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Fire Lookout History of the Santa Fe National Forest



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Cover. Barillas Lookout North Patrol Point, Melvin Fitzgerald, Assistant Ranger (mid-1950s, archeology binder 53, no. 5590, Santa Fe National Forest Supervisor's Office)

Fire Lookout History of the Santa Fe National Forest

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List of Abbreviations

AEC	Atomic Energy Commission
APW	Accelerated Public Works
Bandelier	Bandelier National Monument
BIA	Bureau of Indian Affairs
BOR	Board of Review
CCC	Civilian Conservation Corps
ERA	Emergency Relief Administration
Forest	Santa Fe National Forest
FRC	Federal Records Center
GII	General Integrating Inspection
GLO	General Land Office
GPS	Geographic Positioning System
IS	Indian Service
Jicarilla	Jicarilla Apache Nation
LANL	Los Alamos National Laboratory
NARA	National Archives and Records Administration
NF	National Forest
NGS	National Geodetic Survey
NPS	National Park Service
SCS	Soil Conservation Service
SDDDB	Southwestern District Daily Bulletin
SFNF	Santa Fe National Forest
SMC	Southwest Museum Collection
SO	Supervisor's Office
USFS	United States Forest Service
USGS	United States Geologic Survey
WACC	Western Archeological and Conservation Center
WPA	Works Project Administration

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Introduction

Fire lookouts are distinctive symbols of organized fire protection. They are also captivating reminders of a slower-paced, self-reliant lifestyle in which space, silence and solitude reign. In 1986 the Southwestern Region of the Forest Service conducted an inventory of its lookouts. That year the Santa Fe National Forest (referred to as the Forest or SFNF in this study) staffed eight lookouts, which seems a small number to provide fire detection for the Forest's 1.5 million acres of rough terrain. What other lookout points were used and abandoned over the years, what were the specifics of their development and decline, and what was it like to work and live on these lookouts? Between 2013 and 2016, I used interviews, maps, photographs, archival sources and site visits to identify 78 lookout points on and near the Forest, uncover detailed histories of the sites, and analyze factors driving lookout development and abandonment. This study examines the Forest's fire detection program from its inception through the present, highlights a unique and vanishing cultural resource and lifestyle, and provides data to enable preservation of this significant part of Forest infrastructure. It speaks to a varied audience including archeologists, historians, fire managers, lookout aficionados, and those who have staffed, visited or lived at lookouts.

Part I is a chronological discussion of lookout development and abandonment, Part II discusses various components of the Forest lookout program, and Part III gives detailed history of individual lookouts.

Previous Research on Santa Fe National Forest Lookouts

When the Southwestern Region completed its 1986 fire lookout inventory, they awarded a contract to Peter Steere of Cultural and Environmental Systems, Inc. to evaluate the lookouts and prepare nominations for the National Register of Historic Places. The evaluation/nomination report was submitted in 1987, and in 1989 the Southwestern Region organized and published this material as Lookouts in the Southwestern Region. On the Santa Fe National Forest, Steere only evaluated the eight lookouts that were then in use; just one of these, Glorieta Baldy, was nominated for the National Register. The inventory excluded abandoned sites and tree lookouts. Historical detail was limited in Steere's evaluation report and was occasionally inaccurate.¹

In the early 1990s, Dave Lorenz of the Forest Fire Lookout Association obtained additional information about Santa Fe National Forest lookouts through archival searches, management contacts, and site visits. His research expanded on the 1986 inventory and he determined the source of a tower relocated to Encino Point, one of the Forest sites.

While investigating the old telephone lines on the Jemez side of the Forest, Janie O'Rourke researched area lookouts, identified some abandoned sites and added historical data. She interviewed a number of key people, some now deceased, who worked, managed and visited lookouts years ago.

I expanded on the previous work by identifying many additional lookout sites used by the Forest from 1892 to 2016, both on and off Forest lands. This study provides detailed histories of the sites, shares stories of life on Forest lookouts, corrects some information in the 1987 evaluation report and suggests factors driving lookout development and closure. No attempt is made to evaluate additional sites for the National Register, though the information provided may assist the Forest in protecting these resources.

Any opinions, findings and conclusions expressed in this material are those of the author and do not necessarily reflect the views of the Forest Service.

Terminology

Fire management terms used in this study are defined in the Glossary and some general conventions are followed. A lookout is both the site, the structure, and the person staffing it; differentiation is clear from context. The term is capitalized when it refers to a particular lookout site, but not in reference to personnel. Rangers, fire guards and patrolmen all performed the same fire duties in the early days of the Forest, and the term "ranger" as used here may refer to any of these. Both district offices and guard stations are called "ranger stations."

Prior to May 1, 1929, the nine Forest Service administration areas in the nation were called "districts," with the Santa Fe National Forest located in the Southwestern District. After that date, these areas were called "regions" to differentiate them from the ranger districts within each forest. The Southwestern District became the Southwestern Region, or Region 3. This study uses "Region" for all relevant references except those in citations, including those prior to the name change, in order to reduce confusion.

Until timber sales declined in the 1970s, Forest Service timber sale officers counted and stamped, or "scaled" timber. The Forest placed small temporary cabins at timber sales for the scaler's use, then moved them to the next sale. Scalers' cabins were also used at a few lookout sites. They were "of rough lumber and unpainted, usually constructed at the warehouse in Santa Fe...substandard but serve a useful purpose at low cost." One is shown in Figure 58 in the Jemez District chapter.²

The terms "primary lookout" and "secondary lookout" have had slightly different meanings over the years. Primary lookouts viewed the most important areas and their sole function was discovery and reporting of fires;

thus the lookout remained on the station at all times while others responded to fires. Secondary and emergency lookouts supplemented primary lookout coverage, and were staffed by lookout firemen who were available to leave the lookout in order to go to fires. By the 1970s, all lookouts, both primary and secondary, stayed at their stations and very few responded to fires. Since that time, a primary lookout is defined as one valuable enough to staff throughout the fire season, while a secondary or emergency lookout is staffed only during certain conditions such as high fire danger or fall hunting season. In another use of the term, a primary lookout is a person who regularly staffs a station, while a relief lookout takes over when a primary lookout leaves for time off or to perform other jobs.

Information Sources

From the 1910s through at least the 1960s, the Forest Service conducted frequent inspections of its forests, focusing on specific operations including fire, safety, engineering, cooperative agreements and business administration. General Integrating Inspections, or GII, covered all operations. Inspection reports were the primary source of historical detail and photographs for this study, and inspectors, mentioned frequently in the text, were from the Forest or Region. Fire and work plans, memorandums, letters, maps and ranger work diaries also provided information. Some of these were bundled with inspections that they addressed and are cited as part of the inspections rather than separately. The National Archives and Records Administration (NARA) and the Federal Records Center (FRC) in Broomfield, Colorado hold most of these documents. Some were also found at the District Offices on the Forest and the Forest Supervisor's Office in Santa Fe. The Regional Office in Albuquerque and its Southwestern Museum Collection (SMC) were important sources. Fray Angelico Chavez History Library, New Mexico State Archives, University of New Mexico Libraries, Cline Library at Northern Arizona University, Santa Fe Public Library, Sharlot Hall Museum, Los Alamos Historical Society and the National Park Service's Western Archeological and Conservation Center (WACC) also provided information.

Ranger work diaries are solid gold to a Forest Service historian. Merideth Hmura, historian of the upper Pecos Canyon, provided transcriptions of the extensive work diaries of Ranger John Johnson as well as advice and encouragement. Marietta Wetherill Eaton, Esther Cordova May, Carolyn Melgaard, and Pablo Casados also shared ranger work diaries written by family members and their co-workers.

Before 1950 the Forest published maps of its land every few years; after that new maps came out about once a decade. Symbols on these maps provide an idea of what lookouts were in use at a given time, but these date ranges are far from exact. Typically a lookout existed for several years before first indicated on a map, and it may have remained on maps for some years after it was abandoned. Thus, maps become secondary to other documents

for lookout dating. The Bibliography includes a list of maps used and where they were found. Maps are not generally cited individually in the text.

Sixty-three lookout sites were visited, photographed, and located with GPS. Improvements found included lookout towers, ground houses, tree lookouts, outdoor map boards, telephone lines, telephone boxes, survey markers, accessory cabins, pastures, trails, roads, latrines, cisterns, aircraft markers and helispots.

I interviewed 111 people between 2013 and 2016. Some staffed or managed lookouts, while others were family members who spent time at the lookouts and/or heard stories of lookout life. Interview notes are included in the research materials on file at the Santa Fe National Forest Supervisor's Office. Fourteen interviews conducted by Janie O'Rourke in the 1990s and 2000s also provided valuable information.

The research materials also include digital photographs of many of the documents cited. Indices to these photographs are placed at the end of relevant citations in the endnotes. Index examples include jnara2/20, A1/138, FRC/4, 4/302, Dispatch/114. The symbols before the slash name a particular block of photographs, with the number after the slash indicating which particular photograph within the block is being referenced. Sometimes several photographs are listed in one citation. A full key is provided in the research materials.

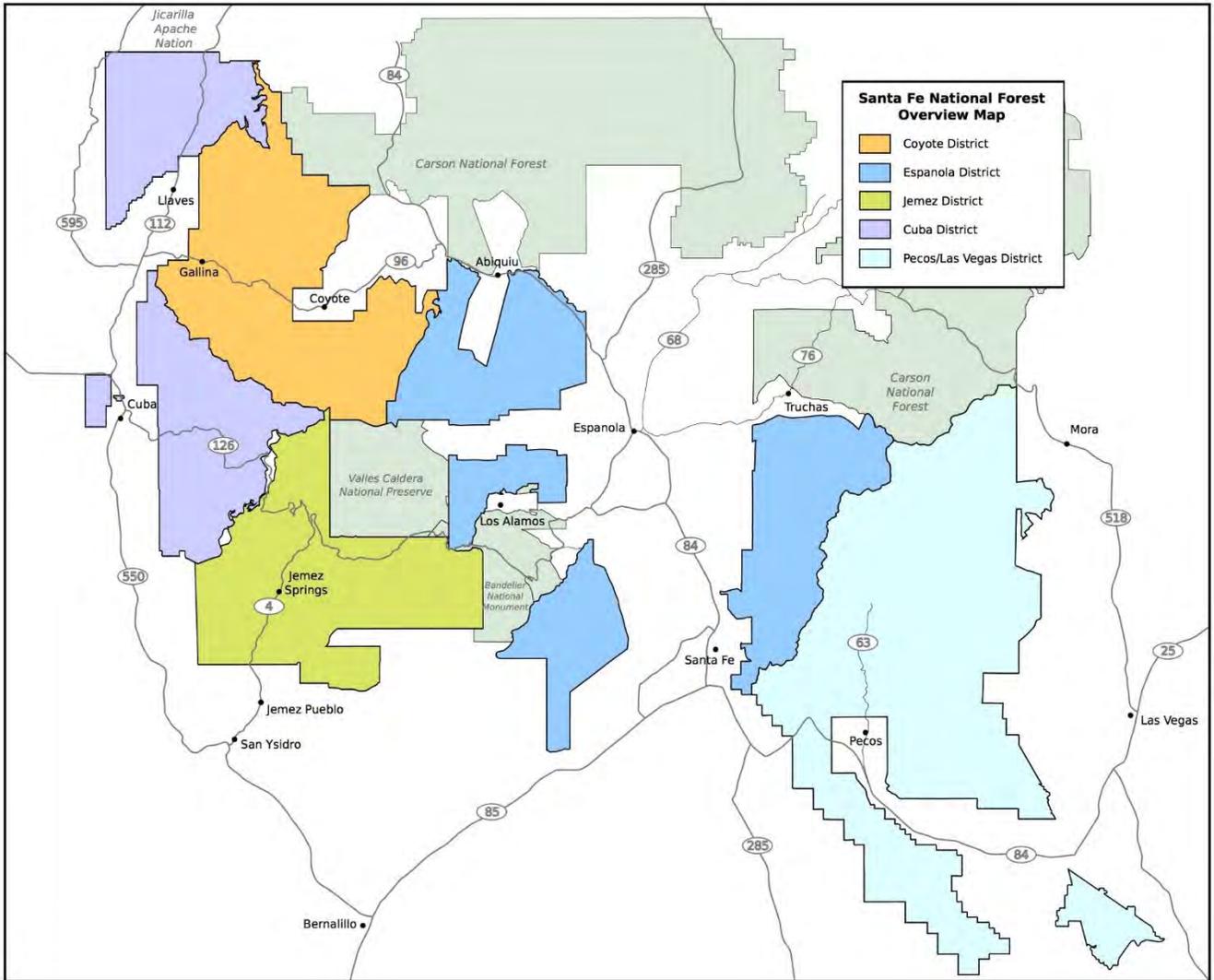


Figure 1. Santa Fe National Forest Overview Map

Part I—Chronological Development of the Lookout Program

Establishment of the Santa Fe National Forest

Under the Forest Reserve Act, the Pecos River Forest Reserve was established in 1892, followed by the Jemez Forest Reserve in 1905. The General Land Office transferred management of these lands to the Bureau of Forestry of the Department of Agriculture in 1905, renaming the Bureau the United States Forest Service. In 1907 all Forest Reserves were renamed National Forests. A proclamation in 1908 renamed the Pecos River National Forest as the Pecos National Forest, and transferred the portion of the Jemez National Forest north of the Chama River to the Carson National Forest. In 1915 the Pecos and Jemez National Forests were combined into the Santa Fe National Forest, and in 1924 the northernmost part of the Pecos Wilderness was transferred from the Santa Fe to the Carson National Forest.

First Lookout Points



Figure 2. Santa Fe Baldy in 1912, showing effects of 1883 Nambe Basin Fire (by T.H.P., archeology binder 27, no. 5590, SFNF SO)

Before the establishment of Forest Reserves in 1891 there was little or no organized fire protection. Small fires could be suppressed by local residents, but larger ones burned unchecked. In 1883 the Nambe Basin Fire burned for weeks through the mountains above Santa Fe. Its effects were still obvious on Santa Fe Baldy in 1912 (Figure 2). A 40,000-acre fire raged on the Pecos River Forest Reserve in 1900.³

The earliest fire detection on the Reserves and Forests was provided by rangers riding trails, stopping at high points and scanning for smokes. A ranger provided one or two horses, carried binoculars, map and compass, and was assigned a patrol route known as a “beat” (Figure 4). When he spotted a smoke, he either put it out alone or rode to the nearest settlement or telephone line for help. Trails and telephone lines were the essential infrastructure of the early fire program, and rangers constructed and maintained them when not

fighting fire. The first telephone lines were built on the Jemez by 1906 and on the Pecos by 1910. Rangers sometimes carried portable telephones so that they could call from anywhere along a line (Figure 3). Telephones also linked the Forest to local cooperators, called per diem guards, who provided supplementary detection and suppression.⁴



Figure 3. “Ranger Stewart, circa 1914, with a mountain telephone packed for transport at Panchuela Ranger Station, Pecos N. F.” (Edwin A .Tucker, *The Early Days: A Sourcebook of Southwestern Region History, Book 3*, (Washington, DC: USDA Forest Service, 1989), 106)

Arthur Wells worked out of the San Geronimo Ranger Station on the Pecos National Forest around 1912. The book *Ranger District Number Five* was based on his experiences, and reportedly on events on the Jemez National Forest near Cuba as well.⁵ It describes a fire guard’s job of that era:

...a forest guard had ridden along his beat,—the little trail following the crest of the main range,—and, stopping at each of the lookout points, had carefully scanned, with the aid of his binoculars, every section of the forest within range of his vision. He was “looking out” for forest fires...

For the three months since the middle of May he had been riding this beat daily...He still had sufficient supplies in his cabin for a couple more months...

Whether lonesome or monotonous, it was a necessary, useful occupation...

As he came to the top of one of the highest peaks on the range, he involuntarily uncased his binoculars and began scanning the country...

Smoke was coming up from a deep cañon away over on District Number Five. There was no telephone communication with that district. He was not familiar with the trails, if indeed there were any on that newly annexed part of the Forest. Nor did he know where the ranger lived. How could he communicate with him? He must notify the Supervisor at once...

The horse, thoroughly aroused by the excitement of his rider, threw discretion to the wind—and on they sped.

It was only ten miles to the point where the telephone line crossed the trail...

[He called and was told,] ‘Ride to [the ranger’s] camp at once and notify him! If you can’t find him there, get men and begin to fight the fire.’...

He would pass his station and change horses before going on, for it would be at least a sixty mile ride.⁶

Many Forest trails served as patrol beats. On the Jemez, the Highline or Skyline Trail ran from Mud Spring to San Pedro Parks, then along the north edge of Valles Caldera to Española, with a spur running north along Cerro Valdez to Youngsville. Another trail linked Jemez Springs with the Bland/Cochiti Mining District and continued east to Frijoles Canyon. The Pajarito Trail ran north/south along the east side of the Jemez Mountains. On the Pecos, C. V. Shearer patrolled its

Highline Trail in 1911; today it is called the Skyline Trail, and runs from Barillas up the East Divide and around to the Santa Fe Ski Basin. A 1907 report on the Santa Fe Watershed recommended “[t]he formation of a trail along or near the summits” bounding the watershed as well as construction of other trails in the area for patrol and as fire lines. In 1902 Tom Stewart spotted two fires on his first patrol along the ridge tops of the Pecos River Forest Reserve, Earl Young patrolled ridges from Cuba to Española



Figure 4. Ranger looking for smokes along his beat (undated, archeology binder 45, no. 9149, SFNF SO)

from 1910 to 1915, and Jim Curry rode a beat from Red Top to Eureka Mesa in 1912 and 1913.⁷

Initial Development of Named Lookouts: the Trial-and-Error Period

In 1908 Arthur Ringland, the first Southwestern Region Forester, initiated a comprehensive fire control program that included development of fire plans, lookouts, telephone lines, toolboxes, trails, roads, and firefighting organizations. Up to this time rangers had been looking for smokes from their patrol beats; now Region directed all Forests to develop specific lookout sites. By 1910 a telephone line had been constructed to Grass Mountain Lookout on the Pecos National Forest. In September 1911 Ranger James Leese and crew built a log lookout cabin below Chicoma Mountain on the Jemez National Forest, and that same year Region tested a telephone line to Airline Lookout on the Pecos.⁸

By 1913 “[t]he majority of Forests in the [Region were]...using triangulation from a series of permanent lookouts as a primary control system, supplemented by secondary control of less important lookout points and patrol beats,”⁹ and the Jemez National Forest was among them. Fire guards were stationed on the following lookout

points: Chicoma, Cerro Pelado, Guaje, Deadman, Red Top, Cerro Pelon and Capulin. Bearhead, St. Peter's Dome and Pedernal/Cerro Valdez were used as “riding patrol points.” Cooperative fire protection was being explored with residents, land grant owners and the Indian Service (now Bureau of Indian Affairs). The Forest had established lookouts in local towns to supplement the primary lookouts on the Forest, with protractors mounted on top of Young’s Trading Post in Cuba and the Domingo Trading Post. Forest lookouts were equipped with simple map boards, alidades and sometimes canvas tents. Construction of trails, telephone lines and horse pastures was underway and telephones were installed once lines reached the lookout sites.¹⁰

The 1913 Jemez National Forest map was the first to identify lookouts, showing Chicoma, Cerro Pelado, Red Top, and Deadman. Lookout development proceeded rapidly, though in a trial-and-error fashion. As on most Forests, the initial lookout system “did not develop from a well-thought-out plan but rather from hastily chosen additions as money became available.”¹¹ In 1916 total lookout numbers peaked at 28 sites: 15 on the Jemez side and 13 on the Pecos. More locations were tried; between 1914 and 1925, 18 new sites were added, while 22 were abandoned.

By 1915 the Forest had established five “high point” lookouts at or above timberline on the highest peaks: Lake Peak, Jicarilla, Elk Mountain, Chicoma and Santa Fe Baldy. They were chosen simply because they overlooked the greatest amount of Forest (that view being called “seen area”), but access was not considered in their selection and this soon proved problematic. In the spring of 1916 there were many fires, and as the Lake Peak, Jicarilla, and Elk Mountain Lookouts could not be reached through remaining snowpack, “it was necessary to have a makeshift plan to take care of the [fires in the] lower country.” Additionally, views from the high point lookouts were sometimes obscured by fog or haze. Although the Forest planned to build cabins near three of these peaks in 1917 to enable earlier detection, by 1925 all of these high point lookouts had been abandoned in favor of those at lower elevations.¹²

The area directly visible from lookout sites is mapped on visibility or seen-area maps. The terrain of the Santa Fe National Forest has many ridges and mesas but few isolated high points, which means that every fixed lookout has considerable blind area. Fire occurrence or risk/hazard maps, first made for the Jemez and Pecos National Forests in 1909 and 1910 respectively, are overlaid on seen-area maps to determine the most useful lookout sites. But the Forest didn’t make its first seen-area maps until 1916, after initial selection of lookout sites. Thus, some of these early sites proved to have limited views of high-risk areas and were quickly abandoned. Occasionally one was replaced with a nearby site that might be more useful, including Rowe with Escobas, Aspen Peak with Truchas, Pedernal with Cerro Valdez, and El Cielo with Hermit Peak. By 1925, there were 16 primary and secondary lookouts on the Forest, with 7 cooperating lookouts in nearby towns.¹³

Early Lookout Improvements

During the first decade of lookout development many sites had only a map board and telephone. As yet there was no standardization, so various types of structures were constructed using available materials. A tree lookout provided a simple and inexpensive way of obtaining a view from forested sites, and was often the first structure built. A tall tree was selected and modified to allow climbing to the top, sometimes incorporating lag bolts, metal ladders, wooden rungs and treetop platforms. A “wolfie” tree was often chosen, as it was naturally contorted with limbs closer to the ground allowing easier climbing. Firefighters climbed trees in the general area of a reported fire to pin down its location, sometimes using spurs they carried for maintaining telephone lines. The Forest also built lookout trees near some developed lookouts as patrol points to cover areas blind to the main lookout; Figure 5 shows one that still stood on the Forest in 2014.¹⁴

In 1915 the Forest obtained its first steel towers from the U.S. Weather Bureau and installed them on the forested summits of Bearhead and Barillas. Each tower had a ladder to a small wooden platform about 30 feet off the ground. The Forest built a wooden pole tower at Deadman in 1926 and another at Pecos Peak in 1938. Other early sites were open enough to allow viewing from ground level, so towers were not required.¹⁵

Early fire guards traveled to lookout points from tents, ranger stations or villages, but in the 1910s the Forest began to construct cabins to house lookouts. As was common throughout the Region, these were generally placed below the peaks, near water and pasture and less exposed to lightning. A cabin was built below Chicoma in 1911, another below Cerro Pelado by 1913, and the Forest was planning to build more cabins below its permanent lookout sites. By 1916 a lookout cabin had been constructed on top of Grass Mountain, the first to be placed on a summit.¹⁶



Figure 5. Lookout tree on the Forest (2014, author)

Lookouts “On Top” in the 1920s

In 1921 the Forest Service's national fire policy changed, requiring all new lookout housing to be built on top of the peaks, ideally as observatory-type structures with many windows to “intensify” detection. Water development was also to be placed on top. The lookout would thus “live on the job at all times” rather than climbing the peak periodically for observations. In 1924 Region pointed out that “[t]he fire that waits to be seen until the fireman gets up from his camp below may some day prove to be the conflagration that will wreck a Forest fire record.” Cabins and pastures were to be moved to the top by 1924, and until that time the lookout was to live in a tent on top of the peak rather than commuting from below. As many summits had no pasture, lookouts who kept horses for riding to fires were exempt from this new requirement and could continue to live below the peak.¹⁷

The Southwestern Region was not initially in favor of the new policy because it required spending money on structures and water improvements. Lightning protection became a critical concern for lookouts living on top of the peaks. In 1924 lightning killed two lookouts in the Region including the Canjilon lookout on the Carson National Forest, and these fatalities fueled doubts about existing lightning protection standards. Regardless, lookout facilities were constructed on top as funding permitted. In 1922 the Forest Service established the first national standards for lookout structures and firefinders, and all existing towers were to have enclosed cabs or “tight breastwork.” At that time, Bearhead and Barillas were the only towers on the Forest, both having open wooden platforms. The Bearhead platform was never enclosed, but Barillas had an enclosed cab by 1928. According to the 1922 directive, new towers under 50 feet could be of either wood or metal, with those of wood to follow a 1921 standard design (that has not been found). The first tower erected on the Forest after the new standards were issued was built of wood at Deadman in 1925 or 1926. An inspector described that tower as “too light for permanent use but will serve for a few years;” apparently it did not follow the 1922 directive.¹⁸

An objective in the Forest’s 1922 Fire Plan was to “[p]lace cabins and water on top where permanency of lookout is known,” and in 1924 this was amended with the phrase “as fast as funds become available.” In 1924 the Forest Service published national standards for new steel towers and glassed-in lookout houses. From 1922 through 1927 the Forest proceeded with an extensive improvement program, building nine lookout cabins on top: at Guaje, Escobas, Cerro Valdez, Deadman, Barillas, Hermit, Cerro Pelado, and Red Top. The cabins at Guaje and Escobas

were frame buildings with windows on all sides. The other six were of log construction, with Red Top (Figure 6) the only one with enough windows to qualify as an “observatory.” Inspectors noted the Forest’s lack of compliance with the directive that new lookout cabins have many windows, and described Forest lookouts as generally below the regional standard. By 1926 all fire guards on the Forest were living on top, using tents where cabins were still under construction. Lightning protection had been installed at most Forest lookouts by 1928.¹⁹



Figure 6. Red Top Lookout in 1932. According to Mary Caldwell the man wearing chaps is Mac Fenton and the other is fire guard Jim Curry. (1932, Stanley F. Wilson, Inspection, Jemez Division, NARA, 5/52)

By 1925 the Forest had established cooperative lookouts in seven local towns, substantially increasing its detection coverage. Figure 7 shows the Forest Service/State Fish and Game float in the 1928 Las Vegas Cowboy Reunion parade that won the first prize of 100 dollars. Its fire lookout replica was by then a locally-recognized symbol of fire protection.



Figure 7. Forest Service/State Fish and Game float in the 1928 Las Vegas Cowboy Reunion parade (archeology binder 19, no. 3926, SFNF SO)

Fire plans of the 1920s and 1930s also directed “emergency lookouts” to be “in shape to man,” with telephone connections secured. These were staffed only when fire danger was high. Road and trail crews, as well as those in the “emergency organization,” were used on emergency lookouts or to supplement detection in blind areas. Specific locations were not listed, but may have included mapped sites without cabins or towers, such as Capulin, Cerro Pelon and Mud Spring. Other unmapped emergency points may have been used. By the 1940s, fire plans listed specific points as secondary or emergency lookouts, including Mud Spring, Rosilla, Cuba Mesa and Puye.²⁰

Cliff Cities National Park Proposals

In the middle-to-late 1920s the Forest delayed lookout development in the eastern part of the Jemez Mountains due to a controversial series of proposals to create Cliff Cities National Park. First proposed in 1899, this Park might have included up to 200,000 acres of National Forest as well as Indian Service and private lands. Bandelier National Monument was established on Forest lands in 1916 as a compromise measure in this campaign. By 1925 public and congressional sentiment for a large park was stronger than ever, but uncertainty lay in how many additional Forest acres would be transferred. The National Park Service (NPS) agenda revolved around archeological preservation and tourism while Forest Service priorities were tied to timber, grazing and mining. The Forest was loath to invest in improvements that might be taken over by the National Park Service, but it was also clear about its current and planned development, to show how it was approaching the “National Forest ideal of all around use and development.”²¹

In 1925, the Forest plan to build a lookout cabin at St. Peter’s Dome was deferred due to “National Park agitation.” Other lookout sites being evaluated for development within the proposal area were delayed or eliminated, including Puye, Rabbit Mountain, and Redondo Peak. Proposals for Cliff Cities National Park ended in 1932 when the NPS obtained administrative responsibility for Bandelier National Monument and NPS management decided a larger park was not justified. The Forest finally built the St. Peter’s Dome lookout cabin in the fall of 1931, and the Indian Service erected the Puye Lookout tower in 1931 or 1932.²²

The New Deal Years

From 1933 through 1943, the federal government's New Deal programs provided the manpower to rejuvenate and expand the Forest lookout system. The total number of lookouts on the Forest rose to 24, almost as high as the initial buildup in the 1910s. Four Civilian Conservation Corps (CCC) camps were established on the Forest in the

spring of 1933. These camps also employed “locally experienced men” or LEMs, skilled workers who oversaw the work crews and eased potential tensions from bringing in men from far away. The Forest Service had issued a new set of standard lookout plans in 1931, and in 1933 the Forest used CCC labor to replace three of the log cabin lookouts with standardized L-4 ground cabs (Cerro Valdez, Cerro Pelado and Red Top). The CCC also replaced Deadman’s wooden tower with a wooden cab on a steel Aermotor MC-24 tower that year. Upgrades at these lookouts ensured their continuance for another facility cycle. These were true observatories with windows all around and a firefinder within the living space, so lookouts no longer had to use an outside map board in potentially dangerous weather. In 1933 the Forest also planned to build a “patrolman’s shelter” at Mud Spring Lookout. CCC labor would probably have been used for this, but the structure was probably not built.²³

In 1935 the federal government's Work Project Administration (WPA) was initiated, enrolling older Americans as workers who completed Forest projects along with the younger workers of the CCC. More CCC camps and smaller side camps were added both on and around the Forest during the New Deal years. In 1936 the Forest planned to have the CCC build standard lookouts at St. Peter’s Dome and Barillas. However, the Dome replacement with an L-4 cab on a rock basement was delayed until 1940 and the Barillas proposal was shelved indefinitely. Apparently the priority on the Pecos side of the Forest was developing new lookouts rather than improving those already in place. Only an outhouse was built at Barillas during the New Deal years, and although a decent lookout cabin was badly needed at Hermit Peak, the CCC only built a hiker shelter there.²⁴

The Forest proposed six new lookouts in the late 1930s: Indian Peak, Tree 73, Glorieta Baldy, Cuba Mesa, Rosilla, and Pecos. Indian Peak was never developed and Tree 73 received only a map board and telephone, but the other four were constructed using CCC labor. Glorieta Baldy was a well-built lookout of standard design erected in 1940, while the other three were substandard or temporary. The 1940 inspector noted that most Forest lookouts were substandard, and as replacements he preferred “to use temporary structures pending the time when funds become available for permanent standard structures rather than to construct permanent substandard improvements.” Cuba Mesa had only a primitive map board platform with a tiny timber scaler’s cabin; a tower was proposed in 1941 but never built. Perhaps due to its minimal improvements, regular staffing of Cuba Mesa only lasted a few years. Rosilla’s initial tower design was rejected in favor of a “temporary [shack] on skids” that was never upgraded to a permanent structure. A simple pole tower was built at Pecos Lookout and was abandoned within a few years. On the Jemez side, secondary lookouts Capulin and Cerro Pelon received no New Deal improvements, and the Forest abandoned them by the mid-1940s. In contrast, between 1936 and 1940 Bandelier National Monument took advantage of CCC labor to develop two tree lookouts, a temporary tent lookout, and a permanent lookout.²⁵

The Forest began to add radio communication to the existing telephone system in the 1930s, and by 1939 some Forest lookouts operated radios during the entire fire season. As roads and facilities were improved during this period, public use of the forests increased. Region directed Forests to “[u]se lookout towers as bait for PR work” with lookouts educating the public in forest objectives and practices.²⁶

Seen-Area Mapping Revisited

By 1936, the Forest needed “additional organized fire detection...because of greater use..., the opening of new areas by roads, and increased vegetative growth...[T]oo much reliance is placed on chance discovery from road travelers and ranchers to prevent some serious elapsed discovery and report time.” In 1937 the Forest Service published “Planning, Constructing, and Operating Forest-Fire Lookout Systems in California,” which examined fire detection plans with a focus on seen-area mapping; its method was adopted as a Forest Service standard. It was widely studied by Santa Fe National Forest managers, and in 1938 and 1939 seen-area maps were made from 48 existing and potential lookout sites on and near the Forest. Sites utilizing several patrol points, such as Hermit Peak, incorporated data from all patrol points into one map. For sites that viewed both Santa Fe and Carson National Forest lands, separate maps were made for the seen areas on each Forest. Figure 8 lists these sites, and Figure 9 shows the Cerro Pelado seen-area map that included the Los Griegos patrol point. Individual maps were combined into composite seen-area maps for the Jemez and Pecos. Composite blind-area maps, the reverse of seen-area, were also made for parts of the Santa Fe National Forest to provide another perspective. The analysis showed that even if all 48 lookout sites were developed and staffed, only 60 percent of the Forest lands would be visible to ground observers, the lowest seen area of all Forests in the Region. “In country of short steep slopes and deeply cut drainage with few or no high points dominating the rest, it requires more lookout points to get a decent percent of coverage...It is inevitable that some dangerous areas will remain invisible to all lookouts.” This is illustrated in Figure 10, the composite blind-area map for the Pecos side which also shows the fire occurrence zones.²⁷

In 1939 the Forest used these new seen-area maps in reorganizing their lookout improvements, and may have delayed some planned projects until this analysis was complete. At that time the Forest had a “new lookout cabin and cabin and observatory on hand” and expected to install them, though it is unclear if or where these particular structures were used. This lookout cabin could have been the L-4 that was installed at St. Peter’s Dome in 1940. The cabin/observatory combination might have been planned for Barillas, but was not used there. Other sites under consideration at the time were Tree 73, Indian Peak, Mud Spring, Glorieta Baldy and Rosilla, but none of these received a cabin/observatory combination, nor was it placed anywhere else on the Forest.²⁸

F
 PLANS
 Presuppression
 Seen-Area Maps

SANTA FE NATIONAL FOREST

SEEN-AREA MAP ATLAS

Map No.	Name of Lookout or Proposed Site
* A	Composite Blind-Area Map of East Half of Forest
* B	" " " " West " " "
1	Barillas Lookout
2	Hermits Peak Lookout
2A	" " " (Carson Seen Area)
3	Glorieta Baldy Lookout
4	Rosilla Peak Lookout
5	Pecos Lookout
* 6	Ohaparita Knob Proposed Site
* 7	Viveash Ridge " "
* 8	Rowe Proposed Site
* 9	Sands Proposed Site
* 10	San Geronimo Proposed Site
* 11	Nelson Ranch Proposed Site
* 12	Dias Alegres Ranch Proposed Site
* 13	Las Dispensas Proposed Site
* 14	Holman Pass Proposed Site
* 14A	" " " " (Carson Seen Area)
15	St. Peters Dome Lookout
16	Cerro Pelado Lookout
17	Red Top Lookout
18	Cerro Valdez Lookout
18A	" " " (Carson Seen Area)
19	Deadmans Lookout
19A	" " " (Carson Seen Area)
20	Mesa De Cuba Lookout
21	Tree 73 Lookout
21A	" " " (Carson Seen Area)
22	Indian Lookout
22A	" " " (Carson Seen Area)
* 23	Los Cerros Proposed Site
* 24	Los Griegos West Proposed Site
* 25	Peralta Ridge Proposed Site
* 26	Ruiz Peak Proposed Site
* 27	San Ysidro Proposed Site
* 28	Pankey Peak Proposed Site
29	Espanola Ranger Station
* 30	Capulin Peak Proposed Site
* 31	Sypher Point Proposed Site
31A	" " " (Carson Seen Area)
32	Mud Springs Lookout
32A	" " " (Carson Seen Area)
* 33	Water Canyon Proposed Site
* 34 + 3 4A	Pena Blanca Proposed Site <i>Santa Fe and Cibola Coverage</i>
* 35 + 3 5A	West Bear Proposed Site " " " " " "
36	Wirt (USIS) Lookout
37	Puye (USIS) Lookout
37A	" " " (Carson Seen Area)
38	Ganjilon (Carson) Lookout
39	Osha Mtn. (Carson) Proposed Site
40	La Cueva (Carson) Proposed Site
41	Snyder Point (Carson) Proposed Site
42	Cerro Visto (Carson) Proposed Site
43	Valle Grande (Carson) Proposed Site
44	Petaca (Carson) Proposed Site
45	Picuris Peak (Carson) Lookout
46	Tres Orejas (Carson) Proposed Site
47	<i>Indian Peak</i>
48	<i>Emilio Point</i>
* Copy available from Regional Office Fire Atlas files.	

Figure 8. Santa Fe National Forest Seen-Area Map Atlas Contents (c. 1950, SFNF SO, Dispatch)

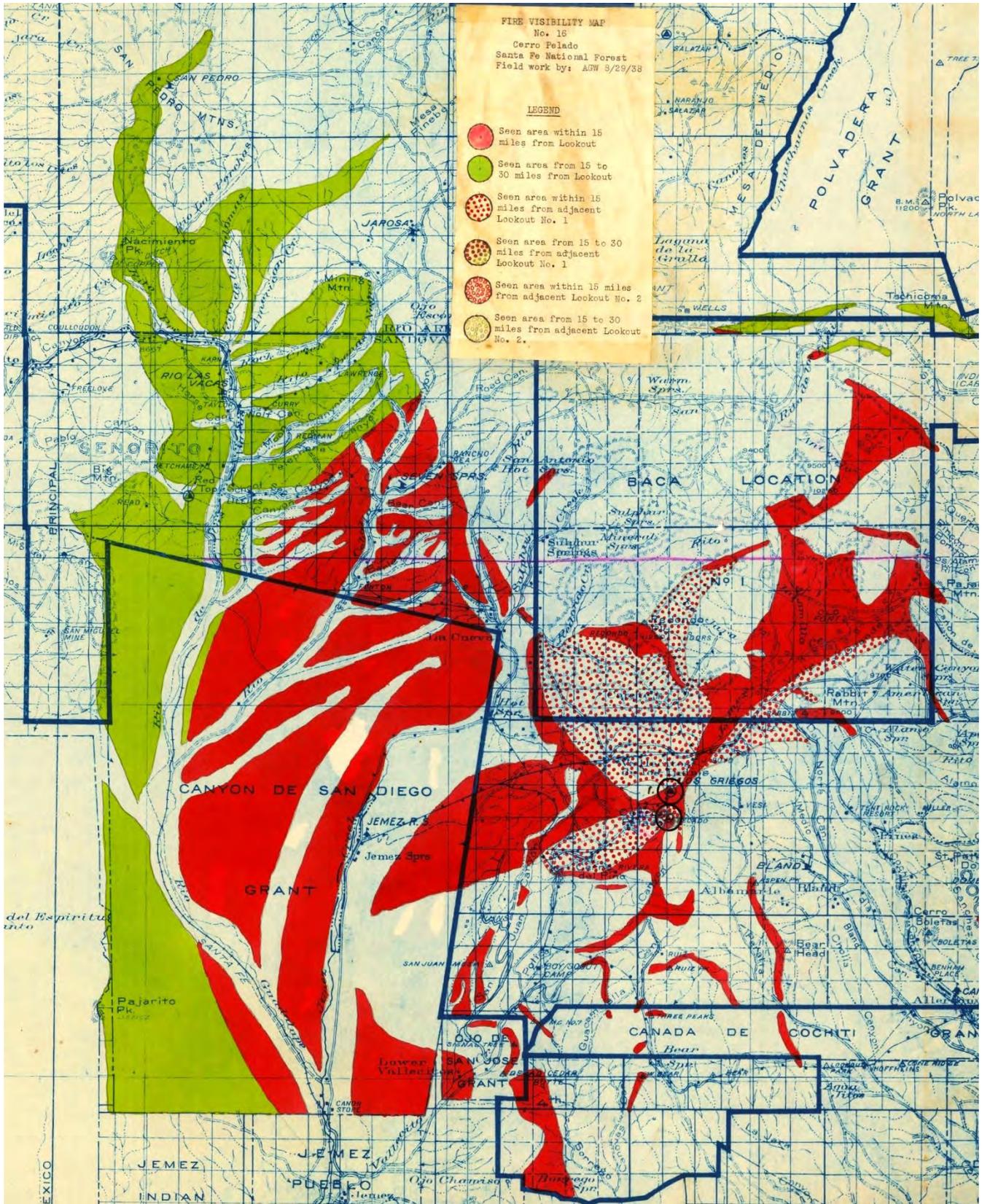


Figure 9. Seen-Area Map, Cerro Pelado Lookout (1938, SFNF SO, Dispatch)

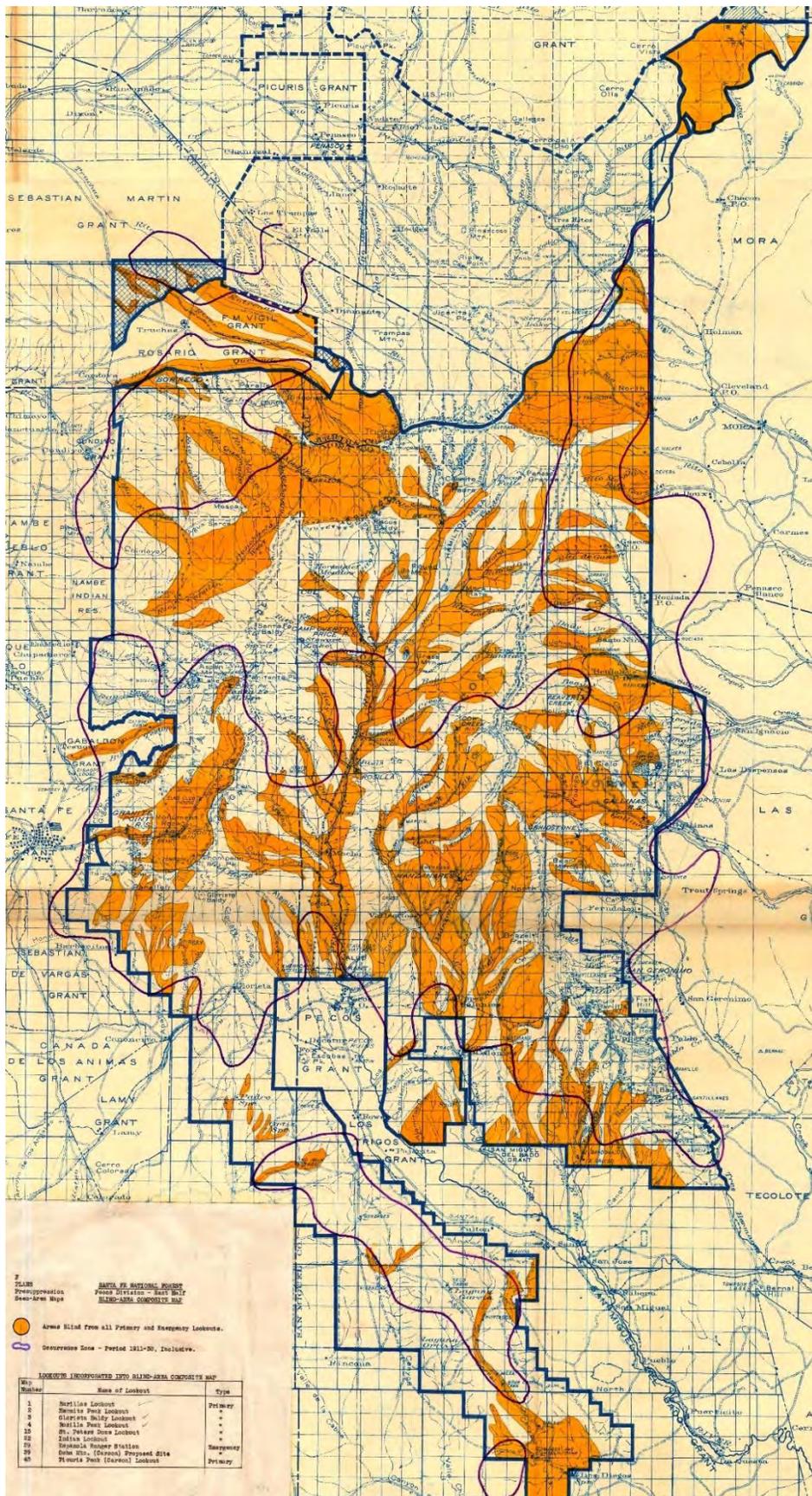


Figure 10. Santa Fe National Forest, Pecos Division - East Half, Blind Area Composite Map (c. 1938, SFNF SO, Dispatch)

World War II

During the war years of 1941 to 1945, most Forest development was halted. The 1943 Forest Plan said that new funding continued to be unavailable, and “administrative improvements will be maintained only to the degree that will preserve the particular improvement from excessive deterioration. No new construction or betterment is contemplated during the emergency period.” Nonetheless, the Forest approved a few projects that year, including construction of a log lookout cabin on Hermit Peak.²⁹

Many Forest Service personnel joined the armed forces during the war, creating a shortage of qualified workers. In the late 1930s, Region would only employ women as lookouts during a national emergency, although wives of lookout men might be employed at the discretion of the individual Forest. During the war years, “in many instances, experienced [lookout] men had to be replaced with inexperienced, newly trained boys, and in a few cases, by women;” older men were also used. The Forest had many large fires in 1943, and one cause was “improper detection and spotting of fires,” partially due to inexperienced lookouts.³⁰

Post-War Years

Returning veterans were sometimes given hiring preference over those who had held positions during the war years. Simon Sandoval had a several-year break in his long service at Cerro Pelado Lookout when Army veteran Ernest Salazar was given the job instead. Many veterans settled into lifetime Forest careers, some starting as lookouts. In the late 1940s and early 1950s, Region also encouraged hiring of forestry students, primarily for lookout positions, if local residents were unavailable. That program had limited success on the Forest, with students failing to appear for work or resigning their jobs in the middle of the fire season.³¹

After the war the Forest addressed its large backlog of improvement issues. A series of inspections in the middle to late 1940s repeatedly pointed out major deficiencies in the Forest lookout system. The 1948 inspector called the facilities “a discredit to the Forest Service.” Roads, trails, lookout structures, water developments and firefinders were in dire need of replacement or upgrade, and slowly, as funding permitted, the Forest made these improvements. Osborne firefinders replaced the old Region 3 protractors, binoculars and some radios were obtained, and a few cisterns were constructed. The 1948 inspector recommended completing roads to the summits of Barillas, Red Top, St. Peter’s Dome, Glorieta Baldy, Indian/Clara Peak, and Deadman. Over the next several decades these roads were built under logging contracts. In 1949, detection studies were underway for the San Diego Grant, Mud Spring and Hermit Peak areas. Although Barillas was temporarily abandoned in 1948, two new lookouts were built during this period: Encino in 1950 and Clara Peak in 1951. These were the last lookouts erected at new Forest sites.³²

The Forest's first reconnaissance flight after lightning storms was in the summer of 1945. These flights supplemented the lookout system and helped with blind-area issues. Perhaps as a result, secondary lookouts Capulin and Cerro Pelon were soon abandoned. In 1949 an inspector congratulated the Santa Fe National Forest on installing

a neat system of ground markers. At each lookout, cabin, and station they have made a circle of painted rocks enclosing a number...spotted on maps used by the aircraft and...clearly visible from the air...keeping the pilot certain of his position and establishing exact location of any fire spotted...Other forests can well take a tip from the Santa Fe and establish similar ground markers.³³

The Forest used these markers (listed in Appendix 1) from the mid-1940s until the 1970s, and remnants are still visible at most sites today. Figure 11 shows the Red Top marker in 1964. Lookout duties included weeding and whitewashing the markers. The Barillas marker was painted on the cabin roof rather than on the ground, and identification numbers were also painted on top of vehicles used in the field.³⁴



Figure 11. Red Top Lookout and aircraft marker made of whitewashed rocks, men unidentified (1964, Cuba photolog book 2, Jemez District Office)

The 1950s and 1960s

Larger fires in the early 1950s prompted another examination of the Forest lookout system. The 1956 Forest Detection Plan listed eleven active lookouts on the Forest: nine primary (Cerro Pelado, Red Top, St. Peter's Dome, Encino, Deadman, Clara Peak, Glorieta Baldy, Barillas, and Hermit) and two secondary (Mud Spring and Rosilla). It also listed cooperative lookouts at Bandelier, Cedar Springs (on the Jicarilla Apache Reservation), and Los Alamos. The nature of Forest terrain made it difficult to provide adequate detection from the existing lookouts, and the deteriorating structures at some sites were not suitable to use for proper observation. Recommendations included maintaining and improving the existing lookouts, supplementing with air and ground patrols and cooperative observers, and encouraging or requiring a fire guard patrolman to be present on timber sales. Use of per diem guards for detection at 62 identified locations was endorsed, with the Forest providing "360 degree cooperators alidades" where practical, though it is unclear how many were utilized. As the Forest removed

telephone lines in the 1950s, the effectiveness of the per diem guard system was reduced by breaking the critical communication link. The 1961 fire inspector suggested the Forest “revitalize” its cooperative detection system, including providing radios at key per diem guard locations. Through a cooperative agreement with the State, the Forest took over staffing of Whites Peak Lookout from the Carson National Forest in 1952 to supplement their east-side detection. But by 1958 they had released it back to the State, which operated it until its abandonment in 1984.³⁵

In 1957 the Santa Fe and Carson National Forests jointly reevaluated their lookout locations. Mogote Peak and Sierra Negra (Abiquiu Peak) on the Carson were briefly proposed as new lookout sites as they viewed areas blind to existing Santa Fe National Forest lookouts, especially the Polvadera and Lobato Grants. But their views were into low-value pinyon/juniper woodlands or were too distant to be of use, and they were never developed.³⁶

The Forest had been slow to fully adopt aerial reconnaissance after lightning storms, and a 1961 inspector said “the record of acres burned could be reduced by increased aerial detection.” The Regional Forester agreed and suggested that “with the very poor percentage of seen area on the Santa Fe[, aerial reconnaissance] could pay big dividends” by keeping fires from becoming large and expensive as had many in the 1950s. Increased reliance on aerial reconnaissance was a major factor in the abandonment of a number of secondary lookout sites and patrol points by the early 1970s, including North Point, Mud Spring, Tree 73, Los Griegos, Bear Springs, Rosilla, Hermit Peak, Whites Peak and Truchas.³⁷

In July 1961 fire protection responsibility on private land was moved from the Forest to New Mexico State Forestry. The Forest presuppression force, including Cerro Pelado, St. Peter's Dome and Red Top Lookouts, had been built up and funded in order to protect this private acreage, especially around the Baca and San Diego Grant areas. Loss of these cooperative agreements reduced the money available for these and other fire positions, and prompted the Regional Forester to tour the Chief Forester over the area to explain the need for a readjustment in funding.³⁸

By 1966 the Forest had obtained parts of the fire-prone San Diego Grant and once again took over fire protection responsibilities for those areas from State Forestry, making a cooperative agreement with New Mexico Timber Company. With increased fire hazard from public presence and timber slash on these lands, better detection was needed. Even before grant acquisition, detection gaps in that area had prompted consideration of additional lookouts. The Forest briefly considered Eureka Mesa, Mining Mountain, Flag 11, Pajarito Peak, and Jarocito as possible sites, but none were developed. Joaquin Lookout, built and staffed by State Forestry in 1962, was located on the newly acquired lands, but the Forest felt its structure was unsafe and inadequate. A replacement steel tower was proposed but not built, and the State structure was demolished in the late 1960s.³⁹

In 1962 Congress established the Accelerated Public Works (APW) Program to relieve unemployment in depressed areas. It provided labor and funding for improvements on the Forest, including lookout upgrades and new lookout construction. An extension of the program enabled the St. Peter's Dome and Cerro Pelado L-4s to be replaced with CL-100 cabs on cinderblock bases. It appears the Deadman cab was replaced under this program as well. Replacement of Encino's MC-39 with a 14- by 14-foot cab was considered but not done. The Forest was studying several potential lookout sites in the 1960s, using aircraft to determine seen area rather than the old method of drawing maps from the ground. It was considering Elk Mountain as a replacement for Hermit Peak, and Cerro Negro (location unclear) to provide detection for the Tesuque/Española Districts. Tall steel live-in lookouts were listed for construction on these two peaks under the APW Program, but neither was built. Hermit Peak Lookout was abandoned soon after 1966; the Peak was added to the Pecos Wilderness at that time and this contributed to its closure.⁴⁰

Lookout personnel were still expected to perform initial attack on fires near their stations during the 1960s, but by the 1970s this was no longer required. In 1964 the Southwestern Region considered contracting lookout services, but this was not tried on the Santa Fe National Forest and was ultimately not adopted by the Region.⁴¹

1970s to Present

By 1970, the Forest was staffing six primary lookouts (Encino, Deadman, Red Top, Clara Peak, Cerro Pelado, St. Peter's Dome, Barillas and Glorieta Baldy), one secondary lookout (Cuba Mesa), one patrol point (Los Griegos), and was utilizing cooperative lookouts at Bandelier and Los Alamos. Helitack was established in the early 1970s and added additional detection capability. Timber sales declined during this decade, reducing monies for forest projects including roads. During the 1970s the Los Alamos tower closed, Cuba Mesa was abandoned, the Bandelier tree lookouts were dismantled and Los Griegos was no longer used as a patrol point. Aerial reconnaissance was used to fill in the blind spots left by these closures.⁴²

The early 1980s were wet years, and although only the State's Whites Peak Lookout was abandoned during this decade, others were staffed less regularly, including Red Top, St. Peter's Dome, Clara Peak, Glorieta Baldy and Barillas. Without full-time staffing, access roads deteriorated, regular maintenance decreased and vandalism became prevalent. Red Top was closed from 1985 through 1987 because its road was impassable. Although a contractor improved the road in 1987 allowing staffing through 1993, further road erosion combined with a rodent infestation of its trailer lookout finally ended full-time staffing.⁴³

In the 1990s Clara Peak, Glorieta Baldy, and St. Peter's Dome became unsafe and uninhabitable, and Clara Peak was demolished in 1993 or 1994. The 1996 Dome Fire eradicated most of the fuels in the immediate area of St. Peter's Dome, ending its usefulness for detection. Glorieta Baldy was closed and Bandelier staffing became sporadic during this decade. Although Red Top's dilapidated trailer lookout was listed for replacement in 2003, it was finally demolished in 2011, with no replacement foreseen.⁴⁴

In 2016 the Forest staffed four lookouts: Barillas, Cerro Pelado, Deadman and Encino, with the cooperative lookout at Bandelier temporarily staffed when needed. That year the Forest began to investigate the restoration of Glorieta Baldy Lookout for inclusion in the cabin rental program, with the possibility of periods of administrative use for fire detection.

Summary of Factors in Lookout Abandonment

Figure 12 is a timeline for Forest and key cooperator lookouts, showing dates of their creation and abandonment as well as periods of sporadic staffing. Some timeline dates are approximate. Figure 13 graphs the total number of lookouts in use at certain dates. The peak in lookout numbers (28) occurred in 1916 during initial site development. The second-highest peak was in the mid-1930s, with the New Deal programs enabling increased development. Lookout numbers dropped slightly through the 1950s, then more in the 1960s as aerial reconnaissance was fully adopted. Numbers plateaued between 1960 and 1990, followed by decline to the current levels. Figure 14 graphs total Forest lookouts and total cooperative lookouts in use at the same dates. Cooperative lookouts were established in the 1910s and 1920s as many of the initial Forest lookouts were being abandoned. Thereafter, cooperative lookouts followed the same plateaus and declines as Forest lookouts.

