson, we traveled two stages of thirty-five and twenty-four miles consecutively, with only four miserable horses in each case. Two of them laid down and would not stir, though beaten as it seemed, cruelly with sticks and poles; but, on passing a rope around the fore-leg of one of them, they started, but soon flagged again; and we had to walk over the roughest part of the distance at night, to relieve the poor jaded creatures. At a mountain station east of the San Pedro River Tallack noted that a group of 10 Apaches, some painted with bright daubs of vermilion and white, loitered nearby. The station keepers were "armed to the teeth" with revolvers and bowie knives and had a stand of rifles inside. On the 13th day near the border with Texas there was nearly a



Butterfield's top priority was the carrying of mail. Passengers often had to sit on top of mailbags that filled all of the space between seats. Sketch of conditions inside a Celerity Wagon. From Tallack (1865, p. 45).

gunfight because passengers disagreed over who would put up with having all the leg space in front of them filled with mailbags.

The mining engineer Raphael Pumpelly (1918, p. 183, 236 abs.) traveled from Syracuse to Tucson on the Overland Mail Stage in October 1860.

I secured the right to a back seat in the overland coach as far as Tucson, and looked forward, with comparatively little dread, to sixteen days and nights of continuous travel. But the arrival of a woman and her brother dashed my hopes of an easy journey at the very outset, and obliged me to take the front seat, where, with my back to the horses, I began to foresee coming discomfort. The coach was fitted with three seats, and these were occupied by nine passengers. As the occupants of the front and middle seats faced each other, it was necessary for these six people to interlock their knees; and there being room inside for only ten of the twelve legs, each side of the coach was graced by a foot, now dangling near the wheel, now trying in vain to find a place of support. An unusually heavy mail in the boot, by weighing down the rear, kept those of us who were on the front seat constantly bent forward, thus, by taking away all support from our backs, rendered rest at all times out of the question.

J. M. Farwell, special correspondent of the Daily Alta California, took the Overland stage from San Francisco to St. Louis in October 1858 and sent his paper a series of letters about the trip. His experiences illustrated the difficulty of handling wild horses (DAC, 1858).

Changing horses we started on again for the San Pedro station, near the San Pedro river, where the traveler going eastward takes leave of the waters flowing toward the Pacific. This is a branch of the Gila. We arrived at the station about 10 o'clock, A.M., about 1 mile to the eastward of the river. Some coffee was prepared for us, and we were soon ready to start again. This time, after we were all seated in the coach, the horses, which were said to have been always kind and gentle, refused to move. After a great deal of beating, coaxing and a trial of various methods suggested by almost every one present, we were all obliged to get out again, and after a great deal of trouble, the horses were started, but the passengers being out of the coach, the driver was obliged to stop again, and again, after they were in, the horses refusing to go. After working with might and main for some time, they were got off upon a run, and this time they were kept going. Hitherto, in starting from any station, a person was obliged to stand at the heads of the horses—they being with few exceptions wild ones—until the driver was seated on his box, the reins gathered and everything in readiness, when he would give the signal, "turn 'em loose," or "let 'em go," and away they would go upon a run. As we get further along, however, they are growing tame, and are more easily handled.

The Overland Mail route through southern Arizona ended in 1861 because of Indian attacks and the anticipation of the Civil War (Farish, 1915, p. 10, 14-15; 25, 29-30 abs.; Winther, 1957, p. 103-106). The route had never been a popular one, and many emigrants had preferred the shorter and less hazardous by way of South Pass and Salt Lake. The Southern faction that

had caused the selection of the southern route no longer controlled Congress. On March 2, 1861 Congress directed that the company change to a more northern route via South Pass and Salt Lake and gave the company a year to make the change. The Overland Mail Company suffered severe losses in making the route change. It gave up all of the improvements it had made in the way of stations and ferries and suffered heavy losses in stock, equipment, and forage. Texas confiscated whatever it could obtain in company property. Indians were emboldened by the withdrawal of federal troops from portions of the southern route and made attacks that produced severe losses and hindered the transfer of stock and equipment to the central route.

