

**FIRE LOOKOUTS AND ASSOCIATED STRUCTURES
ON THE
UMATILLA NATIONAL FOREST**

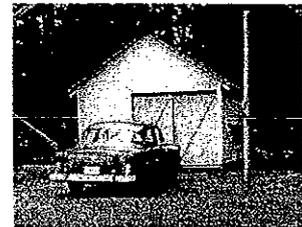
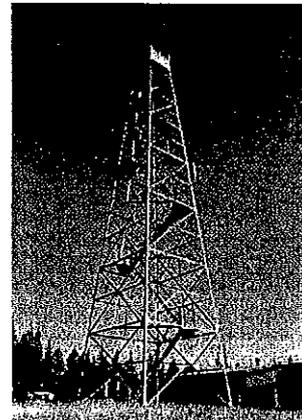
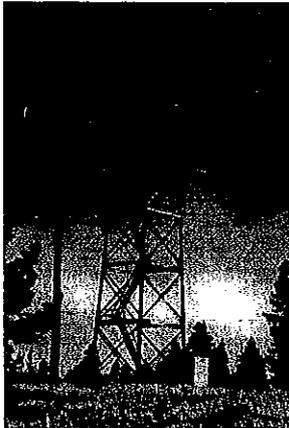
**A DETERMINATION OF ELIGIBILITY
TO THE
NATIONAL REGISTER
OF
HISTORIC PLACES**



Hudson Tree



Zapora



**USDA FOREST SERVICE
PACIFIC NORTHWEST REGION
UMATILLA NATIONAL FOREST**

**GRANT, MORROW, UMATILLA,
UNION AND
WALLOWA COUNTIES, OREGON
AND**

ASOTIN, COLUMBIA AND GARFIELD COUNTIES, WASHINGTON

**Jan M. Tomlinson
Archaeologist/Historic Preservationist**

September 30, 2002

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Cover photos: Top row (left to right) Hoodoo Ridge crow's nest, unknown date, Source: Umatilla National Forest Archives (UNFA); Table Rock cupola, 1930, (UNFA); Red Hill Lookout, a possible L-5 cab, 1953, (UNFA). Middle row (l-r) Lookout Mountain Lookout, 2000, photo by author; Goodman Ridge Lookout and House, 1989, (UNFA); Clearwater Lookout, 2001, photo by author. Bottom row (l-r) Tower Mountain Cabin, 2001, photo by author; Big Butte Garage, 1959, (UNFA).

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INTRODUCTION

The following report is a thematic evaluation of the extant fire lookouts and associated structures on the Umatilla National Forest (NF) for eligibility to the National Register of Historic Places (NRHP). This evaluation will provide a foundation for determining the future management of these unique properties.

The Umatilla National Forest had at least 53 fire lookout locations over the years. A listing of all known lookout locations is provided in Appendix A with information on the types of structures that were built over the years at each location and their current status. Today, there are 13 fire lookout structures still standing on the Umatilla National Forest. Most of these lookouts have at least one associated structure such as living quarters, garages and outhouses. There are 27 permanent associated structures. The majority of these extant lookouts are the second or third generation of a lookout structure at the site, testifying to the long history of these locations serving as primary fire detection sites. Several other lookout sites still have remains such as foundation blocks of former lookout structures and garbage dumps. These sites are potential historic archaeological sites. Subsurface testing is needed to determine if any archaeological materials are present. This report addresses only the standing structures. Table 1 lists all the extant lookouts and their associated structures.

Not all of the extant lookout towers are presently being used in fire detection. Some are continuously occupied throughout the fire season, while a couple others are used only during high fire danger or in emergencies. The remainder of the lookouts and associated structures are no longer used, abandoned, or awaiting management decisions regarding their future use. Figure 1 shows the locations of the extant lookouts and associated structures on the Umatilla National Forest.

Table 1
Extant Lookouts and Associated Structures on the Umatilla National Forest

Lookout Name	Location	Date Built	Building Type	Current Status
Big Butte	T7N, R44E, S1 (WA)	1950	Standard 1936 L-4 cab on 67' treated timber (TT) tower	Staffed by Dept. Nat. Resources
		1930? Historic?	Garage Outhouse	Converted to storage bldg. Still in use
Bone Point	T7S, R31E, S6 (OR)	1961	Metal live-in cab on 40' tower	Not used
		Historic	Outhouse	Abandoned, poor condition
Clearwater	T8N, R42E, S5 (WA)	1933	7x7 cab w/ 87' MC-39 or -40 Aermotor steel tower	Used for emergencies
		1940s? Modern	Cabin	Cabin rental Still in use
		1968	Heliport office	Still in use
		1960?	Storage bldg. Outhouse	Still in use Still in use

Desolation Butte	T8S, R34E, S30 (OR)	1961	R-6 flat-roofed cab on 67' TT tower	Staffed during fire season
		1923?	Garage	Not used, poor condition
		Modern Modern	Outhouse Radio building	Still in use Still in use
Goodman Ridge	T1N, R37E, S5 (OR)	1936-37	L-6 cab on 67' TT tower	Not used, poor condition
		1936-37	Cabin	Not used, poor condition
High Ridge	T2N, R38E, S6 (OR)	1959 Modern	R-6 flat-roofed cab on 67' TT tower Outhouse	Used for emergencies Still in use
Hoodoo Ridge	T6N, R42E, S31 (OR)	1933	7x7 cab on 101' MC-39 or -40 steel Aermotor tower	Not used
		1933	Cabin	Being restored for cabin rental
		1933 Unknown	Garage Outhouse	Being restored Possible restoration for use?
Lookout Mountain	T4N, R40E, S3 (OR)	1948-49 ca. 1980's Modern	Standard 1936 L-4 cab on 83' wooden tower Outhouse Radio bldg.	Currently needs structural repairs before able to use; Staffed during fire season Still in use Still in use
Madison Butte	T5S, R27E, S29 (OR)	1957 Modern Modern	37' steel tower w/ flat cab Battery Bldg. Outhouse	Staffed during fire season Still in use Still in use
Oregon Butte	T7N, R41E, S4 (WA)	1931 Modern	Gable-roof L-4 cab on ground Outhouse	Staffed during fire season Still in use
Saddle Butte	T7N, R43E, S19 (WA)	1932?	Outhouse	Abandoned, poor condition
Table Rock	T6N, R39, S3 (WA)	1949-50	Standard 1936 L-4 cab on 1-story concrete under-story Portable outhouse	Staffed during fire season; modernized ca. 1989
		N/A		Not addressed in study
Tamarack Mountain	T8S, R26E, S18 (OR)	1933-34	7x7 cab on 96' steel Aermotor tower	Not used
		1933-34	Garage, converted to cabin ca. 1966	Cabin rental
		Modern Modern	Outhouse Radio Bldg.	Still in use Still in use, owned by ODOT
Tower Mountain	T6S, R34E, S14 (OR)	ca.1932-1934	Aermotor 7x7 cab on 88' MC-39 or -40 steel tower	Staffed during fire season
		ca.1933-1942	Cabin	Living quarters for lookout; built at Lucky Strike L.O., moved to Tower Mtn. 1949
		Modern ca.1992	Radio Bldg. Outhouse	Still in use Still in use

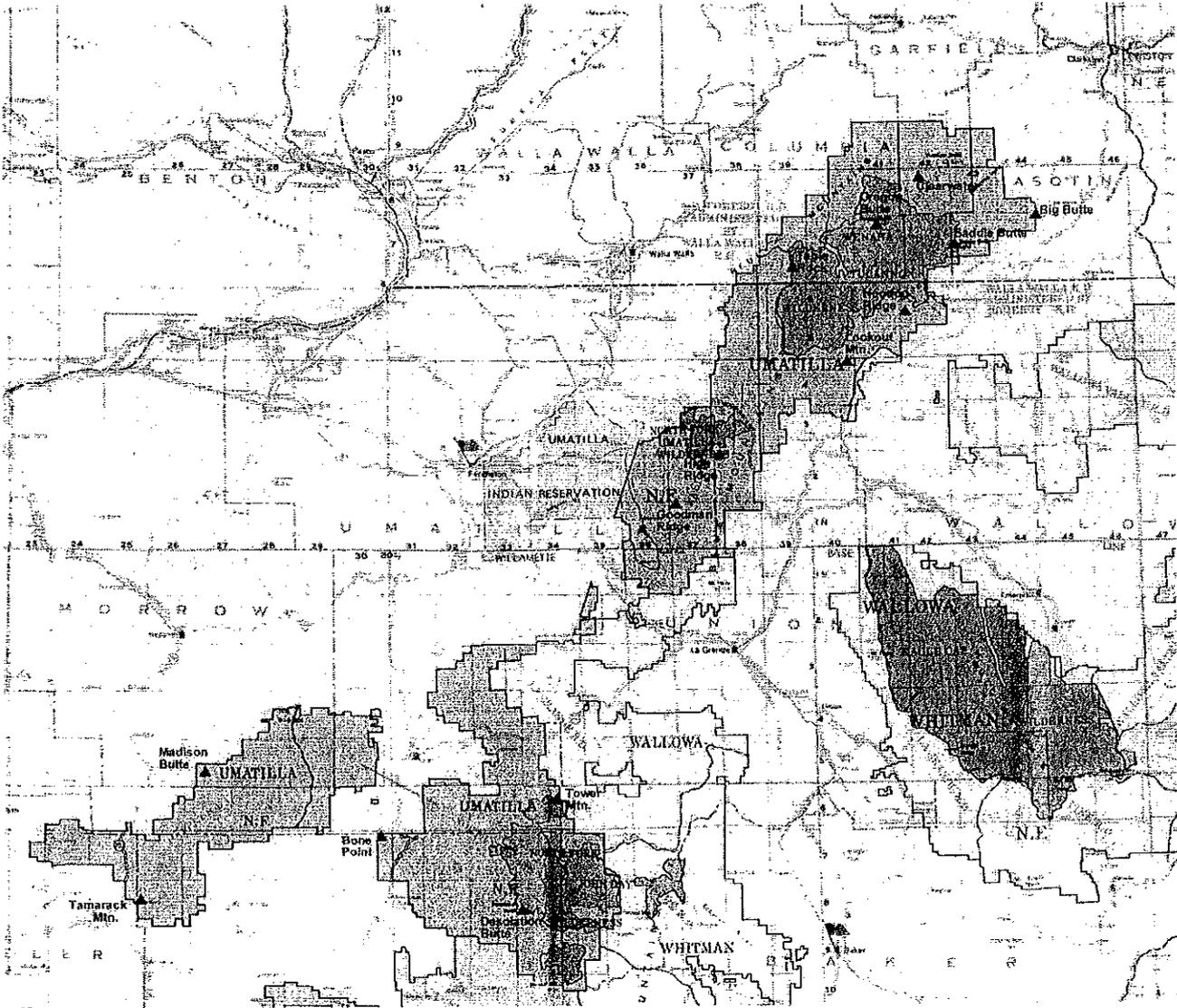


Figure 1. Vicinity map of the Umatilla National Forest showing locations of extant lookouts and associated structures.