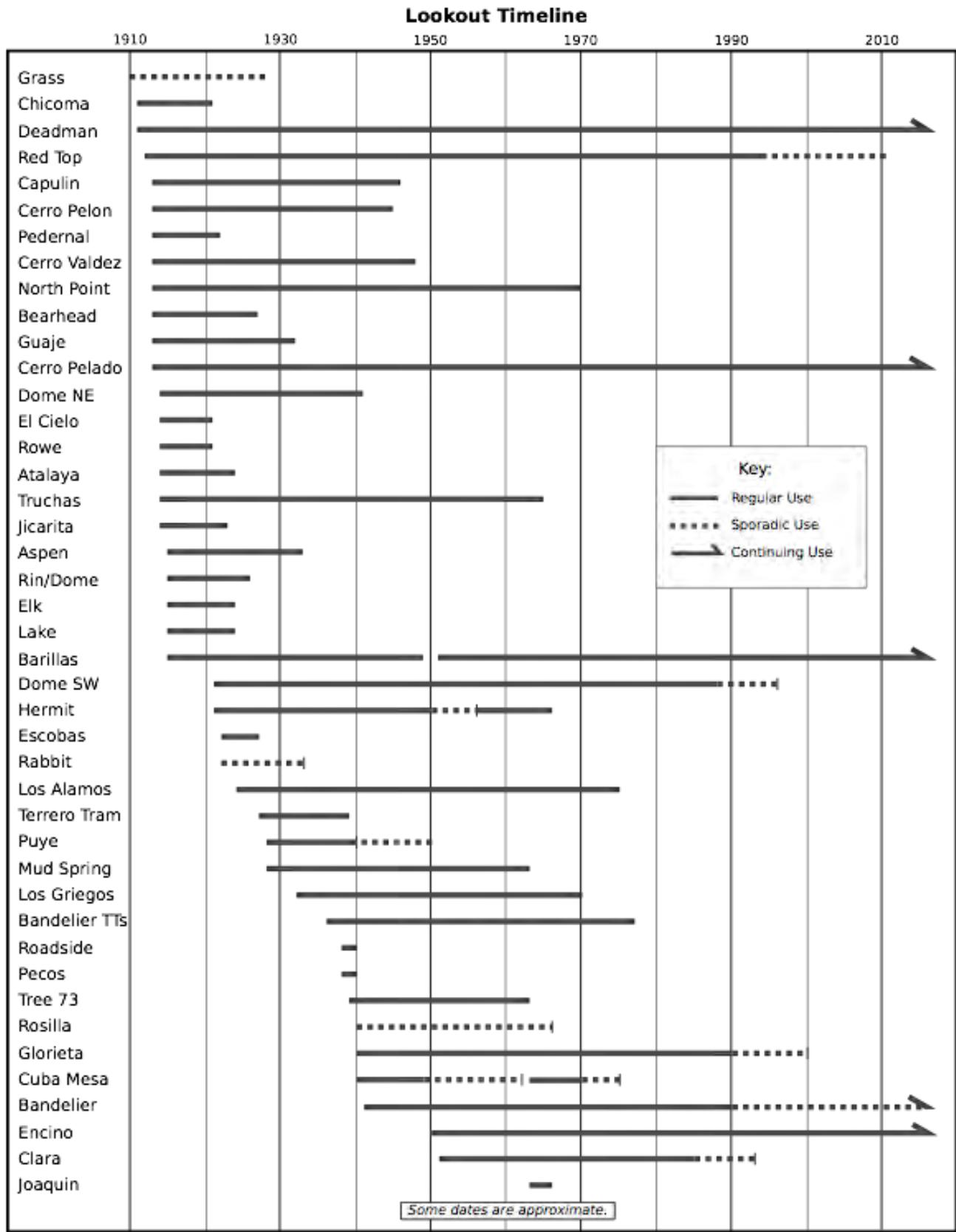


Figure 12. Lookout Timeline. Some dates are approximate.

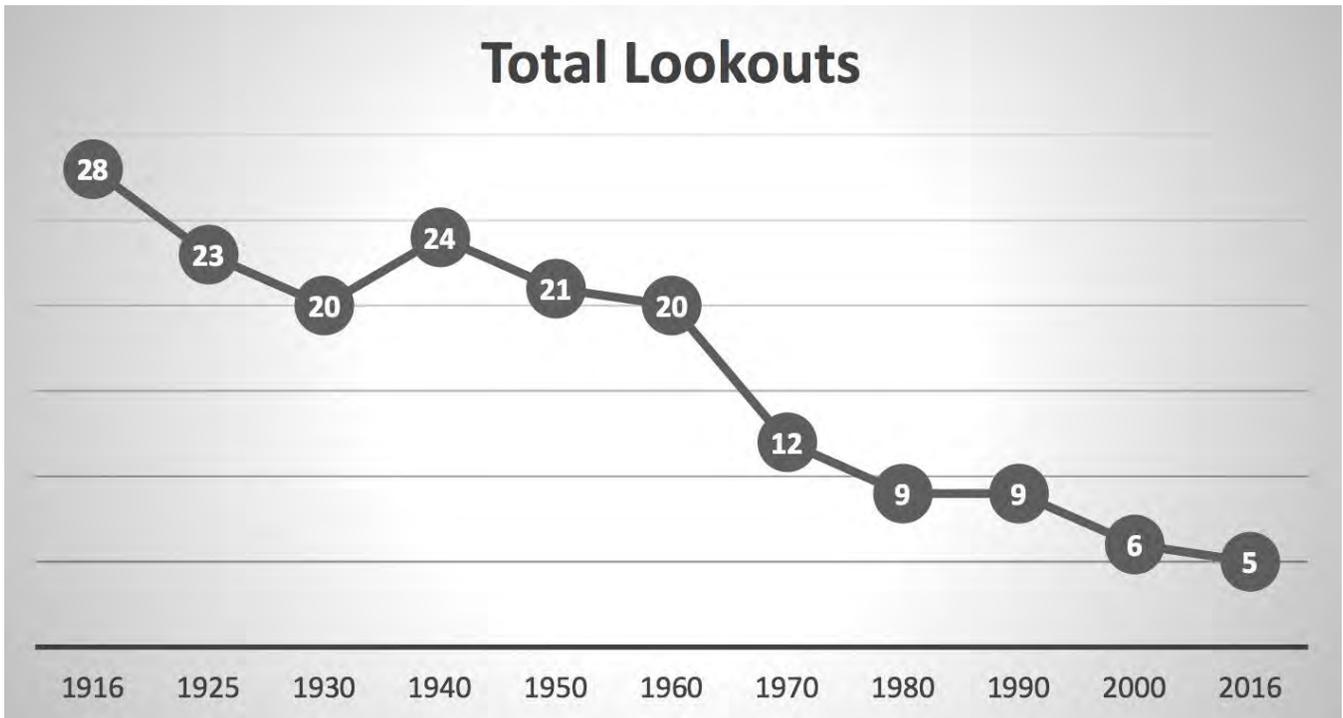


Figure 13. Total Established Lookouts, 1916 - 2016

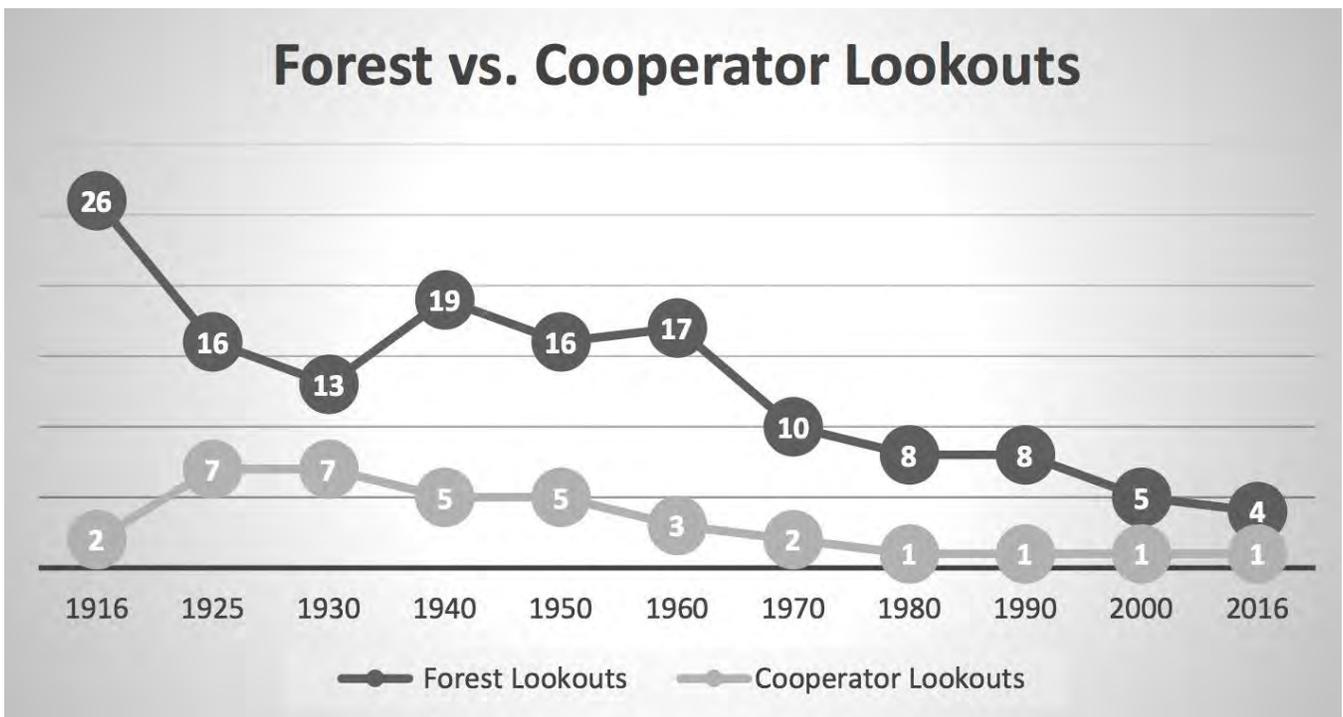


Figure 14. Established Forest vs. Cooperator Lookouts, 1916 - 2016

Following is a review of factors contributing to lookout abandonment.

- Lookouts were initially developed on the Forest without any systematic study of their placement. This, combined with the difficult nature of the Forest terrain, meant that many early sites were not well-chosen. Analysis of seen-area maps overlaid on risk/hazard maps did not begin on the Forest until 1924, and was not fully instituted until 1938. Once such analysis was performed, some sites were abandoned while others were never developed beyond patrol points.
- In many cases, site abandonment occurred only as the Forest developed another nearby location, as with Rowe replaced by Escobas, El Cielo with Hermit, Aspen Peak with Truchas, Pedernal with Cerro Valdez, Bearhead with St. Peter's Dome, and Guaje with Puye.
- The early selection of five high point lookouts proved to be a mistake, as these often weren't accessible during spring fire season.
- Escobas and El Cielo were on private land, which may have precipitated their abandonment.
- Use of aerial reconnaissance in the late 1940s and more heavily in the 1960s, along with establishment of the helitack program in the 1970s, contributed to lookout closures, especially of secondary lookouts and patrol points. These included Capulin, Cerro Pelon, Mud Spring, Tree 73, Rosilla, Hermit Peak, Los Griegos, Cuba Mesa and North Point.
- Tree 73 and Mud Spring Lookouts were to be developed primarily with cooperator funding, but the cooperators could not afford the high initial cost and these Lookouts were eventually abandoned.⁴⁵
- Hermit Peak became part of the Pecos Wilderness in the mid-1960s, a factor in closing that Lookout.
- Los Alamos National Laboratory reportedly developed some alternative detection methods, eliminating their previous reliance on Clara Peak Lookout. This contributed to its closure.⁴⁶
- Timber sales dropped off in the early 1970s, reducing monies available for forest projects including lookout maintenance and road work.⁴⁷
- A series of wet years in the early 1980s led to sporadic staffing of some lookouts, including Clara Peak, St. Peter's Dome and Red Top, which meant less regular maintenance and increased vandalism. As maintenance needs increased, the cost of repairing or replacing lookouts exceeded what was available and most would be abandoned. Liability concerns also contributed to demolition of unused structures.
- Access roads deteriorated and funding was unavailable to improve them.
- Since 2001, the rapidly rising cost of fire suppression has reduced Forest Service facilities funding by 68 percent, ironically contributing to elimination of lookouts that could provide early smoke reports and reduce those suppression costs. If a lookout reports one fire quickly enough to keep it under ten acres, the

money saved has paid for the lookout's entire season, based on an average suppression cost of 2,000 dollars per acre.⁴⁸

- Since lookout use declined nationwide after 1960, many fire managers had not worked with lookouts during their careers, instead relying on aircraft and public reports for detection. New technologies were being adopted: "the Forest Service increasingly has devoted financial and research efforts to developing alternate means of detection including aerial patrols and automated devices," thus diverting funds from staffed lookouts.⁴⁹
- From the 1910s through the 1940s, the lookout was a highly valued and supported position in the fire organization. Today the position is often disregarded, the lowest rung on the fire ladder. Lookouts are conspicuously absent from the Incident Qualifications and Certification System, an interagency information system that tracks training and certifications for federal fire employees. This makes it difficult for dedicated lookouts to get training and experience and demonstrate qualifications. It can keep lookouts from being perceived as an important part of the fire organization: out of sight, out of mind, out of the funding loop, and another lookout is closed.

The Value of Staffed Lookouts Today

Keeping lookouts staffed provides numerous benefits to agencies and the public, as lookouts provide much more than the fire detection they are known for. Firefighter and public safety are actually a lookout's primary responsibility, a critical service in this era of catastrophic fire and increasingly extreme fire behavior. Lookouts keep track of fire crews, direct them into fires, give them weather and fire behavior updates, provide radio relays, work in concert with aerial observers and assist search and rescue. They support interpretive and heritage programs by giving visitors entry to lookouts and educating them about lookout functions and history as well as fire management and public use issues. Lookout personnel provide maintenance of the structures and their on-site presence deters vandalism, thus heading off major deterioration of the facilities. Staffed lookouts provide myriad values for relatively low cost.

¹ Peter L. Steere and Keith E. Miller, *Evaluation Report For Fire Lookout Towers, Southwestern Region - United States Forest Service*, 1987.

² 1940 Inspection, General Records of the U.S. Forest Service, National Archives and Records Administration (NARA) at Denver, Broomfield, CO, 5/31.

³ Edwin A. Tucker and George Fitzpatrick, *Men Who Matched the Mountains: The Forest Service in the Southwest* (Washington, DC: USDA Forest Service, 1973), 49; Edwin A. Tucker, *The Early Days: A Sourcebook of Southwestern Region History, Book 1*, (Washington, DC: USDA Forest Service, 1989), 124.

⁴ George M. White, "This Is My Life," unpublished manuscript, 1958, Los Alamos Historical Society Archives, used with permission of Jim and Linda Goforth; Elliot S. Barker, *Western Life and Adventures 1889 to 1970* (Albuquerque, Calvin Horn Publisher, 1970), 101; Solomon Lovato, interview by Janie O'Rourke, Coyote, NM, August 9, 2004.

⁵ Tucker, *The Early Days Book 3*, 226; Pat Gallegos, interview by author, Cuba, NM, June 4, 2014. His grandmother was the wife of early Cuba ranger Winfred Bletcher, who she said was the model for the ranger in *Ranger District Number Five*.

⁶ Hunter S. Moles, *Ranger District Number Five* (Boston: Spencerian Press, 1923), 273-275.

⁷ Solomon Lovato, interview by Janie O'Rourke, Coyote, NM, June 29, 2007; Tucker, *The Early Days Book 1*, 162; Hugh P. Baker and Frank J. Phillips, January 1907, *Report on the Santa Fe Creek Watershed in Pecos River Forest Reserve New Mexico*, Manuscript on file, Santa Fe National Forest Supervisor's Office (SFNF SO); Tom Stewart as told to Bob Kelleher, "Blazing Trail on the Pecos", *New Mexico*, March 20, 1942; Butch Hernandez, interview by author, Cuba, NM, August 14, 2014; Tucker, *The Early Days Book 3*, 227; Jim Curry Work Diaries, Jemez National Forest (NF), 1912-1913, private collection.

⁸ Tucker, *Men Who Matched the Mountains*, 59; Barker, *Western Life and Adventures*, 101; Jemez NF, *Jemez Forest Ranger*, November 1911, SFNF SO; Southwestern District Monthly Report, May 1911, NARA, jnara2/28.

⁹ Southwestern District Monthly Report, December 1912, NARA, 1/35.

¹⁰ 1913 Jemez NF Fire Plan, NARA, A3/227+.

¹¹ S.B. Show, E.I. Kotok, G.M. Gowen, J.P. Curry and A.A. Brown, *Principles of Forest Fire Detection on the National Forests of Northern California*, Technical Bulletin 574, (USDA Forest Service, Washington, DC, August 1937), 11.

¹² Show, 10; Letter from Forest Supervisor, November 29, 1916, NARA, 4/270; 1916 Inspection, NARA, 4/284; 1913 Jemez NF Fire Plan, NARA, A3/239.

¹³ John W. Johnson Work Diaries, 1917 - 1943, MS 0397, Transcribed by Merideth Wald Hmura, New Mexico State University Library, Archives and Special Collections Department; Seen-area Map Atlas, SFNF SO, Dispatch /99; Arthur Allen Brown, *Forest Fire: Control and Use* Rev. ed. (New York: McGraw-Hill, 1973) 342-343.

¹⁴ Interviews by author: Ben Casaus, Cuba, NM, April 8, 2014; Gilbert Sandoval, Jemez Springs, NM, April 1, 2014; David Old, Santa Fe, NM, April 18, 2016; Carlos Sandoval, Los Lunas, NM, August 9, 2016.

¹⁵ *Southwestern District Daily Bulletin* (SDDDB), December 8, 1915, NARA, 3/212; 1940 Inspection, NARA, 5/139; 1926 Inspection, NARA, 5/84; Johnson Work Diaries.

¹⁶ *Jemez Forest Ranger*, November 1911; 1913 Jemez NF Fire Plan, NARA, A3/242; Letter from Forest Supervisor, January 30, 1925, SFNF SO, Dispatch/132,133; 1916 Inspection, NARA, 4/325.

¹⁷ SDDDB, June 17, 1921, NARA, 4/18; Memorandum from Forest Supervisor, July 8, 1921, NARA, 4/119; SDDDB, March 29, 1921, NARA, 4/13; 1924 Region 3 Inspection, NARA, 4/145; SDDDB, April 4, 1922, NARA, 4/31; SDDDB, July 24, 1922, NARA, 4/42; "Forestry Official Works Out Better Fire Control Methods" *Evening Herald* (Albuquerque), June 14, 1921.

¹⁸ SDDDB, July 23, 1921, NARA, 4/20; SDDDB, April 4, 1922, NARA, 4/31; Letter from District Forester, February 10, 1925, SFNF SO, Dispatch/131; Proceedings of Fifth Annual Supervisor's Meeting 1922, NARA, 3/205; 1928 Inspection, NARA, 5/68.

¹⁹ 1922 Plan, NARA, 2/15; 1924 Plan, NARA, 2/43,55; SDDDB, September 16, 1924, NARA, 4/57; 1926 Region 3 Plan and Progress, NARA, 2/71-73; 1932 Inspection, NARA, 5/36,38; 1928 Plan, NARA, 2/90.

²⁰ 1926 Plan, NARA, 2/69; 1928 Plan, NARA, 2/87,93; 1936 Plan, NARA, 2/149; 1961 Fire Inspection, NARA, 5/263.

²¹ Hal Rothman, *Bandelier National Monument: An Administrative History*, National Park Service Professional Paper no. 14, 1988; Hal Rothman, *Preserving Different Pasts: The American National Monuments*, (Chicago: University of Illinois Press, 1989); Hal Rothman, *On Rims and Ridges*, (Lincoln, NE, University of Nebraska Press, 1992); Letter from Forest Supervisor, June 8, 1925, SFNF SO, Dispatch/132.

²² 1925 Fire Plan, NARA, 2/51-52; Rothman, *Bandelier National Monument: An Administrative History*; 1932 Inspection, NARA, 5/40,41.

²³ "CCC Camps New Mexico", CCC Legacy, accessed November 4, 2016, http://www.ccclegacy.org/CCC_Camps_New_Mexico.html; Ronald C. Brown and Duane A. Smith, *New Deal Days: The CCC at Mesa Verde* (Durango, CO: Durango Herald Small Press, 2010); 1932 Region 3 Plan and Progress, NARA, 2/131; 1933 Plan, NARA, 2/136.

²⁴ 1936 Plan, NARA, 2/149; Johnson Work Diaries; Improvement and Construction Detail Pictures Folio, box G53, Southwestern Museum Collection (SMC), Regional Office, Albuquerque.

²⁵ 1940 Inspection, NARA, 5/32; 1941 Plan and Progress, NARA, 2/184; Johnson Work Diaries.

²⁶ 1939 Progress, NARA, 2/171; 1936 Region 3 Plan, NARA, 2/144,145,154.

²⁷ 1936 Plan, NARA, 2/150; Johnson Work Diaries; Seen-area Map Atlas, SFNF SO, Dispatch/10; 1961 Fire Inspection, NARA, 5/258; 1956 Detection Plan, NARA, A4/303; Brown, *Forest Fire: Control and Use*, 344.

²⁸ 1938 Progress, NARA, 2/163.

²⁹ 1943 Plan and Progress, NARA, 2/196.

³⁰ 1939 Region 3 Fire Control Handbook, NARA, 1/1; 1943 Region 3 Plan and Progress, NARA, 2/193; 1943 Plan and Progress, NARA, 2/195.

³¹ 1949 Plan, NARA, 2/199; Interviews by author: Sergio Morfin, Coyote, NM, December 2, 2014; Carlos Sandoval, Esther May, Cuba, NM, December 15, 2014; 1946 Plan, NARA, 2/216-217; 1948 Plan and Progress, NARA, 2/227-228; 1950 Plan, NARA, 2/240.

³² 1948 GII, NARA, 5/5+; 1949 Plan, NARA, 2/200; 1946 Plan, NARA, 2/210; 1946 Fire Inspection, NARA, 4/131; 1948 Plan and Progress, NARA, 2/227-228; Memorandum from L.F. Hamilton, February 14, 1951, NARA, A2/164; 1956

Fire Inspection, Cuba District, NARA, A3/333; 1960 GII, Jemez District, General Records of the U.S. Forest Service, Federal Records Center (FRC) at Denver, Broomfield, CO, FRC/30.

³³ Cebollita Fire Board of Review, December 10, 1945, NARA, A2/87; 1949 Fire Inspection, NARA, 3/38.

³⁴ Interviews by author: Sergio Morfin; Gilbert Sandoval; Ben Casaus, Cuba, NM, May 5, 2014; Butch Hernandez; 1963 Fire Plan, NARA, A4/55.

³⁵ 1956 Detection Plan, NARA, A4/302; 1955 Fire Inspection, NARA, A3/350; 1956 Fire Inspection, NARA, A3/331; 1957 Fire Inspection, NARA, A2/68, A3/304; 1958 Fire Inspection, NARA, A3/293, jnara2/50; 1961 Fire Inspection, NARA, 5/254, 264; Brown, *Forest Fire: Control and Use*, 352.

³⁶ Carson NF Memorandum, October 4, 1957, NARA, A2/27; 1956 Detection Plan, NARA, A4/346.

³⁷ 1961 Fire Inspection, NARA, 5/254; Memorandum from Regional Forester, September 4, 1961, NARA, 5/253.

³⁸ 1961 Fire Inspection, NARA, 5/262; 1960 GII Jemez District, FRC, FRC/29+; Memorandum from Assistant Regional Forester, May 23, 1961, NARA, A2/126.

³⁹ 1960 GII Jemez District, FRC/26,62; 1959 Engineering Inspection, FRC/86-90; 1957 Fire Inspection, NARA, A2/67; Response to 1957 Fire Inspection, NARA, A2/60; Five-year Building Plan Attached to Memorandum, September 14, 1961, NARA, A4/381; Memorandum, July 27, 1953, A3/40; 1963 Fire Inspection Jemez District, NARA, jnara2/62; Interviews by author: Dennis Trujillo, Ponderosa, NM, January 13, 2016; Frank Gonzales, Ponderosa, NM, August 2, 2014; Memorandum from Regional Forester, August 23, 1966, NARA, A4/114.

⁴⁰ Memorandums from: Assistant Regional Forester, September 18, 1963, NARA, A4/87; Forest Supervisor, May 21, 1963, NARA, A4/76; Regional Engineer, May 25, 1964, NARA, A4/81; Handwritten Note from Paul Wild, November 13, 1963, NARA, A4/96-97; Five-year Building Plan Attached to Memorandum, September 14, 1961, NARA, A4/381; "Forest Service to Use 'Copter In Tower Survey'", *Albuquerque Journal*, June 14, 1965; Leslie Byrne, SFNF Surveyor, personal communication.

⁴¹ 1963 Fire Inspection, NARA, 5/272-273.

⁴² Interviews by author: Gilbert Sandoval, Jemez Springs, NM, September 28, 2016; Dennis Trujillo.

⁴³ Interviews by author: John Lissoway, Santa Fe, NM, July 24, 2014; Orlando Romero, Santa Fe, NM, July 3, 2014; Richard Duran, Cuba, NM, August 10, 2016.

⁴⁴ Interviews by author: John Lissoway; Orlando Romero; William Maestes, Cuba, NM, June 25, 2015; SFNF Facilities Master Plan, 2003, SFNF SO, Facilities.

⁴⁵ 1939 Plan and Progress, NARA, 2/170-171; 1942 Plan and Progress, NARA, 2/187-188; 1952 Plan and Progress, NARA, 2/255; 1953 Plan and Progress, NARA, 2/265; Letter from Regional Forester, March 14, 1940, NARA, A4/401; Memorandum from Lewis J. Korn, March 19, 1940, NARA, A4/398; 1941 Clarke-McNary Law Inspection, NARA, 4/117.

⁴⁶ Orlando Romero, interview.

⁴⁷ Gilbert Sandoval, interview.

⁴⁸ USDA Forest Service, *The Rising Cost of Fire Operations: Effects on the Forest Service's Non-Fire Work*, published August 4, 2015, accessed November 9, 2016, <http://www.fs.fed.us/sites/default/files/2015-Fire-Budget-Report.pdf>; "...data on fire suppression costs in the Deschutes National Forest from 2000 to 2011 shows a range of \$382 to \$6,461 per acre with a mean of \$2,117 per acre.", M.P. Thompson, J.R. Haas, M.A. Finney, et al, "Development and application of a probabilistic

method for wildfire suppression cost modeling”, *Forest Policy and Economics* 50 (2015): 249–58; cost to run Barillas Lookout in 2015 about 20,000 dollars per season, Joe Julian, personal communication, December 12, 2014.

⁴⁹ USDA Forest Service, *Lookouts in the Southwestern Region. Cultural Resources Management Report No. 8*, (Albuquerque, 1989), 49.

Part II—Components of the Forest Lookout Program

Cooperative Agreements

Passage of the Weeks Act in 1911 provided funding for fire control as well as means for cooperative fire protection between state and federal governments. In 1913, the Jemez National Forest made cooperative agreements with land grant owners and the Indian Service. It set up a per diem guard system, through which local residents were available on-call for detection and suppression work. This system was strengthened over the years, becoming an important part of fire management operations.¹

Slash created by logging operations potentially increases fire hazard; fire protection, including detection, was intensified in those areas. Loggers provided valuable detection and suppression services, had equipment at hand, and were already out in the woods close to any fires. By the early 1920s agreements with companies logging private lands adjacent to the Forest included paying portions of some lookout salaries.²

The 1924 Clarke-McNary Act expanded federal assistance for fire control to states and private land owners, with New Mexico joining the state cooperative program that year. From its establishment through the present, the Forest has also made agreements with the Indian Service (now Bureau of Indian Affairs), the National Park Service (NPS) at Bandelier, the Atomic Energy Commission (AEC), and the Soil Conservation Service (SCS). Agreements covered construction of roads, lookout structures and telephone lines, as well as supervision and funding of lookout and suppression personnel. These agreements were reviewed and revised as fire occurrence, program funding, manpower needs and availability varied. They could be complicated, with payments moving between several entities. A detailed discussion of cooperative agreements is presented in the Española District chapter.³

The fire organizations of the Santa Fe and Carson National Forests cooperated with each other from their establishment. Some fires on the Santa Fe National Forest could be seen from Carson National Forest Lookouts Canjilon, Kiowa and Picuris, while Deadman, Cerro Valdez, Encino, and Clara Peak Lookouts reported fires on the Carson. Seen-area maps were made in 1938 and 1939 from 48 sites on the Santa Fe and Carson, with separate maps prepared for seen areas on each Forest. In the 1950s and 1960s the two Forests cooperated on a lookout replanning exercise, intending to maximize seen area by careful placement of lookout sites. From 1964 through 1967, Picuris Lookout on the Carson National Forest was providing smoke reports to the Forest.⁴

The Forest utilized cooperative detection outside its boundaries both from formally designated locations and from per diem guard residences. In 1914 the Jemez and Pecos National Forests each used two designated cooperative lookouts, and by 1930 these numbers had peaked at seven for the Santa Fe National Forest. With increased aircraft reconnaissance after 1950, use of cooperative lookouts steadily declined and only Bandelier remains sporadically active today.

Firefinders On the Forest

Early lookouts and patrolmen used whatever equipment was available to determine locations of fires they spotted; this was sometimes no more than a pocket compass and a map spread on a rock. The first improvements were simple firefinders. A 1928 Montana fire guard described what he used:

[It was] a peeled log upright about four and a half feet tall and about a foot in diameter: supporting a one inch by two foot square board on which was glued a map of the surrounding area...

[There was a pin] in the middle of the map board... This circle [protractor] covers most of the country we can see...

The alidade was a flat ruler-wide piece of steel about sixteen inches long with an upright piece of steel at both ends. One upright was fixed with a narrow slit to look through and the other with a horizontal horsehair centered in an open aperture. With the length of steel against the pin, I swung it around to the direction of the distant smoke, looked through the slit and lined up the hair with the smoke. In order to see the reading on the circle, it was necessary to walk around the board to the slot end of the alidade.⁵



Figure 15. St. Peter's Dome metal map board with alidade (1930s, Improvement and Construction Detail Pictures, SMC, RO coll bldg folio/73)

This type of firefinder had various names, including table, map board, protractor and alidade, although technically each of these labels is a distinct part of the firefinder. All of these terms are used interchangeably in this study.

In 1914 the Southwestern Region planned to supply metal protractors to their forests, but they were deemed too expensive at 12 dollars apiece. In 1922 firefinder requirements were established, and by 1924 the Forest was supposedly ordering “standard” firefinders for their enclosed lookouts. In practice there was little standardization until the late 1940s.⁶

Early map boards were mounted outdoors on posts or stumps and were often made of metal to better withstand the elements. Figure 15 shows the St. Peter's Dome metal map board with alidade, and in

Figure 16 a young man looks through the wooden Cerro Valdez alidade. Hermit Peak had a map board at each of its three patrol points, and Barillas had several outdoor map boards during the years its tower was condemned (Figures 93 and 80 respectively in the Pecos/Las Vegas District chapter). The metal map board at Los Griegos was in use through the 1960s. Outdoor map boards on wooden posts were also used at Cerro Pelado, Rowe Peak, Mud Spring, Cuba Mesa, Cerro Valdez, North Point and Tree 73. Although the Guaje Lookout cabin was partially glassed-in, a map board stood outside.

The “Region 3 protractor” had been developed by 1921, and inspectors found these at most Forest lookout sites into the 1940s. Their construction, of either metal or wood, varied from site to site. Some were more useful than others, as described by the 1946 inspector:

Great variation...in map boards and their mounting. The rail mounting at Deadman...[is] a nuisance, takes up too much room and is a hazard to unwary skulls—as I can testify to a hunk of skin off my forehead and one other of the party who clipped his head painfully on the rail [Figure 16]...Red Top map board mount not too steady. Cerro Valdez map board mount much too high...Glorieta Baldy has a map board on a rolling table, reorients each time. Somehow it looks a bit makeshift...The Barillas map board is very bad, and the map worse. Held on with stones...the detection equipment...in the main looks haywire.⁷



Figure 16. Forest Supervisor Wang using Deadman’s firefinder (June 14, 1946, Edward Ancona, NARA, 46 Fire Inspection/28)



Figure 17. Cerro Valdez wooden map board and alidade (1932 Inspection, Jemez Division, NARA, 5/49)

In 1911 William Osborne developed a precision instrument similar to a surveyor's transit, and it eventually became the standard firefinder on almost all Forest Service lookouts. On the Santa Fe National Forest, Osborne firefinders generally did not replace the old map boards until the late 1940s, well behind other Forests in the Region. In 1946 the only Osborne on the Forest was at St. Peter's Dome, but they had been installed at most Forest lookouts within the next few years. Barillas was the last to receive one when its current tower was constructed in 1959.⁸

Unusual Lookout Styles on the Santa Fe

Although some Forest lookouts followed a fairly standard evolution from log cabin to L-4 to CL-100, in other cases more unusual structures were built. The Lake Peak Lookout shelter was a round structure of unmortared piled stones. Steel Weather Bureau towers were used at Bearhead and Barillas in the 1920s, while Deadman and Pecos Peak had wooden pole towers. Platforms made of poles supported map boards on either end of the Mud Spring mesa. Maintenance workers on a mining tramway served as cooperative lookouts on the Pecos. Rosilla Lookout was "a temporary [shack] on skids" that was never upgraded. Both Hermit Peak and Barillas used map boards placed on points around the summit, with the lookout visiting them periodically from a cabin base. A trailer lookout was used at Cuba Mesa and later moved to Red Top. Many sites were never developed beyond a rough map board and a telephone hanging from a tree, some still in use into the 1960s.⁹

Lookout Lifestyles and Family

The Forest was a primary employer in the small towns of the area, and lookout jobs were responsible positions that started a number of local residents on lifetime careers. The first rangers were solitary workers, riding alone along their beat and chasing down the fires they spotted. As sites were developed and staffed, the lookouts were generally able to share their quiet workplace with family members. During several periods in the 1940s, 1950s and 1960s, Forest management prohibited visitation at lookouts, but some fathers would sneak their wife and/or child up for a few days. Most years the Forest allowed and even encouraged family members to visit, and many lookouts had their spouses and (often many) children living with them for their entire season.¹⁰

Families had to devise creative ways of housing, feeding, and laundering in primitive facilities designed for one person's use. Despite these challenges, family members remembered their lookout days as some of the best of their lives, and they believed that having the family working and living together made the lookout system more effective. Families took pride in the job, in keeping the facilities clean and well maintained, and they made many

improvements. Children were expected to contribute to this upkeep. The individual lookout listings include stories told by family members, and Appendix 2 contains a lookout daughter's memoir of summers at Encino Lookout. The Forest Service was one of the few employers in the area, and in some cases generations of family members worked for the Forest, often as lookouts. In this study, the primary lookout (usually the father) is generally referred to by last name and other family members by first names.¹¹

Until the 1930s the Forest hired only male lookouts, although Ranger Harbison's wife staffed Barillas in 1920 and 1921 after the fire guard quit suddenly. In 1933 a Regional directive encouraged hiring husband and wife lookout teams in order to improve detection, paying wives to act as relief lookouts when their husbands took days off, left to get supplies, fight fires or join other work crews. In 1939 Regional policy only permitted employing women as primary lookouts during a "national emergency," though wives might be hired as relief lookouts at the discretion of each Forest and this was common on the Santa Fe. During World War II men were in short supply and a few women were hired as primary lookouts, but returning veterans later took their places. Deadman Lookout was staffed by the wife of Ranger Graves in 1939, and Bandelier hired two women lookouts during World War II.¹²

In 1946 most Forest lookouts were fairly inaccessible, requiring two to four hours to reach by foot or horse. This, combined with the required 40-hour work week and reluctance of the Forest to pay overtime, caused a problem in obtaining relief lookouts. That year the Forest solved the issue by hiring one father/son and two husband/wife lookout teams and by sharing one relief among several lookouts; thus it only had to pay overtime to the Glorieta Baldy lookout. In 1951 there were only two women lookouts on the Forest, both wives working as relief. By the 1970s women began to be hired as primary lookouts, two moving up from relief positions when their husbands left the primary lookout position for other Forest jobs. The Forest also started hiring women firefighters in the 1970s. Since 2013 from one to three women have filled the Forest's four lookout positions in any given year.¹³

The Lookout Season

Richard Wetherill, Assistant Ranger on the Coyote District in the 1940s, told his new District Ranger what needed to be done in the spring: "...the first thing we gotta do...is hire a couple of fire lookouts. The trails to the lookouts is still blocked with snow, so we gotta bust through them and open up the lookout cabins. They's always a rash of fires first thing in the spring." In the 1960s and 1970s, the Forest hired all seasonal fire employees in early March in order to clear and maintain roads, trails and telephone lines. Once the woods dried out, lookouts moved to their stations. During the fire season, lookouts held evening telephone or radio conversations, sometimes in Spanish. Harriet Young Hernandez, Cuba telephone operator in the 1940s, remembered two lonely lookouts who sang to each other over the telephone for entertainment and company.¹⁴

The fire season on the Forest generally runs from late April or early May until the summer monsoon rains set in, around mid-July. When flying ants swarmed over the windows, lookouts knew the monsoon was arriving and said “it was time to go home.” They put up with the insect swarms for several days before they were told to come off the lookout. During wet periods, the lookout might be assigned other work on the Forest, but was sent back up to the lookout when fuels dried out again.¹⁵

¹ 1913 Jemez NF Fire Plan, NARA, A3/227+; 1924 Plan, NARA, 2/38-39; 1926 Inspection, NARA, 5/82.

² Robert D. Baker, Robert S. Maxwell, Victor H. Treat, and Henry C. Dethloff, *Timeless Heritage: A History of the Forest Service in the Southwest*, (College Station, TX: Intaglio, 1988), 108; 1958 Fire Inspection, NARA, jnara2/40; Interviews by author: Gilbert Sandoval, January 2016; Frank Gonzales, June 11, 2015; Santa Fe National Forest, *Santa Fe News Bulletin*, quoted in SDDB, June 22, 1921, NARA, 4/19.

³ *Southwestern District Forest Pioneer*, April 1924, NARA, A1/290; 1953 Region 3 Inspection, NARA, A2/40; Department of the Interior, 1941 Cooperative Agreement with the Department of the Interior and the Department of Agriculture For the Control of Forest, Brush and Grass Fires on Indian Lands and National Forest Lands, NARA, A2/138; 1941 Clarke-McNary Law Inspection, NARA, 4/117; 1963 Fire Inspection Jemez District, NARA, jnara2/57; 1949 Fire Inspection, NARA, 3/38,39; 1928 Program, NARA, 2/97; 1931 Fire Plan: New Mexico Lumber and Timber Company Sale, NARA, 2/114+; 1948 GII, NARA, 5/11; 1963 Cooperative Fire Control Agreement among the National Park Service Bandelier National Monument, and the United States Forest Service Santa Fe National Forest, and the Bureau of Indian Affairs United Pueblos Agency, and the Atomic Energy Commission Los Alamos Area Office, and New Mexico Department of State Forestry Santa Fe New Mexico, NARA, A4/32; 1956 Detection Plan, NARA, A4/306+; 1941 Fire Plan: Northern New Mexico Grant Lands Project Sangre de Cristo Area, Region 8 Soil Conservation Service, Caja del Rio Majada Grant, NARA, A4/389.

⁴ 1913 Jemez NF Fire Plan, NARA, A3/239; 1928 Inspection, Pecos Division, NARA, 5/66; 1952 Fire Inspection, Carson NF, NARA, 5/186; 1956 Detection Report, NARA, A4/303; Memorandum October 25, 1957, NARA, A4/342+; Fire Discoveries by Lookouts, 1959 - 1970, SFNF SO, Dispatch/169.

⁵ J.N. Hessel, *Diamond Hitch Days* (Caldwell, ID: Caxton Printers, 1991), 228-230.

⁶ Southwestern District Monthly Report, April 1914, NARA, 1/44; SDDB, May 13, 1916, NARA, 3/218; Proceedings of Fifth Annual Supervisor's Meeting, Southwestern District, 1922, NARA, 3/205; 1924 Southwestern District Program, NARA, 2/55; SDDB, November 6, 1924, NARA, 4/59.

⁷ Memorandum from Region 3, July 8, 1921, NARA, 4/120; 1946 Fire Inspection, NARA, 4/131.

⁸ 1946 Fire Inspection, NARA, 4/131.

⁹ Johnson Work Diaries.

¹⁰ Interviews by author: Robert Gallegos, Las Cruces, NM, August 4, 2014; Adelires Trujillo, Española, NM, April 21, 2014; Elaine Martinez, Chamita, NM, August 13, 2014; Richard Atencio, La Jara, NM, January 10, 2015; Interviews by Janie O'Rourke: Solomon Lovato; Betty Jane Curry, Telephone Canyon, NM, 2004-2006.

¹¹ Interviews by author: Frank Gonzales, Ponderosa, NM, April 14, 2014; Elaine Martinez; Adelires Trujillo.

¹² *Santa Fe News Bulletin*, quoted in SDDB, July 2, 1920, NARA, 4/2; 1921 List of Lookouts, SFNF SO, Dispatch/156; 1933 Region 3 Program, NARA, 2/279; 1939 Region 3 Fire Control Handbook, NARA, 1/1; 1957 Fire Inspection, Las Vegas District, NARA, A3/305; Harvey Barlow Work Diary, May 1939, transcribed by Janie O'Rourke, SFNF SO; National Park Service, *Southwestern Monuments Monthly Report*, June 1943 and April 1945, accessed January 10, 2015 on the Integrated Resource Management Applications (IRMA) Portal, irma.nps.gov; 1946 Fire Inspection, NARA, 4/135.

¹³ 1946 Fire Inspection, NARA, 4/132; Memorandum from Forest Supervisor, May 11, 1951, NARA, 3/57; 1958 Inspection, Jemez District, NARA, A3/434-435; Interviews by author: Elaine Martinez; Pablo Casados, Llaves, NM, December 15, 2014.

¹⁴ Gordon R. Heath, *Ranger: A Novel*, (Ellsworth, ME: Methuselah Books, 1991), 25; Gilbert Sandoval, interview; Eleanor and John Hernandez, interview by Janie O'Rourke, Cuba, NM, February 16, 2005.

¹⁵ Interviews by author: Ben Casaus; Alfonso Cordova, Cuba, NM, June 12, 2015; Frank Gonzales, Ponderosa, NM, April 14, 2014.

Part III—Histories of Individual Lookouts

Forest lookouts are organized in this Part by 2016 Forest Districts: Coyote, Cuba, Española, Jemez and Pecos/Las Vegas. Lookout sites used by the Forest but outside its boundaries include those in Valles Caldera National Preserve, Bandelier National Monument, on Bureau of Indian Affairs and Atomic Energy Commission lands, and in local towns. They have their own chapters. Although lookouts on the Carson National Forest and the Jicarilla Apache Nation aided in fire detection on the Forest, detailed information about them has not yet been obtained and is not included here.

Within each of these chapters, lookout entries are generally arranged alphabetically. In a few cases a patrol point associated with a particular lookout is placed immediately after that lookout rather than alphabetically. All legal locations, including those given in the individual lookout headings, are listed as township, range, section. Maps are provided to give general locations of lookouts. Lookouts within a particular District are named on its map, while those off-District are marked but not named. Town sites and other off-Forest lookouts are shown on the District map nearest them. Whites Peak Lookout near Cimarron is shown on its own map in the Pecos/Las Vegas District chapter. Refer to the current Santa Fe National Forest map for additional information on road and trail access to sites.

Coyote District

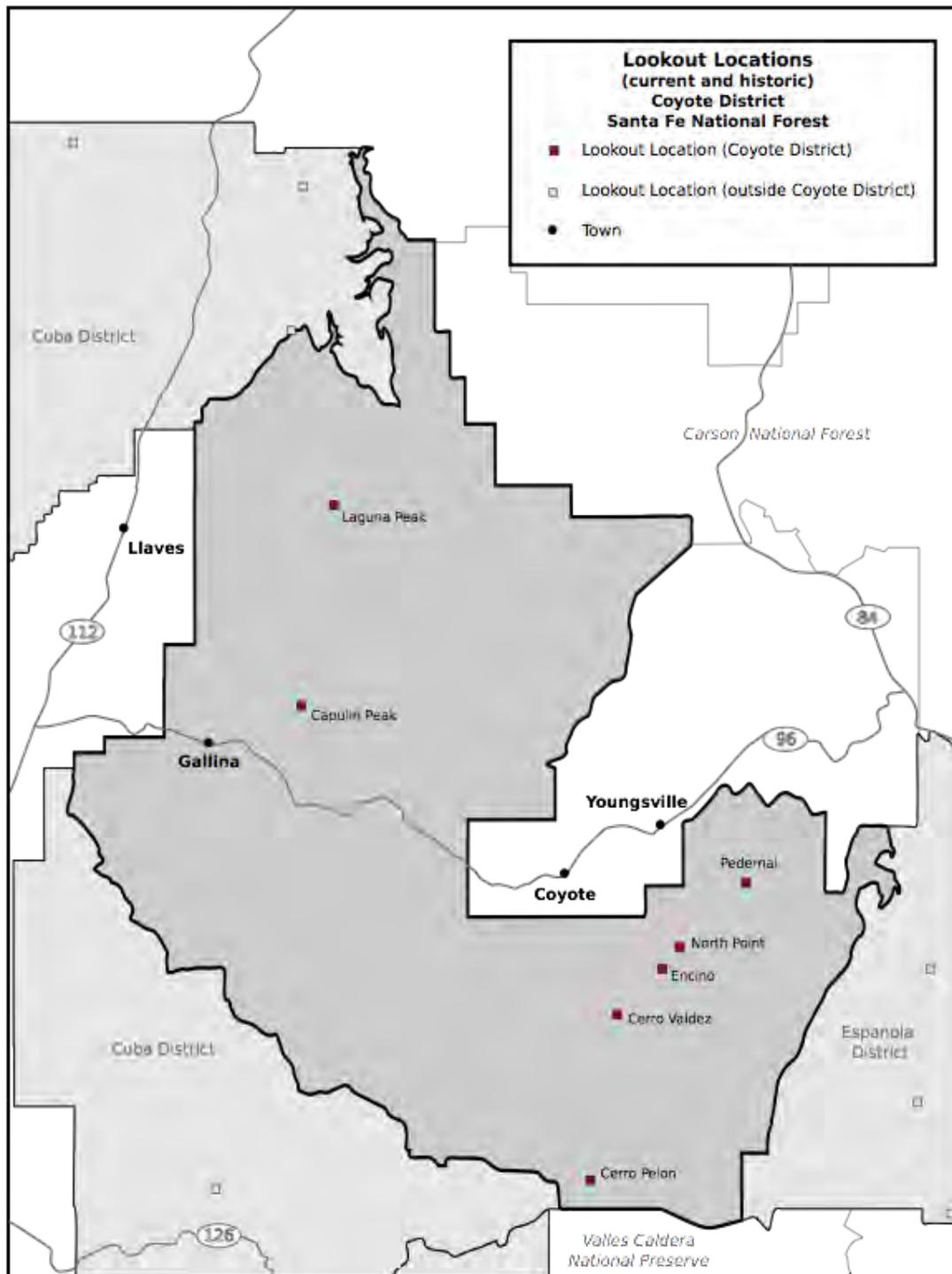


Figure 18. Coyote District Lookout Locations, current and historic

Early Patrol Routes

By 1913 several patrol routes were in use on the Coyote District. Long-time Forest employee Solomon Lovato said, "the Highline Trail was here before there were lookouts. It is where the men rode on horseback along the high mountain peaks and ridges from Española to Mudsprings, keeping a lookout for fires throughout the Jemez Mountains." This Highline (also called Skyline) Trail ran west past Chicoma to Cerro Pelon and turned north. Other patrol trails crossed Mesa Alta and French Mesa, and ran north from Deadman Lookout to the Jicarilla Apache Nation.¹

Capulin

T. 23 S., R. 3 E., sec. 7

Capulin Lookout was on the flat summit of Capulin Peak, and was sometimes called Mesa Alta. In 1913 it was a primary lookout, though its telephone line was still two miles short of the top of the Peak. Along with a lookout, a patrolman was stationed here to respond to fires and to patrol Mesa Alta. Although the Forest made a seen-area map from Capulin in 1924, it did not incorporate that data into the Jemez composite map of that year. By 1925 Capulin was an emergency lookout only, and if the lookout stayed overnight it was in a tent. The telephone line had been completed to the Peak and the telephone was mounted on a tree at the southwest point. Figure 19 shows a wooden bracket for a glass insulator that was still on this telephone tree in 2014. In 1927 the Forest established an orientation point for the protractor, and in 1938 made a new seen-area map from "Capulin Peak Proposed Site."²

Local residents still call the Peak "Cerro de Telephone," and say the lookout rode a horse up just for the day. Capulin is shown as a lookout on maps from 1914 through 1946 and was in the 1942 Forest Service telephone list. The Forest abandoned it in the mid-1940s when aerial reconnaissance began.³



Figure 19. Wooden bracket for a glass insulator on the telephone tree at Capulin Lookout (2014, author)

Cerro Pelon (south)

T. 21 N., R. 3 E., sec. 26

The Forest has used two peaks named Cerro Pelon as lookout points. This one is at the head of Coyote Canyon, near the northwest corner of Valles Caldera, not to be confused with Tree 73/Cerro Pelon on the Española District. The Highline patrol trail passed just south of this peak.

In 1913 the Ranger suggested that “a pasture be built and a telephone installed in the canyon at the foot of Cerro Pelon and a guard stationed there as soon as the fire season starts.” He paid the lookout a monthly salary of 50 dollars and proposed constructing a telephone line to the point from the trunk line a quarter mile away. The Forest made a seen-area map in 1924. In 1925 Cerro Pelon was an emergency lookout with a telephone but no other improvements; the only overnight shelter was a tent. In 1927 the Forest established an orientation point for the protractor, but after 1928 Cerro Pelon was no longer listed in fire plans. Groups from the Los Alamos Ranch School, a private school for boys that emphasized outdoor activities, visited the peak on their camping trips in the 1920s. Their records never mentioned a lookout structure there.⁴

The trail and telephone line ran up the north side of the peak to a telephone attached to a tree. Florenzia Vigil had a ranch north of the peak and rode his horse up the trail to look for fires. A small shed or a tent on a platform may have provided shelter. This trail was still visible in 2015.⁵

Alejandro Herrera, who lived just below the Ranger Station in Coyote Canyon, was a lookout at Cerro Pelon in the late 1930s and early 1940s. He said there was a little building on top, “like a lighthouse or a tool shed,” for protection from storms. Generally he rode his horse up for the day, but sometimes he camped on top. The Forest abandoned Cerro Pelon lookout by the mid-1940s when it began aerial reconnaissance.⁶

In 2004, poles were still piled at the north end of the long summit ridge, possibly the remains of a small structure. That spot is the only unwooded opening on the ridge and the most likely lookout site. In 2014, old telephone batteries, one broken glass insulator and an old wooden floor, as for a very small building or shed, were also found along the ridge. This point is shown as a lookout on maps from 1914 through 1933.

Cerro Valdez

T. 22 N., R. 5 E., sec. 16

In 1913 a patrolman was based at the old Encino Ranger Station in Encino Canyon, and patrolled both Cerro Valdez and Pedernal. The Forest completed seen-area maps of these two points in 1921 and by comparing them, it selected Cerro Valdez over Pedernal for a permanent lookout. In 1922 a trail crew cut logs for a lookout cabin that was built by Eloiso Montoya of Youngsville. It was set back from the rim, as shown in Figure 20. The Forest also

completed fencing, trail construction and some telephone line in 1922, and the Lookout was first staffed in 1923. At that time the Forest proudly announced that Cerro Valdez was the highest lookout in the country reached by a “good wagon road,” but the lookout actually rode five miles up a trail from the Ranger Station in Coyote Canyon. Water was gathered at a lake a half mile away.⁷



Figure 20. Original lookout cabin at Cerro Valdez, built in 1922 (1932 Inspection, NARA, 5/47)

During the fire season of 1923 the Forest constructed the Cerro Valdez Rim Trail for 80 dollars, and the lookout patrolled it to North Point in order to view the area that is blind to Cerro Valdez. Composite seen-area maps made in 1924 did not include data from Cerro Valdez. The Forest completed the telephone line by 1925 and added lightning protection to the cabin in 1926. That year it briefly considered replacing Cerro Valdez with detection by local per diem guards as it only viewed areas of low fire occurrence. However, the Lookout was retained. A seen-area map was made in 1928.⁸

The 1932 inspector commented on the exposure of the outside map board placed on the rim (Figure 17 in the Introduction). The 1933 Fire Plan mentioned building a spur truck trail to Cerro Valdez, probably to facilitate construction of an L-4 ground cabin that year by the CCC (Figure 21). The new cabin was located on the edge of the rim and had windows all around and the map board inside, so the lookout no longer needed to step outdoors to locate fires.⁹

Solomon Lovato staffed Cerro Valdez in 1939, riding up from his home in Coyote Canyon. He had to climb a tree close to the lookout in order to see over to the Cerro Pelon Lookout. The Forest installed a radio at Cerro Valdez in 1940. Figure 22 shows the placement of both the old and new cabins at the site in 1946. The open-air latrine



Figure 21. L-4 lookout cabin at Cerro Valdez, built by the CCC in 1933 (June 14, 1946, Edward Ancona, NARA, 1946fireinsp/24)

was unacceptable to that year's inspector, and the Forest installed a new toilet in 1947. An Osborne firefinder replaced the map board in 1947 as well.¹⁰

Sergio Morfin was the Cerro Valdez lookout in 1947 and 1948. He used the old log cabin for grain storage and lived in the newer L-4, which held a woodstove, cot, cupboard, insulated stool and firefinder. He hauled water from a spring several miles away. Every day Morfin rode patrol along the rim trail to North Point, over two miles each way. One day his horse threw a shoe on the rocky trail, and because of this, he climbed a tall fir tree near Encino Point to get a view. He discovered he could see twice as much there as from Cerro Valdez and made a



Figure 22. Relative placement of both Cerro Valdez cabins (October 1946, Improvement and Construction Detail Pictures, SMC, RO coll bldg folio/57)

seen-area map for this view. Ranger Gordon Heath also climbed this tree and agreed that the spot would make a much better lookout site than Cerro Valdez.¹¹

During a subsequent visit to the Grand Canyon, Morfin saw some lookout towers on the nearby Kaibab National Forest that had been abandoned during World War II. He suggested Ranger Heath obtain one for the new Encino Point site, and in 1948 the Skinner Ridge tower from the Kaibab National Forest was moved to the Forest Warehouse in Santa Fe. This tower was originally slated to replace the condemned one on Barillas Peak, but when the Regional Office abandoned Barillas in 1949, the Skinner Ridge tower was erected at Encino Point instead. 1949 was the last year that Cerro Valdez was staffed. In November 1949, Orbie Bridge of Regina used a bulldozer to skid both Cerro Valdez cabins to the new site at Encino Point.¹²

Cerro Valdez is shown as a lookout on maps from 1924 through 1950. The map board pedestal and foundations for the two cabins remain at the site, while the view to the meadow in Figure 20 is now blocked by a thick forest of young ponderosa pine.

