

SOUTHERN NEW MEXICO HISTORICAL REVIEW



Pasajero del Camino Real
By
J. CISNEROS '89

Doña Ana County Historical Society

Volume XXVI Las Cruces, New Mexico January 2019

Doña Ana County Historical Society

Publisher

Board of Directors 2019

President: Dennis Daily

Vice President: Vacant

Past President: Susan Krueger

Secretary: Jim Eckles

Treasurer: Dennis Fuller

Historian: Sally Kading

At Large Board Members

Garland Courts

Luis Rios

Leah Tookey

Sara Wagner

Daniel Aguilera

Buddy Ritter

Review Editor: Cheryl Fallstead

Review Coordinator & Design: Jim Eckles

Cover Drawing by Jose Cisneros

(Reproduced with permission of the artist)

The *Southern New Mexico Historical Review* (ISSN-1076-9072) is looking for original articles concerning the Southwestern Border Region. Biography, local and family histories, oral history and well-edited documents are welcome. Charts, illustrations or photographs are encouraged to accompany submissions. We are also in need of book reviewers, proofreaders, and someone in marketing and distribution.

Current copies of the *Southern New Mexico Historical Review* are available for \$10. If ordering by mail, please include \$2.00 for postage and handling. Back issues of the print versions of the *Southern New Mexico Historical Review* are no longer available. However, all issues since 1994 are available at the Historical Society's website: <http://www.donaanacountyhistsoc.org>. The PDF files or parts of them can easily be downloaded and printed. Correspondence regarding the **Review** should be directed to the Editor of the *Southern New Mexico Historical Review* at Doña Ana County Historical Society, P. O. Box 16045 Las Cruces, NM 88004-6045. Email messages can be sent to: 19dachs63@gmail.com

Articles may be quoted with credit given to the author and the *Southern New Mexico Historical Review*.

Editor's Note

It was my pleasure to again contribute to the Southern New Mexico Historical Review by editing articles. I've been fascinated with the history of the area since moving here a dozen years ago, and have researched and written about it myself for magazines, newspapers, and radio. However, I found myself learning about a wide range of topics in reading (and rereading) these submissions.

The authors diligently researched their topics and bring to you fascinating stories as wide ranging as Billy the Kid (a perennial favorite topic in this area), the use of iron in Spanish colonial days, a fuze that changed the course of a war, and the timeless battle over water rights in the desert Southwest. Two entries are set in El Paso, one a plea to save a one-time laundry that could help honor the contributions of the Chinese in El Paso, and the other outlining the history of military posts just across the border.

Some of the authors, such as Monte Rout and Frank Brito, bring us very personal stories of their own families. Judy Messal tells the tale of a soldier, an auto race, and murder. Jim Eckles' article is about local woman Clara Melendres Apodaca, whose beauty, charm, and intelligence took her far beyond her title of Miss Nike.

I congratulate all these writers for their hard work and dedication in contributing to this journal, which helps preserve the fascinating history of southern New Mexico (and beyond). I'm sure many of them are already hard at work on submissions to the 2020 New Mexico Historical Review!

Cheryl Fallstead

Southern New Mexico Historical Review

Volume XXVI

Las Cruces, New Mexico

January 2019

Contents

The Great El Paso-Phoenix Road Race of 1919: A Fateful Encounter In Doña Ana County Between John T. Hutchings and Frank M. Scanland <i>(Gemoets Prize-Outstanding Article)</i> Judith Messal	1
Frank C. Brito - Rough Rider, Patriot, Lawman Frank J. Brito	9
The Long Lost Letters Monte Rout	21
Contentious River: International And Interstate Controversy Concerning Rio Grande Water Allocations Within The U.S.-Mexico Borderlands, 1880-1928 Ian Anson Lee	27
When ‘The Kid’ Helped Uncle Rufus: Roswell’s First Blacksmith Recalls That Billy The Kid’s Quiet, Polite Demeanor Belied His Reputation As A Ruthless Killer Janice Dunnahoo	41
The Proximity Fuze And New Mexico’s Role: A World War II Secret Project George Helfrich	45
Desert Outpost, The Post Across From El Paso: American Empire And The Militarization Of The U.S. Mexican Border, 1848-1850 Shawn Warswick	59
An El Paso Chinese Laundry Carolyn Williams	69
Clara Melendres Apodaca: From Miss Nike To New Mexico First Lady Jim Eckles	75
Iron In The Spanish Colonial Borderlands: An Interpretation Of Life, the Politics Of Empire, And The Camino Real Dale Taylor	83

The opinions expressed in the articles are those of the authors and do not necessarily reflect those of the Doña Ana County Historical Society.

Southern New Mexico Historical Review

Sponsors

Robert Pick
Dennis Daily
Susan Krueger and Jesus Lopez
George and Sandy Abernathy
Bob and Cherie Gamboa
Michael Jarvis
Dennis Fuller
Barbara Stevens
Charles Murrell
Frank and Priscilla Parrish
Lois Gilcrease
Robert and Alice Distlehorst
Jim Eckles
David Hall
Deb Dennis
George and Alice Helfrich

Corporate Sponsor

Double Eagle Restaurant & Peppers Cafe
On The Mesilla Plaza

The Great El Paso-Phoenix Road Race of 1919

A Fateful Encounter In Doña Ana County Between John T. Hutchings and Frank M. Scanland



By Judith L. Messal

Abstract

In the summer of 1919, two soldiers, John T. Hutchings and Frank M. Scanland, came home from the Great War in Europe. One resumed his life as a civilian in Alamogordo. The other traveled to Fort Bliss for treatment of war injuries. Within months of their return, they encountered each other on a highly anticipated cross-country road race that passed through Doña Ana County. The result was tragic. Several of southern New Mexico's prominent men played supporting roles in a drama of lives lost and justice sought. The year-long story that unfolded from the encounter has been reconstructed from newspaper reports of that time.

It was 4 a.m. on Sunday, November 2, 1919, in El Paso, Texas. Following a late-night dinner and brief rest, eight friends were up for the launch of the El Paso-to-Phoenix auto race. The four men and four women had gathered at the home of a young army officer from Fort Bliss, and, in the cold hours before dawn, they set off to find a place along the race route in southern New Mexico.

The competition featured forty-one racers on a rough course that took more than thirteen hours to finish. Only ten cars would get to Phoenix. One of them, car number 16, would not travel far at all. Half an hour into the race, its driver and one of the El Paso men would encounter one another in a tragic event. The tragedy would be compounded a year later.

Hutchings and Scanland

John T. Hutchings, the driver of car no. 16,

was favored to win the 1919 race.¹ Automobiles were the young man's life. They figured into his livelihood, his service to his country, and his pastimes. Born in England, Hutchings had become a U.S. citizen. In 1902, he moved from New York to the Territory of New Mexico and worked as a chauffeur for attorney and rancher Albert Bacon Fall. By 1916, the young man was on another adventure: chauffeuring General John J. Pershing in his pursuit of Pancho Villa in Mexico.

In 1917, shortly after the United States entered the First World War, John Hutchings, twenty-nine, was drafted.² Described in military records as tall and brown-eyed, he left a wife and garage business back in Alamogordo. In 1918, he sailed to Europe with Company B, 332nd Battalion, Tank Corps. There he served as a chauffeur at General Pershing's headquarters.

John Hutchings was honorably discharged on July 7, 1919. He returned home to work as a Buick agent and resumed racing. Well-known among car enthusiasts, he often had won races in El Paso and Cd. Juarez. In 1914, he had come in second in the El Paso-Phoenix race although he had had to deal with ten tire changes.³ In 1919, he was trying for first place, and his friends were betting on him. A large amount had been wagered on his winning.

The second man in the story was Frank M. Scanland, also in his thirties. He was new to El Paso. A tall, hardy Kentuckian with a broad, boyish face, he had been in the military since 1902 and earned the rank of major. Like Hutchings, Scanland recently had returned from the Great War. He had served on the Italian front and later commanded a battalion in Montenegro. While in Europe, he had suffered injuries from gassing. His

chemical-warfare wounds had brought him to El Paso, and he was in treatment at the hospital at Fort Bliss.

Scanland had bought a house in El Paso, occupying one room and arranging for a local woman, Mrs. P. L. Holbrook, to occupy the rest.⁴ Holbrook and Scanland's other friends may or may not have known about the existence of his wife, Alice, in New York. There was an air of mystery about the major. As the story of November 2, 1919 progressed, the mystery grew.

Incident in Doña Ana County

Given what was to transpire, it was perhaps unfortunate that Frank M. Scanland accepted the invitation of his new friends to watch the early hours of the El Paso-Phoenix race on November 2. He was not interested in the competition, he would say later, nor was he acquainted with any of the racers. But it was a big event for the region. Spectators were positioning themselves all along the route that morning. In Deming, church attendance was low, a local paper reported.⁵

The El Paso party drove into Doña Ana County in southern New Mexico. They found a good spot along the road and started a campfire against the autumn chill. A bottle of whiskey materialized, as did two guns. Major Scanland had his .45 caliber Smith & Wesson army revolver. Chalk Altman, once a deputy sheriff in Doña Ana County, had his own revolver.⁶ The men decided to do some target shooting while they waited for the cars to roar by. Harry Overstreet took his turn with a pistol but preferred to cross the road and watch the racers. The move would give him an important vantage point as events progressed. One of the women in the group kept a tally of the cars as they passed by, another key activity.

Meanwhile, John T. Hutchings of Alamogordo was ready to race. At his side was his friend, a distinguished older gentleman from Otero County. He was serving as Hutchings' mechanic—or, as the position was called then, his mechanic. Around 7 a.m., the two men started. Soon they were out of El Paso County and into Doña Ana

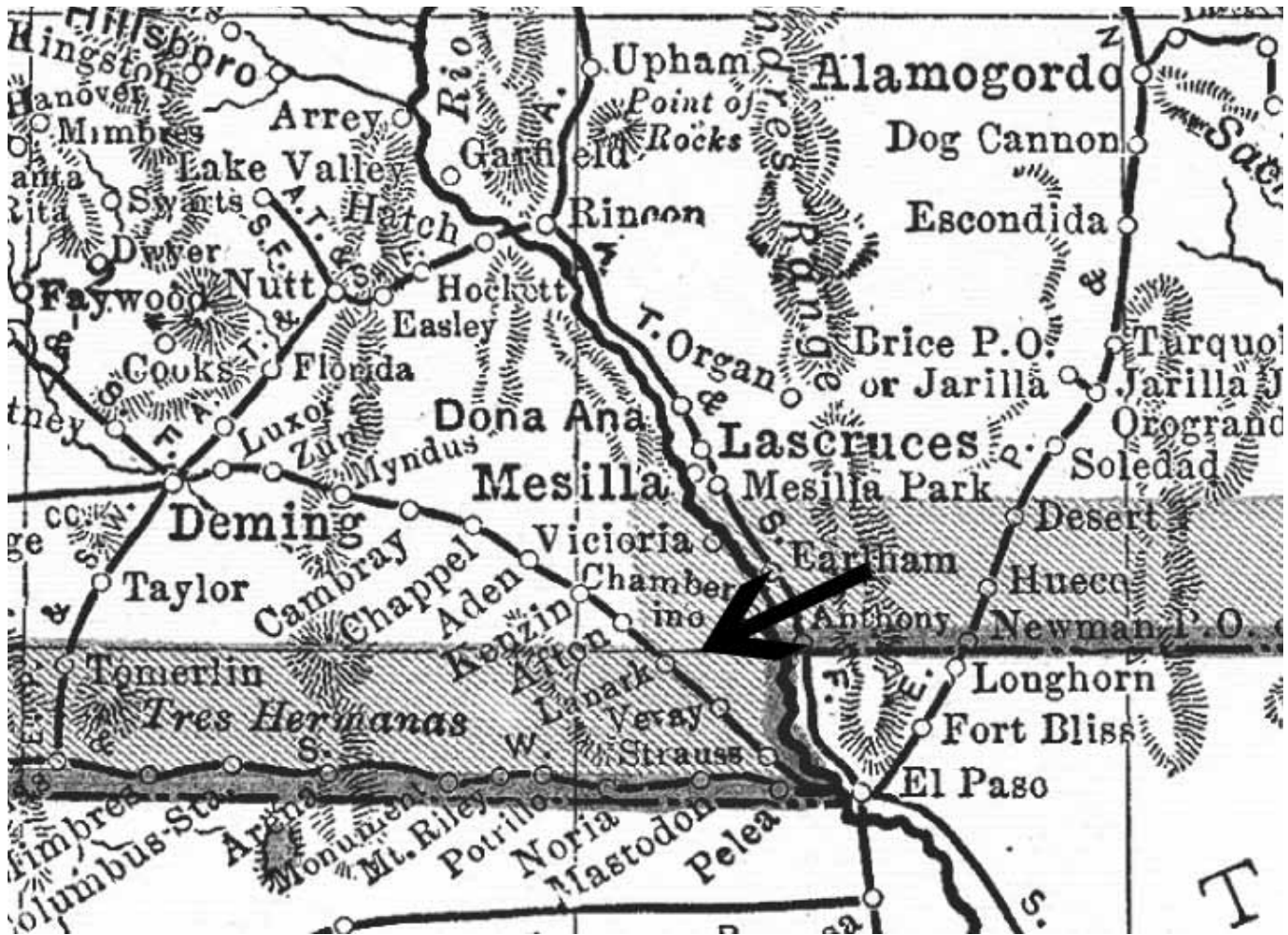
County, traveling along at 45 miles per hour in Hutchings' Buick. It was a good speed on a sandy track in a vehicle of early 20th-century capabilities.

Suddenly, at mile post number 20, gunfire rang out from the side of the road. Car no. 16 had just passed that point, and the mechanic later would recall seeing two men with arms raised to shoot as the car passed them. Then he heard four to six shots, ones which he thought had missed them until Hutchings called out, "That fellow hit me, let's go back."⁷ The wounded man stopped the car after about 100 yards and attempted to turn around to confront the shooter. He quickly lost control. The mechanic, after putting Hutchings in the passenger seat, took the wheel. Since neither man was armed and since Hutchings' injuries seemed grave, they decided to go on to Lanark for help. After about a quarter of a mile, the older man put his arm around Hutchings, who had slumped over.

Lanark, thirty miles northwest of El Paso, was on the Southern Pacific Railroad line to Los Angeles. It offered a fuel depot, a water tank, and a post office. Now a ghost town referred to as Lanark Siding, it lies between La Union and the volcanic depression of Kilbourne Hole near the intersections of County Roads A011 and A-12. Remote even in 1919, Lanark was frantically busy on November 2.⁸ The mechanic rushed into the railroad office to wire for medical aid. Dr. John Hardy responded to the call, making his way to the little settlement in a disqualified race car. It broke down, and he transferred to a touring car that came along. Dr. Hugh White and a Dr. Jamison, also headed to Lanark. The physicians did what they could for Hutchings and, at noon, put him on the Golden State Limited to El Paso. At Hotel Dieu, Dr. H. E. Stevenson began to operate on the young man.

The Arrest

At Lanark, the mechanic had come across two of his friends watching the race: Texas District Judge W. D. Howe and Winchester Cooley.



This segment of a 1919 map of southern New Mexico shows the road out of El Paso heading north-west toward Deming. A few of the names such as Afton and Aden live on but most of the rest have completely died away. Note: there is no road from Las Cruces to Deming.

He enlisted their help and borrowed a rifle. Back at mile post no. 20, the men found the El Paso party still shooting, seemingly unaware of any mishap and surprised that a racer had been shot. Hearing that they were suspects, the men surrendered their guns. Judge Howe took a bullet from Scanland's .45 and inscribed it with his initials to use as evidence.⁹ In El Paso, Dr. Stevenson was removing a similar bullet from John T. Hutchings.

Howe and the others followed the Scanland group to the courthouse in Las Cruces. Chalk Altman, who had sipped a fair amount whiskey, was not able to drive his car, Scanland later would testify.¹⁰ Harry Overstreet took the wheel. Meanwhile, on the other side of the mountains, Mary Hutchings had left Alamogordo and was hurrying

to El Paso to be with her husband. She did not arrive in time. At 3:20 p.m., John Hutchings died.¹¹

When the mechanic heard that his friend had not survived, he went to Doña Ana County Acting District Attorney Mark B. Thompson to file a complaint on charges of murder. Then he visited Justice of the Peace Cruz Garcia for a warrant of arrest.¹² The grieving man was no stranger to legal procedures. He who had accompanied John Hutchings on his ill-fated race was none other than Oliver Milton Lee. Lee, one of the most famous men in southern New Mexico, himself had faced a murder charge twenty years prior and had been defended by Albert B. Fall. In a trial that drew nationwide press, Lee had been acquitted and resumed his life as a rancher. In 1919, he

was serving as a state representative from Otero County.

Sunday, November 2, which had started before dawn for the eight El Paso friends, ended badly for them and devastatingly for the Hutchings family. At the Doña Ana County jail, the four men were behind bars. The women occupied makeshift quarters in the courtroom.

L. E. Claypool of the *El Paso Herald* was on the story. Scanland, who had not yet seen an attorney, told the reporter of the early morning gathering of friends and the drinking and shooting by the roadside. He recalled being confronted with the news that a bullet from his gun had hit a racer. "It is the most unfortunate thing in my life," he said. "I feel sorry about this beyond expression."¹³ His view of his role in Hutchings' death soon would change.

The Preliminary Hearing

A preliminary hearing set for Monday was delayed to accommodate the schedule of Judge Howe, a witness in the case. Reporters used the time to file updates on a story that was spreading across the country. Albert B. Fall, serving in the U.S. Senate at the time, may have been the reason the story circulated so widely. Many newspapers connected the deceased racer with his former employer Senator Fall.

Reporter Claypool, for his part, introduced the eight suspects to the public. He noted that the women were "pretty and well dressed."¹⁴ One was married to Harry Overstreet; another was Scanland's housemate. Ella McPherson worked for an oil company, and Billie Bennett, was a cabaret pianist. They seemed to be enjoying themselves, Claypool wrote, undaunted by the arrest except for worries about their families' and friends' reactions. Sheriff Jose Lucero was providing them good food, comfortable beds, telephone access, and shelter from public scrutiny, the women said.

The men, by contrast, were solemn about their predicament, Claypool reported. Chalk Altman, the former law officer, had been a friend of

Hutchings. Harry Overstreet, a lawyer's son from Dallas, was new to El Paso. Ford Jackson, visiting from Alpine, was the son of a cattle industry leader and former Texas Ranger. For his part, Major Scanland lamented being accused of a crime while in the uniform of a military officer.

In interviews with other reporters, Scanland was more cautious than he had been with Claypool. He and the other men denied shooting at John Hutchings or aiming at his fuel tank. "If there was any shooting, it was accidental," they stated and refused to speak more.¹⁵

Meanwhile, Hutchings was making his last journey home.¹⁶ On Monday, his wife, Mary, and his business partner, Clarence Hunter, accompanied his body on train no. 4 going north to Alamogordo. Hunter had been with Hutchings since news of the shooting sent him rushing to Lanark. He had ridden with Hutchings to the hospital and stood vigil near the operating table. He had even retrieved the bullet that the surgeon extracted from his partner's abdomen.

On Tuesday, November 4, Judge Edwin C. Mechem of the Third Judicial District Court arrived in Las Cruces from his office in Alamogordo. He was a new jurist, forty-one years old, and part of an up-and-coming family in New Mexico government. That afternoon, he opened the hearing.¹⁷ The courtroom was filled, and an overflow crowd gathered outside the door. Special prosecutor Mark B. Thompson called Dr. H. E. Stevenson to the stand. The surgeon stated that he had removed a steel-jacketed bullet, hair, and car material from Hutchings' abdomen, but the bullet had cut an artery, causing a fatal hemorrhage. The doctor, an ex-army officer familiar with weapons, confirmed that the bullet could have come from Scanland's gun. When Major A. A. King of the El Paso garrison testified for the defense, he attempted to speak of Scanland's commendable wartime service. The state objected; the objection was sustained.

Although Scanland did not testify, the rest of the El Paso party did. They had not been betting on the auto race, they confirmed. Ella McPherson

recounted her race-tallying that morning, establishing that the group did know which race cars were passing by. Harry Overstreet offered other important details. Scanland was shooting too close to the road, he had told him. It could delay the racers. The major had apologized, saying, "I'm sorry. I wouldn't have the race stopped for anything in the world."¹⁸ As car no. 16 passed, Overstreet recalled, the mechanic had turned and looked down, as if checking for a punctured tire.

In the end, the state dropped the charges against all in the El Paso group except Major Scanland. Prosecutors asked that he be held without bail for first degree murder. W. H. H. Llewellyn and son, attorneys for the defense, objected. The evidence did not support the charge, they argued. Judge Mechem decided for the state.¹⁹

Frank Scanland was bound over to the grand jury and began to manage his case from the Doña Ana County jail.²⁰ His attorneys petitioned the New Mexico Supreme Court for a writ of habeas corpus. Physicians examined the major, finding his confinement detrimental to his war-weakened health. Through his counsel, Scanland asked to go to the state penitentiary for his own safety. Judge Mechem signed a transfer order, and on November 18, Sheriff Lucero escorted the prisoner to Santa Fe. By late November, a bond of \$25,000 was set. In January, it was posted, and Scanland and his attorney started the drive back to El Paso.

As the state prepared for trial, support poured in.²¹ Car enthusiasts in El Paso and Alamogordo raised \$6,500 to help with the prosecution of Scanland, and Senator Albert Bacon Fall announced that he would serve as a special prosecutor on the case.

The Scanland Trial

The trial of Major Frank M. Scanland began on March 12, 1920 before District Judge R. R. Ryan of the Sixth Judicial District Court in Silver City. Some elements in the case had shifted dramatically. A grand jury had just indicted Chalk Altman for murder, a great surprise since charges

against him had been dropped earlier.²²

Although the Altman trial was not to be held until fall, his indictment may have affected the March 12 proceedings. As Scanland's trial commenced, there were poignant and graphic moments.²³ Mary Hutchings, in black dress and in tears, was in the courtroom. Defense attorney J. H. Paxton had Scanland's friends and Oliver Lee clapping out the intervals between the gunshots as they had heard them. Major A. A. King was back, this time to testify about the power of an army revolver to penetrate a target. Scanland's proximity to car no. 16 meant that his bullet would have passed completely through Hutchings' body, King said. Its having lodged in the racer's abdomen pointed to a more distant shooter, he concluded, not having considered that the bullet's passage through the car itself could have reduced its speed and distance. A character witness was of special note. Pat Garrett of Las Cruces, likely the son of the famed sheriff, had been secretary to the U.S. ambassador in Rome. He had known Scanland there as an officer highly regarded by embassy staff.

The prosecution was asking for the death penalty. Major Scanland, fighting for his life, testified that he and Altman had exchanged revolvers before car no. 16 passed by. Therefore, the weapon that had killed John Hutchings was in the hands of another man, an intoxicated man at that, Scanland asserted. Reporter Claypool noted that the accused remained calm despite hard questioning, only once breaking his composure. It happened as Scanland talked about his interest in athletic endeavors and games. Prosecutor and Attorney General O. O. Askren, in a forceful rejoinder, asked, "On that day (November 2) you participated in a game wherein Johnny Hutchins [sic] had no chance, didn't you?" "Not that I know of, sir," Scanland replied, wincing slightly.²⁴

Scanland, probably thinking of his appeal, requested an acquittal or a first-degree murder conviction. Instead, the jury rendered a verdict of guilty on the lesser charge of involuntary manslaughter. Judge Ryan sentenced Scanland to eight

to ten years in the state penitentiary.²⁵ Soon, the major, out on bond, indeed was preparing his appeal.

Into the Woods

On October 18, 1920, a man walking through the woods near Alexandria, Virginia, had a terrible shock. In the bushes near his path, he saw the body of a man who had met a violent end. When police arrived, they found an individual “of powerful build,” whose injuries revealed that he had fought his killers.²⁶ He had been overpowered, however, and his skull crushed. He was dressed in a dark green suit, khaki cap, and tan shoes, all in good condition. The ground near him was undisturbed, leading to the notion that he was killed elsewhere—perhaps in different dress—and carried to the woods three days before his discovery. *The Washington Post* called the murder the “most baffling crime in northern Virginia in a decade.”²⁷

Investigators traced the victim’s recent past to a hotel room in Washington, D. C. There they found Frank M. Scanland’s suitcase and telling correspondence, parts of which were quoted in area papers:²⁸ One was a letter from his wife, Alice. She suggested Scanland pray a little and urged him to come home to attend to his health. She added a tender assurance: “The Lord is merciful if you just ask for His help—once in a while.” Another letter, from Austin, Texas, was addressed to “Daddy.” In elliptical terms, the writer encouraged him to take a road trip—perhaps for a rendezvous—and hoped he was having one of his “well days.” The letter was signed “Your Child.”

Hotel Raleigh reported that Scanland had paid for his room with a check that bounced.²⁹ Alice Scanland, in Washington to claim her husband’s body, could not explain the insufficient funds. Scanland recently had been discharged from the army and should have had enough money for his expenses. Then she learned that his bank accounts in various cities had low balances. Regarding the “Daddy” letter, her husband did not have children, she said.

The investigation continued.³⁰ A club turned

up near the crime scene. It was wrapped in a newspaper dated near the time of Scanland’s death but had not been used in a beating. Days before the body’s discovery, residents near the woods had reported hearing a woman in a passing car scream about a murder. A soldier’s diary fell into the hands of a man who then became a suspect. The diary told of travels to places Scanland had been, but the handwriting didn’t match his. In another incident, a woman paced outside the mortuary where Scanland’s autopsy was underway. She wanted to see the victim, she said, thinking he might have accompanied her estranged husband to her home one evening. The leads took investigators nowhere.

Several of Scanland’s own activities surfaced.³¹ In a greater context, they may have made sense, but as discrete incidents, they heightened the mystery of his life. He had borrowed an army pistol from a friend, wanting to show it to a congressman who had not seen such a weapon, he had said. The pistol was packed in his suitcase. He added a sister as a beneficiary on an insurance policy, thus reducing by half the amount his wife would receive. On the night of October 15, he stood up a military friend, who had waited at a restaurant for him. Then there was the matter of the gold watch. It was a gift from the Italian government for Scanland’s war service, and it was missing from his personal effects. Later, the watch showed up in Panama, a country Scanland recently had visited and to which he planned to return.

None of Frank M. Scanland’s actions shed light on his demise, but rumors circulated:³² Scanland was under death threat for the Hutchings shooting. Scanland was about to reveal who actually had pulled the trigger. Scanland had been supervising a squad of men involved in a clandestine exercise when a person in a passing car was shot.

In Memoriam

On October 27, Frank M. Scanland was buried in Kentucky, his parents among his mourners. Back in southern New Mexico, the citizens

of Orogrande graded eleven miles of new road south of town. In 1921, they named it Hutchings Speedway. The El Paso Auto Club created large signs for the road which read, "In Memoriam, John Hutchings, who lost his life in the Phoenix-El Paso Road Race."³³

The deaths of Hutchings and Scanland one year apart may have been connected, but the record thus far does not establish the link. Questions linger. What about Scanland's courtroom defense was not compelling to the jury? Was his compromised health a factor in the Hutchings shooting? The gassing wounds were not Scanland's only problem. He also had a head injury from shrapnel. His sisters remembered his even temperament, but his wife spoke of bouts of illness-related melancholy.³⁴ Might Scanland's brain functioning have explained his actions in Doña Ana County on November 2?

Then there was John T. Hutchings, a young man respected for his abilities and loved by his friends. From an early age, he had been connected to several powerful men in southern New Mexico, men like Albert Bacon Fall and Oliver Lee, who had encountered conflict and controversy in their

own careers. Could Hutchings' proximity to those individuals have made him vulnerable in some way? Did the wagering on the race have a part in his demise? Or had Hutchings simply been at the wrong spot on the road as a stray bullet came flying?

One hundred years ago, two young men crossed paths at a fateful moment at mile post no. 20 in Doña Ana County. Ultimately lives were lost; mysteries remained unsolved, and justice never was fully served. The men were more than their disastrous encounter, however. They both had served their country as soldiers at a critical time in world history and had lived lives worth remembering.

Judith Messal, as an associate college professor, taught English composition courses for international students at New Mexico State University. Since 2014, she has been researching the contributions of political and governmental figures in mid-20th century New Mexico. Having spent much of her life in southern New Mexico, she now lives and writes in Albuquerque.

End Notes

Source Note: All newspaper articles were accessed through newspapers.com.

1. "J. T. Hutchings Is Fatally Shot from Roadside," *El Paso Herald*, November 3, 1919.
2. U.S. World War I Draft Registration Cards, 1917-1918, for John Towers Hutchings, ancestry.com. New Mexico World War I Records, 1917-1919 for John Towers Hutchings, ancestry.com. U.S. Headstone Applications for Military Veterans, 1925-1963, ancestry.com. John T. Hutchings in the U.S. Army Transport Service, Passenger Lists, 1910-1939, ancestry.com. "John T. Hutchings Is Fatally Shot from Roadside."
3. "J. T. Hutchings Is Fatally Shot from Roadside."

4. "Scanland Trial End Is in Sight; All Testimony Is Presented," *Albuquerque Journal*, March 13, 1920.
5. "Miller Drove Winning Car in Road Race," *The Deming Headlight*, November 7, 1919.
6. "J. T. Hutchings Is Fatally Shot from Roadside."
7. Ibid.
8. "Lanark," Ghost Towns in New Mexico and Texas. Retrieved October 29, 2018 from <http://www.rbs0.com/abandon.htm>. Lanark, NM, retrieved October 29, 2018 from <https://itouchmap.com/?d=920627&s=NM&f=ppl>. Hutchings Is Fatally Shot from Roadside." "Fastest Time Made

across Luna County,” *The Deming Graphic*, November 4, 1919.

9. “Race Driver Shot in Back,” *Las Cruces Sun-News*, November 7, 1919.

10. “Scanland Trial End Is in Sight; All Testimony Presented.”

11. “J. T. Hutchings Is Fatally Shot from Roadside.”

12. “Miller Drove Winning Car in Road Race.”

13. L. E. Claypool, “Maj. Scanland Admits His Party Had Been Drinking before Hutchings Shot,” *El Paso Herald*, November 3, 1919.

14. L. E. Claypool, “Hutchings Automobile with Bullet Holes, May Be Evidence in Hearing of Eight under Arrest at Las Cruces,” *El Paso Herald*, November 4, 1919.

15. “Race Driver Shot in Back.”

16. “J. T. Hutchings Is Fatally Shot from Roadside.” “Race Driver Shot in Back.”

17. L. E. Claypool, “Major Is Held in Death of Hutchings,” *El Paso Herald*, November 5, 1919. “Major Scanland Is Held Pending Grand Jury Action,” *El Paso Times*, November 5, 1919.

18. L. E. Claypool, “Major is Held in Death of Hutchings.”

19. Ibid.

20. “Major Scanland Freed on Bond,” *The Evening Herald* (Albuquerque), January 10, 1920. “Major Scanland Examined by Physicians,” *The Columbus Weekly Courier*, November 28, 1919. “Maj. Scanland Taken to Santa Fe,” *Albuquerque Journal*, November 18, 1919. “Scanland Gets Bail,” *Deming Headlight*, January 16, 1920.

21. “Senator Fall Will Prosecute Scanland’s Case,” *El Paso Herald*, November 15, 1919.

22. “Grand Jury Springs Surprise,” *Las Cruces Sun-News*, March 5, 1920.

23. “Scanland Trial End Is in Sight; All Testimony Is Presented.” “End Evidence in Scanland Murder Case,” *Bisbee Daily Review*, March 13, 1920. “Manslaughter Is Verdict in Scanland Murder Case,” *Carrizozo Outlook*, March 19, 1920.

“Major Scanland Found Guilty,” *Las Cruces Sun-News*, March 18, 1920.

24. L. E. Claypool, “‘Life for a Life’ Demanded by Prosecution as Fate of Maj. Scanland Goes to Jury,” *El Paso Herald*, March 13, 1920.

25. “Major Scanland Found Guilty,” *Las Cruces Sun-News*, March 19, 1920.

26. “Major Made Fight for Life,” *San Francisco Examiner*, October 25, 1920. “All Clues Fail in Murder of Maj. Scanland,” *The Washington Herald*, October 25, 1920.

27. “Murder Is Mystery,” *Washington Post*, October 24, 1920.

28. “Body of Man Slain in Woods Identified as Ex-Army Major,” *Evening Star* (Washington, D.C.), October 23, 1920. “Major Made Fight for Life.”

29. “Seek Mystery Woman’s Husband in Slaying: Crime Victim Was Indicted,” *The Washington Times*, October 24, 1920.

30. “Identify Body Found in Virginia,” *The Washington Times*, October 23, 1920. “Seek Mystery Woman’s Husband in Slaying: Crime Victim Was Indicted.”

31. “Identify Body Found in Virginia.” “Scanland Met Death in Fight Here, Is Belief,” *The Washington Herald*, October 26, 1920.

32. “Major Made Fight for Life.” “Major F. M. Scanland Murdered in Capital,” *The Deming Headlight*, October 29, 1920. “Official Found Dead Near Capital City,” *The Paris Morning News* (Paris, TX), October 24, 1920.

33. “Citizens of Orogrande Erect Memorial to Late John T. Hutchings,” *Alamogordo News*, March 17, 1921.

34. “Polished Boot Clue in Major’s Slaying,” *The Washington Times*, October 25, 1920. “Body of Man Slain in Woods Identified as Ex-Army Major.”