METHODOLOGY

Historic Archaeologist/Preservationist Jan Tomlinson conducted the extensive research, field inventory, and evaluation of the extant fire lookouts in accordance with *National Register Bulletins 15, 24, and 39*. Research was also conducted to identify all the former lookout stations on the forest, and the descriptions of the fire lookouts and associated structures once existing at those locations (See Appendix A). This compilation of lookout sites shows how extensive the fire lookouts once covered the Forest. The information should also be helpful to the archaeologists on the Forest in identifying probable historic archaeological sites. Further research was completed to provide the background information for the historical overview and the historic context that provided the foundation for the evaluations. The extant fire lookouts were documented on their respective State historic property inventory forms, and evaluated using the Secretary of the Interior's criteria.

Field Inventory

Each fire lookout and their associated buildings were visited at least once to inventory and photograph the structures. The fieldwork was carried out in the fall of 2000, and the summer and fall of 2001. The author accompanied the Forest Facilities Engineer, Jane Stuessy, to some of the lookouts to assist with and learn how to conduct the deferred maintenance reporting. Jill Bassett, North Zone Archaeologist, accompanied the author to Oregon Butte Lookout. Jill also rediscovered the Saddle Butte Outhouse and provided the data for the inventory form. For the remainder of the lookouts, the author was accompanied by her husband, Steve Tomlinson. Data was recorded on the deferred maintenance forms and additional information for the historic structures was reported in a field notebook. Each building was photographed with color film on a standard 35 mm camera.

Research

Background research materials on the history of fire suppression and the evolution of fire lookouts on National Forests were acquired mainly through interlibrary loans. This approach proved to be very time consuming, sometimes taking weeks to receive any materials at a cost of up to \$10.00 per item. Personal visits to the Whitman College Library, in Walla Walla, Washington, and Eastern Washington University Library, in Cheney, Washington proved to be more productive when these libraries were identified as having certain reference materials.

Detailed research on each structure began with visits to the Forest Headquarters in Pendleton, Oregon to search the Heritage files, the Facilities Engineering files and lookout building plans, and fire dispatch records on the lookouts. Steve Lucas, former North Zone Archaeologist, provided information about what records were located at the Walla Walla Ranger District, and copies of Umatilla Lookout information from his files. Later, trips were made to the Walla Walla Ranger District to review the extensive historic records and maps of the North Zone of the Forest (Walla Walla and Pomeroy Districts). Among the records were transcribed interviews with former district employees who recalled information about some of the lookouts. The South Zone Archaeologist, Gary Popek, supplied the author with site records and photographs of

former and current lookouts on the Heppner and North Fork Ranger Districts. Records and historic photographs of the lookouts were limited on the Forest. Conflicting or uncertain dates of construction led the author to search other locations.

The Civilian Conservation Corps were of particular interest. Two of the four Aermotor lookout towers and associated buildings were reported to be built by the CCC. The other two were lacking confirmed construction dates and information on who built them. The CCC Alumni web site <http://www.cccalumni.org> was searched and provided useful information on the known CCC camps in the vicinity of the Forest. CCC camps are listed by state with the company number, project number, a date (which may have been the start date), the nearest railroad, and nearest post office. With this information, the National Archives in Washington D.C. was contacted to find out whether any records for camps in and near the Umatilla NF were archived there and if so, what type of information the records contained. Some records for some of the camps from limited time periods were located, but unfortunately, there were no records pertaining to the projects the "CCC boys" worked on. The majority of the information was regarding the administration of the camps.

Research was conducted at the National Archives, Pacific Northwest Region, in Seattle, with limited success. Very few historic records from the Umatilla NF pertaining to the fire lookouts had been submitted to the National Archives. More extensive Regional Office, Engineering Department records were found, but these were primarily from the 1940s and 50s. The Regional Office records included contracts and purchase orders for lookout construction on the lookouts that were built during that time period. Civilian Conservation Corps records were also searched, but nothing could be found concerning whether any lookouts were built by the CCC.

While in Seattle, a trip was made to the University of Washington Library. A copy of *The Civilian Conservation Corps Camp Newspapers: a Guide* was known to be housed at the library. This guide is a catalog of all the CCC camp newspapers stored at The Center for Research Libraries (CRL) in Chicago, Illinois, the largest collection in the country. With the CCC camp and company numbers from the CCC alumni website, the author found several entries for camps that were located near the Umatilla NF, and hoped that these newspapers might mention the projects the enrollees were working on. Upon contacting the CRL, however, the cost of obtaining copies was extremely prohibitive. Other small collections around the country that reportedly contained Oregon CCC Camp newspapers were contacted, but they did not have any of the Umatilla NF camp newspapers.

Michael "Smoke" Pfeiffer, from the Ozark-St. Francis National Forests, provided copies of two undated Aermotor catalogs from ca. 1920s-30s, and introduced the author, via e-mail, to Ray Kresek. Kresek, the author of *Fire Lookouts of the Northwest*, and owner of a private fire lookout museum at his home in Spokane, Washington, was interviewed about his knowledge of the Umatilla fire lookouts and the different styles of lookout structures including the steel Aermotor lookout towers and cabs.

A valuable source of information on fire lookout locations, former lookout structures, associated buildings and cultural features is the panoramic photos taken from existing and potential lookout sites between 1935 and 1937 on the Forest. A CD of compiled photos, *Osborne Panoramic*

Images of Eastern Oregon, was created by IamWho Panoramic Imaging. A copy of this searchable CD was loaned to the author by Jim Beekman at the Walla Walla Ranger District Office.

Finally, two helpful sources of information were current and past lookout staff. Charles and Beverly Heebner, who have staffed the Oregon Butte Lookout for many years, have done extensive research on that lookout as well as others on the north end of the Forest. They have collected photos, newspaper articles and other documents, including a document of a chronology of fires reported from every lookout location on the forest. This incomplete document which is the only source of information on several former lookout locations apparently came from the Forest Headquarters' Fire Dispatch Office several years ago. Unfortunately, on a return visit to that office to locate the missing pages, no one was familiar with that document.

A former lookout staff on the Tower Mountain Lookout, Michael Duffy, has also done a great deal of research on Tower Mountain and other lookouts on the south end of the Forest. He has interviewed or corresponded with several other former lookouts at Tower Mountain, and has a small collection of photos, primarily of Tower Mountain, which he supplied to the author.

HISTORICAL OVERVIEW

The U. S. Forest Service policy of protecting National Forest Lands from fire evolved from a 19th century conservation movement that emphasized the protection of the Nation's supplies of timber and water, the conservation of soil, the maintenance of navigable waterways, and the protection of wildlife. As the West was being settled, numerous monumental natural and man-made fires burned vast amounts of American forests and caused major damage and tragic loss of life. At the same time, migrating logging companies and settlers were cutting trees down in a wasteful manner at an unsustainable rate. These events stimulated growing fears of an imminent timber famine, coupled with a widely held belief that loss of the forest cover would cause a long-term drought resulting in the permanent conversion of forested lands to desert (Pyne 1982:182-190).

To prevent the depletion of the last great timber stands, primarily in the Northwest, Congress, under the Federal Reserve Act of 1891, authorized the President to

. . . set apart and reserve, in any state or Territory having public land bearing forests, in any part of the public lands wholly or in part covered with timber or undergrowth, whether of commercial value or not, as public reservations, and the President shall, by public proclamation, declare the establishment of such reservations and the limits thereof (26 Stat. 1095 (March 3, 1891), Section 24).

After having over 40 million acres set aside without any means of protection or management, in 1897 the Sundry Civil Appropriations Act (also known as the Organic Act) was passed that directed the Secretary of the Interior (under who's department the Forest Reserves were placed), to make rules and regulations for the protection of the reserves from fire and depredation. The law also stipulated that reserves were only to be established to

. . . improve and protect the forest within the reservation, or for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber for the use and necessities of citizens of the United States . . . (30 Stat. 34-36 (June 4, 1897)).

On February 1, 1905, President Theodore Roosevelt, transferred what had expanded to 63 million acres of Forest Reserves to the jurisdiction of the Department of Agriculture's Bureau of Forestry, headed by his friend, Gifford Pinchot. The Bureau was renamed the United States Forest Service. Two years later, the Reserves were renamed National Forests to reflect Pinchot's philosophy that the natural resources of the federal forests should not be reserved from multiple use, but should be managed "from the standpoint of the greatest good of the greatest number in the long run" (1905 letter quoted in Pinchot 1947:261). The change to managed forests was also in response to the early opposition that the creation of the reserves took away local control over the various resources. In an unprecedented move, Pinchot decentralized his agency's decision making authority by creating, initially, six district offices [now called regional offices] and a headquarters on each Forest. This action was taken to ease the administrative burden in his

office, although he also insisted that the administration of each National Forest be “left largely in the hands of the local officers, under the eye of thoroughly trained and competent inspectors” (Ibid:262). This concept of decentralized management also encouraged positive interactions between the local officers on each forest and the general public.

In these early years, each National Forest had a forest supervisor and a small cadre of forest rangers. The rangers were responsible for on the ground management of their respective districts. They patrolled their district on horseback making sure that the various types of users were using the forest appropriately without causing damage. Rangers also built cabins for their ranger stations, surveyed and marked forest boundaries, and blazed trails. Among their chief responsibilities was fire prevention and control. Though the rangers often put the fires out single-handily, grazing, timber and other permittees were also obligated to fight fires without compensation whenever their permit area was threatened. Interestingly, fire protection was often listed as a major justification for issuing permits (Steen 1991:175).