A transportation era had ended. Stage service to southern Arizona would not resume until 1866 (Ring, 2012, p. 8). (Future articles will discuss the role played by the San Pedro Crossing during the Civil War, the growth of a network of roads in the San Pedro River Valley, some of the many stage lines that operated in the valley, freighting companies, and the arrival and impact of railroads on the valley.)

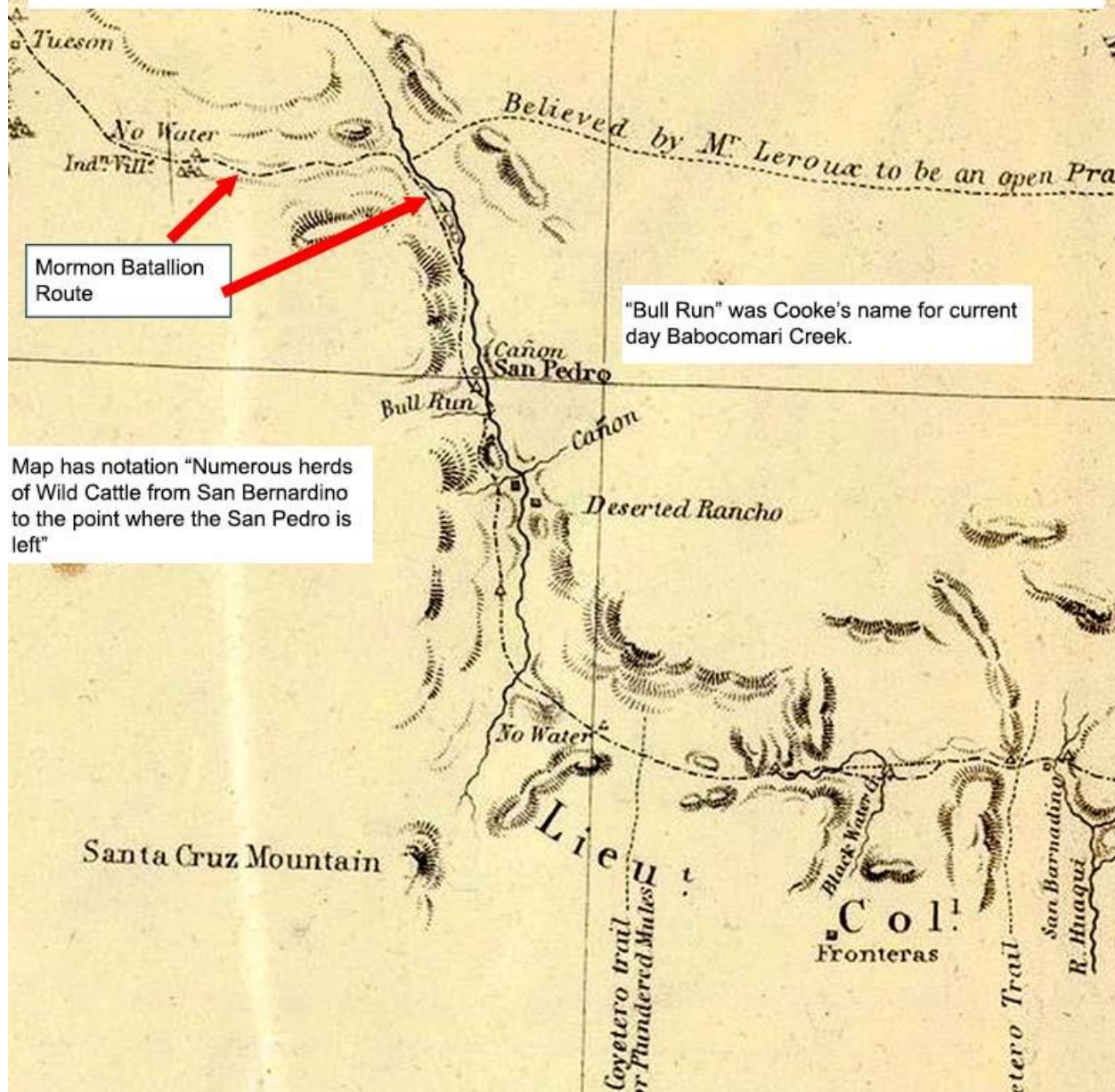
References

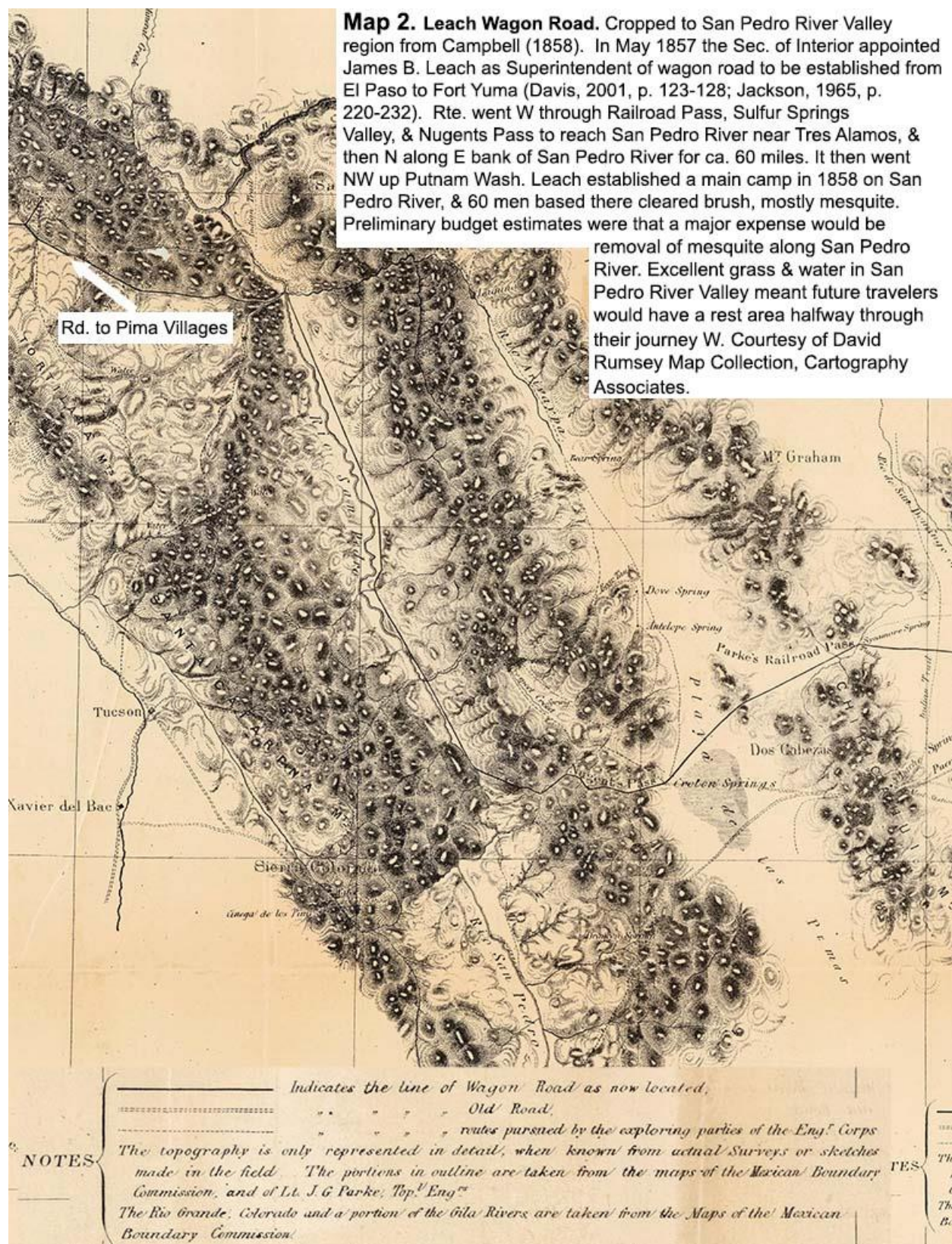
- Ahnert, G. T. 2013. Butterfield Overland Mail Company Stagecoaches and Stage (Celerity) Wagons used on the Southern Trail 1858-1861. 16 p. (PDF accessed May 22, 2015 at http://www.parks.ca.gov/pages/22491/files/butterfield_overland_mail_company_stagecoaches_and_stage_wagons_used_on_southern_trail_1858-1861_gerald_ahnert.pdf).
- Bell, W. A. and Cantab, M. B. 1870. New tracks in North America: a Journal of Travel and Adventure Whilst Engaged in the Survey for a Southern Railroad to the Pacific Ocean during 1867-8 (Google eBook). Chapman and Hall, London. Vo. 1. Second Edition. 565 p. (PDF downloaded June 19, 2013 from http://books.google.com/books/about/New_tracks_in_North_America.html?id=V3gFAAAQAAJ).