[RETURN TO TABLE OF CONTENTS](#)

Frank C. Brito - Rough Rider, Patriot, Lawman

By Frank J. Brito

Frank C. Brito had a most unusual life as a miner, cowboy, soldier, lawman, jailor, prison inmate, game warden, and dynamo engineer. Born in rough circumstances in a busy mining camp high in the mountains, he navigated through life making one terrible mistake in a lifespan of respectable pursuits.

The year 1877 was a violent one for citizens in southern New Mexico. Nolgee and Pionsenay's Chiricahua Apache band were in full attack mode making life dangerous for miners and freighters traveling the roads between the small towns. In Pinos Altos, a small mining town at 7,000 feet and eight miles north of Silver City, Santiago Brito was a gold miner working in the surrounding mountains to feed his growing family. Never an employee, but an individual working his own claims, he considered himself an American citizen, possibly obtaining his status by living in San Elizario, Texas, when the Gadsden Purchase was signed with Mexico. He brought three children (Estanislada, Estéfana, and José) to Pinos Altos from Texas in the 1860s. These three older children had lived with their mother, Anselma Ruis Brito, in San Elizario, until it was safe to bring them to New Mexico. Frank C. Brito told his sons that Anselma was a Manso/Tigua Indian, both Pueblo tribes.

Frank always maintained that his father was a Yaqui Indian from Sonora, but it is likely Santiago also had Apache ancestors because Sonora was a long distance from Janos, Chihuahua, where Santiago spent his childhood. The Yaquis and Apaches were inimical and often at war kidnapping each other's women and children bringing them into their own families. Having Apache blood was probably something Santiago did not wish to publicly admit. Since the Apache Wars with the U.S. and Mexico continued un-

abated until 1886, Santiago's Native American race likely made for amicable relations with the Apaches. Pinos Altos and the wagon roads leading to Silver City, Las Cruces, and Tucson were often attacked by Apaches in the 1860s and '70s, but Indian troubles never seemed to affect the Brito Family. These skirmishes ceased locally, though the battles with various Apache groups continued for eight more years in other parts of Arizona, New Mexico, Texas, and Mexico. According to researcher Berndt Kühn, the last Apache attack in



Ysidra, Santiago and 11-year-old Frank. Author's collection. Courtesy Thomas J. Ryan

Pinos Altos occurred on Bear Creek near Pinos Altos on September 17, 1878.

Settled permanently in Pinos Altos, Santiago and Anselma built a large house with rock walls and it was here where Frank Charles Brito was born on August 24, 1877, and baptized Francisco Brito. His namesake was Frank Charles Bell, a prominent Pinos Altos miner and property owner. In 1882, Frank Bell married Santiago's youngest daughter, Estéfana, after her first husband, William P. Fletcher, died from being poisoned in a mining dispute. Bell and Santiago had a mining partnership and the marriage made the families even closer. Bell, while prospecting near the Florida Mountains not far from the Mexican border, lost part of his hand to an Apache rifle ball in January 1880.

Growing up, Frank Brito was a lively young man speaking Spanish at home, but learning to read and write English at the Pinos Altos



Frank C. Brito at 21 in 1898 - his wedding photo. Author's collection.

schoolhouse. During his young school years, he lived in a small attic space in the Santiago Brito household with his mother and older brother José until 1886 when the latter moved to Georgetown, New Mexico, a nearby mining town, to become a police officer. A few years later, José relocated to California where he tried mining in Keene, Kern County. Leaving shortly afterward, he moved to Los Angeles and worked as a laborer.¹ He returned to New Mexico about 1896 where he was employed as a cowboy in Grant County. Frank no doubt missed his older brother and was happy to see him return.

Santiago believed in educating his children and sent Frank and his siblings to school. We don't know how far Frank's education progressed, but in his early teens he found work as a "printer's devil" (apprentice) at the Pinos Altos Miner, a small newspaper. In the late 1890s, Frank played the role of Santa Claus at a party where a candle caught one of his sleeves on fire. The fire was quickly extinguished and Frank went on to enjoy Christmas Day with his friends.²

Frank was employed as a miner in his late teens and as a cowboy, joining his brother working for the Circle Bar Ranch near Silver City. In April 1898, Santiago learned that the U.S. had declared war on Spain after the USS Maine was sunk in Havana Harbor. Santiago directed his sons Frank and José to enlist because "Our country is at war." We can surmise Santiago harbored a hatred for Spain because of its history of maltreatment of indigenous Mexicans.

Frank and José dutifully enlisted into the 1st Volunteer Cavalry at Santa Fé on May 6³ and the enlistees were sent by train to San Antonio, Texas, for basic training under the command of Lt. Col. Theodore Roosevelt and Col. Leonard Wood. Finished with training, the Brito brothers and the entire "Rough Riders" regiment, as the unit was called, was sent to Tampa, Florida, to await the ships to take them to Cuba. The origin of the term "Rough Riders" has been speculated upon and retired New Mexico Territorial Militia Commander Eugene Van Patten states in his journal

that his state troopers were given this name by Governor L. Bradford Prince. In March 1897, the militia changed its designation to the New Mexico National Guard, which Major Van Patten commanded. When war was declared with Spain, Van Patten was sent to Silver City and other New Mexico towns to recruit for Roosevelt's Volunteers. Van Patten and Roosevelt were fellow New Yorkers and Roosevelt liked the term "Rough Riders," so he appropriated this name for his cavalry troopers.⁴

Due to lack of transportation, Frank and José spent the duration of the Spanish American War in Tampa and to their deep regret never made it to Cuba. As native Spanish-speaking soldiers, they were placed in charge of the stockade, tending to Spanish prisoners. This was Frank's first experience as a jailor, which later led to a 20-year profession in Doña Ana County, New Mexico. A web site page is devoted to Frank's experience with the Rough Riders and can be accessed here: <http://www.spanamwar.com/Brito.html>

Upon victory in Cuba, Frank, José, and the remaining troopers of the 1st Volunteer Cavalry were sent to Camp Wikoff on Montauk Point, New York, to recuperate from their wounds and diseases. By far, disease took a heavier toll than battle on the returning men and Frank suffered from malaria contracted in Tampa. Camp Wikoff was a miserable tent city with lack of medical care, poor food, and men dying of rampant dysentery. In the photo below, you can see the deep

paths worn to the outhouses from the tent barracks.

The treatment, food, and medical care of the Rough Riders was shamefully inadequate at first and the New York newspapers created a scandal about the men that were gravely ill, with many dying. The troopers were first quarantined at a detention camp, then released to other areas until they recuperated. Pvt. Brito personally complained to Col. Roosevelt that they were not getting any milk to drink.

Recovering from malaria and receiving his discharge on September 15, 1898, Frank returned to Pinos Altos and his mining activities. After a short leave in Pinos Altos, José re-enlisted in the army to fight in the war with Spain and shipped out of Fort McDowell, Angel Island, San Francisco, to the Philippines where Frank says he was reported "missing in action." Nothing was heard from José again.

In the September 30, 1898, Silver City Enterprise newspaper, the following article appeared:

"A big celebration, to welcome home the Rough Riders, George Shafer [II] and Brito Brothers, was held at Pinos Altos, Saturday Evening. The young soldiers were warmly welcomed home and a general jubilee was held, ending with a dance. The big hall of Ogleby and Norton was crowded, many persons from Silver City and neighboring towns being present."

Established in his occupation as a miner and



Camp Wikoff, Montauk Point, on Long Island, New York. Mustering-out location for 1st Volunteer Cavalry. Author's collection.

hoisting engineer, Frank proposed to and married in 1899 a local Pinos Altos woman, Dolores Calles. They had a son, Theodore Roosevelt Brito, born to them in January 1900. All was not well in the marriage and Frank suspected Dolores was unfaithful. While at his mine on September 12, 1900⁵, another miner told Frank his wife had a male visitor in their house. Frank borrowed a shotgun and hurried to the house. He later told his son Joe that he saw a man in overalls running out the back door and fired the shotgun at him. Unfortunately, the “man in overalls” was Dolores’s sister, Delfina, and the shot killed her. It is reported in other publications that there was a paramour by the name of Boyne, a fellow Rough Rider, but that name does not appear on the official military roster. There was a Trooper Boyle of Company A, but he was killed in action in Cuba.

Frank was found guilty of murder in the third degree⁶ and sentenced to hard labor in the Territorial Prison at Santa Fé for ten years. As a family mystery, the Prison Record of Convicts (page 97) shows the notation “bullet scar, left knee joint.”⁷ None of Frank’s children were aware of a gunshot wound and could not explain this entry. During his incarceration in Santa Fé, Frank and Dolores were divorced.

Two articles from the *Albuquerque Daily Citizen* on June 27, 1903 shed some light on his duties in prison:

BIG ENGINE Goes Up at the Penitentiary and Loss Will Foot Up to \$5,000

The Atlas engine of 180 horsepower at the territorial penitentiary has cashed in its checks. It’s done for and another will have to take its place.

Yesterday morning at 3:30 the big engine smashed itself up into smithereens. The coupling pin in the governor became loose and dropped out. This made the machine worthless and started at a terrific speed. Frank Brito of Rough Rider fame, is the night engineer, and just got out of the room in time. The big drive wheel, thirteen feet in diameter, twenty-four

*inches wide and heavy metal spokes, flew into little pieces and the bulk of it went out through the roof. A great gaping hole was torn in the roof and many pieces of the wheel picked up showed the wood from the roof so embedded in the jagged edges of the metal that it could be scarcely pried out. Pieces of the heavy belt-
ing that were carried through the roof were penetrated by large and small pieces of wood from the roof, showing the tremendous force with which the mass of the material went up. The heavy spokes of the wheel were snapped off as though by an ax. The largest piece of the big drive wheel found is about two feet square and it was in the yard about seventy five feet south of the building. Another large piece took a northerly course through the air and came down through the roof of the engine house. The damage done there is slight beyond that to the roof, although the dry house is full of brick, as the top story was sufficient to stop the big piece of metal after it had passed through the roof.*

Work was commenced early cleaning up the rubbish after a number of photographs of it had been made and by noon a part of it had been carted away. Not one part of the engine was found which can be again utilized. All the pieces were consigned to the scrap heap. The engine was not an old one and was said was purchased by the penitentiary from the Cash Entry Mining Company. It was valued at about \$3,000. The entire damage done to the plant will be about \$5,000. The brick plant will be compelled to close down until a new engine is secured and one was ordered early today, which will be shipped as soon as possible.

Convicts Behave Well

The behavior of the convicts all this time was good. Most of them thought that the hissing steam was a hard shower and the buildings had been struck by lightning.

His acquired prison skills found him a position in Doña Ana County with the U.S. Bureau of

Reclamation. A second article shows him as a day engineer of a dynamo at the Las Cruces electrical plant in 1906. He told his family that he had learned to operate dynamos while incarcerated. The article is cut from a newspaper without publication name or date.

His scheduled discharge year from prison was 1911, however an undated petition (likely in 1905) was circulated among leading Doña Ana and Grant County citizens asking that Frank be pardoned. Among the many petitioners were the trial court judge Frank Parker who presided and sentenced Frank. Other petitioners were the Grant County District Attorney, R. M. Turner and ex-District Attorney William H.H. Llewellyn, a former 1st Volunteer Cavalry "Rough Rider" officer, and Col. Eugene Van Patten.⁸

On June 12, 1905, the president of the Territorial Board of Commissioners, F. H. Pierce, and other prison officials, petitioned New Mexico territorial Governor Miguel Otero to pardon Prisoner 15442 Francisco C. Brito as a "model prisoner and trustworthy man." Governor Otero signed the pardon on June 14, 1905, setting Frank Brito free.⁹

After his release, Frank took up residence in Las Cruces, Doña Ana County, New Mexico, and married Eugene Van Patten's daughter, Concepción, known to the family as "Concha." Colonel Van Patten was a retired New Mexico National Guard commander. Frank immediately began his work for the electric company and the Reclamation District. In his hours away from the plant on Water Street, Frank worked tending bar at two businesses: Dan Read's Cowboy Saloon and John Barncastle's Saloon. It was in the Cowboy Saloon that Frank met former Doña Ana County Sheriff Pat Garrett and served him drinks. Frank played baseball for Dan Read's saloon team as catcher and enjoyed baseball his entire life, following his favorite teams on television.

Frank was proud of his civic responsibilities and was a volunteer Las Cruces city fireman. He was also a member of the New Mexico National Guard, serving a two-year enlistment in Company A, 1st Regiment, and was activated with that group just after March 10, 1916, when Pancho Villa attacked the small U.S. Army garrison at Camp Furlong and the adjacent border city of Colum-



Frank Brito, left, behind the bar in Barncastle's Saloon. Author's collection.



Frank C. Brito on the right with the catcher's mitt while playing for Dan Read's saloon baseball team. Author's collection.

bus, New Mexico. Company A's duties were to secure the town and await the arrival of additional army troops under General Pershing. Frank's unit returned to Las Cruces shortly after the regular troops arrived.

Continuing his civic service, Frank was appointed a deputy Doña Ana County sheriff and a copy of his deputation is in the family archives. He also served as a Las Cruces town constable and a game warden. The author has his warden's badge. Frank also served many years as the Doña Ana County jailor and was proud of his record that no prisoner ever escaped.

As deputy sheriff, Frank

was sent to the town of Rincón, just north of Las Cruces, to investigate Santa Fé Railroad box car burglaries. Rincón was a junction where the Southern Pacific and Santa Fé railroads met. It had a turntable, shops, and was a much larger town than it is today.

On a small hill above the turntable, there was (and still is) a concrete water tank that provided drinking water to the town and water to the steam locomotives that stopped here. Frank spent a few days in town, investigated the burglaries, and soon discovered who the thieves were. He arrested them and they were prosecuted in the county court system. During his interrogation of the burglars, he was told some of their loot was stuffed in dirt cavities under the water tank. Deputy Brito retrieved the loot and returned it to the railroad.

As a reward for breaking up the burglary gang, the Santa Fé Railroad gave Deputy Brito an Elgin railroad watch. He wore this watch every day for the rest of his life. Its brass case is in beautiful condition, has a lever to set the time, and an extra dial that reflects the time left on the mainspring. The chain attached to the watch is plated with gold from Frank C. Brito's gold mine when he was a miner in Pinos Altos. The watch continues to keep perfect time and was passed on to the author.

In the 1980s, Uncle Santiago conducted Frank J. to the town of Rincón and both hiked up



New Mexico National Guard Company A, Columbus, NM a few days after Pancho Villa's raid on March 10, 1916. Private Frank C. Brito 7th from left with hands on hips. Author's collection.



The railroad watch presented to Frank C. Brito for breaking up the burglary gang. Author's collection.

the hill to the water tank and saw that the crevices are still present. In disrepair, the tank no longer is used to hold water. The town is nearly abandoned, is mostly an agricultural area, and the shops and turntable are long gone.

Frank was active in the annual Rough Rider reunions held in Las Vegas, New Mexico. He was present when Theodore Roosevelt attended the initial reunion in 1899. Roosevelt called Frank



Frank C. Brito was deputy Dona Ana County Sheriff under Felipe Lucero. Author's collection.

“Monte,” short for Montezuma, acknowledging Frank’s Native American heritage. In Roosevelt’s autobiography, he called Frank “Gritto,” when describing Frank’s killing of his sister-in-law in Pinos Altos. Frank’s oldest son, Santiago P. Brito, described a fracas at one of the reunions. Frank was an older man in the late 1940s and stepped off a bus at the Las Vegas hotel where the Rough Rider veterans were to stay. Two nearby young men laughed at him because Frank was dressed in modest apparel and carried a pasteboard suitcase. They mocked him and got very close when Frank swung and decked one of the pests, the other running away. Santiago said, “Dad was always good with his fists.”



Frank C. Brito in his Rough Rider uniform is standing in the center with some unnamed friends. Author's collection.

A copy of an undated article from an unknown newspaper is captioned, “Frank Brito Has Always Made Good as Officer.” The short article states, “Carl P. Slate and John R. Slater who escaped from the Capitol county jail at Santa Fe were confined in the Doña Ana county jail while awaiting trial at Santa Fe in the U.S. Federal

Court for violation of the Dwyer act. They were known to be professional jail breakers and while here they made an attempt to break out. However, their plans were immediately frustrated by our efficient county jailer, Frank Brito, who when asked about it, smiled and said, 'While the boys were planning to get out, I was planning to keep them in.' With the national epidemic of jail breaks throughout the United States, we congratulate our sheriff for the selection of a most efficient jailer."



Left to right: Frank C. Brito, chief jailor; Albert Brown, deputy sheriff; Jose Lucero, sheriff; Fred Brookerson, deputy sheriff; Narciso Alvarez, jailor. Photo circa 1935. Author's collection.

Santiago P. Brito relates the following anecdote his father recounted: José Espalín was a gunman/deputy for Sheriff Pat Garrett. (Espalín was Garrett's deputy in the fight at Wildey's Well where Garrett attempted to arrest the suspects in the Albert and Henry Fountain murders.) Frank C. Brito told Santiago on several occasions that Espalín tried to bluff him with a pistol. Frank called his bluff and Espalín backed down.

When his wife Concha passed away in 1934, he lived alone until marrying for a third time to Petra Padilla in 1938. Upon Petra's death in 1964, Frank again lived alone in his adobe house on Tornillo Street and usually had several cats as pets. His two daughters, Anselma and Lupe, had large families and they continued to visit him and make

sure his needs were met until he passed away on April 22, 1973 at age 95.

The following transcription of a conversation with Frank C. Brito was taken from a circa-1970 tape recording made by my father, Joseph C. Brito, Frank's youngest surviving son. I was allowed to take several hours transcribing the tape but did not make a copy for myself. Upon Joseph's death, the tape recording was lost and cannot be located. I can vouch that the voice was that of Frank C. Brito and in transcribing it was diligent in capturing every word as it was spoken. This transcription has been published only in the family genealogy and appears nowhere else.

In this recorded conversation made just before his death, Frank speaks of his friendship with Pat Garrett, his early years in Las Cruces and other events after the Spanish American War:

I know the Garrett family. I knew Pat Garrett personally. You know, he was a great friend of mine. That was his headquarters there when I worked at the Cowboy Saloon tending bar there. That was the headquarters where that bunch that killed him waited and waited and all those fellows that came in there . . . and he used to go in with them. You see, this fellow that killed him, Pat raised that boy, Wayne [Brazil], and Pat gave him a piece of land and this boy bought some sheep [goats] and was doing pretty good, but Pat wanted to sell that land to this fellow from Oklahoma and that's how the trouble come up. But, he raised that boy, Wayne. And I was working there when he was killed.

I got two decks of cards there that belonged to him. Poe Garrett, his boy, gave me

those cards. Pat had left a grip of some kind [with me] and among the things inside was a deck of cards and a pair of chaps and spurs. Poe took all those things and those cards, he gave to me. I still got 'em. I put 'em away. He was killed on February 29, 1908. Damn! Left him on top of the hill. They were coming in from Organ. Yeah, I knew him very well. I was the only one who could serve him a drink. He drank those old fashion toddies and he called me "Indio."

Martín Lopez and I had to go to work after I'd come out of the [electric] plant. I told him to dress up and I'd go tend bar 'til ten to eleven every night and Martín Lopez was working there. You see, everything was wide open. They had gambling, roulette and the saloon there never closed their doors. (This was Dan Read's Cowboy Saloon. Frank C. Brito also played on the saloon baseball team as a catcher.) They were open all twenty-four hours a day. They had gambling there and you know, all those roulette tables were just lined up with gold pieces. They used gold in circulation then. Twenty-dollar gold pieces, fives, tens, and silver and sometimes they'd put me to watch the tables when there wasn't much bar trade. Why, Dan [Read] said, "You better go over there and watch Old Man Campbell's table there." But then, we never had no robbers like we do now. Never had no trouble.

There was always plenty of money. This fellow that run two roulette tables, he had about \$20,000 on him on display. They had no limit and when they closed the gambling, I happened to pack his outfit to go to Nevada and took him to the depot and crated everything. And it [later] happened that I had to go with some people for

something to El Paso. We went down there, and then at the depot I happened to meet him [returning] and well, we shook hands there at the Union Station and I said, "Where are you going now? Did you do any good in Nevada?" He said, "No, Frank. I never took my gambling outfit out of the crate because the way things were in Nevada then, I couldn't have played one bet! It didn't matter." So, he's on his way to Arizona, Phoenix, or someplace there. But he told me, "If I had to pay one of those bets, it would have put me out of commission." That was very popular - roulette, you know. It's a game that if you know how to play it, you can beat it.

Pat [Garrett] was a great admirer of the Rough Riders. Roosevelt made him Customs Collector in El Paso, but he lost that job. It happened that Roosevelt had come to San Antonio for a meeting of some kind and he wrote to Pat and told him if there was any Rough Riders in El Paso or around, that wanted to go to pick 'em up and bring them with him and he [Roosevelt] would pay for everything. So, he [Pat] got in touch with me and I told him, "Yes, I'll go." Well, there were three or four men from El Paso and one from Alamogordo.



The final Rough Riders reunion, circa 1945. From left, former governor George Curry, Billy Smith, Frank C. Brito, Judge Numa Frenger and Alvin Ash. Author's collection.

But, it happened that the day we were to leave, my sister, Mrs. Mac [Estanislada Brito McDonald], died in Pinos Altos.

So, I telephoned him that I couldn't go; that my sister had died, and he said, "Yeah, I saw it in papers and I figured you couldn't go." So, he went and took some of these boys with him. He came back and in about two months after that, Ted asked him for his resignation. So, nobody knew why or anything. But, he resigned and they appointed a fellow by the name of Manuel Lucero in Santa Fe. When I went to work for the Reclamation [District], one of the secretaries that had worked for Pat there in the [Customs] office told me why Teddy had fired Pat. When Pat went to this meeting, he took three or four of these old-time politicians from El Paso and Teddy didn't like that. He wanted Pat, but Pat took these old-time politicians - Democrats. And after that, Teddy asked him to resign. He did. Nobody knew why until this fellow who happened to be in the Reclamation Office, I think he was a clerk, he had something to do with payrolls, told me. We got talking one day. We had a bottle of moonshine whiskey and we got pretty well tanked up; and in talking, he told me Pat had taken these old-time politicians. He fired Pat. But Pauline, Pat Garrett's daughter, is here yet.

Yeah, I played poker with Pat. I think he got a little sore with me. I don't know. Maybe that was just his way. I had to go to work. It was getting late and I had to go to work at the plant. I used to go in at five o'clock. I think I had about two dollars and a half, blue chips and white chips. They dealt the hand there and he drew one card and I drew two cards. So that when it came to my turn, why, I passed. Then the other guy passed and the other guy passed. And it was up to Pat and he took a stake, fifteen or twenty dollars and he shoved 'em in. And I said, I've only got about two, three dollars." "Well," he said, "stake yours in." I put in, I think, five or six

blue chips and all I had; I wanted to get out of the game, see. And of course, when I called his hand, he had to show, you see, what he had. He had two pairs, aces and kings, and I had three deuces. And he showed his hand and I showed mine and he looked at me and he says, "You're either a good poker player or a damned fool, I don't know which." But he looked like he was sore. So, I didn't say anything to him because I was afraid of him. I picked up my money and walked out. But you know, the next time he came in, he was all right.

I don't know how in the world I made it became the best wages were a dollar a day. Some of them got fifty cents, some of them seventy-five. You had to be a pretty good man to get a dollar. And they had money to gamble, to drink. They got along all right. You could take a dollar them days and buy meat, eggs, coffee, and everything. You could make a dollar. Why, my compadre, Margarito [Pardilla], when he'd sell his alfalfa down there for twelve dollars, he'd load that rig they had, and two mules with flour and beans, and he'd have money to drink and everything else. He used to come and stay here. Those two little mules, they knew the way. Sometimes he'd go to sleep and them mules, they'd take him right to the house. Eggs were fifteen cents a dozen; round steak, twenty-five cents a pound; Arbuckle's Coffee, ten packages for a dollar or fifteen cents a package. A dollar would go a long ways.

When I first came here, I got a room and board for seven dollars and fifty cents. You'd get a room and board. Good eating. And then, I had a room next to that saloon that Ramon Nevarez had. It was an old fellow by the name of Pacquet. Antonio Pacquet. He sold sewing machines after, years after that. Him and a good friend run a boarding house there and I had a nice room in back there. I had a window that adjoined the saloon and all I had to do was knock on the window and get a big

glass of beer for five cents, those schooners, you know. Yeah! Room and board, seven-fifty. After that, I went to live up there with my aunt [Emilia Van Patten Ascarate]. Just imagine, I used to walk from there to the college every day, and back. I'd hunt part of the way because there were lots of rabbits and I'd land at my aunt's place; I'd have six cottontails, nice ones. Them days, people didn't eat rabbits. Only the Indians. But, I'd rather have a rabbit than a chicken. The cottontails were nice. Yeah! I never felt tired. We used to walk all the way to the college and back, mornings and evenings.

Chema's [his daughter, Anselma] a good walker. She always was a good walker. When I was takin' care of that Dripping Springs Ranch with the old man [Eugene Van Patten], while he was gone, why, that fellow Medina that killed that girl down here, that Mestas girl, we used to walk. We'd take that telephone line and we'd get here in time for the movie. Skorda Bennett had movies in the old Jacoba Building. After the movies, we'd walk back there. In the morning, we'd be there you see. That telephone line was a straight beeline, from the Modoc [Mine], right into everything. From there, over to [the town off] Organ, about six miles. Why, we'd walk evenings over there to the Joe Worthy Saloon, play a game of pool, have a few beers, then walk over to the ranch. We never felt tired. Throughout the trail, you know, had to look out for rattlesnakes. [End of transcription]

This was said to Frank J. Brito personally in a conversation held at Frank C. Brito's Tornillo Street home in 1960:

"When I was deputy sheriff, I had to look for outlaws. They'd go across the border [to Mexico] to hide. We had no [extradition] treaty then. But I'd go get them. I'd dress up like an Indian and take a buckboard and take it across the border. I'd find the man I was looking for and hit him over the head. I'd put him in the buckboard, cover him up with a canvas and come back over the border

[to the U.S.] to face the law. That was my treaty. You couldn't say how you caught them, just bring 'em back."

We can say Frank had a solid beginning in life with loving parents, but grew up in a harsh environment in a violent era. He was educated, but once took the law into his own hands, as was often the case in 1890s New Mexico. Seeing repentance and moral value in this prisoner, penitentiary officials, the judicial officers that convicted him, and leading citizens from two counties offered their respect and support. He emerged from prison with a pardon returning his full citizenship rights and he lived a life that provided value to his state and country. In 1968, in recognition of his service to New Mexico, Governor David Cargo and the State National Guard commissioned him a colonel, aide de camp on the governor's staff. From the Apache Wars through statehood into the modern era, his experiences and contributions were truly unique.

Frank J. Brito is a grandson of Frank C. Brito. He is a graduate of Saint Mary's College of California and a retired banker of 35 years. He researched and wrote the 127-page document *The Brito Family – A Genealogical Works*, self-published for his family. He holds the Brito Family Archives, originally collected by Santiago P. Brito, Frank C. Brito's son. These archives contain photos, documents, interviews, and artifacts valuable to the family. He remembers his grandfather well and made many visits to him in the 1950s and '60s. From his home in Northern California he has made several dozen trips to Las Cruces over the past 40 years, continuing his research into family and Southwest history.

End Notes

1. Great Registers, Kern and Los Angeles Counties.
2. Watson, Dorothy, "The Pinos Altos Story," Sixth printing, 1987, Self-published.
3. Oath of Enlistment, Frank C. Brito, May 6, 1898, National Archives and Records Administration.
4. Eugene Van Patten Journal, undated.
5. Territory of New Mexico, Third Judicial District, "True Bill", Frank C. Brito Territorial Prison File, New Mexico State Archives.
6. Ibid.
7. Ibid.
8. "Petition," NM Territorial Governor Miguel Otero Archives, New Mexico State University Library.
9. "Pardon," Ibid.

[RETURN TO TABLE OF CONTENTS](#)

The Long Lost Letters

By Monte Rout

This is a tale of a World War II romance and 21st century internet sleuthing.

My story begins in the summer of 2016 when I accepted a LinkedIn invitation from a Cheryl Herzog. LinkedIn is a social network app designed to allow working professionals to connect for business purposes. I thought, mistakenly, that I recognized the Herzog name from my own southern New Mexico business community.

Shortly after accepting the invitation, I received a message from Cheryl asking that I call her. My curiosity piqued, I picked up the phone and dialed her number. It turns out Cheryl was from Greeley, Colorado, and she had tracked me down specifically to return something she believed belonged to my family.

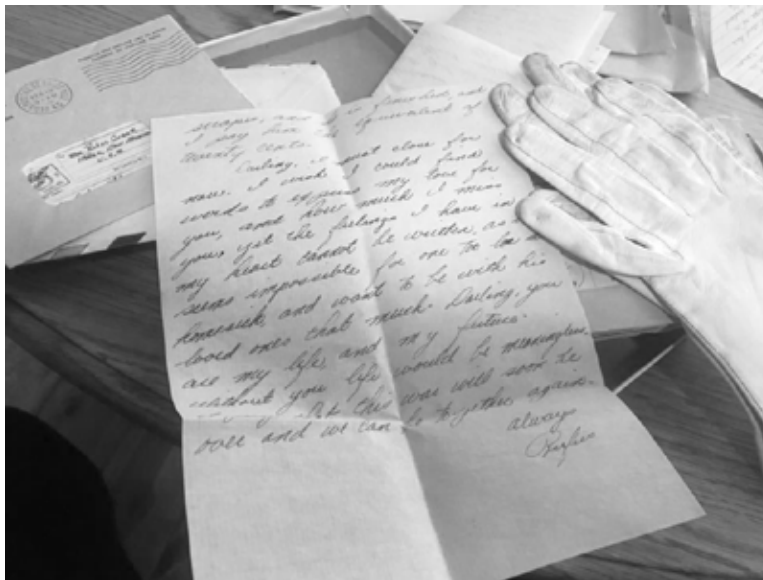
Cheryl told me that her husband's mother had passed away almost two years ago in Colorado. When Cheryl and her husband were sorting through his mother's belongings, they found, tucked in the drawer of a chest, an old air mail stationary box containing a pair of leatherette gloves, a couple of photographs, and a large stack of World War II-era letters from Rufus Creek to Laura McAnally Creek.

Rufus and Laura were my parents. Save the World War II years, when my father was in the army, both lived out their lives in eastern New Mexico.

While Cheryl respectfully did not read the letters, she did take it upon herself to find the owners. An internet search lead her to my mother's obituary which listed my brother, Jim Creek, sister Pamela Creek, and myself, Monte Creek Marlin, as survivors. From this clue, she found my LinkedIn profile from my career as an army public affairs officer at White Sands Missile Range. The easy availability of information via the internet helped solve the mystery.

Cheryl had no idea how or why her mother-in-law came to have these letters. She said she suspected that since she was an avid antiques collector that she may have bought the chest, which at one time must have belonged to my family. Cheryl sweetly wrote in the letter she enclosed with the old stationary box she returned to me, "I know this probably seems weird, but trust me. We're just normal people trying to do the right thing by returning these precious moments to the family to which they belong."

When her package arrived, it was like I was suddenly paid a visit by the 20-something version of my parents. It allowed me to see them as young people in love and living through the separation and fear World War II put on them and their families. I could imagine the petite gloves on my mother's young hands. I recognized the images in the photos as my fa-



One of the letters from Rufus Creek to Laura McAnally Creek and the gloves found by Cheryl Herzog in an old trunk in Greeley, Colorado. Author's photo

ther's brother. The letters, written in my father's cursive penmanship, were full of romantic words.

My mother, Laura Edith McAnally, was born in Roswell, New Mexico, on June 18, 1922. She was the only child of Rawley Wallace McAnally and Ottie Waggoner McAnally. Both the McAnally and Waggoner families homesteaded in New Mexico in the early 1900s. Rawley and Ottie would eventually settle in the eastern New Mexico community of House. Laura graduated

from House Municipal School in 1939 and went on to attend Eastern New Mexico State University in Portales. She was a quiet and sensible young woman who loved to read. She loved her pet cats so much that her nickname came to be Kitty.

Rufus Dennis Creek was born in Rodgers, New Mexico, on April 16, 1920. His parents, Roscoe Dennis Creek and Mary Etta (Tippy) Creek, were also homesteaders. The Creeks would later own and operate the Liberty Café in Portales. Rufus was the middle of five children – sister Monte, and brothers Roy, Sherman, and Gordon (Cotton). He was known as impulsive, short tempered, gregarious, and a great deal of fun to be around.

Rufus and Laura met in Portales. As told by my Uncle Roy, Rufus would drive around town in an old jalopy with this foot dangling out the window. Laura must have been taken with his bad boy image and a romance began.

When my sister Pam and I were adults, we once asked Mother if she saved any love letters between her and Daddy. Her response was that it was none of our business. Years later when we were clearing out her home in House, we found a giant box of letters from Daddy to her. At the bottom of the box was written, "Ha! I fooled you!" Clearly, she was waiting for a time of her own choosing for us to find them.

Rufus and Laura were avid correspondents. The letters we found dated from 1940 to 1945. Read in chronological sequence, they tell the story of two young people in love, planning on



Kitty and Rufus in an undated photo. From the author's collection.

marriage and starting a family only to be interrupted by the onset of World War II. Cheryl's find of more letters dated September 1944 through February 1945 added further depth to the story. Sadly, none of Laura's letters were saved, so the story is somewhat one-sided.