To insure that the public’s right to use the National Forests was protected, while at the same time preventing wasteful destruction of the forests, Pinchot had a “*Use Book*” created soon after the establishment of the Forest Service in 1905. This manual contained all the regulations and instructions for Forest Service officers to follow and enforce. The *Use Book* was intentionally made small enough for the Ranger to carry around in his pocket, and hopefully, so that the Ranger could commit to memory all its contents (Steen 1991:78-9). What the *Use Book* had to say about forest fire control and enlisting public cooperation was to the point:

The utmost tact and vigilance should be exercised where settlers are accustomed to use fire in clearing land. Public sentiment is rightly in sympathy with home builders and the control of their operations should give the least possible cause for resentment and impatience with the reserve administration, but it should be exercised firmly none the less. Settlers should be shown the injury to their own interests, as well as to the public, which results from forest fires. But while the aim ought always to be toward co-operation and good will, it is equally important to have it well understood that reserve interests will be protected by every legal means (Pinchot 1974:277).

The *Use Book* followed with advice and instruction on building a campfire, how to suppress small fires and how to escape fires that get out of control (Ibid:277-78). The small manual was revised a few times before it could no longer fit in a shirt pocket and has evolved into today’s multivolume set of directions.

The need for the Forest Service to develop a strategy to deal with backcountry fire was brought to the forefront in 1910. Lightning and human activities such as land-clearing and campfires caused hundreds of fires, which burned five million acres of forest lands throughout the West. This included some massive conflagrations in Idaho and Montana. For the first time, suppression went on the offensive. After the supplies of local men were exhausted, President Taft authorized, for the first time, the regular Army to send troops to assist in the fire suppression efforts. Many towns were evacuated, sometimes only moments before they were engulfed by the fires. The casualty list was enormous – 85 people were killed and 100 more hospitalized (mostly

firefighters). Additionally, an estimate of almost eight billion board feet of marketable timber was burned (Pyne 1992:241-49).

The devastating fires of 1910 spawned a change in how the National Forests were managed. Fires in these remote and inaccessible areas that were set-aside from the typical expansion of settlement could not be dealt with in the same way as fires near populated areas. Without the normal transportation and communication systems, new networks would need to be set up to deal specifically with fire detection and suppression. Additional staffing, hired just to fight forest fires would be necessary. Fire protection to preserve timber and watersheds soon became the dominant activity on national forest lands.

Fortunately, the Forest Service did not have to deal with forest fires single-handedly. Cooperative efforts to suppress forest fires extended to state forestry agencies and private forest landowners who also wanted to protect their timber resources. This cooperation among the three entities was particularly true in the Northwest. In 1911, Congress passed the Weeks Law which included a section authorizing federal matching funds to be allocated to states that have a forest protection agency that met government standards (Steen 1991:129). Later on, in 1924, The Clarke-McNary Act expanded federal participation in state and private forest protection and reforestation programs (Steen 1991:189).

Following the 1910 fires, the Forest Service began conducting fire research to manage fires more scientifically. Coert duBois, California's District Forester, developed the first comprehensive plan, in 1914, titled "*Systematic Fire Protection in the California Forests.*" Many of his ideas were implemented nationwide. This policy of fire prevention and control included locating high points on mountain and ridge tops where smoke from fires could be readily observed. These first "lookout stations" were simply high vantage points with open views of the forested landscape. The Umatilla National Forest likely had some of these lookout stations. In 1923, Albert Baker, the Asotin District Ranger, wrote in his work diary on August 9th "Left Clearwater 7 A.M. Went to Mt. Misery. . . Went out on lookout point. No fires. Left Mt. Misery 1 P[M]. . ." (Albert Baker Diaries, 1923, transcribed). A ranger station, converted from an old trappers cabin, was located at Mt. Misery (Tucker 1940:146), but there is no record of a lookout structure ever being built there.

Lookout stations, whether just open vantage points or lookouts towers, became critical components of the "fixed point fire detection system" that developed over several decades. Initially, the lookouts used primitive, portable instruments such as the compass and heliograph to locate fires and communicate to others. The first "constructed" lookout type may have been the lookout tree, often referred to as "crow's nests," which usually had wooden slats nailed to the tree trunk or a ladder that led up to a platform in the top of the tree. The Umatilla NF had at least 14 crow's nests and several other "emergency lookout stations" that may have been crow's nests or just vantage points. An example of a crow's nest on the Umatilla was at Pearson Ridge. This crow's nest was captured in a panoramic photo in 1935 from a newer lookout (See Figure 2). The crow's nest lookouts were most likely built on the Umatilla NF during the 1910s and 20s. Freestanding lookout towers may have also been built concurrently with the crow's nests. The earliest reference to a tower being constructed on the Umatilla NF was in 1914, at Tower Mountain (then called Lookout Mountain):



Figure 2. Pearson Ridge crow's nest lookout viewed from the newer lookout. Source: National Archives, Pacific Northwest Region, USFS Records, portion of panoramic photo taken at Pearson Ridge Lookout, ESE view, 7/25/35; copy from *Osborne Panoramic Images of Eastern Oregon*, CD-ROM (Portland, OR: IamWho Panoramic Imaging, 1999).

In order to make the immediate detection of forest fires in the south end of the county more easy, Forest Rangers Walter Allison and Bun Moore are now constructing a tower on Lookout Mountain, the highest peak in the range, and from this they will scan the forests for many miles with a strong glass. The tower is almost complete and one man will be stationed there most of the time (*Daily East Oregonian*, 29 July 1914: no pg.; courtesy of Michael Duffy).

This Lookout Mountain was renamed Tower Mountain in 1925 to avoid confusion with the other Lookout Mountain on the Forest (McArthur 1992:845).

Over time, vast networks of trails, telephone lines, and guard stations, where the fire guards and trail crews stayed, connected the lookout stations to each other and the ranger stations. The trail crews maintained the trails and repaired broken phone lines. When a fire broke out they became fire fighters. Often, to maintain maximum efficiency; the trail crews stayed in simple 3-sided shelters while they were working in the field. To maximize fire detection efforts, they began

building simple lookout structures of various designs out of local materials on mountain-tops across the country.

In duBois' plan, he described how every detail of fire protection should be laid out. Regarding the construction of lookout stations his principles were:

1. Living quarters and working stations will be combined.
2. Stability of the building is essential.
3. The comfort of the building is essential.
4. The maximum view must be obtained from inside the building.
5. Insulation against lightning must be provided.
6. The interior arrangements must be adapted to the purposes of the station.

Specifically regarding the lookout structure he recommends that:

The lookout man's dwelling, office, and workroom should be centered in one house, on one floor, and in one room. The room can be no less than 12 feet square, and must be so constructed that at any moment of the day, with a turn of the head, he can see his whole field. He must be fixed so that while he is cooking, eating, reading, writing, dressing, washing his clothes, walking about, or sitting down, he can not help but be in the best position to see. (duBois 1914:55).

District Forester duBois indicated a steel tower would be the standard for use in California. Specifically, he recommended steel towers manufactured by the Aeromotor Co. of Chicago, Ill. This is the earliest reference to the Aeromotor steel towers, of which at least four were built on the Umatilla National Forest in the 1930s (More discussion of these towers will follow later). When a steel tower could not be delivered to a site, duBois recommended either a pole or lumber tower (Dubois 1914:50).

Early detection of fires proved to be an important factor in suppressing fires while still small; it was also the most efficient. Consequently, lookout structures were built on almost every mountain or ridge top that had an expansive view. On the Umatilla NF, the records are scanty about other lookout structures that were built before 1930. Many locations were "lookout stations" in the 1910s and '20s, but these may have just been high vantage points without structures. Bone Point had a "cupola cabin" built sometime in the 1920s, Madison Butte and Table Rock each had a D-6 cupola lookout built in 1923 and 1929, respectively. Desolation Butte had a 50 or 60 foot steel tower with a 6x6' cab built in 1923. Spout Springs had a platform on top of a 30' log tower built around 1928. It would have had a cab built on top but the Forest ran out of money. Tower Mountain may have had another pole tower built sometime in the 1920s to replace the earlier 1914 tower. All of these early lookout structures (except Desolation Butte) were replaced in the 1930s and 40s with newer styles (Desolation Butte was not replaced until 1961). A discussion of the different lookout styles follows in the next section.

Osborne fire finders became standard equipment in the lookouts for plotting fire locations. W. B. Osborne, who invented the fire finder, also designed a 360 degree panoramic photo-recording transit. Between June 1933 and December 1935, Albert Arnst and a crew from the

Regional Office in Portland took panoramic photographs using this transit from 813 lookout stations in Oregon and Washington including 35 on what is now the Umatilla National Forest (a few were on the Whitman National Forest at the time). Subsequent photos were taken by others as late as 1942. These panoramic photos were taken of existing lookout stations and a few potential lookout sites. The photos were oriented so that three photos were taken, each showing a 120 degree sector of the azimuth circle, one view north, the second view east-southeast, and the third west-southwest. Copies of the photos were supplied to each Forest and used at the offices and by the lookout. The primary purpose of the photos was to prepare ½ inch base and topographic maps of the “seen areas” from the lookouts. These maps were then used by the lookouts to more accurately report where fires were located, and by forest planners to determine where a lookout’s blind spots were, or if there was excessive duplication of coverage from combinations of lookout stations (Arnst 1985:1-4).

One of the values of the panoramic photos today is the information about the lookout structure and associated cultural features such as buildings that sometimes appear in the photos (as shown in Figure 2). Each photo also has the name of the lookout station, date of photo, photographer’s name, height photo was taken from (i.e. the height of the lookout structure plus height of transit, though errors have been noted), and whether the lookout was a tower or a ground house. A great deal of new information about the Umatilla lookouts was found from these photos. The table in Appendix A, which lists all known lookouts on what is now the Umatilla NF, includes information on which lookout stations had panoramic photos taken from them.

Beginning in April, 1933, one of the most successful New Deal programs was established by President Franklin D. Roosevelt to alleviate widespread unemployment during the Great Depression. The Emergency Conservation Work (ECW), later and more widely known as the Civilian Conservation Corps (CCC), continued until 1942 when it was terminated because of the United States’ involvement in World War II and an improved economy. During its 9-year existence, the CCC enrollees worked on thousands of public works and conservation projects, the majority of which were on National Forests.

The CCC put to work many young unemployed men from local communities near the forests; other enrollees, especially those from urban areas, were relocated far from home. The influx of manpower and funding provided a much needed boost to the Forest Service which had been struggling to accomplish numerous programs including its fire protection work. Trails, roads, guard stations, telephone lines and an estimated 600 lookouts were built across the country (Sinclair 1991:12). CCC boys also worked on hazard reductions, fuel breaks, and became a tremendous fire fighting army (Pyne 1982:275).