Encino T. 22 N., R. 4 E., sec. 19



Encino Lookout is located on Encino Point along the Cerro Valdez Rim Patrol Trail. In 1947-1948 the Forest chose Encino (“oak” in Spanish) over the Cerro Valdez Lookout as it had a better seen area (refer to the Cerro Valdez section for details). The Encino Lookout, currently in use, is a 59-foot steel Aermotor MC-39 tower with a 7-by 7-foot steel cab, stamped “USFS Grand Canyon AZ”. It was originally erected in 1929 or 1933 at Skinner Ridge on the Kaibab National Forest, was still standing there in 1941, but was later abandoned. The Santa Fe National Forest obtained it in 1948, and in late 1949 and early 1950 Wayne Wasson of Regina and Mr. Young assembled it on site. The two Cerro Valdez

Figure 23. Encino Lookout tower with cabins moved from Cerro Valdez (mid-1950s, archeology binder 53, negative no. 10058, SFNF SO)

cabins were moved to Encino in the fall of 1949 (Figure 23).¹³

Encino's view includes parts of the Polvadera Grant that are blind to most other lookouts, and its establishment briefly justified discontinuing Clara Peak and Tree 73 Lookouts on the Española District. Although the Forest planned to staff Encino in 1949, completion was delayed until 1950. The Forest finished lightning protection in 1951, developed a (poor) road to the spring in 1953, and built a cistern in 1956.¹⁴

Felix Garcia was the first to staff Encino, and worked there through 1956. Uvaldo Velasquez was placed there along with Garcia, using his horse to patrol the Cerro Valdez Rim Trail (renamed the Encino Patrol) and to respond to fires. In 1957 Velasquez became the lookout, and the Forest considered eliminating the Encino Patrol. But that same year replanning personnel recommended resuming patrols to Cerro Valdez in order to cover some blind areas. Fire plans of the early 1960s authorized Encino horse patrols during critical fire conditions.¹⁵

The Carson National Forest was fully dependent on Deadman, Cerro Valdez, and Encino Lookouts for detection on its Canjilon District after it closed Canjilon Lookout in 1924. In 1957 the Carson considered building a lookout on Mogote Peak, which the Santa Fe National Forest thought might negate the need for Encino Lookout and Patrol. But Mogote Peak's view of critical areas was too distant to be useful to either forest and it was never built.¹⁶

In 1958 and 1960 the Encino lookout's salary came out of timber slash disposal funds. In the early 1960s, under the Accelerated Public Works Program, the Forest considered replacing the existing lookout with a 14- by 14-foot steel cab and catwalk on a tower, but other projects took precedence. The Forest placed a metal shed at the site during the 1960s, which created additional sleeping quarters for the lookout's family.¹⁷

When Jose Endalesmo Trujillo first started working as the Encino lookout around 1963, he rode a horse up a trail from the Ranger Station then in the town of Coyote. Although there was a road to the Lookout, its last four miles were very rough, and right-of-way issues delayed rebuilding it until about 1966. Once it was improved, Trujillo's family joined him each summer (Figure 24). Most of the family slept in the L-4, while two boys had beds among the fire tools in the shed. The Forest installed a metal water tank in



Figure 24. Jose Endalesmo Trujillo, wife Manuelita and their children Elaine, Martin, Ralph, Mark, Marvin at Encino Lookout (c.1968, Courtesy of Elaine Martinez)

the 1970s. Trujillo's wife, Manuelita, was strict about where the children could go; she seldom allowed them on the lookout stairs or near the cliffs. Their daughter, Elaine Martinez, remembers how nervous she felt when she saw her dad leaning far out of the lookout windows in order to wash them. Appendix 2 is her memoir of summers at Encino.¹⁸

Jose's brother, Apollinario Trujillo, served at Clara Peak Lookout with his family during the years that Jose and his family were at Encino; the two families stayed in communication by radio. Manuelita took over as the primary Encino lookout when her husband took other Forest work in the mid-1970s. She staffed it until the mid-1980s, with Norman Montoya as her relief.¹⁹

Montoya was the next primary Encino lookout, and his family often visited him there. The roads were very bad, and the family walked the last quarter mile of the road. His sons sometimes stayed overnight, sleeping in the metal shed. Montoya became the District Fire Prevention Officer in 1995, contacting campers in the morning, then observing from Encino in the afternoon as conditions required. As staffing became more sporadic, vandalism of the site increased. One year vandals threw the Osborne firefinder off the cab and destroyed it. Luckily the Cuba District had two spares, from Cuba Mesa and Red Top, and gave one to Encino. The Forest considered closing the Lookout in the late 1990s, but Montoya showed Forest management that Encino had reported more fires that year than any other Forest lookout and it was retained. It is shown as a lookout on maps from 1950 through the present.²⁰

North Point

T. 22 N., R. 4 E., sec. 17



Figure 25. Map board pedestal at North Point (2014, author)

North Point lies along the patrol trail between Pedernal and Cerro Valdez that was in use by 1913. It provides views into the area north and northeast of Encino toward Pedernal and Mesa del Medio, and continued to be patrolled by the Cerro Valdez and later the Encino lookouts. A trail and telephone line ran from Encino Lookout to the saddle southeast of North Point where a rocky crevice holds the old telephone box. Where the main trail continues down to Coyote, a faint path leads out to North Point, which has a map board pedestal (Figure 25) and marker labelled "USFS Fire Control Seen Area Map Point Cerro Valdez Patrol, 1938." On that year's seen-area map, Cerro Valdez was "lookout number 1" while North Point was "lookout number 2." The Forest incorporated both seen areas into one map.²¹

When Jose Trujillo rode his horse to Encino Lookout from the Ranger Station in the early 1960s, he would stop at North Point and change the telephone batteries. He occasionally visited the Point after lightning to check the north slope and Encino Canyon, but by the 1980s these patrols were no longer made. North Point is shown as a lookout on maps from 1925 through 1948.²²

Laguna Peak T. 24 N., R. 2 E., sec. 5

In 1932, Forest Supervisor Frank Andrews and an inspector visited Laguna Peak. It is marked as Tree Clump 60 on older maps, but Andrews called it Benado Peak. They said, “It is probably a better lookout point than Deadman [Lookout], but is a doubtful fireman location. A tower 20-30’ high, with living quarters on top, would be necessary. If the lookout fireman were put at Benado instead of at Deadman, fires east of Deadman and north of Gallina Canyon would be difficult to reach.” The Forest decided to renovate Deadman instead of developing Laguna Peak, and Laguna has never been shown as a lookout on maps. In 2014 only a tripod made of boards and wire was found; the Peak has great views but no lookout artifacts.²³

Mesa Alta

Several early patrol routes crossed this Mesa. The 1913 Jemez National Forest Fire Plan said “the Mesa Alto [sic] country is difficult to cover from any lookout points and requires special riding patrols.” Capulin Lookout, located on the west end of the Mesa, is sometimes called Mesa Alta. Fires have been reported from some of the fine viewpoints located around the Mesa's rim, and the Forest uses the electronic site on the Mesa as a patrol point.²⁴

Pedernal T. 22 N., R. 4 E., sec. 3

In 1913 a patrolman was based at the old Encino Ranger Station in Encino Canyon, and patrolled both Pedernal and Cerro Valdez by horseback. That year the Ranger suggested that “a trail should be built so that the guard will not have to spend so much time going and coming from the [Pedernal] lookout.” Patrolmen, including Enrique Serrano, Abedon Salazar and Precilliano Garcia, rode to the base of Pedernal’s final cliff and then used a steep hand trail to get to the summit. There was never a structure on top, just lightning-scarred firs.²⁵

The Forest completed seen-area maps in 1921 and selected Cerro Valdez over “rugged, almost inaccessible” Pedernal as a permanent lookout. Pedernal was last staffed in the summer of 1922 and the Forest dropped plans to improve its trail, saying Pedernal:

never has been a satisfactory lookout except for a number of privately owned grants. It thrusts its rocky, precipitous crest far into the sky, has no grass or water and is generally inhospitable to man and beast. The trail leading to the summit is very steep and generally inhospitable to man and beast. Several hundred dollars would be required to put it into shape again and the location would still fail to meet the requirements of a modern [Region] 3 lookout.

Nonetheless, Pedernal was still listed as an emergency lookout in 1925. It is shown as a lookout on maps for 1914 and 1915 only. Maps through 1925 show a trail and telephone line. The line ran up to the final band of steep cliffs, where it likely ended at a telephone box.²⁶

¹ Solomon Lovato, interview.

² 1913 Jemez NF Fire Plan, NARA, A3/235,247; Seen-area Map Atlas, SFNF SO, Dispatch/9; Letter from Forest Supervisor, January 30, 1925, SFNF SO, Dispatch/133; 1927 Plan, NARA, 2/83.

³ Interviews by author: Tony Barela, Coyote, NM, July 16, 2014; Sergio Morfin, Coyote, NM, August 9, 2014; Joe Corrales, Gallina, NM, July 8, 2014; 1942 Telephone Directory, Forest Service Lines, Jemez Division, Los Alamos Historical Society Archives.

⁴ 1913 Jemez NF Fire Plan, NARA, A3/235,247; 1927 Plan, NARA, 2/83; 1928 Plan, NARA, 2/91; Seen-area Map Atlas, SFNF SO, Dispatch/99; Letter from Forest Supervisor, January 30, 1925, SFNF SO, Dispatch/133; Fermor S. Church, Report on Los Alamos Ranch School Summer Camp 1927, Fermor S. Church Collection, New Mexico State Records Center and Archives, Box 3, Folder 3, 10.

⁵ Solomon Lovato, interview by Janie O'Rourke, Coyote, NM, August 9, 2004 and January 18, 2005.

⁶ Tony Barela, interview.

⁷ 1913 Jemez NF Fire Plan, NARA, A3/247; Seen-area Map Atlas, SFNF SO, Dispatch/9; 1922 Fire Plan, NARA, 2/15,18,19,21; 1922 Inspection, Jemez Division, NARA, 4/172,198; Solomon Lovato, interview; SDDDB, June 15, 1922, NARA, 4/38; Letter from Forest Supervisor, January 30, 1925, SFNF SO, Dispatch/132.

⁸ 1923 Plan and Progress, NARA, 2/31; Seen-area Map Atlas, SFNF SO, Dispatch/9; 1926 Plan and Progress, NARA, 2/73; 1926 Inspection, Jemez Division, 5/82; 1928 Plan and Progress, NARA, 2/96.

⁹ 1932 Inspection, NARA, 5/47; 1933 Plan, NARA, 2/137.

¹⁰ Solomon Lovato, interview; 1940 Plan and Progress, NARA, 2/179-180; 1946 Inspection, NARA, A1/175; 1946 Fire Inspection, NARA, 4/130,124; 1948 GII, NARA, 5/22-23.

¹¹ Sergio Morfin, interview.

¹² 1948 GII, NARA, 5/9-10; Dave Lorenz, Note Attached to 1941 Negatives of Skinner Ridge Lookout, Dave Lorenz Collection, NAU.MS.476, Special Collections and Archives, Northern Arizona University, Cline Library, Flagstaff, AZ, lorenz/38; 1946 Progress, NARA, 4/124; 1949 Inspection, NARA, 2/234; 1949 Fire Inspection, NARA, 3/42; 1949 Plan, NARA, 2/200,201; 1957 Fire Inspection, NARA, A2/66; Sergio Morfin, interview.

¹³ 1946 Progress, NARA, 4/124; 1949 Fire Inspection, NARA, 3/38; 1949 Region 3 Plan, NARA, 2/234; 1950 Plan and Progress, NARA, 2/241-242; Dave Lorenz, e-mail message to author, March 17, 2016; Dave Lorenz, Note Attached to 1941 Negatives of Skinner Ridge Lookout; Interviews by author: Tony Barela; Sergio Morfin.

¹⁴ Memorandum from L.F. Hamilton, February 14, 1951, NARA, A2/164; 1949 Fire Plan Chama District, NARA, A3/56; 1950 Plan and Progress, NARA, 2/241-242; 1951 Plan and Progress, NARA, 2/150; 1953 Progress, NARA, 2/265; 1957 Fire Inspection, NARA, A3/283.

¹⁵ 1956 Fire Inspection, Coyote District, NARA, A3/323; 1957 Fire Inspection, NARA, A3/277,283,285; 1956 Detection Plan, NARA, A4/345; 1958 Fire Inspection, NARA, jnara2/51; 1963 Manning Guide, NARA, A4/131.

¹⁶ 1952 Fire Inspection, Carson NF, NARA, 5/186; 1956 Detection Plan, NARA, A4/346; Memorandum from Regional Forester, October 4, 1957, NARA, A2/27.

¹⁷ Integrated Fire Control Organization Charts, SFNF SO, Dispatch; 1958 Inspection, NARA, jnara2/49; 1961 Fire Inspection, NARA, 5/266; Handwritten Note from Paul Wild, November 13, 1963, NARA, A4/96-97; Five-year Building Plan attached to Memorandum, September 14, 1961, NARA, A4/381; Interviews by author: Elaine Martinez; Norman Montoya, Coyote, NM, May 8, 2014.

¹⁸ Elaine Martinez, interview; 1963 GII, Coyote District, FRC/56; Memorandums, SFNF SO, Surveyor's Files.

¹⁹ Elaine Martinez, interview.

²⁰ Norman Montoya, interview.

²¹ Seen-area Map Atlas, SFNF SO, Dispatch/58.

²² Elaine Martinez and Norman Montoya, interviews.

²³ 1932 Inspection, Jemez Division, NARA, 5/49.

²⁴ 1913 Jemez NF Fire Plan, NARA, A3/237,247; Interviews by author: Butch and Johnny Hernandez, Cuba, NM, August 14, 2014; Sergio Morfin; Johnny Hernandez, interview by Janie O'Rourke, Cuba, NM, October 17, 2008.

²⁵ 1913 Jemez NF Fire Plan, NARA, A3/237,247; Sergio Morfin, interview.

²⁶ 1922 Fire Plan, NARA, 2/15,18; SDDDB, June 15, 1922, NARA, 4/38; 1922 Fire Inspection, NARA, 4/187; 1921 Fire Inspection, NARA 4/241; Seen-area Map Atlas, SFNF SO, Dispatch/114; Janie O'Rourke, personal communication, August 12, 2014.

Cuba District

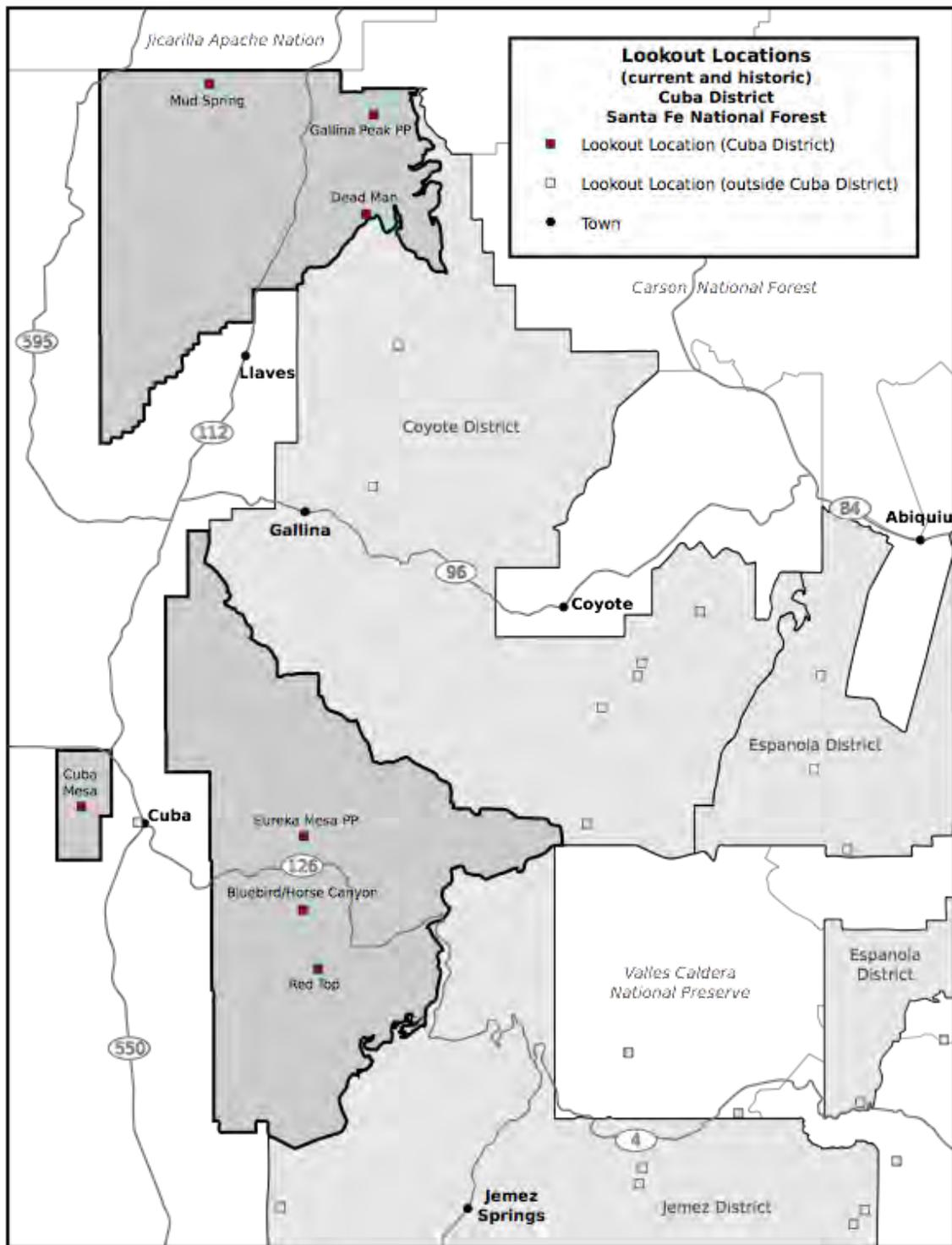


Figure 26. Cuba District Lookout Locations, current and historic

Early Patrol Routes

When Earl Young was the Cuba Ranger from 1910 to 1915, he patrolled by horseback from Cuba to Española six days a week, camping along the way. After being out all week, he would often come home to find that his wife or sister-in-law had arranged a picnic in the woods - not what he wanted to do on his one day off!¹

Jim Curry was Red Top lookout and patrolman in 1912 and 1913, and Ranger Young showed him the patrol route on his first day. Curry split his nights between his ranch in Wolf Canyon and Red Top Lookout. Often he patrolled from Red Top across Bluebird Mesa to Eureka Mesa by foot or horseback, building trail and looking for smokes. He named two specific lookout points: Red Top and Horse Canyon. The 1925 fire map shows this trail continuing beyond Eureka Mesa and ending at Nacimiento Peak, perhaps another patrol point.²

Bluebird/Horse Canyon

T. 20 N., R. 1 E., sec. 15

Bluebird Mesa is flat, with numerous rocky points around its rim. Although maps never showed a lookout on any of these points, patrolmen have always visited them to look for smokes. Areas east of the Mesa are the highest detection priority, but much of the east rim is heavily forested, reducing views (Figure 27). Jim Curry's 1912-1913 patrol route ran along this east rim. He developed "Horse Canyon Lookout," probably located in the northwest quarter of section 15. The upper end of Horse Canyon can't be seen from Red Top, Cerro Pelado or Rio de las Vacas, and the best view of that otherwise blind area is from this point in section 15. Curry did not mention any structure in his patrol diaries, and no lookout artifacts were found at the point in 2016. By

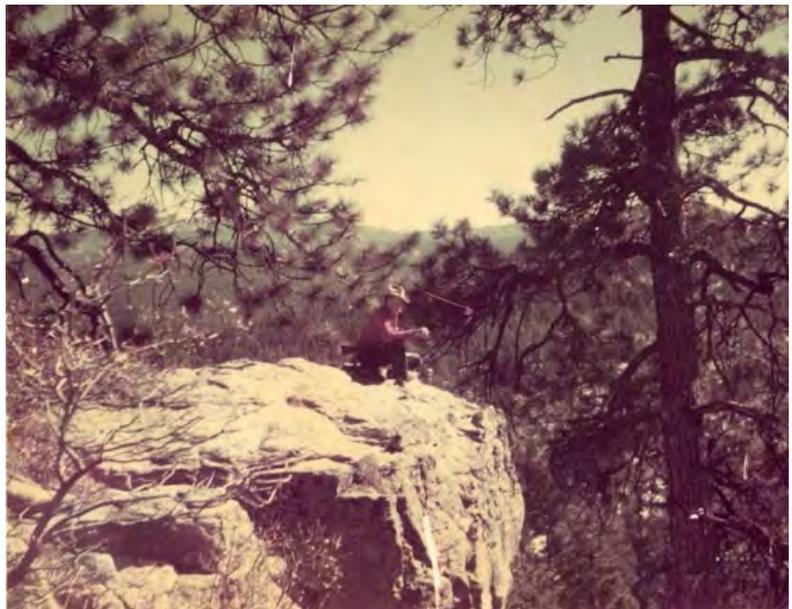


Figure 27. Richard Wetherill on the east rim of Bluebird Mesa, labelled "at Bluebird Lookout" (undated, Courtesy of LaWanda Smith)

1924 the trail across Bluebird Mesa was "very difficult to follow" but was still important for fire protection. That year the Red Top lookout was assigned to clear and blaze it from Red Top to Eureka Mesa.³

Richard Wetherill worked for the Forest for many years and lived at Bluebird Ranch on the west side of the Mesa. In Figure 27, undated and labelled "at Bluebird Lookout," he is shown on a point on Bluebird Mesa's east rim.

Vague thirdhand reports say there once was a cabin and/or small tower on one of the points, used solely to view an area blind to both Red Top and Cerro Pelado, most likely upper Horse Canyon. Reportedly the Forest removed this structure as it was only of value for this small area. The Mesa was logged in the 1970s, and anything remaining would have been obliterated. Richard Atencio heard that there used to be a lookout on the northwest point where the road tops out, but he never saw any sign of a structure there.⁴

Cuba Mesa T. 21 N., R. 2 W., sec. 24

In 1913, the only lookout for the entire west slope of the Jemez Mountains was a protractor mounted on the roof of Young's Trading Post in downtown Cuba. Ranger Earl Young and others would climb up to check for smokes after lightning. In 1916 the Forest made a seen-area map from a point labelled Mesa de Cuba Lookout, located on the southeast rim of the Mesa, but there was no further mention of this site.⁵

In 1936 the Forest wanted "organized detection" for the west slope, and in 1938 selected a spot east of the current electronic site for an emergency lookout and made a seen-area map. Ranger Barlow looked over this site in September 1939. By 1940 the CCC had installed the earliest facilities (Figure 28). They were quite primitive and included a post with a ladder as an observatory, a fire toolbox, and a pole tent frame with wire strung around it as lightning protection. The CCC completed a telephone spur line to the Lookout that year. In 1941 the Forest planned to build a tower at this spot but funding did not materialize.⁶



Figure 28. Earliest facilities at Cuba Mesa Lookout (September 25, 1940, C.W. McKenzie, 1940 Inspection, NARA, 5/131)

Elizardo (Lee) Gallegos had worked at Red Top Lookout in the late 1930s and Ranger Barlow asked him to move over to the new Cuba Mesa Lookout. He worked there through 1945, at first living in a tent and later in a cabin. Occasionally Forest Service employees came to the lookout to review its operation, but family members weren't permitted to visit at that time. However, Gallegos occasionally sneaked his young son Robert up to the lookout, for company and also to teach him responsible work habits.⁷

Within a few years the facilities had been somewhat improved, as shown in Figure 29. In addition to the toolbox, an 8- by 14-foot portable scaler's cabin had been moved in; it contained a "three quarter" bed (bigger than a single, smaller than a double) that Robert would sleep in with his father. Robert thought it was exciting to leave the cabin door open during the night, though Gallegos later built a screen door, as rattlesnakes were common at the site and once one did get inside. The cabin held shelves and a one-burner portable stove. Gallegos went to town for short resupply trips, getting water and groceries. His family didn't have a telephone, but they could ask Harriet Young Hernandez to connect them with Gallegos at the Lookout using the central telephone at the Young Hotel.

The earlier post-and-ladder observatory had been upgraded to a wooden stand. It had stairs to a 5-foot-high platform holding a galvanized map board. Gallegos climbed the stand early each morning, scanned the west face



Figure 29. Improved facilities at Cuba Mesa Lookout (October 1946, Improvement and Construction Detail Pictures, SMC, RO coll bldg folio/49)

of the mountain, then sent in a report. He kept daily records and spent much of his time looking for smokes, checking again in the evening. Robert wasn't allowed to go onto the stand alone, only with his father.⁸

Faringo, Spanish slang for an old jalopy, described the Model A Ford that Gallegos drove to the Lookout. Once it wouldn't start and Robert and his father had to walk "straight down" the side of the Mesa to Cuba. To 10-year-old

Robert it “felt like it took seven years” to get to their home. Although there was no trail, his father knew the way through the trees. Robert kept his walking stick out in front of him in case a rattler struck, but none were encountered. When they could finally see the town of Cuba, Robert felt like a real explorer and was overjoyed to be almost home.

Johnny Hernandez and a friend were once caught on Cuba Mesa during an electrical storm and they got into their truck, which had no doors or windows. When lightning struck a nearby tree and blew it to pieces, the friend got down on his knees and began to pray.⁹

By the late 1940s, Cuba Mesa Lookout was not listed in fire plans, and the Forest did not complete improvements suggested by the 1946 inspector. By 1948 it still hadn’t added the recommended handrail to the observation stand because “it was no longer used,” although that year’s Fire Plan included the Cuba Mesa Lookout. The cabin wasn’t repaired as it was to be moved to Bear Springs in 1950, but the move was not made that year.¹⁰

Cuba Mesa was not listed as an active lookout in the 1956 Detection Plan, but that year’s inspector said “a lookout station in the Mesa de Cuba area might be justified as it would eliminate considerable unseen area,” and advised the Forest to “consider using [a] lookout on Mesa de Cuba during emergency periods to determine effectiveness.” The 1957 and 1958 inspectors echoed these ideas as the west slope of the range was being logged, potentially increasing the fire hazard.¹¹

In 1962 Cuba Mesa was not regularly staffed, but one duty of an early-season patrol was to “install the alidade at the Cuba Mesa Lookout point,” and it was then visited by patrolmen as needed. That year there was a flurry of discussion about re-establishing this Lookout, and in early 1963 a modified commercial camp trailer with a pop-up lookout cab on top (Figure 30) was ordered from Region 1. It was called a “mobile lookout,” designed for locations with temporary needs such as logging sales. This lookout trailer was the Forest’s top priority in fire equipment acquisitions for that year, and was constructed to specifications at a cost of 5,800 dollars. An Osborne firefinder was also purchased, a definite upgrade from the old outdoor map board.¹²

The trailer arrived in time for the 1963 fire season; it was set up at the same site and tied down with guy wires. An outhouse was the only other structure there. The Forest hired Leonard Olivas as the primary lookout, with his wife Emily as relief. They found the brand-new trailer to be very comfortable, with living areas below and a glassed-in observatory above. Emily enjoyed sitting in the observatory with her baby, scanning with binoculars. The lookout telephone was new, unlike the old ones still in use elsewhere. They drove to town periodically for groceries, and water was trailered in. It was very quiet; the only visitors were family members and Forest employees. One day Emily was sitting in the trailer doorway and saw a large animal about thirty feet from the trailer, looking her way.

She went inside, closed the door, climbed up into the observatory and saw it was a mountain lion! That was the only time she was frightened at the lookout.¹³

Perfecto Casaus and his wife moved from Deadman Lookout to staff Cuba Mesa in 1964. The Forest still staffed Cuba Mesa in 1970, and smokes were reported from it. But in the early 1970s the Forest once again discontinued full-time staffing, and only used the lookout sporadically after lightning. Figure 30 was probably taken in 1971. In the mid-1970s the Forest moved the trailer up to Red Top, and after that only an occasional patrol visited the Cuba Mesa site. It is shown as a lookout on maps from 1941 through 1975. In 2014 only small artifacts remained there.¹⁴



Figure 30. “Mobile” or trailer lookout, ordered new for Cuba Mesa, installed 1963 (c. 1971, Public Affairs binder, SFNF SO)

Deadman T. 25 N., R. 2 E., sec. 6

Various stories are told of the origin of the name “Deadman.” According to the May 1911 *Jemez Forest Ranger*, “Assistant Ranger Sypher reports that on May 11, while riding his lookout points on the south end of Gallina Mountain, he found the headless corpse of a man which from all appearances had lain there for six months. The skull bones were scattered and broken and when placed together showed a bullet hole in the back.” A grave is reputedly located near the lookout. This site was called Gallina Mountain Lookout in the 1913 Jemez National Forest Fire Plan and was a primary lookout; it had a telephone and the lookout stayed on site and did not respond to fires. In 1916 seen-area mapping was done from both Deadman Lookout and “Gallina Mountain Patrol” point, and incorporated into a 1924 composite map.¹⁵

Janie O’Rourke obtained the following information from Pablo Casados, who staffed Deadman Lookout from 1959 through 1976: “In its early years as a lookout peak, there was no cabin or tower on top of Deadman. The fire patrolman, whose job it was to ride along the Gallina ridgeline looking for smoke, lived on the mountaintop in a tent next to a firefinder map-board and a posted phone.” In 1922 the Forest briefly considered replacing Deadman with a lookout on top of San Pedro Parks, but dropped the idea. It made a seen-area map in 1924 with data collected in 1916.¹⁶

In 1925 the Forest allocated 200 dollars for building a cabin on top of the Peak, as well as 30 dollars each for a tower and pasture. A 10- by 12-foot log cabin and a 25-foot wooden platform tower were completed in 1926, and lightning protection was installed on both. According to Pablo Casados, “Eugenio Maestas, who had just returned home from fighting in France during World War I...was assigned as lookout on Deadman...He [and Joey Gordon] built a small...log cabin,” and probably the tower as well. The lookout rode a horse to the Peak and



Figure 31. Pole lookout tower at Jay’s Roost, Wyoming that may be similar to the earliest tower at Deadman Lookout. Note the man at the top of the snag on the left. (1916, Courtesy of the Forest History Society, Durham, NC)

construction materials were packed up from Gallina. The 1926 inspector described the tower as “too light for permanent use but will serve for a few years.” No photographs have been found of it, though it may have been similar to the tower shown in Figure 31 at Jay’s Roost, Wyoming in 1916 (note the man at the top of the snag on the left). The Deadman pasture was completed in 1928.¹⁷

In 1931 the Forest negotiated an agreement with the Jicarilla Apaches for Deadman Lookout to report Jicarilla fires to their Stinking Springs Ranger Station. Similar cooperative agreements between the Forest and the Jicarilla continued for many years.¹⁸

The Forest was considering making improvements to Deadman in 1932, and Forest Supervisor Andrews and an inspector visited Benado Peak (now called Laguna) “to see how it would compare with Deadman as a lookout point.” They felt Benado was the better site though a lookout fireman based there would find it difficult to reach areas north of Gallina Canyon. The

Forest decided to retain Deadman, and in 1933 the CCC replaced the wooden tower with a 12- by 12-foot wooden cab on a 30-foot steel Aermotor MC-24 tower. Maestas helped haul the building supplies. Figure 32 is the earliest known photograph of Deadman, showing the new tower next to the old cabin in 1933. Deadman was staffed by the wife of Ranger Walter Graves in 1939. This was unusual as women rarely held primary lookout positions on the Forest before the 1960s.¹⁹

A 1946 inspector rated the tower as “fair” and the old cabin as “very poor but will serve for several years.” He also noted a partially completed horse shelter of poles and an open-air latrine. Access was by six miles of trail

from Wohlenburg Ranch, though the inspector pointed out that it would only take one mile of road construction to reach the Lookout. The 1946 fire inspector was very critical of the old map board with an “unsatisfactory A-leg” mount that took up too much room and caused him to hit his head on the rail (Figure 16 in the Introduction). The Forest replaced it with an Osborne firefinder in 1947. A spring was developed within a mile of the Lookout in 1953; cistern development was repeatedly recommended over the years but never completed.²⁰

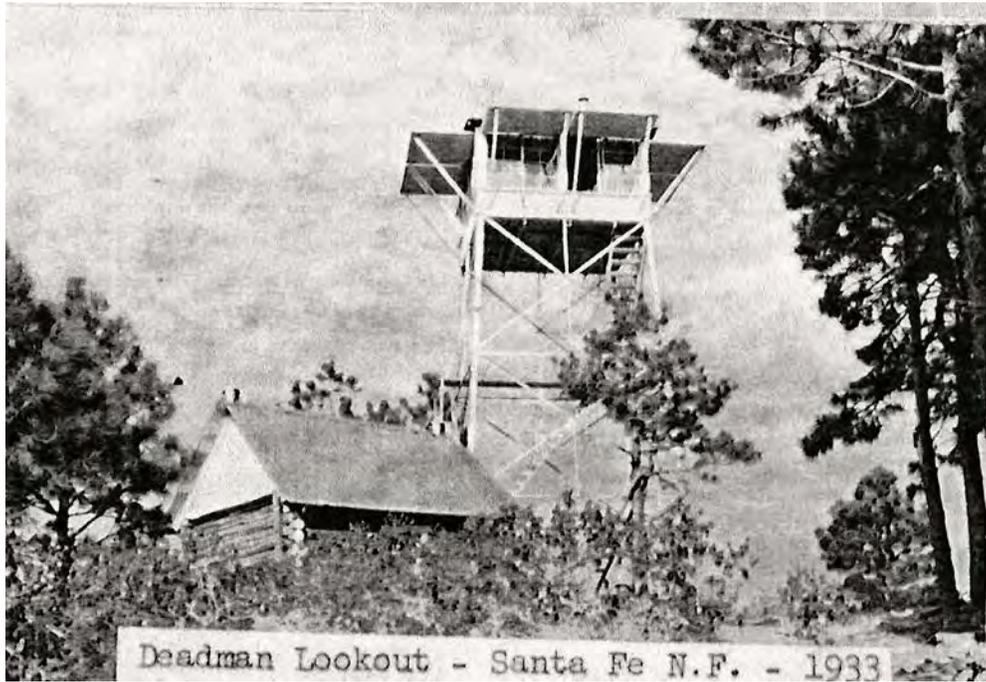


Figure 32. MC-24 erected at Deadman by the CCC in 1933 (1933, Continental Divide Training Center Museum photograph collection, archeology binder, SFNF SO)

Lookouts often saw bears below the Lookout, sometimes rummaging in the trash can. A bear once peered up at Richard Duran through the open trapdoor. Celestino Corrales was the Deadman lookout and patrolman in the late 1940s. He rode his horse to the Lookout and based out of it for riding patrol. Once a bear took his shoes from the Lookout, and another time he had to hit a bear in the face that was trying to get up in the tower. There were other wildlife encounters. Butch Hernandez said, “I had climbed halfway down the stairs one night when I heard the scream of a mountain lion right by the tower. Every hair on my body stood up and I climbed right back up.” Another day he found a rattlesnake coiled on the bottom step of the lookout. Alfonso Cordova saw many small horned lizards (“horny toads”) on the Peak.²¹

By the late 1950s a road had been built to the Lookout as part of a timber sale. The Carson National Forest was fully dependent on Deadman, Cerro Valdez and Encino Lookouts for detection on their Canjilon District after it closed Canjilon Lookout in 1924. In 1957 the Santa Fe and Carson re-evaluated their lookout locations and

considered placing one on the Carson's Mogote Peak. The Forest initially felt that Mogote Peak might eliminate the need for Deadman, but views to critical areas were distant and it was never built.²²



Figure 33. Original Deadman Lookout cabin rebuilt in Llaves, NM; Pablo Casados at left (June 12, 2005, Courtesy of Janie O'Rourke)

In 1958, the cab's trapdoor was accidentally left open when the lookout's family came up for a visit. His young son fell through the door, rolled down the steps to the first landing and then fell twenty feet to the ground. Luckily he was only bruised, but this prompted the installation of a safety gate and wire fencing along the stairs and landings.²³

Pablo Casados married Maestas' daughter Helen

and became the Deadman lookout in 1959. He had neither propane nor refrigerator, and he cooked on a woodstove. The winds were sometimes

so strong that the water in the bucket would spill onto the cab floor...In [1965], when the Forest Service decided to tear down the old...cabin...Pablo paid one dollar for it and took [it] apart log by log and ...reconstructed it for use as a shed. While dismantling [it, he] discovered his father-in-law's initials E.M. and the date 1924 carved into a piece of soft sandstone in the cabin's rock foundation.²⁴

Figure 33 shows Casados next to the old cabin at his home in Llaves. The Forest replaced the cabin with a metal shed. Casados' wife, Helen, continued the family tradition and worked as the primary lookout on Deadman in the 1970s.²⁵

One spring in the late 1960s, Ben Casaus temporarily replaced Casados at Deadman, driving his Volkswagon Beetle to the lookout with his wife and two young children. While they were there a big storm dropped 14 inches of snow. The patrolman's truck got stuck, but Casaus was able to get out in his Volkswagen and even pull the truck out.²⁶

The Deadman lookout maintained radio contact with the Jicarilla Apaches and the Carson National Forest. In the 1980s, the



Figure 34. Current Deadman Lookout (2014, author)

Jicarilla staffed at least one of their lookouts but only for about a month each year, still relying heavily on Deadman's observations.²⁷

In 1963 the Forest approved renovation of Deadman under the Accelerated Public Works Program, and the tower was rebuilt in the mid-1960s. The latest renovation took place in 2002, when a contractor built a new steel cab in Española. Modeled after the earlier wooden cab, it was trucked to the site and installed on the tower (Figure 34) by crane. Forest facilities staff has a video of this interesting installation. The Forest also removed propane from the site and installed a generator in the shed that year. Deadman has been consistently shown on maps from 1913 to the present. It is still regularly staffed although the lookout now commutes daily from Cuba rather than living at the site.²⁸

Gallina Mountain/ Gallina Peak T. 26 N., R. 2 E., sec. 32

Gallina Mountain is generally considered to be the long ridge between Gallina Peak on the north and Deadman Peak on the south. The 1913 map as well as a 1924 seen-area map showed both Deadman Lookout and a separate lookout symbol about two miles northeast of Deadman. This was a specific patrol point labelled "Gallina Mountain" which covered an area blind to Deadman. The seen-area map incorporated data from both of these points. Though the 1913 Jemez National Forest Fire Plan called Gallina Mountain Lookout one of the primary lookouts of the Forest, when considering this map data, the Plan most likely meant Deadman instead.²⁹

Maps from 1913 through 1926 show a trail and telephone line running along the crest between Deadman and Gallina Peak; this was an early patrol route incorporating Gallina Peak as another patrol point, overlooking more country blind to Deadman. Gallina Peak was marked as a lookout on a 1925 triangulation map, and in the 2010s patrolmen still visited it after lightning.³⁰

In the 1960s a patrolman was assigned to maintain the Deadman telephone line and to erect an "orientation stand" on Gallina Peak to use in orienting the Deadman firefinder. This stand stood up above the Peak's treetops allowing the spot to be precisely located by the Deadman lookout. Boards and wire were found on the Peak in 2014.³¹

Eureka Mesa T. 21 N., R. 1 E., sec. 28

In 1912 and 1913 Eureka Mesa was a patrol point along Jim Curry's beat. Many years later, in the 1950s and 1960s, the Forest considered developing Eureka Mesa as a formal lookout, and in 1961 the Forest tentatively

selected it for improvements. This lookout was never built, although it was included in a 1962 lookout list. Eureka Mesa now serves as a site for electronics as well as a patrol point.³²

Mud Spring T. 26 N., R. 1 W., sec. 12

By 1922, the Mud Spring ridge was part of the Chupadera patrol route, which continued north onto Jicarilla land. A 1924 composite seen-area map did not show Mud Spring Lookout, but demonstrated that the area northwest of the Mud Spring ridge was blind to Deadman and other Forest Lookouts. Analysis of this map was probably the impetus to develop Mud Spring Lookout. Pablo Casados said it was built around the same time as the first Deadman cabin and tower, in the mid-1920s, perhaps by Eugenio Maestas. The Forest Fire Lookout Association says the Lookout was built in 1929. The Forest constructed a telephone line along the ridge from the south by 1928. Mud Spring Lookout is shown on maps from 1933 through 1950.³³

The 1930 Forestry Report from the Jicarilla Apache fire organization was the earliest documentation found that named Mud Spring Lookout; the Forest generally called it Mud Spring Patrol. This Lookout was more valuable to the Apaches than to the Forest, and the Jicarilla suggested it be connected by telephone to their Stinking Lake Ranger Station, but this was never done. In 1932 they triangulated with Deadman and Mud Spring Lookouts.³⁴

The lookout rode or walked up a trail from the Mud Spring cabin, generally just for the day. Two pole platforms were built on the mesa top, one against a boulder (Figure 35) with a view to the south, the other with a view north. Each had a map board, and Figure 36 shows the north platform with its map board pedestal in place. The 1933 Fire Plan included building a “patrolman’s shelter” at the site, possibly by the CCC. Remains of lightning protection in the ground between the platforms suggest some sort of shelter had once been there. According to



Figure 35. Pole platform at Mud Spring Lookout, south side of mesa (2014, author)

Pablo Casados, there was never a building, just a tent. Sergio Morfin remembered a lean-to or “throw-down cabin.” The Forest made a seen-area map in 1938.³⁵

In the 1940s and 1950s, head fire guards Solomon Lovato and Sergio Morfin would take the lookouts up to their stations and train them in lookout duties. Morfin placed Ben Archuleta at Mud Spring Lookout, also called Deer Run, soon after World War II. The Forest considered it a

secondary or emergency lookout, mainly staffed during high fire danger, mostly by patrolmen.³⁶

From 1928 into the mid-1950s the Forest tried to negotiate cooperative agreements with the Jicarilla Apaches for lookout and communications improvements at the site, but the Jicarilla were unwilling to provide money as they were funding development of their own lookouts. Since Mud Spring had limited detection value for the Forest, this lack of funding meant the site was never further developed. In 1947 construction of a tower, latrine, accessory building, cistern, and corral was recommended, and a 1949 inspector said, “The Mud Spring lookout still goes on top of a rock to make his observations. We should either construct a lookout here or abandon it.” That year a new location was chosen, and in 1950 plans were underway for its “revision,” but again the Jicarilla did not participate and so nothing was done. Inspectors continued to recommend installing “adequate alidades” to replace the rough map boards, and this was reportedly done in 1950, though they were still rated “crude” in 1956.³⁷

In 1951 the Forest recommended installing a packset radio at Mud Spring Lookout to allow for direct communication with the Jicarilla's Wirt and Wells Lookouts. By 1956, the Mud Spring Lookout telephone line had been removed and a radio may have been assigned. Also that year Cedar Springs Lookout was erected on Jicarilla land not far from Mud Spring, and it began to report smokes to the Forest. As a result the Forest reduced staffing at Mud Spring. Inspectors still suggested replacing the “crude protractor boards” with “proper 360 degree alidades at the two points,” building a jeep road up the ridge to it, and continuing to use it as a patrol point during high fire danger. Again, the Forest made no improvements.³⁸



Figure 36. Pole platform at Mud Spring Lookout, north side of mesa, note map board pedestal (2014, author)

In 1959 Pablo Casados slowly dragged the metal box and telephone down from Mud Spring Lookout; together they weighed about 200 pounds. He gave them to a man who had previously staffed the lookout. In 1960 and 1961 Mud Spring was called an Emergency Lookout and reported a few fires. By 1963 the Fire Plan no longer included Mud Spring Lookout or Patrol, but the Chupadera patrol duties included visiting “some vantage point in [the Mud Spring Lookout] area...[during] emergency conditions.” Crews used a Mud Spring patrol point in the 1990s, though currently they visit the electronics site at Wolf Draw instead to look for fires in Deadman’s blind spot. In 2014 remains of the telephone line and trail from Corral Draw to the Lookout site were still visible. The telephone tree still stood and the map board pedestals were lying on the platforms.³⁹

Red Top

T. 20 N., R. 1 E., sec. 26

Red Top is named for its red soil that makes the point stand out from a distance. In 1912 and 1913, the Jemez National Forest hired Jim Curry as the Red Top lookout, and he also patrolled north across Bluebird Mesa to Eureka Mesa. The telephone line to the site was completed in 1913. In 1914 John Ketcham of Turkey Canyon was the lookout, living in a tent and getting water for himself and his horse at a trail-side spring on the mountain's north side. The Forest improved the trail in 1923, made a seen-area map in 1924, and had placed a telephone on top by then. That year the trail from Red Top to Eureka Mesa was "very difficult to follow" but still considered important for fire protection. The Forest assigned the lookout to clear and blaze it.⁴⁰

In 1925 the Forest considered Red Top the most valuable lookout on the Jemez, partly due to its view of the San Diego Grant, yet a tent on top was still the only shelter. The Forest had planned to build a cabin and pasture at the spring a mile down the trail, but new fire policy in 1921 mandated that lookout cabins be built "on top" with proper lightning protection. Red Top was especially lightning-prone, and a suggestion to blast a dugout from the side or top of the mountain was (incorrectly) said to be "safer [from lightning] than any cabin can be." The Forest decided to construct a log cabin on top instead; it was begun in 1926 and completed by 1928, with John Ketcham hauling construction materials. This was the only log lookout cabin on the Forest with enough windows to meet the national directive to build observatory-type lookout cabins (Figure 6 in the Introduction and Figure 37).⁴¹

Walter Hernandez and Jim Curry were Red Top lookouts in the late 1920s. One would ride up on horseback from Turkey Canyon, pausing to gather water at the spring. They then switched at the Lookout, with the other man riding the horse back down. Hernandez took his new bride, Harriet Young, to the Lookout and she carried their



Figure 37. Original Red Top Lookout cabin (1932, Stanley F. Wilson, Inspection, Jemez Division, NARA, 5/53)

infant son, Johnny, in a cradleboard/knapsack behind her as she rode up the trail. The cabin held tools and a woodstove, and Hernandez once entered the cabin just as lightning hit the woodstove, knocking him down.⁴²

Hernandez and Curry also maintained the telephone lines, using two riding horses and a pack mule. One day Harriet was behind them with the horses and encountered a bear. The horses bolted, causing a major wreck; Harriet was bucked off and had the wind knocked out of her. Meanwhile, Hernandez and Curry had climbed trees, and they called down to see if she was hurt. They spent the rest of the day finding and reloading the pack string. In 1929, Red Top “Lookout Dick Wetherill’s horse had gotten away from him with the saddle on and kept about 3 jumps ahead of Dick from the Vacas to Bluebird, giving him a 10 mile walk.”⁴³

Many stories are told of intense lightning at Red Top. Mac Fenton staffed it in the 1930s and 1940s, and several times lightning struck the stovepipe and the stove lit up; once the lookout cabin was struck three times in one day. Another lookout remembered lightning coming inside and striking the firefinder. Several generations of local families served at Red Top: from 1939 into the 1950s Jim Curry’s son Jack periodically served as lookout, Mac Fenton’s son Bobbie staffed it in 1943 and Walter Hernandez’ grandson Butch staffed it in the 1970s and 1980s.⁴⁴

In 1933 the CCC replaced the log cabin with an L-4 ground cabin located at the far end of the point (Figure 38 and Figure 11 in the Introduction). Worthington (Worth) Karn hauled the material up to build it, and he told Jack Curry’s wife Betty Jane that the hardest thing to haul on the pack animals was the copper wire used for lightning protection. Janie O’Rourke’s interview notes with Betty Jane describe her experience at Red Top:



Figure 38. L-4 built at Red Top by the CCC in 1933 (1936, W.A. Jackson, Photograph No. 95-GP-4738-325077; Records of the Forest Service, 1870 - 2008, Record Group 95; National Archives at College Park, College Park, MD.)

There was barely room to walk between the lookout and the cliff edge...[Inside was] a table, Coleman lantern hanging above the map table and alidade, a cot, a telephone, and stool with glass insulators screwed onto the feet. The fire guard would stand on this during a lightning storm or when talking on the telephone...both she and her husband once stood on it together during a storm. And once...there was a lightning storm and the chimney was struck. The strike made sparks all around the stove...[She] would walk from her home at the Ketcham Ranch in Turkey Canyon up to the...Lookout and bring her young son. The first [Forest] Supervisor allowed this but a later one didn't. [She] would go up anyway and to keep her young son quiet when anyone telephoned the lookout, she would give her son magazines to tear up. It took a long time for her to later break his habit of tearing up paper.⁴⁵

Jack Curry said the Red Top telephone rang whenever lightning was striking nearby, forcing him to make a choice: he didn't want to answer it as it could well be carrying a fatal charge, but if he chose not to pick it up, it was bound to be the Ranger checking on him. He made sure to stand on the insulated stool while he contemplated his options.⁴⁶

Betty Jane continued:

On Memorial Day of 1945 a B-29 bomber came up Rio de las Vacas and just missed the Red Top Lookout. The plane passed 400 feet over the [Curry] home in Turkey Canyon, and crashed into the ridge between Turkey Canyon and Horse canyon...the crew had bailed out near Jemez Pueblo....The crash started a small fire that Jack [Curry] patrolled for a week afterwards. That afternoon two men came in an airplane, landing along the Rio de las Vacas. Two soldiers...left to guard the [wrecked] plane....The military came and pulled out the plane....People came and took souvenirs of what was left. We got the ladder from the tail section and used it for many years for the kids' bunk beds.⁴⁷

Most of the early lookouts rode their own horses up, although Jack Curry preferred to walk so his horse didn't have to "stand up there all day." Sometimes crossing the Rio de las Vacas could be cold and difficult, especially during high water. By the early 1960s, the Forest was keeping a horse at the river for the lookout's use.⁴⁸

Ruben Cordova staffed Red Top in 1946, and his wife and daughter joined him for part of the summer. They walked up the trail leading a pack horse carrying canteens and food. Cordova went ahead to watch for bears and occasionally he would signal his family to stay back. He had a routine to follow when working at the lookout and had to keep a log.⁴⁹

In 1938, the Forest made a seen-area map as well as developing an agreement with the New Mexico Lumber Company to pay half the Red Top salary. The 1946 inspector said the ground house would need replacement within a few years because of the poor foundation. He also noted the "very poor" outhouse and the collapsed horse shelter. The Forest replaced the "not too steady" map board with an Osborne firefinder in 1947. In the late 1940s it was considering construction of a new lookout facility at Red Top with a road to the summit. It

conducted a preliminary road survey in 1953 but there were no funds to build the road and it was judged “not needed.” The Forest finally completed the cistern in 1952.⁵⁰

Detection coverage in the area was an ongoing issue. There was considerable delay in properly locating the 1945 Cebollita Fire due to difficulty differentiating between parallel ridges. The Fire was directly between Red Top and Cerro Pelado Lookouts so they weren’t able to triangulate. This led to studies “for additional detection, especially in [the northeast part of the] San Diego Grant Lands.” Management felt the large acreage of the 1953 Holiday Mesa Fire was primarily caused by failure of the Red Top lookout to properly locate it, again due to trouble telling one ridge from another. According to Red Top lookout Alfonso Cordova, “That country was tricky with lots of ridges and canyons.” Suggestions included placing highly-visible targets on ridgetops for lookout orientation, as well as establishing tree lookouts on high points so crews could pinpoint fires as they approached lookout-provided locations. The Forest felt that “an additional lookout on Mining Mountain or Pajarito Peak would probably help...but since the difficulty is mostly on the San Diego Grant the New Mexico Timber Company would have to stand the cost.”⁵¹

Several inspectors noted the limited visibility of Forest land from Red Top, as most of its seen area was in the San Diego and Baca Grants. A 1959 engineering inspection felt that “the Cuba district was very deficient in lookout coverage,” and suggested Jarocito, Flag 11 or Mining Mountain as possible new sites. That year Pajarito Peak (on Jemez Pueblo lands) was proposed as an additional lookout, but improvements were never built and it was probably never staffed. State Forestry took over fire responsibility for the Baca and San Diego Grant areas in 1961, and by cooperative agreement they paid 70 percent of the Red Top salary. That year's General Integrating Inspection noted some deficiency in the detection system west of Redondo Peak in the high-value timber of the Cebolla and San Antonio drainages. The report said that Red Top was the only lookout with a view of that area, though it was distant and indistinct. Management suggested there might be little Forest need for Red Top, and had an inspector evaluate alternate locations. A 1961 memo said Eureka Mesa had tentatively been selected for improvements, and the next year the Forest again proposed a lookout on Mining Mountain, but neither of these was ever built. Region suggested more aerial reconnaissance as a partial solution, asking, “Can we lean a little heavier on air detection?” In the end, Red Top was retained and the only additional lookout developed was Joaquin by State Forestry in 1962, but it was only used for a few years.⁵²

Ben Casaus staffed Red Top in the early 1960s, and one day he saw smokes appear within seconds of each other on three successive ridges in the San Antonio Peak area. White Sands Missile Range had lost control of a missile and detonated it over this “unpopulated” area, and the resulting debris shower caused multiple fires, burning a total of 400 acres. The Army quickly came in and said “hands off,” beyond required fire suppression.

At that time there was no central Santa Fe Dispatch; instead each District had its own dispatcher. The Cuba District dispatcher would escort the primary lookout up to Red Top at the start of the season. They rode horses across the swollen Rio de las Vacas River and up the trail. The dispatcher dropped off the supplies and took the horses back down across the river, leaving the lookout's horse pastured there. For the rest of the season the relief rode the horse up, then the primary rode it back down, and they switched back and forth. But if the lookout left the mountain with no one to relieve him, the horse would be on the wrong side of the river and the lookout would have to swim. Casaus did that once, and remembers a very cold crossing on his early morning return!⁵³

One morning Casaus shot a grouse, cooked it for breakfast and stored the remainder in the woodstove oven. Inevitably, the Game Warden arrived for a visit that day. It was standard lookout practice to feed visitors, so Casaus was heating a can of pork and beans and that grouse started to warm up. The Warden commented, "Those beans sure smell good." Casaus was worried he'd be caught poaching, but nothing further was said. Much later the Warden admitted he had known what was going on.⁵⁴

After years of discussion, a road was finally built to the top of the mountain in 1970 as part of a timber sale. Its upper part is in a steep drainage of red clay which becomes impassable after rain. Sometimes the lookout had to stay up an extra night if the road was too wet.⁵⁵

Around 1976 the Forest replaced the Red Top L-4 with the trailer lookout from Cuba Mesa (Figure 39). The old lookout was put up for bid, and Leandro Padilla, who had previously staffed Red Top, got it for 15 dollars. Moving it off the mountain was quite a challenge. While he was using empty oil drums to move it to a flatbed, it



Figure 39. "Mobile" or trailer lookout moved from Cuba Mesa to Red Top around 1976 (c. 1987, USFS, Lookouts in the Southwestern Region, 124)

slipped off and all of its windows broke. He finally got it down the difficult road, and now uses it for storage in his yard.⁵⁶

A water tank was installed on the trailer roof and was filled by engines. This gave the unusual luxury of running water at a lookout! But by the early 1980s the tank was gone, the cistern was no longer used, and the lookouts once again had to haul their own water.⁵⁷

Butch Hernandez (grandson of Walter Hernandez previously mentioned) worked at Red Top in the late 1970s and 1980s. He was awakened one night by loud squealing, and stepped outside to see a group of mating porcupines in the moonlight, making quite a racket and leaving quills everywhere. Lookouts competed to be the first to report a smoke. Once Hernandez was on the trailer roof tarring a leak when Ken Seonia at Cerro Pelado called in a smoke very close to Red Top. Hernandez reached in the window to answer the radio, walked right over the tar and tracked it over everything. He climbed to the firefinder in the cupola to give Seonia a cross azimuth. He forgot to close the trapdoor in his rush and fell through it, into the living quarters. Eventually he called in the cross, but by then tar was everywhere. At that point his supervisor called to ask if he'd "got the roof fixed yet."⁵⁸

The District stopped full-time staffing of Red Top from 1985 through 1987 because the road had become impassable. A contractor then improved the road, and Myra Martinez staffed the lookout from 1988 through 1993. She described lightning hitting a tree right next to the trailer, producing a searing noise and a red bolt of light—her scariest experience as a lookout. The Forest moved Martinez to Deadman Lookout in 1994, and discontinued regular staffing of Red Top because the road had again washed out and the lookout trailer was infested with rodents (and potentially hantavirus). Personnel only went up after lightning. By then the lookout was dilapidated and open to the elements, but the firefinder was still inside! By 2002 Red Top was considered an emergency lookout, supposedly staffed during severe fire seasons. According to records for that year and for 2005, the lookout was "scheduled for replacement with a small, one-story [concrete block] and wood structure." The replacement never occurred; in 2011 the trailer was demolished on site and hauled away, leaving only the outhouse behind. Fire personnel still use the site as a patrol point. Red Top is shown as a lookout on maps from 1913 through 1990.⁵⁹

Additional Sites

In 1938 the Forest made a seen-area map from the "Sypher Point Proposed Site" in the northwest corner of the District, but neither the map nor the exact location of this point have been found.⁶⁰

¹ Tucker, *Early Days*, Book 3, 227; Butch Hernandez, interview.