According to the letters Pam and I found, in 1941 Rufus and Laura were planning on marrying soon, but the United States would soon be thrown into complete chaos. Uncle Roy wrote in his memoirs that the Creek family has gathered for a Sunday dinner in Portales on December 7, 1941, when someone burst in the room shouting, "Turn on the radio! The Japanese are attacking Pearl Harbor! We are at war!" Life immediately changed drastically for Rufus, Laura, and the Creek siblings as it did for rest of the country.

In a letter from Rufus to Laura dated December 8, 1941, he writes:

Dearest – I know you are anxious to hear from me and know what my feelings toward the war situation is [sic]. Honey, I am afraid to think just what this really means, but it is certain that I will be called up soon. In peacetime that didn't bother, much, but since we are at war with Japan, I am sure it will cause some difference in our lives together. It wouldn't be fair to either of us getting married at such a time as these, no knowing whether we would ever be together or not, it could ruin your life completely. Honey – the one thing that I want most is for you to be happy, hurting you in anyway is one thing I would never do as I love you more than I could ever tell you...I just want you to know now that the only sensible thing to do is wait and not plan on anything until we are sure of the future...I love you with all my heart and soul. Always, Rufus.

All the Creek boys would find their way into military service during the war. Roy was a young officer in the 507th Parachute Infantry Regiment. He landed in Normandy on D-Day and saw combat in the Battle of the Bulge. After the war, he would continue as a career army officer.

According to Roy's memoirs, "Sherman served as a cook in the Coast Guard on ships patrolling the coastal waters for German submarines, primarily in the Caribbean. Cotton served in the Navy in the Pacific Theater. He was a coxswain and drove a landing craft in several Pacific island invasions. Monte's husband, George Spikes, was a navigator and an officer in Air Corps in the Pacific Theater."



Laura visits Rufus at Camp Claiborne in central Louisiana where he took military training. From the author's collection.

Records found on Ancestry.com show Rufus registered for the draft in 1941. He first served in the merchant marines, but apparently sea duty wasn't his cup of tea. He entered the army on May 15, 1943, and was assigned to 398th Engineers as a construction foreman. He served in the European Theater and was in the Rhineland campaign which resulted in Allied victory and the German retreat across the Rhine River. It included both the Battle of Normandy and the Battle of the Bulge. Roy wrote that Rufus landed in Normandy on D+3 or 4. Roy told my siblings and me that of all the Creek brothers, Rufus probably saw the most atrocities of the war.

Throughout the war, Laura would wait in New Mexico. She and Rufus married on January 9, 1943, in Clovis, New Mexico, between his time in the merchant marines and the army.

The box of letters from my Colorado friend gave glimpses into the lives of the newlyweds. In a letter dated December 23, 1944, Rufus writes,

“My darling wife – I received one letter from ‘My Spirit’ last night. Darling, only you can know how much your letters mean to me...Honey, it will be some time before I write again, don’t worry about me as I am going to be o.k. This will be a Xmas I’ll always remember as we are moving up tonight...I love you more than life itself. My darling nothing can change that. Thank you for being mine. Always yours, Rufus.”

A letter dated February 1, 1945, reads, “To-day was a nice day only because I received seven letters from ‘My Spirit.’ Gee, honey! It was good to hear from you...from your letters I know you enjoyed Xmas...Although my Christmas wasn’t so good, I enjoyed thinking of you and the folks and it being possible for you to enjoy yourselves – cuz that’s what we guys are fighting for, and on a cold night in a foxhole, a guy may suffer a little, but then he can also realize how important it is for us to win this war.”

Rufus would make it home at the end of the war as would all his brothers and his brother-in-law. Roy wrote, “The fact is, we didn’t talk much about the war. We were all glad it was over, and we had all made it through.”

Rufus and Laura went on to make a life in House and raise their family. Rufus passed away on March 28, 1972. My brother, Jim, had been serving in Vietnam for a year. That year was very hard on Daddy as I’m sure it dredged up many memories of his own war years. Jim called home on the night before Daddy’s death saying he was in Seattle and would be home the next day. Daddy went to bed happy and died in his sleep. He never got to see Jim.

Mother was widowed at the age of 50. Mother lost her true love and would continue alone to raise me. I was just 12 when Daddy died. In the late ‘80s, Alzheimer’s disease would begin stealing Mother’s memories and she would spend



The Creek family reunited at the close of World War II. (from the left) – Gordon (Cotton) Creek, Monte Creek Spikes, Sherman Creek, Tippy Creek, Roscoe Creek, Rufus Creek, Roy Creek. From the author’s collection.

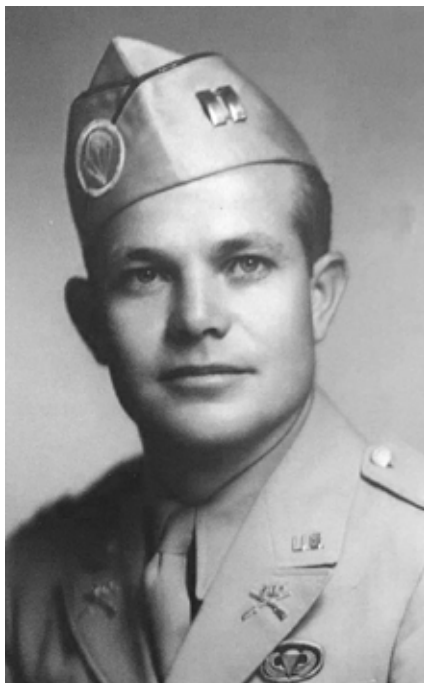
the next two decades in a thickening fog. She passed away on March 7, 2008. She and Daddy are buried side-by-side in the House cemetery.

I am proud of my family's military service. I am thankful be part of such a loving family. And, I am forever grateful to my social media buddy, Cheryl, for that little stationary box full of memories and an unexpected visit from my parents.

Monte Rout was born in Tucumcari, NM, and grew up in the small ranching and farming community of House. She attended New Mexico State University. After graduating in 1982 with a degree in journalism, she began a career in Public Affairs at White Sands Missile Range. She retired in 2013 and now lives in Cloudcroft, NM, with her husband Ray and a houseful of dogs.



Rufus Creek



Roy Creek



Sherman Creek



Gordon (Cotton) Creek

[RETURN TO TABLE OF CONTENTS](#)

Contentious River

International And Interstate Controversy Concerning Rio Grande Water Allocations Within The U.S.-Mexico Borderlands, 1880-1928

By Ian Anson Lee

Rivers can be quintessentially defined as transnational. Many rivers¹ flow indiscriminately through lands claimed by multiple nations and peoples. Irrigation² generated by these bodies of water has been and continues to be an important aspect in the livelihoods of many people. Forced distribution of water has produced instances of both conflict and cooperation between nations and states sharing the bounty that rivers provide, particularly so within the arid regions of the Southwest United States/Northern Mexico borderlands. Without proper collaboration between states and nations sharing the same water source, many residents could potentially suffer ill effects related to water deficiencies. Water shortages within the U.S./Mexican borderlands can be especially precarious given the volatile nature of the hot and arid environment.

The Rio Grande River has long served as a natural boundary as well as a continuous source of precious water consumed by both the United States and Mexico. The Rio Grande forms in the state of Colorado proceeding southward to empty into the Gulf of Mexico. The north-to-south flow of the Rio Grande has historically favored farmlands located within the river's northern regions. Those to the south have been forced to employ the remaining waters allotted after much has already been collected and distributed by its northern consumers. This uneven distribution of the waters of the Rio Grande has been the cause of much turmoil between the United States and Mexico, as well as various U.S. states utilizing the river.

In the late nineteenth century, the unequal distribution of the Rio Grande became the source of conflict. In the 1880s, the government of

Mexico began making claims for a large indemnity for damages caused by diversions of Rio Grande waters by the United States.³ Through various conventions, the two nations agreed on a resolution, eventually signing a treaty concerning water rights. This agreement stipulated that a dam was to be built upon the Rio Grande. Through this dam, the United States could more easily divert water for their irrigation purposes, while at the same time allowing a fixed amount of water to be delivered from the dam to Mexico, in theory resolving any long-standing disputes regarding the issue.⁴ The creation of the Elephant Butte dam and reservoir near Engle, New Mexico, sought to resolve the historical water disputes between the United States and Mexico.

During the 1920s, after the completion of the dam at Elephant Butte, more controversy unfolded concerning Rio Grande water rights. An exploding population in Colorado, wishing to irrigate more of their land, proposed to build their own irrigation system located on the upper Rio Grande.⁵ This proposition didn't sit well with states below Colorado using Rio Grande waters for irrigation. Concerned officials argued that a diversion of Rio Grande waters by the state of Colorado could potentially rob New Mexico, Texas, and even Northern Mexico of irrigation water. This dispute eventually erupted with a series of lawsuits, ultimately reaching heightened levels of litigation. Similar to the dispute between Mexico and the United States, disagreements concerning Rio Grande water rights necessitated resolutions that favored all parties. This interstate controversy would eventually lead to the creation of a compact between Colorado, Texas, and New Mexico. This

Rio Grande Compact would be vital to the wellbeing of the peoples of these three states, as well as northern Mexico. In sum, the transnational nature of the Rio Grande would ignite heated controversy between the United States and Mexico and later between Colorado and New Mexico, in which the U.S., and particularly Colorado, would find it necessary to set aside their own best interests in order to reach negotiated settlements and attempt to restore amicable relations between the parties.

Irrigation in what is now known as the Southwest United States has been an integral part of the livelihoods of the various and diverse peoples living within the region for hundreds of years. Extremely limited rainfall in this region has long been the cause of difficulty and duress among these residents. Annual averages of rainfall of course fluctuate, however precipitation in the Southwest is extremely limited. For example, Phoenix, Arizona, averages 7.2 inches of rainfall per year, far insufficient for agriculture as it is practiced in more humid regions. Even more so today, the amount of rainfall in the Southwest is insufficient for the demands of bulging cities and the needs of expanding industries.⁶ In light of these facts, the need for irrigation has played a vital role in the existence and wellbeing of human societies within this arid and inhospitable region for thousands of years.

When the Spanish first entered what would become the northern Spanish Borderlands during the sixteenth century, they encountered cultures that were already heavily dependent upon irrigation for their existence. The original agriculturalists within the desert Southwest, the Hohokam Indians, were the first to use irrigation practices in the region. This civilization, reaching its apex at around 1200 A.D. and disappearing about two hundred years later, was able to use irrigation canals in order to water more than 100,000 acres in what is now the greater Phoenix area.⁷ Ancient Anasazi people of New Mexico learned how to use existing surface water to grow maize along with other important crops upon which many Indian groups survived.⁸ The descendants

of the Anasazi, the Pueblo Indians located in New Mexico, with a population of upwards of 20,000, were able to survive and flourish subsisting on products raised by irrigation from Rio Grande river drainage.⁹ Of course, without access to Rio Grande waters along with irrigation technology, such societies would not have been able to survive in the region.

As the Spanish began to settle New Mexico during the seventeenth century, they began to assert their own ideas concerning communities and water rights. Beginning with the expeditions of Juan de Oñate in New Mexico during the seventeenth century, Spaniards unsuccessfully attempted to create their own irrigation ditches in order to grow crops for sustenance. Oñate initially had high hopes for the creation of these ditches, noting that the Pueblo's "corn and vegetables... are the best and largest... in the world."¹⁰ However, the failure of the Spaniards to properly use the ditches led to them being intent upon relying on the Pueblo Indians for their survival. This included utilizing Indian crops watered with Indian-made irrigation canals. Returning after the Pueblo Revolt of 1680, Spanish settlers in New Mexico eventually initiated Spanish ideas and systems of water rights. As crown property, flowing water was available for common uses such as washing, cooking, fishing, and watering livestock, while certain uses such as operating a mill race or an irrigation system, required a specific grant of water rights.¹¹ These water regulations regarding special uses would remain relatively unchanged during the period of Mexican Independence and beyond.

The growing population of Anglo-Americans settling in the American West during the nineteenth century would instigate an era of conflict over Rio Grande water rights. In 1848, after the U.S. war with Mexico, Mexico begrudgingly accepted the Rio Grande as the Mexican/U.S. border. In addition to serving as a boundary line, the river was exceptionally important to the irrigation of lands in Colorado, New Mexico, Texas, and the Republic of Mexico. A ballooning settler population of Anglo Americans west of the Mississippi

began to put a tremendous strain on Rio Grande irrigation projects. With the Rio Grande forming in the state of Colorado and flowing southward into the Gulf of Mexico, expanding agriculturalists located within Colorado had the benefit of an uninterrupted quantity of water with which to irrigate their lands. At the same time, as the river moved southward, the situation became more perilous as the flow of water became insufficient for large-scale agriculture. Agriculturalists in New Mexico, Texas, and chiefly Mexico, were injured profusely by the copious amounts of water appropriated by settlers in Colorado.¹²

By the early 1880s, the Republic of Mexico began to make claims to Washington that they were owed compensation for damages done to agriculturalists in and around Ciudad Juárez due to the appropriation of water from the Rio Grande on the U.S. side of the border. In a letter to the United States Secretary of State Richard Olney, responding to a joint U.S./Mexican commission into building a dam on the Rio Grande, Mexican Ambassador Matias Romero, in 1897, spelled out the specific injuries caused the Republic of Mexico by the United States' confiscation of water from the Rio Grande. First, Romero claimed that the population of Juárez at certain times of the year was reduced precipitously due to lack of irrigation waters, from a peak of 18,360 to a low of merely 8,814 residents.¹³ Romero also asserted that the loss of public wealth from the ten years prior had been \$22,840,000, and the loss of wealth from private individuals had been \$12, 845,000.¹⁴ These figures added up to a monstrous loss of \$35,685,000 to the Mexican economy, a massive amount of money during the late nineteenth century. The Mexican ambassador also declared that:

The United States especially the state of Colorado, have obtained great advantages through the use of the waters in Colorado, since the Federal Government has been able to sell millions of acres of lands which are irrigated by the waters of the River Bravo del Norte and its tributaries, and the population of the State of Colorado

*has increased fivefold in a period of fifteen years.*¹⁵

Whether these claims were exaggerated or not, it is undeniably certain that the State of Colorado had reaped a large amount of the benefit of the flow of the Rio Grande due to their geographical position, with the starting point of the river being located within the state.

The United States government seriously and critically analyzed and considered the nature of these forceful claims made by Mexico. A subsequent project by the International Boundary Commission first mentioned the idea of a dam and reservoir as a remedy to Mexico's claims. One General Stanley, in charge of the Texas division of the commission, reported that:

*Our relations with our Mexican neighbors along the line of the Rio Grande have been kindly, although they are a good deal excited over what they deem the violation of the riparian rights through our people taking all the water of the Rio Grande...thus far there has been no call for military force. The remedy for this water famine...must be found in storage reservoirs, so easy of construction.*¹⁶

The United States then agreed to enter into an international commission with Mexico to pursue the best course of action that would benefit both nations. The commission, headed by Anson Mills and F. Javier Osorno, came to the decision that:

*The best and most feasible mode, whether through a dam to be constructed across the Rio Grande near El Paso, Tex., or otherwise, of so regulating the use of the waters of said river as to secure to each country concerned and to its inhabitants their legal and equitable rights and interests in said waters.*¹⁷

Therefore, the construction of an international dam and reservoir was eventually deemed to be in the best interest of both the United States and the Republic of Mexico.

The United States' interest in creating such

a dam was not entirely based on the complaints of Mexico however. While agreeing that a dam was necessary in order to placate the government of Mexico, the recommendations of the International Boundary Commission (referred to previously) also illustrated that United States' interests would be furthered by its construction. The commission claimed that the flow of the Rio Grande had not only become scarce in northern Chihuahua, but also much higher up in New Mexico.¹⁸ The report claimed that "many of these (canals on the U.S. side) for the past five years have been constantly dry, and all of them have been dry for a great part of the irrigating season three years out of the five past."¹⁹ Therefore, commission officials believed that the construction of an international dam would not only benefit Mexico, but also the U.S. possessions of New Mexico and Texas. Thus, officials began to plan the immediate construction of such a dam.

The project, however, would soon hit an obstacle which would bring the entire proposition of the dam into question. During the commission by the United States and Mexico, the citizens of Mexico, upon hearing of the proposed project to build the dam, petitioned the Mexican government to stop any construction upon the Rio Grande.²⁰ These Mexican residents argued that the construction of the dam would even more severely limit access to Rio Grande water. The construction of the dam would thus place Mexican agriculturalists in dire straits. A letter to the U.S. State Department by Mexican Ambassador Romero stated that "As the Mexican Government considers the petition of the inhabitants of Paso Del Norte (Juárez) well founded, it has instructed me to transmit it to you with the recommendation that the orders requested by the inhabitants be issued."²¹ Because of the insistence of the Mexican people, the United States government would attempt to put a stop to the construction of a dam and reservoir on the Rio Grande.

As the U.S. government tried to pacify Mexico by suspending actions relating to construction of the dam, a serious dilemma reared its head

with the actions of the company commissioned to construct the dam. Long before the petition by the citizens of Mexico was heeded, the Rio Grande Dam & Irrigation Company had already secured the rights to build the dam near Elephant Butte, New Mexico. Despite the request of the governments of the United States and Mexico, the company would continue to proceed with construction of the dam.²² Anson Mills, American member of the Joint Boundary Commission, summarized that it was "recommended strongly that some way be found to promptly cancel the rights of the Rio Grande Dam and Irrigation Company or restrict their use of water by legislative action or otherwise."²³ The Boundary Commission and United States government would indeed begin to look for ways in which to stop construction by the Rio Grande Dam and Irrigation Company, and legal channels were used to make this happen.

Many legal means were eventually undertaken to stop construction at Elephant Butte, however contemporary laws did not give the government the power to intervene and stop the rights of the Rio Grande Dam and Irrigation Company from constructing the dam. However, one legal loophole offered a glimmer of hope. An act ratified on July 13, 1892, provided that it was not lawful to build any wharf, pier, dolphin, boom, dam, weir, breakwater, bulkhead, jetty, or structure of any kind outside established harbor lines, or in any navigable waters of the United States where no harbor lines are or may be established, without the permission of the Secretary of War.²⁴ In other words, the government had to prove that the Rio Grande was a navigable river in order to stop the construction of the project, thereby placating the concerned citizens of Mexico. This one loophole would twice make its way to the New Mexican Supreme Court, eventually reaching the United States Supreme Court. The Supreme Court found that:

As the latter country (the Republic of Mexico) cannot be indifferent to the result of this litigation, and is not a party to the record, the court ought not to determine the

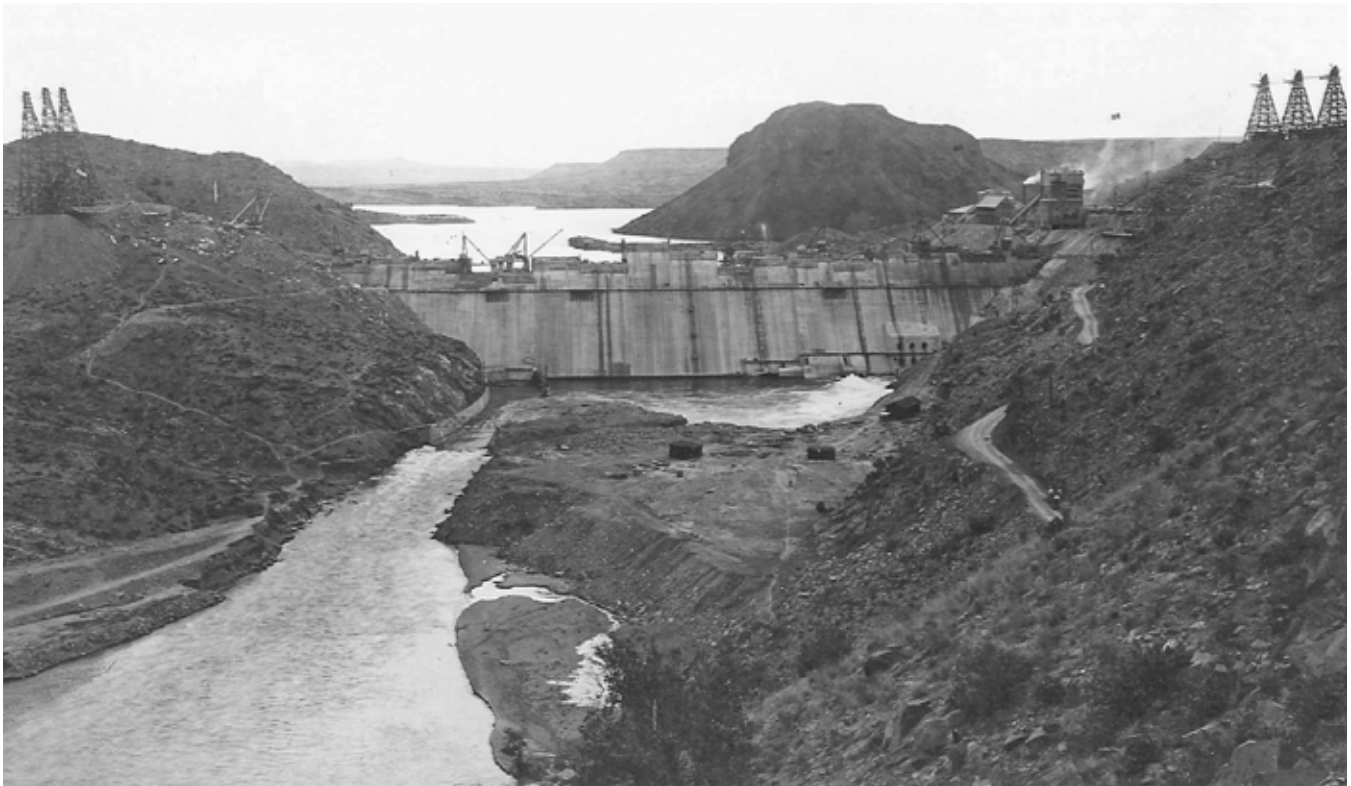
*important question before us in the absence of material evidence, which we are not at liberty upon this record to doubt would be in the record but for the somewhat precipitate action of the trial court.*²⁵

Thus, the case was sent back down to the Supreme Court of New Mexico with direction to accumulate further evidence before a verdict could be decided. The Supreme Court of New Mexico was eventually able to affirm that the rights of the Rio Grande Dam and Irrigation Company to construct the dam were to be cancelled not based on the navigation loophole, but based on the technicality that construction work had not been commenced within the five-year limitation provided in the law.²⁶ Thus the building of the dam and reservoir at Elephant Butte was halted.

The discontinuance of the construction of the dam at Elephant Butte temporarily placated the citizens of Mexico; however, as years passed, the government of Mexico again began to pursue the United States for reparations due to both historical and contemporary diversion of irrigation

waters. In 1904, Mexican Ambassador Manuel de Azpiroz wrote a letter to the United States government claiming that “the cause of so considerable a loss for Mexican interests has continued and has grown so much worse that the loss to both the government and the citizens of Mexico may well be estimated to have reached twice the amount computed in Mr. Romero’s (original letter).”²⁷ Thus the idea of building a dam was resurrected. This time the United States government would look for a way to construct the dam without the effect of hurting the citizens of Mexico during its construction. To not interrupt water flow during construction, the United States government would take charge of construction and maintenance. The government (The United States Bureau of Reclamation) would build a secondary reservoir near El Paso to catch the surplus of flood waters, with which a sufficient supply of water could be obtained for irrigation of Mexico during construction.²⁸

The idea of an international dam was therefore agreed to by both nations, however



Construction on Elephant Butte dam. The work began in 1911 and was completed in 1916.

before construction could begin, a treaty would need to be entered into by the United States and Mexico that explicitly spelled out the details of the construction and maintenance of the dam. The purpose of the treaty was to “provide for the equitable distribution of the waters of the Rio Grande of irrigation purposes, and to remove all causes of controversy between them in respect thereto.”²⁹ Therefore, the implementation of this treaty was designed to end any and all disputes between the two nations regarding the use of water from the Rio Grande. At the same time, the treaty and building of the dam were to be considered compensation for Mexican claims of transgression by declaring “fully settled and disposed of...all claims heretofore asserted or existing, or that may hereafter arise, or be asserted, against the United States.”³⁰ This project would essentially be

considered remuneration for years of injury upon Mexican agriculture.

The treaty of 1907, called the Convention between the United States and Mexico, spelled out the specifics of the water rights on the Rio Grande. Within the treaty, the United States agreed to construct a dam near Engle, New Mexico. From the dam, the United States would thus deliver to Mexico the total amount of 60,000 acre-feet of water annually, with the water being delivered in “the bed of the Rio Grande at the point to where the head works of the Acequia Madre, known as the Old Mexican Canal, now exists above the city of Juárez, Mexico.”³¹ The United States also agreed to pay for the construction of the dam in full, as well as the storage and deliveries of its water. At the same time, the treaty expressly stated that other than the 60,000 acre-



The completed Elephant Butte dam with a lake full of water behind it. At the time it was the world's largest irrigation dam, just over 300 feet tall. It was allowed to start filling in 1915.

feet of water delivered annually, Mexico would “waive any and all claims to the waters of the Rio Grande for any purpose whatever between the head of the present Mexican Canal and Fort Quitman, Texas.”³² In other words, Mexico would receive nothing more from the United States side of the Rio Grande than the stated amount of water to be delivered annually.

This description of the international aspects of the construction of a dam and reservoir at Elephant Butte shows the lengths to which the United States was willing to go to end conflicts between them and the citizens and government of Mexico. The United States government indeed saw the accusations by Mexico as serious, calling for immediate action. The amount of litigation that was performed to initially stop the construction of the dam is evidence to this point. As indictments against the United States by Mexico began to be resurrected in the early twentieth century, the U.S. was again compelled to bow to the wishes of the Mexican government. Military action within the borderland was not likely, but it was a fear on both sides nonetheless. Thus, a treaty was entered into, and terms were constructed in which the United States would deliver water to Mexico and pick up all costs related to the construction and delivery of water. This unprecedented cooperation between the two countries shows how the wellbeing of both nations was in the interest of collaboration and mutual support. However, the United States still held the upper hand, as the U.S. contained the source of the water, thereby ultimately preserving their right to discretion in how much water the state of Texas would release into northern Mexico.

The treaty between the United States and Mexico in 1907 laid the groundwork for the beginning of the construction of the dam at Elephant Butte. The dam was eventually completed in 1917, the cost of which was picked up by the United States government. The dam and reservoir were seen as a solution for all peoples situated in the Southwest United States/Northern Mexico. However, as time passed, one group began to

question the viability of the dam to their interests. The citizens and government of Colorado, the original group accused of acquiring most of the irrigation waters of the Rio Grande, began to indicate their desire to build their own reservoir on the Rio Grande. Colorado proposed to build a dam and reservoir upon the northern regions of the Rio Grande, located within the San Luis Valley.³³ This proposal would spearhead a new round of controversy involving the water of the Rio Grande, one that would eventually lead to the Rio Grande Compact, which is still in force today.

The roots of the controversy with Colorado were planted during the construction of the dam at Elephant Butte. In 1897, when preliminary negotiations for the dam were underway, the Secretary of the Interior of the United States wrote a letter to the General Land Office ordering that “any and all applications for the right of way through public lands for the purpose of irrigation by using the waters of the Rio Grande River or any of its tributaries be suspended until further instructed by the Department of the Interior.”³⁴ Thus, it became illegal to construct any dam or structure other than that at Elephant Butte. Despite being previously accused as the appropriators of massive amounts of water from the Rio Grande, Colorado did not embrace this order with open arms. The State of Colorado had fiercely objected to this order because they had claimed that the request had seriously impaired the expansion of irrigation in the San Luis Valley, where nearly 400,000 acres are capable of irrigation if water could be stored and used.³⁵ This embargo, however, would be sustained during and after the construction of the dam because according to Director of the Elephant Butte project H.H. Brook in 1920, “The order had saved hundreds of thousands of dollars in litigation in the twenty-six years since it was made.”³⁶ The order suspending all rights of way on the Rio Grande would thus stay in effect until the 1920s, when the state of Colorado proposed its own Rio Grande irrigation project.

Indeed, this would not be the first time Colorado had contributed toward interstate controversy

concerning water rights. In 1907, Kansas pursued litigation against Colorado for diverting the water of the Arkansas River for the irrigation of lands in Colorado, thereby, as alleged, preventing the natural and customary flow of the river into Kansas and through its territory.³⁷ This case made it to the United States Supreme Court. The court ruled in favor of Colorado, citing that the Arkansas River had made thousands of acres fertile in both Colorado and Kansas, and no special treatment was due Kansas.³⁸ Thus, Colorado was no stranger to angering neighboring states due to their appropriation of water from various rivers. This judgement in favor of Colorado would have the effect of emboldening the state into building their own dam and reservoir upon the Rio Grande.

Soon after the construction of the dam at Elephant Butte, the State of Colorado began to lobby for removal of the embargo implemented in 1897 which disallowed any construction or "rights of way" upon the waters from the Rio Grande. Colorado officials also frequently protested against the Elephant Butte dam. In 1917, the Colorado legislature appropriated \$50,000 to fight the embargo, and one Colorado senator made a speech two days in length against the project at Elephant Butte.³⁹ In 1922, Colorado delegate Bannister again assailed the dam at Elephant Butte, explaining at length how it hurt the state.⁴⁰ Colorado lawyer Albert L. Moses, in a letter to several United States Senators, spelled out the specifics of Colorado's grievances: "I will say further for your information that from that day to this the development of the San Luis Valley in Colorado has been menaced and retarded because of the construction of that damn dam on the Rio Grande."⁴¹ Along with the desire to repeal the order, Colorado would also start lobbying for the creation of their own irrigation system to be located on the upper Rio Grande. Colorado's desire for the creation of their own reservoir was such that they were willing to see to it that an amount of drainage water equivalent to the storage capacity of the reservoir be turned down the river across the state line each year.⁴² In other words, Colorado was promising

the delivery of an adequate supply of water to the Elephant Butte dam. However, the Elephant Butte Irrigation District was highly skeptical of this claim, looking on previous seizure of water by Colorado as grounds to reject such a project.

As Colorado proposed such an undertaking, the United States Reclamation Service devised a plan that would allow construction of a reservoir in the San Luis Valley, while at the same time benefitting the other states using the Rio Grande for irrigation. The Reclamation Service's plan was devised around the fact that in the Middle Rio Grande, above Elephant Butte, there lay about 200,000 acres of seeped and water-logged land, the loss and evaporation of which was enormous.⁴³ The creation of artificial drainage in which to reclaim these "wasted" waters and re-appropriate them back into the Rio Grande would in theory supply enough excess water to which the creation of a dam in the San Luis Valley would not hinder the amount of water delivered by the river to the states downstream. A.P. Davis, director of the U.S. Reclamation Service, thus proposed that by artificial drainage a substantial increment to the flow of the river could be developed, and the construction of drainage works might deliver water into the river at a point low enough to insure its flow into the Elephant Butte Reservoir.⁴⁴ This idea, thought of as a compromise between Colorado and the other states, would not sit well with managers of the Elephant Butte project.

Both the construction of a dam in the San Luis Valley as well as the feasibility of the project of creating artificial drainage with which to re-appropriate water from waterlogged land was rigorously questioned by the Elephant Butte Irrigation District. They deemed the construction of a reservoir in the San Luis Valley unfair because it would permit the people of the upper stretches of the river (Colorado) to again deplete the water supply, despite Colorado's promises to the contrary, and thus deprive the other states using the river of the full benefits of the costly works that would be constructed.⁴⁵ The district was also highly skeptical of the possibility of developing

drain waters in the upper basin which would compensate for an equal diversion and storage of river water in Colorado. The Elephant Butte District believed it was hard to conceive, from a practical point of view, how this drain development would reach the Elephant Butte Reservoir during the periods of normal flow of the river.⁴⁶ The district believed that the drainage water could and would be picked up by lower diversions “and used over and over again, with the result that only the drainage water from the last small sub-division would reach Elephant Butte.”⁴⁷ The district’s argument was that not enough drainage water would reach the reservoir to account for diversions brought upon by the San Luis reservoir. The Elephant Butte Irrigation District also outlined four probabilities if such actions were taken: (1) loss of water; (2) loss of future growth or development; (3) excessive litigation; (4) and necessary watchfulness and policing. These probabilities were extremely alarming to the Elephant Butte District, thus accounting for their outright rejection of the San Luis Project.⁴⁸

Despite these fears, the U.S. Reclamation Service tried multiple times to persuade the Elephant Butte Irrigation District to negotiate with Colorado. A letter written by Director of the U.S. Reclamation Service, A.P. Davis, to President of the Elephant Butte district H.H. Brook illustrated an attempt to prove the viability and importance of the drainage project. In the letter, A.P. Davis claimed that the U.S. Reclamation Service acknowledges “that there is a large amount of seepage water being wasted and that a reasonable exchange would provide for additional irrigation without menacing the water supply of your project.”⁴⁹ Davis continues:

*To prohibit in advance, the construction of any reservoir, either for flood control or for the storage of exchange waters, is to beg the question and insist that the resources of the valley run perpetually to waste because you see no advantage in their development to your valley. I do not think such arguments can permanently prevail.*⁵⁰

Due to such evidence, it can be ascertained that the U.S. Reclamation Service was highly critical of the reluctance of the Elephant Butte Irrigation District to negotiate with Colorado. However, the Elephant Butte Irrigation District, sympathetic to the needs of New Mexico and Texas, would eventually enter into negotiations concerning a compact between these three states in which each party would benefit.