On the Umatilla NF, records are limited from the 1930s that would indicate which lookout structures the CCC may have built, although a number of lookouts were constructed from 1933-42. According to Gerald Tucker, a CCC camp was on the Asotin Ranger District (now Pomeroy and Walla Walla Ranger Districts) the summer of 1933, and the enrollees accomplished a great deal of building projects. Among those projects were the following:

Barn, warehouse, oil house, garage and steel tower [still standing] at Clearwater Ranger Station. . . . Telephone line from Saddle Butte to Bucket Spring. . . .

Smoothing Iron emergency lookout house. . . . Reconstructed telephone line from Iron Springs to Clearwater, Clearwater to Tucannon, Clearwater to Mt. Misery and put in a new line from Wickiup Spring to Smoothing Iron emergency station. . . . **Hoodoo steel tower, house and garage** [all still standing]. . . . (Tucker 1940:148-49).

On the south end of the Forest, the only lookout related structure known to be built by the CCC is the house that was built for the lookout at Lucky Strike Lookout Station and moved to the Tower Mountain Lookout in 1949. Other CCC crews worked on the Umatilla NF, but their accomplishments are gone from Forest Service records. Of the 35 Osborne-panoramic photos taken from lookouts now on the Umatilla NF, 21 of the locations had towers or ground lookout houses that may have been built during the 1933-42 era, suggesting more than the above-mentioned lookouts and associated structures might have been built by the CCC. However, many of the lookout structures have very conflicting dates of construction as illustrated in Appendix A.

During WWII, no lookout construction projects were recorded. With the male labor force dramatically cut, the Forest Service increased the number of women lookouts (one of the few field positions available to women at the time). The Umatilla NF apparently staffed a few lookout stations with women. In an article in the *Walla Walla Union Bulletin (WWUB)* the attitude of the times is readily apparent:

Women and girls will not be dispensed with as smoke-chasers and fire spotters on the national forests this year, but the number so employed will probably be slightly less than a year ago. These courageous women and girls have stepped into a man's job under lonesome circumstances.

Ranger Ward reports Mrs. Elsie Ralph of Walla Walla will take the Lookout Mountain fire sentinel job. . . .

Over in Wallowa County Darlene Wilson will again do her smoke-chasing and fire spotting job at the Dorrance cow camp. This station is about 30 miles north of Hat Point which reveals the isolation of her sphere of influence. Miss Wilson has become definitely celebrated in forest service circles for the remarkable way she carries on her work in a wilderness area. She asks no favor of any man. . . . (*WWUB*, "Girl Lookouts," June 24, 1945).

From 1946 to 1950, six lookout structures were built on the Umatilla NF, all replacements of earlier structures. Following WWII, fire detection methods began to change in response to technological advances. Surplus equipment from the military was acquired by the Forest Service and put to use in fighting fires. Two-way radios replaced telephone lines for communication. Aerial patrols and smokejumpers became more common, making many fixed-point detection facilities increasingly obsolete. Improved access by roads left many of the trails abandoned, but these roads did bring more recreationists to the Forests who would also report fires. Nationwide, the number of lookout towers peaked in 1953 to 5,060. Then a steady decline began (USDA Forest Service 1969:5).

Only four more lookouts were built on the Umatilla NF, all between 1957 and 1961, and all to replace earlier structures. All during the time that the Umatilla NF was building new lookouts they were abandoning and tearing down others. The destruction of lookout towers (as well as other surplus Forest Service buildings) increased dramatically in the mid-1960s. This was primarily the result of legislation passed by Congress in 1965 that allowed citizens to sue federal agencies for injuries they received while on government property (Spring and Fish 1981, in Sinclair 1991:15). With all these “attractive nuisances” that recreationists loved to climb - and still do - the Forest Service reduced their liability by tearing many abandoned lookout structures down. The majority of lookout structures that remain were ones still needed for fire detection and those that no one got around to tearing down (perhaps because no funding was available).

UMATILLA NATIONAL FOREST LOOKOUT STYLE HISTORY

Early Styles

As mentioned earlier, the first lookout stations were just high points that had good views of the surrounding area. As early fire detection became more crucial to suppressing fires, these lookout points became more permanent stations with accommodations that made the observer more comfortable and the viewing area more expansive. For locations that did not have full viewing areas because of trees, the lookout would climb a tree for a better view. When climbing up and hanging on to the tree trunk became a nuisance, the resourceful lookouts started building steps or ladders up the trunk. Some trees even had all the branches removed to avoid rubbing against them. Trees that were topped and had a platform built on top, usually with a safety railing, were called “crow’s nests.” The Umatilla had its share of crow’s nests including the one at Pearson Ridge captured in the panoramic photo taken in 1935 (Figure 2), the one at Hoodoo Ridge (Figure 3) and another at Summit Ranger Station (Figure 4).

Different Regions of the Forest Service found it more economical to design standardized lookout plans. These standardized plans allowed many lookout structures to be built quickly by the “average” Forest Service employee rather than a skilled carpenter. Many of these designs were shared with other Regions, which was probably why their design names often included their Region number (or earlier District number), to identify the originating Region. Included in this lookout style history are only those styles that were known to be built on the Umatilla NF. For descriptions of other styles refer to sources such as, Cox 1991; Sinclair 1991; Thornton 1986; and Kresek 1998.



Hoodoo Tower

Figure 3. Hoodoo Ridge crow’s nest lookout, date unknown. Source: USFS Umatilla National Forest archives.

Figure 4. “Summit Tree Tower,” 30 December 1931. J. F. Irwin, photographer, USFS Photo #262575. Source: USFS, Umatilla National Forest archives.



D-6 Cupola

Soon the lookouts were building structures that protected them from the variable weather conditions that high elevations in the mountains could present even during the summer. In the Northwest, the first standardized lookout structure with living quarters was what later would be called the D-6 Cupola (because it was designed in District 6). The prototype was designed by Elijah "Lige" Coalman for use on top of Mt. Hood. In 1915, Coalman, known as the "Man of the Mountain" because he eventually climbed Mt. Hood 586 times, applied for a position as "fire watch" on Mt. Hood, if such a position was ever created. The forest supervisor took him up on his offer on an experimental basis. After five weeks of living in a tent at the top of the 11,239-foot mountain, he designed plans for the cupola and submitted them to the supervisor. Four days later, pack mules were headed up the mountain carrying 4,000 pounds of materials. The loads had to be carried by men up the last stretch to the summit. The D-6 cupola was a 12' x 12' framed building with a 6' x 6' glassed-in, pyramidal-hipped roof cupola centered on top of the truncated pyramidal-hipped roof first story. The first floor was the living quarters; the cupola, set up with a firefinder, was the observatory. All the windows had shutters for when the lookout house was not in use. Both roofs were covered with cedar shingles. Coalman's cupola was staffed until 1935, and survived until 1941 when it toppled over and fell into a deep crevasse (Kressek 1998:11, 25-6; Sinclair 1991:18).

These lookout houses were designed to rest on the ground rather than on towers like later models. At least four "cupola" lookouts were built on the Umatilla, reportedly as late as 1936, including at Table Rock, which was built in 1929 (Figure 5). Unfortunately, none of these cupolas survive on the Umatilla.



Figure 5. Table Rock D-6 Cupola Lookout, July 1930. F. W. Cleator, photographer, USFS Photo #248008. Photo of copy located at Table Rock Lookout taken by author, 30 August 2001.

L-4 or “Aladdin”

The Forest Service had for a long time desired a lookout station where the observation facilities and living quarters were combined in the same 1-story room. Coert duBois endorsed this idea in 1914 when he described and illustrated a 12'8" x 12'8" hipped-roof cabin complete with furnishings (duBois 1914:55-7). According to Mark Thornton, duBois drafted and presented a 14' x 14' live-in cab in 1917, referred to as design 4-A, which became a Region 5 standard (Thornton 1986:27). This design may be the predecessor to what became the most popular lookout designs in the Pacific Northwest -- the L-4s. These versatile styles were designed to be built on towers or placed on the ground. Some, like Table Rock Lookout, were placed on top of one-story foundations which served as storage. Catwalks were usually built on the towered models. The L-4s were prefabricated and often were sold as a kit, at least in the early years. The Aladdin Company of Portland, Oregon, was the primary manufacturer, which is why the L-4s were often called “Aladdins” (Sinclair 1991:21).

1929 Version (and 1931 Revision). The design for the L-4 originated in the Northern Region (Region 1) in 1929. The earliest version of the 14' x 14' building had a gable roof. Five sets of nine-light casement windows extended across each façade (though later models may have had only four-lights), except where the door replaced one window on the end of one wall. Two shutters, hinged at the top, covered the windows on each façade during the off season, and could be raised to shade the windows and prevent glare when in use. These were held up by either a 5/8" iron rod bolted to the structure below the windows (as shown in the 1931 plans) or 2" x 2" struts (a possible later modification) fastened either to the structure (for buildings without catwalks) or to the catwalk railing. A separate shutter covered the door. The original siding described on the plans as 1" x 6" “Rustic,” was probably a type of shiplap siding. The interior walls below the windows are covered in the same type of siding. The roof was covered with cedar shingles 4 1/2" exposed to weather. Inside, the floor and ceilings were 1" x 4" tongue and groove lumber from clear grain fir. The furniture consisted of two bunk beds that folded up when not in use, a table with legs that folded up, a stove, three sets of shelves, a fire firefinder stand, and a “_____ Box” [illegible] (USDA FS, Region One, “Lookout House Plan L-4, 1931 Revision, Dec. 1930; Clifford 1994:8). This version was apparently not made after 1932 when the next version was developed. Only two gable roofed L-4 lookouts are known to have been built on the Umatilla NF - Diamond Peak (Figure 6) and Oregon Butte Lookouts, both built in 1931. Diamond Peak was intentionally burned in 1953, leaving Oregon Butte as the only surviving example of this type on the Umatilla National Forest, as well as east of the Cascades in either Washington or Oregon.