- Campbell, A. H. 1858. Map No. 1 of the El Paso & Fort Yuma Wagon Road. J.B. Leach, Superintendent. Made under the direction of N.H. Hutton, Chief Engr. Assisted by G.C. Wharton, Prinl. Asst. Engr. W.D. Cress and P.G. Hume, Assts. 1857-8. Thos. S. Wagner Lith. 38 Hudson St. Philada. Dept. of the Interior, Pacific Wagon Roads. (Sen. Ex. Doc. No. 36. Ho. Ex. Doc. No. 108 - 2nd Sess. 35 Cong.). T.S. Wagner's Lith., Philadelphia. (JPG downloaded April 28, 2015 from http://www.davidrumsey.com/luna/servlet/detail/RUMSEY~8~1~204723~3002261:Map-No--1-of-the-El-Paso-&-Fort-Yum?sort=pub_list_no_initialsort%2Cpub_date%2Cpub_list_no%2Cseries_no&qvq=w4s:/who/Cress,+W.D./Hutton,+N.H./what/Explanation+Book/when/1859;sort:pub_list_no_initialsort%2Cpub_date%2Cpub_list_no%2Cseries_no;lc:RUMSEY~8~1&mi=0&trs=2#). Courtesy of David Rumsey Map Collection, Cartography Associates.
- Custer, H. 1859. Explorations and Surveys for a Rail Road Route from the Mississippi River to the Pacific Ocean. War Department. Route near the 32nd. Parallel of North Latitude. Vol. 11 of 13 vol. set. Map No. 2. From the Pimas villages to Fort Fillmore. From Explorations and Surveys Made under the Direction of the Hon. Jefferson Davis. By Lieut. John G. Parke. Top. Eng. assisted by Albert H. Campbell, Civil Engineer and N.H. Hutton H. Custer and G.G. Garner. Scale of 12 Miles to one Inch or 1.760320. 