Eventually in 1924, New Mexico could no longer neglect the requests of the U.S. Reclamation Service, and an act was enabled in which the states would begin negotiations. Senate Bill No. 104 laid out an act in which New Mexico and Colorado would adhere into a joint commission, in which their troubles would be discussed. Senate Bill No. 104 was an act “Providing for the appointment of a commissioner on behalf of the State of New Mexico to negotiate a compact of agreement respecting the use, control and disposition of the waters of the Rio Grande River and for other purposes.”⁵¹ The joint commission would include commissioners for the States of Colorado and New Mexico, provided, however, “that any such compact or agreement would not become operative and shall not bind any of the signatories thereto, unless and until the same shall have been ratified and approved by the legislature of each of the signatory states and by the Congress of the United States.”⁵² In other words, by this point, no agreement was required to be set in stone unless the legislatures of both states agreed to all points. This commission would seek to settle any and all disputes between the states of Colorado and New Mexico concerning the waters of the Rio Grande.

These talks would be a step in the right direction towards ending the dispute on the Rio Grande, however a decision by Secretary of the Interior Hubert Work would forestall negotiations further. In 1925, Work had given Rio Grande Compact Commission Chairman Herbert Hoover his word that the embargo on the Rio Grande would not be lifted during the compact negotiations.⁵³ Despite this assurance, Secretary Work concluded that “additional development through

storage of water along the upper reaches of the Rio Grande and its tributaries will not be inimical to the interests of the Rio Grande reclamation project.”⁵⁴ Work then quietly lifted the embargo and authorized the construction of a dam within the upper Rio Grande, much to the chagrin of New Mexico and Texas. Because of this betrayal, New Mexico and Texas irrigators demanded that compact negotiations with Colorado be withdrawn.⁵⁵ The secretive lifting of the embargo ended any hope that New Mexico would stay in the compact negotiations.

During this period, Colorado had also been in negotiations with other states concerning the waters of both the Colorado River and the La Plata River. With both the Colorado River Compact and the La Plata River Compact, circumstances had remained controversial over precisely how to apply that agreement even though the accords had been fully ratified.⁵⁶ Issues with these respective compacts led Colorado to desire to push forward with an agreement with New Mexico and Texas. At the same time, Colorado had a large desire to avoid the pitfalls that had been prevalent within the Colorado and La Plata River Compacts. Also, flooding on the Mississippi River Valley in 1927 had emphasized the need for concerted and unified responses to the nation’s water resource problems.⁵⁷ These combined issues led to the increased need for negotiations in a timely manner between Colorado, New Mexico, and Texas.

The year 1928 brought these negotiations to fruition, and by 1929 the Rio Grande Compact was signed and ratified. In order to benefit all three states, it was agreed that the United States would construct a drain for the San Luis Valley’s Closed Basin and a reservoir in Colorado near the state line to impound the increased Rio Grande flow from the drainage works.⁵⁸ The compact also provided that after the Closed Basin Drain and the reservoir were completed, the three states would meet again to work out a permanent agreement based on river flow measurements with these facilities in place.⁵⁹ Until the drain and reservoir

were built, Colorado agreed not to increase diversions, build more storage facilities, or impair the flow of the river as it then existed.⁶⁰ This Rio Grande Compact would remain in effect until 1938, when a more permanent compact would be ratified by the states. However, the Rio Grande Compact of 1929 helped to settle once and for all interstate conflict on the Rio Grande.

The conflict and eventual resolution between the United States and Mexico, as well as the creation of the Rio Grande Compact, shows the ways in which nations and states are not neatly organized as self-sustaining, homogeneous blocks. In many cases, what affects one nation or state is bound to affect another. Such is commonly the case concerning economic and social phenomena, and in this case the transnational aspects of rivers. The taking by one group, in many instances, takes from the whole, in this case on an international scale. This give and take can be especially precarious within borderland areas, where such interactions have the potential to be magnified precipitously.

Less than forty years removed from the treaty of Guadalupe Hidalgo, the controversy with Mexico was not one to take lightly. The United States knew the importance of maintaining a peaceful existence with Mexico, with the violence of the San Elizario Salt War being but a recent memory. In addition, the conflict shows us just how fragile relationships between states can be (Keep in mind, too, that New Mexico was still a territory during much of its dispute with Colorado), and the ways in which cooperation between these governmental bodies is integral to state-to-state relations.

Many times, emphasis is placed on destructive events within historical scholarship, however accentuating cooperation can be just as enlightening to historical studies as calling attention to its negative aspects. It can be extremely beneficial to emphasize how certain crises were averted due to the cooperation of each entity. The Treaty with Mexico in 1907 and the signing of the Rio Grande Compact of 1929 are cases in which such coop-

eration can be emphasized. That is not to say that the United States didn't hold the upper hand in negotiations. The bulk of the Rio Grande waters lay in U.S. territory, and Mexico was and still is at the mercy of the United State's decision to supply them with such water. More than a century after the agreement between the United States and Mexico, a mostly dry riverbed near Mexico attests to such an inequality.

Many times, rivers cut indiscriminately through national boundaries. Rivers do not care who or what institutions they affect. Such is the character of nature. Those who make their home within the borderlands are especially prone to feel the significance of border-to-border relations when disputes over such natural phenomena materialize. Thus, borderlands scholarship holds a special place within general historical scholarship.

Events and disputes on the border tend to be magnified due to the precariousness of international relations, and these disputes show the tremendous importance of cooperation and collaboration between states and nation

Ian Anson Lee is a Ph.D. candidate at the University of Texas at El Paso. He received a bachelor's degree in history from the University of Texas at Arlington in 2013 and a master's degree in history from the University of Texas at El Paso in 2016. He is currently researching and writing his dissertation, the topic of which is civilian warfare in New Mexico during the nineteenth century. He hopes to complete his doctorate by the end of 2019.

End Notes

1. Don. M. Romero to Richard Olney, January 5, 1897), Ms0235, folder 14, box 3, Elephant Butte Irrigation District Records, New Mexico State University Special Collections, Branson Library, Las Cruces, NM (hereafter cited as Elephant Butte Irrigation District Records).

2.. Convention between the United States and Mexico for the Equitable Distribution of the Waters of the Rio Grande, US-Mex, January 16, 1907.

3. H.H. Brook, *International Aspects of the Rio Grande Project* (Las Cruces, NM: 1925), folder 12, box 3, Elephant Butte Irrigation District Records.

4. Robert G. Dunbar, *Forging New Rights in Western Waters* (Lincoln and London: University of Nebraska Press, 193), 1.

5. Dunbar, *Western Waters*, 3.

6. Char Miller, ed., *Fluid Arguments: Five Centuries of Western Water Conflict* (Tucson: The

University of Arizona Press, 2001), 40.

7. W.W. Follette, *Equitable Distribution of the Waters of the Rio Grande, Proceedings of the International Boundary Commission, United States and Mexico* (Las Cruces, NM: November 17, 1896), Ms0235, folder 14, box 3, Elephant Butte Irrigation District Records.

8. Miller, *Fluid Arguments*, 48.

9. Miller, *Fluid Arguments*, 7.

10. Don. M. Romero to Richard Olney, January 5, 1897, folder 12, box 3, Elephant Butte Irrigation District Records.

11. Don. M. Romero to Richard Olney, January 5, 1897, folder 12, box 3, Elephant Butte Irrigation District Records.

12. Ibid.

13. Ibid.

14. General Stanley, *Report of General Schofield*

to *Secretary of War* (Las Cruces, NM: September 12, 1889), folder 12, box 3, Elephant Butte Irrigation District Records.

15. Convention between the United States and the Republic of Mexico, U.S.-Mex, May 6, 1896, folder 14, box 3, Elephant Butte Irrigation District Records.

16. International Boundary Commission Report, November 25, 1896, folder 12, box 3, Elephant Butte Irrigation District Records.

17. Ibid.

18. H.H. Brook, *International Aspects of the Rio Grande Project* (Las Cruces, NM: 1925), folder 12, box 3, Elephant Butte Irrigation District Records.

19. Don. M. Romero to the State Department, August 4, 1896, folder 12, box 3, Elephant Butte Irrigation District Records.

20. H.H. Brook, *International Aspects of the Rio Grande Project* (Las Cruces, NM: 1925), folder 12, box 3, Elephant Butte Irrigation District Records.

21. Anson Mills to the State Department, November 17, 1896, folder 12, box 3, Elephant Butte Irrigation District Record.

22. Secretary of State Richard Olney to Secretary of the Interior D.R. Francis, November 30, 1896, folder 12, box 3, Elephant Butte Irrigation District Records.

23. *United States v. Rio Grande Dam and Irrigation Company*, 174 U.S. 690 (1899), 690-92.

24. H.H. Brook, *International Aspects of the Rio Grande Project* (Las Cruces, NM: 1925), folder 12, box 3, Elephant Butte Irrigation District Records.

25. M. de Azpiroz to Secretary of State, June 3, 1904, folder 12, box 3, Elephant Butte Irrigation District Records.

26. H.H. Brook, *International Aspects of the Rio Grande Project* (Las Cruces, NM: 1925), folder

12, box 3, Elephant Butte Irrigation District Records.

27. Convention between the United States and Mexico for the Equitable Distribution of the Waters of the Rio Grande, U.S.-Mex, January 16, 1907.

28. Convention between the United States and Mexico for the Equitable Distribution of the Waters of the Rio Grande, U.S.-Mex, January 16, 1907.

29. Ibid.

30. Ibid.

31. H.H. Brook, *International Aspects of the Rio Grande Project* (Las Cruces, NM: 1925), folder 12, box 3, Elephant Butte Irrigation District Records.

32. Department of the Interior Secretary D.R. Francis to the Commissioner of the General Land Office, December 5, 1896, folder 17, box 1, Elephant Butte Irrigation District Records.

33. H.H. Brook, "Colorado Controversy" (Las Cruces: NM, 1925), folder 17, box 1, Elephant Butte Irrigation District Records.

34. Ibid.

35. *Kansas v. Colorado*, 259 U.S. 46 (1907).

36. Ibid.

37. H.H. Brook, *Colorado Controversy* (Las Cruces: NM, 1925), folder 17, box 1, Elephant Butte Irrigation District Records.

38. Ibid.

39. Albert Moses to United States Senators Lawrence C. Phipps, Sam D. Nicholson, Guy U. Hardy, January 24, 1923, folder 17, box 1, Elephant Butte Irrigation District Records.

40. A.P. Davis to H.H. Brook, March 17, 1920, folder 17, box 1, Elephant Butte Irrigation District Records.

41. H.H. Brook, *Colorado Controversy* (Las Cruces: NM, 1925), series 2, folder 17, box 1, Elephant Butte Irrigation District Records.

42. Ibid.
43. H.H. Brook to A.P. Davis, December 23, 1922, folder 17, box 1, Elephant Butte Irrigation District Records.
44. H.H. Brook to A.P. Davis, December 23, 1922, folder 17, box 1, Elephant Butte Irrigation District Records.
45. H.H. Brook to A.P. Davis, January 3, 1923, folder 17, box 1, Elephant Butte Irrigation District Records.
46. Ibid.
47. H.H. Brook to A.P. Davis, January 3, 1923, folder 17, box 1, Elephant Butte Irrigation District Records.
48. Ibid.
49. Senate Bill No. 104, (1924), folder 17, box 1, Elephant Butte Irrigation District Records.
50. Ibid.
51. Douglas R. Littlefield, *Conflict on the Rio Grande: Water and the Law, 1879-1939* (Norman: University of Oklahoma Press, 2008), 185.
52. Ibid, 185.
53. Ibid, 186.
54. Littlefield, *Conflict on the Rio Grande*, 188.
55. Ibid.
56. Ibid, 191.
57. Ibid, 192.
58. Littlefield, *Conflict on the Rio Grande*, 192.

Primary Source Bibliography

Don. M. Romero to Richard Olney, January 5, 1897, folder 12, box 3, Elephant Butte Irrigation District Records.

General Stanley, *Report of General Schofield to Secretary of War* (Las Cruces, NM: September 12, 1889), folder 12, box 3, Elephant Butte Irrigation District Records.

Convention between the United States and the Republic of Mexico, U.S.-Mex, May 6, 1896, folder 14, box 3, Elephant Butte Irrigation District Records.

International Boundary Commission Report, November 25, 1896, folder 12, box 3, Elephant Butte Irrigation District Records.

Don. M. Romero to the State Department, August 4, 1896, folder 12, box 3, Elephant Butte Irrigation District Records.

Anson Mills to the State Department, November 17, 1896, folder 12, box 3, Elephant Butte Irrigation District Record.

Secretary of State Richard Olney to Secretary of the Interior D.R. Francis, November 30,

1896, folder 12, box 3, Elephant Butte Irrigation District Records.

United States v. Rio Grande Dam and Irrigation Company, 174 U.S. 690 (1899), 690-92.

H.H. Brook, *International Aspects of the Rio Grande Project* (Las Cruces, NM: 1925), folder 12, box 3, Elephant Butte Irrigation District Records.

M. de Azpiroz to Secretary of State, June 3, 1904, folder 12, box 3, Elephant Butte Irrigation District Records.

Convention between the United States and Mexico for the Equitable Distribution of the Waters of the Rio Grande, U.S.-Mex, January 16, 1907.

Department of the Interior Secretary D.R. Francis to the Commissioner of the General Land Office, December 5, 1896, folder 17, box 1, Elephant Butte Irrigation District Records.

H.H. Brook, *Colorado Controversy* (Las Cruces: NM, 1925), folder 17, box 1, Elephant Butte Irrigation District Records.

Kansas v. Colorado, 259 U.S. 46 (1907).

Albert Moses to United States Senators Lawrence C. Phipps, Sam D. Nicholson, Guy U. Hardy, January 24, 1923, folder 17, box 1, Elephant Butte Irrigation District Records.

A.P. Davis to H.H. Brook, March 17, 1920, folder 17, box 1, Elephant Butte Irrigation District Records.

H.H. Brook to A.P. Davis, December 23, 1922, folder 17, box 1, Elephant Butte Irrigation District Records.

H.H. Brook to A.P. Davis, January 3, 1923, folder 17, box 1, Elephant Butte Irrigation District Records.

Senate Bill No. 104, (1924), folder 17, box 1, Elephant Butte Irrigation District Records.

Secondary Source Bibliography

Dunbar, Robert G. 1983. *Forging New Rights in Western Waters*. Lincoln and London: University of Nebraska Press.

Littlefield, Douglas R. 2008. *Conflict on the Rio Grande: Water and the Law, 1879-1939*. Norman: University of Oklahoma Press.

Miller, Char. 2001. *Fluid Arguments: Five Centuries of Water Conflict*. Tucson: The University of Arizona Press.

[RETURN TO TABLE OF CONTENTS](#)

When 'The Kid' Helped Uncle Rufus

Roswell's First Blacksmith Recalls That Billy The Kid's Quiet, Polite Demeanor Belied His Reputation As A Ruthless Killer

By Janice Dunnahoo

The following is an article I found in the July 16, 1931, Roswell Daily Record. Rufus Henry Dunnahoo was the first blacksmith in Roswell, New Mexico. He built the first bridge over the Hondo River on South Main Street with the help of Capt. Joseph C. Lea.

He played the fiddle for dances at the Chisum Ranch, and he was my husband's great-great-grandfather. Jim Mullins was his nephew and was one of the first teachers in Roswell, teaching at the LFD school. He was a reporter for the Santa Fe newspaper and a state legislator. Following is a true story of the good side of Billy the Kid, as told by Rufe Dunnahoo to his nephew, Jim Mullins.

This is something new in the Billy the Kid stories. Nobody gets hurt and it illustrates the helpful spirit of the Old West, even by those outlawed by such government and order as existed. Uncle Rufe told it on his 87th birthday and admits a tender feeling for the men all banned by law and on the dodge who played Good Samaritan to him and his fellow freighters. But I'll let him tell it.

You must remember that this happened 50 years ago last July and a few facts or names may be forgotten or overlooked. A bunch of us, six wagons in all, had been to Las Vegas, New Mexico, to pick up freight for the store here that operated just across from the west front of the courthouse, that being the mercantile end of Roswell, New Mexico, then, and the courthouse was a saddle-horse corral. Dan Cosgrove was postmaster and Captain Joseph C. Lea owned the land and most of the houses in town. We had come down

on the east side of the Pecos because of high water when we reached Fort Sumner.

John Chisum And Bosque Grande

About 1866, John Chisum had established his headquarters at Bosque Grande, 45 miles north of Roswell, on the Pecos, from where he supplied the 7,000 Indians on the Sumner reservation with beef, the government having given him the contract for this while he was located at Fort Concho, Texas, and he had moved out here. After Chisum moved his Jinglebob base to South Spring River, now the Hagerman ranch and farm, anyone who wished was at liberty to use the buildings and corral that he had built at Bosque Grande, and a man with a small bunch of cattle and some stock horses was then living there and had employed Aleck Bley and his mother, well-known old-time black people, as horse rustler and cook. Chisum had fixed up what in those days was a very fair crossing of the river, that is fair crossing for the Pecos, if you know what I mean, and when the river was not up.

We had camped not far from the ranch and I intended to wait for the river to run down. That night Billy and his "gang" came over to camp to talk to us until bedtime and naturally, hear any news from Vegas. He knew several of our party and some of us knew him and his pals. In his bunch, as I recall, were Dave Rudabaugh, Dan Dedrick, Tom O'Phalliard and three others whose names are forgotten.

Ferrying Over The River

When they started to leave that night, Billy said to me, "Uncle Rufe, I know how we can get

you fellows across the river if you have enough big ropes to reach across. There are some big dead cottonwoods up yonder not far, and we can make a raft and ferry you over. I expect old Don Cosgrove and Captain Lea want that stuff you are hauling. So, get up early in the morning and we will come in by sunup and help. There will be a dozen of us and we are out to get it all over in one day.”

Next morning, they rode in from the hills, just as promised. We had cut down several big dry cottonwoods and I had found a coil of rope in my

cargo. Billy and his men tied on and drug the logs down to the river and soon we had a raft some 25-feet long and six logs almost two-feet lashed together. (Our best guess is that he meant the raft was six logs wide and each was about 2 feet across - making it 12 feet wide) Billy and one of his men stripped and tried to swim the river with one end of the big rope, but it was too heavy and pulled them under.

Finally, one of our freighters found a coil of what was intended for clothes lines and Billy swam over with one end of that, tied to a tree and soon we had a regular ferry cable strung across the flood. We then made slings to the raft, to hold it straight and with ropes to each end to haul it, we had a regular “Tolbert’s ferry.” Before we started ferrying, Billy went out and drove up a fat yearling, killed it, and told Aleck and his mother to get busy cooking so we wouldn’t have to lose any time fixing dinner. All day we worked, Billy taking the lead and doing more than anyone else, and Aleck and his mom having plenty of biscuits, fried beef, and coffee at the landing all the time. Many a ducking was enjoyed by all of us that day, slipping back in the river from a glassy surface bank.

After our stuff was all over, Billy made Aleck bring us buckets of bread, beef, and coffee for supper and then said, “You fellers are too tired to do anymore tonight, so just leave your teams on the other side and in the morning we will drive them down and swim them over to you.” We had one man in our party called Parson Henderson, the stingiest man I ever saw, and the most suspicious. He did not want to leave his team on the same side with Billy. Parson was loaded with stuff for Seven Rivers, most of it whiskey and wine for the Rainbolt brothers, I think it was. He refused to let us give Billy and his men



Rufe Dunnahoo seated on the chair arm, left. Zeb Chewning is top center with Jim Mullins on the right. Henry Chewning is seated. From the author’s collection.

a drink of his cargo although we would pay for it, he being afraid they would get on a jamboree. So, we told Billy "okay" and they left us.

Uncle Rufe Sees Billy For The Last Time

Next morning before we got up, true to his promise, Billy had our teams at the river, swam them over and ate breakfast with us. All of the men except Parson Henderson wanted to pay them something for helping us over, but Billy said, "Hell no, fellers. You have got the one thing that I want. I'd like to have enough of that small rope to make Aleck's mother a clothesline." We told him to fly at what he wanted out of it and he cut off about 50 feet and took it to the cook. Then he shook hands all around, said give his regards to "Granny Garrett," his name for Pat, and waving his hand as he rode away. He and his men rode off into the waters of the muddy Pecos. I never saw him again. He was killed by Pat Garrett at Fort Sumner about one year after this event.

An amazing thing happened the night after we left Billy. Parson Henderson had some money and was afraid Billy would rob him, so he and

his son took his money tied in a buckskin bag and buried it in a dog hole about 100 yards from camp. Next morning, Will Chisum and some Jinglebob boys drove a herd of some 2,500 cattle by our camp just as we were getting up. They tramped the muddy ground until every trace of where Parson had hid the money was obliterated. Our bunch was so disgusted with him then we all refused to help him hunt for it and pulled out, leaving him in his glory. He finally found his money, but did not throw in with us anymore. We got in the next day and unloaded.

I have read all the stories about Billy the Kid and only Pat Garrett mentions his extreme politeness to women or his elders. He was a ladies' man, dressed neat, had a friendly smile, always tipped his hat, Mexican-style, was very quiet and soft-spoken and had nothing about his bearing to indicate that he was a dangerous man.

I have always been strong for law and order, but confess that no tears were shed when I heard the following May that Billy had killed Bob Ollinger and escaped. I felt that Bob had it coming for abusing the Kid while a prisoner.



Rufe Dunnahoo is the #3 man from the left. This photo was taken in front of Captain Lea's house, on what was to become Main Street in Roswell, New Mexico.

Uncle Rufe Confesses His 'Soft Spot' For Billy

Pat Garrett and I were very best of friends but if we hadn't been, and confessing a soft spot in my heart for the Kid, it would have been a public calamity if Billy had killed Pat that July night in 1881, when he walked in Pete Maxwell's room and asked who were the men outside. They were John Poe and Kip McKinney. The Kid had never seen Mr. Poe. Garrett was the only law then in eastern New Mexico who had the

confidence of the people as an officer and the guts to hunt for Billy the Kid. Mr. Poe was then practically unknown and the others had all failed.

With the Kid gone, Pat told the ambushing factions of the Lincoln County War to cut it out and behave and they cut it out and behaved.

Later on in our history, such officers as Charles Perry, Fred Higgins and Captain Dan Roberts would have no doubt captured the Kid, but none of them were here then, and I am glad to pay this tribute to Pat Garrett and say a few kind words for a boy who would maybe have made a good man if he had had a chance.

Janice Dunnahoo attended ENMU and retired in 2010 from RISD. She is a board member of Southeast New Mexico Historical Society and its volunteer head archivist.

She has written weekly historical articles about southern New Mexico for the Roswell Daily Record for the past three years. She does speaking and Power Point presentations to local civic groups and organizations to promote awareness and education of the rich history of eastern New Mexico, including the HSNM Annual Conference in April 2018. She has been published in Wild West Magazine.

[RETURN TO TABLE OF CONTENTS](#)

The Proximity Fuze And New Mexico's Role

A World War II Secret Project

By George Helfrich

The outcome of the Second World War was determined by many factors. Certainly the most significant was the dedication, patriotism, heroism and sacrifice of both the Allied troops and civilian populations. But victory was also made possible by a new and revolutionary approach to develop and supply the weapons needed to win the fight. One man (Dr. Vannevar Bush) conceived a plan whereby the diverse capabilities of the military, the scientists and industry were united in a common and cooperative effort to defeat the Japanese and German military.

Two of the three most significant scientific technological developments of World War II are well known, the atomic bomb and radar. The third, development of the proximity fuze, has been nearly forgotten and little is remembered of the fuze testing done in New Mexico. During the war the proximity fuze, for security reasons, was referred to as the "variable timed" or VT fuze.

During the 1930s, the United States, along with much of the rest of the world, was slowly recovering from the Depression of the early 1930s and the *War to End All Wars*, WWI. By the mid 1930s, the country was deeply divided between isolationism and intervention in Europe. However, as the Nazi aggression and persecution increased, and many of Europe's leading scientists sought refuge in England and the U.S., sentiments changed. Several leading university leaders became convinced if England and democracy were to survive, the U.S. needed to address the poor state of the country's defense capabilities, while at the same time providing aid to England. This was not a popular sentiment on some college campuses.

Dr. Vannevar Bush, Dean of Engineering at Massachusetts Institute of Technology (MIT) approached President Franklin D. Roosevelt (FDR) with a proposal that the leading physicists, chemists and engineering specialists at the country's universities be recruited to address the technology shortfall of the country's military technical capability. Recently appointed as President of the Carnegie Institute, V. Bush (as he signed his name) was subsequently authorized to create and chair the National Defense Research Committee (NDRC). On June 18, 1940, their first informal meeting was held in Washington. V. Bush was joined by such notables as Dr. James B. Conant, President of Harvard, Dr. Frank Jewett, President of Bell Labs, Dr. Karl Compton, President of MIT, and Dr. Richard Tolman of Caltech.¹

Members of the NDRC began contacting leading scientists at U.S. universities, the refugee scientists, and scientists in England who were working on nuclear research, radar, and other war-related technology. On June 28, 1941, the Office of Scientific Research and Development (OSRD) was created, again headed by V. Bush.² Both the NDRC and the OSRD were related in that the NDRC established what needed to be done, and the OSRD, with access to funds and resources, got it done.

Admittedly, the atomic bomb which shortened the war with Japan was a huge technical challenge and saved countless lives, both Allied and Japanese. Also, at the start of the war, radar was still in its developmental stages, both in the U.S. and England. The British had designed a new powerful transmitter tube, the magnetron, which the U.S. was able to mass produce to the benefit of both countries. Having been Dean of Engineering

at MIT, and now chairman of the NDRC, V. Bush established the Microwave Committee to develop an accurate fire control and more advanced anti-aircraft system. Being familiar with the abilities of the MIT, he was instrumental in creating the Radiation Laboratory (Rad Lab) at MIT, which would eventually design the SCR-584 Radar using the British-designed magnetron. This radar would prove to be a quantum leap in microwave technology and would be used in both the European and Pacific war zones and for years afterward.



An early SCR-584 radar with the dish mounted atop a trailer. This was the configuration used early on at White Sands Proving Ground to track V-2 launches. From the author's collection.

Locally, after the war, the SCR-584 Radar would become the primary radar tracking device at the newly formed White Sands Proving Ground. The radars were a part of the early Range Control Center located ten miles east of the main base and south of Launch Complex 33 where the V-2s were launched. The author used portions of the SCR-584 Radar (antenna, drive and control mechanisms) to support later radar experiments at WSMR (1959), Roosevelt Roads, Puerto Rico (1968), Key West, Florida (1970) and Pt. Loma, California (1970).

The proximity fuze was urgently needed. Until development of the proximity fuze, the only options for ground forces in firing at enemy aircraft were contact fuzes and mechanical timed fuzes, both of which were very ineffective. The contact fuze depended on actual physical contact with the target. The mechanical timed fuze required the speed, altitude, heading, and range of the target to be estimated and then manually setting a timer on each shell fired. The probability of destroying a target was on the order of one in 2.4 thousand.³ It should be kept in mind that until WWII, aircraft were not considered to be a significant threat. With the introduction of the Japanese Kamikaze suicide weapon, the loss of ships and personnel would have greatly increased, were it not for the development of the proximity fuze.

On August 24, 1940, Dr. Merle A. Tuve of the Department of Terrestrial Magnetism (DTM) of the Carnegie Institute was named head of the NDRC, Section T (for Tuve), Division A, responsible for armor and ordnance. He was charged with the development of a proximity fuze for rotating projectiles. On September 19, 1940, Tuve met with the British Minister of Supply, J.D Cockcroft, as a result of the British-American long-range technical liaison negotiated by FDR and Churchill.⁴ Various approaches to a proximity fuze, including photoelectric, acoustic, and radio triggers were considered or had been investigated by both countries.⁵ The Carnegie Institute began working on a solution.

By agreement between the Navy Bureau of Ordnance (BuOrd) and the trustees of the Johns Hopkins University (JHU) in March of 1942, for administrative reasons and space limitations, Tuve and a group from the Department of Terrestrial Magnetism left the Carnegie Institution and became the nucleus of the newly formed Johns Hopkins University Applied Physics Laboratory (JHU/

APL) and the task was shifted from the NDRC to the OSRD.⁶ What the navy wanted was a fuze that could sense the approach of an enemy plane and, at the proper distance, detonate the projectile. If done correctly, the resulting spray of shrapnel would create a cloud of debris much more likely to disable the plane.

The single most important aspect of the fuze development was the necessity of developing a working product as fast as possible. With the creation of APL, and the transfer from NDRC to OSRD, things were greatly improved. Work continued at DTM and by the British on fuzes for rockets and bombs while the work of Tuve and his team was concentrated on rotating projectiles (the type fired from ship's guns).

The most significant hurdle was the development of a radio transmitter/receiver that was rugged enough and small enough to fit in the nose of a three- or five-inch shell and could withstand the 20,000 G forces of being fired. Another design requirement was for the fuze to be able to withstand the centrifugal force created by the projectile rotating at four or five hundred revolutions per second.⁷

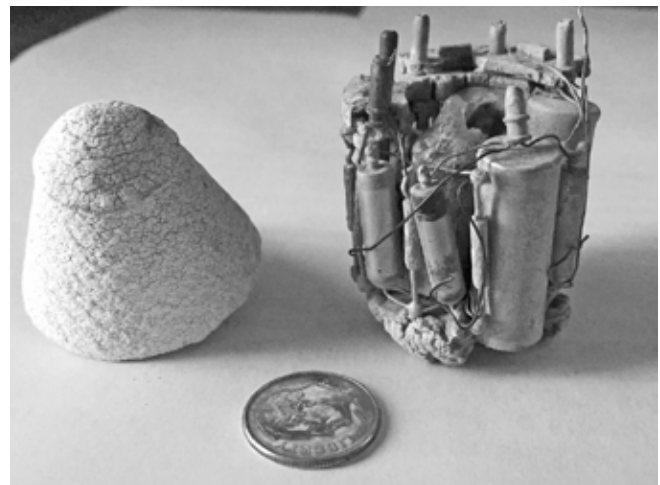
The original fuze was a simple five-tube device that sent out a radio pulse and measured the time lapse for the reflected signal to return. When the time of the returned pulse was short enough (i.e. at the desired range), the explosive in the shell was detonated, resulting in a barrage of shrapnel in the path of the approaching target.

The first prototype fuzes built, using hearing aid tubes, were test fired at the navy facility on the Potomac River at Dahlgren, Virginia. Some testing was also done in Maryland and in New Jersey. Initially, shells were fired from three inch, five inch and 57mm guns pointing straight up in the sky. The shells would ascend until gravity sent them back to earth, base first, with the nose still pointing up. Using posthole diggers, members of the test team would dig up the shells and return them to APL for evaluation.

Test sites on the East Coast soon proved inadequate from the standpoints of safety, se-



The photo above shows artillery shells equipped with proximity fuzes. The photo below shows a recovered fuze after firing. The fuze was created before the digital age and is remarkably small for its time - that is a dime in the foreground. From the author's collection.



curity, and space. On one occasion a shell fell dangerously close (about six feet) from the U.S. Route-301 Potomac River Bridge that connects Virginia and Maryland near the Dahlgren Navy base. After the test, the staff was gathered in the office of Commander William S. Parsons, the BuOrd fuze Project Officer. The phone rang and Parsons answered and was heard to say, "Yes — yes — yes." Then, in a very firm voice, "And now let me tell you something. The navy has the most accurate bombsights in the world. If we intended to hit that bridge, we would have hit it." He hung up and dialed another number. Then the staff heard "Joe, for God's sake don't ever drop another shell within a mile of that bridge."⁸ Two differ-

ent authors have reported this verbal exchange. The difference is that the second author indicates that the bridge was the Cape May bridge near the naval air station of the same name in New Jersey.⁹ The later location is probably more likely as this was obviously a bomb fuze test which was also being supervised by Parsons.

With the development of tubes rugged enough to withstand the firing shock, and for reasons stated above, it was decided that another, more suitable, test range was needed. Dr. E.J. Workman, the head of the Physics Department at the University of New Mexico (UNM), a colleague of Dr. Tuve and familiar with previous research at the Carnegie Institute, was approached by OSRD to develop a test range in New Mexico.¹⁰ Workman had been working with the Carnegie Institute and had been given the task to mount an oscillator (i.e. a radio frequency generator) in a small shell and shoot it.¹¹ Workman's approach was to use a 37mm gun. On April 20, 1941, Workman heard the first successful oscillator in flight. This point was in doubt for about ten days because the oscillator was heard after landing — ten days later. It was found that the receiver sensitivity permitted hearing an oscillator of this kind half-buried in the ground. This demonstrated the feasibility of putting a radio (radar) device in a projectile, and was therefor the first step in developing a proximity fuze.



In January of 1941, Dr. Workman was named director of what became known as the New Mexico Test Range.¹² Location of the test range, also referred to as the New Mexico Proving Ground, or Experimental Range, was driven by safety consideration and the need for a remote, secure area. Also, within the test site, a relatively flat area large enough to recover shells for evaluation was needed. Workman decided on a site south of Albuquerque, situated at the base of the Manzano Mountains and northeast of the Isleta Indian Reservation on what was to later become the southern part of the Sandia/Kirtland Air Force Base facility. Created originally by the School of Mines of Socorro, New Mexico, to test explosives used in mining operations and to train students in their use, the range was perfect. Consequently, UNM arranged to take over the area and expand the site for the navy project.