² Jim Curry Work Diary.

³ Interviews by author: Richard Duran; Alfonso Cordova, Gallina, NM, June 12, 2015; Jim Curry Work Diary; 1924 Inspection, NARA, 5/102.

⁴ Richard Atencio, interview.

⁵ 1913 Jemez NF Fire Plan, NARA, A3/245; Butch Hernandez, interview; Seen-area Map Atlas, SFNF SO, Dispatch/99.

⁶ 1936 Plan, NARA, 2/150; Seen-area Map Atlas, SFNF SO, Dispatch/63; Harvey Barlow Work Diaries, transcribed by Janie O'Rourke, SFNF SO; 1940 Inspection, NARA, 5/131; 1940 Plan and Progress, NARA, 2/179-180; 1941 Inspection, NARA, 5/32; 1941 Plan and Progress, NARA, 2/184.

⁷ Johnny Hernandez and Robert Gallegos, interviews.

⁸ 1946 Fire Inspection, NARA, 4/130.

⁹ Johnny Hernandez, interview.

¹⁰ 1948-1950 Fire Plans, Cuba District, NARA, A3/82-88; 1948 Plan and Progress, NARA, 2/227-228; 1949 Fire Inspection, NARA, 3/43; 1948 GII, NARA, 5/24; Memorandum, follow-up to 1946 Fire Inspection, August 27, 1948, NARA, 4/124; 1946 Inspection, NARA, A1/152; 1950 Plan and Progress, NARA, 2/243-244.

¹¹ 1956 Detection Plan, NARA, A4/304; 1956 Inspection, Cuba District, NARA, A3/330,334; 1958 Inspection, Cuba District, NARA, A3/420.

¹² 1962 Fire Plan, Cuba District, NARA, A4/251,257; Memorandums from: Regional Forester, July 20, 1962, NARA, A4/246; Forest Supervisor, September 18, 1962, NARA, A4/235; Forest Supervisor, September 24, 1962, NARA, A4/359; Assistant Regional Forester, January 29, 1963, NARA, A4/242; Forest Supervisor, February 5, 1963, NARA, A4/243-244; Forest Supervisor, February 14, 1963, NARA, A4/241; H. K. Harris, "Mobile Lookout", *Fire Control Notes* 21, no. 3 (July 1960): 94-96, accessed November 20, 2016, http://www.fs.fed.us/fire/fmt/volumes_authors.html.

¹³ Interviews by author: Emily Padilla and Leonard Olivas, Cuba, NM, April 29, 2015; Ben Casaus; 1964 Fire Plan, Cuba District, NARA, A4/170.

¹⁴ Interviews by author: Ben Casaus; Richard Duran; Leandro Padilla, Cuba, NM, May 5, 2014; Pablo Casados; Charlie Wright, Cody, WY, December 30, 2015; Fire Discoveries by Lookouts, 1959-1970, SFNF SO, Dispatch/169+.

¹⁵ *Jemez Forest Ranger*, May 1911; Interviews by author: Richard Duran; Pablo Casados; 1913 Jemez NF Fire Plan, NARA, A3/247; Seen-area Map Atlas, SFNF SO, Dispatch/99.

¹⁶ Janie O'Rourke, "Jemez Forest", *Lookout Network*, Autumn 2010; 1922 Fire Plan, NARA, 2/15; Seen-area Map Atlas, SFNF SO, Dispatch/16.

¹⁷ Letter from Regional Forester, February 10, 1925, SFNF SO, Dispatch/132; 1925 Plan and Progress, NARA, 2/46; 1926 Plan and Progress, NARA, 2/70,72,73; O'Rourke, "Jemez Forest"; Pablo Casados, interview by Janie O'Rourke, Llaves, NM, June 22, 2007; 1926 Inspection, NARA, 5/84; 1928 Plan and Progress, NARA, 2/90.

¹⁸ Memorandum of Agreement between Forest and Jicarilla Apache Indian Reservation, June 8, 1931, NARA, 2/119; 1928 Plan and Progress, NARA, 2/86,98.

¹⁹ 1932 Inspection, Jemez Division, NARA, 5/49; 1933 Plan, NARA, 2/136; O'Rourke, "Jemez Forest"; Harvey Barlow Work Diaries.

²⁰ 1946 Inspection, NARA, A1/172; 1946 Fire Inspection, NARA, 4/131; 1948 GII, NARA, 5/22-23; 1952 Plan and Progress, NARA, 2/255; 1953 Plan and Progress, NARA, 2/265; 1956 Inspection, Cuba District, NARA, A3/332; William Maestas, interview.

²¹ Interviews by author: Joe Corrales; Richard Duran; Butch Hernandez; Alfonso Cordova.

²² 1952 GII, NARA, 5/162; 1952 Fire Inspection, Carson NF, NARA, 5/186; Memorandum from Regional Forester, October 4, 1957, NARA, A2/27; 1956 Detection Plan, NARA, A4/346; 1958 Inspection, Cuba District, NARA, A3/421.

²³ 1958 Inspection, Cuba District, NARA, A3/421.

²⁴ O'Rourke, "Jemez Forest".

²⁵ Pablo Casados, interview.

²⁶ Ben Casaus, interview.

²⁷ 1958 Inspection, Cuba District, NARA, A3/420; 1952 Fire Inspection, Carson NF, NARA, 5/186; Alfonso Cordova, interview.

²⁸ Memorandums from: Forest Supervisor, December 11, 1963, NARA, A4/83; Assistant Regional Forester, September 18, 1963, NARA, A4/87; Memorandums and List of Archived Drawings, March 20, 1995, SFNF SO, Facilities; Pablo Casados, interview.

²⁹ 1913 Jemez NF Fire Plan, NARA, A3/247; Seen-area Map Atlas, SFNF, Dispatch/99.

³⁰ Alfonso Cordova, interview; Seen-Area Map Atlas, SFNF SO, Dispatch/120.

³¹ 1963 Fire Plan, Cuba District, NARA, A4/153.

³² Jim Curry Work Diaries; 1924 Inspection, NARA, 5/102; 1960 GII Jemez District, NARA, FRC 26,30; Five-year Building Plan Attached to Memorandum, September 14, 1961, NARA, A4/381; Fire Discoveries by Lookouts, 1959-1970, SFNF SO, Dispatch/175; Richard Duran, interview.

³³ 1922 Guard Employment, SFNF SO, Dispatch/157; Seen-area Map Atlas, SFNF, Dispatch/99; Pablo Casados, interview; "New Mexico Lookouts", Forest Fire Lookout Association, accessed November 21, 2016, <http://www.firelookout.org/lookouts/lo-newmexico.html>; 1928 Plan and Progress, NARA, 2/86,93,94.

³⁴ Richard A. Bruckner, *Jicarilla Apache Forestry: A History of Timber Management, Forest Development and Forest Protection on the Jicarilla Apache Reservation 1887 - 1994*, (Dulce: Dulce, NM, Branch of Forestry, Jicarilla Agency, 1995), 221.

³⁵ Pablo Casados and Sergio Morfin interviews; 1933 Program, NARA, 2/136; Seen-area Map Atlas, SFNF, Dispatch/77.

³⁶ Sergio Morfin, interview; 1940 through 1956 Fire Plans, Chama/Cuba District, NARA, A3/58-81.

³⁷ 1928 Plan and Progress, NARA, 2/86,93,94; 1939 Plan and Progress, NARA, 2/170-171; 1942 Plan and Progress, 2/187-188; 1947 Region 3 Improvement, Construction and Replacement Needs, NARA, 1/12; 1948 Cooperative Fire Control Agreement Between the Jicarilla Apache Indian Reservation and the Santa Fe National Forest, NARA, A2/141; 1949 Fire

Inspection, NARA, 3/38,42; 1949 Plan and Progress, 2/200-201; 1950 Plan and Progress, 2/241-242; 1952 Plan and Progress, 2/254; 1953 Plan and Progress, 2/265; 1956 Detection Plan, NARA, A4/305,329.

³⁸ Memorandum from Regional Engineer, NARA, A2/157; 1956 Inspection, NARA, A3/331; 1956 Detection Plan, NARA, A4/305,306,329,348.

³⁹ Pablo Casados, interview; Fire Discoveries by Lookouts, 1959-1970, SFNF SO, Dispatch/169+; 1961 GII, NARA, 5/263; Memorandum from Forest Supervisor, May 14, 1963, NARA, A4/301; Interviews by author: Myra Martinez, Cuba, NM, June 12, 2014; Richard Duran.

⁴⁰ Jim Curry Work Diaries; 1913 Jemez NF Fire Plan, NARA, A4/245,266; Peggy Ohler, interview by author, Cuba, NM, August 14, 2014; 1923 Fire Plan, NARA, 2/31; Seen-area Map Atlas, SFNF, Dispatch/99; Letter from Forest Supervisor, January 30, 1925, SFNF SO, Dispatch/132; 1924 Inspection, NARA, 5/102, 107.

⁴¹ Letter from Forest Supervisor, January 30, 1925, SFNF SO, Dispatch/132; Letter from District Forester, February 10, 1925, Dispatch/131; 1926 Inspection, Jemez Division, NARA, 5/84; 1926 Plan and Progress, NARA, 2/70; 1927 Plan and Progress, NARA, 2/80-81; 1928 Plan and Progress, NARA, 2/90; Peggy Ohler, interview.

⁴² Butch and Johnny Hernandez, interview.

⁴³ Butch and Johnny Hernandez, interview; *Santa Fe News Bulletin*, quoted in *Southwestern District Forest Pioneer*, July 1929, NARA, A2/192.

⁴⁴ Interviews by Janie O'Rourke, Mary Caldwell, Ponderosa, NM, January 31, 2005; Jesse Fenton Fitzgerald, Corrales, NM, June 25, 2006; Betty Jane Curry; Richard Atencio, interview by author.

⁴⁵ Betty Jane Curry, interview; Harvey Barlow Work Diaries.

⁴⁶ Peggy Ohler, interview.

⁴⁷ Betty Jane Curry, interview.

⁴⁸ Interviews by author: Carolyn Melgaard, Cuba, NM, August 3, 2015; Ben Casaus.

⁴⁹ Esther May, interview.

⁵⁰ Seen-area Map Atlas, SFNF, Dispatch/24; Report on Baca Location Logging Operations Santa Fe National Forest, New Mexico, May 1938, NARA, 3/179; 1946 Inspection, NARA, A1/148; 1946 Fire Inspection, NARA, 4/131; 1947 Region 3 Improvement, Construction and Replacement Needs, NARA, 1/12; 1953 Plan and Progress, NARA, 2/263; 1952 Plan and Progress, NARA, 2/255.

⁵¹ Cebollita Fire BOR, June 25, 1945, NARA, A2/85,96,98; Memorandums from: Leon Hill, Jemez District Ranger, June 19, 1953, NARA, A3/38; Forest Supervisor, July 27, 1953, NARA, A3/40; Alfonso Cordova, interview; 1957 Fire Inspection, NARA, A2/67.

⁵² 1959 Engineering Inspection, NARA, 5/237; 1956 Detection Plan, NARA, A2/19; 1960 GII Jemez District, FRC/26,30,36; Memorandums from: Forest Supervisor, March 18, 1959, NARA, A2/53; Assistant Regional Forester, February 10, 1959, NARA, A2/56; Five-year Building Plan attached to Memorandum, September 14, 1961, FRC/86,90; 1957 Fire Inspection, NARA, A2/67; Response to 1957 Fire Inspection, NARA, A2/60, quote; 1961 Fire Inspection, NARA, 5/258; Memorandum from Forest Supervisor, September 18, 1962, NARA, A4/235; Handwritten Note from Regional Forester, 1957, NARA, A2/60.

⁵³ Interviews by author: Ben Casaus; Gilbert Sandoval.

⁵⁴ Ben Casaus, interview.

⁵⁵ Interviews by author: Richard Atencio; Butch Hernandez; Alfonso Cordova.

⁵⁶ Interviews by author: Dennis Trujillo; Leandro Padilla.

⁵⁷ Richard Duran, interview.

⁵⁸ Butch Hernandez, interview.

⁵⁹ Interviews by author: Richard Duran; Richard Montoya, Albuquerque, NM, May 6, 2014; William Maestas; 2002 and 2005 SFNF Facilities Master Plans, SFNF SO, Facilities.

⁶⁰ Seen-area Map Atlas, SFNF, Dispatch/9.

Española District

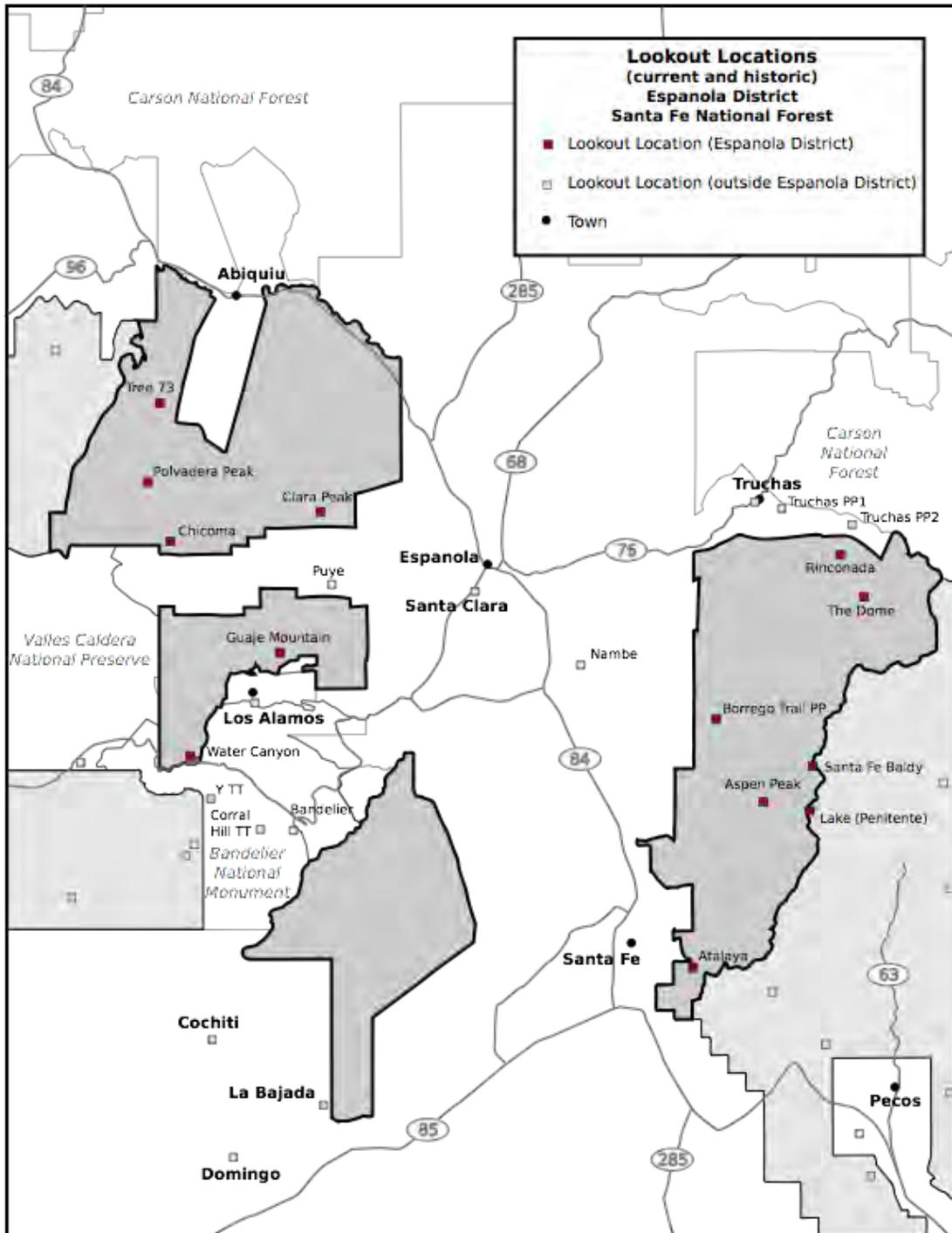


Figure 40. Española District Lookout Locations, current and historic

Cooperative Agreements Driving Lookout Development

The Española District is composed of several pieces of land separated by private, Bureau of Indian Affairs (BIA), and Los Alamos National Laboratory (LANL) lands. The Soil Conservation Service (SCS), with responsibility for soil erosion, has also been involved in fire management efforts. The negotiation of complex cooperative agreements between the Forest and these agencies has heavily influenced lookout development on this District. A brief summary of such negotiations is given below and further details are found under the individual lookout listings.¹

In 1927 the Forest considered developing a lookout at Puye Ruins to replace Guaje Lookout, and in 1928 the Forest and the Indian Service negotiated an agreement establishing Puye Lookout. When LANL was established in 1943, the Atomic Energy Commission (AEC) took over most of the land in that area and assumed much of the fire protection responsibility, including detection from a tower at its east entrance. But its observations proved unreliable, and Santa Clara Pueblo lands needed better fire protection due to increased logging and recreational use. By then, Puye Lookout was not providing satisfactory service to either the Forest or the Indian Service and the Forest's St. Peter's Dome Lookout could only see Santa Clara Pueblos's south slopes; the agencies needed additional detection. As early as 1940 proposals were made to discontinue Puye and move its facilities to Indian Peak (just west of Clara Peak), which had a view of much of Santa Clara Pueblo's land.²

In 1939 the Forest and SCS negotiated fire protection responsibility for the Polvadera and South Lobato Grants, making plans for construction of a lookout at Tree 73 and an associated telephone line. A 1940 inspector noted that the high initial cost for new lookouts such as Tree 73 might be too much for some cooperators; he suggested temporary use of "makeshift lookouts" along with minimal telephone lines and roads until a balance of cooperative funds could be built up for more permanent improvements. This would also provide a trial period for evaluating lookout usefulness.³

The Forest never built a lookout structure at Tree 73 and maintenance of its telephone line was sporadic. It was difficult to get crews to this inaccessible area. By 1950, drought had lowered the water table in the area and settlements had been abandoned. "Only one old bachelor remained [probably Domingo Vigil]...The sincerity of this old man and his efforts are the only thing which saved a more costly [1950] fire season in the South Lobato Grant. He discovered and put out 4 fires which were in bad locations and could have been big fires. He worked alone on the Oso Canyon Fire until help arrived approximately 15 hours later."⁴

The establishment of Encino and Clara Peak Lookouts in 1950 and 1951, respectively, allowed the Forest to discontinue Tree 73 Lookout, though patrolmen were still making observations from it into the 1960s. A new

cooperative agreement was reached in 1951, with the Forest providing fire protection in the area and SCS and the Indian Service providing much of the construction cost of Clara Peak Lookout.⁵

Aspen Peak T. 18 N., R. 11 E., sec. 8

This is shown as a lookout on maps from 1915 through 1933. The Forest staffed it for short periods in 1921 and 1922, but never considered it primary.

Aldo Leopold, in his 1923 inspection report, said there was no tower at the site and its cabin was “not well located as working base for present conditions, not very orderly condition inside”. The cabin was probably located somewhere below the Peak. At that time there were cabins in Aspen Basin and at Aspen Park (Figure 41), but it is unclear if either of these was the one used by the lookout. Leopold also felt that construction of the Truchas



Figure 41. Aspen Park cabin (undated, Improvement and Construction Detail Pictures, SMC, RO coll bldg folio/76)

Lookout tower in 1922 had eliminated the need for the Aspen Peak Lookout. The Forest made a seen-area map from the point in 1924, and it was one of four lookouts included in a composite seen-area map of the Pecos. In 1925 “Aspen Park” was listed as an emergency lookout, probably a typographical error for Aspen Peak. No artifacts were found on the Peak in 2013, and it is now heavily treed.⁶

Atalaya T. 17 N., R. 10 E., sec. 28

This is shown as a lookout on maps from 1914 through 1924, and was probably just a patrol point. *Atalaya* is Spanish for “watchtower”. No signs of a telephone line were found on a 2014 visit, though a limbed tree on the summit has its bark partially peeled as if to flatten the trunk for a ladder. It may have served as a tree lookout.

Borrego Mesa/ Cerro Negro T. 24 N., R. 8 E., sec. 21

The Forest has repeatedly sought detection for the Borrego Mesa area. In 1914 an unnamed lookout site and toolbox were located near the junction of Rio Nambe and Rio Capulin. In 1918 Tesuque Ranger John Johnson

serviced a “Cerro Negro” toolbox; perhaps the 1914 lookout point was known by that name as well, since toolboxes were usually placed close to early lookout sites.⁷

In the 1950s and 1960s, the Forest examined potential lookout sites for coverage of the Borrego Mesa area. In 1957 it participated in a replanning effort with the Carson National Forest which evaluated Sierra Negra or Abiquiu Peak north of Abiquiu as a potential lookout site. This location, also called Cerro Negro in a 1957 fire inspection, was deemed inadequate and rejected. The 1961 inspector felt a lookout was needed in the Borrego Mesa area due to “increased risk and present and future [logging] slash areas,” and the Ranger felt that Clara Peak Lookout’s detection coverage of Borrego was “marginal at best.” In 1962 and 1963 the Forest studied potential lookout locations and selected Cerro Negro “in Santa Fe County in the Española District,” but the exact location was not provided in the documents. In 1964, under the Accelerated Public Works Program, it planned to construct a 14- by 14-foot cab with catwalk on a tall metal tower on this Cerro Negro. But funding was diverted to other administrative facilities on the Forest and the plan was dropped. The Cerro Negro on Bureau of Land Management land near Ojo Caliente has a poor and distant view of the Española District, and Sierra Negra/Cerro Negro at Abiquiu was rejected as a lookout site in 1957. No one today knows of a Cerro Negro within the Forest; this location remains a mystery.⁸

Chicoma T. 21 N., R. 5 E., sec. 34

This is shown as a lookout on maps from 1913 through 1915, and again on a 1925 triangulation map. It was a high point along the Highline/Skyline Trail patrolled by early rangers, and was also called Scenic Mountain and Santa Clara Peak. The November 1911 *Jemez Forest Ranger* said:

Because of failure to obtain right-of-way across the Santa Clara Reservation, it has been necessary to abandon the proposed telephone line from the Stone House Ranger Station to the Scenic Mountain Lookout. However, we shall not fail to take advantage of this point as a primary fire patrol. It is now the plan to construct the [telephone line] to this point from the Coyote Ranger Station...During the month of September an improvement crew...constructed a log cabin at the Chicoma Ranger Station and a forty-acre pasture. This station will be used by the officers stationed at the Scenic Mountain during the fire season.⁹

The 1913 fire plan included “detection by...riding patrol on the Santa Clara Mountain until telephone connection is made...it then to become one of the primary lookouts on the forest...Has cabin and pasture near top...This station cannot usually be used until late in season...Patrolman...[w]ill need horses and be paid \$75 per month.”¹⁰

Chicoma provided a good view of what was then the Gallina Coyote District, and it was especially useful for triangulation with Deadman Lookout. The Forest never completed its telephone connection nor built structures on



Figure 42. Chicoma Lookout cabin (2014, Courtesy of Janie O'Rourke)

southeast side of the Mountain at the Forest boundary, with a trail from the summit to this cabin continuing down to the “Indian Service Cabin” in Santa Clara Canyon. A 1923 resurvey map shows a “Ranger Station” cabin in the same area.¹²

In 2014, a distinct trail marked with old blazes led across the south slope of the Mountain to the ruin of a large well-made cabin at the mapped location (Figure 42), with constructed trail continuing to a developed, but now dry, spring.

Clara Peak T. 21 N., R. 7 E., sec. 19

The Forest made a seen-area map from Indian Peak in 1939; this point is now called Los Cerros (point 8434, T. 21 N., R. 6 E., sec. 25) and is located west of Clara Peak. In 1940, in cooperation with the Indian Service, the Forest made plans to replace Puye Lookout with Indian Peak and to move the existing Puye improvements there, but these plans were halted along with other Forest development during the war years of 1941 through 1945. By 1946, the new plan was to eliminate both Puye and Tree 73 Lookouts and build a set of “modern improvements” at Indian Peak. In 1947 the Forest indicated that Indian Peak Lookout needed these improvements: tower, latrine, accessory building, cistern and corral.¹³

In 1948 the Forest planned to have a road built to Indian Peak by a timber company, but after it made a seen-area map from Clara Peak in April 1949, it chose Clara over Indian Peak for lookout development and a road was begun. While Indian Peak would require a tower to see over its trees, Clara Peak (sometimes called Santa Clara

Peak, not to be confused with Chicoma) could provide better views from a less-expensive ground house. The 1949 Fire Plan showed Clara Peak staffed in high fire danger, though its improvements were not yet complete. That year the Regional Office briefly abandoned development of Clara Peak because the Forest felt that the new Encino Lookout would substitute. This proved untrue, and Clara Peak's development continued.¹⁴



Figure 43. Clara Peak Lookout with Trujillo family members (1960s, Courtesy of Adelires Trujillo)

The Forest, Indian Service, and

SCS entered into a new cooperative agreement in 1951, with the Forest taking responsibility for fire protection in the area and for building the new lookout. The agreement also included moving the Forest Service scaler's cabin and Osborne firefinder from Puye to Clara Peak, constructing the last part of the road to the top of the Peak, installing lightning protection, a telephone line and a radio system, and setting up a water system. These improvements cost an estimated 4,200 dollars to be divided among the agencies on a per-acre basis. The lookout



Figure 44. Clara Peak storage shed and children's bedroom, moved from Puye Lookout (mid-1950s, archeology binder 53, negative no.10077, SFNF SO)

was to be employed and supervised by the Forest Service, with the salary divided among the cooperators. By July 1951 the road had been completed, lookout construction was underway, and at least one fire had been reported by Clara Peak Lookout.¹⁵

The new lookout was a 14- by 14-foot modified L-4 ground cabin of cinder block (Figure 43), and the Puye scaler's cabin was placed just below the summit as a storage shed (Figure 44). The Forest improved the road over the next several years, and added a cistern in 1957 (Figure 45). Clara Peak was considered a primary lookout due to its view

of high priority LANL and Santa Clara Pueblo lands. The AEC and BIA paid the entire lookout salary, at least into the early 1960s.¹⁶

Apollinario (Paul) Trujillo staffed Clara Peak from 1962 to 1975, with his wife, Adelires, as relief. They raised nine children at the lookout (Figure 43); the babies slept with the parents in the L-4 and the older children slept in the shed below. The children built a flat area between the lookout and the shed for playing ball. The family used binoculars to watch the movies playing on the outdoor theatre in Española, and also enjoyed the various fireworks displays. Trujillo took overnight resupply trips to Española, and the Forest sometimes sent him alone to hold nearby fires until crews could arrive. He and his sons also removed old telephone lines. Adelires was left to run the lookout at those times, and eventually she wasn't afraid to be there on her own. When there was lightning at the lookout, she gathered the kids inside until it passed.¹⁷

Water was hauled from the Ranger Station to fill the cistern; a hand pump delivered the water inside the lookout. Figure 45 shows Trujillo and some of his children working on the cistern. Nine children meant lots of laundry, including diapers. Laundering by hand was a long process of washing, rinsing, and hanging clothes on bushes to dry. Adelires said “We had to learn how to live there,” but she nonetheless loved the lookout life.

In 1969 the children encountered several rattlesnakes at the Lookout. The Ranger immediately arranged for a “snake fence” to be built around the compound, which stopped the problem. Most of this fence is still standing, with a concrete foundation topped with woven wire mesh and a narrow gate for outhouse access (Figure 46). The Forest also installed concrete walkways making it easier to spot any snakes. Next to the Lookout, a large circle of rocks enclosed the number 32; it was the aircraft marker and was repainted yearly by the lookout.

One day Adelires almost sat on a big spiny animal lying on the cistern. She had never seen such a creature before and was very frightened. She stayed inside the Lookout with the door locked until her husband returned from town. The animal was gone by



Figure 45. Trujillo and his children working on the Clara Peak Lookout cistern (1960s, Courtesy of Adelires Trujillo)



Figure 46. Rattlesnake gate on the path to the outhouse at Clara Peak Lookout (2014, author)

then, but she soon saw another on a branch; her husband identified it as a porcupine and warned her about its quills.

Clara Peak had three radios: for the Santa Fe National Forest, the Carson National Forest and LANL. Los Alamos firefighters sometimes visited the lookout to spot fires in the Garcia Canyon area. Clara Peak obtained cross bearings from the St. Peter’s Dome Lookout, which was especially important in order to properly locate smokes among the many ridges in the Los Alamos area. Clara Peak also worked with the Encino Lookout, then staffed by Apollinario Trujillo’s brother Jose and his wife, Manuelita.¹⁸

Clara Peak was regularly staffed through 1984, but a series of wet summers combined with LANL developing their own methods of detecting smokes led to reduced staffing in the late 1980s. In the summer of 1993, the Forest had discontinued staffing for fire and removed the firefinder, and an archeological technician used the Lookout as living quarters. During the winter of 1993-1994, the Forest demolished it and pushed its remains into the cistern. Clara Peak is shown as a lookout on maps from 1950 through 1990.¹⁹

Guaje Mountain

T. 20 N., R. 6 E., sec. 35

In 1913, Guaje Mountain was a secondary lookout. It was located on a ridgetop near the Pajarito Patrol Trail, “1/2 mile from trunk telephone line. Can be connected at cost of \$15...[Lookout man] should not leave lookout, but telephone bearing of all fires...should be kept in supplies by District Ranger. Salary should not exceed \$50 per month as lookout man will not need any horses.” Until 1922 the lookout stayed in a tent; that year the Forest built 10 miles of trail as well as a “protective cabin” at the site, described in a 1929 General Land Office survey as “about 12 ft. x 16 ft.”²⁰

Guaje Lookout was a weekend destination for groups from the Los Alamos Ranch School. In a photograph taken on one of their visits (Figure 47), the wood frame lookout cabin looks new. The sign over the door says “5/22/1922 Lookout Station” in a flowing script, giving the date of construction. A man in the center is peering at a map board. When Aldo Leopold inspected Guaje Lookout in 1923, he evaluated Manuel Maestes, the lookout fireman, and reported that there was no tower or pasture. In 1924 the Forest made a seen-area map. The 1926

inspector approved of the “good combined observatory and cabin” with its many windows, and lightning protection was completed that year. In 1930 Guaje reported a fire right under the St. Peter’s Dome Lookout.²¹



Figure 47. Los Alamos Ranch School students visiting Guaje Mountain Lookout; a man is peering at a map board in the middle of the photograph. Note the date of construction on the sign over the door. (undated, Courtesy of Los Alamos Historical Society Archives)

The 1926 inspector suggested eliminating Guaje and Bearhead Lookouts and developing St. Peter’s Dome in their place. The 1927 Fire Plan proposed developing Puye Lookout as well and abandoning Guaje in 1928. The Forest was already sporadically staffing St. Peter’s Dome and planned to build a lookout cabin there, but the Dome and Puye developments were delayed until about 1931. Guaje was finally abandoned that year and its reference marker was removed in 1932. Guaje is shown as a lookout on maps from 1914 through 1933. The cabin still stood in 1936, but was gone by 1948. After LANL took over fire responsibility in the area in 1943, AEC security guards patrolled by horseback in the Guaje area, turning in any fires spotted.²²

In 2014, the cabin site was located and bits of lightning protection, plate glass, iron, sheet metal, a telephone grounding rod and tin cans were found. Remains of the telephone line can be traced despite the lasting effects of the Cerro Grande Fire, which burned intensely through the area in 2000.

Lake (Penitente) Peak

T. 18 N., R. 11 E., sec. 10

This is shown as a lookout on maps from 1918 through 1923. Penitente is not named on these maps; instead the two separate Peaks are drawn together as one massif labeled Lake Peak, the name the Forest used for the Lookout. Probably the actual lookout site was on what is today called Penitente. The telephone line ran up the ridge from Puerto Nambe to the summit of Penitente, but no line or structure remains have been found on Lake Peak.

The Lake Peak Trail was completed on September 30, 1915, running up Santa Fe Canyon to the summit of Penitente, and the Lookout was first staffed in the fall of 1915. On October 31, Jesse Nusbaum rode a motorcycle up the new trail. Nusbaum was the first to use the Forest Service telephone which had been connected only one hour before his arrival. “A fire guard was found on the job in the lookout station on the crest of the peak, as the Pecos forest is extremely dry.” Figure 48 shows Nusbaum next to a rock structure on the Penitente summit, probably the “lookout station.” The lookout likely took the photograph.²³

In 1916 the Forest built the Lake Peak Spur Trail from Penitente to the summit of Lake Peak to facilitate patrols between the two summits. Harold Walker hiked from Puerto Nambe to Lake Peak in 1934, following “the old telephone line to the remains of the rock shelter used as a fire lookout years ago on the summit of Penitente Peak.” The shelter ruin still exists, with a piece of telephone line imbedded in its lower walls.²⁴

Through 1916 the lookout stayed in a tent below the Peak, but by 1918 Tesuque Ranger John Johnson had chinked the new “Lake Peak cabin” near Santa Fe Lake (Figure 49). The lookout stayed at this cabin and hiked or rode up to either or both Peaks. A fine trail from this cabin to Penitente, used by Nusbaum in 1915, was still evident in 2014.²⁵

Lake Peak was one of the early high point lookouts that proved inefficient. Fog and haze often obscured the view, and snowpack generally delayed staffing during the early spring, which was fire season in the low country. Lake Peak couldn't be reached through the snow during the bad spring fires of 1916. A 1921 inspector said “high lookouts like this one are not nearly as successful as lower secondary lookouts.” In June 1920, Ranger Leonard Blodgett tried to repair the telephone line to Lake Peak, traveling through a blizzard. The snow was almost 20 feet deep, covering the telephone poles! By 1925 the Forest had abandoned Lake Peak Lookout along with the other high point lookouts.²⁶



Figure 48. Jesse Nusbaum at Penitente Peak Lookout (October 31, 1915, Courtesy of Palace of the Governors Photo Archives (NMHM/DCA), negative no. 158088)

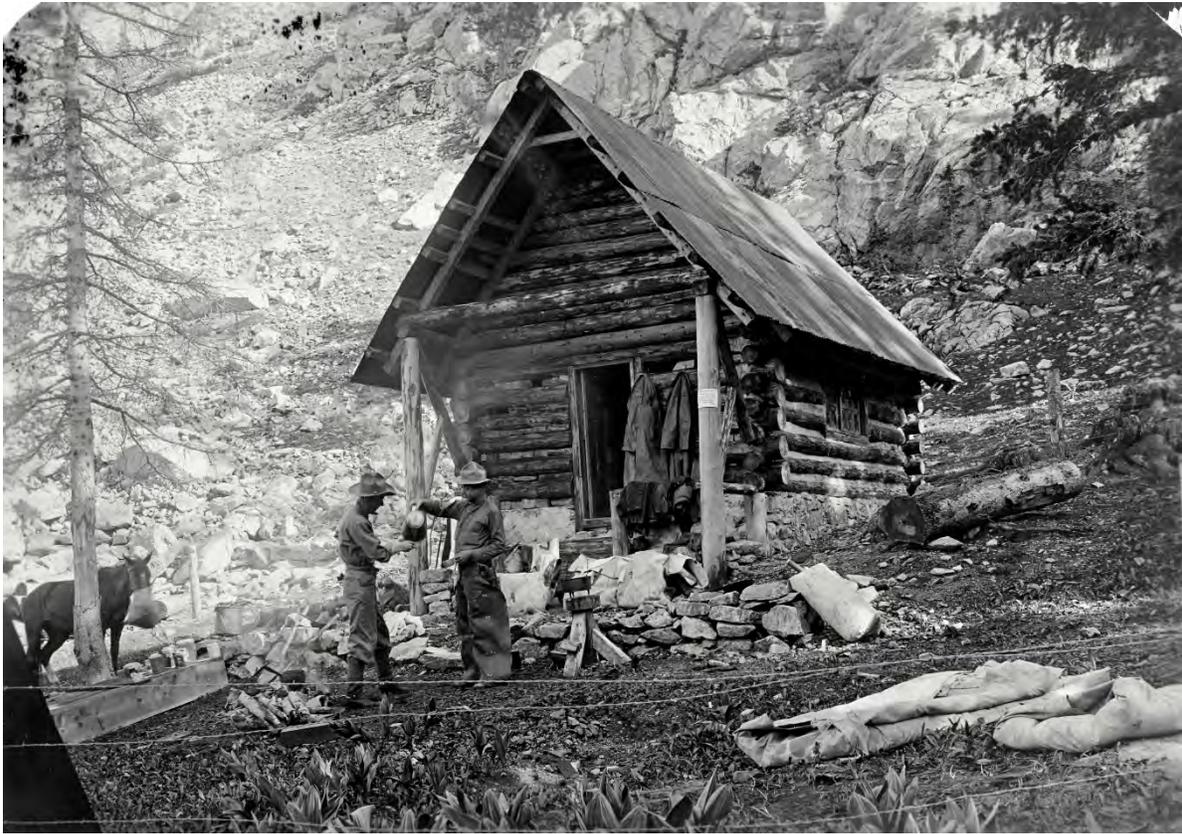


Figure 49. Lake Peak Lookout Cabin near Santa Fe Lake (undated, archeology binder 42, ACC no. 8574, SFNF SO)

Polvadera Peak

T. 21 N., R. 5 E., sec. 9

This Peak is located within a land grant that was obtained by the Forest in 1937. Although there is a lookout symbol at this spot on maps from 1941 through 1950, references to Polvadera Lookout almost certainly apply instead to Tree 73 Lookout, three miles north. That is the assumption followed in this study. In 1938 the Forest made a seen-area map from Tree 73, but not from Polvadera Peak. A few old boards, nails, and telephone batteries were found during a 2014 visit to the Peak, and trees mostly obscured the view. Perhaps the Forest tried this site as a lookout but Tree 73 proved more satisfactory.²⁷

Rinconada T. 20 N., R. 11 E., sec. 1 and

The Dome T. 20 N., R. 12 E., sec. 7

The high ridge between the village of Truchas and Truchas Peak served as an early patrol beat, and these two lookout points are located along it. In 1917, 17-year-old Lorin Brown was hired as a “trail rider and lookout”

based at the Borrego Ranger Station, and rode to these points. In 1918, Tesuque Ranger Johnson listed the work that needed to be done along this beat:

The Dome should by all means be connected by telephone or a new system put in effect. The trail from Borrego to Rinconada is bad, too steep, needs cleaning and brushing out from Rinconada to Dome about 2 miles...It takes a lookout or patrol man 2 and 1/2 hours to ride from Borrego to Rinconada and 1 hour from here to Dome, very little is seen of the surrounding country until either of these high points are reached. From the Rinconada the Rio Medio country cannot be seen. This is a very poor patrol route and a man is helpless if he discovers a large fire. No telephone communication and a long ride to Borrego. A tower is needed on Dome. 30 feet.²⁸

In 1918 the lookout man cleared the trail between Borrego Ranger Station and Dome, but the Forest never built a telephone line there. The 1922 construction of a lookout tower in Truchas reduced the need for these points, and they are high enough that access in the spring would sometimes be blocked by snowdrifts. They are shown as lookout points on maps from 1915 through 1926, and Rinconada was marked as a “proposed lookout” on a 1925 triangulation map, but they were abandoned soon thereafter. This Dome is not to be confused with St. Peter’s Dome Lookout on the Jemez District.²⁹

In 2016 the patrol trail ran through thick forest providing few views, and no lookout artifacts were found at the Dome. Rinconada could not be reached due to heavy blowdown.

Santa Fe Baldy

T. 19 N., R. 11 E., sec. 34

Santa Fe Baldy Lookout was only mentioned once, in the 1921 Inspection, and was never shown as a lookout on maps. It was one of the early high point lookouts, all of which were abandoned within a few years as they were difficult to reach through spring snow while the low country was burning.³⁰

Tree 73 / Cerro Pelon (north)

T. 22 N., R. 5 E., sec. 22

This point is within the same land grant as Polvadera Peak, obtained by the Forest in 1937. The label “Tree 73” has appeared on maps since 1927. Similar “tree” labels are shown on maps at a few west-side high points, and might suggest their use as lookout or patrol points. Although Tree 73 is much lower than nearby Polvadera and Chicoma Peaks, it has better views and easier access. This lookout site was also called Cerro Pelon and Polvadera Lookout. A 1946 fire inspection mentions “Polvadera (Tree 73) Lookout,” and all references to Polvadera Lookout likely refer to Tree 73. This site should not be confused with another Cerro Pelon Lookout on the Coyote District near the northwest corner of Valles Caldera.³¹

Before the Forest built Clara Peak Lookout in 1951, the Polvadera and South Lobato Grants were mostly blind to any lookouts. To remedy this, in 1939 the Forest and SCS made a cooperative agreement to construct a lookout at Tree 73 and build a telephone line to it from Santa Clara Canyon. The Forest made a seen-area map that year, and put a map board on the summit (Figure 50). Tree 73 was initially considered a primary lookout, and it communicated by radio until the telephone line was completed in 1941. It was listed in the Forest's 1942 Telephone Directory and 1940 Fire Plan as Polvadera Lookout. Residents of the nearby settlements of Polvadera, Vallecito, and Rechuelas worked as patrolmen and lookouts. Although staffed by Forest employees, Tree 73 was of value mainly to SCS lands.³²



Figure 50. Map board pedestal at Tree 73 Lookout (2014, author)

In 1940 the Forest proposed building a lookout structure and other improvements at an estimated cost of 4,000 dollars, but the cooperators could not afford this expense and nothing was built. Nonetheless, the Forest staffed “Polvadera (Tree 73) Lookout” in moderate to extreme fire conditions from 1940 until aerial observation was started in the late 1940s. In 1946, Tree 73 was reported to have “no improvements of any sort,” and in 1947 construction of a ground house, latrine, accessory building, corral and cistern was recommended. With few tall trees on the summit, a tower was not required for a good view.³³

By 1946 the Forest was considering abandoning Tree 73 once Indian/Clara Peak Lookout was established, though in 1948 it was staffed once fire danger reached moderate. The Forest supposedly discontinued Tree 73 in 1950 as a result of establishing Encino and Clara Peak Lookouts, but patrolmen based out of the old Polvadera guard station continued to report fires from Tree 73 into the early 1960s. It is shown as a lookout on maps only briefly, from 1946 through 1950.³⁴



Figure 51. Telephone box at Tree 73 Lookout (2014, author)

Eusebio Lopez served as the Tree 73 lookout and patrolman in the 1960s, traveling on horseback or occasionally on foot from his home in the nearby community of Polvadera. His young son, Joe, sometimes joined him. Lopez carried an alidade to use with the map board, as well as a big, heavy radio that he turned on at certain times of the day to make reports. He visited Tree 73 just for the day unless there was a fire, in which case he might stay overnight in a tent or possibly a simple wooden structure. Poles on the Tree 73 summit supported antennas.³⁵

In 2014 the telephone box (Figure 51), map board (Figure 50), and antenna pole were found, all of which had deteriorated considerably since a 2007 visit to the site. The old telephone line has been traced from the south.

Water Canyon T. 19 N., R. 5 E., sec. 36

In 1938, the Forest made a seen-area map from “Water Canyon Proposed Site.” This map has not been found, and the location of the site is unconfirmed. In October 1939, the Frijoles CCC Camp in Bandelier National Monument was moved to the present-day junction of Highways 4 and 501 outside Los Alamos. This Camp, NP-4, was turned over to the Forest in June 1941, and most enrollees remained. The CCC sometimes built small, simple lookouts close to its camps for easy staffing. Remains of a small structure are located on a point on Forest land above this Camp. They include concrete footings for 4- by 4-inch posts, bits of lumber, broken panes of glass, small pieces of fiber cement siding, chunks of grooved tile, a small dump of old cans, guy wire and a telephone insulator in a tree. Views southeast from this point are expansive, especially into much of Bandelier, and views east would be excellent above the trees. The site lies just above the old road and near the 1938 telephone line. This was probably a lookout built by the enrollees while the camp was occupied from 1939 to 1942, though it was never shown on any Forest maps. The 2000 Cerro Grande Fire partially burned the site.³⁶

¹ Memorandum from L.F. Hamilton, February 14, 1951, NARA, A2/164.

² Memorandum from L.F. Hamilton, February 14, 1951, NARA, A2/164; 1927 Plan and Progress, NARA, 2/77-78; 1928 Plan, NARA, 2/86; 1948 GII, NARA, 5/9; 1946 Fire Inspection, NARA, 4/134; 1948 Plan and Progress, NARA, 2/227-228; 1949 Plan and Progress, NARA, 2/200-201.

³ Memorandum from L.F. Hamilton, February 14, 1951, NARA, A2/164; 1939 Plan and Progress, NARA, 2/170-171; 1941 Land Management Plan for Northern New Mexico Grant Lands Project, NARA, A4/107; 1941 Clarke-McNary Law Inspection, NARA, 4/117.

⁴ Memorandum from L.F. Hamilton, February 14, 1951, NARA, A2/164; Augustin Garcia, information via personal communication with Randy Garcia, summer 2015.

⁵ Memorandum from L.F. Hamilton, February 14, 1951, NARA, A2/164; 1949 Plan and Progress, NARA, 2/200-201; Memorandums from: Forest Supervisor, February 1, 1951, NARA, A2/163; Assistant Regional Forester, April 3, 1951, NARA, A2/162.

⁶ List of Lookouts, 1921 through 1926, SFNF SO, Dispatch/156-160; 1923 Aldo Leopold Inspection, SFNF SO; Seen-Area Map Atlas, SFNF SO, Dispatch/107; Letter from Forest Supervisor, January 30, 1925, SFNF SO, Dispatch/133.

⁷ 1914 Fire Map of Pecos National Forest; Johnson Work Diaries.

⁸ Memorandum from Regional Forester, October 4, 1957, NARA, A2/27; 1957 Fire Inspection, Carson NF, NARA, A2/51; 1961 Fire Inspection, NARA, 5/250,252,265,266; Memorandums from: Forest Supervisor, September 18, 1962, NARA, A4/235; C.B. Zamora, September 18, 1962, NARA, A4/245; Forest Supervisor, May 21, 1963, NARA, A4/76; Forest Supervisor, June 25, 1963, NARA, A4/361-362; Forest Supervisor, July 25, 1963, NARA, A4/74; Assistant Regional Forester, September 18, 1963, NARA, A4/87.

⁹ *Jemez Forest Ranger*, November 1911, SFNF SO.

¹⁰ 1913 Jemez NF Fire Plan, NARA, A3/239.

¹¹ 1913 Jemez NF Fire Plan, NARA, A3/247; Dependent Resurvey, 4/9/1915, DM ID 88321, Supplemental Plat, 5/29/1923 and 6/18/1923, DM ID 88323, Dependent Resurvey, 5/17/1926 and 10/29/1926, DM ID 88325, General Land Office Records, <http://www.glorerecords.blm.gov>; Solomon Lovato, interview.

¹² John D. Wirth and Linda Harvey Aldrich, *Los Alamos: The Ranch School Years, 1917-1943* (Albuquerque: University of New Mexico Press, 2003), 143; Lawrence S. Hitchcock, 1922 Camp Diary, Lawrence S. Hitchcock collection, Los Alamos Historical Museum Archives, New Mexico State Library, Santa Fe, NM; Supplemental Plat, 5/29/1923 and 6/18/1923, DM ID 88323, General Land Office Records, <http://www.glorerecords.blm.gov>.

¹³ Seen-area Map Atlas, SFNF SO, Dispatch/71; Memorandum from L.F. Hamilton, February 14, 1951, NARA, A2/165; 1948 GII, NARA, 5/9; 1946 Fire Inspection, NARA, 4/134; 1947 Region 3 Improvement, Construction and Replacement Needs, NARA, 1/12.

¹⁴ Memorandum from L.F. Hamilton, February 14, 1951, NARA, A2/165; 1948 GII, NARA, 5/4,10; 1949 Memorandum, SFNF SO, Surveyor's Files; Seen-area Map Atlas, SFNF SO, Dispatch/33; 1948 Plan and Progress, NARA, 2/227-228; 1949 Plan and Progress, NARA, 2/200-201; 1949 Fire Plan, Tesuque District, NARA, A3/186.

¹⁵ 1951 Cooperative Fire Suppression and Detection Agreement between the Albuquerque Office of the Bureau of Indian Affairs and the Santa Fe National Forest, NARA, A2/143; Memorandum from Assistant Regional Forester, April 3, 1951, NARA, A2/162; 1951 Plan and Progress, NARA, 2/250; 1951 Engineering Inspection, NARA, 4/105; Fire Report, NARA.

¹⁶ 1956 Detection Plan, NARA, A4/327,342; Memorandum from Jack Crellin, October 5, 1962, NARA, A4/371; 1952 Plan and Progress, NARA, 2/258; Orlando Romero, interview; Integrated Fire Control Organization and Plan 1960, SFNF SO, Dispatch/1-6.

¹⁷ Adelires Trujillo, interview.

¹⁸ Longino Vigil, interview by author, Nambe, NM, April 18, 2015.

¹⁹ Glorieta Baldy Lookout logs, Pecos District Office; Orlando Romero, interview; Duane Archuleta, interview by author, September 8, 2015; Mike Bremer, personal communication, summer 2014; Dave Lorenz, e-mail message to author, March 17, 2016.

²⁰ 1913 Jemez NF Fire Plan, NARA, A3/239; 1922 Fire Plan, NARA, 2/15,19,21; Independent Resurvey, 11/2/1929 and 11/23/1929, DM ID 87828, General Land Office Records, <http://www.glorerecords.blm.gov>.

²¹ 1923 Aldo Leopold Inspection, SFNF SO; Seen-Area Map Atlas, SFNF SO, Dispatch/101; 1926 Inspection, NARA, 5/84; 1926 Fire Plan, NARA, 2/73; H. D. Schmeltzer, "Fire Lookout", *New Mexico*, November 1936.

²² 1926 Inspection, NARA, 5/82; 1927 Plan and Progress, NARA, 2/77-78; SFNF, *Santa Fe News Bulletin*, quoted in SDDDB, May 2, 1932, NARA, 5/338; 1932 Program, NARA, 2/125; National Geodetic Survey Data Sheet, Guaje Mountain, PID FO1678, <http://www.ngs.noaa.gov>; Jim Trehern, interview by author, Ponderosa, NM, April 2, 2015.

²³ "Nusbaum Scales Lake Peak On Motorcycle; Believed to be Altitude Record. Remarkable Test of Possibilities of Forest Service Trail", *Santa Fe New Mexican*, November 1, 1915; Southwestern District Monthly Report, November 1915, NARA, 2/9.

²⁴ Photographs of Lake Peak Trail Construction, 1916, Archeology Binder 54, SFNF SO; Elliott S. Barker, *Beatty's Cabin: Adventures in the Pecos High Country*, (Santa Fe, NM: William Gannon, 1977), 114.

²⁵ 1916 Inspection, Pecos Division, NARA, 4/270; Johnson Work Diaries.

²⁶ 1916 Inspection, Pecos Division, NARA, 4/270,284; 1921 Inspection, NARA, 4/244; SFNF, *Santa Fe News Bulletin*, quoted in SDDDB, June 23, 1920, NARA, 4/1; Letter from Forest Supervisor, January 30, 1925, SFNF SO, Dispatch/132.

²⁷ Cherie L. Scheick, ed, *A Study of Pre-Columbian and Historic Uses of the Santa Fe National Forest: Competition and Alliance in the Northern Middle Rio Grande, the Archeological and Historical Cultural Resources*. Southwestern Region Report No. 18, 2006, 331; Seen-area Map Atlas, SFNF SO, Dispatch/33.

²⁸ 1916 Inspection, NARA, 4/284; Lorin W. Brown, with Charles L. Briggs and Marta Weigle, *Hispano Folklife of New Mexico: the Lorin W. Brown Federal Writers' Project Manuscripts*, (Albuquerque : University of New Mexico Press, 1978), 10; Johnson Work Diaries.

²⁹ Johnson Work Diaries; 1923 Aldo Leopold Inspection, SFNF SO; Map on file, SFNF SO, Dispatch/114.

³⁰ 1921 Inspection, NARA, 4/244.

³¹ Scheick, 331; 1946 Fire Inspection and Progress, NARA, 4/129.

³² 1939 Plan and Progress, NARA, 2/170-171; 1941 Land Management Plan for Northern New Mexico Grant. Lands Project, NARA, A4/107,109; Seen-Area Map Atlas, SFNF SO, Dispatch/65; 1941 Fire Plan, South Lobato and Polvadera and Grants, Soil Conservation Service, NARA, A4/393; 1941 Plan and Progress, NARA, 2/184; 1942 Telephone Directory, Forest Service Lines, Jemez Division, Los Alamos Historical Society Archives; Joe Lopez, interview by author: Abiquiu, NM, July 16, 2014; Randy Garcia, personal communication, summer 2014.

³³ Letters from: Lewis J. Korn, March 20, 1940, NARA, A4/396; Regional Forester, March 14, 1940, A4/401; 1940 Plan and Progress, NARA, 2/179-180; 1940 Fire Plan, Rio Grande District, NARA, A3/171; 1941 Clarke-McNary Law Inspection, NARA, 4/117; 1946 Fire Inspection, NARA, 4/129; 1947 Region 3 Improvement, Construction and Replacement Needs, NARA, 1/12; 1944-1947 Fire Plans Rio Grande District, NARA, A3/165,162,159,156.

³⁴ 1946 Fire Inspection, NARA, 4/134; Memorandum from Forest Supervisor, February 1, 1951, A2/163; 1948 GII, NARA 5/9; 1948 Fire Plan, Tesuque District, NARA, A3/189; 1948 Plan and Progress, NARA, 2/227-228; 1949 Plan and Progress, NARA, 2/200-201; Memorandum from L.F. Hamilton, February 14, 1951, NARA, A2/164; Fire Discoveries by Lookouts, 1959-1970, SFNF SO, Dispatch/169+; Joe Lopez, interview; Randy Garcia, personal communication, summer 2014.