1854 & 55. Constructed and drawn by H. Custer. [The map has the following additional text: "Note. The Gila River, from the mouth of the valle del Sauz eastward, is laid down from the reconnaissance of Maj. W. H. Emory, U.S.T.E. in 1846_ the remaining portion of the Gila; the positions of Frontera, El Paso, Ft. Fillmore and Tucson, and the topography along the Mexican Boundary Line were furnished by the office of the Mexican Boundary Commission, Maj. W. E. Emory, Commissioner. The heavy dotted line indicates new trails were made by Lt. Parke's Parties." War Department, Washington D.C.] [The Library of Congress metadata about this map lists the publication date as 1859. Volume 7, published in 1857, of the 13 volume series mentioned the map. However, this map & most others in the series was published in 1859 in volume 11.] (JP2 downloaded April 17, 2015 from <http://www.loc.gov/resource/g4330.r001590/>).
- DAC. 1858. Daily Alta California p 1. Letter from our Overland Correspondent. Tuesday, November 16, 1858. Vol. 10, No. 315. (PDF accessed June 12, 2015 at <http://cdnc.ucr.edu/cgi-bin/cdnc?a=d&d=DAC18581116.2.6&e=-----185-en-Logical-20-DAC-1-byDA--txIN-Farwell-ARTICLE---1858--#>).
- Davis, G. P. 2001. Men and Wildlife in Arizona: The American Exploration. 1824-1865. Arizona Game and Fish Department. Phoenix, Arizona. xii + 225 p.
- de Witzleben, A. 1860. R.P. Kelley's Map of the Territory of Arizona. Compiled from his Private Notes Taken while U.S. Deputy Surveyor and from the Latest Official Reports in the Departments at Washington City. Theodore Schrader, St. Louis, Missouri. (Tiff downloaded April 16, 2015 from <http://www.loc.gov/resource/g4330.ct002289/>).
- Dixon and Kasson. 1859. Outline of the Butterfield Route. [From pamphlet accompanying Dixon and Kasson's "Map of the Overland and Ocean-Mail Routes," San Francisco, Hutchings and Rosenfield, February, 1859.] Quarterly Publication (Historical Society of Southern California), 17: 104-107.
- Ehrenberg, R. E. 2005. U.S. Army Military Mapping of the American Southwest during the Nineteenth Century, p. 80-129. In, Reinhartz, D. and Saxon, G. D. 2005. Mapping and Empire. Soldier-Engineers on the Southwestern Frontier. University of Texas Press, Austin. xx +204 p.