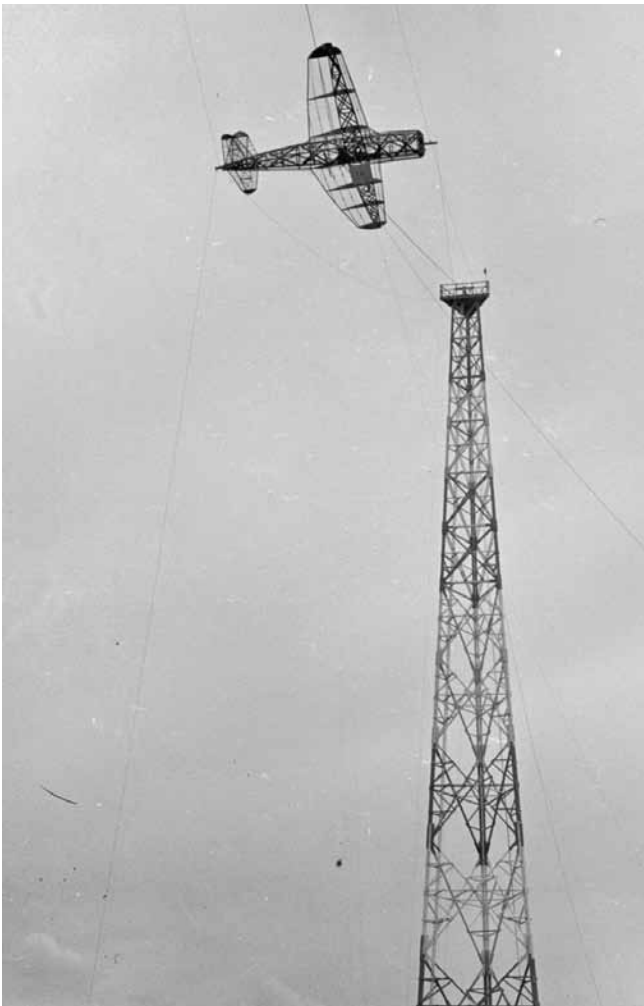


The Sandia Girls School where administrative offices were established in 1941. From the author's collection.

Administrative offices and work rooms, originally on the UNM campus, were later set up in what had been the Sandia Girls School, located off Gibson Avenue. The first task was to erect two 250-foot wooden towers spaced 400 feet apart using a minimum number of steel bolts and without any guy wires that would have interfered with the radio signals. Suspended between the towers, using pulleys and 1-1/2" heavy rope, mockup aircraft targets could be suspended. The towers



The two towers erected at the test facility with an aircraft mockup suspended by rope between them. From the author's collection.



A mockup of the Japanese Nakajima B5N Kate suspended between the towers. From the author's collection.

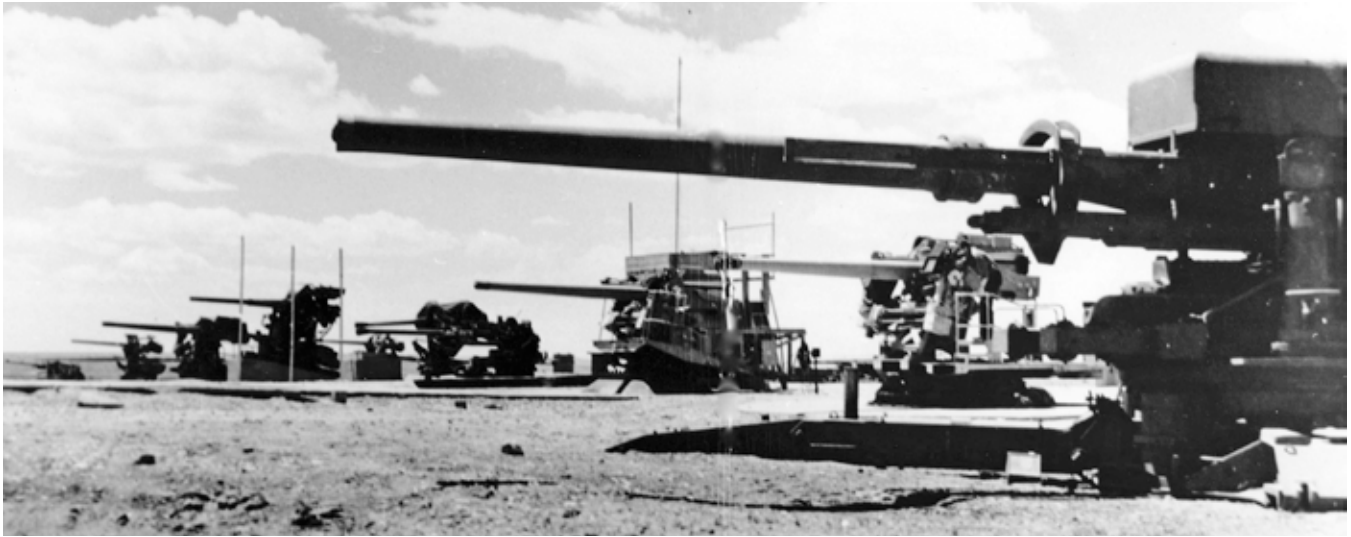
and target were designed to withstand 100-mph winds. They were subjected to 95-mph winds the next year during a storm.

The Japanese Nakajima 97 torpedo bomber and American B-25 aircraft models were initially used to evaluate fuze performance, burst patterns, and lethality. Personnel shelters, providing adequate protection, were needed to allow spotters to locate the impact of shells fired vertically. Also necessary was a firing line located approximately two miles west of the towers where various guns could be placed.¹³ Eventually as many as 15 guns, operated by a navy crew, were installed

at the range. Initially there were two 5-inch/38s (i.e. they had a five-inch diameter barrel that was 190 inches long: $5 \times 38 = 190$). These were later joined by a 5-inch/51, 90mm guns, a 120mm gun, a British 3.7" gun and the U.S. Navy's 3-inch/50 and 6-inch/47 gun.¹⁴ Testing began in New Mexico with a continuation of proximity fuze vertical firings (as previously performed back on the East Coast) with shells containing no explosives. This was done to finish verification that the fuze met ruggedness minimum thresholds.

Next, shells with black powder spotting charges were fired at the suspended target to evaluate burst patterns. Spotters could then measure the distance between the target and the shell when the shell detonated. After the optimum approach distance of 70 feet between the shell and target was established, shells with normal explosive charges were fired to measure lethality.

The value of the new range was soon demonstrated in the winter of 1943. After fuzes were initially put into production at various factories, production-lot-acceptance tests at Dahlgren suddenly resulted in unexplained failures, thereby stopping production. Frozen ground where the shells were recovered was soon identified as the cause of the failures. Lot acceptance testing was immediately shifted to the New Mexico Test



The gun line used for testing proximity fuzes in various sized shells. From the author's collection.

Range where the desert seldom freezes.¹⁵ A suitcase full of fuzes was rushed to Albuquerque for testing, soon enabling production to resume.

An interesting side service provided by Dr. Workman and the Physics Department at UNM involved supporting work done at Los Alamos. By acting as a front for receipt of the enormous amount of test equipment required to develop the atomic bomb, technical equipment was shipped to "Physics Department, UNM, Albuquerque, New Mexico" to divert attention from what was going on at Los Alamos.¹⁶

Development of the New Mexico Test Range was not without difficulty. In March 1942, Workman attempted to lease 30 square miles of rangeland for \$2,000 as an addition to the McCormick Ranch¹⁷ that had been acquired several months earlier. The lease was rejected by NDRC. In a letter to Dr. R.C. Tolman, chairman, Division A, NDRC from Dr. Tuve, chairman, Section T, Tuve made some strong comments about the rejection: "for the simplest vertical shooting, an area of about five square miles is necessary" — "final tests at various angles must be carried out also" — "none of the above facts should be ignored in replying to your vigorous questioning" — "I furthermore regard this as a decision of the type which must be made by the man in charge." The contract was approved¹⁸ providing 20,000 acres

which by the end of the war was expanded to 46,000 acres.¹⁹

Along with similar occasional administrative problems, there later developed a sizable controversy. By 1946, Workman's handful of scientists had grown to a department of 200. The UNM president under whom his work had grown suddenly died. Sizable navy and signal corps contracts were being administered by Dr. Workman. The new president tried to change the contracts giving the university more control and allowing for increased administrative and overhead funds to be charged. The new UNM president insisted that the contracts go through the school or there would be no contract.

Workman's response was that he would take his contracts and staff and move to the School of Mines in Socorro.²⁰ On February 8, 1946, after a meeting in the New Mexico governor's office, attended by U.S. Navy Bureau of Ordnance (Bu-Ord) officers, UNM, School of Mines trustees, the NM State Auditor and NM Attorney General's Office, it was announced that the fuze project would shift to Socorro with Workman as director.²¹ On February 26 it was announced that UNM had subcontracted the navy fuze contract to the School of Mines²² with the statement that "the operation of the project in buildings of the campus would not be compatible with the intellectual and scientific

life of the university.” There was never any mention in the newspapers of the controversy between Workman and the new president. Four months later in June 1946, Workman became president of the School of Mines. In 1951, it became the New Mexico Institute of Mining and Technology (NMI). For many years after the war, ordnance testing for the navy continued to be carried out in the mountain canyon west of the NMI campus.

In 1946, the secret of the proximity fuze was announced to the public²³ with a newspaper article stating “UNM physicists assisted materially in the development of the variable timing (proximity) fuze, the war’s second most startling invention and American science’s answer to the German V-1 flying bomb and the Japanese Baka rocket.” The assistant secretary of the navy ranked it “only behind the atomic bomb as a scientific wartime development.” The article also stated that the cost to the Navy Department was \$800,000,000. Workman was quoted as saying “it enabled our fleet to sail into enemy waters in the later stages of the war and literally challenge the Japanese planes to attack.”

In Europe, the fuze was credited with permitting antiaircraft gunners to defeat German air power during and after the Battle of the Bulge. The combined use of the SCR-584 radar and the proximity fuze is credited with greatly reducing the damage and casualties caused by the German 80-day campaign waged with the V-1 buzz bomb against London. For the last four weeks of the now famous 80 days of V-1 attacks, the record of anti-aircraft was as follows: first week – 24 percent of all targets engaged were destroyed; second week – 46 percent; third week – 67 percent; and the fourth week – 79 percent. On the last day that a large quantity of V-1s were launched against England, only four reached London. The fuze is also credited with protecting Antwerp, Belgium, against the German V-1 buzz bomb.²⁴ The Battle of Antwerp is mentioned because after D-Day, the Allies had advanced so rapidly that their supply lines were extended inland to a distance of 500 miles. Fortunately, the British captured Antwerp

with its excellent port and facilities virtually intact. The Germans made an all-out effort to destroy the port and city with the V-1 buzz bomb, but were unable to stop the Allied advance because of the use of the proximity fuze. Until then, over land use of the fuze had not been authorized for fear that the enemy would recover a shell that had not exploded and learn how the fuze operated and develop a countermeasure by jamming the fuze radar frequency.

The first successful use of the proximity fuze by the U.S. Navy was on January 5, 1943, when the USS Helena, with just one shell, destroyed a Japanese Aichi D3 (Val) dive bomber near Guadalcanal.²⁵ This was the very first time a shell with a proximity fuze was fired in battle. Commander William S. Parsons was aboard as an advisor/observer. The fuze is credited with greatly reducing later navy losses in the Pacific from Kamikaze attacks.

William Sterling Parsons

Navy Officer/Scientist

Nov. 26, 1901 – Dec. 5, 1953

Just as the work on the proximity fuze in New Mexico has nearly been forgotten, little is remembered about one of the most gifted and outstanding WWII Navy officers who incidentally came from New Mexico. Captain William S. “Deke” Parsons is most often remembered as the ordnance officer/weaponeer who armed the atomic bomb after takeoff from Tinian Island aboard the Enola Gay on its flight to Hiroshima. He may also be remembered as the associate director of the Manhattan Project under Robert Oppenheimer at Los Alamos. There, he was second in command of the project.²⁶ He watched the Trinity nuclear test from a B-29 on July 16, 1945. However, there is much more to his life and career that took place before the atomic bomb and after WWII

Parsons was born in Chicago, Illinois, on November 26, 1901. His father, Harry Parsons, was a lawyer who decided to move to Fort Sumner, New Mexico, in 1909. Parsons did not start school until the move was complete when he was



Formal portrait of Rear Admiral Parsons.

eight years old. He and his younger sister started in the local school at the same time, she in the first grade. His mother, Clara, taught English and Spanish at the Santa Rosa High School. Parsons was fluent in Spanish and completed three years of school in one year, having been home schooled by his mother.

At the age of 16, Parsons went to Roswell, New Mexico, as an alternate candidate to take the exam for the U.S. Naval Academy. He passed the exam while more favored candidates did not. He got the appointment.

He graduated from Santa Rosa High School in 1918. Because he was two years younger than most candidates, he had not finished growing in height and weight, but managed to convince the Naval Academy admissions board to admit him anyway. He entered the Naval Academy at Annapolis, Maryland, in 1918 and graduated 48th out of 539 in the class of 1922.

As a newly commissioned ensign, Parsons

began his career on the battleship USS Idaho on August 1, 1922. He was recognized as a quiet, able officer and was put in charge of the number one turret of the ship's main battery of 14-inch guns. He began by analyzing dispersion problems of the shells fired which affected the ship's performance and effectiveness. As a new officer with one year experience, he approached the skipper, who had thirty years experience, and suggested a solution which would improve gunnery scores. His proposal was implemented and soon demonstrated a marked improvement.²⁷

In May 1927, Parsons returned to Annapolis and entered the Naval Postgraduate School (PG). He is remembered as the brilliant one of his five fellow ordnance PG students. Although he was totally dedicated to his studies, he managed to fall in love with Martha, the daughter of Admiral Wat Cluverius. Like Parsons' mother, Clara, Martha was a graduate of Vassar College. They were married in November 1929 and upon finishing PG school in 1930, he was ordered to the Naval Proving Ground in Dahlgren, Virginia. By now, because of his last name, he had become known as "Deke," a nickname he carried for the rest of his life. He learned that as a postgraduate student, he was to reside in the bachelor officer's quarters (BOQ) along with the other PG students. Rather than use his father-in-law's influence, Deke approached the base commander and upon assuring him there would be no children in the next five months, struck a deal where Martha would be in charge of running the BOQ where she would be expected to reside.²⁸ The base, named after the nineteenth century Admiral John Dahlgren for his contribution to naval weaponry, would be Parsons' home for some time. There he would eventually be considered the twentieth century equal to Admiral Dahlgren.

Parsons was next assigned to serve on the battleship USS Texas for three years. There he took up gunnery duties with a clear understanding of how things worked and what basic problems needed to be fixed. In 1931, the USS Texas was home ported in San Diego. Martha was able to

join him and surprisingly, his father-in-law "the Admiral," was also assigned to the USS Texas. This was great for Martha, but Deke was always on guard to not have the relationship affect his performance or give the appearance of favoritism.

While aboard or on shore, he remained dedicated to understanding and solving problems related to ballistics and gun performance. He continued communication with his PG mentor, Dr. L.T.E. Thompson at Dahlgren, not as a student, but as an officer wanting to continually improve the ship's guns and accuracy. With the May 1927 news of Lindbergh's successful flight to Paris, only Parsons and a few others realized that the airplane would become a significant threat to ships. He knew that the anti-aircraft guns on ships at that time were very ineffective.

In July 1933, Lieutenant Parsons was assigned as the technical liaison officer between the Naval Research Lab (NRL) in Virginia and the navy Bureau of Ordnance (BuOrd) which was responsible for all naval weapons. At NRL he learned of work being carried out related to "radio echo," that would eventually be known as radar.

In his position as a link between the research lab and BuOrd, he strongly encouraged support of this new concept. He tirelessly submitted proposals and recommendations to the highest levels of the navy only to be told that it could not be done, it could not fit on a ship or an airplane, etc., etc. Because his vision of the threat to ships from attacking aircraft was not endorsed by the parts of the navy that could fund the requested research, it is widely accepted that the navy lost at least three years in developing radar for fleet use. The cost in lives, planes, ships, and battles lost was substantial. V. Bush would later credit Parsons with being the first military officer to recognize the full military potential of the new technology of radar.²⁹

In 1934, as NRL's radar work finally started to get funded and proceed, Parsons was given a dual assignment. He was to report to Annapolis as a post graduate instructor in ordnance and also follow up on liaison tasks begun with NRL. In June 1936, Parsons reported aboard the destroyer

USS Aylwin as executive officer and navigator. In May 1937, he was promoted to lieutenant commander and in March 1938 he was transferred to the battleship USS Detroit.

The Parsons' first child, Hanna, born November 11, 1931, was three years old when her sister Margaret, to become known as Peggy, was born on her birthday, November 11, 1934. Sadly, in May of the next year, Hanna suddenly developed a fever and was rushed to the hospital, but died of polio in her father's arms. Another daughter, Clare, was born on November 13, 1937. She, like her father, would also become a U.S. Navy officer.

Parsons' advocacy of radar continued even as he was a PG school instructor. He continued to promote radar's revolutionary potential on his trips to Washington. In June 1939, the Parsons family returned to the Naval Proving Ground at Dahlgren. Parsons was to be the Dahlgren experimental officer, third in the Proving Ground hierarchy. About this time, Britain declared war on Germany and he assumed that he would soon be going to sea. This was not to happen.

Parsons' first effort at Dahlgren was to get support for military rocket research as proposed by Robert Goddard. Goddard had by then nearly given up hope of getting the military interested in his rocket work. Goddard visited Dahlgren and briefed Parsons on the results of rocket experiments that, with the financial support of Harry Guggenheim, he had done at a test range near Roswell, New Mexico. Parsons recognized the potential military applications that rockets could offer. However, little was accomplished by Goddard's visit, primarily because he insisted the rocket be fueled with liquid propellant while the navy insisted on the use of solid propellant for shipboard safety reasons. The navy eventually funded Goddard to develop a rocket that would provide added thrust to an airplane for takeoff and climb. These became known as JATO (jet assist take off) rockets. Other than Parsons and a few others, the navy at that time showed no interest in missiles or rockets.

In the wake of the near disaster of Dunkirk, Parsons was destined to play a very key role in the efforts of V. Bush to mobilize the U.S. through the NDRC and OSRD as explained earlier. Because of Parsons' unique combination of scientific ability, naval officer sea experience, and quiet managerial skill, he was eminently qualified to bridge the gap between the scientists and the military for V. Bush's proposed collaboration between the two. Parsons was to play key roles in development of the two most remarkable weapons of the coming war, the proximity fuze and the atomic bomb.³⁰ With the attack by the Japanese on Pearl Harbor, the production of a proximity fuze took on a whole new urgency.

Parsons was made the BuOrd proximity fuze project officer. Preliminary tests at Dahlgren were then only ten percent successful at best. To start production, a fifty percent success rate was established by Parsons as a threshold. The fifty percent level was suddenly realized on January 29, 1942, after only nineteen months of concerted research. A batch of fuzes with cracks in the plastic body had been set aside and had been dipped in cerise wax and Visanex (a rubber-like substance). These fuzes that had previously not been considered for test were fired while waiting for a delayed shipment of pilot production units. A surprising success rate of 65 percent was achieved.

The wax, which had an insulating effect, was applied to the fuzes thereafter and production was authorized. By the summer of 1942, production fuzes were scoring 70 percent.³¹

Significant administrative changes were needed before the fuzes could be produced by the millions. The BuOrd officer in charge, Admiral Blandy, wanted V. Bush, recently appointed as head of the OSRD, to continue overall technical direction of the fuze project. V. Bush agreed provided the navy would "attach one damn good officer to him for liaison." That officer was Commander Parsons. It was at this time that the fuze program (Tuve's Section T) was shifted from the Carnegie Institution to the newly-formed Johns Hopkins University Applied Physics Laboratory.

Parsons was now the navy project manager; he was also the BuOrd representative responsible for \$800,000,000 of funding.

During the initial research and development phase of the fuze project in 1942, the cost per fuze was \$732. When the fuzes first went into production, the cost was \$75 each, but by the end of the war the cost was only \$18. There were approximately 22 million fuzes delivered to the navy by the end of the war at a cost of about one billion dollars³²

Parsons and Tuve proved to be a great team as neither assumed the position of "boss." They both spoke the same scientific language and Parsons provided the expertise related to military and fleet use. After the fuze went into full scale production, the next hurdle was to introduce its use into the fleet in the Pacific.

Naval ships officers were always skeptical of new weapons. Parsons again took the initiative and personally took a quantity of fuzes aboard the USS Cleveland, before it left Norfolk for the Pacific, for a final live demonstration. He asked for six remotely piloted airplane drones, but was only able to get four as gunnery officers were always considered to be over confident. The first drone crashed due to a malfunction, but the next three were all destroyed. V. Bush wired his colleague James Conant, "Three runs, three hits, no errors."³³

Parsons immediately started making arrangements to take the fuzes to the fleet in the war zone in the Pacific. Upon completion of shipping arrangements, Parsons went to Noumea, New Caledonia, and after convincing Admiral William Halsey, naval commander of the South Pacific, was given permission to find commanders of combat units willing to use their ships for the ultimate test of this new weapon against enemy aircraft.

In January 1943, Parsons went aboard the light cruiser USS Helena, one of the ships under Admiral Arleigh Burke during the Solomons campaign. For several days, they patrolled in hostile waters and bombarded shore installations and enemy airfields to stop Japanese support of action

on Guadalcanal, but no enemy aircraft appeared. On the morning of January 5, 1943, the task force was attacked by eight Japanese Aichi torpedo bombers that hit one of the cruisers. As the enemy departed, the USS Helena aft 5-inch gun crew fired several shells with proximity fuzes and two Japanese planes crashed into the sea.³⁴ The proximity fuze was now in the war.

With Parsons' completion of his assigned mission, to get the proximity fuze into production,



Parsons on Tinian as part of the Manhattan Project's team preparing the two atomic bombs to be used against Japan. Los Alamos photo.

delivered to the fleet and indoctrinate crews in its use, he hoped to get command of his own ship. Instead he was given another even more demanding job. At a May 4, 1943, meeting of the Military Policy Committee, his name was offered by V. Bush as the only qualified scientist/officer to support the Manhattan Project as head of the Ordnance Division under Oppenheimer and Groves.³⁵ He was to supervise the actual production of an atomic bomb. He also would ultimately be responsible for all non-nuclear ordnance aspects of the program.

On May 5, 1943, Admiral Purnell, navy representative on the Military Policy Committee, called Parsons and told him to report to Admiral Ernest King, chief of naval operations (CNO) and commander in chief of the U.S. Fleet (ComInCh). After the meeting, Parsons was then one of only three navy officers who knew of the atomic bomb project. He knew, as an officer, he had no choice but to accept the job, realizing that his dreams of going to sea in command of his own ship were not to be. General Groves, in charge of the Manhattan Project, liked him; "Within a few minutes

(of meeting him)," the general says, "I was sure he was the man for the job." When Oppenheimer interviewed him, he agreed.³⁶

After WWII, he would later provide technical leadership in Operations Crossroads and Sandstone. The first was to test the effects of nuclear weapons against ships and the second was to test new nuclear bomb designs. Parsons was awarded the Navy Distinguished Service Cross. In November 1945, he was named deputy chief of naval operations for special weapons.³⁷

At his death on December 5, 1953, at the age of 53, Parsons had risen to the rank of rear admiral even though he had never had command of a ship. His death from a heart attack has been attributed to the shock of learning of the loss of Robert Oppenheimer's security clearance as a result of Joseph McCarthy's anticommunism crusade. President Dwight Eisenhower's "blank wall" directive blocked Oppenheimer's access to any classified material. In the evening after the news about Oppenheimer broke, Parsons started having chest pains. The next morning, he went to the Bethesda Naval Hospital in Washington, DC, and died on the examining table.

A destroyer, the USS Parsons (DD-949), was launched and christened by his wife, Martha, in August 1957.³⁸ The ship was later converted to a guided missile destroyer, DDG-33, in 1967 with his daughter Clare, then a navy officer herself, representing the family. The USS Parsons was decommissioned in 1982 and was later used as a target and sunk.

George Helfrich. For fifty years Helfrich was involved with guided missile programs. In 1953, he was drafted into the U S Army Ordnance Corp and was stationed at Redstone Arsenal, White Sands Proving Ground, and finally the Los Angeles area servicing Nike installations. In 1955, upon discharge, he entered the University of Maryland and in 1956 began working at the Johns Hopkins University Applied Physics Laboratory (JHU/APL). Upon graduation in 1959, with a degree in Electrical Engineering, he returned

to White Sands to the APL Field Office to support the Navy missile programs there until 2003. His experience was in radar, fire control systems, target development, range operations and flight safety. From 1963 until retirement he was a technical advisor to the navy and the APL Field Office manager.

He has served on the WSMR Museum Foundation, is a charter member of the Dona Ana County Historical Society and a founding member of the Amador Museum Foundation.

End Notes

1. Conant, Jennet, "Tuxedo Park," (Simon & Schuster, 2002), 228.
2. Conant, Jennet, "Man of the Hour: James B. Conant, Warrior Scientist," (Simon & Shuster), 192.
3. Baldwin, Ralph B., "The Deadly Fuze," (Presidio Press, 1980), 25.
4. "The First Forty Years: A Pictorial Account Johns Hopkins University Applied Physics Laboratory Since its Founding in 1942," (The Laboratory, 1982), 1.
5. Baldwin, "The Deadly Fuze," 65.
6. Baldwin, 100-101.
7. Baldwin, 109.
8. Baldwin, 68.
9. Christman, Al, "Target Hiroshima," (Naval Institute Press, 1998), 60-61.
10. Chew, Joe, "Storms Above the Desert," (UNM Press, 1987), 11.
11. Tuve, M.A., Declassified draft of "Notes on the early history of the VT Fuze" (APL Archives, 1945),12.
12. Interview Helfrich/Dr. Bill Hume, 2/17/95, Socorro, New Mexico.
13. Baldwin, 136-138.
14. Helfrich, George, "On a Sea of Sand," 3.
15. Baldwin, 112.
16. Interview Helfrich/Dr. Bill Hume, 2/17/95, Socorro, New Mexico.
17. Tuve, M.A., Declassified draft of "Notes on the early history of the VT Fuze."
18. Tuve, M.A., Letter to R.C. Tolman, March 7, 1942, "Rental of proving ground near Albuquerque, NM," Helfrich Files.
19. "Dr. Workman, Four Associates with an Idea," Albuquerque Tribune, September 21, 1945.
20. Chew, "Storms Above the Desert," 13.
21. "OK Fuze Shift to Socorro," Albuquerque Journal, February 8, 1946.
22. "Navy Project Is Sub-Contracted," Albuquerque Journal, February 26,1945.
23. "NMU Secret War Role Disclosed," Albuquerque Tribune, September 21, 1945.
24. Baldwin, 2, 266, 273.
25. Baldwin, 222.
26. Groces, Leslie, "Now it Can Be Told..." (Harper & Row, 1967).
27. Christman, "Target Hiroshima," 26.
28. Christman, 35.
29. Christman, 55.
30. Christman, 72.
31. Christman, Al, Naval Institute Proceedings, Jan. 1992, 59, 87.
32. Baldwin, 212.

33. Christman, "Target Hiroshima," 94.
34. Christman, "Target Hiroshima," 97.
35. Christman, "Target Hiroshima," 107.
36. Rhodes, Richard, "The Making of the Atomic Bomb" (Simon and Schuster, 1986), 477.
37. Kunitka, James, "The General and the Genius: Groves and Oppenheimer," (Simon and Schuster, 2015), 408.
38. Willshaw, Fred. "USS Parsons (DD-949 / DDG-33)," NavSource Naval History. Retrieved 30 July 2011.

[RETURN TO TABLE OF CONTENTS](#)

Desert Outpost

The Post Across From El Paso, American Empire And The Militarization Of The U.S. Mexican Border, 1848-1850

By Shawn M. Warswick

On May 25, 1859, Lydia Spencer Lane and her husband, Army officer Lieutenant William B. Lane, arrived at Fort Bliss on the far edge of western Texas. Perhaps surprising to modern visitors and residents of El Paso, Lydia found the location to be “the most delightful station” to which they had ever been posted.¹ Most visitors remark upon the heat (especially in the months between April and late October) or, in the spring, upon the dust storms reminiscent of the deserts of Arabia. Instead Mrs. Lane found the settlement in general, and Fort Bliss in particular, to be one of the best posts in the army of the antebellum West.

Mrs. Lane and her husband came to the desert Southwest as part of the U.S. Army, enforcers of American sovereignty in the newly acquired territories of the Southwest. The soldier was tasked with the mission of pacifying a region famous among its former imperial masters (be they Spanish or Mexican in nationality) for violence and lawlessness.² In the case of the Post Across from El Paso, the future Fort Bliss, and others like it in the area, the U.S. Army was responsible for securing the border and ensuring the safety of travelers on the road to California from San Antonio, which was particularly dangerous as it passed through lands claimed by the Apache.

Thus I argue the southwestern borderlands, an area with a reputation for violence and lawlessness prior to the arrival of Americans in the nineteenth century, comes under the imperial control of the United States in the aftermath of the war with Mexico in 1848.³ In an effort to impose what historian William Appleman Williams referred to as administrative colonialism on the inhabit-

ants of the region, the United States government created a system of forts to protect the border and subdue the native population.⁴ Within this system, Fort Bliss, a fairly minor outpost in the war with the Apaches, would evolve as the city of El Paso evolved and grew. Its role would be more about border protection and planting the flag of American empire rather than subjugating Indians.

In 1846, war between Mexico and the United States broke out over Texas in general, and specifically over the location of the boundary between the two countries, with the United States arguing the border was the Rio Grande and Mexico saying the border was the Nueces River.⁵ While El Paso del Norte was fairly calm, the area did see some action. Alexander Doniphan received a commission as a colonel in the Missouri volunteers. After capturing Santa Fe “bloodlessly,” Doniphan and his forces would be detached from Stephen Kearny’s Army of the West and head south through the pass and eventually into Chihuahua. On Christmas Day, Doniphan and his men won the battle of Brazito, having suffered only seven men wounded.⁶

With the Battle of Brazito won by the Americans, the region fell under the control of the United States permanently. By 1848, the war was over and the Treaty of Guadalupe Hidalgo was signed that February. This document contained several provisions, including Article VIII which stated that Mexican citizens would either retain the title and rights of Mexican citizens or they could “acquire those of citizens of the United States.” Furthermore, the treaty stated all Mexicans had one year to decide and, if they did

not make their intentions known within that time period, they would automatically be “considered to have elected to become citizens of the United States.”⁷ Of further importance was an article which gave the United States responsibility for protecting Mexico from raids by Indians residing in the United States. Thus the U.S. would have to enforce the border or be in violation of the treaty, if say the Apaches raided villages in Mexico.

The problem in 1848 is that while the United States now had legal sovereignty over the “pass of the north,” it had no physical presence of any significance in the region. In other words, it had no agents of empire to enforce or to ensure it held onto the newly acquired territory. First though, they would need to demarcate the boundary between Mexico and the United States and then they would have to establish some sort of military presence to discourage natives from engaging in violence against both Mexican villages and Americans who would be ostensibly using the region to reach California and the gold fields located there.⁸

So, besides the boundary line, the government also decided a road was needed to connect east Texas to El Paso, tying the far western, less settled region to the nation state.⁹ To do this, the government hired John S. Ford, a Texas Ranger, and Major Robert S. Neighbors, U.S. Indian Agent in Texas, to open a road from Austin to El Paso while, at the same time, hiring Lt. William F. Smith of the Topographical Engineers and Lt. Whitting of the Engineering Corps to survey a military road from San Antonio.¹⁰ Both the lower military road and the upper civilian route were used by 49ers making their way from the East to California and it would be the responsibility of the army to protect those travelers.

The U.S. Army was ordered to establish a post at the pass of the north and it would be the responsibility of the 3rd Infantry to do so. At this time, there were the aforementioned reasons for the establishment of a base in the region, but a third, so far undiscussed reason existed. A report to the 45th Congress of the United States noted

that Mexicans on the American side of the border, “were bound to Mexico” by way of race and religion.¹¹ While that report was produced almost three decades after the founding of the first army post in El Paso, the attitude expressed in it was not new in the 1870s and existed prior to even 1850. As Chicano/a and borderlands historian Ernesto Chavez notes, the Treaty of Guadalupe Hidalgo might have extended U.S. citizenship to Mexicans, but Article IX labeled them a conquered people, ensuring that they would lose their land grants and allowing for the crafting of a Mexican race in the United States. One can see this at work in the Treaty of Guadalupe Hidalgo and in the prior report to the 45th Congress.¹²

To elaborate on that last point, noted historian of race relations and American expansion Reginald Horsman has shown the racial side of American expansion. Horsman shows that although American leadership was influenced by the enlightenment and its ideas of equality of all men, the hunger of the American people for more land thwarted any chance which might have existed to incorporate transformed Indians into the American nation. Indeed, Americans thought Indians were not worthy of retaining the land, since they did not use it in the way Europeans did.¹³ This hunger for land motivated the American war against Mexico and would continue to motivate the actions of Americans in the borderlands when they began to displace Mexican ownership of the land.