³⁵ Joe Lopez, interview.

³⁶ Seen-Area Map Atlas, SFNF SO, Dispatch/9; Laura Soulliere Harrison, Randall Copeland and Roger Buck, *Historic Structure Report, 1988 : CCC Buildings, Bandelier National Monument, New Mexico*, U.S. Dept. of the Interior, National Park Service, Denver Service Center, 1991, 26-27.

Jemez District

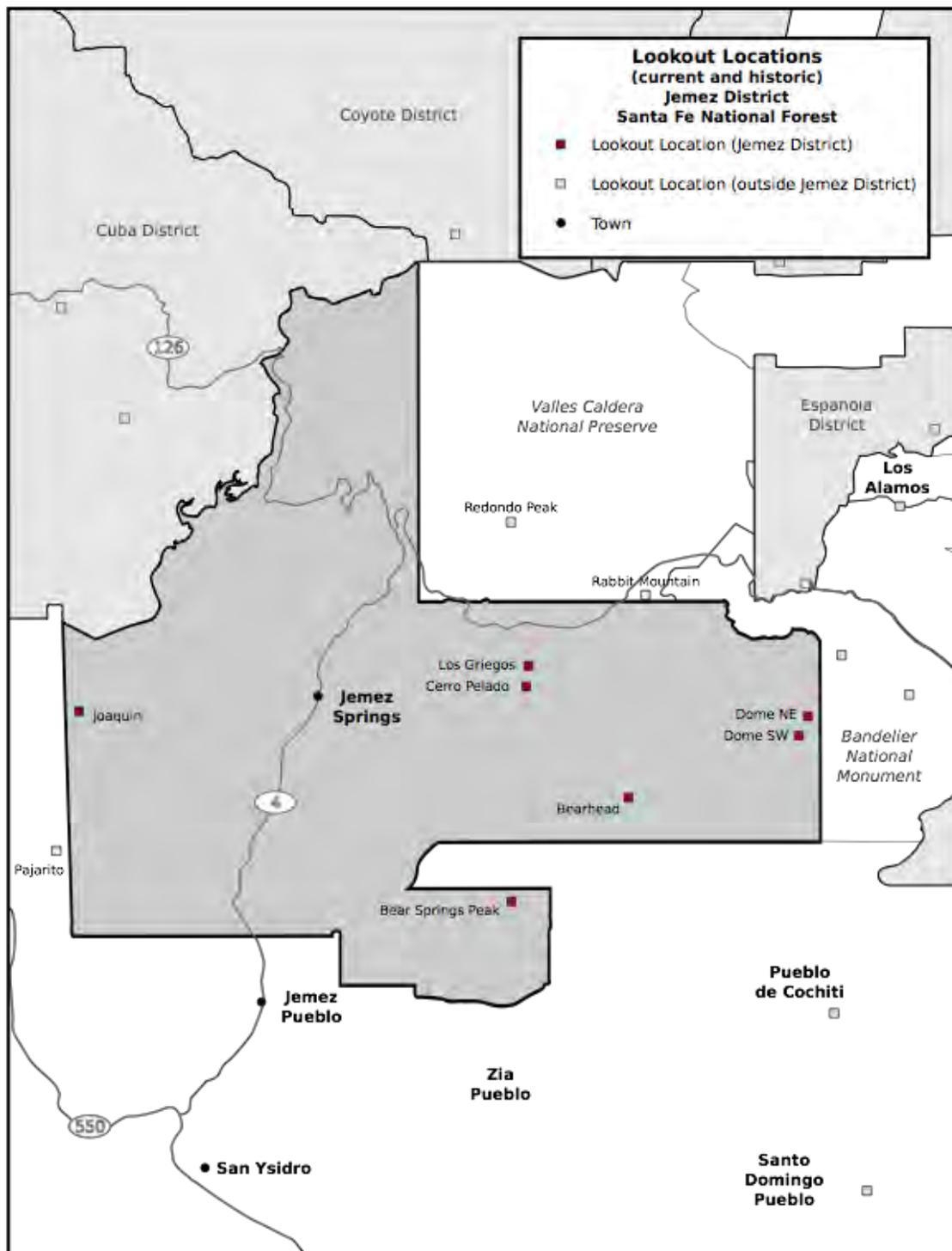


Figure 52. Jemez District Lookout Locations, current and historic

Early Patrol Routes

In 1913 today's Jemez District was divided between the Cochiti and Rio de las Vacas Districts of the Jemez National Forest. This area had the most lightning, the most fire starts, and the largest fires on that Forest, and thus needed the most protection. The fire hazard was increased by the area's heavy fuels, inaccessibility and sparse local settlements. One patrolman was based at Bearhead, riding the southern parts of the Cochiti District including the trail from Cañada to Ponderosa. Another rode the canyons now making up Bandelier National Monument and through the St. Peter's Dome area, with a third patrolman based at Cerro Pelado along with the primary lookout stationed there. Red Top Lookout viewed parts of the area, and a patrolman rode the canyon bottoms blind to the lookouts. A protractor was also mounted on the cooperators store at Domingo Station, but the owners of the Baca and San Diego Grants were not yet performing patrols. Cochiti District Ranger Daniel Carter reported success with "keeping patrolmen on lookout points rather than riding patrol."¹

Jerry Leyba of Peña Blanca was born in 1921 and remembered the Highline Patrol Trail, parts of which ran on Cochiti Mesa and in Del Norte Canyon. The Forest had little tent camps on the ridges along the Trail to house fire guards, with one on Rabbit Mountain.²

Bearhead

T. 17 N., R. 4 E., sec. 1

In 1913 Bearhead was a riding patrol point, probably with a tree lookout to improve the view from its forested summit. In 1915 the Forest erected a steel tower on Bearhead that it obtained from the U.S. Weather Bureau. This tower, still standing on the summit in 2014 (Figure 54), is stamped "Local Office Weather Bureau Santa Fe New Mexico." Its tiny wooden platform barely has room for a map board, and although the Forest reportedly installed lightning protection on it in 1926, this was probably never completed and it has none today.³



Figure 53. Cabin ruins one mile below summit of Bearhead, possibly the lookout cabin (2009, Courtesy of Janie O'Rourke)



Figure 54. Bearhead Lookout (2015, author)

The Forest regularly staffed Bearhead from 1921 through 1926, with the lookout salary partially paid from cooperative funds. In 1922, lookout Bill Brite camped in a tent on top rather than using the pasture and unkempt lookout cabin below the Peak (possibly the ruined cabin a mile below the summit shown in Figure 53). The 1922 inspector described Brite as “the type of man whose wants are very few,” which served him well at remote, primitive Bearhead Lookout. The inspector refused to climb the tower and felt the lookout wouldn’t spend much time on its unprotected top. The telephone hung on a ponderosa pine at the base of the tower. In 2014 this tree still held two wooden brackets for insulators (Figure 55).⁴

The 1922 inspector also suggested the Forest study lookout sites at Bearhead, Cerro Pelado and Redondo to decide where best to install improvements, especially cabins “on top”. The Forest evaluated these sites over the

next several years, eventually rejecting Redondo and planning to replace Bearhead with St. Peter’s Dome. Meanwhile, it constructed the Bearhead Ridge Trail in 1923. In 1924 two comprehensive seen-area maps were made, but neither included Bearhead.⁵

Moises Sandoval staffed Bearhead Lookout during the 1920s. His tent was tied to the base of the steel tower to anchor it from high winds, making it extremely hazardous in lightning storms! Though he was based at Bearhead, his job also included patrolling the many trails throughout the area. When he saw a fire he rode to it and put it out. Groceries were brought by wagon to the Administrative Cabin below Cerro Pelado and Sandoval rode his horse across the District to pick them up (Figure 56), returning to Bearhead across Paliza Canyon or through Peralta Canyon past Bear Jump.⁶

In 1927 the Forest proposed the replacement of Bearhead and Guaje Lookouts with St. Peter’s Dome and Puye, respectively. Although cabin construction at Dome was delayed, enough lookout development had occurred at Puye by 1928 that Bearhead was



Figure 55. Telephone tree at Bearhead Lookout, with wooden brackets for glass insulators (2015, author)

abandoned. Sandoval felt its high lightning hazard was the reason for its closure. The Las Conchas Fire burned through this area in 2011, but the tower survived and still stands in a partially burnt forest. Bearhead Lookout is shown on maps from 1914 through 1933.⁷

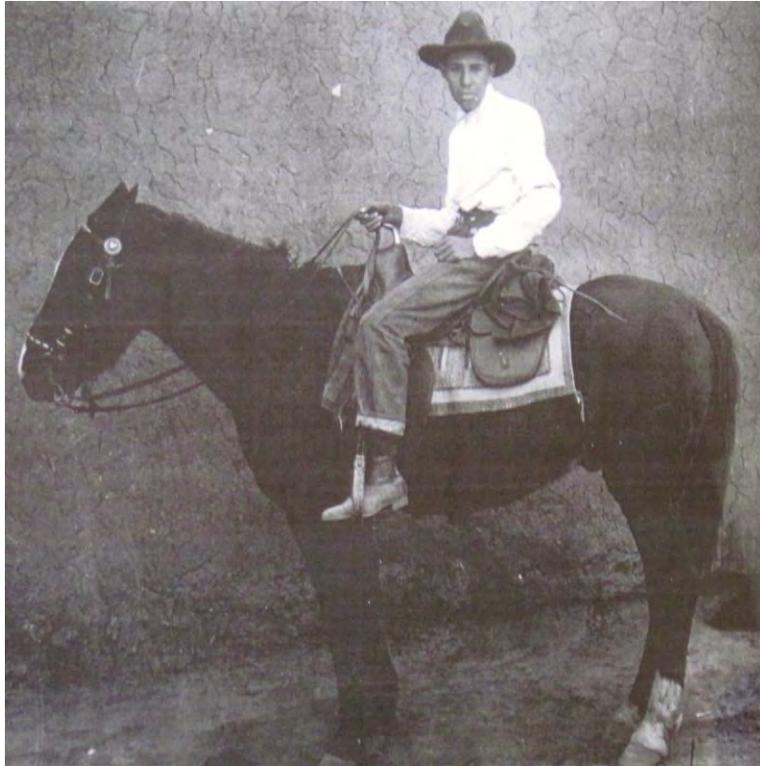


Figure 56. Moises Sandoval on his horse, possibly the one he rode while serving as Bearhead Lookout (c.1920s, Courtesy of Gilbert Sandoval)

Bear Springs Peak

T. 17 N., R. 4 E., sec. 30

An early patrol beat ran from Ponderosa to Lookout Park, where it joined a road to Cañada, and a telephone line later followed this route. Bear Springs Peak and other high points along it were never marked on maps as lookouts, but patrolmen visited them to look for smokes. Despite its name, Lookout Park was a scenic overlook rather than a fire lookout.⁸

Florencio Waquie was the fire guard at the Bear Springs Administrative Cabin (Figure 57) in the late 1950s and early 1960s. His son Pat spent three summers with him, and the rest of the family joined them on some weekends. Pat, about 9 years old, helped his father with much of the fire guard work. On weekday afternoons they hiked to the top of Bear Springs Peak and watched for fires for four or five hours. There was no structure on the summit. Waquie had binoculars, a map he spread on a rock and a big, heavy radio to call in smokes. Sometimes he went to

a fire he'd reported, occasionally for several days and nights. Pat waited alone at the cabin, "not too fun at midnight" for a young boy. Pat saw many bears during those years, of all colors, with the blonde or yellow ones the most striking. He once saw an entire family of blonde bears. They were especially prevalent in Quacamalla and Hondo Canyons. Sometimes bears came right into the yard of the cabin.⁹



Figure 57. Bear Springs Administrative (scaler's) Cabin (1952 Gil, NARA, 5/154)

The cabin contained a crank telephone, and maintaining the lines was one of their duties. They checked the lines every day, and Waquie fixed breaks due to weather or downed trees. He used climbing spurs and a belt to ascend trees for repairing the line. No time was wasted coming back out of a tree; Waquie wrapped a piece of hose around a branch and quickly rappelled down. Sometimes he carried the radio to the top of a tree in order to get better reception. If the reception was still poor, they hiked to the next high point and tried again. Waquie and his coworkers, Lewis Casiketo, Barnabe Romero, and Joe Bacca, spelled each other on jobs. Bear Springs patrols were ongoing until at least the late 1970s.¹⁰

Cerro Pelado T. 18 N., R. 4 E., sec. 20

This is the only lookout on the Jemez District consistently shown on maps from 1913 to the present. It has turned in the most smoke reports of all lookouts on the Forest and is still regularly staffed. In 1913 Cerro Pelado was a primary lookout on the Jemez National Forest. The lookout man remained on the peak "at all times" and received a monthly salary of 50 dollars. A patrolman was also stationed at Cerro Pelado to respond to fires and do trail work, getting a higher salary of 75 dollars as he provided his own horse. There was a telephone on the summit, and the Ranger recommended installing map boards at two viewpoints about a quarter mile apart. He also suggested putting a shelter tent on top, since the lookout cabin and pasture were one mile downslope to the west.¹¹

Fire guard Pedro (Pete) Sandoval, Moises Sandoval's uncle, built this log lookout cabin (Figure 58) by 1912 and served as the first Cerro Pelado lookout. The cabin and pasture cost 325 dollars to construct. From this cabin the lookout walked or rode the mile to the summit for observations. Also called the Cerro Pelado Ranger or Administrative Cabin, it served as "a supply house for outfitting forces gathered in that vicinity," including Bearhead Lookout. The boy on horseback in Figure 58 may be Pedro Sandoval's son Simon, who later staffed Cerro Pelado for many years.¹²

When the fire inspector visited Cerro Pelado in 1922, lookout Pedro Sandoval was not there and neither the tent on top nor the cabin and pasture below looked used, with the cabin “in disorder.” Sandoval probably rode up daily from his home in nearby Vallecitos de los Indios to make observations. At that time, and into the 1960s, companies logging in Valles Caldera paid half of the Cerro Pelado lookout's salary. The Forest made a seen-area map in 1924.¹³



Figure 58. Original Lookout/Administrative Cabin on Cerro Pelado, one mile west of the summit (c.1914, A.J. Connell, USFS Southwest Region Historic Photos Online Collection)

In 1921, a new national fire policy required lookouts to live on top of their peaks, and by 1924 all lookout cabins below the summits, such as the Cerro Pelado cabin, were to be replaced with cabins on top. The Forest made studies of the best locations for such improvements. In 1922 it proposed Redondo Peak as a replacement for Cerro Pelado and Bearhead, but it decided there were “no benefits to be gained” at that time, and the idea was dropped.¹⁴

The Forest began construction of a log lookout cabin on top of Cerro Pelado in 1926, and it was completed the following year. The Fire Plan said it was to be an observatory, with windows all around for viewing. This cabin was built west of the current lookout on a rock foundation that is currently barely visible. It had few windows as it was living quarters rather than the planned observatory. The lookout visited a map board on a stump at the summit to look for smokes. Local resident Lew Caldwell said, “The Cerro Pelado Lookout was a log cabin with a dirt floor when I first saw it. It was built just off the high point and had no lightning abatement.” Lightning would hit the stovepipe and blast ashes into the cabin. The lookout obtained water from a spring in Water Canyon, near the saddle between Cerro Pelado and Los Griegos. By the 1950s this cabin was roofless and in ruins.¹⁵



Figure 59. Probable Cerro Pelado Lookout cabin built “on top” in 1926-1927, staffed in 1929 by Leo Sturdivant (1929, Leo Sturdivant, Courtesy of Joy Burrow)

Richard Wetherill was staffing Red Top Lookout in 1929 when his cousin Leo Sturdivant came for a visit, and Wetherill helped him get a job at a lookout “somewhere east of Bluebird.”

Sturdivant photographed the lookout cabin he staffed (Figure 59). A post with alidade stands in front; note its shadow. The cabin sits a little below the summit, matching the topography at the old rock foundation on Cerro Pelado mentioned above. The photograph shows almost no

vegetation, but by 1924 Cerro Pelado had been overgrazed by sheep and was much more bare, more *pelado*, than it is today. Sturdivant’s family has forgotten the name of his lookout, but recalls that his food had to be packed in by horse. Storms were terrible and frightening; once lightning knocked his telephone off the wall. None of the other log lookout cabins on the Forest in 1929 (Deadman, Red Top, Cerro Valdez, and Barillas) look exactly like this one, so this is probably the 1927 Cerro Pelado cabin. That it was not an observatory as planned was typical on the Forest then; of the four other log lookout cabins, only Red Top had enough windows to qualify as an observatory, despite regional and national policies.¹⁶

Coinciding with establishment of the first CCC camps on the Forest in 1933, the Forest Plan included rebuilding “Pelado cabin and pasture.” That summer the CCC built an L-4 ground house (Figure 60) on the very top of Cerro Pelado. As a young boy, Lew Caldwell helped his father, Lew Sr., pack supplies and construction lumber up the



Figure 60. L-4 built at Cerro Pelado by the CCC in 1933 (undated, archeology binder 23, no.4535, SFNF SO)

trail from the Administrative Cabin below the peak. The lumber was so long and the trail was so winding that the pack animals had to go off trail to climb up. One time the horses spooked and all the canned food in the pack saddles was knocked loose and rolled down the mountain. Figure 61 shows animals packing lumber for a similar job, construction of a backcountry cabin in Bandelier.¹⁷

In 1938 the Forest made a seen-area map as well as an agreement with the New Mexico Lumber Company to pay half the lookout's salary. It surveyed a road to the top that year which was built by the CCC, and Ranger Harvey Barlow drove to the Lookout in May 1939. A new toilet was installed in 1940, probably by the CCC. The 1946 facilities inspector recommended construction of a 30-foot tower, a horse shelter, and a cistern at the site, as well as better access to the Los Griegos patrol point, described below.¹⁸

Simon Sandoval, Pedro's son, staffed the Cerro Pelado L-4 for many years, throughout the 1930s and early 1940s, then again for most of the 1950s. His wife, Geralda, and son, Carlos, spent much of each season with him. The L-4 held a woodstove, a bed that made into a double, a folding cot, a table, cabinets and the Osborne firefinder in the center. Gas lanterns provided light. Carlos remembered when the lookout was hit by lightning, but the copper lightning protection kept them from being hurt. That strike only (!) scorched the north side of the Lookout where the telephone line came in, and later the Ranger had Simon repaint that area. Simon kept three of his personal horses in the large pasture at the Lookout and had no trouble gathering them when he needed them. He sometimes responded to fires that were close to the Lookout, in the Paliza, Vallecitos, and Cerro del Pino areas. Just before the monsoon rains began the family sometimes saw fireflies (*luciernagas* in Spanish) at the Lookout.¹⁹

In 1948 Ranger Leon Hill recruited two Catholic priests, Fathers James Armitage and John Buckley, to serve as the Cerro Pelado lookouts. While resting between missions at Via Coeli Monastery in Jemez Springs, they took a tour with Ranger Hill and became curious about the lookout life. "It was a happy arrangement. The priests enjoyed the opportunity for rest and meditation in the solitude of the forest, and Leon got the services of a couple of highly intelligent men, trained in self-reliance in a very tough professional field." Father Armitage described their lookout duties in a magazine article. Regular maintenance included "telephone trails to be cleared; shutters to be repaired and repainted; new stone steps up to the cab to be built; the flagpole to be painted the standard

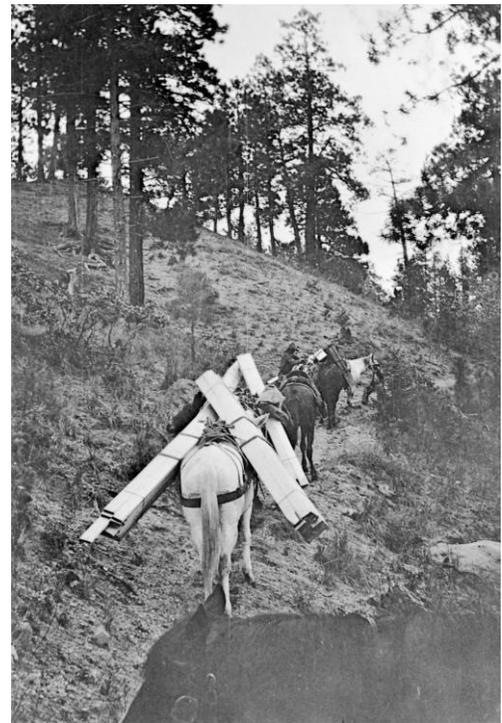


Figure 61. Pack stock brought materials to Cerro Pelado Lookout before the road was completed to the summit. (undated, BANC_3650, NPS, Bandelier National Monument, Early 20th Century Photo Archives)

ivory shade.” Another chore was “the daily fetching of four canteens of water from the spring that lies on the saddle between Cerro Pelado and its twin peak, Los Griegos.”²⁰

The first radios were installed in the early 1950s, and at night the lookouts would use them to talk with each other. The Forest finally completed a cistern on the southeast side of the Lookout in 1952, but it never worked well. In 1963, the cistern had “not been functioning for years” and was unsafe; water was hauled to the site. When the new lookout was built in 1965, a water tank was installed in its basement. State Forestry took over fire protection responsibilities on the Baca and San Diego Grants in 1961 and they paid 60 percent of the Cerro Pelado lookout’s salary.²¹

Jackie Martinez and his wife, Irene (as relief), staffed the L-4 in 1961 and 1962, living there with their 2-year-old son. Once a month they had a day off together to go down for groceries. The Lookout was furnished with a cot, woodstove, firefinder, radio and telephone. There was no electricity, running water, or insulated stool; during lightning storms they stayed on the bed. They drove down the road about a mile to a spring and gathered water in containers. One day their young son was very excited to find a cold bottle of Pepsi Cola in the spring!²²

In 1963, Cerro Pelado Lookout was one of the facilities slated for replacement under the Accelerated Public Works Program. Materials for the new structure were milled that year and arrived at the regional warehouse the following March. In 1965, the Forest replaced the L-4 with the current 14- by 14-foot steel CL-100 (R6 flat) cab on a cinder block base (Figure 62).²³



Figure 62. Current Cerro Pelado Lookout, an R6 flat CL-100. (2010, Courtesy of Janie O'Rourke)

Frank Gonzales staffed Cerro Pelado for eight seasons in the late 1960s and early 1970s. His wife, Aurora, was relief and his daughters joined him for the summer. His daughter, Annette, helped by running between Cerro Pelado and the Los Griegos patrol point to check for smokes in the blind spot. The crank telephone was still in the lookout, connected directly to the District Ranger's house. At that time State Forestry was the only agency with a reconnaissance airplane and Cerro Pelado was the only Forest lookout with a State Forestry radio, so Gonzales passed lightning strike locations to the airplane. He also had a radio for the New Mexico Timber Company which allowed him to coordinate between logging trucks and Forest Service vehicles on Forest Road 376 through the Gilman Tunnel. This helped to avoid collisions. The loggers assisted the Forest by reporting fires to Cerro Pelado. When lightning began striking close to the Lookout, Gonzales would go out of service, turn off the radio, and sit on the bed. He could see lightning dance on the pipes, and once it hit the radio.²⁴

Ice always broke some lookout windows over the winter since there were no shutters. Gonzales' first job in the spring was to drive to Albuquerque and get new glass, hauling it back to the Lookout on a rack he had made for his truck. One year he was at the Lookout early in the season when a big storm moved in. By the next morning, 7 feet of snow had fallen, and his truck was completely buried. He was stuck there for several days until Gilbert Sandoval came up on a snowmobile to rescue him. In the late 1960s, Gonzales still walked to the spring in Water Canyon to collect water, but in the 1970s the Forest began to truck water to the tank in the basement of the Lookout.

Gonzales described the use of "signal trees" marked with blazes. The Fire Management Officers for the Jemez and Cuba Districts, Moises Sandoval and Herman Atencio respectively, used mirror flashes from these signal trees to show the lookout various locations around the Districts. The lookout gave them the azimuth reading and they marked it on the tree.

One night it was raining hard, and Gonzales heard a small plane headed right for the Lookout. He took a lantern outside, and the plane moved a bit away and flew right over his truck, just missing the mountaintop. The next morning Gonzales heard a report of a plane crash in the Sangre de Cristo Mountains.

His wife, Aurora, loved being up at the lookout with her family. They picked strawberries and wildflowers, and she used a washboard to do laundry. She remembered the first time her husband went to Los Alamos for groceries, leaving her at the lookout with her daughters. That night it got very dark. She couldn't understand what had happened to the lights she was used to seeing. It turned out that clouds had rolled in and obscured everything.

Fred Swetnam, Jemez District Ranger in the late 1960s and early 1970s, preferred to talk to Cerro Pelado on the telephone rather than over the radio. The crank telephone in the lookout was on the same party line as the whole village of Jemez Springs. When the lookout called with a smoke, everyone picked up their telephone, reducing the

volume of the conversation considerably. Swetnam had to tell them all to get off the line so he could hear the smoke report. Radio communication existed by the 1940s but was never very reliable, and there were no repeaters. When the radio system improved, the Forest planned to remove all of the telephone lines. But Swetnam insisted on keeping the line to Cerro Pelado—it was one of the last on the Forest.²⁵

Los Griegos

T. 18 N., R. 4 E., sec. 18

This patrol point is located about a mile north of Cerro Pelado and provides views into areas blind to that Lookout. It is shown on maps from 1936 through 1961. A trail, now overgrown, runs from Cerro Pelado across the saddle to this point. In 1925 the Forest made a seen-area map from here, labelled North Cerro Pelado, and in May 1932 Richard Wetherill and a coworker installed a telephone line, telephone and protractor. The weather was very stormy and they “had to wade thru ten feet of snow on [the] north side of Cerro Pelado and had to work in a foot of fresh snow all day. We suffered all day from the cold and wet.” Remains of this line still exist, as well as the old telephone box (Figure 63).²⁶

For many years the Cerro Pelado lookout was required to patrol once or twice a day to Los Griegos during high fire danger and after thunderstorms. Before the Forest started hauling water to Cerro Pelado in the 1970s, lookouts combined these patrols with collecting water from the spring between the two peaks. During Simon Sandoval’s many years as Cerro Pelado lookout, he rode across to Los Griegos on fire patrol at 10:00 a.m. and 3:00 p.m. every day, gathering water from the spring in one gallon canteens. Jackie and Irene Martinez, Cerro Pelado lookouts in the early 1960s, were required to visit Los Griegos every afternoon. The Forest kept a horse at Cerro Pelado for riding to the point, but Martinez enjoyed walking over. During extreme fire conditions in the late 1940s and early 1950s, a “Los Griegos fireman” was based at the patrol point so the Cerro Pelado lookout could observe continuously with no break in service. The Los Griegos firefinder was a round piece of metal with a rotating azimuth ring, made by Moises Sandoval, probably in the mid-1940s. It had small holes at various azimuths but no map and was placed on a 4-foot-high stump.²⁷



Figure 63. Telephone box at Los Griegos patrol point (2014, author)

The 1960 Cerro Pelado lookout missed that year’s Conchas Fire because he failed to do the required twice-daily patrol to Los Griegos. The 1960 and 1963 inspectors recommended replacing its old firefinder, but this was probably not done, and it disappeared by the late 1970s. They also suggested constructing a road to the point for

easier access, perhaps as part of a timber sale, but it was never built. When helicopter use began in the early 1970s, the Forest discontinued the Los Griegos patrols. Lookouts sometimes hiked across, but it was no longer a job requirement.²⁸

Joaquin T. 18 N., R. 1 E., sec. 21

The San Diego Grant was always fire-prone. Beginning in 1914, the Forest tried to set up cooperative agreements with various Grant owners. These attempts failed until the early 1930s, when an agreement was finally reached with the New Mexico Lumber and Timber Company. The loggers maintained toolboxes in the Grant, one at a site named “Joaquin” in 1939. The Forest provided detection on the Grant from Cerro Pelado and Red Top Lookouts, and had a San Diego Grant patrolman.²⁹

Despite this coverage, the area had detection deficiencies—it was difficult for lookouts to differentiate between the various ridges. The Board of Review for the 1945 Cebollita Fire recommended establishing a lookout on the Grant, parts of which were then being considered for Forest acquisition. The Forest made detection studies and suggested additional lookout points including Jarocito, Flag 11, Mining Mountain and Pajarito Peak, but none were developed.³⁰



Figure 64. Turkey Lookout built by State Forestry, very similar to Joaquin Lookout (1964 GII, State Forestry Cooperative Review, NARA, A1/105)

In 1961 State Forestry assumed fire protection responsibility for the private land, ran patrols along what was called the Skyline Road (now Forest Road 558), and in 1962 started building Joaquin Lookout. Forest inspectors visited the Lookout in May 1963, evaluating it for improvement under the Accelerated Public Works Program. It was also “triangulated in” so it could provide cross bearings with Cerro Pelado and Red Top. At that time there was no cab on the tower and the Lookout was unstaffed. The inspectors thought its seen area was good, with some advantages over Red Top, but felt it would not solve the problem with ridgetop differentiation. State Forestry probably completed Joaquin Lookout later in 1962, as it was staffed by a State Fire Control Aid in 1963 and 1964.³¹

Its steel tower had many guy wires, with interior stairs to a small plywood cab with a trapdoor and a standard Osborne firefinder. The tower legs were vertical rather than pitched and

its concrete footing includes a 1962 inscription. A small quonset hut served as the living quarters, with a woodstove, bed, table and chair. No photographs have been found of Joaquin Lookout, but its facilities were very similar to those of State Forestry's Turkey Lookout, located on the Philmont Boy Scout Ranch near Cimarron, and shown in Figures 64 and 65. The State considered such facilities a quick, inexpensive way to get detection for an area, and installed them at several sites.³²



Figure 65. Turkey Lookout quonset hut built by State Forestry, very similar to Joaquin Lookout cabin (1964 GII, State Forestry Cooperative Review, NARA, A1/103)

Throughout 1964 and 1965, parts of the San Diego Grant were being progressively acquired by the Forest, and the Forest provided funding to staff Joaquin after its portion of the Grant was acquired. The Forest Manning Guide showed Joaquin staffed with a guard in 1965, and with a lookout fireman in 1966, along with a pencilled note “state position until 9/1/66.” During the 1966 hunting season, Joaquin was to be staffed rather than St. Peter’s Dome Lookout. Joaquin reported fires to the Forest in 1965 and 1966.³³

Frank Gonzales staffed Joaquin Lookout for State Forestry in 1966. He only had one radio which he used to communicate with the State’s reconnaissance airplane and the State base in Magdalena. He could also communicate with Cerro Pelado, the only Forest lookout with a State radio. Gonzales used a Jeep to fetch water from Joaquin Canyon. State Forestry dropped him food from their airplane, as he didn’t get days off to resupply. He noted, “When there was a storm, the cab would move around.”³⁴

Most Grant acquisition was complete by 1966, and the anticipated Program of Work for 1968 included construction of a 54-foot steel tower with a 14- by 14-foot cab at “Joaquin Mesa” for 19,000 dollars. The Forest completed a site survey (that has not been found), and foundation tests were to be finished by June 1968 when bids would be solicited. Initially the Forest may have planned to construct Joaquin under the Accelerated Public Works Program. However, that program ended before 1968, which probably derailed Joaquin’s construction. Perhaps Forest management decided Joaquin would cost more to develop than it would be worth; the 1963 inspectors had said as much. For whatever reasons, the Forest never built the new lookout.³⁵

By 1967 Joaquin was not listed as a reporting lookout. The tower and associated quarters were demolished in the late 1960s, with tower remains still on the ground in 1970. In 2014 only foundations remained. It is shown on Forest Service maps from 1969 through 1976.³⁶

These two peaks are within a mile of each other and have both served as lookout points, sometimes separately and sometimes simultaneously. Until the mid-1930s, the northeastern point (8335), was called St. Peter's Dome. It was the original lookout point due to its proximity to the trail and telephone line linking Frijoles to Bland, and was marked as a lookout on maps from 1914 through 1941. The southwestern point, where the existing facility stands, was originally called St. Paul's Dome. This location is shown as a lookout on maps from 1925 to the present. To further confuse the issue, around 1938 the names were switched, and the southwestern (current) lookout point has since been called St. Peter's Dome. Additionally, both points have sometimes been called San Miguel Lookout. Now the current lookout is generally just called Dome (not to be confused with the Dome on the Española District). For simplicity, these two points are marked as Dome NE (northeast point) and Dome SW (southwest point) on the Jemez District map and in Figure 12 in the Introduction.³⁷

In 1913 the Jemez National Forest based a patrolman "in the vicinity of Saint Peter's Dome" (the northeast point) to respond to fires and maintain trails from that area into what is now Bandelier. Cochiti District Ranger Daniel Carter had good results that year "by keeping patrolmen on lookout points rather than riding patrol," so the Dome patrolman probably spent a fair amount of time on the northeast point.³⁸

Homer Pickens mentioned the San Miguel Lookout "near Bland" on the label for a 1922 photograph. In 1924 the Forest made seen-area maps for both the St. Peter's and St. Paul's Dome Lookouts and completed a trail from Cañada to Capulin Canyon. It hoped to have lookout development there completed by the following year, which would allow Bearhead Lookout to be abandoned. A 1925 map showed a proposed lookout at the northeast point and a "camp protective man" or patrolman based at the southwest point. However, a 1925 letter detailing Forest lookout development called for a cabin and pasture to be built a half mile from the top, with the southwestern point as the main lookout and the one northeast as a patrol point. This conflicted with national policy of the time that mandated lookout cabins to be built "on top." Development of this Lookout was slowed by proposals to create Cliff Cities National Park, which would have included the Dome area. Forest management was loath to invest in improvements that might be transferred to another agency. A 1925 letter concerning this proposal mentioned "the new St. Peter's Dome lookout," but cabin construction there was deferred on account of "National Park agitation."³⁹

The 1926 inspector suggested eliminating Guaje and Bearhead Lookouts and building a lookout cabin on St. Peter's Dome, with construction costs coming from cooperative funds. He proposed a cabin "on top" that would be suitable as an observatory (with windows all around). The 1927 Fire Plan included "relocation" of the St. Peter's Dome lookout and telephone, perhaps from the northeast point to the southwest point. By early 1928, the

Forest had connected Dome's telephone to the Frijoles Ranger Station and had almost completed the trail system. A cabin was to be built by that spring, but once again it was delayed. That year, Assistant District Forester Cheney toured the area to evaluate it for National Park status. He "rode to the St. Peter's and St. Paul's lookout" as part of his trip.⁴⁰

H. D. Schmeltzer was the Dome lookout in 1930 and lived in a tent in the saddle below the southwest peak. The

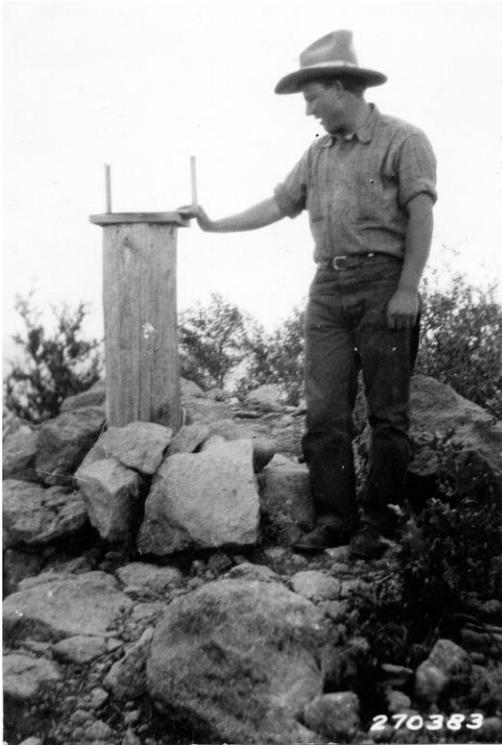


Figure 66. St. Peter's Dome Lookout map board. The man may be lookout D.B. Mitchell. (1932 Inspection, NARA, 5/40)

only improvements on that peak were a map board (Figure 66) and a telephone. The ranger had warned him that "a lookout would be called on to do all sorts of work. He might have to jump on his horse (which should always be kept ready for emergencies) and, armed with fire-fighting tools and hardtack chuck, make haste to a fire and put it out himself. There were also cooking, fence-building, work on the telephone lines, trail building, and alas, horse-shoeing."⁴¹

Schmeltzer was expected to be on the peak during most daylight hours, but one day he was lunching down at his tent when he spotted nearby smoke. He ran up the hill, located the fire and called the ranger, who berated him for taking so long, saying "Guaje lookout reported that fire ten minutes ago and it's right under your nose."

Another humbling moment in the life of a lookout! At the end of Schmeltzer's 1930 season, he "blasted off the tip of the

[southwestern] peak with high explosives in preparation for a cabin's foundation."

By the fall of 1931, the Forest had extended the old wagon road down the mesa to the saddle between the two lookout points, and had finally completed a log cabin near the top of the southwestern peak (Figure 67). This cabin was just west of the current lookout where today's road now turns to go down the hill. The 1932 inspector chided the Forest for building a lookout cabin with few windows, saying "a serious mistake was made in not following Regional and Service practice, which calls for regular glassed-in lookout houses." This non-observatory cabin style was typical of the log lookout cabins built on the Forest in the 1920s, though Dome was the only one with a porch.⁴²

The *Santa Fe News Bulletin* reported that "lightning hit the St. Peters Dome cabin 5 times this summer [of 1932]. Lookoutmen reported it came in with a noise like a shotgun—no damage except to clothes of Lookout Mitchell—



Figure 67. First lookout cabin on St. Peter's Dome. The Forest was chided for not putting enough windows in this lookout. (1932 Inspection, NARA, 5/41)

and they weren't burnt. Guess our lightning installation works." The Forest was developing a spring just below the peak so the lookout wouldn't have to travel all the way to Capulin Canyon for water, but the work was never completed. When the National Park Service took over management of Bandelier National Monument in 1932, it was St. Peter's Dome Lookout that viewed their lands, and in 1933 Bandelier suggested sharing costs of running the Dome with the Forest.⁴³

In 1936, the Forest planned construction of an L-4 lookout house on a stone basement there, but it was the fall of 1940 when it was finally built by the CCC. Figure 68 shows it during construction. A blizzard in November trapped the building crew and Supervisor McGowan at the site without food. As the Forest's heavy equipment was far away at Taos and Sandia, the Bandelier tractor was sent to rescue them, but it took a full day and night to get to the Dome. Worried at the delay, Bandelier officials also had the snowplow and a truck from the Los Alamos Ranch School start in. The rescue was a success, and Bandelier Custodian Thomas praised his men, saying "Thirty-eight hours on an open tractor, shoveling and chopping—4 foot drifts and zero weather... McGowan and his five men were in pretty bad shape, but I think a little rest and food will put them on their feet again."⁴⁴



Figure 68. Construction of the L-4 on St. Peter's Dome by the CCC in 1940 (1940, Improvement and Construction Detail Pictures, SMC, RO coll bldg folio/73)

Once the L-4 was completed, the old log cabin was razed. The lookout no longer had to go to the outside map board for observations, and the northeast patrol point was abandoned about then. Lookouts still hauled water three miles from Capulin Canyon by horse. The Forest listed a water cistern/catchment system as an ongoing need throughout the 1940s and into the 1950s, but funding was never available. Some version of a system was finally completed in 1953, but it didn't work. 1940 plans also called for construction of a garage/horse shelter/storage shed at the road's end a half mile below the lookout, but it was not built that year. By 1945 a "small forest service cabin" had been placed there, later followed by other small buildings. A scaler's cabin from Bear Springs was the last building there; it was installed in 1951 and was sold and removed in June 1961.⁴⁵

In 1946, St. Peter's Dome was the only lookout on the Forest to have an Osborne firefinder. The latrine was termed "very poor" and "a casual affair," and in 1948 the Forest built a new one. The 1956 Detection Plan noted Dome Lookout's importance to Bandelier and Los Alamos and suggested completing a road to the top. It also recommended using husband and wife lookout teams here so that the lookout fireman husband could quickly ride into the high-risk Capulin Canyon area to fight fires while his wife maintained detection. Figure 69 shows Cristino and Amalia Tafoya from Cochiti, who staffed the Dome Lookout from 1944 through at least 1958.⁴⁶



Figure 69. Cristino and Amalia Tafoya at St. Peter's Dome Lookout, which they staffed from about 1942 to the early 1960s. (Aug 19, 1951, BANC_3405A, NPS, Bandelier National Monument, Early 20th Century Photo Archives)

The 1958 inspector reported that St. Peter's Dome now had both Forest and Bandelier radios, and the Forest was no longer maintaining the telephone line. He recommended going one season without using the telephone, and

then removing the line. This was done within the year. When State Forestry took over fire protection responsibilities on the Baca and San Diego Grants in 1961, they paid 20 percent of the Dome lookout's salary.⁴⁷

By 1956 the Forest was discussing replacement of the L-4, but needed a road to the top in order to proceed. In the early 1960s, the road was extended from the saddle to the top of the peak as part of the Dome timber sale. In 1963, the top Forest priority under the Accelerated Public Works Program was replacing the Dome L-4 with a 14-by 14-foot steel cab with catwalk on a cinder block base. The cost was 7,000 dollars, the materials arrived at the Regional Warehouse in March of 1964, and the Forest replaced the L-4 with the current CL-100 (R6 flat) in 1965 (Figure 70).⁴⁸

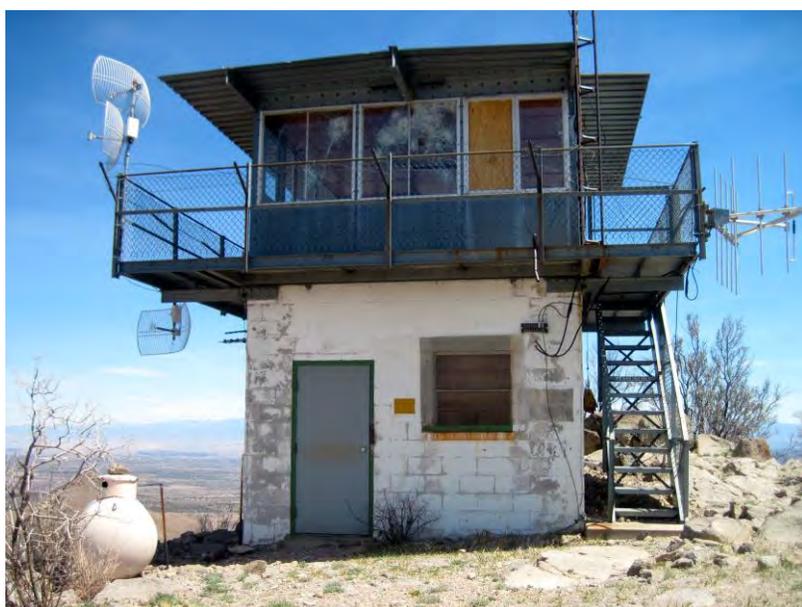


Figure 70. Current CL-100 (R6 flat) St. Peter's Dome Lookout; note vandalism. (2014, author)

Lynda Holliday and her husband staffed Dome Lookout in 1966. Lightning struck the tower several times that summer: her hair would stand on end, followed by blinding light and a huge BANG! They got on the bunks or wooden stool and tried to stay away from metal as instructed, which was hard to do in a tiny room filled with metal objects. A water tank sat in the Lookout basement, which the Forest filled at the beginning of the season. Once it had emptied, the lookouts had to haul all their water from the Cañada Ranger Station in milk cans and learned to be very conservative with it, taking “bird baths.”⁴⁹

The outhouse was perched on the cliff's edge and one day a crew arrived from Santa Fe to dynamite a new hole for it. They dug down to bedrock, placed the dynamite, put bed springs over the charge, and tied them down with bungee cord. When they blew the dynamite, the flying rocks were contained by the bedsprings.

Lookouts also had to share their home with rattlesnakes. Linda Robinson, the 1985 Dome lookout, was advised to throw pebbles as advance warning when going to the outhouse and to watch carefully around her vehicle tires for snakes. One day she saw her 3-year-old daughter approaching a coiled rattlesnake. Robinson ran down with her rifle, pushed her daughter away, spun around and fired at the snake. She stretched the dead rattler out across the tailgate of her truck and it hung off both sides. She shot another snake on the trail east of the lookout that was as thick as her arm.⁵⁰

Linda West experienced hordes of ladybugs when she staffed the lookout. Her children played with them; little sister threw handfuls of them at her big brother, and he stuffed them down her shirt—and ladybugs bite!⁵¹

St. Peter's Dome viewed a large area blind to Cerro Pelado Lookout, and is the only lookout with a direct view into the Santa Fe Watershed. Despite this, staffing became sporadic by the late 1980s. A number of factors contributed: the road was in poor condition, Bandelier Lookout was still staffed and saw much of the same country, the public reported fires from the Highway, and budgets were tight. Rather than placing a lookout at Dome for the entire summer, the Forest sent employees up during high fire danger and when there were fires or lightning strikes in the area.⁵²

When the Dome Fire started on April 26, 1996, the Lookout was unstaffed, but the Forest sent Engine 5 to verify that no one was there. The engine was returning on the switchbacks below the Lookout when the Fire turned around and overran it. The crew deployed fire shelters and survived, but Engine 5 was destroyed. Forty-five other firefighters deployed shelters in two nearby locations within the same hour. This Fire burned much of the vegetation in the area, an additional factor in the decline of St. Peter's Dome Lookout. The Fire also damaged the Lookout windows, but they were replaced.⁵³

With sporadic staffing, vandalism increased. Dan Key, Jemez Fire Management Officer in the late 2000s, started to refurbish the lookout. But when the Las Conchas Fire blew through the area in 2011 and reburned the snags



Figure 71. St. Peter's Dome Lookout area 10 years after the 1996 Dome Fire (2006, Courtesy of Janie O'Rourke)



Figure 72. St. Peter's Dome Lookout area 3 years after the 2011 Las Conchas Fire; compare deforestation with figure 71. (2014, author)

remaining from the Dome Fire, the area was essentially deforested and the lookout was closed for good. Figures 71 and 72 show the tower and surrounding area 10 years after the 1996 Dome Fire, and 3 years after the 2011 Las Conchas Fire, respectively. Several agencies now keep radio equipment in the lookout basement.⁵⁴

Additional Sites

In 1938, the Forest made seen-area maps from the following points: Los Griegos West, Peralta Ridge, West Bear and Ruiz Peak. None, however, were developed as lookouts. Another point called Las Conchas or Sierrita Conchas, just east of Cerro Pelado, was considered as a patrol point but seldom used as it took too long to reach.⁵⁵

To differentiate between parallel ridges, firefighters used tree lookouts in the Paliza area and on Cat, San Juan, Virgin and Holiday Mesas. In the 1960s, Cerro Pelado Lookout would give a fire location which included the nearest road, designated by color such as Red or Orange. Once in the general area, the firefighters climbed trees to pinpoint the fire, sometimes using the climbing spurs they had carried for maintaining the telephone lines. They also knew the locations of “wolfie” trees with good views.⁵⁶

In 1926, the Forest was “consider[ing] Cerro del Pino as [a] lookout.” In 1928, Assistant District Forester Cheney climbed Cerro del Pino, “from which point a good view of the western slopes and the upper Poliza (sic) Canyon could be secured,” but he didn’t mention a lookout. Locals say Cerro Pelado adequately covers that area, so an additional lookout on Cerro del Pino was not required.⁵⁷

¹ 1913 Jemez NF Fire Plan, NARA, A3/233,237,242.

² Jerry Leyba, interview by Janie O'Rourke, Peña Blanca, NM, June 13, 2010.

³ 1913 Jemez NF Fire Plan, NARA, A3/242; SDDDB, December 8, 1915, NARA, 3/212; 1926 Plan and Progress, NARA, 2/73.

⁴ Lookout Lists, SFNF SO, Dispatch/156+; 1926 Inspection, NARA, 5/82; 1922 Inspection, NARA, 4/184,188.

⁵ 1922 Inspection, NARA, 4/172; 1923 Plan and Progress, NARA, 2/27,31; 1924 Plan and Progress, NARA, 2/39; Letter from Forest Supervisor, January 30, 1925, SFNF SO, Dispatch/133; 1926 Inspection, Jemez Division, NARA, 5/82; 1927 Plan, NARA, 2/77; Seen-area Map Atlas, SFNF SO, Dispatch/99,108.

⁶ Gilbert Sandoval, interview.

⁷ 1927 Plan and Progress, NARA, 2/77; 1928 Plan, NARA, 2/86.

⁸ Gilbert Sandoval, interview.

⁹ Pat Waquie, interview by author, Jemez Pueblo, NM, June 23, 2014.

¹⁰ Carlos Sandoval, interview.

¹¹ 1956 Detection Plan, NARA, A4/343; 1913 Jemez NF Fire Plan, NARA, A3/242.

¹² 1913 Jemez NF Fire Plan, NARA, A3/243, 264; Gilbert Sandoval, interview.

¹³ 1922 Inspection, NARA, 4/187; 1924 Plan and Progress, NARA, 2/34; Seen-area Map Atlas, SFNF SO, Dispatch/108.

¹⁴ SDDDB, March 29, 1921; NARA, 4/13; SDDDB, April 4, 1922, NARA, 4/31; 1922 Inspection, NARA 4/172; 1923 Plan and Progress, NARA, 2/27.

¹⁵ 1926 Inspection, NARA, 5/84; Letter from Forest Supervisor, January 30, 1925, SFNF SO, Dispatch/132; 1926 Plan and Progress, NARA, 2/70; 1927 Plan and Progress, NARA, 2/81; interviews by author: Frank Gonzales; Gilbert Sandoval; Carlos Sandoval; Lew Caldwell, interview by Janie O'Rourke, Ponderosa, NM, January 31, 2005.

¹⁶ Joy Burrow, interview by author, Peoria, AZ, June 26, 2015; 1924 Plan and Progress, NARA, 2/42.

¹⁷ 1933 Program, NARA, 2/136; Harvey Barlow Work Diaries; Lew Caldwell, interview.

¹⁸ Seen-Area Map Atlas, SFNF SO, Dispatch/30; Report on Baca Location Logging Operations, Santa Fe National Forest, New Mexico, May 1938, NARA, 3/179; 1938 Progress, NARA, 2/166; Harvey Barlow Work Diaries; 1940 Inspection, NARA; 1946 Inspection, NARA, A1/146.

¹⁹ Carlos Sandoval, interview; Manuel Lucero, interview by author, Albuquerque, NM, July 11, 2016.

²⁰ Region 3 Administrative Bulletin, September 9, 1948, NARA, A1/200; James A. Armitage, "Fire Lookout", *New Mexico*, January 1949.

²¹ Carlos Sandoval, interview; 1952 Plan, NARA, 2/255; Memorandum from Jack Crellin, October 5, 1962, NARA, A4/371; 1957 GII, Jemez District, NARA, A3/448; 1958 Fire Inspection, Jemez District, NARA, A3/434; 1963 Fire Inspection, Jemez District, NARA, jnara2/55,62,63; 1961 Fire Inspection, NARA, 5/258.

²² Jack Martinez, interview by author, La Cueva, NM, January 20, 2016.

²³ Memorandums from: Assistant Regional Forester, September 18, 1963, NARA, A4/87; Assistant Regional Forester, March 23, 1964, NARA, A4/82; USDA Forest Service, *Lookouts in the Southwestern Region*, 136.

²⁴ Frank Gonzales, interview.

²⁵ Interviews by author: Cathy Stephenson, Cle Elum, WA, April 17, 2014; Jim Swetnam, Albuquerque, NM, July 2014; Tom Swetnam, Jemez Springs, NM, July 21, 2014.

²⁶ 1925 Progress, NARA, 2/46; Richard Wetherill Work Diaries, transcribed by Janie O'Rourke, SFNF SO.

²⁷ 1949 and 1951 Fire Plans, Jemez River District, NARA, A3/99,102; 1961 Fire Inspection, NARA, 5/258; 1963 Manning Guide, Jemez District, NARA, A4/182; 1949 Fire Plan, Jemez River District, NARA, A3/102; Interviews by author: Carlos Sandoval; Jackie Martinez; Gilbert Sandoval.

²⁸ 1960 GII, Jemez District, FRC/26,30; 1963 Fire Inspection, Jemez District, NARA, jnara2/55,62,63; Frank Gonzales and Gilbert Sandoval, interviews.

²⁹ Gilbert Sandoval, interview; 1923 Plan and Progress, NARA, 2/24; 1924 Plan and Progress, NARA, 2/34; *Southwestern District Forest Pioneer*, April 1930, NARA, A2/182; 1931 Fire Plan: New Mexico Lumber and Timber Company Sale, NARA, 2/114+; Harvey Barlow Work Diary, June 15, 1939; 1956 Inspection, Jemez District, NARA, A3/346; 1958 Inspection, Jemez District, NARA, A3/429.

³⁰ 1945 Cebollita Fire BOR, June 25, 1945, NARA, A2/85,96,98; Memorandum from Forest Supervisor, July 27, 1953, NARA, A3/40.

³¹ 1961 Fire Inspection, NARA, 5/258; Gilbert Sandoval, interview; 1963 Fire Inspection, Jemez District, NARA, jnara2/62; 1963 Manning Guide, Jemez District, NARA, A4/183,189; Handwritten Note, 1964/1965, NARA, A4/190.

³² Frank Gonzales, interview; 1964 GII, State Forestry Cooperative Review, NARA, A1/101.

³³ Scheick, 331; 1964 GII Progress, FRC/62+; Memorandum from Regional Forester, March 4, 1964, NARA, A4/46; 1965 Manning Guide, Jemez District, A4/61,196; Fire Discoveries by Lookouts, 1959-1970, SFNF SO, Dispatch/169+.

³⁴ Frank Gonzales, interview.

³⁵ Memorandums from: Forest Supervisor, April 20, 1966, NARA, A4/128; Assistant Regional Forester, August 23, 1966, NARA, A4/114.

³⁶ Fire Discoveries by Lookouts, 1959-1970, SFNF SO, Dispatch/169+; Dennis Trujillo and Frank Gonzales, interviews.

³⁷ 1945 Cebollita Fire BOR, NARA, A2/116; 1951 Fire Plan, Jemez District, NARA, A3/97.

³⁸ 1913 Jemez NF Fire Plan, NARA, A3/223,242.

³⁹ Homer C. Pickens Papers, MS 0449, Archives and Special Collections Department, New Mexico State University Library; Seen-Area Map Atlas, SFNF SO, Dispatch/99; 1924 Plan and Progress, NARA, 2/39; Letter from Forest Supervisor, June 8, 1925, and Map to Accompany it, SFNF SO; Letters from Forest Supervisor: January 30, 1925, SFNF SO, Dispatch/133; June 8, 1925, SFNF SO; 1925 Plan, NARA, 2/46,47,51,52.

⁴⁰ 1926 Inspection, NARA, 5/82; 1927 Plan and Progress, NARA, 2/77-78; Letter from Assistant District Forester, October 4, 1928, SFNF SO.

⁴¹ H. D. Schmeltzer, "Fire Lookout", *New Mexico*, November 1936.

⁴² Letter from Forest Supervisor, November 3, 1959, SFNF SO, Surveyor's Files; 1931 Plan and Progress, NARA, 2/111; 1932 Inspection, Jemez Division, NARA, 5/36,40.