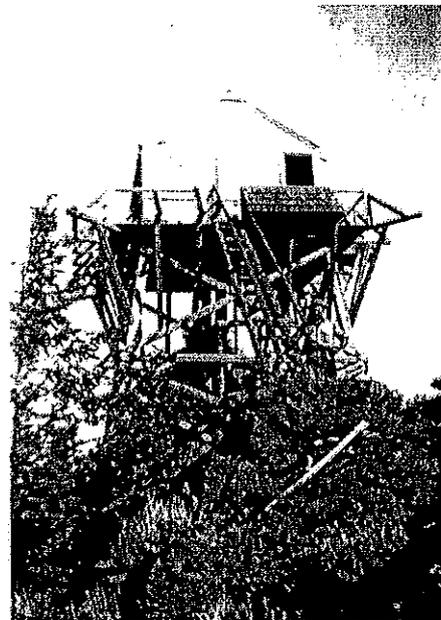


Figure 6. Diamond Peak Lookout with Merle Hoosehagen, state trapper standing in front, July, 1953. Source: USFS, Umatilla National Forest archives.

1932 Version. By 1932 the plans were revised to a hipped roof version that provided greater structural stability under snow loads. Struts were still used to hold up the shutters. The windows may have also been changed at this time to have only four-light sashes, which provided better visibility and easier cleaning. By 1935, specifications referred to the window design as “four light barn sash, 1 3/8” thick.” According to Kresek, this popular version of the L-4 was built until 1953 (1998:11). Only four lookouts on the Umatilla NF were documented as 1932 versions – Griffin Peak (1933), High Ridge (1932), McIntyre Point (1932), and Saddle Butte (1932, Figure 7). Another may have been at Ant Hill (1935). None of these lookouts remain on the Umatilla National Forest.



Figure 7. Saddle Butte Lookout, L-4 1932 version, unknown date.
Source: USFS, Umatilla National Forest archives.

“Standard 1936” Version. Another modification was made in 1936. In an attempt to secure the shutters better than with the 2” x 2” struts, the ceiling joists were extended two feet beyond the cab and provided with bolts to which the shutters could be hung from. The detailed Region Six plans for this version show a few changes from the 1931 Revision. The windows now have four-lights per sash, all fixed except the center sash is hinged. The siding is now described as “1” x 6” single V rustic siding.” If the lookout had a catwalk, it was constructed of 2” decking and had a 36” high railing.

Inside the cab, furniture consisted of a stove, a single bunk bed, a table, a cooler cabinet “A,” a cabinet “B,” and a water stand. All the furniture around the perimeter, except for the stove pipe was no higher than 36” to avoid blocking the view. In the center of the room, the fire finder was placed on a more elaborate built-in stand, elevated above the other furnishings. A telephone was mounted on the side of the stand. A stool had glass telephone insulators for feet, for protection against lightning strikes (still in use today) (USDA FS, Region Six, “Standard – 1936 14’ X 14’ Lookout House).

This very common style of lookout house was also built until about 1953 (Kresek 1998:11). On the Umatilla NF as many as thirteen Standard 1936 L-4s may have been built. Three lookout cabs of this style survive – Lookout Mountain (1949), Table Rock (1949), and Big Butte (1950). Lookout Mountain and Big Butte (Figure 8) are on towers; Table Rock, which has been heavily modified, sets on a 1-story concrete foundation that serves as a storage room.

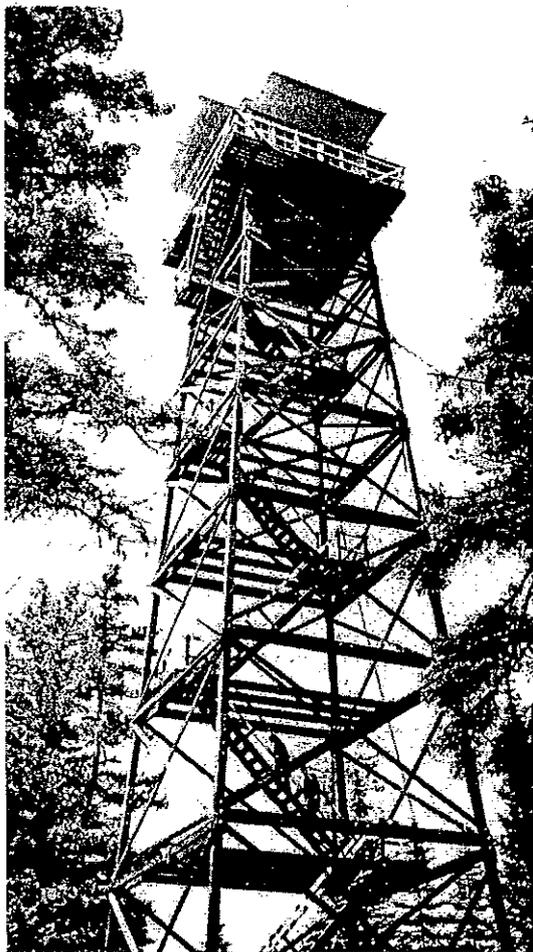


Figure 8. Big Butte “R-6 Standard 1936 L-4 Lookout,” 1959. Source: USFS Umatilla National Forest archives.

Although the “Standard 1936” name has prevailed, minor modifications may have been made each year in the contract specifications written by the Regional Office in Portland. For instance, specifications in 1938 were identified as “R-6 Standard 1938.” By 1941, however, the name reverted back to “R-6 Standard, 1936.”

A 2-page document, found at the National Archives (Record Group 95 (RG 95), Forest Service, Box #6817, Folder - Prefabricated Bldgs. 1938), dated 1/25/39 for a “Forestry Lookout Station” and simply titled “Specifications” detailed some major material changes. The changes consisted “chiefly of substituting plywood for lumber where feasible and simplifying the construction so as to facilitate and speed up erection.” The plywood was to be used on door and window panels, roof panels and shutters, subfloor and ceiling. This document which may not even be a Forest Service document (the term “Forestry” is suspicious) is discussed here because the two Umatilla L-4 lookouts, Big Butte and Lookout Mtn. have plywood shutters, one for each window sash. If the suggestions in this document were ever put to use, especially by the late 1940’s when plywood was surely more cost effective, the shutter styles for these two lookouts, even if replaced, could be original. A 1941 “Bill of Material” (RG 95, Box #6817, Folder – 14x14 Lookout House Specifications), still lists 1” x 6” flooring boards for the shutters (this was the most recent document giving material specifications).

L-5, L-6, L-7 and Standard 7’ X 7’ Lookout Houses (ca. 1932-1938+?)

These styles are addressed together as there may be some confusion in other reports of what denotes an L-6. The L-5 and L-6 cab styles were smaller variations on the L-4 style. The L-5 measured 10’ x 10.’ The few that went up were only used as secondary lookouts; and only a fraction of these were lived in. Only two possible L-5s, Red Hill (pre-1935) and Wheeler Point

(by 1932), both on the Heppner RD, are believed to have been built on the Umatilla NF (from photo identification). Based on Red Hill's photo (Figure 9), the 10' x 10' can be assumed as it has only three window sashes of four lights each on each façade (assuming all sides are the same, except the door). Each sash had its own shutter, propped up by struts mounted on the catwalk railing. The roof appears to have been a hip roof. If not an L-5, Red Hill L.O. may have also been a variation of an L-6 or an individualized plan. This lookout structure was abandoned in 1957.



Figure 9. Red Hill Lookout, a possible L-5 cab, 24 June 1953, by C. M. Rector. Source: USFS, Umatilla National Forest, South Zone archives.

Wheeler Point Lookout (Figure 10) may be another variation of an L-5 or L-6 cab, or its own unique design. Its cab style varies from Red Hill's in that it does not have a catwalk or shutters; the windows appear to be smaller in height; and the roof may have a steeper pitch. It also does not exactly match either the L-5 or L-6 plans (both dated 1932) that are owned by Ray Kresek. This Wheeler Point lookout tower was replaced in 1959 by an R-6 Flat cab on a 67-foot treated-timber (TT) tower (see Figure 13), which was torn down ca. 1983.

Figure 10. Wheeler Point Lookout with house and outhouse (foreground), 1932. Source: USFS, Umatilla National Forest archives.



According to Kresek, the L-6 measured 8' x 8.' Again, the plans in his possession, dated 1932, and a reconstructed L-6 at his museum confirm these measurements. His L-6 has three, six-light window sashes on each façade and each side has a large single shutter held up by braces that extend from the catwalk floor. Kresek's records indicate that the only L-6 on the Umatilla NF was one without a catwalk at Big Butte, built in 1938 (personal communication, August 2001; Figure 11). This lookout tower with a ground house, built in 1930, and garage (ca. 1930s) was replaced with an L-4 in 1950 (see Figure 8). The L-4 and the old garage still remain.

Sinclair (1991:21, 28-9) describes the L-6 as measuring 7' x 7.' Her existing example at Black Butte (shown on page 22 of her report) appears to be instead a Region 6 design of a "Standard 7' x 7' Lookout House." Specifications for 7' x 7' lookout houses dating from 1933 to 1938 were found at the National Archives, Pacific NW Region. The 1933 Specifications were identified as **L-7, Tower Lookout House, Ready Cut – 7' x 7'**. Specifications dated from 1935 to 1938 dropped the L-7 designation and instead changed the title to **R-6, Standard, 193x** [depending on the year] **7' x 7' Lookout House** (RG 95, Forest Service, Box #95-54FP045 (6817), Folder: 7' x 7' Lookout House). This style had a pair of six-light sashes on each façade, a low pitched gable roof that was to be covered with canvas, and could be built with or without a catwalk. Corresponding plans for the 1936 version were found in a USDA Forest Service document, *Standard Lookout*

Structure Plans (1938:17-17b and 26-26g; see Appendix X). The Standard 7' x 7' Lookout House, because of its small size, was often placed on top of tall towers. Living quarters were usually available in ground houses at the site or nearby, such as at a guard station.

The Umatilla NF had at least three of these rare 7' x 7' types, at Pearson Ridge (1935), Ukiah Ranger Station (Figure 12, 1939), and Goodman Ridge (1936). Goodman Ridge is the only extant 7' x 7' still standing on the Forest, and it is in very poor condition.



Hoodoo

Figure 11. Big Butte L-6 Lookout. Photo taken sometime before 1950 is erroneously identified as Hoodoo. Source: USFS, Umatilla National Forest, Pomeroy Ranger District archives.

Figure 12. Ukiah RS 7' x 7' Lookout, 1962. At some earlier point in time, a large water tank was placed just under the cab that apparently supplied water to the ranger station compound. Source: USFS, Umatilla National Forest archives.