By the 1840s, racialization had come far. Dr. Josiah Nott of Mobile, a man who would become internationally famous in the decades leading up to the Civil War for his writings on race, claimed racial interbreeding to be a disastrous proposition and would lead to less fertility amongst the offspring. Mulattoes were, in the minds of Americans in the 1840s, inferior and to be avoided. “To keep Caucasian blood pure was to ensure the continuation of civilization and progress... Civilization was to be found only among the various branches of the Caucasian race.”¹⁴ When it came to Mexicans, Americans, as mentioned before, saw them as a step above Indians,

but degenerate nonetheless. Richard Henry Dana, an American from Boston, visited Mexican California in the 1830s, describing the people there as “lawless, thriftless, proud and extravagant.” He said they were especially fond of gambling and licentiousness, and the women he described as being uneducated but of great beauty, lacking in virtue and known for their jealousy and desire to avenge any slight.¹⁵

Anglos, on the other hand, saw themselves as God’s chosen people, evidenced by their ability to survive and prosper in the New World against all odds.¹⁶ This idea of American exceptionalism, first expressed by John Winthrop in “A Modell of Christian Charity” [sic] was part and parcel of the American psyche. By the 1840s, the Puritan mission, as expressed by Winthrop, had become the American mission: to bring the light of civilization to the uncivilized areas of the world.¹⁷

By late 1848, Secretary of War William L. Marcy recommended the establishment of a military base along the Rio Grande to defend the new boundary, to protect settlers against Apache attacks, and finally to establish and maintain law and order.¹⁸ On November 7, 1848, the War Department issued General Order No. 58, reassigning the 3rd Infantry Regiment to “duty in Department No. 9.” Department 9 referred to the New Mexico Territory, to which the El Paso region was assigned. Further it ordered four companies from New Orleans Barracks to repair to Jefferson Barracks, where they would receive further orders from Major General Taylor. A total of six companies would head to El Paso as soon as possible. Thus, the first military outpost would be created by the U.S. Army’s 3rd Infantry.¹⁹

By February 1849, orders were issued directing the HQ company and six other companies from the 3rd Infantry to head towards El Paso del Norte on April 10. Originally, the plan was for the column to proceed west via Fredericksburg, Texas, however, a party of topographical engineers had already set out to reconnoiter possible routes and recommended they pass instead through the Leona Creek region.²⁰

The column faced several delays, including a cholera outbreak and flooding in the San Antonio region, but Major Jefferson Van Horne, the officer in charge of the troops heading to West Texas, would take advantage of the delay to request several things from Third Infantry Headquarters. First, he felt it would be necessary to have at least one company of dragoons (cavalry troops) to work in tandem with the infantry in their assignment to pacify the Apaches, who were known to be formidable raiders. Secondly, he requested the ability to make presents of tobacco to bands of Indians both in route to the post and once there to try and create peaceful relations with the natives. Thirdly, he felt it necessary to employ guides and interpreters to not only help the column find its way, but to also help with the enforcement of treaty stipulations. Fourth, he asked for frontiersmen to find the best route and he also requested the most up-to-date maps and a quartermaster to help outfit the expedition. Major Van Horne was granted his first request and allowed to mount fifteen men on horses and armed with Colt revolvers (perhaps not what he had in mind). Interestingly, he was told his second request was not possible as the “government had no provisions for making presents of any kind to the Indians.” As for his other requests, a number of experienced frontiersmen were employed by the Department of Engineers and assigned to accompany the expedition and, although no maps existed of the Southwestern frontier, the army did assign a quartermaster, Captain Samuel Gibbs French, to outfit the column and serve at the new outpost.²¹

While not everything was in order, the column finally headed for its new home on June 1, 1849. It was not the most auspicious day thanks to heavy rain and poor roads. However, Major Van Horne, the officer in charge of the troops heading to West Texas, decided there had been enough delays, and ordered the column to head out. The wagon train consisted of a total of 275 wagons pulled by 1500 oxen, mules, and horses and 400 men with eight officers and 177 enlisted men, 200 teamsters and mechanics, as well as some Califor-

nia gold seekers who decided to tag along for the first part of their journey west. As historian Evan Antone notes, this group represented the longest wagon train to ever embark westward across Texas.²²

It would take three months for the column to march across Texas, and on September 1, 1849, it arrived at San Elizario. The officers were so pleased they had finally reached the end of their march, they remained in place for three days and nights before moving on to Socorro and Ysleta. The march from San Elizario to Ysleta was pleasant, as the route mostly followed along green fields, vineyards, and cottonwood trees growing along the banks of the Rio Grande river. The wines made from the grapes grown in the region were known for their excellence.²³

At this time, El Paso did not yet exist. Paso del Norte was in Chihuahua, while what was then called the Ponce de León village would become the modern American city of El Paso. De León sold his property to Franklin Coons and the village would become known as Franklin. Around the time the army arrived, the combined population on the U.S. side numbered approximately 3000 people, while on the Mexican side the population numbered near 4000. Furthermore, about 100 Anglos lived in the area at this point.²⁴

Not all the troops who had travelled to the region were to be stationed at the "Post Opposite El Paso." Companies I and K as well as a howitzer battery would take up station in San Elizario.²⁵ On September 11, Franklin Coons agreed to rent some of his buildings to the army, including structures to house troops and a storehouse at an expense of \$410 per month.²⁶ This plan was only a temporary solution, at least in the eyes of Major Van Horne, who felt the best site for a permanent base would be in San Elizario, the location of an old Spanish presidio, which he believed could be rebuilt and repaired for relatively reasonable rates. Further, there were plentiful supplies of wood and the grazing was better at this location.²⁷ Lastly, the major was apparently worried about the wretched hordes of "gamblers, drunkards

and desperados" in El Paso del Norte, an opinion which reflected the general bias against Mexicans and Mexico which was prevalent in the United States and often reflected by the writings of its people.²⁸

However, not all the locals were pleased with Major Van Horne's plans, and even some of his own men believed this decision was not in the army's best interest. First, Captain Thomas L. Brent of the quartermaster corps believed the site was too low and prone to flooding and felt there was no tactical advantage to placing troops at that location. Second, local merchants, led by James W. Magoffin, argued that removal of troops from the Coons Ranch location would leave the actual routes through the Pass of the North, and American citizens, exposed to Indian depredations and completely unprotected from bandits who apparently ran roughshod in the region at that time. The decision was made to leave the bulk of the forces at the Coon's ranch location and place two companies at San Elizario.²⁹

Thus, in the fall of 1849 the United States has approximately one soldier for every 10 people living on the American side of the border in the valley. At a time when the army was kept notoriously small during times of peace (there were 8730 troops on active duty in 1844 and after the war with Mexico a force of over 47,000 was cut down to approximately 10,000), keeping 400 in such a remote location seems excessive.³⁰ Those 10,000 troops, divided into 160 companies, were expected to defend and police an area that encompassed the entirety of the U.S. from the Mississippi River to the Pacific Ocean. Of 166 companies which made up the U.S. Army, the West received the bulk, 126. However, calls to increase the size of the army in the West were issued regularly from various quarters in American society, including military officers, government officials, and the press. The *Corpus Christi Star* noted in November 1848 that the locals in that part of the state were concerned with what they perceived to be lawlessness in the aftermath of the war and the withdrawal of American forces from that part of the state.

The citizens of the area went so far as to petition the commanding officer of the Rio Grande district, a T.W. Sherman, to aid the local authorities in the enforcement of the law.³¹ A later issue of the same newspaper would note that while there were armed forces scattered throughout the West, most of these, if not all, were not large enough to protect themselves, much less the locals.³² This sentiment was probably not confined to Corpus Christi, and likely responsible for the opposition to Major Van Horne's plan to station the bulk of his forces in San Elizario rather than at Franklin.

While citizens in 1848 and 1849 worried about lawlessness and appear to have seen policing as a part of their duty, the U.S. military was also concerned with frontier security. Military historian and specialist on the U.S. Army in the American West Robert Wooster referred to the frontier soldiers of the 1830s and 40s as "agents of Manifest Destiny," and the army would have been worried about securing the border from Indian raids which originated within the United States, but also from raids by Mexicans who perhaps wanted to reclaim some of their recently lost territory. □ The United States had treaty obligations, which meant the former certainly had to be on the minds of those in charge, but what about the latter claim? While one could make the argument there was nothing to fear from Mexico, having been recently defeated, it makes sense that these troops were sent to El Paso, a relatively remote and quite region, sparsely settled, to not only protect the border, but to establish the line and fly the American flag, thus establishing American sovereignty over the newly acquired territory. □

Life at the post was hard, but quiet. The main settlement was called Magoffinsville, after James Magoffin, the previously mentioned Anglo-American trader originally from Missouri. And while the valley was known to produce a variety of fruits and fine wine, the soldiers' limited budgets meant living conditions could be difficult at the best of times. Food rations featured monotonous items such as beef or salted pork, bread, and coffee and spiced up by the occasional presence of

cabbage or potatoes. The quality, texture, and appeal of the food was lacking, although there was plenty of it. □

Furthermore, while the weather in El Paso could be pleasant enough in the fall and winter, especially compared to the eastern portions of the United States, the springtime would have featured temperature swings and dust storms on plenty of occasions. The summers, of course, would have been the worst. The temperature can often climb over 100 degrees in July and August, making life miserable at a time when refrigeration technology, while available, was primitive and expensive and certainly not going to be purchased for use at a frontier outpost. However, the weather could also be rough in the autumn and winter, with snows as early as November not being an unheard-of event.

John Russell Bartlett, U.S. Boundary Commissioner, who noted in his journal that his group experienced a "severe snowstorm" on the 7th of November 1850 and were forced to stop just south and east of Guadalupe Peak, 165 miles from El Paso. As they had almost run out of provisions, having only taken 30 days' worth with them from San Antonio, Bartlett sent four of his men ahead to El Paso to secure much needed supplies so his group could make it the rest of the way. □ Once the snow had melted, the Bartlett expedition moved forward and, as it moved through Guadalupe Pass he noted, "I regretted that we were not able to spend more time in this interesting pass, the grandeur of which would, under any other circumstances, have induced us to linger... We looked down upon a broad plain, stretching out as far as the eye could reach."³⁷

Sometime around November 10, a Mr. Daguerre had arrived from El Paso and informed Bartlett that help was on the way. They were bringing water in barrels, but Mr. Daguerre had excellent boiled beef, bread, coffee, and sugar, all of which the expedition had run out of already. On November 13, the expedition passed Hueco Tanks and they got their first glance of Mexico, in front of a range of mountains which rises ten miles in the rear of El Paso and, eventually the stars and

stripes was seen “curling in the breeze,” causing a thrill to run through the party, knowing it had finally reached its destination. □

Two more points about Bartlett should be mentioned before he is allowed to leave this story. First, he notes that the country from San Antonio to El Paso is well suited to either a wagon road or a railroad, as for the most part, the land is fairly flat. □ This would give ammunition to those who advocated for a southern route when constructing a trans-continental railroad to connect California to the East and would eventually lead to the creation of the Southern Pacific Railroad, which would cause the city of El Paso to experience a population boom of epic proportions in the 1880s.

The second point is that murder and terrorism of locals by whites was not tolerated, at least not at this time and in this place. One of the first moves Bartlett would make upon the arrival in El Paso of the main body of the Boundary Commission was to dismiss many of the teamsters whom he found out were “worthless characters... found to be of bad habits or vicious disposition,” thus he paid them off and discharged them from service. □ Indeed, these men were nothing short of ruffians and they terrorized the population of Socorro (where they were let go), compelling locals to give them homes while committing several murders. The situation was so bad several Mexican families abandoned their homes and sought refuge in Mexico or other settlements on the American side. □ As local historian Leon Metz notes, by early January of 1851 the toleration of these criminals had ended and the boundary commissioners stationed on the American side of the river arrested three of the worst offenders and put them on trial before a jury of six Mexicans and six commissioners. The offenders were found guilty and summarily executed by hanging from trees in the Socorro Mission plaza. Although the trial could have turned violent as there was an angry mob present, troops from the post kept the crowd under control and life would return to normal. □

Besides rescuing the head of the boundary commission and quashing a possible mob from

preventing a jury from doing its job, the troops at the post had other activities to keep them busy. On October 13, 1849, two companies, Alpha and Charlie, were sent to the lower crossing of the Pecos river to escort a wagon train that was heading to California with both emigrants and supplies. The train contained a total of 120 wagons, but was having trouble crossing Texas, a story that would become familiar. The severe weather of autumn apparently made life difficult for everyone attempting to cross Texas, either to reach El Paso or on their way to points west. □

To complicate the situation, native Americans were growing restless and, in December 1849 Company Bravo, under the command of Captain Oliver T. Shepherd, was stationed at Doña Ana, north of both modern El Paso and Las Cruces, was ordered to deal with Apaches who had been active in the area. The idea was to move the soldiers into a more tactically astute location allowing them to better protect life and property of the inhabitants of the new “Mexican” town of Doña Ana, population 500. □ Not only had Apaches become active in southern New Mexico, but they were also operating in the El Paso region by late 1850. Bartlett notes that during his visit to Doña Ana in January 1851, Indians raided an enclosure near Mr. Magoffin’s home, stealing thirty mules, even though there were men sleeping in wagons within the corral where the animals were sheltered. □ This activity was a recent development, as Major Van Horne himself had reported as recently as May 1850 that Apaches were “committing outrages on all sides of us at a distance, none have been committed in this quarter.”⁴⁶ However, at the same time the major was reporting all quiet in his area of responsibility, he also states that thirty miles away into Mexico, a Mexican government wagon train escorted by eighteen men was attacked by Indians. □ It is apparent that already the United States was having difficulty upholding its end of the Treaty of Guadalupe Hidalgo.

However, part of the problem is easy to see. From a tactical perspective, the army had

made a major mistake when it expected infantry troops to deal with Apaches mounted on horseback. Major Van Horne had been correct in asking for dragoons, however, the idea that a few soldiers with pistols mounted on horses would do the trick shows the arrogance with which the Americans still viewed the Apaches.

While the presence of the army in the region could not pacify the natives, at least not immediately, one effect it did have was on the economy: it caused inflation and a scarcity of both food and fuel in the region. Thus, while one often hears of the positive effects a military base can have on a regional economy, in this instance it is obvious there are some deleterious effects as well.

Finally, the army could be used to tie the location to the American economic system, as most of the trade at this point flowed in one direction, from Chihuahua north through El Paso, while trade flowing south tended to go through other locations. □ Eventually the army would attract the usual hangers-on that accompany military bases and this would further tie the citizens of the valley to the American economic system and thus to the American empire.

In September of 1851 the Post Across from El Paso would be closed due to budget cuts. It would be reopened in 1854, moved to a new location, and renamed Fort Bliss. This theme would be repeated several times until the latter portion of the century when Fort Bliss would finally move to its current location, and the true growth of the base would take place. □ In the coming decades

the post would again be tasked with the mission of establishing law and order in the border region, especially in the aftermath of the Salt War and again during the Mexican Revolution.

However, although the border region was supposed to be one of violence and chaos, at least one person disagreed. Army wife Lydia Spencer Lane thought Fort Bliss, during the antebellum period, was the most delightful post in her and her husband had lived. Indeed, in the decades between the founding of the original Post Across from El Paso and the turn of the century, troops from Fort Bliss had little to do. During the especially violent Indian wars that took place after the Civil War, Fort Bliss had almost no role, and indeed would be closed again in the midst of those conflicts in the mid 1870s. Instead, the purpose of the Post Across from El Paso was to simply tie the borderlands to the American nation state: the exertion of imperial power and control over the newly acquired territory.

Shawn M. Warswick has a BA in history, an M.Ed. in Education Administration and an M.A. in US-Mexico Borderlands history from the University of Texas-El Paso. Currently a Ph.D student, his research focuses on militarization and imperialism in the nineteenth and twentieth century American west. He currently teaches at the Mission Early College High School in the Socorro Independent School District and is a reader for College Board's AP World history exam.

End Notes

1. Lydia Lane Spencer, *I Married a Soldier*, (Albuquerque: Horne and Wallace Publishers Inc., 1964), 68.

2. Numerous historians of the borderlands note the violence in its past. See, Ana Maria Alonso, *Thread of Blood: Colonialism, Revolution, and Gender on Mexico's Northern Frontier* (Tucson:

University of Arizona Press, 1997); Gary Clayton Anderson, *The Conquest of Texas: Ethnic Cleansing in the Promised Land, 1820-1875* (Norman: University of Oklahoma Press, 2005); John Francis Bannon, *The Spanish Borderlands Frontier, 1513-1821* (Albuquerque: University of New Mexico Press, 1974); Ned Blackhawk, *Violence Over the Land: Indians and Empires in the Early*

American West (Cambridge: Harvard University Press, 2006); Brian DeLay, *War of a Thousand Deserts: Indian Raids and the U.S.-Mexican War* (New Haven: Yale University Press, 2008); Andy Graybill, *Policing the Great Plains: Rangers, Mounties, and the North American Frontier, 1875-1910* (Lincoln: University of Nebraska Press, 2007); William Kiser, *Dragoons in Apacheland: Conquest and Resistance in Southern New Mexico* (Norman: University of Oklahoma Press, 2014); and Sam Truett, *Fugitive Landscapes: The Forgotten History of the U.S.-Mexico Borderlands* (New Haven: Yale University Press, 2008)

3. When using the term empire in reference to the United States, I refer to a large political unit, one which is expansionist and attempting to exert power over large areas and a political entity which maintains distinct hierarchies while attempting to incorporate new peoples. See Jane Burbank and Frederick Cooper, *Empires in World History: Power and the Politics of Difference* (Princeton: Princeton University Press, 2010), 8. A more complete definition was offered by historian William Appleman Williams: “The Forcible subjugation of formerly independent peoples by a wholly external power, and their subsequent rule by the imperial metropolis.” See William Appleman Williams, *Empire as a Way of Life* (Brooklyn: IG Books, 2007), 13. Historian Sydney Lens argues the American Imperial project begins as far back as the founding of the United States in the eighteenth century. Sidney Lens, *The Forging of the American Empire* (New York: Crowell, 1971).

4. Williams defines administrative colonialism as the function of the people sent out from the metropolis, rather than “...being charged to settle and populate the area, they were (and still are) dispatched to rule an indigenous society by setting limits on the choices the natives *can* consider.” William Appleman Williams, *Empire as a Way of Life* (Brooklyn: IG Books, 2007), 14.

5. The historiography on the war with Mexico, while not as extensive as other wars, is signifi-

cant. See David Clary, *Eagles and Empire: The United States, Mexico, and Struggle for a Continent* (New York: Bantam Books, 2009); and Brian DeLay, *War of a Thousand Deserts*.

6. Sonnichsen, *Pass of the North*, 113-117

7. Article VIII, Treaty of Guadalupe Hidalgo, quoted in Ernesto Chavez, *The U.S. War with Mexico: A Brief History with Documents* (New York: Bedford/St. Martins, 2008), 121.

8. Shortly after the treaty of Guadalupe Hidalgo was signed, gold was discovered at Sutter’s Mill in California, and the gold rush of 1849 would mean thousands of Americans heading through the region on their way to the West Coast.

9. When using the term nation state, I mean a political unit “based on the idea of a single people in a single territory constituting itself as a unique political community.” Burbank and Cooper, *Empires*, 8. Benedict Anderson argues the political community is an imagined one insofar as the members will never meet most of their fellow members, yet they each imagine themselves to be “in communion” with each other. Benedict R. O’G Anderson, *Imagined Communities: Reflections on the Origins and Spread of Nationalism* (London: Verso, 1991), 6.

10. Metz, *Desert Army*, 25.

11. U.S. Congress, *El Paso Troubles in Texas*, House Executive Document 93, 45th Congress, 2nd session (1878), 68 quoted in Andy R. Graybill, *Policing the Great Plains*, 97.

12. Ernesto Chavez, *The U.S. War with Mexico*, 25-26. For further discussion on race in U.S. history see Reginald Horsman, *Race and Manifest Destiny: The Origins of American Radical Anglo-Saxonism* (Cambridge: Harvard University Press, 1981).

13. Reginald Horsman, *Race and Manifest Destiny: The Origins of American Racial Anglo-*

- Saxonism* (Cambridge: Harvard University Press, 1981), 116.
14. Horsman, *Race and Manifest Destiny*, 130.
 15. Richard Henry Dana, *Two Years Before the Mast* (New York: Harper and Brothers, 1841), 212, 214-216 quoted in Amy S. Greenberg, *Manifest Destiny and American Territorial Expansion: A Brief History with Documents* (Boston: Bedford/St. Martins: 2012), 79-80.
 16. Amy S. Greenberg, *Manifest Destiny*, 4.
 17. John Winthrop, "A Modell of Christian Charity." quoted in Amy S. Greenberg, *Manifest Destiny*, 43.
 18. Timmons, *El Paso*, 106.
 19. Regimental Returns, Third Infantry Regiment, January, 1849. General Order 58 is also mentioned in Fort Bliss Public Relations Office Release, July 21, 1943 accessed from the George Ruhlen Papers, C.L. Sonnichsen Special Collections, The University of Texas at El Paso Library.
 20. Fort Bliss Public Relations Office Release, July 21, 1943. Allan W. Sandstrum, "Fort Bliss: The Frontier Years," Master's Thesis. University of Texas-El Paso, 1962, 13-14.
 21. Letter 23 May 1849 to Major George Deas, National Archives microfilm No. MF463, University of Texas El Paso Library. Response letter 24 May 1849 from Deas, National Archives microfilm No. MF463, University of Texas El Paso Library.
 22. Evan Haywood Antone, *A Tribute to Major Jefferson Van Horne (1802-1857), Founder of Fort Bliss* (Fort Bliss, TX: Fort Bliss Museum, 1998), 22-23.
 23. Sonnichsen, *Pass of the North*, 96.
 24. Martinez, *Border Boom Town*, 10.
 25. Returns, Third Infantry, September 1849. The staff and six companies camped five miles below El Paso del Norte" September 8, 1849. On September 14, they moved up and stationed themselves opposite El Paso. The next day companies I and K marched twenty miles down the valley to San Elizario.
 26. Thomas Swords, Quartermaster, to The Quartermaster General, October 25, 1851. Annual Report, Senate Executive Documents, 32 Cong., 1 Sess. (16 Vols.: Washington, 1851), (Serial No. 611), 250. Quoted in Sandstrum, "Fort Bliss," 22.
 27. Timmons, *Borderlands*, 107.
 28. Van Horne to Assistant Adjutant General, 9th Military District, November 1849, Office of the Commissary General and Office of the Quartermaster General (NA Santa Fe) quoted in Timmons, *Borderlands* n.8, 323. The literature on antebellum American racial attitudes is too extensive to quote here. For a discussion of the attitudes of American soldiers in the Mexican war towards Mexicans, see Paul Foos, *A Short, Offhand, Killing Affair: Soldiers and Social Conflict During the Mexican-American War* (Chapel Hill: University of North Carolina Press, 2002), 5. For a detailed discussion of racial Anglo-Saxonism in the nineteenth century, especially towards Indians and African Americans, see Reginald Horsman, *Race and Manifest Destiny*; on whiteness, there are numerous studies, chief amongst them being David R. Roediger, *The Wages of Whiteness: Race and the Making of the American Working Class* (New York: Verso Books, 2007).
 29. Timmons, *Borderlands*, 108.
 30. Lawrence Francell notes the size of the army during the "War with Mexico" and in its aftermath. See Lawrence John Francell, *Fort Lancaster: Texas Frontier Sentinel* (Austin: Texas State Historical Association, 1999), 5-6; Robert Wooster, *The American Military Frontiers: The United States Army in the West, 1783-1900* (Albuquerque: University of New Mexico Press, 2009), 97.

31. *Corpus Christi Star*, November 14, 1848.
32. *Corpus Christi Star*, May 26, 1849 quoted in A.B. Bender, *The March of Empire: Frontier Defense in the Southwest, 1848-1860* (Lawrence: University of Kansas Press, 1952), 109
33. Wooster, *American Military Frontiers*, 96-118.
34. The United States, in the newly acquired Southwestern territory, was using the Army as an agent of state building. This was not new, and in fact many scholars have shown the relationship of military to state formation and the expansion power. See Robert M. Citino, "Military Histories Old and New: A Reintroduction," *American Historical Review* 112.4 (2007): 1078; Geoffrey Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800* (New York: Cambridge University Press, 1996).
35. Wooster, *The American Military Frontiers*, 96-97.
36. John Russell Bartlett, *Personal Narrative of Explorations and Incidents in Texas, New Mexico, California, Sonora, and Chihuahua, 1850-1853*. Vol 1, (Two vols.: New York: D. Appleton, 1854, 113-117. Cited hereafter as *Personal Narrative*.
37. *Personal Narrative*, 121.
38. *Personal Narrative*, 135-136.
39. *Ibid.*, 141.
40. *Ibid.*, 152-155.
41. *Ibid.*, 156-157; Metz, *Desert Army*, 32.
42. Metz, *Desert Army* 32.
43. Sandstrum, "The Frontier Years," 24.
44. William Watts Hart Davis, *El Gringo: New Mexico and Her People* reprint (Lincoln: University of Nebraska Press, 1982), 373.
45. *Personal Narrative*, 155.
46. Van Horne to the Adjutant General, March 1, 1850, [Van Horne Letters](#), Ltr. 16.
47. *Ibid.*, Ltr. 21.
48. Oscar J. Martinez, *Border Boom Town: Ciudad Juarez Since 1848* (Austin: University of Texas Press, 1978).
49. Fort Bliss is larger than the state of Rhode Island today and contains over 600,000 sq. acres as well as the largest area for maneuvers in the U.S. Army.

[RETURN TO TABLE OF CONTENTS](#)

An El Paso Chinese Laundry

By Carolyn Williams

Downtown El Paso has a neighborhood, “Duranguito” (named after Durango Street on its eastern side), with a unique history. This neighborhood tells the story of El Paso during its formative and booming years, while showcasing the diversity that has been a part of El Paso since the beginning. Among other things, it has a building that recalls the history of Chinese immigration during and after the period of railroad construction; the rise and fall of the Red-Light districts; and the turmoil of the Mexican Revolution (1910-1920).

The Chinese laundry at 212 W. Overland is a major part of the neighborhood’s story, and it is one of few buildings left that has a direct link to the Chinese immigrants of 1881. Because of the heavy influence of the Chinese during the 19th and 20th centuries, this laundry can become a heritage center that showcases the history of Chinese in El Paso, but it also could be recognized on the National Register of Historic Places.

The Chinese laundry would meet Criteria A of the National Park Service’s guidelines for determining historic sites, because it is associated with the Chinese immigrants that came with the railroads. It would satisfy Criteria C because of the laundry’s structure and architecture are original from when it was first constructed.

The Union Plaza district, of which Duranguito is a part, has been central to El Paso’s history since the early 19th century. It was originally part of “Ponce’s Ranch,” having been settled by Maria Ponce de Leon in 1827 when the region still belonged to Mexico. In the 1850s, possession of the ranch passed quickly from the Ponce family to Benjamin Franklin Coons, then to William Smith, and finally to the El Paso Land Company (a consortium of landowners including Smith), which platted the land and oversaw its emergence as a small village, first known as “Franklin” and

later as “El Paso.” When the railroads reached El Paso in 1881, fueling a fast-paced urban growth, Duranguito became home to El Paso’s first city hall, located on the corner of San Francisco and Chihuahua Street.¹

In 1891, Duranguito also became home to one of El Paso’s first schools, Franklin School, which was located on the corner of the neighborhood on 215 Leon Street. By the turn of the century, Duranguito had become a neighborhood for businessmen to create and oversee several diverse businesses. The neighborhood would begin to become especially important after 1904, when construction of the Union Plaza began.² Duranguito was also part of El Paso’s “illicit past” – its network of bars, gambling joints, and a whorehouse, most notoriously “The Mansion,” an elaborately designed brothel built circa 1900.³

In October 2016, the City of El Paso announced that the location of the new downtown arena would be in the Duranguito neighborhood. Since then there have been numerous legal battles, protests, and campaigns to try to save the Duranguito neighborhood.

Today, the fate of the neighborhood is unsure, but it is not too late to make the case that this neighborhood is historic and deserves to be preserved for generations to come. The City of El Paso has other potential sites for the downtown arena, including an unused railyard less than a mile away from Duranguito. If the City of El Paso reconsidered the placement of the downtown arena and collaborated with organizations to preserve and showcase this neighborhood instead, there could be tremendous economic growth and popularity in the downtown area.

The goal for this project is to preserve the histories and memories of these buildings, especially the Chinese laundry, while educating citizens of El Paso about their local history. Im-

portantly, it might also begin a conversation about preservation and all the city's historic neighborhoods.

Chinese Laundry -212 W. Overland

One of the Duranguito buildings that is import to El Paso history is the Chinese laundry. Chinese immigrants migrated to El Paso due to the construction of railroads. The Southern Pacific Railroad arrived in El Paso on May 19, 1881,⁴ and other rail lines soon followed. Collectively, these railroads would dramatically increase the population of El Paso. "The population of El Paso in 1880 was 736, but by May 1881, after the arrival of the railroad, it had increased to 1,500,"⁵ notes Nancy Farrar, who has done extensive research of El Paso's Chinese population. She claims that the jump in number was largely due to the 1,200 Chinese laborers who came with the railroad, many of whom stayed.

The Chinese laborers who came with the railroad were important because they challenged the workforce and the economy of El Paso: "The Chinese were seeking places where they could work and live in peace in order to support themselves and their families or villages in mainland China. Regardless of how hard the work or how low the pay, the Chinese were willing to do the job."⁶ When Chinese immigrants arrived in El Paso, they primarily resided in downtown El Paso. "In the 1880s, El Paso Chinese lived in an area extending from St. Louis (present day Mills) south to Fourth Street and from Stanton to El Paso street. In later years, they congregated along south Overland street."⁷

In 1882, the U. S. passed the Chinese Exclusion Act, which prohibited all immigration of Chinese laborers. By this time, however, Chinese men had already begun a life in El Paso and did not feel the need to move back to their motherland. Though El Paso's Chinatown holds historical significance today, during the 1880s, it did not have the best reputation as it was saturated with opium houses.⁸ Luckily, the city benefited from the large number of Chinese laundries. "As early as 1889,

the Chinese held a laundry monopoly in El Paso. Of the eighteen laundries in the city at that time, all were owned and operated by Chinese, and only one of them, the El Paso Laundry (owned by Wing Chuck and Company) was run similar to the American way."⁹ In traditional Chinese culture, only Chinese women were to work with laundry, but because these Chinese men were far from home, their traditions did not hold them back from operating laundries.¹⁰

The relations between the Chinese men and Mexican men and women became worse, because Mexican women were also primarily known to work in the laundry business of El Paso. "Complicating the situation was the fact that Pancho Villa did not like the Chinese. He probably saw them as taking jobs from the Mexican peasant populations. His brutal treatment of the Chinese increased the number of those seeking to enter the U.S. through the smuggling trade. This did not stop them from working for low salaries in either Mexico or the U.S."¹¹



The building that once housed the Chinese laundry on Overland. Photo by the author.

It did not take long for other Chinese immigrants to the U.S. to notice the growth and success of Chinese men in El Paso, and this helped grow the Chinese communities into one of the state's largest Chinatowns. "In the 1900s, El Paso had the largest Chinese community in Texas, about three hundred Chinese lived between the Rio Grande and the downtown area. Some maintained work on the trains, which were headquartered there, while others work as gardeners and servants. The Chinese also opened boardinghouses, barbershops and restaurants that served countrymen."¹²

Most Chinese laundries were located on Main, Second, San Antonio, Santa Fe, and San Francisco streets.¹³ The exact name of this Chinese laundry is not known, but it was owned by Qyung/Quong Lung. Today, it is an unoccupied restaurant in the ownership of Billy Abraham, and the building is also in bankruptcy.

The Chinese laundry helps tell the story of the Chinese in El Paso, and it is important that it should be saved from being torn down. The Chinese laundry is currently unused and the future of it is undetermined, but it is not too late to change its fate. A local organization, Paso del Sur, has made multiple pleas to turn the Chinese laundry into a heritage center where it details and showcases the history of Chinese in El Paso.¹⁴ The City of El Paso could in this way acknowledge the contributions of the Chinese to the community. Though the laundry was only active for a few years, the Chinese immigrants that came to El Paso to live were fundamental to the growth of the city. It would be appropriate to honor these Chinese immigrants by displaying their history in the only remaining Chinese laundry. The fight to keep this building is very important, especially now that the future of the building is unknown.

In 1998, the El Paso County Historical Society assisted Stephen Mbutu and John Peterson in an archeological study of the neighborhood and their findings helped solidify the historical connections between this neighborhood and the Chinese immigrants. "Chinatowns existed to provide opportunities for further study through

potential recovery and preservation, thus enabling us to learn more about Chinese culture and daily lives. Archaeological excavation could potentially reveal information and artifacts of the Chinese communities. This is especially important considering that anticipated downtown renovation projects in El Paso, particularly the proposed \$5 million shopping mall on Oregon Street which is the core of the historical community. Repeatedly, important sites are identified in oral histories that are located in vicinity of Oregon Street."¹⁵ This study also revealed that this is not the first time the City of El Paso has tried to demolish this neighborhood, so this makes the fight even more important.

Protecting/Preserving the Chinese Laundry

The Chinese laundry deserves to be recognized as a historical place, since it is one of few links to Chinese immigrants of 1881. The only links we have that doesn't include the Chinese laundry is the Chinese Cemetery at Concordia and a few neighborhood stores in the downtown area. The Chinese laundry is only part of the story of Duranguito, as there are several buildings in the neighborhood that are equally important as the Chinese laundry. According to the National Park Service, the criteria is that the buildings must, "(A) be associated with events that have made significant contribution to the broad patterns of our history, (B) must be associated with the lives of significant persons in our past, (C) they embody the distinctive characteristics of a type, period, method of construction that it represents that work of a master, or that possess high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction, and finally (D) that the neighborhood must yield information in history or prehistory."¹⁶ The Chinese laundry meets Criteria A and C to be nominated on the National Registry of Historic Places.