- Emory, W. H. 1848a. Notes of a Military Reconnaissance: From Fort Leavenworth, in Missouri, to San Diego, in California, Including Parts of the Arkansas, Del Norte, and Gila Rivers. P. 1-126, In, Ex. Doc. No. 41, 30th Congress-First Session. Wendel and Van Benthuyzen, Printers, Washington, D.C. 614 p. (PDF file available at http://books.google.com/books/about/Notes_of_a_Military_Reconnaissance.html?id=ggFZAAAAMAAJ; and <http://sciencequest.webplus.net/Arizona%20Early%20Explorers.html>).
- Emory, W. H. 1848b. Military Reconnaissance of the Arkansas Rio Del Norte and Rio Gila by W. H. Emory, Lieut. Top. Engrs. Assisted from Fort Leavenworth to Santa Fé by Lieut. by J. W. Abert and W.G. Peck, and from Santa Fé to San Diego on the Pacific by Lieut. W. H. Warner and Mr. Norman Bestor, Made in 1846-7, with the advance guard of the "Army of the West". Under Command of Brig. Gen. Stephn. W. Kearny. Constructed under the Orders of Col. J. J. Abert Ch. Corps Top. Engrs 1847. Drawn by Joseph Welch. Engraved on stone by E. Weber & Co. Baltimore. [Produced (Wheat, 1954, p. 115) as part of Emory, 1848a.] (JPEG accessed May 13, 2015 at <http://www.davidrumsey.com/luna/servlet/detail/RUMSEY~8~1~1810~180024: Military-Reconnaissance-Of-The-Arka#>). Courtesy of David Rumsey Map Collection, Cartography Associates.
- Farish, T. E. 1915. History of Arizona. Vol. II. The Filmer Brothers Electrotype Company, San Francisco.viii + 348 p. (PDF downloaded August 1, 2013 from <http://books.google.com/books?id=YEoGHWCr5c4C&printsec=frontcover&dq=history+of+arizona&hl=en&sa=X&ei=qPz6Ub9egsOKAqrOgiAJ&ved=0CC8Q6AEwAA#v=onepage&q=history%20of%20arizona&f=false>).
- Farish, T. E. 1916. History of Arizona. Vol. IV. The Filmer Brothers Electrotype Company, San Francisco. ix + 351 p. (PDF downloaded August 1, 2013 from <http://archive.org/details/historyofarizona04farij>).
- Giddings, E., Mahon, W. and Kielman, C. V. 1957. George H. Giddings and that San Antonio-San Diego Mail Line. The Southwestern Historical Quarterly, 61: 220-239.
- Jackson, T. W. 1965. Wagon Roads West. A Study of Federal Road Surveys and Construction in the Trans-Mississippi West 1846-1869. Yale University Press, New Haven. xix +422 p.
- Ormsby, W. L. 2007. The Butterfield Overland Mail, by Waterman L. Ormsby. Edited by Lyle H. Wright and Josephine M. Bynum. The Henry E. Huntington Library and Art Gallery. xv + 179 p.
- MW. 2015. MeasuringWorth (Website calculator accessed June 24 2015 at (<http://www.measuringworth.com/ppowerus/>).
- Pumpelly, R. 1918. My Reminiscences. With Illustrations and Maps in Two Volumes. Vol. 1. Henry Holt and Company, New York. Xiii + 438 p. (PDF accessed May 22, 2015 at <https://archive.org/details/myreminiscences04pumpgoog>).
- Ring, B. 2012. The History of Stagecoaches in Tucson, Arizona. (PDF accessed May 30, 2015 at <http://ringbrothershistory.com/bobsprojects/TheHistoryofStagecoachesinTucson,Arizona.pdf>).
- Sanders, K. 2013. The Butterfield Overland Mail Route through New Mexico and Arizona 1858-1861. Amazon CreateSpace. 176 p.
- Talbot, D. 2002. A Historical Guide to the Mormon Battalion and Butterfield Trail. Westernlore Press, Tucson. Second Printing. 124 p.
- Tallack, W. 1865. The California Overland Express. The Longest Stage Ride in the World. Published Serially in 4 Parts in The Leisure Hour, Vol. 4. London. 11-15 , 21-23 ,43-45 ,60-64. (PDF accessed May 18, 2015 at https://books.google.com/books/about/The_Butterfield_Overland_Mail.html?id=uoTAAAYAAJ&hl=en).
- WarDept. 1867. Old Territory and Military Department of New Mexico. Compiled in the Bureau of TopogL. ENG RS of the War Dept chiefly for military purposes under the authority of the Secretary of War 1859. Partially revised and corrected to 1867. United States, Topographical Bureau, Washington D.C. (Made from SID file map that showed military Department of New Mexico, with such department then including Arizona. SID file downloaded May 1, 2015 from <http://www.loc.gov/item/99446140/>).
- Winther, O. O. 1957. The southern Overland Mail and stagecoach line, 1857-1861. New Mexico Historical Review, 32: 81-106.
- Wood, J. C. 1858. Report to Hon. A. V. Brown, postmaster-general, on the opening and present condition of the United States overland mail route between San Antonio, Texas, and San Diego, California. 43 p. (PDF downloaded April 28, 2015 from <http://babel.hathitrust.org/cgi/pt?id=miun.aft3376.0001.001;view=1up;seq=1>).