Aermotor Steel Towers and Cabs

The Aermotor Company of Chicago, IL, began manufacturing steel towers for windmills, pumps and tanks in 1888. By 1914, Coert duBois was endorsing Aermotor steel towers for use in California forests. In Region 6, a few "steel towers" started to show up in the 1920s. In the 1930's, several more steel towers, most likely Aermotors, were built predominantly east of the Cascades. The year 1933 was the banner year, perhaps because of the CCC workforce available to construct them (Kresek).

On the Deschutes, two extant Aermotor towers, Fox Butte and Trout Creek Butte, both model MC-39s with 7' x 7' cabs, were built in 1933 by the CCC (Sinclair 1991:33, 42). These styles are the same as the Umatilla's Aermotor towers. All four extant Umatilla Aermotor lookouts appear to be MC-39 or MC-40 towers, because of the interior diagonal staircase and 7' x 7' steel cab (see plans in Appendix B). The Hoodoo Ridge (Figure 13) and Clearwater Aermotor lookouts are known to have been built in 1933 by the CCC. Tamarack Mtn. is reported to be built in 1933 or '34. Tower Mtn. was built ca. 1932-34. Based on the above similar information, the author believes all four Umatilla Aermotor towers may have been ordered at the same time and built in 1933 or '34 by the CCC. Another possible Aermotor MC-39 or -40 tower may have been built at Lucky Strike, because of the tapered shape of its shadow in a 1935 panoramic photo. The date of construction is unknown, but its ground house was built by the CCC. Kresek, however, reports a 67' L-4 was built at Lucky Strike in 1936 [but it was unusual to have a ground house with a live-in L-4, so this information may be incorrect].



Hoodoo

Figure 13. Hoodoo Ridge MC-39 or -40 Aermotor Lookout Tower, date unknown. Source: USFS, Umatilla National Forest, North Zone archives.

“R-6 Flat” (CL-100 to CL-106 series) and modern variations

After the long success of the L-4s, Region 6 designed a new lookout house in 1953. Apparently, to reduce the costs of replacing shutters and shingles on the roof of the L-4s, the “R-6 Flat” design has a flat tar roof with extended eaves. The exterior walls are covered with T-111 plywood. The overall dimensions of the building range from less than 14’ x 14’ to over 15’ x 15.’ The plans for this style are just labeled “Lookout House” (on file, Umatilla NF Headquarters). The term “R-6 Flat” appears to be the most common name. The Southwestern Region refers to this style as the CL-100 to CL-106 series, which may refer to the design plans (USDA FS, SW Region, 1989). The R-6 Flat is the last of the standardized styles, and has been built in the last decade on other Forests in the Region. The Umatilla built three R-6s, Wheeler Point (Figure 14, 1959, torn down in 1980s), and Desolation Butte (1961, still in use), and High Ridge (1959, still used in emergencies).

Madison Butte (1957, still in use), appears to be a smaller variation of the R-6 Flat. The outside wall dimensions measure only 13’ 4” and are clad in galvanized metal. Whether the metal was the original design or a later addition is not known. The sub-floor is constructed of wood and the interior walls, below the aluminum sliding windows (possible modification) are covered with T-111 siding. The cab sits on top of a steel tower and has a steel catwalk and stairs.

The only lookout structure not addressed above is Bone Point which was built in 1961. This 14’ x 14’ all-steel-clad (the sub-floor is wooden), lookout house and catwalk, sets on a 30-foot steel tower. This lookout, which has a hip roof, is no longer in use.

Towers

The styles of towers holding up the lookout houses were just as varied as the houses. For the Aermotor steel towers the tower and cab came as a unit with various style types (as shown in Appendix B). Later steel towers may have also had style type designations. But the earlier wooden towers had variations that depended on the size of lookout house they would support and whether the supports were treated timber (i.e. TT-1), creosote-treated timber (CT-1 to CT-6), which may have just been a later term, or untreated round poles (RT-1). An additional code designation with the TT and CT tower types indicated whether they would be hauled to the site by truck or horse. For instance, a TT-1 TH refers to a truck haul, and a CT-6 HP indicates a horse pack. The CT and RT tower types were standardized by at least 1937. See Appendix B for illustrations of the 1940 version of these standardized plans.



Figure 14. Wheeler Point R-6 Flat Lookout, date unknown (pre-1983). Source: USFS, Umatilla National Forest, South Zone Archives.

Houses

When fire detection stations developed into more than high viewpoints that were visited by the ranger on his rounds, and more permanent lookout structures were built, the lookout person needed living quarters to stay in during the fire season. Initially, a tent was used as housing with the crow's nest lookout structure. As lookout towers became more common, it is likely better housing developed as well. Perhaps the lookouts initiated building comfortable quarters for themselves during times when fire danger was low. Or, the Forest Service may have needed to provide better accommodations to entice people to take on the lookout job. Information is almost non-existent on cabins or houses before 1935 when the panoramic photographers caught a few on film. By this time, some live-in lookouts such as the D-6 cupolas and the early L-4s had already been built. But the locations that required a tall tower, which could only support a small cab, continued to utilize ground houses. Eventually, most of these towers with small cabs were replaced by live-in lookout cabs and the ground houses were destroyed. So, it is not surprising that only five houses remain on the Umatilla NF, at the five lookout structures with small cabs. These are located at Clearwater, Goodman Ridge, Hoodoo Ridge, Tamarack Mountain (the former garage was converted to a house), and Tower Mountain.

The houses built at lookout stations were usually simple, rectangular, one or two-room, one-story, gabled roof buildings such as an early house identified as Bone Spring (Figure 15). The common 1"x 5" single "V" rustic siding is present on all five remaining houses (Goodman Ridge has been covered over with T-111 siding), which reflects the 1930s-early 40s time period when the houses were built. Although the houses have similarities, including age, they do not appear to have been built from standardized plans like the lookout structures as each building is unique. Goodman Ridge's house, for example, has a cross-gabled roof. A couple other variations from the basic style were built at Desolation Butte (a pyramidal-hipped roof), and a later house at the former lookout station, Bone Springs (1 ½ stories), as shown in Figures 16 and 17. The small cab lookout at Desolation was replaced by an "R-6 Flat" in 1961 which apparently caused the demise of the house. The later Bone Spring house was still standing in 1956, 7 years after the old 7' x 7' cab on a pole lookout tower was replaced in 1949 by an "R-6 Standard 1936 L-4" style. This later Bone Spring house is described as "Cabin, old style, 2 rm., 19x15" in the Walla Walla Ranger District's Project Work Budget in April 1945 and April 1946 and the construction date given was 1930. This would indicate the earlier cabin and garage in Figure 15 are much older, although, as discussed below, the garage appears similar to others built in the 1930s.

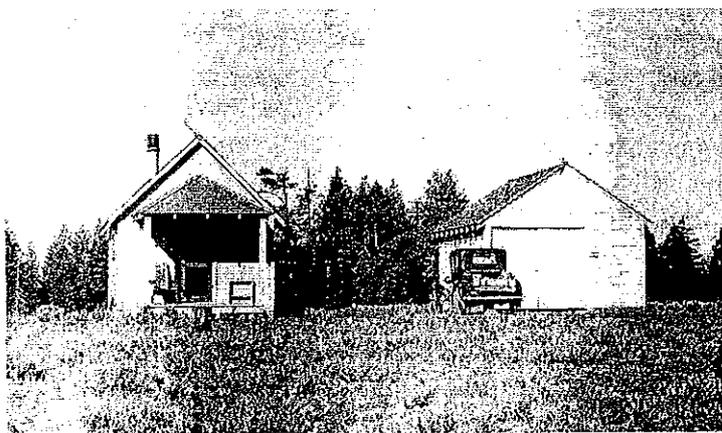


Figure 15. Possible early Bone Springs House and Garage, date unknown. Both replaced by 1935? (see Figure 17). Source: USFS, Umatilla National Forest archives.



Figure 16. Desolation Butte House with pyramidal-hipped roof and full-front shed roof over porch, 1935. Source: Portion of panoramic photo, *Osborne Panoramic Images of Eastern Oregon*, CD-ROM.

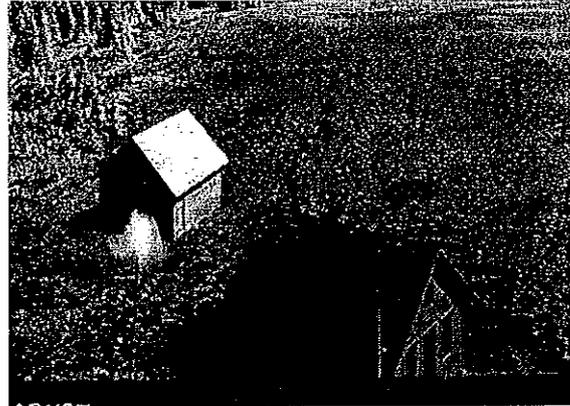
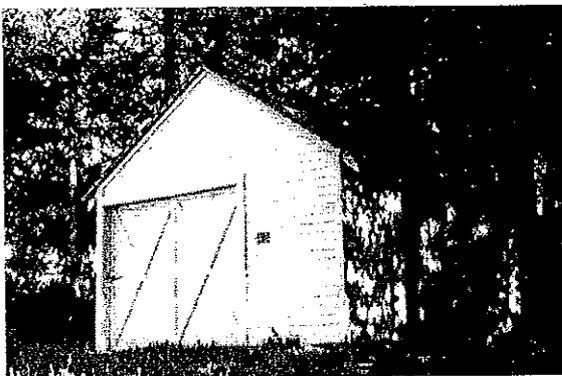


Figure 17. Bone Springs House and Garage, 1935. The house is relatively large with 1 ½ stories. Source: Portion of panoramic photo, *Osborne Panoramic Images of Eastern Oregon*, CD-ROM.