Criteria A

One important event that the neighbor-

hood relates to is the Chinese immigration of the 1880s; when the railroad came to El Paso in 1881, it brought with them several Chinese immigrant workers. Most of these Chinese immigrants stayed behind in El Paso to start their new life in America and to prosper through numerous businesses ventures. When the Chinese arrived in El Paso, they brought life and attention to downtown El Paso, and though not all of it was positive, on the whole the Chinese helped El Paso prosper economically. Because the Chinese were so successful with their lives in El Paso, this persuaded even more people of Chinese descent to call El Paso their home and continue to help the downtown area economically.

Criteria C

The Duranguito neighborhood highlights different characteristics of buildings and how they were created, but one important characteristic is the showcasing of red bricks. When the railroads arrived in El Paso, Duranguito had access to a wider variety of building materials. The neighborhood holds some of the oldest buildings in downtown El Paso, tracing back to the 1880s. In the alley next to the Chinese laundry, you can see original red brick that was used to construct the building. Red brick, or bricks in general, were used with several buildings in the neighborhood; the bricks that are showcased today link us back to the past when they were first constructed. The Chinese laundry, Firehouse 11 (corner of Paisano Street and Santa Fe Street), Tenement building (219 W. Overland), M. A. Dolan home (309 Chihuahua), the Mansion (306 W. Overland), and others visibly showcase the red brick that were originally used to construct the buildings.

Conclusion

Therefore, Duranguito is historic and significant to the identity of El Paso, but it is unfortunately at risk. It is not too late to save Duranguito; with the right energy and research, Duranguito can easily be transformed into a lively and historic neighborhood. This neighborhood is one of few connections to Chinese immigrants, the Mexican

Revolution, red-light districts, and so much more. There are at least 10 contributing structures in Duranguito, the Chinese laundry being an important one of them. It would be unwise for El Pasoans to ignore this history that is just waiting to be explored and showcased. Above all, destroying this neighborhood would mean El Pasoans would be a part of destroying lives, memories, and histories that are valuable to El Paso today.

In addition to the Anglos and Hispanics who established El Paso, the city's history and culture were enhanced due to the contributions of the Chinese who helped build the railroad and the economy. The Chinese immigrants should always be considered as founding fathers of downtown El Paso, because if it was not for them, things would be incredibly different. Lifelong resident Martin Lee says, "In order to venture into the future, one must study history. History is the lighthouse of our future and so is the last standing Chinese laundry downtown. It reminds us of how the Chinese worked hard, building the railroad. Today in El Paso, descendants of Chinese immigrants include judges, professors, doctors, accountants, nurses, teachers, and businesspeople. We have followed the example of our ancestors, our good lighthouse. So please, keep this lighthouse. It is not only for the Chinese; it is for all El Pasoans. It is a priceless relic that we should preserve and be proud of forever."¹⁷

Carolyn Williams, 23, is in her final year in the Public History graduate program at NMSU. Since April 2016, she has been employed with the City of Las Cruces Museum Systems; once she graduates she plans to continue working in museums in the Southwest. She enjoys learning the history of cultures and the desert Southwest.

[RETURN TO TABLE OF CONTENTS](#)

References

- Brady, Marilyn Dell. *Chinese Texan*. College Station: Texas A&M University Press, 2004.
- Farrar, Nancy. *The Chinese in El Paso*. El Paso: Texas Western Press, 1972.
- Mbutu, Stephen and Peterson, John. *The Union Plaza Downtown El Paso Development Archaeological Project: Overview, Inventory, and Recommendations*. El Paso: ARC Archaeological Technical Report No. 17, 1998.
- National Register Publication. "Section II: How to Apply the National Register Criteria for Evaluation." National Park Service. Accessed on April 16, 2018. https://www.nps.gov/nr/publications/bulletins/nrb15_2.htm.
- Paso Del Sur. "Duranguito's Chinese Cultural Heritage Center." Paso del Sur's Facebook page. Published on March 18, 2018. <http://www.facebook.com/PasoDelSurEP/post/1794552017275307>.
- Yee, Martin. "Preserve El Paso's last Chinese laundry." *El Paso Times* (El Paso, TX), May 2, 2017.

End Notes

1. Stephen Mbutu and John Peterson, *The Union Plaza Downtown El Paso Development Archaeological Project: Overview, Inventory, and Recommendations* (El Paso: ARC Archaeological Technical Report No. 17, 1998) 50.
2. *Ibid.*, 73.
3. *Ibid.*, 94.
4. Nancy Farrar, *The Chinese in El Paso* (El Paso: Texas Western Press, 1972), 2.
5. *Ibid.*, 2.
6. Stephen Mbutu and John Peterson, *The Union Plaza Downtown El Paso Development Archaeological Project: Overview, inventory, and Recommendations* (El Paso: ARC Archaeological Technical Report No. 17, 1998), 114.
7. *Ibid.*, 3.
8. Nancy Farrar, *The Chinese in El Paso* (El Paso: Texas Western Press, 1972), 6.
9. Stephen Mbutu and John Peterson, *The Union Plaza Downtown El Paso Development Archaeological Project: Overview, inventory, and Recommendations* (El Paso: ARC Archaeological Technical Report No. 17, 1998), 13.
10. *Ibid.*, 113.
11. *Ibid.*, 114.
12. Marilyn Dell Brady, *Chinese Texan* (College Station: Texas A&M University Press, 2004), 15.
13. Nancy Farrar, *The Chinese in El Paso* (El Paso: Texas Western Press, 1972),
14. Paso del Sur, "Duranguito's Chinese Cultural Heritage Center," Paso del Sur's Facebook, published March 18, 2018. <http://www.facebook.com/PasoDelSurEP/post/1794552017275307>.
15. Stephen Mbutu and John Peterson, *The Union Plaza Downtown El Paso Development Archaeological Project: Overview, inventory, and Recommendations* (El Paso: ARC Archaeological Technical Report No. 17, 1998), 141.
16. National Register Publication, "Section II: How to Apply the National Register Criteria for Evaluation," National Park Service, accessed on April 16, 2018. https://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_2.htm.
17. Martin Yee, "Preserve El Paso's last Chinese laundry," *El Paso Times* (El Paso, TX), May 2, 2017.



Clara Melendres Apodaca

From Miss Nike To New Mexico First Lady

By Jim Eckles

In 1956, White Sands Proving Ground was a boomtown with more than 8,000 people working there. It was a mix of civilian, military, and contractor personnel and was by far the largest employer in the Las Cruces area. By comparison, that same year New Mexico College of Agriculture and Mechanic Arts (now NMSU) only had 2,100 students and a much smaller faculty and staff.

It was a remarkable number considering the proving ground was only established in the summer of 1945 and, for the first year, was intended to be temporary. The construction of permanent buildings on the main post was constant and test sites and facilities sprang up all around the 3,200-square-mile test range. The Cold War was on and the money spigots were open.

Clara Melendres, a young woman from Las Cruces, was just one of many pragmatic locals attracted to the well-paying jobs being offered by the military. Growing to that size in just 10 years meant the proving ground was hiring people in droves for vacancies from the top to the bottom. There was opportunity there that simply didn't exist in the local communities. Clara said, "Taking the job at White Sands was a chance to make some money."

Little did Clara know that her short time at White Sands would put her into a real-life scene with teen heartthrob Tab Hunter that would rival a television slapstick comedy. Also, it presented her with a life-altering reunion with her former high school boyfriend. All in all, 1956 was a busy year for Clara, one that defined the path she was going to follow through her life.

Clara was born in Doña Ana in 1934, but grew up in Las Cruces where she attended Las Cruces High School (Union High in those days). In high school she was a cheerleader, homecom-

ing queen, Bulldog Sweetheart, played clarinet in the marching band, and piano in the school dance band.

After graduation, she enrolled at New Mexico A&M to study secondary education. While in college, she was head cheerleader in 1954, a princess to the homecoming queen, voted most popular girl, and finished in the top three of the Vanity Fair Beauty Contest. One newspaper article listed her hobbies as music and dancing.

Given her high school and college credentials for looks and popularity, Clara was exactly the kind of girl many boys would dream about dating but never actually ask out. Part of what made her so attractive was her smile. Photographs of her during this period show a young woman with a megawatt smile shining out from those black and white prints.

Talking to her in 2014, I became aware that the smile was just an outward manifestation of Clara's friendly and outgoing personality. She told me she has always been a people person and simply enjoys being with others. The smile and personality were potent tools in the political world Clara would later enter, especially when employed by someone with intelligence and drive.

In running through her background, Clara was quick to point out she was also a decent student in high school and college. However, she said she couldn't match her sister Esther who was a straight A student at both levels. Esther graduated from high school at age 15 and college at 19.

At the end of her college junior year in June 1955, Clara dropped out to get a job. Early in 1956 she was hired at the Signal Corps Agency on White Sands as a stenographer in the organization's supply division. She said she was majoring in elementary education in college and, like ev-

everyone else, she took lots of typing and shorthand. So, when she applied for a job at White Sands, she was already an accomplished typist and note taker.

She said she doesn't remember a lot about the job except that people were very nice to her. Also, I got the impression she attracted the young soldiers like flies to honey. She said she never dated any of them, but she found herself going to missile launches to see what all the excitement and talk were about.

During the 1950s, the nation was very much enamored with beauty pageants. White Sands Proving Ground was no different. In 1956, the base held a competition for the title of "Miss Nike."

The name for the title was taken from the family of Nike missiles that had dominated early testing at White Sands. At that time, there were the Nike Ajax and Nike Hercules missiles with the Nike Zeus soon to follow. These names come from Greek and Roman mythology. Hundreds of these missiles were fired at White Sands in the late '40s through the '50s. After testing, they were deployed in many areas of the nation to protect the country from Russian bombers. Our northern cities were ringed with missile sites and manned by soldiers constantly searching the skies for an enemy attack.

The men in the Signal Corps convinced Clara to represent their organization in the Miss Nike competition that took place in March 1956. It probably wasn't strange at all for Clara, who had been a cheerleader for years, competed in other pageants, and performed with various musical groups. She was used to being the center of attention.

When Clara agreed to compete for the title at White Sands, her mother was not happy. The contestants were required to "pass in review" before the judges and the audience in swimsuits. Clara explained that her mother was very conservative and felt a young woman shouldn't engage in such behavior.

As an example of her conservative nature, Clara told me her mother wouldn't even let her

have movie magazines in the house. Clara said she had to hide them in her room. But now Clara was an adult and she did what she wanted.

There were 13 contestants for Miss Nike in 1956. Interestingly, four of them were married. In



THE WINNER — Miss Clara Melendres, newly crowned "Miss Nike of 1956", is shown flashing a victorious smile to the jam-packed Post Theater audience.

This clipping from Clara Apodaca's scrapbook is from the White Sands newspaper, the Wind and Sand, March 30, 1956.

the end, the field was cut to just three. Along with Clara were Joyce Roberts and Mary Benn. When the votes were all tallied, SueAnn Holman, the proving ground's 1955 Miss Nike, gave Clara her crown and a big bouquet of flowers.

Then it was on to the Truth or Consequences Fiesta in early April as the White Sands entrant in the fiesta's beauty pageant. However, instead of her Miss Nike banner, she wore one for New Mexico. The young contestants each represented a state, not a town, region, or organization. It was a mini-mini Miss America contest.

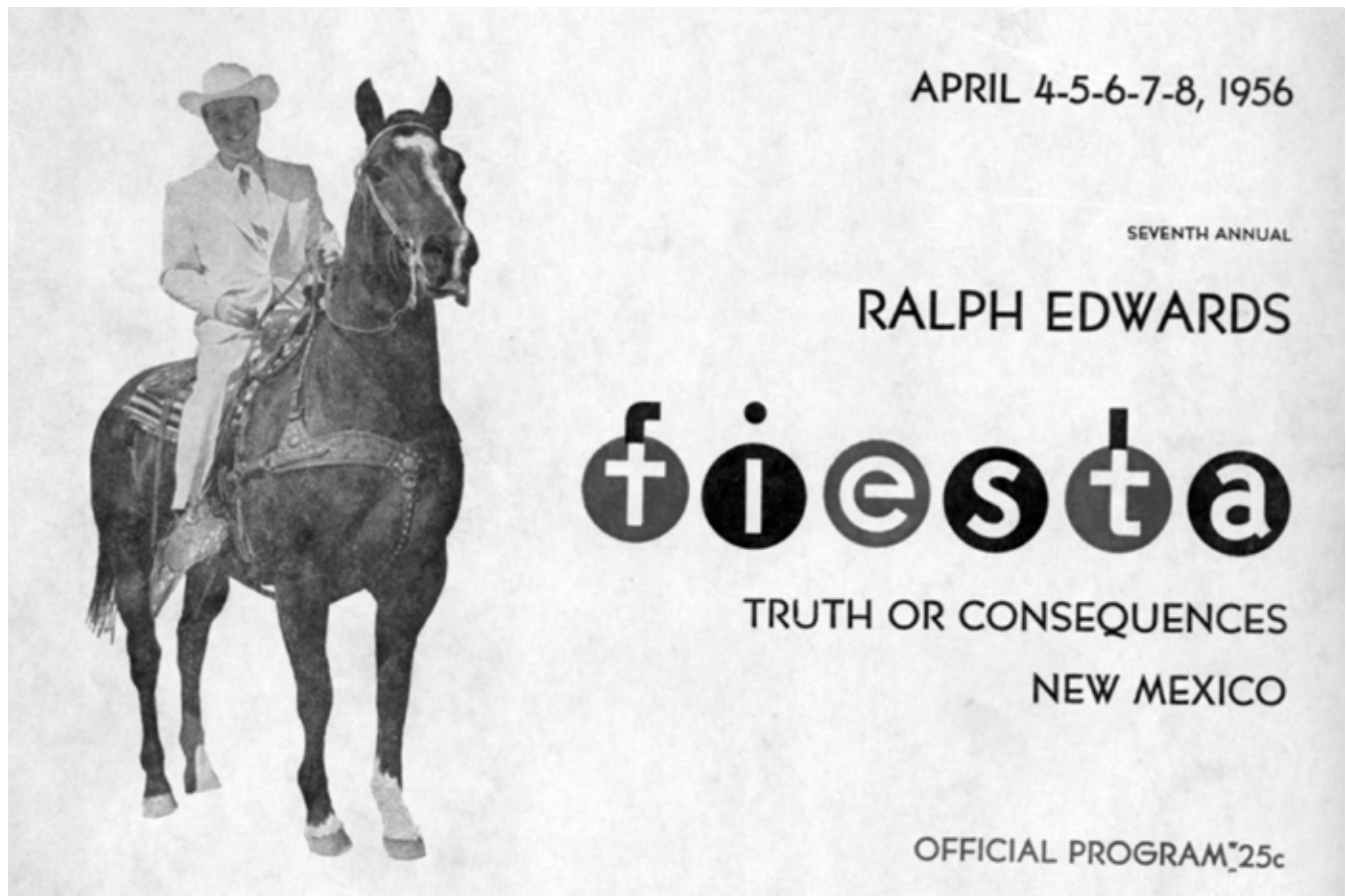
The fiesta and the town's name can be traced back to Ralph Edwards, the creator and host of the popular radio and TV show *Truth or Consequences*. To celebrate the show's tenth anniversary on the air, Edwards offered to stage that birthday broadcast in any town that changed its name to Truth or Consequences. Hot Springs, New Mexico, jumped at the chance to stand in the

national spotlight and, hopefully, get a little free advertising.

The community's main industry was health tourism based on the soothing properties of the hot mineral water found there. According to a Hot Springs brochure, they were constantly getting confused with towns like Hot Springs, Arkansas., and were always getting the short end of the stick. The brochure said California alone had something like 32 towns using the term "hot springs." It was perceived as a problem and limitation to growth. By changing the name, the community suddenly was blessed with a unique brand – one that no rustler could steal.

Like most long names and titles in America, locals have shortened Truth or Consequences to just "T or C."

Although Edwards only promised to do the one show in 1950, he returned to T or C each year to participate in the town's fiesta. He turned out to



The cover for the 1956 Fiesta program in Truth or Consequences. From Clara's scrapbook.

be a major booster for the small community. He must have enjoyed it because he kept going back for decades when there was no requirement to do so.

A measure of Edwards as a man might be found in his commitment, not only to T or C, but to the community's Carrie Tingley Children's Hospital as well. In 1956, Edwards and Tab Hunter spent a whole afternoon meeting with the children and entertaining them. They could have made a short appearance. Instead, they spent hours at the hospital and Edwards did this every year. They gave the kids flowers and candy and Edwards was apparently quite a comedian as there are reports he kept the children in stitches. The hospital was open to children up to the age of 21, so there were numerous teenagers who appreciated an opportunity to meet and talk with Hunter.

The hospital opened in 1937 and was originally designed to use the mineral hot springs water found in town to treat children with polio. By the time Edwards starting visiting, the hospital was open to children with any kind of orthopedic problem. For instance, the warm waters were believed to be therapeutic for children suffering from arthritis. It closed in 1981 with the facility now housing the New Mexico Veterans' Home.

In addition to sending Clara to T or C for the beauty pageant, other representatives from White Sands worked the event. For years, White Sands sent military hardware

and floats to appear in the fiesta's annual parade. In 1956, the proving ground's parade entry was a Nike missile on a trailer, matching Clara's Miss Nike title.

Clara remembers being there for a couple days, but the big day for her was Saturday, April 7. At 10 a.m. she and the other beauty queen contestants rode in the annual parade. She said she was in a convertible and got to wave at the crowds lining the street. Being from Las Cruces, she was almost the hometown favorite and the crowds cheered her passing.

Then at 11:30, the beauty-queen contest was held in the high school auditorium. The women appeared in formal gowns and swimwear and had to answer a question posed to each of them by Ralph Edwards.

Each year, Edwards brought acts and personalities with him from Hollywood to entertain



Tab Hunter gives Clara a kiss on the cheek after he declares that she is his winner of the beauty contest. From Clara's scrapbook.

folks attending fiesta events. In the first decade, often called the golden years, there were many celebrities who attended with him. In 1956, his group included a pretty big star in the person of Tab Hunter. Hunter was approaching the height of his career and was nationally very popular. He appeared in many films, was considered a heartthrob by teenage girls, and even had a hit record in 1957 called *Young Love*. He wasn't in the same league with Clark Gable or Jimmy Stewart, but teen girls loved him.

In 1955, Hunter appeared in a Climax

television show called *Fear Strikes Out*. It was the story of major league baseball player Jimmy Piersall and his battles with mental illness. Hunter played Piersall. Also in 1955, he appeared with Claudette Colbert in a Ford Television Theatre production.

The Burning Hills was a Warner Brothers film that Hunter starred in with Natalie Wood in 1956. It was based on a Louis L'Amour novel, but apparently the book far exceeded the quality of the movie.

Because of his appeal, Hunter was an obvious choice to be one of the fiesta's beauty pageant judges. According to the *Wind and Sand*, the proving ground's newspaper, Clara Melendres was "the center of attention" wherever the beauty contestants appeared. She also caught Hunter's eye.

As the beauty pageant wrapped up, Clara, with that laser-beam smile, was again a finalist. She didn't win, however. She came in second despite a major interruption to the proceedings by

teen idol Hunter who didn't agree with the outcome.

Clara confirmed that Tab Hunter ran out on stage to hug and kiss her on the cheek when it was announced that Beverly Sikes from Texas had won. The newspapers quoted Hunter as saying, "This is my choice for queen." Apparently, Hunter also publicly begged for a delay to allow the other judges to reconsider their decision. They didn't change their minds.

Like Clara, Beverly Sikes was no novice at appearing in front of people. She had already been chosen a Southwestern Sun Carnival princess in El Paso and was named Miss Southwest in an area beauty contest before the T or C Fiesta. In high school, she was a cheerleader and a member of the student council.

One can imagine the reaction Ms. Sikes might have had with the big Hollywood star protesting the fact that she was chosen the winner. In the photos, she smiled and soldiered on. However,



The beauty pageant winners in 1956. From left to right in the front row are Ralph Edwards, Pat McCombs (third place), Beverly Sikes (first place), Tab Hunter, Clara Melendres (second place). The identities of the two men in the back row are unknown. Clara's scrapbook.

her family members probably didn't buy Hunter's next record.

I asked Clara if she was flattered or embarrassed by Hunter's antics. She said she was flattered to receive so much attention from the star.

Lost in this brouhaha is the fact that Pat McCombs from Wilcox, Arizona, placed third.

That evening, in the same auditorium, Edwards broadcast the tenth anniversary *Truth or Consequences* show. The three beauty queen finalists appeared on the radio broadcast.

Of course, there was much more to the fiesta. It had a bit of a county-fair flair with a rodeo, dance, fiddlers contest, dress revue, and a beard-growing contest. By the way, second prize in each of the beard-growing categories was an



When Clara returned to White Sands after finishing second and the big hoopla caused by Hunter, she was a bit of a rock star. Here she poses at the Navy pool before the start of the summer season. She became a bit of a pinup as White Sands personnel hung these photos on their office walls. From Clara's scrapbook.

electric shaver. First prize in the girl's barrel race was a round-trip ticket on Continental Bus Lines to Albuquerque.

The conclusion of the fiesta is not the end to this story. Clara didn't simply compete and return to Las Cruces and White Sands the next Monday. In high school, Clara dated Jerry Apodaca, a sports star who lettered in three sports year after year after year. When he went off to the University of New Mexico in Albuquerque to play football, she stayed in Las Cruces. They drifted apart and weren't dating anymore by 1956.

Somehow Apodaca heard about Clara being in the fiesta and he went to watch. They met and soon started dating again. Things went pretty fast and within a few months the engagement announcement appeared in the *Las Cruces Sun-News*. They were married August 18, 1956, in St. Genevieve's Church in Las Cruces. After they married, she moved to Albuquerque to be with Apodaca as he finished college.

After the fiesta, Clara returned to her job at White Sands until the wedding. She said one thing that was a bit startling at White Sands during those last few months was seeing her framed photo on office walls as Miss Nike. It was the age of the "pinup" and White Sands had one of their own instead of the canned Hollywood photos sent down by the Department of Army for the post newspaper. Clara, in her white, one-piece bathing suit, was very popular.

The Apodacas started a family and quickly had five children in seven years. Managing the family and working in the Apodaca insurance business kept Clara running and left no time to return to NMSU to finish her degree. Later she would say that if you successfully manage a household that size, you can manage anything.

In 1961, they moved down to Las Cruces where Jerry went into real estate and insurance. But he eventually turned to politics and Clara quickly rose to the occasion with her personality and smile. She told me she's always heard how people hate political campaigning. She said she loved it.

Clara said part of their campaign strategy was to go door to door making house calls. When canvassing a neighborhood, Jerry would take one side of the street and she would knock on doors on the other side. She related that Jerry would quickly run out of gas and say, “That’s enough.” Clara, on the other hand, was just getting started. She’d say, “Let’s do another street.”

It doesn’t take much imagination to see how Clara was a major ally in getting Jerry into office. To have a partner like Clara was probably priceless. He was elected to the state senate in 1966 where he served four terms. In 1974, he was elected governor of New Mexico – the first Hispanic governor in the U.S. since 1918. He served two terms, 1975 - 1979.

As first lady of New Mexico, Clara participated in many volunteer activities and worked to promote the arts. She told me when they got settled in Santa Fe she immediately saw an opportunity in the governor’s reception area on the fourth floor of the capitol building. She said the space was a sitting area and was mostly used by reporters just hanging out.

She pushed and quickly received permission to turn the space into the Governor’s Gallery. The grand opening featured paintings by Georgia O’Keeffe who was the guest of honor at the event. O’Keeffe was elderly at the time but she showed up and Clara said she handled a reception line for two hours.

The gallery still exists and has a sign crediting Clara for its creation. During her time scheduling the space, they put on 40 art shows.

In the same vein, but a different art form, Clara started brown bag musical concerts in the capitol’s rotunda. State employees and tourists were offered short concerts by local musical groups as a respite from their busy days.

Being the wife of New Mexico’s governor didn’t quench Clara’s interest in politics or involvement with people and issues. She quickly struck out on her own and in the 1980s she served as cabinet secretary for New Mexico’s Department of Cultural Affairs under both Governors

Anya and Carruthers.

During her time in Santa Fe, a freak accident left Clara blind in one eye. A broken glass tumbler left a glass shard in her eye that four surgeries could not correct. She soon lost the eye and has had an artificial one since.

Clara eventually left New Mexico for the big leagues in Washington, D.C. While in Washington for 18 years, she served as a commissioner on the D.C. Commission of the Arts and Humanities, was appointed to the White House Millennium Commission by former first lady Hillary Clinton,



A more current photo of Clara Melendres Apodaca. Courtesy photo from Clara.

and was a special assistant to the Secretary of the Treasury.

She returned to New Mexico, without a husband, to serve as the President and CEO of the National Hispanic Cultural Center Foundation. Clara and Jerry had divorced after 40 years of marriage. At that time, she was selected as one of “100 Influentials” in America by *Hispanic Business Magazine*.

Clara has spent her life helping out. Now, in her 80s, she is still active. In fact, on February 18, 2017, the Del Norte Rotary Club in Albuquerque honored her for her selfless contributions to New Mexico. When interviewed by the *Albuquerque Journal* about the honor, she pointed out the irony of it in that she never belonged to Rotary because until recently they didn’t allow women as members. She then added, “Their mission of service above self is something I live by.”

The *Journal* reporter, Adrian Gomez, said Clara was “witty, but ever the diplomat. Her tiny frame masks a strong drive to achieve high goals and expectations.”

Ivan Wiener, the founder of the Albuquerque Film and Music Experience Foundation, said he was thrilled to have Clara on his board of directors. In the same *Journal* article, he stated, “Clara

is one of the most respected people in our city, state and throughout the country. Her passion and commitment for growth and sustainability are reflected on a daily basis through her involvement in the community, especially towards the betterment of the arts. Clara’s impact, both socially and politically, are second to none.”

When I interviewed Clara in 2014, it was evident she was proud of her Hispanic heritage and what she accomplished on the long road she has traveled since being selected as Miss Nike. It is a road marked with success at every turn. In the end though, she said she was most proud of her family: her children and grandchildren.

Jim Eckles retired from a 30-year career at White Sands Missile Range in 2007. He has written extensively about the history of the range and published *Pocketful of Rockets: The History and Stories Behind White Sands Missile Range* and *Trinity: The History Of An Atomic Bomb National Historical Landmark*. His most recent book is *Deming, New Mexico’s Camp Cody: A World War One Training Camp*. He was inducted into the missile range Hall of Fame in 2013. He is currently the DACHS secretary and newsletter editor.

[RETURN TO TABLE OF CONTENTS](#)

Iron In The Spanish Colonial Borderlands

An Interpretation Of Life, the Politics Of Empire, And The Camino Real

By Dale Taylor

The Spanish borderlands in what is now the United States included Florida, Texas, New Mexico, Arizona, California, and part of Colorado.¹ In a few of these places the history of Spanish occupation is readily found. More often it is only hinted at or a new presence with little relation to the earlier. There are reasons for this, and they are found in the function each of those places had within the Spanish empire as well as the subsequent history of those places and the influence of English laws and culture which often superseded the Spanish.

All of these colonies, with a single exception, were reactionary, defensive countermoves to events on the larger world stage which threatened Spain's New World empire. Only one was undertaken for monetary gain and none produced viable products. All that survived wound up as serious financial drains on the crown at a time when Spain was already bankrupt.

Spain was in the enviable position of importing a huge amount of raw gold and silver bullion from her New World holdings. While it is impossible to quantify how much she took in, it is possible to estimate that Spain became from two to five times as wealthy as the rest of Europe in the space of fifty years².

We now know that this leads to hyperinflation and a debasing of those working-class economics on which the society depended for real stability. It was now possible for any citizen who could find a way to rise in wealth to nearly any status imagined and manual work was deemed beneath almost everyone. Spain's New World colonies served both as an opportunity and safety valve for this group of people.

When the crown took it upon itself to

become the financial backing for the Catholic Church, and to wage wars on its behalf, it went some way towards mitigating hyperinflation by spending the excess income abroad. Spain's wars could have helped mitigate social issues by presenting a different outlet for a search for glory for unemployed soldiers after the wars of unification. Unfortunately, in this case most were fought with foreign mercenaries. Unrealistic goals and poor management contributed to the rapid squandering of Spain's huge financial boon and a rapid decline into bankruptcy beginning in 1585 and failing again regularly thereafter.

But in the process of fighting Europe, Spain caused a backlash in the New World. Instead of mere personal greed, those countries fighting against the armies raised by this wealth adopted a national incentive to compete for the source of that wealth itself, the better to be able to compete on the battlefield.

The logistics of this campaign were all in Spain's favor. With established bases in the Caribbean and Mexico, she was in a much better position to deal with any interloping colonial efforts. Her bases were thousands of miles closer to the theater than the rest of the worlds'. But there was a weak spot in the chain which connected Spain and her colonies.

Shipping from Spain traveled down the coast of Africa, made the passage at the narrowest point in the South Atlantic, coasted South America, took on silver at Cartagena, coasted to Panama where the trans-isthmus shipment from the Manila galleons was loaded, thence to Mexico for gold and, with a final stop at Havana, set off for Spain again, traveling up the Bahama channel to a point near the border between modern

Georgia and Florida where the Gulf stream diverged from shore and thrust itself into the North Atlantic for the quick route back to Spain. This convoy was well protected by Spanish settlements in the Caribbean and virtually impossible to find in the North Atlantic.³ It was only in the last few hundred miles along the Florida coast that it was vulnerable.

The first of the Spanish North American colonies, Florida (later East Florida), was founded in 1565 as a base from which to destroy Fort Caroline, a piratical French settlement some thirty miles further north, about as far from Havana as it could be while still posing a threat to the Spanish fleet using the Bahama channel. In a short campaign, St. Augustine survived and Fort Caroline was destroyed. St. Augustine would remain as a garrison town to prevent any further incursions into this vital part of the treasure route. For nearly a century St. Augustine was a small town, with no economy other than the garrison and no fort other than a wooden structure.

In the meanwhile, England founded colonies in Virginia, Massachusetts (which would overflow into other New England colonies), Maryland, Pennsylvania, took over Dutch colonies in New York and New Jersey and finally, in the late seventeenth century, moved south of Virginia into the Carolinas. At this juncture, Spain reacted to the threat and built a new stone fortress at St. Augustine to ensure enough strength to hold off the English.

It worked, but just barely. The town was besieged in 1702 and burned, but the *castillo* held. The fort was strengthened, and by the next try, in 1740 after the border was moved further south by the founding of Georgia, the entire town survived.

During this time, France had moved into Canada, less intent upon settling and developing residential colonies than in holding the rights to the lucrative fur trade. Ultimately, it would move down the Mississippi river and establish New Orleans to guard the southern entry into the mid-section of the country. In reaction to this, Spain settled West Florida at Pensacola and established

a chain of missions and presidios into East Texas which was ultimately governed out of San Antonio. This boxed New Orleans in with Spanish posts on either side of French claims, but it did so at crippling cost to Spanish resources.

California was settled shortly before the American Revolution in reaction to a series of Russian settlements in northern California. Arizona owes its origin to both religious interests and an effort to connect California to the New Mexico colony.

Only New Mexico, founded as a mining colony, was different in nature. Established in 1598, it was declared a failure by its governor by 1606. There was discussion whether to abandon the colony or transfer it to the crown. The religious faction won out by claiming that to abandon the converts made would forever close the door to resettlement. After this, the colony continued as a financial loss to the crown with a primarily religious function.

Iron (and steel⁴) is a product of great value to society. It also represented the cutting edge of technology during the colonial period. When Spain succeeded in re-conquering all her territories under the combined rule of Ferdinand and Isabella in 1492, she was one of the most advanced cultures in Europe. Medicine, mathematics, learning, technology and crafts all flourished. Unfortunately, when the jubilant monarchs decreed the Edict of Expulsion which drove Jews and Muslims out of Spain in 1492, they also drove out most of those responsible for the pre-eminent place Spain had occupied, beginning a slide in Spanish fortunes which would last hundreds of years.

Spain had long been renowned for her iron production. But by the early sixteenth century technology was advancing, and Spain was in a conservative position, relying upon her traditional methods of making iron.

There are two ways to refine iron from the

raw state. The easiest, although most labor intensive, is to heat a mass of ore in the blacksmith's forge until it approaches the molten stage, then hammer the soft iron into a single mass out of which the impurities are driven by force. The pure iron can then be further processed. This technique is known as blooming, the place where the work is done a bloomery. Blooming was done on a craft basis in Spain with small shops producing iron.

By comparison, the new method the rest of Europe was beginning to use in the sixteenth century utilized a highly-organized labor force and extensive capital support to produce quality iron at a much faster rate utilizing a blast furnace or foundry.

The blast furnace was a stone or brick structure, squat chimney-like in shape, in which alternating layers of charcoal, lime for flux to congeal the impurities and iron ore were stacked, then fired with a draft of air applied to the fire by water-powered bellows. Twice a day molten iron could be tapped off the bottom, flowing along troughs in the casting room floor where it was directed into molds for making cast items or into ingot molds for reprocessing.

Founding iron was not for the family operator. Large furnaces, such as appeared in New Jersey, New York, and other American colonies before the American Revolution, could consume thirty acres of hardwood converted to charcoal for each day the furnace was in blast. A single furnace kept in blast consumed an average of 17 square miles of virgin forest each year. More wood was needed to burn limestone or shells to make lime for flux and miners were kept busy bringing ore to the site. Pattern makers, charcoalers, axemen, miners, carters, and other employees in the hundreds made foundries small towns.