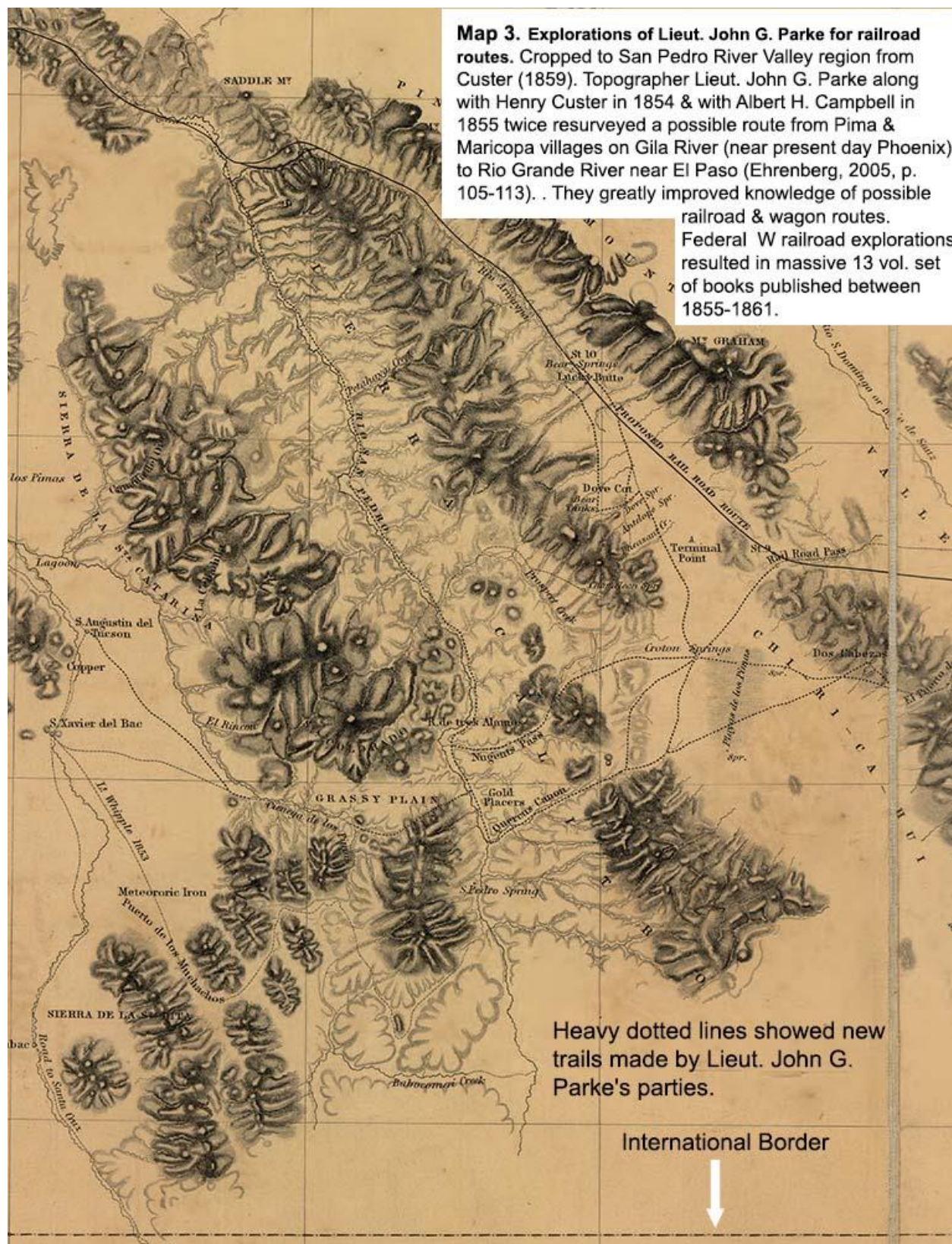
Map 1. Army of the West Explorations during Mexican-U.S. War. Cropped to San Pedro River Valley region from Emory (1848b.) Colonel Stefan Watts Kearny commanded Army of the West & led 1 of 2 columns that moved W. He traveled along Gila River. One mission of army was to create first accurate map of area from Rio Grande W to Pacific. Lieut. William Hemsley Emory, a highly skilled topographic engineer, led a 14-man contingent in column of topographic engineers. Emory produced accurate maps & wrote a very informative & well-received volume about W that Congress had published in 1848 (Emory, 1848a).