Garages

Like the houses, the garages at lookout stations, if the station had one, were very basic and functional. Unlike the houses, some of the garages may have been built on standardized plans or the designs were copied. Consider the early garage at Bone Springs Lookout (Figure 15) and the garage at Arbuckle Lookout (Figure 18). The garages at Big Butte, Hoodoo and the former garage at Tamarack (converted to a house) all look very similar. The later garage at Bone Springs (Figure 17) and the one at McIntyre were both described in the 1945-46 Walla Walla RD Project Work Budgets as “Garage, single, 16x20, F-25” suggesting a single design plan was used for at least these two garages. The garages in the historic photos and the three extant garages at Big Butte, Hoodoo Ridge, and Desolation Butte were built for a single-car with additional space on one side for storage. They have front-gabled roofs and, like the houses, single “V” rustic siding (Desolation Butte’s garage’s original siding has been covered with split-cedar siding). Big Butte (1930 or later) and Hoodoo (1933) are both approximately 18’x16’ in size. The garage at Desolation Butte is narrower, only 18’x14.’ This narrower size along with some interior



details suggests this garage could be older than Big Butte or Hoodoo Ridge’s garages, possibly as old as 1923, which is when the earlier lookout and ground house (Figure 16) were built.

Figure 18. Arbuckle Lookout Garage, 1962, with the double cross-braced door and space on the side for storage. Source: USFS, Umatilla National Forest archives.

Outhouses

No historic records could be found for the outhouses at the lookout sites, yet they do appear to have been at some of the lookouts as early as 1932, such as at Wheeler Point (Figure 10), and another captured in 1935 in a panoramic photo at Silver Butte (Figure 19). Without documentation, construction dates could not be determined for certain. The outhouses were probably contemporary with the houses, but were just not mentioned because of their private function. The outhouses at Big Butte and Hoodoo Ridge may be historic (> 50 years old) but without documentation of their construction dates, this cannot be confirmed. Saddle Butte and Bone Point's outhouses are also likely to be over 50 years old, because of their level of deterioration and unique styles. The designs of the outhouses are square or slightly rectangular with various roof forms. Hoodoo Ridge and Big Butte's outhouses both have a front-gabled roof. Bone Point has a shed roof and Saddle Butte has a side gable roof. These four outhouses each have different siding. Big Butte has 7" wide horizontal shiplap siding, Hoodoo has 1-foot high split cedar siding (which may cover earlier shiplap siding), Bone Point has drop siding and Saddle Butte has a board and batten siding. The variation in styles of these four lookouts indicates that these outhouses were built before any standardized plans were developed. They were most likely constructed by whoever built the lookouts or houses and they may have just used leftover materials.



Figure 19. View ESE from Silver Butte Lookout showing outhouse in foreground, 1935. Source: Portion of panoramic photo, *Osborne Panoramic Images of Eastern Oregon*, CD-ROM.

CONTEXT DEFINITION

The central purpose of this study is to evaluate the fire lookouts and their associated structures on the Umatilla National Forest to determine which, if any, of them might be eligible for nomination to the National Register of Historic Places. The basis for evaluation is the **historic context**, a structured framework for organizing information about cultural resources based on a shared theme, time period and geographic area. Historic contexts are important historical patterns that can be identified through historic research of the property and the historical development of the surrounding area. Two historic contexts, a primary and secondary context, have been identified for the fire lookout structures on Forest, as follows:

Primary: Fire Detection and Suppression on the Umatilla National Forest from 1902 to 1953.

Fire detection and suppression has been a priority of the Forest Service throughout the years. In the early years, the Forest Service justified its existence to a suspicious and oppositional public by demonstrating the need for fire detection and suppression work. The Forest Service's early involvement in these tasks resulted in their becoming the lead agency nation-wide in fire research as well as fire detection and suppression. The system of fire lookouts that remains standing is representative of what was one of the agency's most important roles.

The spatial boundaries of this historic context are limited to the current boundaries of the Umatilla National Forest. However, there were a few lookouts outside the forest, operated by State agencies, that the Umatilla NF had a role in establishing. Since the Forest Service is no longer involved with these structures, either for maintenance or staffing, they are not considered in this evaluation.

The beginning date for the temporal boundaries was determined by the dates the various Forest Reserves that later became the Umatilla NF were established. The Wenaha Forest (northern portion of Umatilla) was established in 1902. The Heppner Forest (now southwest part of Umatilla) was established in 1903 and renamed the Umatilla NF in 1908. The Blue Mountain National Forest (central portion of Umatilla) was established in 1902, renamed the Whitman National Forest in 1908, and then a portion transferred to the Umatilla in 1911. The Umatilla and Wenaha National Forests were consolidated in 1920. Later modifications were made in the 1940s among the Umatilla, Wallowa and Whitman National Forests which resulted in the Umatilla acquiring at least three lookout sites and giving up at least one.

The ending date is based on three criteria: 1) The number of lookouts nation-wide peaked in 1953 which represents the beginning of the decline in their use; 2) Also, that year, a new standardized lookout house style was introduced - the "R-6 Flat" - effectively signifying the end to the construction of the long-standing L-4 design; and 3) The year 1953 is just one year short of the usual 50 year requirement for a property to be considered eligible for the National Register of Historic Places. Although the known extant lookout structures that are over 50 years old are believed to be built between the years of 1923 and 1950, these broader dates allow for the

inclusion of previously unknown lookout structures, currently unknown construction dates, or the strong possibility that some construction dates are incorrect. The time period also reflects more accurately the historic period of the evolution of fire detection and suppression on the Forest.

Secondary: The Civilian Conservation Corps' Role in Fire Detection and Suppression on the Umatilla National Forest from 1933 to 1942.

This historic context is somewhat of a sub-theme of the other context as their themes are similar. But because of the significant role the CCC played in building lookout-related structures on the Forest, as well as other fire suppression duties such as building roads and trails and fighting fires, a separate context is described. Other administrative structures built by the CCC in Region 6 have already been determined eligible, and many nominated to the National Register of Historic Places. Lookout structures were excluded at the time, perhaps because their unique designs reflected their function and not always the typical architecture that the CCC-era represented. The lookout structures during the CCC-era were built from standardized designs that were pre-cut and pre-fabricated. They were not built exclusively by the CCC. Some styles were built before and/or after the CCC program was in existence. Purposely by design, skilled craftsmen were not required to erect the lookouts and therefore, no embellishments were added. Also, since fire lookouts were typically located in remote areas which were accessible only a few months during the summer, it was important to design buildings that were simple to erect in a short period of time. The role the mostly unskilled young men on the CCC crews provided was the much needed manpower to erect a large number of lookouts and associated structures quickly. Some of the CCC-built lookout cabins and garages, though, do exhibit the features of the simpler rustic-style architecture the CCC are associated with.

EVALUATION

National Register Criteria

The U.S. Department of the Interior (USDI), National Park Service (NPS), established the criteria for nomination to the National Register of Historic Places in the *Code of Federal Regulations*, Title 36, Part 60. Technical guidelines were prepared in various *National Register Bulletins* to help interpret the regulations. In particular, *Bulletin 15: How to Apply the National Register Criteria for Evaluation* states that **significance** is present in districts, sites, buildings, structures, and objects when they “possess **integrity** of location, design, setting, materials, workmanship, feeling, and association,” and meet **one or more** of the following four criteria:

- A. That are associated with **events** that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of **persons** significant in our past; or
- C. That embody the **distinctive characteristics of a type, period, or method of construction**, or that represent the **work of a master**, or that possess **high artistic values**, or that represent

a **significant and distinguishable entity whose components may lack individual distinction**; or

- D. That have yielded, or may be likely to yield, **information** important in prehistory or history [emphasis added].

A property can meet one of the four National Register Criteria for Evaluation by:

- Being associated with an important **historic context** *and*
- Retaining historic **integrity** of those features necessary to convey its significance.

“Integrity” does not refer to the physical condition of a property, but rather to its original appearance and setting. A property in poor physical condition may still retain good integrity if it is still able to convey the qualities that associate it with the significant historic context. A property that has been modified with inappropriate material or by changes to the design may no longer retain its integrity. Additionally, a property that has been moved from its original setting, unless the move was more than 50 years ago and to a similar setting and environment, may also have lost its integrity.

Another criterion, in regard to this evaluation, is that a property must be at least 50 years old, unless the property is of “exceptional importance.” This criterion can be modified somewhat if the period of significance as defined in the historic context extends slightly beyond, or more recent than 50 years.

Each of the extant Umatilla National Forest fire lookouts and associated buildings will be evaluated against the National Register of Historic Places criteria. All the structures that were built more recently than 1953 are automatically determined not eligible because of their age. All the pre-1953 structures are associated with the historic context, *Fire Detection and Suppression on the Umatilla National Forest from 1902 to 1953*. If their integrity is retained they are eligible under National Register Criteria A because of the significant role they played in fire detection and suppression, and of their association with this important event that has made a significant contribution to the broad patterns of our history. The various lookouts and associated buildings may also be eligible under Criteria C if they represent intact examples of specialized structural types that embody distinctive characteristics of a type, period, or method of construction, such as the standardized lookout styles. These lookout structures are becoming increasingly rare as more are being lost by demolition or deterioration.

The structures built by the CCC are also associated with the historic context, *The Civilian Conservation Corps’ Role in Fire Detection and Suppression on the Umatilla National Forest from 1933 to 1942*. Again they would qualify for NRHP eligibility under Criteria A and C. The integrity of all the pre-1953 structures is evaluated below. For detailed descriptions and histories of the properties, refer to the Historic Property Inventory Forms (Appendix C). The structures are listed alphabetically, first the structures located in Washington, followed by those located in Oregon.

WASHINGTON LOOKOUTS

BIG BUTTE
Asotin County, WA
T. 7N, R. 44E, Sec. 1

Lookout Tower – Building #4211

Construction Date: 1950

Description: A “Standard 1936” L-4 cab on top of an 82’ TT-1 tower.

Integrity: Very good. The only noticeable alteration, other than possible paint colors, is the shutters. The original full window length shutters have either been modified to fold up in half, or replaced with hinged shutters that fold up in half. A 1959 photo shows full-length shutters, but perhaps the shutters can be hung either full-length or folded. Standard plans up to 1945 only show the full length shutters. Additionally, safety wire has been attached to the inside of the catwalk railing. The lookout falls within the historic period of significance and retains its integrity of location, design, setting, materials, workmanship, feeling, and association with the primary context.