⁴³ *Santa Fe News Bulletin*, quoted in SDDDB, August 6, 1932, NARA,5/333; 1932 Inspection, Jemez Division, NARA, 5/41; Memorandum: Fire Protection Requirements for Bandelier National Monument, from L. F. Cook, ca. 1933, WACC/16.

⁴⁴ 1936 Plan, NARA, 2/149; 1939 Plan and Progress, NARA, 2/170-171; 1940 Region 3 Plan, NARA, 2/173; 1940 Plan and Progress, NARA, 2/179-180; 1940 Inspection, NARA, 40/12; National Park Service, *Southwestern Monuments Monthly Report*, November 1940, 318.

⁴⁵ 1940 Inspection, NARA, 5/136; Improvement and Construction Detail Pictures Folio, box G53, SMC, RO bldg folio/43; 1946 Fire Inspection, NARA, 4/130; 1946 Inspection, NARA, A2/20; Memorandum from Jack Crellin, October 5, 1962, NARA, A4/374; 1941 Plan and Progress, NARA, 2/187-188; 1947 Plan and Progress, NARA, 2/221-222; 1948 Plan and Progress, NARA, 2/227-228; 1949 Plan and Progress, 2/200-201; 1950 Plan and Progress, NARA, 2/239-242; 1951 Plan and Progress, NARA, 2/250; 1952 Plan and Progress, NARA, 2/255; 1957 GII, Jemez District, NARA, A3/448; 1960 GII Jemez District, NARA, FRC/26,30.

⁴⁶ 1946 Fire Inspection, NARA, 4/131; 1946 Inspection, NARA, A1/156; 1956 Detection Plan, NARA, A4/327,332; 1958 Inspection, Jemez District, NARA, A3/434-435.

⁴⁷ 1958 Inspection, Jemez District, NARA, A3/429,433; 1961 Fire Inspection, NARA, 5/258.

⁴⁸ Fire Organization Chart, 1956 Replanning Study, NARA, A2/73; 1957 GII, Jemez District, NARA, A3/450; Memorandums from: Forest Supervisor, May 21, 1963, NARA, A4/76; Assistant Regional Forester, September 18, 1963, NARA, A4/87; Assistant Regional Forester, March 23, 1964, NARA, A4/82; Regional Engineer, May 25, 1964, NARA, A4/81; Gilbert Sandoval, interview.

⁴⁹ Lynda Holliday, interview by author, Santa Fe, NM, June 23, 2014.

⁵⁰ Linda Robinson, interview by author, Jemez Springs, NM, July 17, 2014.

⁵¹ Linda West, interview by author, Santa Fe, NM, September 4, 2014.

⁵² Interviews by author: Frank Gonzales; Dan Key, Rio Rancho, NM, April 14, 2016; Duane Archuleta; Linda Robinson; Dennis Trujillo; Gilbert Sandoval.

⁵³ Dennis Trujillo, interview.

⁵⁴ Interviews by author: Dan Key; Dennis Trujillo; Linda Robinson; Larry Panana, Jemez Pueblo, NM, June 20, 2014.

⁵⁵ Seen-Area Map Atlas, SFNF SO, Dispatch/9; Gilbert Sandoval, interview.

⁵⁶ Interviews: Gilbert Sandoval and Dennis Trujillo; 1957 Fire Inspection, NARA, A2/67.

⁵⁷ 1926 Plan and Progress, NARA, 2/61-62; Letter from Assistant District Forester, October 4, 1928, SFNF SO; Interviews: Jackie Martinez; Gilbert Sandoval; Carlos Sandoval.

Pecos/Las Vegas District

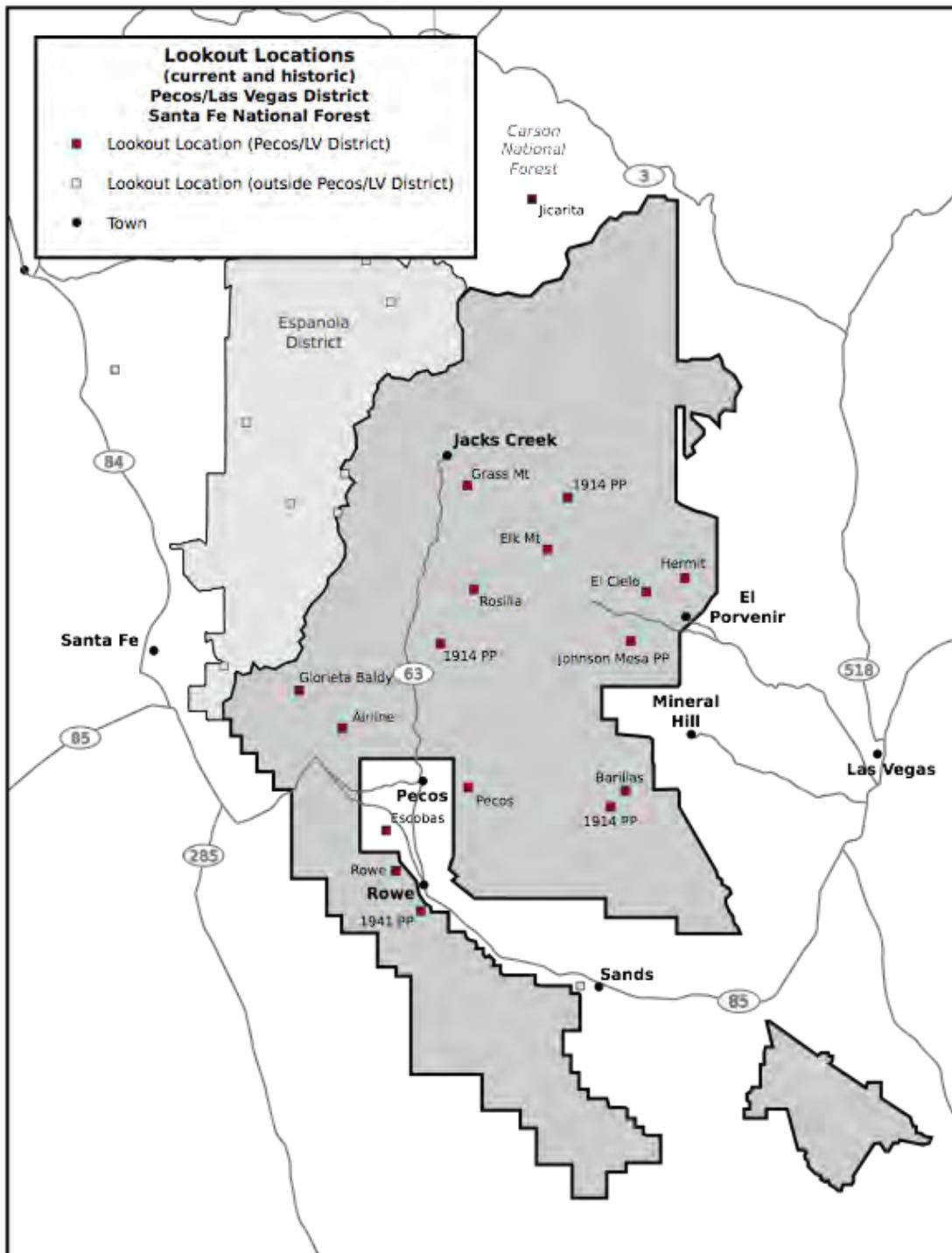


Figure 73. Pecos/Las Vegas District Lookout Locations, current and historic

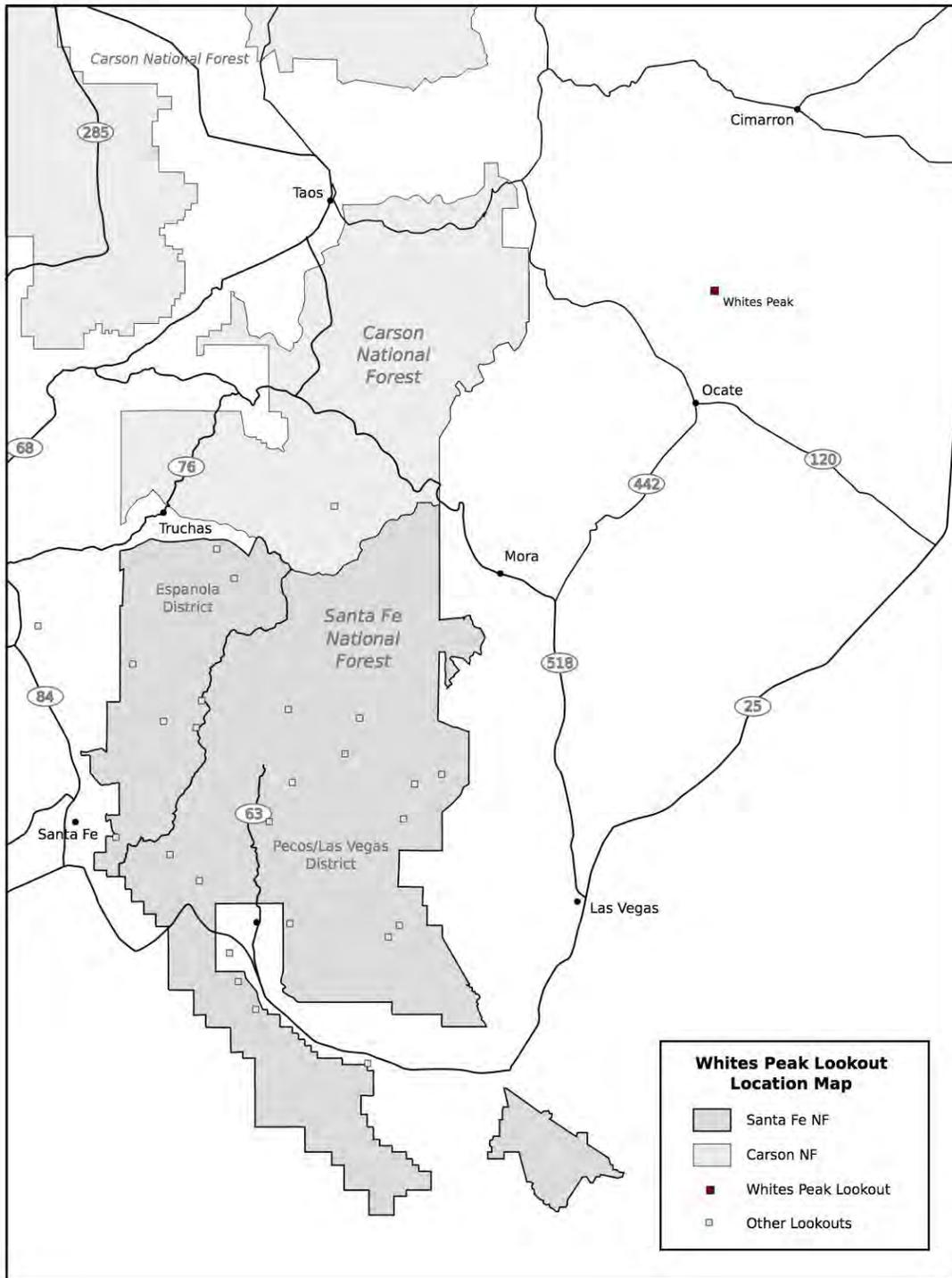


Figure 74. Whites Peak Lookout Location Map

Early Patrol Routes

Rangers riding ridgeline trails provided the earliest fire detection. In May 1902, Tom Stewart was hired as a Ranger on the Pecos River Forest Reserve. He said that his appointment letter

ended with the order, ‘Get busy’. It only took a few hours to learn the order was superfluous. When I rode to the top of the mountains that day to look at my district, the first thing I saw was smoke from two forest fires...I scratched my head and cursed and decided to handle them one at a time...That first day as a ranger...had stretched into two days and nights without sleep. My bay horse ‘Borrego’ had carried me 45 miles...Salary was \$60 a month (in the months you worked), and out of that you had to furnish two horses, and your own tools for trail building and other work. Men you hired to fight fires had to bring their saws and shovels.

Figure 75 shows him on the road in Pecos Valley in 1903.¹

Today’s Skyline (also called Highline) Trail was an early patrol route and runs north from Barillas up the East Divide, past Elk Mountain and Truchas Peaks to Aspen Basin. C.V. Shearer was a fire guard out of the San Geronimo Ranger Station in 1911, and stated, “on my first job I rode the high line up there...I had a rake, Kortic tool, shovel, axe, and a mattock, on a packhorse. When I saw a fire I went to it and put it out, no matter where it was.” In 1912, Tom Stewart, by then Pecos National Forest Supervisor, allotted 60 dollars for two patrolmen to extend the “Barillas Peak and Elk Mountain trail.”²

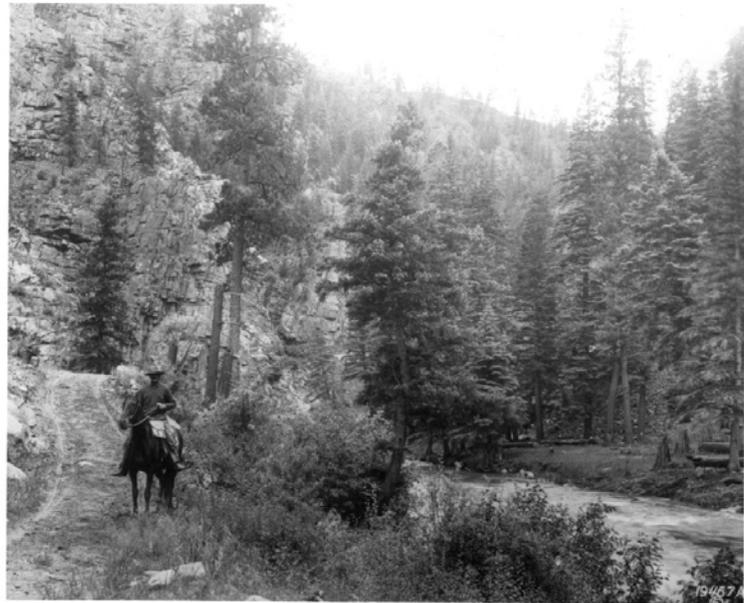


Figure 75. Ranger Tom Stewart on the road in Pecos Canyon in 1903. (1903, USFS Southwest Region Historic Photos Online Collection)

Earliest Lookout Points

The earliest references to named lookouts on the Pecos National Forest were to Grass Mountain Lookout in 1910 and Airline Lookout in 1911. The 1914 Pecos National Forest Map was the first to show lookout symbols. Although lookout names were not shown on this map, most were named and are described in the individual listings below. Three, shown only on that map and abandoned by 1915, were unnamed, and the map scale did not provide precise locations. One was on the south end of Viveash Ridge (T. 17 N., R. 12 E., sec. 22, perhaps point

9495 south of Viveash Mesa), close to the telephone line to the Arnold Ranch. Another was a high point along the Skyline Trail, probably Spring Mountain (T. 19 N., R. 13 E., sec. 35), the only point in that area with an open view. A third site was on a ridge about a mile southeast of Barillas, at T. 15 N., R. 14 E., sec. 6. The 1914 map shows a toolbox and cabin just below it in Sebadilla Creek. The establishment of Elk Mountain and Barillas Lookouts in 1915 removed the need for these three points. They are labelled 1914 PP on the map in this chapter.³

Ranger John Johnson

John Johnson was District Ranger in the Pecos area from 1920 through 1943, and his detailed work diaries and autobiography provide a thorough description of the many duties expected of a ranger of the time. Even though fire protection was only one of his responsibilities, he devoted many days to visiting high points in order to select the best lookout sites. He also built trails and lookout cabins, built and maintained telephone lines, and recruited lookouts (a never-ending chore as there was high turnover, even within one season). He trained, evaluated, and supplied his lookouts, and sometimes cleaned up after them if they abandoned their post. He personally served as a lookout many times when no one else was available, and patrolled the high ridges during critical fire conditions. In the early days of his career he had little help. Later some of these duties were shared with Assistant Rangers, but throughout his tenure, he continued to look for and develop new lookout sites, hoping for better visual coverage of the difficult terrain, using labor supplied by locals and later through relief programs of the 1930s and early 1940s.⁴

Airline

In 1911, the Southwestern Region Forester witnessed a test of emergency telephone line laid along the ground between the Glorieta Ranger Station and “Airline lookout point,” vaguely described as being two miles or one hour from Glorieta. The 1914 Fire Map shows an unnamed lookout point about two miles east of Shaggy Peak fitting this description, but it was abandoned by 1915, probably as a result of the establishment of Barillas Lookout that year. Two points in this area were visited in 2014 and had good views but no lookout artifacts.⁵

Barillas Peak T. 16 N., R. 14 E., sec. 33

Barilla is Spanish for a small piece of wood or log. This name may refer to the extensive logging done throughout the area over the years, especially for mine and railroad ties. Several different spellings of the name



Figure 76. Probable first tower on Barillas Peak. The photograph is of Bearhead Lookout, and the Forest probably installed an identical tower on Barillas Peak around 1915. (2015, author)

appear on early maps. Barillas is the only point on the District consistently shown as a lookout on maps from 1915 to the present. Initially it was reached by trail from the San Geronimo Ranger Station, and later by road from San Jose to within a mile of the top. By 1958 the Forest completed the current road from Lower Colonias to the summit. The Forest ran telephone lines from Rociada via Mineral Hill to Barillas in 1911 and from Barillas to Pecos in 1912, suggesting that Barillas was a patrol point at that time. Barillas also marked the southern end of the early Skyline Patrol Trail.⁶

A seen-area map was made in 1915 or 1916. The earliest tower on Barillas was an “[o]ld Weather Bureau Tower erected prior to 1920.” The Forest obtained at least one such tower from the U.S. Weather Bureau in Santa Fe around 1915 and erected it on Bearhead Peak (Figures 54 in the Jemez chapter and 76). It probably also got a second and placed it on Barillas. In 1915 Barillas replaced the unnamed lookout point just southeast of it. The 1916 inspector said

Barillas was the only one of the four east-side lookouts that “can be used at any time early or late in the spring.” The other three, Lake Peak, Elk Mountain and Jicarita Peak, were high point lookouts at or above timberline.⁷

Esther Harbison spent her first married summer (1920) at the San Geronimo Ranger Station with her husband, Ranger Donald Harbison. She staffed Barillas in 1920 and 1921, the only woman known to serve as a lookout on the Forest before World War II, and described her experience:

One day at the Ranger Station the Supervisor, Mr. Andrews, was with us when the fire guard came limping in. He had fallen while descending the lookout tower and thought he had dislocated his shoulder. The men couldn’t find anything wrong with him, but he had had enough and wanted to quit. It was fire season and the guard had to be replaced immediately. I volunteered and was accepted. I wouldn’t have to camp at the tower or work on trails during the rainy weather.

I rode about three miles each morning at day-break. If it was raining I stayed at home. On the tower there was no glassed-in cabin, just a table for the compass, alidade and telescope. I had to hold on to the table to keep from being blown off. I do not know how high the tower was, but it had to be higher than the ponderosa pine that grew around it. I climbed the ladder every 30 minutes to take a look.

Nothing very exciting happened. Once there was a rattlesnake on the trail. I got off my horse and killed it. Another time a skunk was on the trail ahead of me. I slowed down and let the skunk take his time getting off the trail.⁸

The *Santa Fe News Bulletin* reported: “Lookout Ladies! The Santa Fe has one. Being unable to secure dependable and satisfactory masculine material, Mrs. Ranger Harbison has undertaken the task of looking the world over, from 8 a.m. to 6 p.m., from Barillas Peak as weather conditions require. The first day up she was rained out.” In 1921 Mrs. Harbison received 3 dollars per day, the same wage paid to the male lookouts on the District.⁹

In Aldo Leopold’s 1923 inspection report, he described Barillas as a “40’ windmill tower, no room for a crow’s nest, probably would be unsafe to tie one on... a pipe railing for the little platform on top is lying on the ground—evidently been there for years... the platform is too weak to hold it—would be easy to have a really substantial platform made of metal holed to receive this railing.” Leopold recommended adding guy wires to the Barillas tower: “Believe it would be a good thing for moral effect”—no doubt! He complained that the “protractor is left out all year—bound to warp.” There was no cabin on the mountain in 1923, a tent providing the only shelter, and Leopold noted, “If to be a regular lookout a cabin would pay.” In 1924, Gross Kelly and Company, a large mercantile outfit that sold wood harvested from land on and around the Forest, paid half of the Barillas lookout’s salary. That year the Forest made a composite seen-area map of the Pecos, and Barillas was one of the four lookouts included.¹⁰

A fire began April 15, 1925 in dry, windy conditions at the Reid Sawmill below Barillas. It jumped the fire lines and burned over Barillas Peak and down the east slopes. Ranger Johnson left the fire as soon as others could take over in order to get Escobas Lookout staffed quickly in the critical fire conditions. The Barillas tower was apparently saved, as it was staffed later that year.¹¹

In 1925 the lookout still lived in a tent, with a telephone nearby. As national and regional policies mandated that lookout cabins be built “on top,” that year the Forest budgeted 200 dollars for a cabin, and Ranger Maximillian Bruhl began construction. It was completed in 1926. In 2015 tree-ring dating was performed on logs found below the current Barillas tower. This showed that they were notched for cabin construction in the middle to late 1920s,



Figure 77. Barillas Peak Lookout cabin built in 1925-1926 (C.W. McKenzie, 1940 Inspection, NARA, 5/138)

corroborating the historic records. Installation of lightning protection began on both cabin (Figure 77) and tower in 1926.¹²

An enclosed metal cab had been built on a 30-foot metal tower by 1928, perhaps the same Weather Bureau tower that had been on the mountain since 1915 (Figure 78). Gavino Lesperance, a rancher from Mineral Hill, staffed Barillas for several summers in the late 1920s, accompanied by his young son, Pedro (Pete). An inscription in the old cab lists a Lesperance as one of three or four people who erected this “First Observatory.” Unfortunately this inscription has been heavily scratched out and the date and other names cannot be read.¹³

The 1928 inspector described this cab as “not fancy but adequate.” It was only 4-by-4 feet, barely big enough for a map board and an observer. That year the cabin was chinked and “lightning proofed.” There was a telephone in the cabin but not yet in the tower, and there was no pasture on the Peak. In 1931 the tower was “closed in;” perhaps this meant that windows were added then. By 1941, the Forest decided the Barillas lookout did not need a horse, as using one for fire suppression here was judged “not expeditious.” However, fire plans continued to require that a mounted patrolman join the lookout during extreme fire conditions.¹⁴

This original cab is now on Karen George’s property west of Barillas. Her grandfather, Bill Reid, homesteaded



Figure 78. Second Barillas Lookout tower, built by 1928. Forest Supervisor Andrews is trying and failing to open the cab door from the ladder. (C.W. McKenzie, 1940 Inspection, NARA, 5/139)

the Reid Ranch, now called the Flying Cloud, in Sebadilla Canyon in the late 1920s. Reid started working in this tower in 1938, and staffed it through at least 1940. His daughter, Stella, rode a horse up to Barillas from the ranch to deliver lunch to him. She hated climbing the ladder to the cab, and always felt safer when her father grabbed her arm at the top. In August 1940, Reid’s wife, Helen, rode a horse to the lookout—and climbed the ladder!—to summon Reid as she was starting into labor. He was able to find someone to cover the lookout, and rode down to the ranch in time for the successful delivery. However, the baby had the cord wrapped around her neck, which the family always attributed to Helen climbing that ladder.¹⁵

The inside of this old cab contains many inscriptions. One is a list of telephone rings for the different stations: two long, one short meant a call for Barillas, while one short, one long, two short was a call for Hermit Peak Lookout. Another inscription, written in the 1930s, reminded the lookout what to report when a smoke was sighted:

1. Reading on Protractor
2. Dist[ance] from Barillas?
3. How Many Men?
4. Best Way to Get There
5. How Long Has Smoke Been Coming up?

The tower and cabin were located on the south end of Barillas Peak, but the north point is actually a few feet higher. The lookout periodically visited this north patrol point to scan the area blind to the tower. By 1938, trees were obscuring its view, and Ranger Johnson directed lookout Reid to “cut a 30 foot pole with a 6 inch top and dig a hole and...set the pole and guy it and put in 18 stubs for climbing.” The cover photograph of this study shows the lookout platform with map board next to this pole. Today the ruins of both platform and pole remain in what is now dense forest.¹⁶

In 1938 Ranger Johnson walked from Sebadilla Canyon to Barillas with Mr. Harris of the Department of Commerce. Harris “wanted to size it up as a place for an airway beacon,” a rotating light on a tower used by pilots for navigation. The beacon and associated power line were never installed.¹⁷

In November of 1937, Johnson described the poor condition of Barillas Spring, where Douglas squirrels were storing pine cones, “not dumped, but fitted in layers to get the maximum number in.” During 1938 and 1939, Johnson had Reid improve the spring with concrete, work on the trail, and put in a flagpole. In 1940, Johnson improved the telephone wiring for the tower and cabin, as by now there were telephones in both structures. The first latrine was finally built in 1941, probably by the CCC; this may be the same one used on the site today.¹⁸

In 1936, the Forest planned to have the CCC to build a “standard” tower at Barillas, but it was not done. Instead, Ranger Johnson used CCC labor to build lookouts at new locations rather than improving those already standing. During the 1940s, the Forest recognized the continued need for a new tower at Barillas, but no funding was forthcoming. In 1942 it failed to secure enough cooperative funds for an “adequate structure.” 1946 fire inspectors suggested condemning the “very poor and dangerous makeshift tower,” noting its very light construction, instability, inadequate guying, nonstandard lightning protection, low interior height and awkward entry from the outside ladder. Figure 78 shows Supervisor Andrews trying but failing to enter the cab, unable to open the door. The Barillas map board was the worst on the Forest, and its map was “even worse, held on with stones.” Although the Forest was then replacing map boards with Osborne firefinders at its other lookouts, this was delayed at Barillas until the substandard tower was replaced in 1959. For a number of years, Barillas was on the Las Vegas District but was administered by the Colonias District because access was easier from that side. In the mid-1940s, the Forest instituted its ground marker system for aircraft, and by 1952 had painted the number 29 on the Barillas cabin roof.¹⁹

When the Forest finally condemned the old tower in the late 1940s, it instituted a new detection system: three map boards were placed around the mountaintop, and every hour the lookout was to make a circuit of them. A wooden base was put on a post and leveled, and a metal firefinder was placed on it. It had a rotating ring and azimuth markings like an Osborne, but was smaller and did not have a map. Figure 79 shows the map board near the cabin with a view to the east and southeast. The second map board was on the small rise southwest of the current lookout with a view of Rowe Mesa and the Pecos area. The third map board was on the north patrol point, and the lookout augmented that view by climbing the spiked and securely guyed pole (cover photograph). Lookouts kept the views open by trimming trees and brush. When the season was over, the three bases and firefinders were removed from the posts and stored in the cabin for the winter. Although this system avoided use of the unsafe tower, it proved inefficient due to the time spent “traveling through timber and brush between alidades,” and Barillas Lookout was providing few first reports of fires.²⁰



Figure 79. Map board on the southeast point of Barillas Peak, one of three used after the old tower was condemned. (mid-1950s, archeology binder 53, negative no. 10082, SFNF SO)

In 1948, the Forest moved the abandoned Skinner Ridge Lookout tower from the Kaibab National Forest to the Santa Fe Warehouse. It was originally meant for Barillas, and in 1949 funds were available to build a road to the summit, but instead the Regional Office decided to abandon Barillas that year. Aerial observation after thunderstorms was to be substituted, and the tower from the Kaibab was erected at Encino Point instead.²¹

The year 1950 was the worst for fires since the Forest had been established; the “fire season started in March and was still continuing on December 11.” On June 6, 1950, the Commissary Fire started below abandoned Barillas Lookout. The ensuing Board of Review said the large fire size “might have been held down by a guard at Barillas Peak,” and recommended it be re-established as a primary lookout, “an essential link in the inter-district detection system.” Until funds could be obtained to build a road and new lookout, Barillas was reopened as an emergency lookout, using the old cabin and patrols to the three map boards as before. The Forest again instructed lookouts to avoid the old tower, though it did serve one useful function during the 11 years it stood condemned: it provided a cone of lightning protection over the cabin. Probably due to the inefficiency of the detection setup, Barillas only reported three fires during the 1950s.²²

Throughout the 1950s, funds for a new lookout were repeatedly requested but not provided, and road building proceeded slowly. Inspectors continued to recommend road completion and construction of a new tower. One

planned to investigate the availability of a surplus Army tower. The 1952 GII report included a photograph labelled “Barillas Peak, needs lookout, 52' steel tower available in Albuquerque.” Although it was listed as a primary lookout in the 1956 Detection Plan, that year’s GII said, “considerable difficulty was experienced in maintaining the manning on Barillas Peak, and it is difficult to supply that point because of road and trail implications.” In April 1956, an inspector noted only two patrol points on the Peak, and in July of that year a new cast aluminum map board was installed. The 1957 inspector felt Barillas was “an extremely important lookout point,” but it had only “an unusable tower and an alidade on a post.”²³

Until the road was completed to the top of the peak in late 1958, water and supplies had to be packed three miles up the trail from the Flying Cloud Ranch in Sebadilla Canyon. Its owner, Mr. Sprague, had the contract and used horses to pack in large metal milk cans full of water. Lookouts drove an old Army jeep to the end of the road and walked up the last mile and a half carrying their food and clothing on their backs. Even the packers had no riding horses and walked while leading the pack horses. The Forest added gutters and rain barrels to the cabin in 1956 which “resulted in a saving on the water haul.” Lookouts visited Barillas Spring for water if they ran low between deliveries.²⁴

Ricardo Varela was the primary Barillas lookout in the late 1950s, working a 10-day shift, with Tony Vigil as relief for four days. Both men sometimes took their sons (Wilfred and Fred, respectively) with them. Before the new lookout was built, they stayed in the old cabin, which held two small beds with insulators, woodstove for



Figure 80. Barillas Lookout tower and cabin in the mid-1950s. (mid-1950s, archeology binder 53, negative no. 10088, SFNF SO)

heating and cooking, table, chairs with insulators, Coleman lantern, battery box, map for determining legal locations of smokes, and metal cabinets to protect food and supplies from rodents. With no insulation under the metal roof, the cabin was very noisy in hailstorms. Figure 80 shows the cabin and old tower in the mid-1950s. The lookout used the radio in the cabin to make reports, as the telephones had been removed in the early 1950s. Some nights, Vigil chatted in Spanish over the radio with the lookouts at Clara Peak, Deadman and Red Top. There were no visitors as the roads were poor and the last mile and a half was trail. Although Vigil monitored his son’s activities at Barillas, Fred managed to climb the forbidden ladder up the old tower and looked into its cab. It was

messy inside with no firefinder. A 10-day shift went very slowly for young Wilfred; he chopped wood and carved airplanes from aspen wood to hang in the trees as rifle targets.²⁵

The Forest planned to place a smokechaser at Barillas in addition to the lookout in 1958, though one inspector felt a guard cabin at El Barro should be built for the smokechaser instead. By year's end, the Forest had finally completed the road to the top of the Peak, as well as a connector road to the El Barro Fire Trail. This facilitated construction of the new (current) tower, a 14- by 14-foot steel CL-100 (R6 flat) cab on a 54-foot steel tower. It is shown during construction in Figure 81, and was completed in November 1959. The Forest dismantled the old tower when it built the new one, but left its cab on the ground at the site. After the Cat and Dog Fire of 1971, this cab was removed for scrap, and began a new life as a children's playhouse in East Pecos. The Forest retained the old lookout cabin as storage and emergency smokechaser quarters until it was demolished in the late 1960s. Figure 82 shows its relationship to the new tower.²⁶

Tony Vigil was the first to staff the new Lookout. After years of hiking up the trail and staying in the dark cabin, Vigil's son, Fred, was impressed by the road to the top, the tall tower, and its well-lit cab with windows all around. Unfortunately for him, now the lightning was readily visible! A small Forest Service trailer at the base of the tower had been used by the construction crew. But the lookouts now lived in the new cab, which was sparsely furnished at first with a woodstove and two single beds making an L in a corner. A Coleman lantern provided light but there was no refrigerator; the Forest didn't install propane until 1974. An Osborne firefinder was also placed in the new cab, Barillas being the last lookout on the Forest to get one.²⁷

The Forest began construction of a cistern for the new Lookout in 1960, but it was never fully completed or operational. The El Barro guard cabin proposal was dropped because smokechasers could stay in the old Barillas cabin now that the lookout lived upstairs in the new cab. Improvements to the road were still high priority.²⁸

During critical fire conditions in June 1971, firemen Gonzalo Varela and Charles Mullings responded to a smoke south of Barillas, naming it the Cat Fire for lion tracks seen nearby. They worked on it until it was almost out, with just a few smokes showing. Meanwhile, the Barillas lookout had spotted another fire when he went down for



Figure 81. Current Barillas Lookout tower built in 1959, a CL-100 (R6 flat), shown during construction. (June 26, 1959, negative no. BLO2, source FSMSW FS 1999.3.25, Digitized Photographs held by the Forest)



Figure 82. Relationship of newly-completed Barillas Lookout tower to the old cabin (1959 Engineering Inspection, NARA, 5/237)

water at the spring, and the crew was sent from the Cat Fire to this new start, which they of course named the Dog Fire. However, by the time they had driven to it, the Cat Fire had blown up in high winds and they were ordered back to it, just the two of them trying to work what was now a sizable blaze. They were forced to leave the Fire during the night, and since Forest Road 83 was cut off by fire, they drove poor roads south to San Jose in the dark. The two Fires quickly grew together into the large Cat and Dog Fire, and burned intensely through the Barillas area and east over the mountain, destroying the old San

Geronimo Ranger Station and other private structures. The *Santa Fe New Mexican* of June 29, 1971 said, “had it not been for almost constant bombing of the Barillas Peak area, a ranger station [sic] atop the peak would have been destroyed,” and the lookout had to be evacuated. Once the Fire was extinguished, Mullings assisted with helicopter seeding over the area, dumping seed and fertilizer into the helicopter’s hoppers. Beginning in 1972, the Forest hired Mullings and many others to plant “thousands and thousands” of trees in the Cat and Dog Fire scar. A concrete pad and metal shed were installed at the base of the Barillas tower to house some of these workers. A snow cache was created at the Skyline Saddle below Barillas by using a bulldozer to pile snow up to 15 feet high and tunnel into it. Tree seedlings were kept in the tunnel over the winter, and by April workers would dig trees out for each day’s planting.²⁹

In 1974, Gail Roos and Rich Rydin were the Barillas lookouts. They used candles and Coleman lanterns for light and a woodstove for cooking and heating. Toward the end of the season, Rydin began installing propane. They had a hand-winch to haul up water and wood. Once a chipmunk came up in a winch load, then ran around and around the catwalk and finally jumped right off the edge. It survived the 54-foot fall and ran into the woods! Roos disliked lightning storms; she would sit in the insulated chair with a blanket over her head, shaking like a leaf. There were many fires that year, including a large one at Mortandad Spring, during which neither the telephones nor radio repeaters were working. For a full week, 24 hours a day, the two of them handled all of the fire communications, including telling the air tankers when to drop their slurry. They also ordered the supplies for several hundred firefighters, starting with “100 dozen eggs.”³⁰

By the late 1970s, Glorieta Baldy was considered the primary lookout on the district and Barillas staffing became more sporadic. Some years it was only staffed if there were fires or lightning. However, Richard Martinez staffed

...under Ranger Reindorp, the Forest Service began concentrating on preventing forest fires. Forest Supervisor Johnston established high point lookouts, one of which was on Elk Mountain. Springfels was hired to haul telephone wire up from the Harvey ranch, which had a telephone hooked up with Pecos.

Springfels recalls that he packed the five miles of telephone wire on 10 burros, each coil reaching one-half mile, and weighing 150 pounds. He unloaded one roll of wire each half mile up Elk Mountain. He reported that he hated to load the burros so heavily, but it had to be done, and both he and the animals were much relieved when the wire was all packed in.

Springfels served as the first Forest Service lookout on Elk Mountain that summer of 1915. In those days when a smoke was spotted, the man on the job took off immediately with no provision made for emergency food, except possibly some beans and bread wrapped in a slicker on the back of the saddle. The main idea was to get on the fire fast and get it under control. He said that he would be sent out to fight a fire alone that would now draw 15 to 20 men, equipped with provisions for several days.³⁶

The establishment of Elk Mountain Lookout in 1915 probably allowed the abandonment of the lookout points on Spring Mountain and Viveash Ridge. The Forest staffed Elk Mountain again in 1916, but too late to help with some bad spring fires. Like other high point lookouts, it proved inefficient as it was usually inaccessible through spring snowpack when fire danger was high in the surrounding lowlands. The telephone line to the Mountain also needed work in 1916, and within a year Ranger Reginald Reindorp had installed a weather-proof telephone at the site. The lookout used a tent for shelter, though the Forest proposed to build a lookout cabin to facilitate spring snowshoeing to the Mountain. This cabin was not built, and Elk Mountain was abandoned as a lookout by 1925, along with the other high point lookouts. Johnson visited Elk Mountain in June 1925, “looking over the country with a glass for fire,” and he made no mention of a lookout structure. The weatherproof telephone box and perhaps a map board were the only improvements ever made to the Lookout site.³⁷

Figure 83 was taken on the summit of Elk Mountain during a 1927 ski trip made by Ranger Johnson and Dave Shoemaker to study winter elk movement. They skied up from Terrero, and had to crawl the last 100 yards to the top of Elk Mountain due to very high winds. Johnson said, “There was a big rock cairn behind which we sheltered to catch our breath,” but no structure.³⁸



Figure 83. Dave Shoemaker on the summit of Elk Mountain in 1927. No lookout structure was found. (February 23, 1927, John W. Johnson, SFNF SO)

Many years later, between 1959 and 1966, the Forest considered building a lookout here to replace or augment Hermit Peak Lookout. A 14- by 14-foot live-in cab with catwalk on a 67-foot steel tower was to be built in 1964 under the Accelerated Public Works Program. But management decided it wouldn't “add much to the detection of the Forest,” and funding was diverted to other administrative facilities. It was ultimately dropped with the intention to reconsider it when a road was constructed through the area. A map from the late 1960s shows a lookout here, and the 1966 Manning Guide lists a lookout

fireman and relief placed here during high fire danger and hunting season, but the Forest never built the tower. A radio facility is the only structure on the Mountain at present.³⁹

Escobas T. 15 N., R. 12 E., sec. 18

This location was also called Fox or Escoba Peak. In 1922 Ranger Johnson selected it over previously-used Rowe Peak:

We needed a lookout somewhere on the lower end of the district who would cover the woodland areas and also the Pecos River drainage. I selected Escoba Peak on the rim of Glorieta Mesa. This peak was on the Pecos grant in private ownership, but I had no trouble getting an easement to build a small cabin in upper Padre Springs Canyon and construct a telephone line. The nearest water was 2 miles away, but the lookout man had to keep a horse.⁴⁰

Johnson did all the development himself: reconnoitering the location, removing the telephone line from Rowe Peak and installing one to Escobas, building the cabin, and finding and training lookouts. He was able to haul supplies by wagon to within 300 yards of the summit, and built a trail up the north side from that point. No photographs have been found of this cabin. It was probably framed with dimensional lumber like Guaje Lookout (Figure 47 in the Española District chapter), which was also built in 1922.⁴¹

Johnson struggled to find and then retain lookouts. In 1922 alone he went through four different lookouts at Escobas between April and July. Other obligations or a different job might pull them away, or perhaps they discovered that the loneliness or lightning didn't suit them. They generally gave little advance notice, and sometimes a lookout abandoned his post without telling anyone.⁴²

Aldo Leopold's 1923 inspection report praised the "ingenious" protractor setup in the Escobas Lookout cabin, said the windows did not cover all of the walls, and recommended adding a pasture, as lookout fireman Max Lucero had been hobbling his horse and feeding it grain. There was no tower. The Forest made a composite seen-area map of the Pecos in 1924, and Escobas was one of the four lookouts included. In 1925, the lookout lived in the cabin on top with a telephone inside. The next year Johnson installed lightning protection at this cabin; perhaps the prior lack of lightning protection contributed to the high turnover in personnel.⁴³

The Forest staffed Escobas Lookout from 1922 through 1927, mostly using Max Lucero and Vernon Cook, though in 1926 Cook also left early and Johnson was unable to find a replacement. The 1927 Fire Plan proposed to eliminate Escobas for that year and gauge the effect on the fire organization. But instead, Escobas was retained due to "emergencies of season, [Assistant Ranger] Burton's disability, and suspected incendiarism," and Max Lucero staffed it once again. In 1928 the Forest finally closed Escobas, although Johnson preferred it over



Figure 84. Escobas summit cairn with view toward Pecos Wilderness (2014, author)

Barillas. No explanation has been found for its abandonment, perhaps issues with its private land status. The Forest removed its markers in 1932.⁴⁴

Escobas was last shown on the 1933 Forest Map, although it was apparently retained as an emergency lookout. Proposed 1939 telephone improvements included running a line “from Pecos via Escoba Emergency Lookout point to Cow Springs... [to allow] emergency detection”. By 1953 only a cairn with a pole remained at the site and was still in place in 2014 (Figure 84),

along with a fine trail, telephone wire, old telephone batteries and bits of metal and glass. A few eroded inscriptions are visible in the sandstone bedrock, including “USFS” and “Escobas Lookout.” The view is outstanding.⁴⁵

Glorieta Baldy T. 16 N., R. 11 E., sec. 5

A fire was reported from this peak in 1936, but lookout development did not begin until a few years later. Dissatisfied with detection coverage from Pecos Lookout, in May 1938 Ranger Johnson made seen-area maps from various points in the area including Glorieta Baldy. In 1940, he arranged to have the CCC build a 12- by 12-foot wooden cab on a 30-foot steel Aermotor MC-24 tower at this site. Pete Vigil began installing a telephone line from the Glorieta CCC camp in April.⁴⁶

At that time, an old logging road came within a mile and a half of the top, but the final two miles of that road were impassable by truck. Fifty-five tons of material were moved to the peak, including sand and aggregate. Crews took trucks as far as possible, then hauled the materials two miles by wagon, and used pack horses for the last mile and a half. Johnson wrote, “The 20-foot long corner angles for the tower were a bit difficult...I built stout wood risers to go on top of two pack saddles on which the ends of the long angles could be fastened and there would be room underneath for the horses to maneuver on the switchbacks of the trail.” He built a temporary tower, probably of poles, to use until the permanent tower was finished. Figure 85 is labeled “Glorieta Baldy, Johnny Johnson,” and was likely taken in 1940 during Lookout construction; Johnson is on the right, and the top of a tent is visible beyond him.⁴⁷

Johnson continued, “I helped [construction supervisor] Marley all I could as I wanted to get the job finished ahead of the summer rainy season...I had a telephone installed on a post...I installed the lookout man [Louis Roybal, with his wife] in a tent.” From the temporary tower, Johnson “found it necessary for the lookout man to make two patrols, one 300 yards to southwest and one $\frac{3}{8}$ mile northeast,” and had trails built to these patrol points. At one of



Figure 85. “Glorieta Baldy, [Ranger] Johnny Johnson”, taken during lookout construction. Johnson is on the right. Note tent in background. (1940, SFNF SO)

them, they “topped a 30-foot tall fir tree and built a ladder up...[to] cover some country that [the lookout] could not otherwise see.” Some equipment was moved to Glorieta Baldy from the Pecos Lookout. Barillas called in a smoke on May 31 and Roybal was able to cross it, giving the first smoke report from the new Lookout.⁴⁸

On June 20, 1940, lightning struck the lookout while Marley and Manuel Vigil were working on the roof, and Vigil was badly injured. The lightning hit his head, jumped to the metal stove flue, and thence to ground. He began to fall off the roof, but Marley was able to catch and hold him until he could be pulled in through a window opening. A doctor was taken up to the Lookout, and Vigil then walked the three and a half miles to a truck that took him to the Santa Fe Hospital, but he never fully recovered. The family was denied compensation, and his father was awarded guardianship of him. Amazingly, during Vigil’s lifetime he was struck three times by lightning. The third strike, on August 9, 1946, killed Manuel Vigil, his son, and their mules on Elk Mountain. A monument marks the site of their deaths.⁴⁹

The day after this lightning strike at Glorieta Baldy, Johnson repaired the telephone line himself. Five hundred feet was “literally melted. The lightning arrestor held and the telephone was not damaged...The lookout man was worried about his wife as she was talking on the telephone when the lightning struck and was knocked down and shocked or fell from fright.” Roybal asked to take his wife home, and Johnson took over as lookout for several days, also helping Marley with construction. They completed the installation of the lightning protection and moved the telephone into the lookout cab.⁵⁰

Not surprisingly, Roybal and his wife quit soon after the lightning strike. “They had had all of the lookout experience that they wanted.” Roybal had dropped the alidade from a tree and Johnson had to repair it. Howard



Figure 86. Glorieta Baldy Lookout shortly after completion (1940, archeology binder 45, no. 9094, SFNF SO)

Wester took over the lookout duties along with construction work. Figure 86 shows the lookout shortly after completion.⁵¹

A latrine was built by the CCC in 1941, and Max Lucero served as lookout. The next year Johnson assigned someone else to Glorieta Baldy, but after extensive training sessions, he concluded the man “could not be trained for lookout.” He moved Max Lucero over from Rosilla Lookout for the rest of the season. Manuel Romero was the 1943 lookout. On May 8, Johnson had to ride up and find Romero’s horse. It had broken its hobbles and “got with a wild bunch of 5 head from Tesuque District. After a 20 mile run, [Johnson] caught [Romero’s] horse in Apache Canyon.” After this adventure, Johnson had Romero fence a horse pasture at the Lookout.⁵²

The 1946 inspector complained about the “makeshift” map board, mounted on a rolling table and requiring the lookout to reorient it for each use—a novel setup! The following year the Forest replaced it with an Osborne firefinder. The lookout obtained water at an undeveloped spring about a mile northeast of the tower. A “worthless” 4- by 4-foot storage building stood on the site, an “old meat house perhaps.” Although the inspector recommended replacement with a combination storage and horse shelter, this was never built.⁵³

Glorieta Baldy was part of the Tesuque District’s “regular normal protective force”, with its staffing coordinated between the Pecos and Tesuque Rangers. Some of its lookouts came from the Tesuque side. In 1950, Glorieta Baldy Lookout reported the Commissary Fire below then-abandoned Barillas Lookout. The 1956 Detection Plan described Glorieta Baldy as “the most effective lookout on the Pecos division,” recommending it be “maintained as a key lookout.”⁵⁴

A cistern was proposed and approved in 1953 but was never built; water was hauled up in a trailer after the Forest completed the road to the Lookout that year. The woodstove was moved closer to the cab wall in 1956, allowing two built-in beds to be constructed and giving needed storage space. In the 1960s and early 1970s, the cab held only one or two beds, firefinder, desk, insulated chair and woodstove. A small camp trailer had been placed at the base of the tower after the road was completed; it held the cooking facilities and another bed. Horacio Varela, known as Peaches, staffed Glorieta Baldy during this time, and told of a bear trying to come through the trailer’s kitchen window; he and his wife ran up the tower to escape it. After that, they slept up in the cab as did most

lookouts. Many people visited the tower, mostly hikers from the local Glorieta Baptist Assembly. They seldom asked to come up in the cab, but poured water from the lookout supply over their heads, distressing the lookout who had laboriously hauled it up the mountain!⁵⁵

In 1974, Phil Long and Meria Loeks staffed Glorieta. One night they received a report of a mountain lion just a few hundred feet from the lookout. Their own big bad tomcat was out hunting, and suddenly came flying up the lookout stairs, through the hatch door, and wasn't at all interested in going out for the next three days! They never saw the lion.⁵⁶

Glorieta Baldy was once considered one of the best remaining examples of an Aermotor MC-24 in the Southwestern Region, and was placed on the National Register of Historic Places on January 27, 1988. The Forest discontinued regular staffing by 1989. Since then, the lookout has been heavily vandalized. Glorieta Baldy was staffed briefly in the early 2000s when fire danger was high, including during the large Viveash Fire of 2000. The Forest later removed the lower flight of stair treads in an attempt to reduce further vandalism.⁵⁷

On December 7, 2007, Glorieta Baldy was placed on the National Historic Lookout Register. In 2016, the Forest was investigating restoration of the lookout for use in the cabin rental program, perhaps retaining periods of administrative use for fire detection.

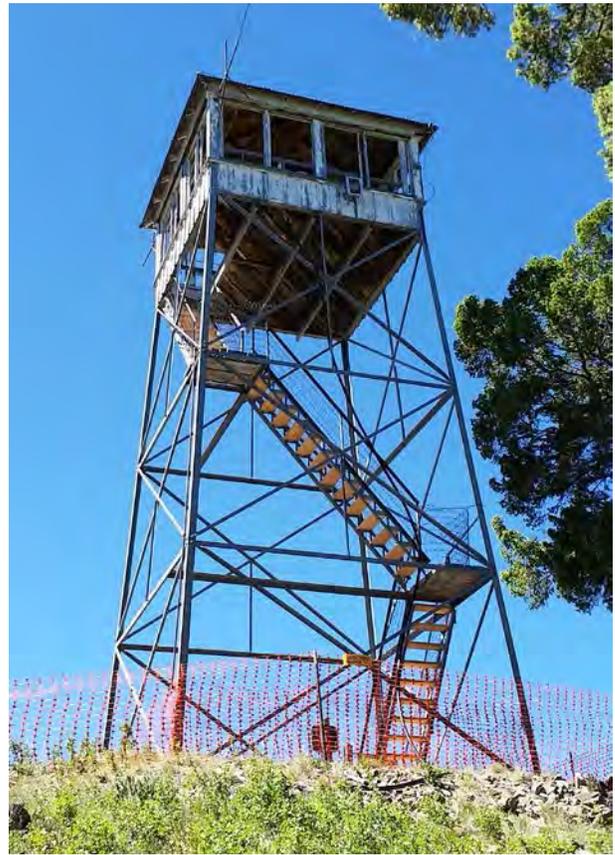


Figure 87. Glorieta Baldy Lookout in 2016. The stairs had been temporarily re-installed to allow an evaluation for potential restoration. (2016, author)

Grass Mountain

T. 19 N., R. 12 E., sec. 6

During the summers of 1910 and 1911, Elliot Barker “strung a telephone line to Grass Mountain fire lookout station.” This is the earliest documentation of a named lookout on the Pecos. Figure 88, taken June 11, 1911, shows an inspector testing the new line at the Lookout, with Pecos National Forest Supervisor Tom Stewart looking on.⁵⁸

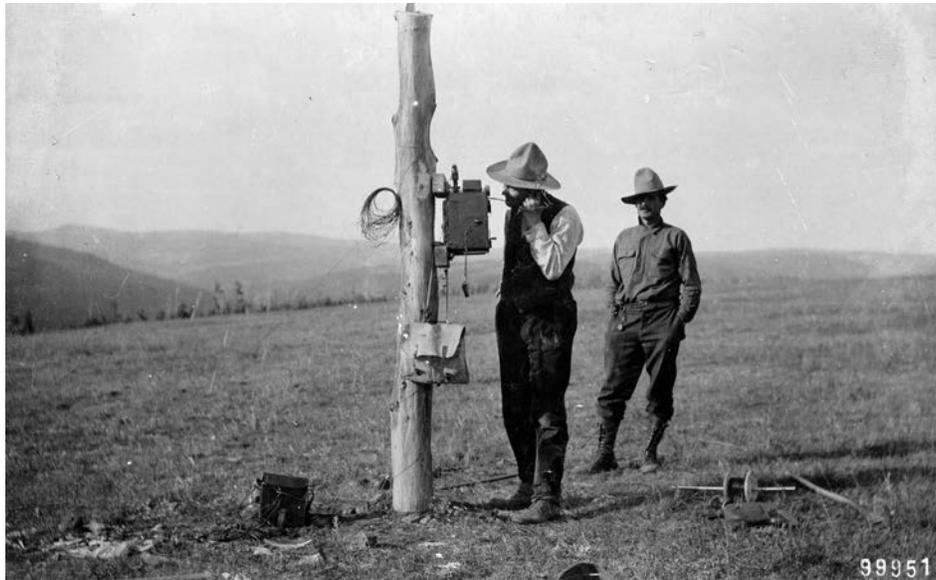


Figure 88. “Installing Telephone 1336E June 11, 1911, at Grass Mt Lookout Station...at telephone is a traveling inspector known only as Mr. Merriweather. At right is Tom Stewart, then Forest Supervisor.” (A.W. Waha, SMC)

The Forest never regularly staffed Grass Mountain Lookout. It had a fine view of the upper Pecos drainage, but few fires occur in that country and it was easy to visit on short notice. Barker was instructed to go to Grass Mountain Lookout one day in the summer of 1910. He was to look for fires “both morning and afternoon,” and in between he took the opportunity to do some fishing on nearby Bear Creek. Local rancher and outfitter George “Skipper” Viles “rode lookout” on Grass Mountain during a very dry June of 1914.⁵⁹

Spring of 1916 was also dry, and Grass Mountain was staffed when the primary high point lookouts, Lake Peak, Jicarilla Peak, and Elk Mountain, were inaccessible through snow. By that time there was “a very neat little cabin on Grass Mountain used as a shelter for the lookout man. It is a small frame building with shingle roof. There are windows on all 4 sides” (Figure 89). Its construction date is unknown.⁶⁰

In June 1920, Ranger Johnson installed a telephone inside the cabin and had it staffed. Karl Valentine staffed it for 18 days in July 1921. Johnson also installed lookouts there in 1922 and 1928, and he visited it to check for fires on smoky or high-fire-danger days. A 1921 fire inspector said there was “already a lookout station on Grass Mountain connected by telephone and when a season of sufficient severity occurs to require its use, it could be placed in operation with very little work. Some of [the] window panes [are] broken. Covers very well the interior of the Pecos watershed.” Next to this entry was a handwritten note: “which never has any fire danger.” The Forest made a composite seen-area map of the Pecos in 1924, and Grass Mountain was one of the four lookouts included.⁶¹

In 1925 the Forest listed Grass Mountain as an emergency lookout, with a cabin “not worth maintaining.” The 1928 fire inspector did not mention it. Ranger Johnson helped set benchmarks at the site in 1931, and for orientation he “put [a] flag pole up through [the] roof in [the] old lookout cabin,” and cut down the telephone poles along its line. Clearly the Forest had abandoned it by then, though it continued to serve as a patrol point



Figure 89. “1921—The lookout on Grass Mountain. With no trees nearby to obstruct the view, this lookout did not need a tower.” (1921, J. D. Jones, USFS Southwest Region Historic Photos Online Collection)

during critical fire weather. Johnson may have closed it after he arranged for detection from linemen on the Terrero Tramway in 1927. An unconfirmed local story says lightning damaged Grass Mountain Lookout at some unknown date, ending its use. It appeared to still be standing in a long-distance 1958 photograph. It is shown as a lookout on maps from 1914 to 1936. In May 2013, old lumber, wire and green glass was still on the ground at the site.⁶²

Hermit Peak

T. 18 N., R. 14 E., sec. 36

Originally called Cerro de Tecolote, this mountain was renamed Hermit Peak in honor of Giovanni Maria Agostini, a Roman Catholic lay hermit. He lived on the Peak from 1863 to 1867, providing religious instruction and healing to nearby residents. He was highly revered, and some trails on the mountaintop serve as a Via Crucis or Stations of the Cross, built and used in his honor. Devotees still make pilgrimages to the Peak.