Captain Philip St. George Cooke commanded Mormon Battalion, 2nd column of Army of the West. Battalion was tasked with finding a suitable trail for passage both for its wagons & for those of future travelers. Battalion reached San Pedro River Dec. 9, 1846 by following Greenbush Draw to it, at a point ca. 3 km SW of current day Hereford (Talbot, 2002, p. 38). It then marched N along river until striking a route NW in area of current day Benson. Army promoted Cooke to Lieutenant Colonel by time of this map. Courtesy of David Rumsey Map Collection, Cartography Associates.





Map 3. Explorations of Lieut. John G. Parke for railroad routes. Cropped to San Pedro River Valley region from Custer (1859). Topographer Lieut. John G. Parke along with Henry Custer in 1854 & with Albert H. Campbell in 1855 twice resurveyed a possible route from Pima & Maricopa villages on Gila River (near present day Phoenix) to Rio Grande River near El Paso (Ehrenberg, 2005, p. 105-113). . They greatly improved knowledge of possible railroad & wagon routes. Federal W railroad explorations resulted in massive 13 vol. set of books published between 1855-1861.



Heavy dotted lines showed new trails made by Lieut. John G. Parke's parties.

International Border



Fig. Map 4. Route of both San Antonio-San Diego Mail Co. & Butterfield Overland Mail Co. Cropped to San Pedro River Valley region from de Witzleben (1860). Butterfield & his associates organized The Overland Mail Company (Winther, 1957). It used existing railroad & wagon road facilities. Section rode by wagon extended only within 160 miles of St. Louis, ending at railroad terminal in Tipton, Missouri. Co. shipped mail by railroad over remaining 160 miles. Routes from E terminals at Tipton & Memphis, Tenn. met at Fort Smith, Arkansas. Route in Arizona followed former route of San Antonio-San Diego Mail Line. In Arizona the route for the Antonio-San Diego Mail Co. & initially for the Butterfield Overland Mail Co. went to Dragoon Springs then SW through Quercus Cañon (now known as Dragoon Wash) to the San Pedro River, N 6 miles, & crossed the river by the white arrow (Sanders, 2013, p. 92-96; Ormsby, 2007, p. 85; Wood, 1858, p. 17, 40). The Butterfield Overland Mail Co. had a station by the white arrow and by approximately late October 1858 switched to a shorter & more direct route that avoided Quercus Cañon & went directly to the San Pedro Station.



Indian attacks were a major concern, & 1859 Butterfield pamphlet (Dixon & Kasson, 1859) claimed 25 well armed men guarded every station & every wagon. Butterfield stations averaged ca. 18 miles apart, but some were as close as 12 & some more than 30 miles apart (Tallack, 1865). They were mostly log houses or adobe constructions, with each having several well armed men. For an extra charge passengers could obtain meals twice a day. **One station was at Middle Crossing just E of San Pedro River** (DAC, 1858; Sanders, 2013, p 95). Butterfield fare for through passage between E and W was after some experimentation set at \$200, not including meals, which averaged from \$0.40 to \$1 each (Farish, 1915, p. 13, 28 abs.; Winther, 1957, p. 97-98). Food generally was items such as (Farish, 1915, p. 13, 28 abs.; Tallack, 1865) bread or heavy biscuits, corn bread, chicory coffee sweetened with molasses or brown sugar, tea, fried pork floating in grease, & fried steaks of bacon, venison, antelope, or mules. Vegetables, milk, & butter were only available within Calif. & at stations in central portions of W Mississippi valley.

Map 5. Military map showing some major routes. Cropped to San Pedro River Valley region from WarDept (1867). Map apparently based on info. from well before 1867. By late 1858 many travelers were able to save time & miles by going directly to San Pedro Crossing without detour through Quercus Cañon.