Because when the furnace was taken out of blast it had to be completely disassembled, the lining renewed, and the hardened slag removed from the throat of the furnace, it was kept in blast as long as possible. The only reasons for stopping the run at a furnace were if the water supplying the bellows froze or materials ran out. Some fur-

naces were kept in blast for three years or more, and some sites had multiple furnaces in blast at the same time.

Obviously, iron making was a heavy industry, and could only be undertaken in those locations with the requisite raw materials: Iron ore, a reliable supply of running water, and vast tracts of hardwood timber. New Jersey and southern New York had exactly the right conditions. By the eve of the American Revolution, England's American colonies were the third largest iron producer in the world, behind Sweden and an aggregate of the Baltic states.

So, how does the territory I've covered apply to Spain, the Spanish borderlands, and the Camino Real?

Both Spain and England had similar laws limiting the nationality of the ships which could trade with their colonies to those from the home country. Both also limited the extent to which the colonies could undertake manufactures. The idea was that colonies existed to provide the mother country with raw materials and then to purchase back finished goods. Such items as iron were specifically identified. New Spain was under legal sanction to purchase its iron from Spain's old-fashioned, inefficient bloomeries. And the English colonies could only sell iron to England.

But Spain was bankrupt. In 1726 Florida Governor Benavides, responsible for providing the garrison at St. Augustine with its annual supply shipment, couldn't find Spanish vendors capable of fulfilling the contract. Claiming expediency, he turned to New York merchant William Walton. This relationship was formally recognized by Philip IV and lasted, except during times of war, until the British took control of Florida after the French and Indian War. This is telling for several reasons. First, while Benavides had money (unusual given the financial trouble Spain was in), he could not purchase sufficient goods with that money in Cuba or Spain. Second, the garrison in St. Augustine, most of whose two hundred years were spent keeping the English out of the Spanish empire, was now dependent upon an English mer-

chant for their supplies. Benavides also attempted to officially establish a Free Port for English Merchants, but was disallowed by the Council of the Indies. And this may not have been the beginning of the process, only a long-delayed official acknowledgment.

Anyone who takes a close look at St. Augustine soon realizes that not all was as it seemed. Official records continually cry poor, complaining that the annual supply, which included the pay chest, was often delayed or stolen, resulting in an average pay for the garrison of once every three years. St. Augustine was the only place in the Spanish empire where recruits could serve in their own town. And house sizes were substantially larger than average throughout the rest of North America, even including much more affluent colonies. There had to be an invisible economy.

The best guess is that, after the great earthquake in Port Royal in 1692 destroyed most of that city, the center for smuggling in the Caribbean moved to St. Augustine. We can trace the official cover. The *guardacostas* was charged with preventing incursions of Spanish territory, but the crown lacked funds to commission ships and crews for the purpose. So, they used the wartime expedient of issuing letters of marquee, by which private captains were authorized to capture smugglers. Captains were paid by the ability to sell the smuggled cargoes, less a percentage to the government. It is a very small step from having legal authority to sell smuggled goods to smuggling them, and it entails much less risk to life and limb. All legal, all official: All totally illegal and invisible. And all assuredly entailed payoffs to the officials charged with oversight, so the arrangement worked for all involved.

It is certain that the merchants of New York, Rhode Island, and other seaports in the English colonies had a far greater interest in the profits to be made from opening up trading routes into New Spain than in their government's desire to eliminate the St. Augustine garrison. It appears granting a contract to a New York merchant was just another step in a long-established business

relationship by which St. Augustine prospered, New Spain got goods it could not get from Spain, and the American colonies got goods they desired as well as the Spanish coinage which became the most common currency in circulation in the cash-starved English colonies. Cheaper than Spanish, more readily available, closer than any other source, we are fairly safe in stating that iron was one of those items sold across the Hudson, then down the coast, finally finding its way virtually everywhere in New Spain, including Santa Fe.

Somewhere in the mountains on an interstate, I am passing a semi laboring uphill. This is unusual; they usually run far faster than I do. He signals me back in, and I thank him, signaling and calling on the CB radio. After he responds to my call, I tell him I'll exchange the courtesy on the down slope, and then ask, "You must be pretty fully loaded."

"Yep, forty thousand pounds of hot dogs back there."

Forty thousand pounds of hot dogs.

Sometimes it is almost impossible to deal with the issues of scale we confront when we study early colonial efforts. His one truck was carrying more than a tenth of the Oñate expedition's net cargo capacity *in hot dogs*.

What do you do with forty thousand pounds of hot dogs? In round numbers, if every resident of El Paso and Las Cruces buys one pound of hot dogs once a month, it takes a truck carrying that much *every day* to supply the demand. Put that in perspective. Go to the grocery store, stand in front of the hot dog section and look at how little shelf space is devoted to hot dogs. That represents forty thousand pounds a day. One truck a day. Now do the same with cans of beans. And corn, and.... Now, mentally pull back. This is just a food store. Think about the builder's supply/home store. And the other half of Walmart. Now think of the cases of paper at the office supply store. Pretty soon, you can't conceive of the

scale on which we live our lives today. From our perspective, it is equally difficult to imagine life along the Camino Real when it was the only road into the interior.

In 1720, New Mexico lost most of a force of 43 soldiers fighting the French and their Indian allies in Kansas. We are told this was more than a third of the soldiery available in the colony. At that rate, the garrison couldn't put one man to every two miles of the Camino Real north of the Rio Grande. The Apaches wouldn't even have noticed them, especially after they killed them one by one. Today, there are more drivers on rural I-25 than that and the armored division stationed at Fort Bliss could put a soldier every 80 feet along the road. Today's small towns like Socorro or Truth or Consequences can easily number more than the population of the entire colony, even in its larger days.

If we try to calculate the amount of iron which the Oñate expedition took with it we have problems. We can account for raw stock, trade goods, horseshoes, and nails, all from the official inventories. But how much did the suit of full or half armor plus armor for a horse a colonist took with him amount to? We can estimate, and be generous, and still have some realistic numbers. Being generous, if the Oñate Entrada brought 300 quintals⁵ of iron (15 tons), when we pass a semi loaded with rebar (or hot dogs) the payload represents 33 percent more than that. Add the truck itself and we get almost three times the amount of iron the entire colony brought with it.⁶

If every three years the supply train brought an equal amount, with 76 resupplies from 1591 to 1820, plus the Entrada at 300 quintals each equals 23,100⁷ quintals or 1155 tons of iron as the maximum we could anticipate the New Mexico colony ever getting. The reality is probably much lower⁸.

Let us jump forward, past the end of the Spanish colonial era to a time when goods were starting to move along the Santa Fe Trail. This wasn't efficient enough, and within a short time the most significant event in the story of iron in

New Mexico occurred: Railroads arrived in the area.

Railroad rail weighs between 25 and 50 pounds-per-foot (ppf)⁹. At 50 ppf, one mile (5280 feet) weighs 2640 quintals, or 132 tons per rail, but of course, you need two rails. Thus, each mile of track really weighs 5280 quintals or 264 tons without joint bars, tie plates or spikes. With 25 #/ft rail, these numbers are halved, equal to a single rail at 50 ppf.

Using these numbers, the Oñate iron load represents about 300 feet of double rail, and all the iron previously seen in New Mexico represented between four and eight miles of rail. These numbers are not even complete track, and don't have either rolling stock or shop equipment factored in, nor bridge girders and similar iron components. By the time you add that, the amount of iron suddenly arriving in the area makes that previously available insignificant.

If the railroad could bring that much at once just to put its feet down, you can imagine how much more it brought in for sale once it was here: iron stoves, machinery, structural members, pots and pans, and tools. The list goes on and on. All cheaper and delivered at far less cost than ever before. A totally new era in the history of the region began, one which has led inexorably to our truckload of hot dogs.

It is said the Camino Real was the only communication between the towns in New Mexico and Mexico City and, ultimately, Spain. True enough. But what does that really mean? Just because it was unique, and was thereby undeniably important, does that mean we should place undue value upon it? Everything that New Mexico had indisputably came up the Camino or was made locally. But how much actually came up the road? Again, the answer is in the numbers.

Monetary value is a difficult thing to measure in history. Periods of inflation, deflation, boom and bust occur in all economies over time.

The nickel loaf of bread of the Depression era only compares favorably with our \$3 loaf in absolute terms. But buying power is something else. As a general rule, we can state that cost in terms of the labor it takes to produce an item (including the material from which that item is made) and the labor it takes to purchase it will be closely related across time, given comparable economic brackets for the manufacturers and the purchasers and a similar method of manufacture. Put another way, you will spend about the same percentage of your income to purchase the same item made the same way as your ancestor did, assuming you both occupy the same economic bracket. So how can we value the trip all goods had to take on the Camino Real?

Roughly 1500 miles separate Mexico City from Santa Fe. An ox team does well to make two miles per hour. At that rate, it takes about 750 hours one-way to bring a load north. How long the teams ran we don't know, but can figure at least six days a week, probably averaging around 10 hours a day, for a total of 20 miles per day, 120 miles per week, or 13 weeks minimum one-way, roughly three months. But these numbers are probably high. Stock condition (cattle, including oxen, are ruminants and don't sleep while eating), road condition, terrain, weather, and a host of other factors can be expected to delay almost any caravan. Whether the team could find a return load that was worth their time in New Mexico is an open question. If not, or if the cargo only partially paid their return trip, we have to factor dead-head time of as much as 100 percent into this calculation, for a total of, say, seven months (add some time for turn-around, re-loading, resting, etc.), or roughly 58 percent of annual billable hours (Calculated using 60, not 40 hour weeks. The percentage would be much higher if we used modern labor law.). If a wagon train ran late into the year and had to overwinter in New Mexico, this cost could rise dramatically.

Now let's look at the cost of transporting the goods.

Carretas were officially rated at carrying

capacities of 1000 or 2000 pounds each. But not all that capacity was available for payload. Each cart had to carry the belongings of the carter(s) attached to it, water as needed, food, ammunition, spare parts, tools for making repairs en route, and similar necessities. Less obvious, it does not make good sense to carry expensive commodities on a hazardous journey with each cart carrying its maximum load from the outset, since it is reasonable that at some point one or more carts will break down and their loads must be shifted into the remainder or left behind, lost to any profit-making venture and a liability against profits if carrying a contract load. So, each cart must have been underloaded.

Water is an issue. The Jornada is ninety miles of waterless expanse. Tradition tells us that it was crossed only at night, and the stock went without water. But examine the reality. Ninety miles takes forty-five hours run time, with the short night in the summer season at about ten hours. So, it would take at least four or five days to cross the Jornada. The stock would require some water, even if not an ideal amount. And "some" for large numbers of stock can rapidly add weight. The carters would require on the order of a gallon a day. Five gallons minimum (no safety margin) at eight pounds per gallon equals forty pounds (Plus the weight of containers) deducted from the payload for each man. And then you have to factor in food, for the caravan couldn't waste time hunting.¹⁰

In the end, probably no *carreta* carried more than about half of its rated capacity in payload and many less. If you assume a government caravan of 300 of the largest carts you have approximately 150 tons of cargo capacity every three years or 50 tons average for each year. For each 1000 pounds (the actual capacity of a single large cart) you will have to pay for at least one carter, one cart, and a team of at least two (but larger teams are known) oxen for a period of seven months. At minimum wage today, without factoring in the cart and team, it would cost at least \$8500 to move that half ton of payload, or \$8.50 per pound. Figure

a bit higher to cover the team, cart, losses, overhead, profit, etc., and a minimum \$10 per pound transportation surcharge to receive goods in New Mexico is not unreasonable.

Some items had to come up the road, and each of those we can identify lowers the capacity for discretionary goods. The church required wine for communion and candles, the priests demanded chocolate, the government needed arms, ammunition, and paper (not just for administrative purposes but for making cartridges for their muskets), iron was needed for tools, hardware, and arms, and, for a substantial period of time, trade goods were needed to pacify the Apache and Comanche, as well as buy internal peace. That didn't leave a lot of room for commercial goods, and commercial caravans were not underwritten by the government.

All this valuing presupposes an important commodity – money. Unlike many other items which could be obtained by barter, iron was the product of an industrial complex, built on capital, sold for cash, shipped three or four thousand miles with the expectation of making a profit, and then delivered to a customer. Either that customer had money in hand or they had a commodity which was worth money when exchanged in a distant market. With a commodity, a credit economy could exist, with all the dangers of any futures market. But without a commodity neither a credit nor a cash economy could exist. New Mexico had no real exports, no real cash crops,¹¹ no marketable mineral wealth and no manufactures. It is difficult to imagine most non-governmental people affording iron, or any other imported goods, in any quantity. And, what we see in the records reflects this absence of market.

Working the numbers on the Camino Real points up a very real, if overlooked, fact. It wasn't the major highway we think of when we compare it to I-25. For most people, it might not even have existed. Like the Santa Fe Trail which came later and connected into it, the Camino Real was a government road. After Oñate declared the New Mexico colony a failure in 1606, it only survived

as a religious enterprise. Governmental efforts were the minimum necessary to support the colony, especially after the reconquest in 1692-6, which was effected at such extreme fiscal hardship to the exchequer that its memory would taint the settlement of Pensacola for more valid strategic reasons. It is improbable that tax revenues from New Mexico ever covered the cost to the crown of maintaining a government and garrison. The average colonists who lived here could not afford most goods from the Camino Real. With realistic cost factors in mind, it is possible to begin to measure that intangible: need. We all desire many things, but what we actually need is different. Without money to purchase, with limited availability and high prices, how did the local people get by?

That's easy to answer: never underestimate what is possible with skill. The man who trained me to make eighteenth century shoes built an entire reproduction turned four-poster bed with no more tools than a four-in-hand rasp, a pocketknife, patience, and time. Building copies of Renaissance woodwind instruments, I have repeatedly worked wood to tolerances of ± 0.02 mm, something I've been assured by several engineering professors is impossible. And I've worked with craftsmen who can eyeball measurements smaller than that under even the most trying optical illusions. I realized one day that I had completed my hand leatherworking apprenticeship when I no longer reached for various tools, but used one, the oldest (and perhaps most dangerous for some applications) tool in the kit for nearly everything. With that came the realization the rest of the tools were not to make it possible to do the job – they merely made it faster. In our society, time is money, so such tools are worth it. But in a society which lacked money, time was the means to an end, the commodity you spent to have something.

In our culture, we often aren't even aware of the ways we use iron. Open a door. The hinges, latch, lock, and nails or screws are iron. But more importantly, the tools used to shape the door itself, hand planes and chisels or router bits, jigs and power tools, are all iron. And before that, the

tree was cut and dimensioned with saws, dressed with planes and shipped to us, often by railroad or truck. Most people don't even think about the door.

Iron is heavy. It does not take a lot of room in a carreta, but a small amount rapidly exceeds the weight capacity. It ships well by boat, where weight doesn't matter, but poorly by overland transport, where it does. Usually it was shipped as raw material, bars and sheets of various sizes. This ensured against cutting waste or having the wrong sized part after the trip. It meant that small pieces didn't have to be packed in heavy barrels or boxes to keep them from falling off the cart. It meant the consumer decided what was really important, and could have the smith make those items, rather than the merchant trying to guess what was needed from several thousand miles away. It meant that, even if the raw material was the wrong size, a competent smith could make it work, welding pieces together or hammering bars into flat stock.

What products do we see in the bills of lading, or survive as rare artifacts? Horseshoes and nails probably take top billing. These are completely expendable. A shoe is thrown in the middle of the desert. Almost no-one notices, fewer still will stop to pick it up, and it is lost to use. But a horse-shoe almost guarantees a governmental or wealthy buyer. Most farmers walked where they needed to go and owned oxen which went unshod, plodding at such a slow pace they weren't bothered by the ground surface.¹²

Instead, consider the few tools which survive. A few chisels have come down to us, axes and other tools. They are so worn away by repeated sharpening that they are almost unrecognizable. And then they would normally be recycled, made into something usable. A few specialty items like yard arms for weighing and sets of weights, iron or brass, survive. Many of these would have been governmental, setting the standard for local production. A wooden balance with stones matched to the official weights would do as well for many farmers. Wooden pegs or leather or

rawhide laces replaced nails. And most smithing equipment is American in design, arriving after the opening of the Santa Fe Trail or the railroads.

The style of furniture and architectural woodwork which survives tells us much about the tools available, and the overall material culture of an area. First, there isn't much in the way of furniture or other wooden artifacts. That shouldn't be too surprising given the small size of the population. But given the favorable conditions for survival of wooden artifacts it is a bit unusual. Many of those which do survive show signs of extreme wear, as if they were either heavily used or used over a long period of time, without expectation that they could be replaced. A few doors and other woodwork survive in our oldest buildings, or as salvaged bits preserved when a structure was rebuilt. The El Paso Museum of History has one of a set of early Spanish-style doors which are reported to have been saved from the Mission at Ysleta. They are similar in design and construction to several which can be seen in situ, still in use in old buildings in El Paso's south valley near the earliest settlements on the American side of the Rio Grande in the pass area. These doors are weathered and eroded to the point it is sometimes difficult to read tool marks with any great accuracy, but in places they are in good enough condition to do so.

See Photos At The End Of The Article

Careful examination reveals that they were made with a bare minimum of tools. Perhaps a saw, a plane or two (one of which could have been made from a chisel blade, as could the router which might have been used) and a chisel, which could have stood in for a plane and router, or the wooden frames of these tools could have been built to accommodate the same chisel. The hinges are typical Spanish style "cotter-pin" or "snipe" hinges, which require only a hammer, anvil, hot chisel and a set of tongs to fashion, and which use a minimum of iron. The use of iron on an ecclesiastical building is not in the least unusual.

The church was subsidized by the government, and both had support from resources outside the region which common residents lacked. But economical use of the resource reinforces how scarce it was. The doors are joined in typical mortise and tenon panel construction, and the tenons are pegged as usual. This implies either a drill bit (and brace or T-handle) to drill the peg hole, or a piece of round iron stock of the correct size which could be heated to burn the hole.

In style these doors imitate a more complex style which is found in Spanish work and in higher class furniture from more affluent centers. But they simplify the design to allow construction with a limited tool kit.

The furniture style which developed in New Mexico, while based in some degree upon Spanish folk styles, is likewise designed to utilize a minimal tool kit. Almost all the furniture known from any of the earliest periods could be made from a similar kit.

The very conscious act of redesigning a convention to allow its fabrication with a limited tool set argues more strongly than any other factor that more resources than that were not available. When seen within the context of ecclesiastical establishments, it argues this even within a class which could have afforded them if they existed. And if that subset did not have them, it is completely unreasonable to expect that the average citizen did.

Other items, such as a carreta in the museum's collection, exhibit a different, but equally frugal, tool kit. The carreta could have been built with an axe, one or at most two T-handled augurs (it is difficult to tell, but holes drilled in the body, mostly as sockets for other members made from tree limbs, appear to be a single size), a chisel and perhaps another augur for fashioning the hub. A plane or two and a saw or two would help, but the degree of finish does not require more than the kit described.

What can be done without is as important in this context as what is needed. Wood, leather, pottery, fibers, or even stone could be used for many items traditionally made of iron. Objects made of

wood included roasting spits and supports, barrel hoops, lock bars, mortars and pestles, peels (for baking), spoons, wedges, mauls, hoes, digging sticks, and wood or leather hinges. Shovels and plows were made of wood, and could be faced with an iron shoe, if it was available, to protect the edge. Alternatively, fire hardening wood could be used to strengthen it for digging sticks and shovels. Pottery was commonly bought from local natives, and could include chocolate pots, pottery or stone cooking pots, frying pans and griddles, pottery, or leather drinking vessels and bottles. Chains could be made of rope, often from local fibers. Virtually any item could be made of something else, and only a few cutting tools were necessary. Even some of those could be made of bone, animal teeth, or even stone.

Perhaps the biggest lesson a survey of iron and pricing on the Camino Real can teach us is that the people who lived in colonial New Mexico were different from us. Those who chose to come back after the reconquest did so knowing what conditions were like. They knew they would do without. Yet they came anyway.

We think of the colonial period through glasses tinted by the elegance of Colonial Williamsburg or the finery which survives in Mexico and other Latin American capitals. Very little of that was here, and that for only a very few people. The rest made do. And they were content to do so. They didn't need a truckload of hot dogs every day to survive. And perhaps, if they had been given the chance, they didn't even want that kind of a life. Instead of taking umbrage at the fact the Camino Real wasn't as glorious as we want to imagine it, we should understand what it tells us about the people who lived at the end of it, and see them in a more appreciative light than we might have before.



Full snipe hinge. This view shows one whole side of a snipe or cotter-pin hinge. In the front is the hinge itself, where the two loops of the two sides inter-connect. At the rear of the photo you can see where one side of the hinge comes through the door frame, is separated and flattened, and then turned at an angle and driven into the door as nails to secure the hinge on this side. On the side of the hinge loop you can see where the iron has been flattened, probably by driving the hinge into the undersized mortise cut for it in the door frame. If you look closely, you can see that the mortise to receive the hinge was cut out, probably first with a saw, then a chisel to make a rectangular mortise. However, the hinge is wider than the mortise, and the wood around the mortise has been deformed only where the iron is and is shaped exactly as the iron is shaped. There are no odd cuts such as would be left if a chisel were used to enlarge the mortise. So, the hinge was most likely driven into the wood at this point. The size of the flat on the iron itself suggests either that the iron was quite hot when this was done or that significant force was used.



Mortise tool marks. Here you can see the mortise cut on one of the interior rails of the door to accept and position a cross rail. You can tell it is an interior fabrication since there is no peg or peg hole to secure it – the cross rail is secured in place axially solely by the rigidity of the outside structure and laterally by its fitting into the mortise. If you look carefully at the angled left edge of the top mortise, you can see what appears to be a line cut by a saw into the web's (between the two mortises) surface, parallel to the side. However, closer examination reveals that this is not of consistent depth, and that the wood just above this cut on the side wall has been split by the force of a chisel being driven down. This is particularly noticeable near the back of the photo on this side, where a large mass of split wood appears as a small mound occluding the groove. You can see similar breakage on the right wall, and at the back you can see that the wall is undercut at an angle of about 15 degrees. You can also see chisel marks on the surface of the web at the juncture of the left and back walls and on the surface of the lower mortise. This last is typical of using the chisel perpendicular to the wood surface instead of trimming with it parallel to the finish surface.



Rail end tool profile. This view of a structural rail between panels of the door shows details of the angles at which tools were held. You can see that the grooves to accept the panel edges were not cut square to the outer edge of the rail, and that the bottom of the groove is also not perpendicular to the groove sides. While this is possible if the iron of a plane is not sharpened properly and the plane is not cut square, it is more likely indicative of a hand-held chisel instead of a plane which has built-in alignment controls. The presence of both sets of angular errors speaks strongly to use of a hand-held chisel. You can also see that the width of the groove varies from the sides to the end of the rail, again indicative of uncontrolled hand techniques, as most grooving planes have a width control built in. Similarly, the surface between the sides of the groove and the bottom on the end of the rail is not plane, but made up of two different cuts, the outer one angled more obtusely than the other. This also would not occur if cut with a plane. This view also shows a reasonably clear profile of the decorative shape of the rail's visible face (there is some parallax on the left side of the rabbet). Notice that it is simply cut with three surfaces, one a square rabbet in the center and the other two angled shoulders on either side of the rabbet. Each could be cut with a plane or a chisel. More typical Spanish work would step the edges of the interior rabbet and the shoulders in a more ornate pattern, requiring planes to control.



Hook. This view shows a typical Spanish-style hook mounted to the door by one-half of a snipe or cotter pin hinge which is visible on the left. This hook is fairly large as befits its function on a large door, but it is somewhat crudely made. The smith has failed to draw out the excess material from the flat bar completely into the hook portion, leaving two raised ridges at the base of the hook as well as a rough surface between them. There is also a cold shut at the right edge of the interior ridge, indicating that it was broken down later than the rest of the hook. There is also what appears to be a cold shut, visible as a line running parallel to the lower surface closest to the viewer, which may indicate this entire piece of stock was welded up from smaller stock. You can also see that the two legs of the cotter pin which secures the hook are not matched. The lack of hammer control, practice to know how much material to break down at first, and a failure to take the time to finish the work may indicate a lack of routine practice or a semi-professional status. The mismatch of the legs of the cotter pin may indicate the same, or be a function of the sequence the smith used to draw out the metal of these parts. On the other hand, the weld indicated along the bar of the hook is quite competently done.

You can also see how the metal of the mounting of this hook caused the rail it is mounted in to split as it dried out.

Dale Taylor gets bored easily. A high school drop-out, he went to college early where he created a program in musicology and performance of early music on period instruments, building most of a master's degree into his bachelor's program and completing it in a little over two years. He apprenticed as a hand shoe and harness-maker at Colonial Williamsburg before returning to his teacher's shop in New York as a supervisor, building copies of Renaissance and Baroque woodwind instruments, a trade combining tool-and-die and pattern making. He then returned to Virginia, where there weren't others to play with, so he taught himself computer programming and was project manager for a major organ and tissue bank. He next wrote an article for *Early American*

Life, found out he would have gotten paid much better if he had taken the photographs, taught himself photography, and started a freelance business which took him to the White House, all while helping his wife, Sue, run her Fodor's-listed destination management company and writing a social history of Britain's American Colonies for *Writer's Digest Press*. In 1996, they sold Chapultepec, their 1854 house in Tidewater and moved into an RV, traveling the country before settling in the Four Corners area where his main interests are Spanish colonial music and the social history of which it is a part. While on the road, he spent a season as the blacksmith at San Augustin Antiguo Museum. Dale now repairs instruments, teaches and performs, and photographs out of El Paso.

End Notes

1. For a brief while they included Louisiana and parts of Alabama, Mississippi, South Carolina, Utah, Oklahoma, and Kansas, but claims, aborted settlement and exploration are not the same as establishing a real foothold, either in international law or reality.

2. Europe had been relatively poor in bullion before the New World was discovered. Since Spain had a monopoly on this discovery, it also benefited disproportionately from the huge influx of bullion produced there.

3. Anyone who doubts the huge problem this entailed need only study the Bismarck escape into the North Atlantic and consider it was conducted in an age of powered ships which could sail into the wind and endure storms no early fleet could, and with the benefit of airplanes to both extend the range of searches by hundreds of miles and carry an attack over those distances.

4. Steel is iron with a small amount of carbon added, enabling it to be hardened and thus made into more durable tools and used for items like

springs. The making of steel is a specialized process, and steel was a scarce and expensive commodity during the colonial period. Whereas today an entire tool might be made of steel, during the period it would be made of iron. Either a steel bit at the cutting edge would be welded in place (such as for an axe) or the outside of the iron could be case hardened to turn it into steel. If case hardening was used, it would wear through with time, and the part would have to be re-treated by a smith. Henceforth, I will use iron to refer to both materials.

5. The Spanish system of weights, at least through the period of the Oñate Entrada, was closely equivalent to the English in pounds, an arroba being 25.366 pounds and a quintal being 4 arrobas or ≈ 100 pounds, so an English ton ≈ 20 quintals.

6. 80,000 pounds gross or 40 tons

7. 229 years divided by three equals the number of supplies, plus one for the Entrada = 77 trips, each at 300 quintals = 23,100 quintals. Note that these figures continue during the years of the

Pueblo Revolt, when no shipments were made, so this handily accounts for a few extra trips.

8. While supply amounts may have varied, the initial number includes estimates for the armor and horse armor of the settlers, which would clearly not have been represented in each resupply even though that weight has been allocated to each supply.

9. From an early 20th century engineering handbook, citation lost. I realize there is greater variety of rail than this and that some of the smaller was used on early railroads, but this is close in time and more appropriate for a major line, when the smaller rail was reserved for things such as mine carts.

10. On the northbound trip food would have been reduced by consumption en-route, allowing extra capacity for water by this point in the journey, but this may not have been valid on any southbound trips that carried cargo.

11. In the southern Rio Grande, wine grapes were a viable cash crop, although the real value is hard

to determine, as the only such crop in a debased economy any profitability would be exceptional to commentators. Some salt was exported from the El Paso area to mines in Durango and ranchers for shipping hides. And some hides were shipped out of the Rio Grande, many of which were reportedly deer or elk skin, not steer hide. But shipping a few hides doesn't mean a volume we would recognize. The average of 15,000 head of cattle Texas growers shipped annually to their army in Louisiana during the American Revolution, was a much larger number, and only began in 1779. And the situation was not unique to New Mexico. Florida, as a military garrison, exported almost nothing but ballast and a few shipments of oranges in the official returns on the St. Augustine supply contract.

12. A few ox shoes are known from the region, but I doubt that they represent either a very old tradition or a widespread one. Look around the next time you drive I-25. Those cattle aren't shod, and neither were most of their ancestors.

Bibliography

Andrews, Charles M. *England's Commercial and Colonial Policy: The Colonial Period of American History, Vol. 4*. New Haven, CT: Yale University Press, 1964.

Barnes, Thomas C., Naylor, Thomas H., Polzer Charles W. *Northern New Spain: A Research Guide*. Tucson, AZ: University of Arizona Press, 1981. ISBN: 0-8165-0709-0

Chavez, Thomas E. *Spain and the Independence of the United States: An Intrinsic Gift*. Albuquerque, NM: University of New Mexico Press, 2002. ISBN: 0-8263-2794-X

Connor, Seymour V. *Texas in 1776*. Austin, TX: Jenkins Publishing Co., 1975.

Hammond, George P. & Rey, Agapito. *Don Juan de Onate, Colonizer of New Mexico 1595-*

1628 in 2 parts. Albuquerque, NM: University of New Mexico Press, 1953.

Hennessy, Alistair. *The Frontier in Latin American History*. Albuquerque, NM: University of New Mexico Press, 1978. ISBN: 0-8263-0467-2

Kessell, John L. *Pueblos, Spaniards and the Kingdom of New Mexico*. Norman, OK: University of Oklahoma Press, 2008. ISBN: 978-0-8061-3969-2

Leonard, Irving A & Robertson, James A. *The Spanish Approach to Pensacola 1689-1693*. Albuquerque, NM: Quivera Society, 1939.

Lisk, Jill. *The Struggle for Supremacy in the Baltic: 1600-1725*. New York, NY: Funk & Wagnalls, 1967.

Manucy, Albert. *The Houses of St. Augustine 1565-1821*. St. Augustine, FL: St. Augustine Historical Society, 1978.

Noel-Hume, Ivor. *Here Lies Virginia*. New York: Alfred A Knopf, 1974.

Padillo, Carmella, Editor. *Conexiones: Connections in Spanish Colonial Art* Santa Fe, NM: 2002 Museum of Spanish Colonial Art. ISBN: 0-9719103-0-8

Palmer, Gabrielle and Pierce, Donna. *Cam-bios: The Spirit of Transformation in Spanish Colonial Art*. Albuquerque, NM: Santa Barbara Museum of Art in cooperation with University of New Mexico Press, 1992. ISBN: 0-8263-1408-0

Parry, J. H. *The Spanish Seaborne Empire*. Berkeley, CA: University of California Press, 1966. ISBN: 0-520-07140-9

Peck, Mary & Nestor, Sarah. *Carpinteros and Cabinetmakers: Furniture Making in New Mexico 1600-1900*. Santa Fe, NM: Museum of New Mexico Press, 1983. ISBN: 0-89013-146-5

Rishel, Joseph J & Stratton-Pruitt, Suzanne. *The Arts in Latin America 1492-1820*. Philadelphia, PA: Philadelphia Museum of Art, 2006. ISBN: 0-87633-250-5

Rubira, Jose Claret *Encyclopedia of Spanish Period Furniture Designs* New York, Sterling Publishing Co. Inc. 1984

Simmons, Marc. *Coronado's Land: Essays on Daily Life in Colonial New Mexico*. Albuquerque, NM: University New Mexico Press, 1991. ISBN: 0-8263-1313-2

Simmons, Marc and Turley, Frank. *South-western Colonial Ironwork - The Spanish Black-smithing Tradition from Texas to California*. Santa Fe, NM: Museum of New Mexico Press, 1980. ISBN: 0-89013-128-7

Taylor, Dale. *Writer's Guide to Everyday Life in Colonial America 1607-1783*. Cincinnati, OH: Writer's Digest Press, 1997. ISBN: 0-89879-772-1

Timmons, W. H. *El Paso, A Borderlands History* El Paso, TX: Texas Western Press, 1990. ISBN: 0-87404-207-0

Vedder, Alan C. *Furniture of Spanish New Mexico* Santa Fe, NM: Sunstone Press, 1977. ISBN: 0-913270-66-0

Waterbury, Jean Parker, Editor. *The Oldest City: St. Augustine, Saga of Survival*. St. Augustine, FL: St. Augustine Historical Society, 1983.

Wright, J Leitch Jr. *British St. Augustine*. St. Augustine, FL: St. Augustine Historic Preservation Board, 1975.

Wheelwright, Jeff. *The Secret of San Luis Valley*. Smithsonian Magazine, October 2008. Vol. XXXIX No. 7 pp. 48-56, also available on-line at: <http://www.smithsonianmag.com/science-nature/san-luis-valley.html> including reference to the precedent medical publication

The Segesser Hide Paintings. Santa Fe, NM: New Mexico Palace of the Governors

Plus personal observation, conversations with friends who have worked in the field as archaeologists/anthropologists, direct personal contact with inhabitants who relate similar materials from their own experience. and training at various museums.

RETURN TO TABLE OF CONTENTS