In May 1921, the *Santa Fe News Bulletin* reported that “Hermit Peak is now connected by telephone, and a protractor duly installed thereon, thus giving us detection control over one of our worst fire areas.” The Forest staffed Hermit with two men that year, paying each 3 dollars per day. An inspector noted that the Peak was

“equipped with three alidades located in a triangular position so that the lookout man can by visiting these 3 points, about a quarter of a mile apart, see the entire east slope of the range.” Two of the lookout points already had easy access to the telephone line, and he recommended running a third line, with the lookout carrying a field telephone. He felt it was impractical to build a tower as the mountain top was too flat to gain the needed view with a standard-height tower. The last mile of trail was impassable by horse, and he recommended it be improved, possibly in cooperation with the Porvenir Resort at the foot of the trail. This trail work was completed in 1922.⁶³

For the first five years, the lookout lived in a tent on top with a telephone nearby. When Aldo Leopold inspected the site in 1923, he was aghast that Hollenbeck, the Hermit Peak lookout fireman, had been on duty for an entire month “with no Dutch Oven.” The Forest made a composite seen-area map of the Pecos in 1924, but Hermit Peak was not included. A 1925 triangulation map listed it as a primary lookout, and the Forest planned to build a cabin and tower on top.⁶⁴

Its first lookout cabin was constructed in 1926 or 1927 “in cooperation with the Society of the Cross [a devotional organization honoring the Hermit with visits to the mountain] and used jointly with them.” This cabin gave Society members some protection from bad weather during pilgrimages. Lightning protection was never installed on it, nor have any photographs of it been found.⁶⁵

The 1928 inspector felt that aside from the large pasture the “improvements...do not amount to much,” noting one of the three protractors was broken. He was the first of many to suggest construction of a steel tower, preferably with living quarters on top, to replace the inefficient three-protractor arrangement. At that time the Lookout was partially financed by cooperative money from private land grants. The telephone line was not repaired that year because the maintenance man was killed by lightning.⁶⁶



Figure 90. Hermit Peak hiker shelter built by the CCC in 1936 (undated, Improvement and Construction Detail Pictures, SMC, RO coll bldg folio/91)

By the mid-1930s, Forests in the Region were receiving more public use; in response they were building overnight shelters near some lookouts to support recreation and discourage early and late season break-ins at the lookouts. Hermit received more visitors than most lookout sites on the Forest due to its religious significance, and in 1936 the CCC built a hiker shelter on top (Figure 90). In 1938, the Forest made a seen-area map that incorporated information from all three patrol points.⁶⁷

By 1941, there was a strong push to get better lookout improvements at Hermit Peak despite wartime policies limiting development. The Forest began construction of a log lookout cabin near the hiker shelter in 1943. It was about 13 feet by 15 feet, “fire guard quarters of temporary construction that can be used as storeroom etc. when more permanent quarters are built.” The lookout finished it during the 1945 season, and it was never replaced by “more permanent quarters.” This cabin is shown in Figure 91.⁶⁸

The 1946 fire inspector noted “primitive galvanized protractor plates at three points, no alidades, lookout uses a straight edge instead.” The lookouts that year were Robert Springfels (Elk Mountain lookout in 1915) and his wife. Figure 92 shows Mrs. Springfels pointing towards Barillas from the west protractor point; the inspector is blocking the view of the cement and rock protractor stand. In 2015, a marker labeled “USFS Fire Control Seen Area Map Hermit West” was found at this spot, as well as broken pieces of the stand. One piece was inscribed “USFS 1929,” and its top held four lag bolts for attaching the now-missing metal map board. A tree at this spot has a grounding rod, junction box, and piece of copper lightning protection running to its top. This provided safety when using the portable telephone to report smokes.⁶⁹

The east protractor point has a 1965 USGS marker labeled “HERMITET” (an abbreviation for Hermit East), as well as traces of cement on the bedrock from the protractor stand. The south protractor point has a USGS marker,



Figure 91. Hermit Peak Lookout cabin built in 1944-1945 (October 1946, Improvement and Construction Detail Pictures, SMC, RO coll bldg folio/55)



Figure 92. Mrs. Springfels, Hermit Peak relief lookout, pointing towards Barillas from the west protractor point; the inspector is in front of the cement and rock protractor stand. (June 19, 1946, Edward Ancona, NARA, 1946fireinsp/10)

unlabeled but dated 1931. Rocks are piled there, but no cement was found. A map in the 1960 Las Vegas District Fire Atlas shows three different azimuth rings corresponding to lookout points “Hermit,” “East,” and “West.”

In the early to mid-1950s, the Forest was switching over from telephones to radios, and it removed all telephone lines and spurs on the District except the one to Hermit Peak, waiting “until the radio system was completely operative” to take that line down. By 1958 a radio repeater had been installed on the Peak.⁷⁰

Patrolling between the three protractor points while out of radio communication was inefficient. Hermit only reported 12 fires in the 1950s. A 1949 detection study recommended abandoning Hermit Peak Lookout and substituting aerial detection after lightning. Fire plans for the early 1950s showed Hermit as an emergency lookout, staffed only in high to extreme fire danger. It was listed as unstaffed in the 1952 aircraft marker list. The 1956 Detection Report again listed it as a primary lookout, with construction of a tower as priority one, though many doubted a tower would work on the flat

mountaintop. From the mid-1950s to the mid-1960s, proposed alternatives included building a 100-foot tower on Hermit, or developing other points in the area that might give better coverage. Suggested alternates included Elk Mountain, El Cielo, Johnson Mesa, Ute (Capulin) Peak, and high points near Rociada and Trout Springs, none of which were developed. Another proposal was to turn Hermit over to State Forestry. In 1959 and 1960, the Las Vegas District planned to purchase two Osborne firefinders, at 265 dollars each, “if 2 towers are constructed,” but the specific locations were omitted. State cooperative funding provided 300 dollars of the 1959 lookout salary, with 75 dollars allocated for feed for the lookout’s horse.⁷¹

It was such a dry year in 1956 that the Hermit Peak Spring failed, and water had to be hauled to the Lookout. In July 1958 an inspector felt the lightning protection was inadequate, and the lookout was closed until this was rectified, probably in early 1959. In 1961 the hiker shelter and lavatory still stood. The Forest likely removed them soon after 1966, at the same time as the lookout cabin. Parts of the chimney foundation for the hiker shelter remained near the trail junction on top of the Peak in 2015.⁷²

Tony Roybal visited the Lookout in the early 1960s when his cousin Charlie Martinez staffed it. The cabin in Figure 91 was the lookout quarters, set back from the precipitous rim, with the hiker shelter within walking

distance of it. Every hour the lookout was required to leave the cabin and visit the three patrol pedestals. Roybal said the old map boards and rulers used in the 1940s had been replaced with a small firefinder, which the lookout carried from point to point, placing it on pipe extending from the pedestals.⁷³

During the five seasons that Martinez staffed the Lookout, he only had Sundays off, with no relief lookout. A makeshift corral stood northeast of the cabin for his horse, which was grained. He used his horse to pack water from the Spring a quarter mile away, and wooden gutters also collected roof water into a large wooden cistern on the side of the cabin. There was little space inside the cabin, so Roybal slept outside during his visits, but Martinez warned him to move in if there was lightning. Unfortunately the insulated stool only accommodated one person! The cabin also held a fine Majestic woodstove. Near the rim is a large circle of rocks with the remains of the number 25 within; this was an aircraft marker. Roybal helped Martinez whitewash it.⁷⁴

Hermit Peak turned in fires in 1965 and 1966, but was not listed after that. The Lookout was demolished sometime in the late 1960s, probably burned. The area became part of the Pecos Wilderness at that time, which may have been the impetus for its removal. It did not appear on the 1967 Pecos map.⁷⁵

Jicarita Peak

T. 21 N., R. 13 E., sec. 16

The northernmost part of the Pecos Wilderness, including Jicarita Peak, was originally part of the Santa Fe National Forest but was transferred to the Carson National Forest in 1923. Maps from 1914 through 1923 show a lookout on this Peak, with a telephone line to it from the northeast. It was then called Jicarilla Peak, not to be confused with what is today called Jicarilla Peak closer to Truchas Peaks. It was staffed from 1914 through 1921, with the lookout probably staying in the primitive Angostura Cabin several miles below the Peak. The telephone line needed work in 1916. Jicarita was one of the high point lookouts that were difficult to reach due to snow in early spring when fires might be burning in the low country. The Forest abandoned all of the high point lookouts by 1925, and substituted middle to low elevation lookouts.⁷⁶

There were a number of rock structures on the summit in 2016, one of which was round



Figure 93. Rock shelter on Jicarita Peak, very similar to the lookout structure on Penitente Peak (2016, author)

and very similar to the lookout structure on Penitente Peak (Figure 93). No remains of telephone poles or lines were found. The lookout would have had to patrol across the broad summit to get full views, which are outstanding in all directions.

Pecos Peak

T. 16 N., R. 12 E., sec. 36

This site is on point 8140 on the north end of Los Trigos, and is shown as a lookout on maps from 1938 through 1948, marked “Pecos.” In 1937, with labor and funds available under the New Deal programs, Ranger Johnson began reconnoitering new lookout points, including this one. He called it Pecos Peak or Pecos Lookout, while local residents called it Divisadero, meaning “viewpoint” in Spanish. Johnson sketched a seen-area map, planned the telephone line and tower, and “arranged to get poles” for building the tower. No photographs have been found of Pecos Lookout, but it might have been similar to the Mt. Sedgewick pole tower on the Cibola National Forest, shown in Figure 94. The forest on Pecos Peak is dense but not tall, and a 30-foot structure would have sufficed.⁷⁷

Johnson assigned Howard Wester to build the tower in May 1937. He completed it within a month, probably using CCC labor. A protractor was installed, staffing begun, and Pecos Lookout reported at least one fire that summer. This site had no cabin as it was easy for the lookout to travel daily from the town of Pecos; Johnson

sometimes drove the lookout partway up. Meliton Lopez staffed this lookout, which he called Divisadero. He told his son Milton that it was a timber tower with a platform, roof and lightning protection, but no windows.⁷⁸



Figure 94. Pole tower at Mt. Sedgewick Lookout on the Cibola National Forest, possibly similar to Pecos Peak Lookout (1932, SMC, RO scans old photos/10)

Johnson made another seen-area map in April 1938. He described this site as “good for Pecos Basin, but a lot of blind area of high hazard,” so he began making plans to develop Glorieta Baldy and Rosilla Lookouts as well. In May, he considered placing a CCC enrollee on Pecos Lookout, but the CCC supervisor required special authority to authorize regular lookout duty. Instead Johnson hired an “emergency lookout,” arranging for Bill Reid, the Barillas lookout, to help train him. Pecos Lookout was also used in 1938 and 1939, but in 1940 Johnson moved some of its equipment to the new Glorieta Baldy Lookout. Pecos Lookout was staffed “late in the season” in 1940, but is not mentioned after that. Once Glorieta Baldy and

Rosilla Lookouts were completed that year, Johnson abandoned Pecos Lookout. It was still standing in the early 1950s.⁷⁹

A marker labeled “USFS Fire Control Seen Area Map Pecos Lkt” is still in place at the site. A visit to the point in September 2013 also turned up a copper grounding rod and some cans and pieces of metal. The old jeep road is washed out near the top.

Rosilla Peak

T. 17 N., R. 12 E., sec. 1

Ranger Johnson reconnoitered this area in 1937, checking high points for a lookout location that “covers most of country that Pecos lookout does not.” After the Terrero Mine closed in May 1939, he lost the cooperative detection of their linemen along the Pecos Canyon Tramway, and he “needed a lookout to cover the west slope of the Pecos. The upper Cow Creek Country Rosilla Peak was selected.” In September 1939, he completed a seen-area map, set a brass marker, and identified a nearby patrol point. Once construction of Glorieta Baldy was underway in June 1940, he sent Tom Gonzales to set up a temporary lookout at Rosilla Peak. Johnson “selected a tree to use as the lookout,” and sent spikes to Gonzales for building a ladder up the tree. The 1940 Fire Plan indicated Rosilla was to be staffed in high fire danger. But things went awry at Glorieta Baldy Lookout later that month when lightning struck its construction crew, and further development of Rosilla was dropped until mid-August, when Pete Vigil began constructing the telephone line. In September, Johnson designed a “tower for Rosilla,” and found most of the materials for its construction at the Santa Fe Warehouse. But on October 2, the Regional Office decided against his tower plans, preferring to build a temporary structure rather than a substandard permanent one. It approved a “non-standard but satisfactory” ground house, a “temporary [shack] on skids” for Rosilla, built with funds remaining after completion of Glorieta Baldy and St. Peter's Dome Lookouts.⁸⁰

Johnson began construction in October 1940, and he spent many days working with the CCC crew. That month an inspector noted that Rosilla was “being manned with no improvements available other than a telephone...A temporary cabin is being constructed by ERA men...properly insulated against lightning,” but it wasn't completed that fall. Johnson prepared a map and protractor for Rosilla in the spring of 1941, and a CCC crew stayed there for 12 days in June to finish construction. Somehow the Lookout had been built on a corner of Tom Old's private property, and he and Johnson surveyed the area in preparation for a land exchange that was never finalized.⁸¹

After completion, the Forest seldom staffed Rosilla. Even Ranger Johnson considered it an emergency or secondary lookout. It was used sporadically and some years not at all, generally only in high fire danger and during elk hunting season. In 1942, Max Lucero started his season at Rosilla but was soon moved to Glorieta

Baldy when the new lookout there proved untrainable, and no one replaced him at Rosilla. The Lookout was sometimes used as housing during Forest projects, and at least once Johnson allowed Boy Scouts to use it.⁸²



Figure 95. Rosilla Lookout (1946, SMC, RO scans old photos/61)

A 1946 inspector described Rosilla as a 14- by 14-foot ground house on skids, well built but incomplete inside (Figure 95). It was a frame building covered with Shevlin commercial siding, made to look like peeled pine logs, and it held a woodstove and two cots. In 1946 access was via a poor road and one mile of trail, but by 1956 a road reached all the way to the Lookout. A handwritten progress note said the cabin interior was completed in 1948. Rosilla was one of the few lookouts on the Forest that never had an Osborne firefinder, just a protractor and alidade.⁸³

The 1955 GII inspector, evaluating recreation potential, said “Rosilla Lookout could be developed into a magnificent vista point.” He suggested that the neglected building be “brought up to standard” for use in extreme fire danger as it had “good coverage of the worst fire country on the district.” The cabin was deteriorating in 1956: broken windows were letting in snow and rain, lightning protection was substandard, and the telephone line had been disconnected. The 1956 Detection Plan listed it as a secondary lookout. Most inspectors felt it should be abandoned since the few blind areas it covered were of low risk, but the District Ranger felt Rosilla was useful, so needed maintenance was done in 1957. Once the new Barillas tower was completed in 1959, Rosilla was only staffed following lightning, but just for the day.⁸⁴

Forest facilities records contain a lease agreement dated June 1, 1962, whereby W.T. (Tom) Old leased 15 acres to the federal government “for the installation of equipment needed to operate the Rosilla Peak Lookout.” The lease had a 10-year term, with a payment of five dollars per year. Lookouts had to make arrangements to cross Old's

private land to access the cabin. In May and June of 1962, the Forest staffed Rosilla for 29 days, and in 1964 a smoke was reported from it. It was still listed in the 1966 Manning Guide, but was probably removed soon after that; the cabin was gone by 1971. Rosilla Peak Lookout is shown on maps from 1941 through 1959, but it was not on the 1967 Pecos map. Bits of concrete and a topped and limbed tree were found at the site in 2014.⁸⁵

Three people remembered seeing a tower at this site in the early 1960s, with a small glassed-in cab. After the Forest demolished Rosilla, David Old saw a pile of metal on the ground along with concrete footers, definitely not remains of the ground cabin. Records do not mention any additional development at the site, and as it was never an important lookout, these reports are a mystery.⁸⁶

Rowe Peak T. 15 N., R. 12 E., sec. 30

Rowe Peak was shown as a secondary lookout on maps from 1914 through 1924. The 1916 inspector said its telephone was “sheltered in a small shed of rough lumber. [The p]oint is used now only in emergencies. The trail to the lookout is very steep and barely passable but it does not seem advisable to keep it up unless the lookout point should be made to play a more important part in the fire protection scheme that it does at present.”⁸⁷

Ranger Johnson visited Rowe Peak in September 1920 “to consider using that point for Fire Protection.” The next year, he ran a telephone line up from Rowe Plaza, hired Karl Valentine as the lookout, and set up a tent with a wood floor and stove at nearby Ortiz Springs. He also improved the trail, installed a telephone, and trained and supplied Valentine. But in March 1922, Johnson decided to abandon Rowe Lookout in favor of nearby Escobas, which he developed and staffed that year. On March 30 he removed the telephone line to Rowe Peak.⁸⁸

In 2014 the old map board pedestal still remained (Figure 96), along with some telephone line and batteries, metal and glass trash, and excellent views.

In May 1938, dissatisfied with coverage from Pecos Lookout, Johnson had seen-area maps made from various points, including “Sands and Rowe Points,” a point east of the Rowe Hill road, and interestingly, the old Rowe Peak Lookout point. Maps of 1941 and 1947 show a lookout symbol right at the top of the Rowe Hill road, so Johnson apparently chose that location over these others on



Figure 96. Map board pedestal on Rowe Peak, with view to Pecos Wilderness (2014, author)

Rowe Mesa. It was a patrol point, with easy access and good views up Pecos Canyon. No artifacts were found along that section of the rim during a 2014 visit.⁸⁹

Terrero Mine Tramway

The American Metal Company began mining at the Terrero Mine in upper Pecos Canyon in 1927. It transported ore on an aerial tramway that ran down the west side of the canyon for 12 miles to a mill on Alamitos Creek. Ranger Johnson made a detection agreement with the Mine: “While the mines were operating, the tramway maintenance men who rode the line acted as our fire lookouts along the Pecos Canyon.” They used a portable telephone to report smokes. Initiation of detection from the tramway may have allowed Johnson to abandon Grass Mountain Lookout in the late 1920s. The Terrero Mine shut down in May 1939, and to replace the lost detection coverage, Johnson built a lookout on Rosilla Peak.⁹⁰

Whites Peak

T. 24 N., R. 17 E., sec. 2



Figure 97. Whites Peak tree lookout, built in the early 1920s. (June 1947, Substandard Improvements Folio, SMC, RO day2/78)

This lookout site lies northeast of the Forest between Ocate and Cimarron, in an area of mixed State and private lands. Sometimes called White Peak or Black Lakes, it is shown on the second map at the beginning of this chapter. The first lookout was built in the early 1920s, a topped tree with ladder and platform (Figure 97). In 1926 the Carson National Forest and the State made a cooperative agreement to protect the Black Lakes area and staff Whites Peak Lookout. The area was heavily logged in the late 1940s, and the cooperative agreement was working well. In 1948 this tree lookout was one of the last two in use in the Region, but Region felt it was unsafe, having “already caused one permanent injury to a former lookout.”⁹¹

The State erected a 48-foot steel Aermotor LS-40 tower with a 7- by 7-foot steel cab at the site in 1949. This lookout may have been obtained from the Forest Service. An inspector said the associated cabin was small and “nothing to be proud of,” the old tree lookout was slated for removal, and the grounds needed cleaning up.⁹²

In March 1950, the 24,000 acre Ocate Fire crowned and burned over the tower area. It “burned out the floor and all stair treads above the second stair run” and broke all the windows, but the metal tower itself was fine, and the

lookout was quickly restored (Figure 98). The Fire obliterated the old tree lookout and the cabin, generally cleaning up the area just as recommended in the 1949 inspection. In 1951 the lookout stayed in a tent on a platform, though the State Land Commissioner was willing to finance a new cabin “if the State does not sell the land.” The site was also used as a work center by the New Mexico State Land Office in the early 1950s, with a crew living on site for timber cruising, fire patrol and suppression.⁹³

The Santa Fe National Forest took over the cooperative agreement from the Carson National Forest by 1952, and that year it placed a one-room metal field cabin at the site. Whites Peak reported fires to the Forest from 1952 through 1957, and was listed in Fire Plans for those years. But by 1958 the cooperative agreement had been terminated, and it was then run solely by the State. State Forestry crews used it as a work center in the 1960s.⁹⁴

Ernie Lopez staffed Whites Peak for State Forestry from 1970 through 1972, triangulating with the State's Turkey and Armstrong Lookouts. The small cabin had a pitched roof, metal siding, plywood interior paneling, woodstove, simple kitchen, and a bedroom with three bunks. In addition to housing the lookout, work crews continued to base there. Lopez's uncle had staffed Whites Peak in the 1950s; at that time, all communication was by telephone, and maintaining the line was part of the lookout's job.⁹⁵

The State staffed Whites Peak through 1984, and soon after that it closed all of their lookouts in the area. They now use aerial reconnaissance and ground patrols for detection. The Lookout still stands, though the stair treads are gone and the cabin is in poor shape. The State gave its firefinder to the Cabo Lucero Volunteer Fire Department (described in the Local Towns chapter).⁹⁶



Figure 98. Whites Peak Lookout, an Aermotor LS-40 built in 1949, shown after the 1950 Ocate Fire. (1950, R.H. Lewis, USFS Southwest Region Historic Photos Online Collection)

Additional Sites

There were many fires in the spring of 1916, and the primary high point lookouts couldn't be staffed as snow was too deep. Instead the Forest used “[c]ertain high points in the Rio Pueblo [Anton Chico and Rowe Mesa] country,” but no specific locations were given.⁹⁷

Ranger Johnson investigated a point on the ridge between Dalton and Alamos Canyons as a potential lookout in 1938. He said, “it is not high enough for a general coverage,” and never developed it. Danny Roybal reported

seeing a metal ladder in a tree on private land on that ridge in 2003. Nothing was found during a limited search of the area in 2014.⁹⁸

For many years the Forest has made vehicle patrols onto Johnson Mesa to look for smokes.⁹⁹

The Viveash Ridge/Chaparito Knob area has had several lookout sites. As mentioned above, the 1914 Pecos National Forest Map showed one on the south end of Viveash Ridge. In 1938, the Forest made seen-area maps from Chaparita Knob and Viveash Ridge Proposed Lookout Sites, though the maps have not been found and the exact locations are unknown. David Old remembered a tree lookout on the north or northwest side of Chaparito Knob with a view to the northwest. It had carved notches in its trunk for steps, but unfortunately burned in the Viveash Fire. Joe Armijo also saw a tree lookout around Chaparito Knob, perhaps with pieces of wood nailed up like a ladder. While working on a thinning project in the early 1980s, Tony Lopez saw remains of a pole tower laying on the ground on the southern end of Viveash Ridge. The Forest subsequently burned the area as part of the project, and the tower remains are likely gone.¹⁰⁰

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- ¹ Tom Stewart as told to Bob Kelleher, "Blazing Trail on the Pecos", New Mexico, March 20, 1942.
- ² Tucker, *The Early Days Book 1*, 162; Letter from Forest Supervisor, June 8, 1912, NARA, jnara2/94.
- ³ Barker, *Western Life and Adventures*, 101; District 3 Monthly Report, May 1911, NARA, 1/24.
- ⁴ Johnson Work Diaries; John W. Johnson, *Reminiscences of a Forest Ranger - 1914-1944*, (Dayton OH: Brown and Kroger, 1976).
- ⁵ District 3 Monthly Report, May 1911, NARA, 1/24.
- ⁶ 1958 GII, Las Vegas District, NARA, A4/20; "Dial Telephones Go Into Service In Pecos Area", *Las Vegas Optic*, January 6, 1953.
- ⁷ 1928 Inspection, Pecos Division, NARA, 5/67; 1940 Inspection, NARA, 5/139; SDDDB, December 8, 1915, NARA, 3/212; 1916 Inspection, Pecos District, NARA, 4/284.
- ⁸ Rita Jane Glazebrook, ed., *Sampler of the Early Years, Volume II*, (Portland, OR: Gann Publishing, 1986), 73.
- ⁹ *Santa Fe News Bulletin*, quoted in SDDDB, July 2, 1920, NARA, 4/2; 1921 List of Lookouts, SFNF SO, Dispatch/156.
- ¹⁰ 1923 Aldo Leopold Inspection, SFNF SO; 1924 List of Lookouts, SFNF SO, Dispatch/160; Seen-Area Map Atlas, SFNF SO, Dispatch/109.
- ¹¹ Johnson Work Diaries; Johnson, 39-40; Letter from Forest Supervisor, January 30, 1925, SFNF SO, Dispatch/133.
- ¹² Letter from Forest Supervisor, January 30, 1925, Dispatch/133; 1925 Plan and Progress, NARA, 2/46; Tom Swetnam, e-mail message to author, November 23, 2015; 1926 Plan and Progress, NARA, 2/73.
- ¹³ 1928 Inspection, NARA, 5/68; Glenn Damian, interview by author, Mineral Hill, NM, June 28, 2014.
- ¹⁴ 1928 Inspection, NARA, 5/68; 1931 Plan and Progress, NARA, 2/111; 1940/41 Inspection, NARA, 5/34; 1942 and 1943 Fire Plans, Colonias District, NARA, A3/127,130.
- ¹⁵ Karen George, interview by author, Santa Fe, NM, fall 2013; Johnson Work Diaries.
- ¹⁶ Johnson Work Diaries.
- ¹⁷ Johnson Work Diaries.
- ¹⁸ Johnson Work Diaries; Johnson, 109.
- ¹⁹ 1936 Forest Plan, NARA, 2/149; 1941 Plan and Progress, NARA, 2/184; 1942 Plan and Progress, NARA, 2/187-188; 1946 Inspection, NARA, A1/138; 1946 Fire Inspection, NARA, 4/129,131; 1952 Fire Plan, NARA, A3/224.
- ²⁰ 1946 Inspection, NARA, A1/138; 1948 GII, NARA, 5/4,10; Interviews by author: Fred Vigil, Pecos, NM, August 5, 2014; Wilfred Varela, Pecos, NM, September 26, 2016; 1951 Commissary Fire BOR, NARA, 3/135.
- ²¹ 1946 Fire Inspection, NARA, 4/124; 1948 Plan and Progress, NARA, 2/227-230; 1948 GII Report, NARA, 5/4,10; Memorandum on Progress from 1946 Fire Inspection, August 27, 1948, NARA, 5/24; 1949 Fire Inspection, NARA, 3/38; 1949 Plan and Progress, NARA, 2/200,201,204,205; 1949 Region 3 Plan, NARA, 2/234; 1957 Fire Inspection, NARA, A2/66.

²² 1950 Region 3 Plan and Progress, NARA, 2/236; 1950 Plan and Progress, NARA, 2/238; 1951 Plan and Progress, NARA, 2/250; 1951 Commissary Fire BOR, NARA, 3/135,138,139; 1956 Inspection, Lower Pecos, NARA, A3/375; 1958 Inspection, NARA, A4/25; 1961 GII Fire Inspection, NARA, 5/261.

²³ Memorandum from Forest Supervisor, March 9, 1955, NARA, 5/197; 1952 Plan and Progress, NARA, 2/257; 1953 Region 3 Plan and Progress, 2/260-261; 1952 Plan and Progress, NARA, 2/255; 1952 GII, NARA, 5/158; 1957 Fire Inspection, NARA, A2/66; 1956 Detection Plan, NARA, A4/304,328,347; 1956 Inspection, Lower Pecos, NARA, A3/370,375,379.

²⁴ 1946 Fire Inspection, NARA, 4/130; 1963 Fire Inspection, Lower Pecos District, FRC/18; Interviews by author: Hank Quintana, Pecos, NM, July 6, 2014; Fred Vigil; Wilfred Varela; 1956 Detection Plan, NARA, A4/328; 1956 Inspection, Lower Pecos, NARA, A3/370.

²⁵ Fred Vigil and Wilfred Varela, interviews.

²⁶ 1958 GII, Lower Pecos District, NARA, A4/20-21; USDA Forest Service, *Lookouts in the Southwestern Region*, 136; 1959 Engineering Inspection, NARA, 5/237; Karen George, interview.

²⁷ Fred Vigil, interview.

²⁸ Memorandum from Jack Crellin, October 5, 1962, NARA, A4/375; Business Management Inspection, Lower Pecos District, NARA, jnara2/78; 1958 GII, Lower Pecos District, NARA, A4/13.

²⁹ Interviews by author: Gonzalo Varela, Pecos, NM, August 4, 2016; Charles Mullings, Santa Fe, NM, August 25, 2014; Wilfred Varela.

³⁰ Gail Roos, interview by author, Santa Fe, NM, August 3, 2014.

³¹ Interviews by author: Fred Vigil; Mike Wirtz, Santa Fe, NM, June 9, 2014; Glorieta Baldy Lookout logs, Pecos Ranger District; Hollis Engley, "Lookout - A Family Affair Among the Lightning Bolts", *Santa Fe New Mexican*, June 16, 1983, B-3.

³² Polly Mullen, interview by author, Pendaries, NM, June 6, 2014.

³³ Author's personal experience while staffing Barillas 2013 through 2016.

³⁴ Tony Roybal, interview by author, Romeroville, NM, summer 2013; Right-of-Way Deed between R. B. Schoonmaker and the Secretary of Agriculture, April 3, 1914, NARA, 5/168; 1916 Inspection, NARA, 4/284; *Santa Fe News Bulletin*, quoted in SDDB, May 16, 1921, NARA, 4/14.

³⁵ Tony Roybal, interview.

³⁶ Audrey Simpson, "Mountain Man' Still Held By Magnetism of Mountains", *Las Vegas Daily Optic*, August 20, 1963.

³⁷ 1916 Inspection, NARA, 4/270,284,289; Reginald Reindorp, *The Autobiography of Reg Reindorp*, (Self-published, 1988), 10; Johnson, 45-46.

³⁸ Johnson, 45-46; SDDB, March 4, 1927, NARA, 4/94.

³⁹ Memorandums from: L.A. Pritchard, March 16, 1959, NARA, A2/54; Forest Supervisor, May 21, 1963, NARA, A4/76; Forest Supervisor, June 25, 1963, NARA, A4/361-362; A.J. Garner, July 5, 1963, NARA, A4/80; Forest Supervisor, July 25, 1963, NARA, A4/74; Assistant Regional Forester, September 18, 1963, NARA, A4/87;A2/53; List of Archived

Drawings, March 20, 1995, SFNF SO, Facilities, includes a 1966 listing "Proposed ??? Elk Mountain LO"; 1966 Manning Guide, Pecos District, NARA, A4/122.

⁴⁰ Johnson, 28.

⁴¹ Johnson Work Diaries; 1922 Plan and Progress, NARA, 2/15,17,19,21.

⁴² Johnson Work Diaries.

⁴³ 1923 Aldo Leopold Inspection, SFNF SO; Seen-Area Map Atlas, SFNF SO, Dispatch/109; Letter from Forest Supervisor, January 30, 1925, SFNF SO, Dispatch/133; 1926 Plan and Progress, NARA, 2/73; Johnson Work Diaries.

⁴⁴ Lists of Lookouts, SFNF SO, Dispatch/157-160; 1927 Plan, NARA, 2/77; 1928 Plan and Progress, NARA, 2/96; 1928 Inspection, Pecos Division, NARA, 5/67; 1932 Plan, NARA, 2/125.

⁴⁵ Project Work Inventory Forms, Binder in Archeology Cage, SFNF SO; National Geodetic Survey Datasheet, PID FN0679, <http://www.ngs.noaa.gov>.

⁴⁶ Johnson Work Diaries; Seen-Area Map Atlas, SFNF SO, Dispatch/18; 1940 Plan and Progress, NARA, 2/179-180; Johnson, 82-84.

⁴⁷ Johnson, 82.

⁴⁸ Johnson, 82-83; Johnson Work Diaries.

⁴⁹ Johnson, 83-84; Johnson Work Diaries; Eric Roybal, interview by author, Barillas Lookout, June 15, 2014.

⁵⁰ Johnson, 83-84; Johnson Work Diaries.

⁵¹ Johnson, 84; Johnson Work Diaries.

⁵² Johnson Work Diaries.

⁵³ Progress August 27, 1948, NARA, 5/24; 1946 Fire Inspection, NARA, 4/130; 1946 Inspection, NARA, A1/133.

⁵⁴ 1948,1949,1950 Fire Plans, Tesuque District, NARA, A3/189,185,181; Gonzalo Varela, interview; 1950 Commissary Fire BOR, NARA, 3/140; 1956 Detection Plan, NARA, A4/341.

⁵⁵ 1953 Plan and Progress, NARA, 2/265; 1952 GII, NARA, 5/162; 1956 Detection Plan, NARA, A4/328; 1956 Fire Inspection, Upper Pecos District, NARA, A3/398,401; 1957 Fire Inspection, Upper Pecos District, NARA, A3/314; interviews by author: Charles Mullings; Joe Armijo, Barillas Lookout, July 7, 2014; Phil Long, August 19, 2014; Milton Lopez, Pecos, NM, August 29, 2016; Wilfred Varela.

⁵⁶ Phil Long, interview.

⁵⁷ Steere, 44; Glorieta Baldy Lookout logs, Pecos Ranger District; Danny Roybal, personal communication, summer 2014.

⁵⁸ Barker, *Western Life and Adventures*, 101; SMC, Box B23, Regional Office, Albuquerque, Janie scan/2.

⁵⁹ 1916 Inspection, NARA, 4/284,326; Barker, *Eighty Years with Rod and Rifle*, 22; George A. Viles personal diaries, 1898-1950, MS 0396, Transcribed by Merideth Wald Hmura, New Mexico State University Library, Archives and Special Collections Department.

⁶⁰ 1916 Inspection, NARA, 4/284,326.

⁶¹ Johnson Work Diaries; 1921 Inspection Report, NARA, 4/214 quote; Seen-Area Map Atlas, SFNF SO, Dispatch/109.

⁶² Letter from Forest Supervisor, January 30, 1925 ,SFNF SO, Dispatch/133; 1928 Inspection, Pecos Division, NARA, 5/62; Johnson Work Diaries; 1966 Business Management Inspection, Española District, NARA, jnara2/82.

⁶³ *Santa Fe News Bulletin*, quoted in SDDDB, May 16, 1921, NARA, 4/14; 1921 List of Lookouts, SFNF SO, Dispatch/156; 1921 Inspection, NARA, 4/213,244,251,252; 1922 Fire Plan, NARA, 2/18.

⁶⁴ 1923 Aldo Leopold Inspection, SFNF SO; Seen-Area Map Atlas, SFNF SO, Dispatch/109,116; Letter from Forest Supervisor, January 30, 1925, SFNF SO, Dispatch/133.

⁶⁵ Letter from Forest Supervisor, January 30, 1925, SFNF SO, Dispatch/133; 1926 Plan and Progress, NARA, 2/70,73; 1927 Plan and Progress, NARA, 2/81; 1928 Inspection, Pecos Division, NARA, 5/68; *Santa Fe News Bulletin*, quoted in SDDDB, September 20, 1928, NARA, 4/98.

⁶⁶ 1928 Inspection, Pecos Division, NARA, 5/68,71.

⁶⁷ SDDDB, April 30, 1935, NARA, A1/21; Improvement and Construction Detail Pictures Folio, box G53, SMC, ROcoll/91; Seen-Area Map Atlas, SFNF SO, Dispatch/42.

⁶⁸ 1941 Plan and Progress, NARA, 2/184; 1943 Plan and Progress, NARA, 2/196-197; 1945 Plan and Progress, NARA, 2/207-208.

⁶⁹ 1946 Fire Inspection, NARA, 4/131, 46insp/10; National Geodetic Survey Datasheet, PID FN0769, <http://www.ngs.noaa.gov>.

⁷⁰ 1958 GII, Las Vegas District, NARA, A4/9.

⁷¹ 1958 GII, Las Vegas District, NARA, A4/9; 1949 Plan and Progress, NARA, 2/200-201; 1952 Plan and Progress, NARA, 2/256; 1961 GII Fire Inspection, NARA, 5/261; 1961 GII, Las Vegas District, FRC/22; 1957 Fire Inspection, NARA, A2/53,54,55,66,67; 1950 and 1951 Fire Plans, Las Vegas District, NARA, A3/111,115; 1952 Fire Plan, NARA, A3/224; 1958 Inspection, Las Vegas District, NARA, A3/295; 1957 Inspection, Las Vegas District, NARA, A3/305; 1955 GII, Las Vegas District, NARA, A3/363; 1956 Detection Plan, A4/304,305,328,329,340; Organization and Financial Plan, FRC/21-22; 1961 Fire Inspection, NARA, 5/262,264; 1959 Fire Control Plan, SFNF SO, Dispatch/1+.

⁷² "Stubborn Fire in Enchanted Lake Area, Man Caused", *Las Vegas Optic*, July 9,1956; 1958 Inspection, Las Vegas District, NARA, A3/290-291.

⁷³ Tony Roybal, interview.

⁷⁴ Interviews by author: Tony Roybal; Damian Duran, Cleveland, NM, August 28, 2014.

⁷⁵ Fire Discoveries by Lookouts, 1959-1970, SFNF SO, Dispatch/187-192; Memorandum from Earl Blann, May 20, 1966, NARA, A4/116; Interviews by author: Damian Duran; Manuel Solano, San Ignacio, NM, August 27, 2014; Leslie Byrne, Surveyor, SFNF, personal communication.

⁷⁶ 1916 Inspection, Pecos Division, NARA, 4/270,284,289,332; 1921 Inspection, NARA, 4/241.

⁷⁷ Johnson Work Diaries; Milton Lopez, interview by author, Pecos, NM, August 29, 2016.

⁷⁸ Johnson Work Diaries; Milton Lopez, interview.

⁷⁹ Seen-Area Map Atlas, SFNF SO, Dispatch/52; Johnson Work Diaries; Milton Lopez, interview.

⁸⁰ Johnson Work Diaries; Johnson, 84; Seen-Area Map Atlas, SFNF SO, Dispatch/46; 1940 Fire Plan, Pecos District, NARA, A3/153; 1940 Inspection, NARA, 5/32; 1940 Plan and Progress, NARA, 2/179-180.

⁸¹ Johnson Work Diaries; 1940 Inspection, NARA, 5/32.

⁸² Johnson Work Diaries; October 1956 Trip and Job Plan, Upper Pecos District, NARA, A3/29; 1944 Fire Plan, Pecos and Colonias Districts, NARA, A3/123; 1946 Fire Plan, Pecos District, NARA, A3/136; 1949 Fire Plan, Pecos District, NARA, A3/133; 1956 Inspection, Upper Pecos District, NARA, A3/399; 1956 Detection Plan, NARA, A4/303,305; 1963 Manning Guide, Upper Pecos District, NARA, A4/225.

⁸³ 1946 Inspection, NARA, A1/132; 1956 Detection Plan, NARA, A4/329; Wilfred Varela, interview.

⁸⁴ 1955 GII, Upper Pecos District, NARA, A3/409,412; 1956 Detection Plan, NARA, A4/303,329; 1956 Fire Inspection, Upper Pecos District, NARA, A3/395,397,398,402; June 1957 Trip and Job Plan, Upper Pecos District, NARA, A3/25; 1957 Fire Inspection, Upper Pecos District, NARA, A3/313-314; Wilfred Varela, interview.

⁸⁵ Lease Agreement, SFNF SO, Facilities; Memorandum from Warren Hall, July 13, 1962, FRC/5; Fire Discoveries by Lookouts, 1959-1970, SFNF SO, Dispatch/169+; 1966 Manning Guide, Pecos District, NARA, A4/123; interviews by author: Bryan George, Santa Fe, NM, fall 2013; Wilfred Varela.

⁸⁶ Interviews by author: Sally Flores, San Geronimo, NM, summer 2016; David Old; Gene Long, Macho, NM, April 18, 2016.

⁸⁷ 1916 Inspection, NARA, 4/306-307.

⁸⁸ Johnson Work Diaries.

⁸⁹ Johnson Work Diaries; Seen-Area Map Atlas, SFNF SO, Dispatch/9.

⁹⁰ Johnson, 84; Johnson Work Diaries.

⁹¹ USDA Forest Service, *Lookouts in the Southwestern Region*, 18; 1956 Detection Plan, NARA, A4/307; 1949 Fire Inspection, NARA, 3/50; 1948 Region 3 Plan, NARA, 2/225; Memorandum from Donald Beck, December 16, 1948, NARA, 4/114.

⁹² Forest Fire Lookout Association, "New Mexico Lookouts", accessed December 7, 2016, <http://www.firelookout.org/lookouts/lo-newmexico.html>; Fred Fuchs, interview by author, Los Lunas, NM, June 25, 2014; 1949 Fire Inspection, NARA, 3/50; 1949 Region 3 Plan, NARA, 2/233-234.

⁹³ Memorandums from: Regional Forester, April 21, 1950, NARA, 3/81; L.F. Cottam, December 19, 1950, NARA, 3/46; 1951 Region 3 Fire Inspection, NARA, 3/29; New Mexico State Forestry, Memorandum "White's Peak Lookout", undated, based on an interview with Larry Garcia in September 1994.

⁹⁴ 1952 GII, NARA, 5/151; 1954 Las Vegas District Fire Organization Chart, NARA, A3/107; 1956 Fire Plan, A3/211; 1958 Inspection, Las Vegas District, NARA, A3/348; 1961 Fire Inspection Report, NARA, 5/259,262; "White's Peak Lookout" Memorandum.

⁹⁵ Ernie Lopez, interview by author, Ute Park, NM, June 30, 2015.

⁹⁶ Interviews by author: Frank Smith, Hartsel, CO, December 8, 2016; Eugene Pino, Las Vegas, NM, January 27, 2016; Dave Lorenz, e-mail message to author, March 17, 2016; James Romero, personal communication, summer 2016.

⁹⁷ 1916 Inspection, NARA, 4/284.

⁹⁸ Johnson Work Diaries; Danny Roybal, personal communication, summer 2014.

⁹⁹ Tony Roybal and Damian Duran, interviews.

¹⁰⁰ Seen-Area Map Atlas, SFNF SO, Dispatch/9; Interviews by author: David Old; Joe Armijo; Tony Lopez, personal communication, summer 2014.

Valles Caldera National Preserve

This area was an early land grant called Baca Location Number 1, and is also known as Valle Grande. A lawsuit led to private ownership by non-heirs to the grant, with ranching and timber as primary uses. From the 1920s to 1961, the Forest maintained cooperative agreements with the owners for prevention and suppression. In 1961, the State assumed fire protection responsibilities on private lands, and placed several summer patrolmen in this area. The federal government obtained the land in 2000, created the Valles Caldera National Preserve, and the Forest once again had responsibility for fire protection. In 2015 the National Park Service took over that responsibility. The following two lookout sites are shown on the Jemez District map.¹

Rabbit Mountain

T. 19 N., R. 4 E., sec. 36



Figure 99. Labeled "Rabbit Mountain Lookout telephone instrument" though the terrain does not match areas on or near the Rabbit Mountain summit (undated, archeology binder 27, no. 5439, SFNF SO)

This is shown as a lookout on maps from 1922 through 1933. In 1924, Ranger Perl Charles and Forest Supervisor Frank Andrews “put an emergency lookout on Rabbit Mountain,” packing in World War I telephone wire, and possibly installing a telephone and map board. The summit is a boulder field with good views, so a lookout structure was not required nor developed. In the 1920s, the proposed Cliff Cities National Park included Rabbit Mountain. The Forest was hesitant to make improvements when they were unsure of future land status, and this may have curtailed further development. Jerry Leyba remembered a little tent camp on Rabbit Mountain for the fire guards.²

A 2009 archeological survey of the Mountain found no lookout artifacts, and in 2011 the Las Conchas Fire burned intensely over the area. Only baling wire and small wood pieces were found among the summit boulders in 2015. Figure 99 is labeled “Rabbit Mountain Lookout telephone,” though the location is uncertain and it does not match terrain on or near the top of the Mountain.³

Redondo Peak

T. 19 N., R. 4 E., sec. 18

In the 1920s, the Forest evaluated several area summits to determine the best location for lookout development. One objective in the 1923 Fire Plan was to “determine if Redondo Peak can be used as a lookout with a view of eliminating Cerro Pelado and Bearhead,” as Redondo was felt to be “the keystone of detection for Cañon de San Diego and Baca grants and should be developed.” In 1925, the Forest made a seen-area map, proposed a trail and telephone line to the Peak, and Supervisor Andrews said “we will probably put on one primary lookout on Redondo.” The Forest performed another study in 1927, but it ultimately decided the Peak was too high, inaccessible, and costly to develop. The Cliff Cities National Park proposal also curtailed development. Nonetheless, Redondo was shown as a lookout on maps from 1921 through 1933.⁴

Locals felt Redondo would be a poor lookout site because its summit is too broad and forested to provide good views and it is often in the clouds. No lookout artifacts have been found on the mountain, though there are remains of a radio tower installed by landowner Dunigan in the 1960s. The top has been heavily logged.⁵

Additional Sites

Frank Smith, retired Fire Management Officer for State Forestry, remembered a tree lookout in the El Cajete area that was used by State patrolmen in the 1970s and 1980s. It was topped, had a wooden or metal ladder and perhaps a platform, but has not been located.⁶

¹ Kurt F. Anschuetz and Thomas Merlan, *More than a Scenic Mountain Landscape: Valles Caldera National Preserve Land-Use History*, Gen. Tech. Rep. RMRS-GTR-196, (Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station), 2007; 1923 Aldo Leopold Inspection, SFNF SO; Letter from Forest Supervisor, June 8, 1925, SFNF SO, Dispatch/132.

² Tucker, *Early Days, Book 2*, 97; National Geodetic Survey Datasheets, PID FO1679, <http://www.ngs.noaa.gov>; Jerry Leyba, interview.

³ Valles Caldera National Preserve, 2008 and 2009 Section 110 Survey on Rabbit Mountain Cultural Resources Report R2009-010, VCNP CR Project P07-010 NMCRIS Activity # 113478, Jeremy T. Decker Archaeologist, Valles Caldera Trust December 29, 2010, draft.

⁴ 1922 Inspection, Jemez Division, NARA, 4/172,187; 1923 Plan and Progress, NARA, 2/27; 1924 Plan and Progress, NARA, 2/39; 1925 Improvements Map, SFNF SO, Dispatch/130; 1925 Plan and Progress, NARA, 2/46; Work Plan, January 29, 1925, SFNF SO, Dispatch/111; Letter from Forest Supervisor, June 8, 1925, and Map to Accompany it, SFNF SO.

⁵ Interviews by author: Peggy Ohler; Gilbert Sandoval; Carlos Sandoval; Frank Gonzales; Pat Waquie; Archie McKellar, La Cueva, NM, April 16, 2014.

⁶ Frank Smith, interview.

Bandelier National Monument

Bandelier National Monument was established within the Santa Fe National Forest in 1916, as a compromise in the ongoing campaign to create Cliff Cities National Park. The Forest administered it until 1932, when the National Park Service (NPS) took over. Its far northwest corner was originally part of the privately-owned Baca Location. St. Peter's Dome Lookout has good views of Bandelier and was used for detection there, particularly prior to lookout development within the Monument. In 1933 the new NPS management negotiated a cooperative agreement for detection and suppression, which the Forest had previously provided. Bandelier initially suggested sharing the cost of operating St. Peter's Dome Lookout, but instead it paid for a patrolman to cover the high-hazard Dome area and also canyon bottoms that the lookout couldn't see.⁷

All of Bandelier's lookout development was done with CCC labor. Their first CCC camp was established in Frijoles Canyon in November 1933, and in October 1939 it was moved near today's junction of Highway 4 and 501. This camp, NP-4, was turned over to the Forest in June 1941. The locations of the Bandelier lookout points are shown on the Española District map.⁸

Y and Corral Hill Tree Lookouts

T. 18 N., R. 6 E., sec. 22 and 7

By 1936 Bandelier wanted to improve its own fire detection capabilities, and its Forester recommended building "two lookout tree ladders." These were made in the Bandelier blacksmith shop and installed by the CCC: one at the Y of Upper Crossing Trail in November 1936 (Figure 100), and the other on Corral Hill in March 1937. The ladders were made of angle iron and wired for lightning protection, following specifications from Grand Canyon National Park. Bandelier placed a telephone box on Corral Hill in February 1938.⁹

Bandelier removed the Y ladder sometime after 1977, and the 2011 Las Conchas Fire vaporized what was left of the tree. Only metal bits and the foundation of the nearby toolbox remained at the site in 2015. The Corral Hill ladder was probably removed at the same time as the Y ladder. In 1992 a prescribed fire burned the corral, old telephone box, and trees at Corral Hill. These tree lookouts are each labelled "TT" on the Española District map.¹⁰



Figure 100. Tree Lookout at the Y of Upper Crossing Trail, built and installed by the CCC in November 1936. Photograph taken after the La Mesa Fire. (1977, Chris Judson, National Park Service, Bandelier National Monument)

Roadside Point

In February 1938, Bandelier announced, “we are going to have a lookout point of our own,” in order to have detection service for a longer period than provided by St. Peter’s Dome Lookout. The CCC set up Roadside Point Lookout, using a tent as shelter “on the Frijoles Canyon rim near the entrance road... [a CCC] enrollee... will have an alidade for locating fires and a telephone for reporting.” A number of fires occurred that June, and Bandelier’s new Roadside Point lookout “beat the Dome lookout in every case.” In September, the lookout structure was taken down and the telephone lines rolled up, to be set up again in May 1939 and 1940. The site was probably located near the current Bandelier Lookout.¹¹

Bandelier/Frijoles Rim

T. 18 N., R. 6 E., sec. 24

Bandelier considered building a permanent lookout in December 1939. Custodian Thomas said the “immediate reaction of course was that it should be hidden or placed on the floor of [a] canyon somewhere... Much as I would hate to see wildernesses ruined by man made improvements... I think a lookout station should be... right out in front of God and everybody.” They actually work much better out there! Thomas also saw the additional benefit of making visitor contacts at a lookout placed in plain view, and wanted to use available CCC labor for construction and staffing.¹²

The CCC began construction of this live-in Lookout in August 1940, on Forest land later transferred to the NPS. Lyle Bennett, architect for most of the Bandelier buildings built by the CCC, designed the lookout. He based it on an NPS standardized fire lookout, drawing PG-3040, with a wood cab on a stone basement. It was finished by April 1941, but it was July before Bandelier found funding to “equip it for living” and hire a lookout. One of the first jobs assigned to the 1942 lookout was to finish painting it “with a brush in one hand and his binoculars in the other.” An Osborne firefinder was installed when it was completed, at a time when all but one of the Forest lookouts were still using the old map boards.¹³

During World War II, women filled positions vacated by men off to war. In 1943, the wife of Bandelier Ranger Kendall was hired for the lookout job. Another woman, Ollie Wendland, staffed it from 1944 through at least 1947. The 1946 inspector said “...this is some lookout...running water, sink, gas refrigerator, gas stove, Osborne firefinder. Lookout de-luxe,” quite a contrast to the more primitive Forest lookouts of that time. In 1943 the Atomic Energy Commission (AEC) established Los Alamos National Lab (LANL) next to Bandelier, and in 1948 the Forest, the AEC and Bandelier made a cooperative agreement for detection and suppression.¹⁴

In 1953, the AEC “conducted a series of tests in a technical area northeast of [Bandelier] headquarters, and as a result broke windows in the lookout...The AEC replaced the windows. The custodian wrote that he awaited the results of the seismograph reading to determine the strength of the tests. He never printed the results.” Bandelier added a slump block kitchen/bathroom addition to the first-floor living quarters in 1956. Sometime between 1965 and 1971, the windows were remodeled from vertical (Figure 101) to sloping.¹⁵



Figure 101. Bandelier Lookout, built by the CCC in 1940-1941. (1964, BANC_2387, NPS, Bandelier National Monument, Early 20th Century Photo Archives)

Bandelier staffed this lookout regularly until the early 1990s, when it began to place more reliance on aerial reconnaissance. Currently the downstairs living quarters house Bandelier employees, and the engine crew visits the lookout after lightning to look for smokes. The lookout has only been shown sporadically on maps since its establishment. Although its formal name is Frijoles Rim, it is generally referred to as the Bandelier Lookout, and occasionally as Roadside or Park.¹⁶

Additional Sites

A small lookout, called Water Canyon in this study, was located on a point above the second Bandelier CCC camp (NP-4) for a few years around 1940. As the lookout site is on Forest rather than Bandelier land, it is described in the Española District chapter.

In April 1946, Bandelier built a secondary lookout below “the woodyard” on the Frijoles Canyon Rim to cover areas blind to the primary Bandelier and St. Peter's Dome Lookouts and to provide cross azimuths; in 1966 an Osborne firefinder was obtained for it. Subsequently the AEC relocated their fence, making it necessary to move this lookout. No further mention of it has been found, nor has the location been identified.¹⁷

In 1963, to improve communication and detection, Bandelier placed antenna ladders at Capulin Cabin and the backcountry fire caches of Upper Frijoles, Alamo Canyon, Corral Hill and the Y. In 1964, two new fire observation points were located in the upper Frijoles area, checked after lightning or on report of a fire. Details of their locations and design have not been found.¹⁸

⁷ Rothman, *Bandelier National Monument*; Fire Protection Requirements for Bandelier National Monument, from L. F. Cook, ca. 1933, WACC/15-16.

⁸ CCC Legacy, "CCC Camps New Mexico", accessed November 4, 2016, http://www.ccclegacy.org/CCC_Camps_New_Mexico.html; Harrison, Copeland and Buck, 26-27.

⁹ NPS, *Southwestern Monuments Monthly Report*, February, November and December 1936, March 1937, February 1938, accessed January 10, 2015 on the Integrated Resource Management Applications (IRMA) Portal, irma.nps.gov.

¹⁰ John Lissoway, interview.

¹¹ *Southwestern Monuments Monthly Report*, February, April, June and September 1938, May and June 1939, May 1940.

¹² Letter from Chester Thomas, January 4, 1940, WACC/17-18.

¹³ *Southwestern Monuments Monthly Report*, August 1940, April 1941, July 1941, May 1942; Harrison, Copeland and Buck, 189.

¹⁴ *Southwestern Monuments Monthly Report*, June 1943, April 1945, August 1946, May 1947; 1946 Fire Inspection, NARA, 4/135; 1948 GII, NARA, 5/9.

¹⁵ Harrison, Copeland and Buck, 189,191, photographs BANC_2386 and BANC_3372, National Park Service, Bandelier National Monument, Early 20th Century Photo Archives.

¹⁶ John Lissoway, interview; 1961 Annual Forestry Report, WACC/23; 1957 Fire Plan, Jemez District, NARA, A3/91.

¹⁷ *Southwestern Monuments Monthly Report*, April 1946; 1966 Annual Forestry Report, WACC/35.

¹⁸ 1963 Annual Forestry Report, WACC/27; 1964 Annual Forestry Report, WACC/30.

Bureau of Indian Affairs

Pajarito Peak **T. 17 N., R. 1 E., sec. 20**

In the 1940s and 1950s, the Forest investigated ways to improve detection across the Jemez mesas, especially in the San Diego Grant area; it proposed Pajarito Peak on Jemez Pueblo land as an additional lookout. The 1959 Fire Control Plan listed a lookout fireman, relief lookout and a 10- by 12-foot tent at Pajarito, and these items were approved in November of 1960. They were to be “financed if lookout built or land acquired.” In the 1963 Plan, these same entries were listed but later crossed out. No structure was built, it was probably never staffed, and it was not shown as a lookout on any maps. Instead, nearby Joaquin Lookout was developed in 1962 and 1963. Pajarito is an electronics site today and is shown on the Jemez District map.¹⁹

Puye **T. 20 N., R. 7 E., sec. 8**

In 1927, the Forest considered replacing Guaje Lookout with a new lookout at Puye Ruins, in cooperation with the Indian Service and the tour operator, Santa Fe Transportation Company (Fred Harvey). That year, the Forest started building the telephone line, but “functioning of the lookout was not definitely tied down” with the cooperators. In 1928, an agreement was negotiated with the Indian Service to split the cost of manning Puye Lookout. That year the telephone line was completed and “protractors set up,” though there was as yet no tower. But the agreement didn’t work out because the Indian Service failed to hire a lookout.²⁰

In 1931 or 1932, the Indian Service erected a 35-foot steel Aermotor LS-40 tower with a 7- by 7-foot steel cab (Figure 102), and Guaje Lookout was abandoned. A new agreement was signed in 1932: the Forest would hire, train, and supervise the Puye lookout, and provide the protractor, stand, map, telephone, and living quarters. It installed a standard Region 3 protractor with fixed mounting, and made a seen-area map in 1938.²¹

By September 1940, the Forest had moved a 10- by 14-foot cabin to the site. It held two cots and a woodstove, but had no lightning protection. It was “a portable one similar to old timber sale [scaler’s] cabins, of rough lumber and unpainted, usually constructed at the warehouse in Santa Fe,...substandard but serve a useful purpose at low cost.” The 1946 inspector felt this cabin was “not a good advertisement for the Forest Service at this very public spot beside the ruins.” A telephone line was built to it from the tower in 1941.²²

By agreement, the Indian Service was providing up to 100 dollars per year to staff Puye Lookout or to conduct aerial observation of Pueblo lands. But it was only considered an emergency lookout, and was not providing satisfactory service to either the Forest or the Indian Service. In 1940, the Forest suggested closing Puye and moving its facilities to Indian Peak, but when Forest development was halted during World War II, the move to Indian Peak was delayed. During the 1940s, Puye was generally staffed only in extreme conditions. In 1947, the Forest performed maintenance on both tower and cabin, and installed an Osborne firefinder. In 1949 the Lookout was unstaffed and reportedly abandoned, with no further improvements planned; aerial observation and reliance on the Los Alamos tower were substituted. Nonetheless, the 1950 Fire Plan still showed Puye staffed during extreme conditions.²³

The Forest moved the Puye cabin and Osborne firefinder to newly-built Clara Peak Lookout in 1951, and Puye Lookout was abandoned. It is unknown when its tower was dismantled or where it was taken. Very little remains at the site. There are two outhouses, one a two-holer, but these may have been associated with other activities at the Ruins rather than with the Lookout. Puye is shown as a lookout on maps from 1936 through 1950 and is found on the Española District map.²⁴



Figure 102. Puye Lookout, an Aermotor LS-40 built by the Indian Service in 1931 or 1932. Scaler's cabin served as lookout quarters. (undated, SMC, RO scans old photos/54)

¹⁹ Letter from Forest Supervisor, July, 27, 1953, NARA, A3/40; 1959 and 1960 Fire Control Plans, SFNF SO, Dispatch/3-6; Gilbert Sandoval, interview.

²⁰ 1927 Forest Plan and Progress, NARA, 2/77-78; 1928 Forest Plan, NARA, 2/86.

²¹ *Santa Fe News Bulletin*, quoted in SDDDB, May 2, 1932, NARA, 5/338; 1932 Inspection, NARA, 5/41-44; Ray Kresek, e-mail message to author, December 23, 2015; 1932 Memorandum of Agreement with Northern Indian Pueblo Agency, NARA, 2/120; 1932 Fire Plan, NARA, 2/124; Seen-Area Map Atlas, SFNF SO, Dispatch/83.

²² 1940 Inspection, NARA, 40insp/19; 1948 GII, NARA, 5/21; 1940 Inspection, NARA, 5/31; 1946 Inspection, NARA, A1/158-160; 1941 Plan and Progress, NARA, 2/184.

²³ Memorandum from L.F. Hamilton, February 14, 1951, NARA, A2/164; 1940, 1948, 1946 Fire Plans, Rio Grande District, NARA, A3/173,168,160; 1944 Fire Plan, Rio Grande District, NARA, A3/168; 1948 Fire Plan, Tesuque District, NARA, A3/189; 1950 Fire Plan, Tesuque District, NARA, A3/182; 1946 Fire Inspection, NARA, 4/134; 1946 Inspection, NARA, A1/159; 1948 Plan and Progress, NARA, 2/227-228; 1948 GII, NARA, 5/9; 1949 Plan and Progress, NARA, 2/200-201.

²⁴ Memorandum from L.F. Hamilton, February 14, 1951, NARA, A2/167.

Atomic Energy Commission

Los Alamos

T. 19 N., R. 6 E., sec. 15

This is shown as a lookout on maps from 1924 through 1933, and then again in 1950. It is shown on the Española District map in this study. During the earlier years, the Lookout was on the Los Alamos Ranch School grounds. The *Southwestern District Forest Pioneer* of July 1928 said, “the Los Alamos Ranch School, through Albert Connel [sic] have furnished us with supplementary voluntary detection service for several years.” Observations may have been made from the water tower, as it was the tallest structure on the school grounds.²⁵

The AEC took over these lands in 1943 when it established LANL, and in a cooperative agreement with the Forest the AEC promised “observation . . . from their [security] tower at the main entrance to their area.” These duties were handled by the Los Alamos Fire Department. Fire plans listed Los Alamos Lookout beginning in 1944. No photographs have been found of the first tower, but the current tower was built in 1948 (Figure 103).²⁶



Figure 103. Los Alamos Lookout: the security tower at the east entrance, built in 1948 (2015, author)

By 1951 the Forest felt that “AEC observation has proved to be unreliable, due to very many personnel changes at their tower,” and they developed Clara Peak Lookout as a replacement. Nonetheless, AEC observations from this tower continued into the 1970s. Los Alamos was still listed in fire plans as a cooperating intermittent lookout and it reported fires to the Forest and Bandelier.²⁷

Longino Vigil was a firefighter for the Los Alamos Fire Department for about 25 years. From 1951 through 1953 he worked 4-hour shifts in the Los Alamos Lookout. He occasionally spotted smokes and used an Osborne firefinder to locate them. All smokes were reported to Los Alamos Fire Department Dispatch at Station 7, both by firemen and residents. The man staffing the Lookout stayed there for his shift while other firemen responded to smoke reports.²⁸

Jim Trehern started with the Los Alamos Fire Department in 1962, also working some shifts as lookout in the security tower. Sometime in the 1970s, the AEC gave part of their land back to the Forest. After this, Los Alamos Fire Department personnel still staffed the tower, but fewer fires occurred and use of the tower declined. Trehern was Los Alamos Fire Chief from 1981 to 1987, and by then the tower was no longer used for fire detection.²⁹

²⁵ *Southwestern District Forest Pioneer*, July 1928, NARA, A2/203.

²⁶ Memorandum from L.F. Hamilton, February 14, 1951, NARA, A2/164; interviews by author: Jim Trehern and Longino Vigil; 1944 Fire Plan, Tesuque District, NARA, A3/195; 1948 GII, NARA, 5/9; 1950 Fire Plan, Tesuque District, NARA, A3/182; Ellen McGehee, e-mail message to author, May 5, 2016.

²⁷ Memorandum from L.F. Hamilton, February 14, 1951, NARA, A2/164; 1951 Fire Plan, Jemez River District, NARA, A3/99; interviews by author: Jim Trehern and Longino Vigil; 1956 Detection Plan, NARA, A4/303; 1965 Annual Forestry Report, WACC/33.

²⁸ Longino Vigil, interview.

²⁹ Jim Trehern, interview.

Local Towns

Many towns around the Jemez and Sangre de Cristo Mountains have fine views of the Forest, and they have provided fire reports to supplement those from Forest lookouts. From its inception, the Forest negotiated cooperative agreements with local residents and businesses for detection and suppression. The Forest purchased groceries and supplies for firefighters from certain stores; storekeepers were State Fire Wardens, and often had the only telephone in town. Residents reported fires to storekeepers who would then notify the Forest and organize local suppression forces.³⁰

The 1922 inspector suggested developing lookouts outside the Forest in the lower country towards the Rio Grande River, but Forest management was reluctant, citing cost of lookout firemen. Nonetheless, maps have shown lookout symbols at some towns, and in several cases, protractors were mounted on rooftops of the stores used to supply fires. An actual lookout tower was constructed in the town of Truchas; elsewhere observers may have climbed the tallest structure in town or a nearby high point. Town locations are marked on several of the District maps.³¹

Cabo Lucero

T. 16 N., R. 14 E., sec. 10



Figure 104. Lookout structure at Cabo Lucero fire station, previously a fire escape on the Montezuma Hotel. (2016, author)

This fire station for the Volunteer Fire Department was built northwest of Mineral Hill in 1992, with an attached steel tower and an open platform for detection (Figure 104). Its view includes areas blind to Barillas Lookout. The tower had previously been the fire escape on the Montezuma Hotel, and was obtained during its restoration. The firefinder came from Whites Peak Lookout after its closure by the State.³²

The Forest made a seen-area map from nearby “San Geronimo Proposed Site” in 1938, and in 1970 it made another from a proposed lookout site called “Mineral Hill,” east of that village on private land. These were never developed as lookouts.³³

Cochiti

T. 16 N., R. 6 E., sec. 19

In April 1925, the Forest set up a cooperative agreement with the Governor, Lieutenant, and Captain of War of Cochiti Pueblo for detection and suppression of fires. The agreement provided “that the Indians shall keep a sharp lookout for fires in the forest. When one is discovered a protractor reading on the smoke will be made and a runner dispatched with the information to the Ranger’s headquarters in Bland.” The exact location of the protractor was not given. The view from town toward the Jemez Mountains is mostly blocked by lower terrain, but there is a water tower on a ridge above town. Cochiti is shown as a lookout on maps from 1925 through 1950. It is printed but crossed out on a 1959 lookout list.³⁴

Cuba

T. 21 N., R. 1 W., sec. 29

According to the 1913 Jemez National Forest Fire Plan, the “protractor station” on the roof of Young’s Trading Post was the only lookout for the west slope of the Jemez Mountains. The Trading Post was just across from the old Young’s Hotel, at the corner of Highway 550 and State Road 126. Ranger Earl Young and others would climb up to check for smokes after lightning. The 1914 Fire Map showed half of an azimuth ring centered in the town of Cuba.³⁵

Domingo Station

T. 15 N., R. 6 E., sec. 20

The 1913 Jemez National Forest Fire Plan said:

[the] protractor station at [the Bernalillo Mercantile Company store in] Domingo is an added safeguard for detection of fires and information of the Supervisor which can be installed at practically no cost. From this point when there is not blowing sand along the Rio Grande a very good general view can be had of the entire east side of the Cochiti Dist[ri]ct...the Domingo store is quite well stocked and able to fill large orders [to support firefighters].

³⁶

An azimuth ring is shown on the 1914 and 1925 Fire Maps.

La Bajada

T. 15 N., R. 7 E., sec. 6

This is shown as a lookout on maps from 1925 through 1938. The view is good from any high point in the settlement, though on a 1925 improvement map a “Protractor Location” is shown about a half mile to the southwest along the old road to Domingo.³⁷

Nambe

T. 19 N., R. 9 E., sec. 4

This is shown as a lookout on maps from 1941 through 1959, located about 3 miles northwest of town. Longino Vigil owns an orchard in that area with several modern towers supporting fans to deter frost, but he has never heard of a lookout there. He suggested a high point a few miles away along Highway 503 as a better location. However, the ridge just northwest of his property has excellent views in all directions and could have been the lookout site. From 1940 to 1950, a per diem guard would serve as lookout at Nambe under certain conditions.³⁸

Peña Blanca

T. 15 N., R. 6 E., sec. 5

The 1922 inspector suggested an unidentified hill in the Majada grant as a potential lookout site, though the Forest Supervisor questioned the cost of placing and staffing lookouts outside of the Forest. In 1938, the Forest made a seen-area map from a mesa a half mile east of the town of Peña Blanca, and placed a marker there, identified as “Fire Control Station 17.” The mesa, on Cochiti Pueblo land, has good views towards the Jemez Mountains and parts of the Cibola National Forest.³⁹

Sands

T. 14 N., R. 13 E., sec. 36

The 1922 Fire Plan listed “rented quarters” here, perhaps with pasture for fire personnel, but was marked “Abandoned.” Maps from 1925 to 1941 show a lookout symbol just west of Sands. Ranger Johnson installed a fire toolbox at Sands in 1923, and the Forest made a seen-area map in 1938. Cooperative detection agreements were also made with residents of the area at least into the 1960s. Sands has a good view of the mountains to the north, some of which is blind to Barillas Lookout, but no structures or other improvements have been found.⁴⁰

Santa Clara

T. 20 N., R. 8 E., sec. 10

This is only shown on the 1924 map, as an azimuth ring. Perhaps there was a protractor mounted on top of a building as in other towns, though no other documentation has been found.

Truchas

T. 21 N., R. 11 E., sec. 18

This is shown as a lookout on maps from 1914 through 1950. The 1914 map showed two lookout sites, both along the ridge east of town. By 1915 only one site was shown, in the center of town near the current highway junction,

with a telephone line to it from the Borrego Ranger Station. In 1916, the Assistant Ranger for the Tesuque District included “Truchas Mesa” in his fire patrols. In 1922 the Forest built a lookout tower here, the only one it constructed in a town, and in 1926 lightning protection was added to the tower.⁴¹



Figure 105. Gilbert Martinez standing on the site of the wind generator tower he used as the lookout in Truchas. (2015, author)

In 1923, inspector Aldo Leopold praised the Tesuque Ranger for “building [a] tower at Truchas, with volunteer detection by Manuel Martinez.” Martinez had become the Truchas storekeeper and postmaster when his father died in 1912, and his combined store and home was at the current highway junction. The 1922 lookout was nearby, but no photographs have been found of it. In 1923 Martinez built a new house just north of the store, and in the early 1930s, he installed a wind charger there to generate power for the house and store. A 40-foot steel tripod tower supported wind vanes and a small platform, and was located only a few feet from the house. It was safe and convenient to climb, and Martinez and his four sons went up most days and also after lightning to look for fires. The view from the top of the wind tower was expansive. The family didn’t use a firefinder or compass to locate fires; they knew the country well and reported the geographic location of the smokes by telephone. Most of the smokes they reported were in the Jemez Mountains.⁴²

One son, Gilbert, recalled jumping from the tower to the roof of the house and climbing through his bedroom window. He is shown standing on the site of the tower in Figure 105. Born in 1937, he never saw or heard of an earlier tower. Possibly Martinez took the original tower down when he installed the wind tower.⁴³

Fire Plans of 1940 through 1955 list a per diem guard as Truchas lookout during high fire danger. Gilbert took over as storekeeper and Fire Warden in 1963. By the late 1960s, the tower was no longer used for spotting fires. In 2013 Gilbert’s son gave the tower to friends in Truchas, and in 2015 it was on the ground in their pasture (Figure 106).⁴⁴



Figure 106. The Truchas Lookout wind generator tower on the ground in Truchas (2015, author)

Additional Sites

A 1925 improvement map showed a proposed lookout in the town of Española, and also one on the north end of the city of Santa Fe. In 1938, the Forest made seen-area maps from the following points: San Ysidro, Pankey Peak, Española Ranger Station (an Emergency Lookout), Nelson Ranch, Dias Alegres Ranch, Las Dispensas, and Holman Pass. None of these were developed as lookouts.⁴⁵

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- ³⁰ 1913 Jemez NF Fire Plan, NARA, A3/237,238,241,243,244,246,248; 1922 Plan and Progress, NARA, 2/13; Gilbert Martinez, interview by author, Truchas, NM, March 28, 2015.
- ³¹ 1922 Inspection, Jemez Division, NARA, 4/176,187; 1913 Jemez NF Fire Plan, NARA, A3/243,245; 1922 Plan and Progress, NARA, 2/20.
- ³² Tim Nix, interview by author, Cabo Lucero, NM, May 15, 2016.
- ³³ Seen-Area Map Atlas, SFNF SO, Dispatch/9,152.
- ³⁴ *Southwestern District Forest Pioneer*, April 1925, quoted in USDA Forest Service, *Lookouts in the Southwestern Region*, 45; Fire Discoveries by Lookouts, 1959-1970, SFNF SO, Dispatch/164.
- ³⁵ 1913 Jemez NF Fire Plan, NARA, A3/245; Butch Hernandez, interview.
- ³⁶ 1913 Jemez NF Fire Plan, NARA, A3/242-244.
- ³⁷ 1925 Improvement Map, SFNF SO, Dispatch/113.
- ³⁸ Longino Vigil, interview; 1940,1944,1945,1946,1948,1949,1950 Fire Plans, Tesuque District, NARA, A3/198,194,162,192,189,185,181.
- ³⁹ 1922 Inspection, Jemez Division, NARA, 4/176,187; Seen-Area Map Atlas, SFNF SO, Dispatch/9; National Geodetic Survey Datasheets, PID FO0948, <http://www.ngs.noaa.gov>.
- ⁴⁰ 1922 Plan and Progress, NARA, 2/16; Johnson Work Diaries; Seen-Area Map Atlas, SFNF SO, Dispatch/9; 1963 Manning Guide, Lower Pecos District, NARA, A4/214; 1959 Manning Guide, Lower Pecos District, NARA, A4/281.
- ⁴¹ 1916 Inspection, Pecos Division, NARA, 4/284; 1922 Plan and Progress, NARA, 2/20; 1926 Plan and Progress, NARA, 2/73.
- ⁴² 1923 Aldo Leopold Inspection, SFNF SO; Gilbert Martinez, interview.
- ⁴³ Gilbert Martinez, interview.
- ⁴⁴ 1940,1944,1946,1948,1949,1950,1953,1955 Fire Plans, Tesuque District, NARA, A3/198,194,192,189,185,181,178,175; 1949 Rio Medio Fire BOR, NARA, 3/142; Gilbert Martinez, interview.
- ⁴⁵ 1925 Improvement Map, SFNF SO, Dispatch/114-115; Seen-Area Map Atlas, SFNF SO, Dispatch/9,50.

Conclusion

From 1892 to the present, fire lookouts have played a critical role in fire management on the Santa Fe National Forest. The Forest has used at least 78 lookout sites, attempting to get maximum detection coverage in difficult terrain. It tried numerous sites before 1925, with more development during the New Deal years, a lower plateau in the 1960s, 1970s, and 1980s, and then a final decline to current levels. Lookouts, a “significant, finite, dwindling, and nonrenewable cultural resource,” not only captivate the public but have ongoing value for fire management, perhaps more than ever in this era of catastrophic fire. They are being lost both nationally and locally through fire, vandalism, and the elements, and occasionally through intentional removal by the Forest Service. Knowledge of lookout sites aids in their preservation, while stories of daily lookout life provide a lively window into a vanishing lifestyle. The potential restoration of Glorieta Baldy Lookout offers the possibility of increased fire detection, a start at reversing this decline.¹

¹ Steere and Miller, 124.

Glossary¹

Aerial reconnaissance: Fire detection using helicopters or fixed wing aircraft.

Aermotor: Windmill company that was also a major supplier of prefabricated metal lookouts.

Alidade: A straightedge equipped with sights that turns in a graduated circle (360 degrees) for measuring the angle of a smoke from a lookout. It may also be fitted in a hole in the map board and rotated along an azimuth ring.

Azimuth: The directional bearing between a lookout tower and another point, usually a fire, expressed in degrees clockwise from true north.

Azimuth ring: A ring around the map on a firefinder, marked in degrees up to 360.

Beat: Early ranger patrol route, usually ridden horseback.

Blind area: An area in which neither the ground nor its vegetation can be seen from a given observation point under favorable atmospheric conditions.

Blind-area map: Map showing the areas blind from a point, usually a lookout. The reverse of a seen-area map.

Blowdown: Area where trees have been blown down by wind.

Board of review: A committee selected to review results of fire control action on a given incident in order to identify reasons for both good and poor action, and to recommend ways of doing a more effective and efficient job.

Cab: A small house or cabin on the top of a lookout tower, where the lookout lives and/or works.

Cabin: Living quarters for a lookout, built on the ground.

Catwalk: Decking around a lookout cab, used as a walkway and for observation.

CL-100: A lookout design used on the Forest starting in the 1950s and 1960s: a metal live-in cab.

Cooperator: A local person or agency that has agreed in advance to perform specified fire control services. Sometimes called fire warden or per diem guard.

Cross, Cross bearing, Cross azimuth: Azimuth reading from a second lookout that triangulates with the first lookout's azimuth, their intersection giving the fire location.

Cupola: A small structure on top of a roof used as an observatory.

Detection: The act or system of discovering and locating fires.

Dispatcher: A person who receives reports of discovery and status of fires, confirms their location, takes action promptly to provide the personnel and equipment likely to be needed for control in first attack, and sends them to the proper place. For additional needs, the dispatcher acts on orders from the duty officer.

District: 1. Prior to 1929, one of the nine geographic divisions of the Forest Service. The Southwestern District, or District 3, covered Arizona and New Mexico. After 1929, the term "district" was changed to "region" to avoid confusion with the other use of the term: 2. A district is a portion of a Forest, such as the Cuba District on the Santa Fe National Forest.

Emergency lookout: A lookout that is staffed intermittently in high to extreme fire danger, high risk or reduced visibility, or if a fire is in its seen area. Typical of cooperator detection sites and patrol points.

Firefinder: Device used to precisely locate a fire on a map.

Fire guard: A general term used in the early Forest Service for seasonal employees hired to fight fires, patrol or serve on lookouts.

Fire occurrence map: Map showing where fires started during specific date ranges, often differentiated by cause. Zones or clusters of such starts are called risk areas, where detection is most needed. These maps are used along with seen-area maps to determine the best locations for lookout development.

Fire season: The period or periods of the year when fires are likely to occur, spread, and do sufficient damage to warrant organized fire control.

Fire warden: An officer in charge of fire control in a given area, generally a cooperator.

General Integrating Inspection (GII): An inspection of all aspects of a forest's operations.

Ground house: An observation structure that sits on the ground and is not elevated on a tower.

Guard station: A base for field operations, usually located in outlying areas of a forest.

Helitack: Helicopter crew that performs suppression and support operations for fire management.

High point lookout: Lookout located on one of the highest peaks of the Forest, at or above timberline. These were established in the 1910s but found to be inefficient and were abandoned by the mid-1920s.

Improvements: Forest infrastructure including lookout towers, fire guard cabins, pastures, cisterns, telephone lines, roads and trails.

Legal location: Description of geographic location using the Public Land Survey, designated by township, range, section.

Lightning protection: A system of aerials, conductors, and grounding materials installed to protect personnel and improvements from lightning.

Lookout: 1. A person designated to detect and report fires from a vantage point, who generally remains at the station for continuous coverage. 2. A lookout station.

Lookout fireman: A lookout who also responds to fires in nearby territory.

Lookout house: A building containing living quarters with walls largely of glass, on a tower or natural elevation to permit an unobstructed view.

Lookout point: A vantage point selected for fire detection.

Lookout tower: A structure placing a person above nearby obstructions to sight. It can be capped by a platform or a cab.

L-4: A lookout design used on the Forest starting in the 1930s: a live-in cab, usually wood frame, that can be a ground house or mounted on a tower.

LS-40: A lookout design used by State Forestry at Whites Peak in 1949, with a metal observatory-only cab mounted on a tower.

Map board: An early firefinder constructed of a wooden or metal board with a map cut and glued onto it; center of map board corresponds to location of lookout.

Marker: A survey disk or monument, placed in bedrock.

MC-24: A lookout design used on the Forest starting in the 1930s, with a wooden live-in cab without a catwalk, mounted on a metal tower.

MC-39: A lookout design used on the Forest starting in the 1950s, with a metal observatory-only cab mounted on a tower.

Observatory: 1. In early years, a lookout structure with windows allowing viewing in all directions; it may or may not contain living quarters. 2. In later years, a small lookout cab, usually 7- by 7-feet, that holds only a firefinder and chair, in contrast to a larger live-in cab.

On top: National and regional fire policy changed in 1921, mandating that all lookouts live on top of their peaks and that all lookout structures were to be built on top for increased detection.

Orientation point: A precisely known geographic location that can be seen from a lookout and used to orient its firefinder.

Osborne firefinder: The standard firefinder eventually used by almost all Forest Service lookouts, first designed in 1911 by William Osborne.

Patrol: To travel a given route to prevent, detect and suppress fires. Supplements lookout detection in blind areas.

Patrolman: A person who travels ridges and other vantage points to discover, locate, report, and suppress fires.

Patrol point: 1. A point close to a travel route or beat that is used for observation. 2. An additional point in the area of a developed lookout that is used to view areas blind to the lookout. 3. A point used for detection that never gets improvements except perhaps a map board and a telephone.

Per diem guard: A local resident cooperater who agrees to provide detection and suppression services, both on-call and on his own initiative. Some guards may be authorized to hire personnel for suppression.

Platform: A floor built on top of a tower or tree to enable observations.

Primary lookout: 1. A lookout point that covers such extensive or important territory that it is continually staffed for the entire fire season; the lookout is usually not sent to fires. 2. A person who occupies such a station. 3. The main person staffing a lookout, as opposed to a relief lookout who fills in when a primary lookout is off duty.

Project lookout: A lookout erected to provide protection for a particular project, such as the trailer lookout at Cuba Mesa established primarily for logging project protection.

Protective cabin: Early term for a cabin built to shelter a person staffing a lookout.

Protractor: 1. A circular overlay marked in degrees, placed over a map to determine bearings. 2. A simple firefinder composed of a map board, protractor and alidade; Region 3 developed their own version.

Protractor station: A simple firefinder generally placed outside the Forest for detection by cooperators.

Range: East/west descriptor in a legal location.

Ranger station: Base of operations for Forest personnel, generally a district office.

Region: After 1929, one of the nine geographic divisions of the Forest Service. The Southwestern Region or Region 3 covers Arizona and New Mexico.

Relief lookout or relief: A person that takes over lookout duties when a primary lookout is away from the station.

Replanning: Re-evaluation of resources such as lookouts to improve efficiency.

Scaler: Timber sale officer.

Scaler's cabin: Small temporary structure used to house a scaler at a timber sale, also used for temporary housing at other sites, including lookouts.

Section: A tract of land usually one mile square. Thirty-six of these form a township.

Secondary lookout: 1. A lookout point used to supplement the seen-area coverage of the primary lookout system when required by conditions such as fire danger, poor visibility, or other factors. Shorter seasons and/or intermittent occupancy are common. 2. A person who occupies such a station and can leave the station to respond to fires, unlike a primary lookout.

Seen area: The ground or vegetation that can be directly seen from a given lookout point under favorable atmospheric conditions.

Seen-area map: A map showing the specific territory in which either the ground surface or the vegetation is directly visible, to practical distances (generally 15 or 30 miles) from a lookout point. Also called visibility map.

Slash or logging slash: Logs cut down and left by a logging operation.

Slash disposal: A program to remove logging slash.

Smokechaser: 1. A person whose principal function is fire suppression. 2. Early term for Forest Service fire guard.

Telephone box: A box of wood or metal hung on a tree or post, used to contain and protect an outdoor telephone.

Toolbox: A fire cache containing tools. These were placed throughout the Forest, especially near cooperators' ranches. Ranchers were responsible for maintaining the tools. The box had a metal seal that could be broken in an emergency. See Figure 28 in the Cuba District chapter.

Township: North/south descriptor in a legal location, also a tract of land made up of 36 sections, approximately 6 miles square.

Tree lookout: A tree modified to allow easy climbing to the top for fire detection. Modifications could include limbing as well as installation of lag bolts, wooden or metal ladders, and platforms.

Triangulation: A system of precisely locating a point by crossing bearings from two lookouts. See **Cross**.

Trunk line: Main line for telephone service with laterals or spur lines coming off it.

Visibility Map: see **Seen-Area Map**.

Wolfie or wolf trees: Naturally contorted trees with limbs close to the ground, relatively easy to climb.

¹ Sources: USDA Forest Service, *Lookouts in the Southwestern Region*; National Wildfire Coordinating Group. *Fireline Handbook NWCG Handbook 3*, Washington, D.C. 1989; USDA Forest Service. *Fireman's Guide*. 1961; Brown; USDA Forest Service. *Glossary of Terms used in Forest Fire Control*, 1939; 1940/41 Inspection, NARA, 5/31; Gilbert Sandoval, interview by Janie O'Rourke, Jemez Springs, February 9, 2006.

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SFNF Supervisor's Office

- 1915 SFNF, Jemez division
- 1922 Los Alamos/Bandelier area, topographic
- 1923 SFNF
- 1925 SFNF, West side, colored, showing improvements
- 1927 SFNF
- 1930 Carson NF
- 1936 SFNF, several copies
- 1936 SFNF, East side, very clear
- 1936 SFNF, West side, very clear
- 1938 SFNF, several scales
- 1941 SFNF
- 1941 SFNF, Jemez division, Aerial Planimetric, North end only (Chama)
- 1950 SFNF, 2 copies
- 1959 SFNF, East side, clear and detailed
- 2004 SFNF

New Mexico State Archives

- 1915 SFNF, Pecos division
- 1918 SFNF, East side
- 1920 SFNF, East side, North part only
- 1924 SFNF
- 1927 SFNF
- 1934 Carson NF
- 1936 SFNF, East side
- 1958 SFNF, Northeast areas, Aerial Planimetric
- 1960 SFNF recreation map

Chavez History Library, Palace of the Governors

- 1910 Jemez Forest Reserve
- 1914 Proposed National Park of the Cliff Cities
- 1914 Pecos National Forest fire map
- 1914 Jemez National Forest fire map
- 1915 SFNF, Pecos division, large scale and clear
- 1915 SFNF, Jemez division, large scale and clear
- 1918 SFNF
- 1921 SFNF, West side, large scale
- 1923 Deadman area, topographic
- 1923 Baca area, topographic
- 1925 SFNF, Jemez division fire map, 2 fine copies
- 1926 Carson NF, 3 fine copies, one on linen
- 1927 SFNF, 2 fine copies
- 1929 SFNF brochure with map
- 1929? Carson NF brochure with map, no date, but similar to previous listing
- 1933 SFNF
- 1935 Carson NF
- 1936 SFNF, East side, 2 copies, large scale and clear
- 1936 SFNF, West side, 2 copies, large scale and clear
- 1938 SFNF, 2 fine copies
- 1941 SFNF, 2 copies
- 1941 Carson NF
- 1946 SFNF, fine
- 1947 SFNF, Pecos division fire, 2 copies
- 1948 SFNF
- 1950 SFNF, Pecos side recreation
- 1960 SFNF recreation, 2 copies
- 1964 Carson NF hunting map Tres Piedras/El Rito, 2 copies
- 1970 SFNF recreation, 2 copies
- 1972 Santo Domingo Pueblo topographic
- 1975 SFNF
- 1975 Carson NF, 2 copies

University of New Mexico Centennial Science and Engineering Library

1920 SFNF, West side, large scale

1959 SFNF

1967 SFNF, East side

1968 SFNF, West side

1976 SFNF

1987 SFNF

1990 SFNF

Appendix 1 – Aircraft Ground Markers¹

From the late 1940s to the 1970s, the Forest placed the following numbers at the corresponding locations, making them clearly visible from the air. They were usually laid out on the ground using whitewashed rocks, though they were painted on the roof of at least one cabin. They were marked on maps used by aircraft, for identifying their position and that of any fire spotted.

Lookouts

- 3 Deadman
- 4 Encino
- 5 Cerro Valdez
- 10 Red Top
- 13 Cerro Pelado
- 14 St. Peter's Dome
- 16 Puye
- 25 Hermit
- 26 Glorieta Baldy
- 29 Barillas
- 32 Clara Peak
- 41 Whites Peak

Guard Stations

- 2 Mud Springs
- 11 Seven Springs
- 19 Las Conchas
- 31 Gallinas

Administrative Cabins

- 1 French Mesa
- 6 San Pedro
- 7 Jarosa
- 8 La Jara
- 9 Rio Las Vacas
- 12 Paliza

- 15 Bear Springs
- 18 Canada
- 20 Borrego
- 21 Panchuela West
- 22 Panchuela
- 23 Aspen Hill
- 24 Beaver Creek
- 27 Manzanares
- 28 San Geronimo
- 30 Beatty's
- 33 Penas Negras
- E El Pueblo

Ranger Headquarters

- 17 Coyote
- 34 Jemez
- 35 Pecos

Identification Points

- 36 southwest half San Diego Grant
- 37 northeast half San Diego Grant
- 38 northwest corner Baca Location
- 39/40 Along Pipeline Road Baca Location

¹ 1952 Fire Plan, NARA, A3/224; 1953 Fire Plan, NARA, A3/222; 1954 Fire Plan, NARA, A3/219; 1956 Fire Plan, NARA, A3/212; 1956 Detection Plan, NARA, A4/312; 1958 Fire Plan, NARA, A3/202; 1963 Fire Plan, NARA, A4/54-55.

Appendix 2 - Life at Encino Lookout, by Elaine Martinez

Cerro Valdez was the old lookout establishment that was later moved to Encino Lookout located on top of Cerro del Encino. This name fits well to the area which contains large areas of *encinos* (oaks in Spanish). Cerro Valdez Lookout, two miles south of Encino Lookout, was manned by Felix Garcia and Uvaldo Velasquez. I believe they also manned the Encino Lookout when it was first opened. Jose E. Trujillo took over for fire season in mid-May of 1964, or it could have been as early as 1962. He went on horseback, and stayed up there in the cabin for a few days at a time, until fire season was over. He traveled the trails on horseback for the first couple of years. By 1966, the road was opened, so he packed all of us along with household goods and groceries in his 1952 Chevy truck to spend the fire season at Encino Lookout. This was the start of our summers for the next 18 years. It reminds me of the movie “Adventures of the Wilderness Family.” Instead of being bored with the hassles of city life in Los Angeles and moving to the Rocky Mountains with no return, we had a seasonal move to Cerro Encino with our parents as part of Dad’s job, and later Mom’s (Manuelita).

This equipment was used for everyday office work: Antique wood telephone, one at the main cabin and one in the tower. There was another phone located at North Point. These phones were battery operated (Eveready Dry Cell Batteries). One of Dad’s tasks was to stop at North Point and change out the batteries for that telephone; I am not sure how often. Motorola Radio: one at the tower and one in the main cabin. This radio was the main means of communication between the Encino Lookout, the main Forest Service office in Coyote and the other lookouts and Headquarters. Firefinder: this was used to pinpoint the location of the smoke/fire. Logs: these logs were to document fires. The data collected included time the fire was first spotted, when it was reported, the name of the fire, the location and when it was out, and what type of fire it was. Sometimes fires were just snags burning from lightning, others were human-caused and I still remember a fire that was thought to have started from the sun reflecting off a glass bottle on a hot summer day. A visitor log was kept at the cabin. We often had visitors on horseback, hikers, campers, other Forest Service employees, family, and friends.

Dad’s day at the office started with climbing the tower by 8:00 or 9:00 a.m., every morning during the week and weekends if need be. His job was to watch for smokes, which indicated there was a fire. He spent his days with those tower windows open and his binoculars at hand. He had a “High Chair”, I used to call it. It was a grey swivel pub-type chair, where he sat and looked every direction at the mountains. I used to eat my heart out when I saw him cleaning the tower windows. He was hanging halfway out of those windows; that was almost a bi-weekly cleaning. I recall some of the areas he used to talk about, including: Cerro Valdez, Cerro Pedernal, Canyon Del Coyote, Mesa Montosa, Mesa Del Medio, La Grulla, Rito De Las Sillas, Banco Largo/Los Posos, Vegita De Los

Cochinos, Chicoma, Pinabetosa, Cerro Pelon, Las Lagunitas and many more. He had contact with other Lookouts such as Deadman, Clara Peak, Cerro Pelado, and probably several others that I don't recall.

If he spotted a smoke/fire, he called the office on their antique wood phone if it was during office hours. Otherwise he used the Motorola radio. The radios were a means of getting hold of the wardens who lived in the houses surrounding the main office at the old Ranger Station. The phone was only a means of communication to the main Forest Service office in Coyote. Three rings connected him to the Coyote office. The work began at the time a fire was spotted and continued until it was out. Sometimes the suppression continued for 12 or 24 hours without a break. During the rainy season, there were water dogs (patchy fog), as Dad and Mom called them, that appear and lift up after rain. That is one thing that Mom and Dad were savvy about; I always mistook them for smoke, but they knew the difference. There were times that I fell asleep to the sound of all the commotion on the radio, information about the fire or fires going on.

The seasons at Encino Lookout were very educational, interesting, quiet, and serene parts of our family life. I remember 7:00 a.m. came way too early. Dad had us all up before 7:00 a.m. every day. Dad, being a Korean Veteran, with a lot of his military ways instilled, raised us in such ways. The cabin had to be spotless, and beds and breakfast done before 8:00 a.m. There were chores to be done. We had to get the U.S. flag on the pole and raised. Dad treated our U.S. flag with so much respect, and he taught us that respect. He taught us the proper way to fold the flag, never to touch the floor, and always kept it in a safe place when we took it down at the end of the day. The outhouse had to be swept and floor washed with Pine-Sol and smelling clean, wood chopped and ready for Mom to use for cooking. We were on a 24/7 camping expedition all fire season. There was no running water, no gas for heating and no electricity for light; everything requiring electricity was battery operated. For lighting we had oil lanterns and for cooking we had a beautiful woodstove that occupied a small corner of the cabin. Water was hauled up by the Forest Service, but a lot of the time we all used to hop on that Chevy truck and ride down to the Palo Duro Spring and haul water back up. The Forest Service built a cistern with a manual pump that required lever movement manually. They filled the cistern with water approximately bi-weekly. Watching the water flow by moving that lever up and down was the coolest thing. Eventually, several years later, with the Forest Service and Dad's help, a small gas stove and a small gas refrigerator were installed in the main cabin, along with a propane bottle at the back. Now we were camping in style. Even though we were secluded, there were a lot of things to do. In today's world, this way of living makes one appreciate all the luxuries of the smallest things in life, like running water, gas, electricity, and an inside bathroom.

My brothers and I found ways of entertaining ourselves outdoors, whether it was nature walks, building forts under the aspens, or collecting pine cones for later craft projects with Mom. She sometimes packed us a small bag with goodies, and we pretended to have a picnic under the aspens or found a nice spot under the *encinos*. Mom

always warned us not to be under the *encinos* so we wouldn't get ticks or bugs in our ears, but we never listened. Bugs in my ears or on my hair always scared me; however, I don't ever recall getting ticks or bugs. I think it was a way to scare us and keep us close to the main cabin. Mom had a special tree stump on which she emptied the leftover food, and we sat and watched the little critters snag the food. Dad at times lent us his binoculars—with his permission only—to see them closer. I remember several times we had a big furry visitor in the early morning hours. It was a black bear that smelled the leftover food and came to finish it off. I used to read a lot. We got Smokey the Bear coloring books that Dad brought to us from the main office. I was always amazed by the story of Smokey the Bear, and how he was the best messenger to promote the prevention of accidental forest fires. “Remember, Only You Can Prevent Forest Fires”. I used to pretend I was a school teacher, and played school in the old log cabin. I took all my school papers and such, since we migrated to Encino Lookout after school had let out for the summer. My brothers pretended to have Model-Ts made out of a piece of wood or a rock that looked to them like a car or truck. We didn't have WiFi or Internet or computers or smart phones, and those were the best times of our lives: making our own toys out of nothing. I remember one time the Forest Service caught some wild horses about a mile from the lookout tower. I don't recall the scenario, but I recall sneaking out there to check them out, and I got in a whole lot of trouble. We were not supposed to bother those wild horses. Apparently the Cerro Valdez and Encino area was known as wild horse country in the earlier years, possibly in the 1920s or 1930s, until the Forest Service took action to improve the range. When Mom got the propane stove installed, there was no stopping her on baking and cooking. She enjoyed that and she always had goodies for visitors. She had all the time in the world, and it was not so hot up there and was especially cool in the early morning hours. Those were the days.

Mom spent time with Dad up in the tower reading her “True Story” magazines, but she was very interested in what Dad did, paid attention to all that needed to be done, and she helped him on occasion when there were fires. In the years of watching Dad do his work, she learned all the ins and outs of staffing the Encino Lookout. In the 1973 fire season, she was hired on part-time and filled in for Dad when he was off on weekends or when he was called out to do field work. By 1974 or 1975, she was staffing the Encino Lookout herself. This was when Dad was offered a seasonal job in the field, supervising the thinning and planting crews. He stayed at Encino Lookout overnight, but drove down to the main office every morning to get his work done. This continued until 1983 or 1984, when Encino Lookout was closed. After that time, Norman Montoya went up during the day and came back down in the afternoons during fire season, but there was not much manning of the Encino Lookout anymore. After Mom left the lookout, she continued working part-time in the field, piling brush and working with the prescribed burning crews for a few years.

Appendix 3 - Known Lookout Personnel¹

Some dates are approximate. When a name is listed without dates, the person was known to work at the lookout, but dates were not available. Generally the primary lookout is listed first, followed by relief lookout(s).

Capulin

1921	R.G. Gay
Solomon Jacquez	
Enrique Jacquez	

Cerro Pelon

late 1930s/early 1940s	Florenzio Vigil, Alejandro Herrera, Enrique Serrano and perhaps Felix Garcia relief
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Cerro Valdez

1924,1926	Enrique Serrano
1930-1932	Henry Serrano
1939	Solomon Lovato
early 1940s	Solomon Jacquez, Julius Serrano
1946	Alejandro Herrera, Nestor Trujillo relief
1947-1948	Sergio Morfin
Felix Garcia, David Martinez	

Encino

1950-1956	Felix Garcia sometimes here and sometimes at Deadman, Solomon Lovato
1950s	Enrique Serrano, Alejandro Herrera
1957,1958,1963,1964	Uvaldo Velasquez

early 1960s	Euvaldo Gallegos, Felix Garcia
1963-1976	Jose E. Trujillo, wife Manuelita relief, Norman Montoya relief in 1976
1977-1984	Manuelita Trujillo, Norman Montoya relief
1985-1987	Norman Montoya
1988 or 1989	Butch Hernandez, Norman Montoya relief
David Martinez	
Ed Folks	
1990-2016	Norman Montoya, reliefs: Gonzalo Trujillo, Cricket, Sara Chavez 2 seasons
2013	David Chavez

Pedernal

1921	Abedon Salazar
Enrique Serrano	
Presiliano Garcia	
Juan Ysidro Garcia	

Bluebird/Horse

1912-1913	Jim Curry
1946	Dan Archuleta

Cuba Mesa

1940-1945	Elizardo (Lee) Gallegos
1946	Eddie Cordova, Dan Archuleta relief
1963	Leonard and Emily Olivas
1964	Perfecto Casaus and wife
after Perfecto:	Johnny Segura, Leandro Padilla

Deadman

early years	Jack Davis
1921	W.R. Ruley
early 1920s	Joey Gordon
1922-1924	Eugenio Maestas
1926	Tomas Martinez
1939	Mrs. Graves
1940	Solomon Lovato
1946-1950	Celestino Corrales, 1946 relief Solomon Jacques (was a regular lookout man since 1944)
late 1940s	Tony Jacquez
1951-1956	Perfecto Casaus
1950-1955	Felix Garcia sometimes here and sometimes at Encino
1958-1959	Leandro Padilla, Perfecto Casaus and Harry Nickless relief
early 1960	Leandro Padilla
1959-early 1960s	Tacho Casaus occasional relief
1960-1978	Pablo Casados, wife Helen and Cloroveo Lucero as relief
1960-1966	Leandro Padilla occasional relief
1962	Elfego Garcia, Leandro Padilla relief
1963	Johnny Segura, Cloroveo Lucero relief
about 1962 or 1963	Uvaldo Velasquez
1966-1969	Ben Casaus, occasional relief
1979-early 1980s	Helen Casados
1971	Alfonso Cordova relief
1973-1976	Richard Duran relief here and Red Top
1974+	Richard Atencio relief
1970s	Antonio Jacquez
1970s,1980s?	Alcario Chacon
mid to late 1970s	Butch Hernandez occasional, Alfonso Cordova and Johnny Segura relief
1979-1981	Pablo Casados occasional relief
early 1980s	Peggy Gladhill
early 1980s	Alfonso Cordova relief here and Red Top
1984-1987	Alfonso Cordova

late 1980s/early 1990s	Karen (don't know last name)
1994-2002	Myra Martinez
2000s?	Denise Montoya
2007-2012	Brian McCoy
2013	Matt Garcia
2014	Myra Martinez, Richard Duran relief
2015-2016	Richard Duran

Mud Spring

1940s	Ben Archuleta
1946	Alfonso Sanchez, Solomon Jacques relief

Red Top

1912-1913	Jim Curry
1910s	John Ketcham
1921	Raymond Freelove
1924,1926	Amos Taylor
1927+	Walter Hernandez and Jim Curry
1929	Richard Wetherill
1930	Mac Fenton
1932	Mac Fenton and Jim Curry
1932-1933	John Ketchum
1934	Jackson and maybe Jim Curry
mid-1930s	Elizardo (Lee) Gallegos relief
1935	Mac Fenton
1937-1939,1942	Jack Curry
1943	Bobbie Fenton
1945	Frank Gurule, Mac Fenton during Cebollita fire
1946	Ruben Cordova, Dan Archuleta relief
early 1950s	Jack Curry
1951-1955	Perfecto Casaus

1956	Ruben Cordova relief
1958	Sisto Sandoval
1961-1963	Ben Casaus
1962-mid 1960s	Leandro Padilla relief
1963	Cloroveo Lucero relief
early 1960s	Florencio Waquie relief
1959-early 1960s	Tacho Casaus occasional relief
mid to late 1960s	Johnny Segura
1966-1969	Ben Casaus occasional relief
1969-1973	Richard Atencio, Johnny Segura relief
1971	Alfonso Cordova relief
about 1973 and 1974	Roger Melgaard
1973-1976	Richard Duran relief here and Deadman
mid to late 1970s	Butch Hernandez, Alfonso Cordova and Johnny Segura relief
1977,1980	Pablo Casados occasional relief
1970s	Antonio Jacquez
1970s/1980s?	Bobby Sentijenny (sp) 1-2 seasons
early 1980s	Dinah (don't know last name)
early 1980s	Sherry (don't know last name)
early 1980s	Alfonso Cordova relief here and Deadman
1988-1993	Myra Martinez

Aspen Peak

1921	Burrell J. Hall
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Clara Peak

1950-1951?	Willie Vigil
1952?-1961	Patricio Chavez
1950s	Elizardo Vigil (same as Willie?)
1962-1975	Apollinario Trujillo and wife Adelires relief
late 1960s/ early 1970s	Eusebio Lopez relief

about 1976-1977	Nazario Barela
1978	Ronald Baker
late 1970s	Joe Suazo

Guaje

1921,1922,1924,1926	Manuel S. Maestas
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Lake/Penitente

1918	Rafael Montoya
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Rinconada/Dome

1917	Lorin Brown
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Tree 73

1946	Alex Vigil and his father Agustin Vigil relief
1950s/1960s	Patricio Chavez
1960s	Eusebio Lopez, Joe Ortiz, Robert Garcia, Joe Suazo?

Bearhead

1921	T.L. Crandall
1922	Bill Brite
1923	Moises Sandoval
1924	Moises Sandoval and Daniel Carter
1925	Moises Sandoval
1926	D.B. Mitchell

Bear Springs

1956-1964 Florencio Waquie

Jose Rivera, Serafin Rael

Cerro Pelado

1912-1925 Pedro E. Sandoval

1926 Andy Wright

1929 Leo Sturdivant

1930 Pedro or Simon Sandoval

1931-1945 Simon Sandoval

early 1940s Clemente Rivera

1946 Ernest Salazar, Simon Sandoval relief

1948 Father James Armitage, Father John Buckley

1949-1958 Simon Sandoval

1954-1955 Gilbert Sandoval relief here and Dome

1958 Johnny Sandoval relief

late 1950s Jose Leandro Rivera relief

early 1960s Jose Leandro Rivera, Carlos Sandoval relief

1961-1962 Jack E. Martinez, wife Irene relief

early 1960s Florencio Waquie relief

1963-1967 Ken Seonia

1963 Jack Martinez relief

1968-1975 Frank Gonzales, wife Aurora relief

late 1960s Louis Casiketo

mid 1970s Phil Neff, John Dickenson

mid-late 1970s Dennis Trujillo occasional relief

late 1970s, 1980s Frank Gonzales

late 1970s-1980s Ken Seonia, Jim Foley relief

1986-1991 Linda Robinson

1990-1991 Linda West occasional relief

1990s Linda Robinson occasional relief

1990s	Sandy Baker, Tony Chinana, Ken Seonia
1993	Ken Seonia
2003-2004	Tony Chinana, Frank Gonzales relief
2006-2007	Richard Krause
2014	Linda Marshall and Rusty
2015	Jim and Flo Lyon
2016	John Yohe

Joaquin

1965	Man related to State Senator Lujan
1966	Frank Gonzales

St. Peter's Dome

1930	H. D. Schmeltzer
1932	D.B. Mitchell
1942-mid1960s	Cristino Tafoya and wife Amalia relief (they also worked on Cerro Pelado)
1942,1944	Godofredo Armijo relief
1950s/1960s?	Mr. Abeyta
1954-1955	Gilbert Sandoval relief here and Cerro Pelado
1957-1958	Serafin Rael relief
1962-1963	Ben Gallegos and wife Reina relief
1960s	Joe Bacca
early 1960s	Florencio Waquie relief
1966	John Sargent and Lynda Holliday
about 1968-1970	Jack Gardner
1970s/1980s	Ken Seonia
1978	Pat Felts
1981-1983	Linda West, Sandy Baker relief
1980s	John Dickenson, relief
1985	Linda Robinson, Frank Gonzales relief

Barillas

1920	Esther Harbison
1921	Esther Harbison, Manuel and Higinio Santillanes
1924	Indelacio Duran
1926	Higinio Santillanes
1928-1930	Gavino Lesperance
1938-1942	Bill Reid
1944	Doroteo Abeyta
1945-1946	Pete Vigil
1946	E.W. Barrett, Rafael Flores relief
1950	Teodolo Flores?
1951	Mike Duran relief
1953-1956	Ramon Herrera
1953	a Trujillo relief
mid 1950s-1960s	a Quintana from east side
1954	Ramon Herrera, Austin Duran relief here and Hermit
1953/1956?-1957	Tony Vigil relief?
1957-1959	Ricardo Varela, Tony Vigil relief
1960-1961	Tony Vigil
late 1950s/early 1960s	Matias Valencia, Jacobo Lopez
1962-1968	David Varela
1966	Elias and Filipita Vigil
1970	Tom Colbert
1971	Toby Anderson and wife Michelle relief, or? George Valencia and wife, and/or Horacio (Peaches) Varela
1974	Gail Roos and Rich Rydin
1975	Ken Hastey and wife Marianne relief
1977-1980	Joe Armijo, here and Glorieta
1978	Clifford Valencia, Max Sena relief
1982-1983	Richard Martinez
1985	Linda J. White Trifaro part of the season
1989?	Steve Valencia? or at Glorieta this year?
1990s	Clifford Valencia

1996	Stephanie (don't know last name), Polly Mullen relief
2000	Polly Mullen, Clifford Valencia, Ken Haste
2001	Calabasas
2006	Paul Montoya
2010?-2012	Badger
2013-2016	Barbara Zinn

Elk Mountain

1915	Robert E. Springfels
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Escobas

1922	Karl Valentine, Francis Cook
1923-1927	Max Lucero
1926	Vernon Cook

Glorieta Baldy

1940	Louis Roybal and wife, John Johnson, Howard Wester
1941	Max Lucero
1942	Juan Ortega at first, then Max Lucero, then Juan Ortega
1943	Manuel Romero at first then Juan Ortega
1945-1946	Juan Ortega
1947-1953 or 1954	Max Lucero
1940s	Pete Vigil
1954?	Gonzalo Varela
1955-1957	Manuel Ruiz and wife Valeria relief
1962	Euverio Varela
1962-1963	Russ Quintana
1963	Daniel Porter relief
mid-1960s	Horacio (Peaches) Varela

1970	Charles Mullings, Peaches relief
about 1971?	Toby Anderson
1974	Phil Long and wife Maria Loeks
1975	John Apodaca and wife Wendy relief
1975	Meria Loeks briefly
1978	Ismael Sena, Max Sena relief
1977-1980	Joe Armijo, here and Barillas
late 1970s/1980s	Jim and Peggy Gladhill
1983	Linda J. White Trifaro, Jim and Peggy Gladhill, Clifford Valencia relief, Edmund Vigil relief
1984	Linda J. White Trifaro, D. Tallon relief, Clifford Valencia relief
1985	Charles L. King, Joe Armijo relief
1987	Joe Armijo primary, Danny Roybal, Morrison, Domanski reliefs
1988	Morrison, Danny Roybal and Gonzalo Varela reliefs
1989-1990s	Steve Valencia
2000	Rick Romero, 1 month

Grass Mountain

1910	Elliott Barker
1914	George "Skipper" Viles
1921	Karl Valentine

Hermit Peak

1921	Raymond Roach and Pete Newfeldt
1924	Vito C. de Baca
1926	Henry and Rosendo Lesperance
1927-1928	Rosendo Lesperance
1934	Gordon Byrnie
1946	Robert Springfels and wife relief
1948	Ramon Duran
1953	Austin Duran
1954	Ramon Duran, Austin Duran relief here and Barillas

1955	Louis G. Duran
1957	L.M. Duran
1958	Frank Duran
1961,1963-1965	Ramon Herrera
early 1960s	Charlie Martinez

Joe Benito Duran, Ismael Mondragon, Benny Archuleta

Pecos

1937	Mr. Tapia
1938-1940	Meliton Lopez

Rosilla

1940	Tom Gonzales
1942	Max Lucero until moved to Glorieta
1950s	Manuel Ruiz relief

Rowe Peak

1921	Karl Valentine
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Whites Peak

1940s/1950s	Larry Garcia
1953	Ernest Abreu
1950s	Ernie Lopez' uncle, don't have his name
1954	Carlos Lopez and Efraim Hernandez
1958	Frank Montoya
1970-1972	Ernie Lopez

Bandelier

1941	Frances Elmore
1943	Mrs. Opal Kendall, Miss Ollie A Wendland
1944-1947	Ollie A. Wendland
1950	Harold D. Venn
1952	Martin Abeyta, Pat Cordero
1977	Robin Mitchell, Newton
1978	Anne McKibben and Mike Hudak
1979	Prendergast and Anne McKibben
1982,1984	Christy Dougherty

Puye

1932	Tom Buchanan
1942,1944	Feliciano Garcia (emergency)
1946-1947	Joe Rodriquez and his wife relief

Los Alamos

(all firefighters took short shifts)

1951-1953	Longino Vigil
1962-1970s	Jim Trehern

Nambe

1958	Amadeo Trujillo
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Sands

1963	Kay Gilmartin
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Truchas

1922-1963

Manuel Martinez

1963-late 1960s

Gilbert Martinez

¹ Sources: Documents, interviews, Barillas inscriptions, Glorieta Baldy logbooks.