NRHP Eligibility: **Eligible under Criteria A and C.**

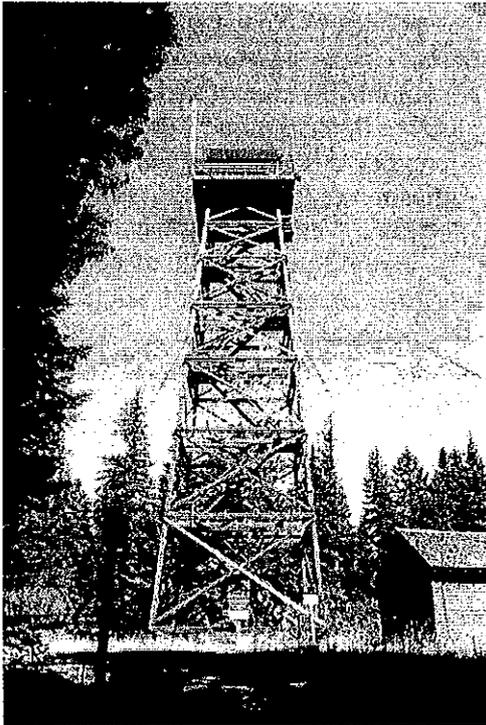


Figure 20. Big Butte Lookout Tower, looking east, 8 August 2001. Photo by author.

Figure 21. Big Butte Lookout interior, looking northwest, 20 July 2001. Photo by author.



BIG BUTTE

Garage/Storage Building – Bldg. #1512 Construction Date: ca. 1930, but possibly later

Description: An 18' x 16' gable roof, single garage with additional room for storage. The exterior siding is horizontal 1"x6" single "V" rustic siding. Wood shingles cover the roof. At an unknown date, the garage was converted to a storage building by filling in the large door opening and changing to a standard door opening with a sliding door on the interior. The new siding filling in where the garage door was is the same style and width as the other siding, but can be differentiated because of its newer appearance and because the exterior garage door trim is still present around the original opening.

The construction date is estimated as a ground house was built in 1930 to provide housing for a lookout tower with an L-6 or 7x7' cab built in 1929. The garage is shown in an undated photo of the earlier tower so it had to have been built before 1950 when the newer tower was built. The 1" x 6" single "V" rustic siding was available on the district at least as early as 1931, as the L-4 Oregon Butte L.O. used that type of siding that year.

Integrity: Good. As mentioned above, the former garage/storage building was converted at an unknown date to a storage only building. An argument can be made that this building still serves a utilitarian function for a lookout station. The alteration of the door was done in a sensitive manner with evidence of the original design remaining. The storage building falls within the historic period of significance and retains its integrity of location, design, setting, materials, workmanship, feeling, and association with the primary context.

NRHP Eligibility: **Eligible under Criterion A.**



Figure 22. Big Butte Garage, front (north) and west facades, 20 July 2001. Photo by author.

BIG BUTTE

Outhouse – Building # 14407-1

Construction Date: unknown, probably historic

Description: A simple, slightly rectangular (4'4" x 3'9"), gable roof structure with horizontal, 7" wide, shiplap siding with corner boards. Mesh screen fills in the gable wall. Wooden shingles cover the roof. It has a rock foundation.

Integrity: Good. No significant alterations are apparent.

NRHP Eligibility: Potentially eligible under Criterion A.



Figure 23. Big Butte Outhouse, north and west facades, 20 July 2001. Photo by author.

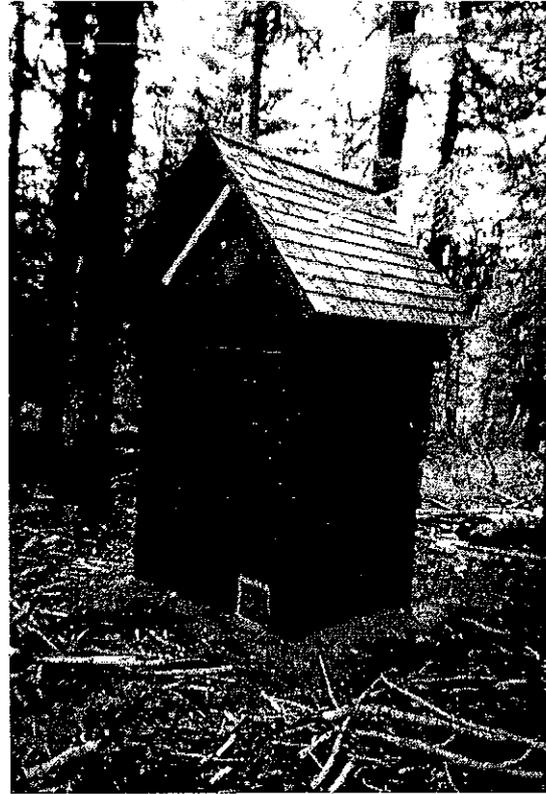


Figure 24. Big Butte Outhouse, south and east facades, 20 July 2001. Photo by author.

CLEARWATER
Garfield County, WA
T. 8N, R. 42E, Sec. 5

The Clearwater Lookout Site retains the two structures from its historic period, although the cabin may not be contemporary with the lookout tower. The integrity of the setting has been impacted somewhat by the graveled heliport area and driveway, the modern heliport office and storage building built so close to the tower.

Lookout Tower – Building #4212

Construction Date: 1933

Description: Aermotor ~87' steel tower, Model MC-39 or -40 with diagonal crisscross staircase with wooden treads on stair steps; 7x7' steel cab. Built by the CCC.

Integrity: Very good. No major changes to the tower or cab were noted. Pinkish exterior paint on lower portion of cab is probably not original. The Clearwater Lookout Tower falls within the historic period of significance and retains its integrity of location, design, setting, materials, workmanship, feeling, and association with both historic contexts.

NRHP Eligibility: **Eligible under Criteria A and C.**

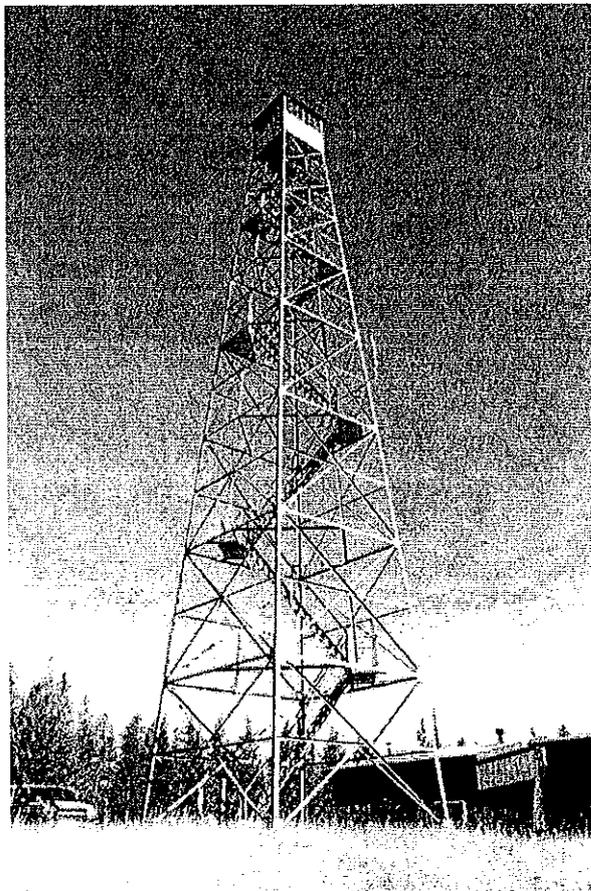


Figure 25. Clearwater Lookout Tower, looking ~southeast, 8 August 2001. Photo by author.

CLEARWATER

Ground House – Building #1025

Construction Date: ca. 1940s

Description: The 2-room, 15' x 24' rectangular house with gable roof has 6" wide, horizontal single V rustic siding. The moderately pitched roof is covered with wooden shingles. The eaves are exposed. A smaller gable roof covers the wooden porch at the front entrance on the east façade; the south side of the porch roof lies flush with the southern exposure of the main roof. On each façade is a single aluminum frame, 5'x2' sliding window. These are likely replacements. Plywood shutters, hinged at the top, covered the windows at the time of the visit. The front door is a modern hollow core door, an obvious replacement. The screen door, which appears to be original, has three lower panels below a screened top half. The two pressure treated porch posts measure 3 ½" square. A poured concrete foundation supports the structure. The interior could not be accessed during the visit.

Records for the date of construction are conflicting. A 1978 district inventory states the house was constructed in 1935 by the CCC. But these same records have numerous errors on dates of other buildings that have different dates verified by primary documents. Tucker (1940) states a "lumber tent frame was built near the Clearwater tower for use of the Lookout" in 1939. This suggests the house was built sometime after that. The lookout is located within a mile of what was then the Clearwater Ranger Station. The lookout staff may have been housed at those facilities before the tent frame was built.

Integrity: Without a historic photo, the original condition cannot be determined with certainty. However, the aluminum frame windows with plywood shutters, the front hollow core door and possibly the two porch posts appear to be modern. The house was most likely built during the historic period of significance and despite some modifications to the design and materials it still retains its integrity of location, setting, workmanship, feeling, and association with the primary context.

NRHP Eligibility: **Eligible under Criterion A.**



Figure 26. Clearwater House, south and east (front) facades, 20 July 2001. Photo by author.

CLEARWATER

Heliport Office – Building # unknown
NRHP Eligibility: **Not eligible**

Date of Construction: Modern

Storage Building – Building #2609
NRHP Eligibility: **Not eligible**

Date of Construction: Modern

Outhouse – Building #65510-1
NRHP Eligibility: **Not eligible**

Date of Construction: Modern

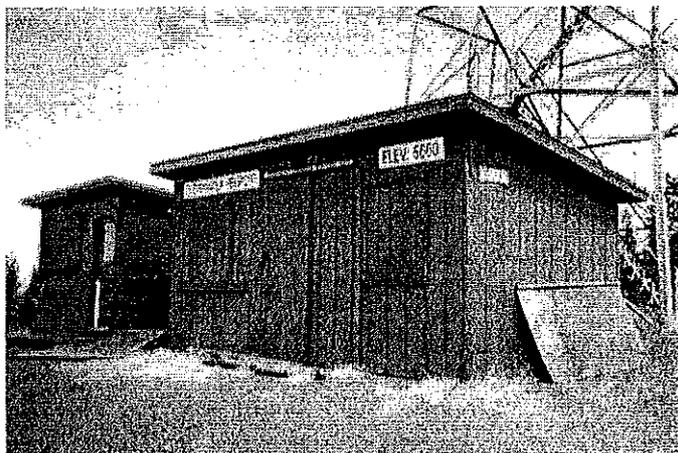


Figure 27 (above). Clearwater Heliport Office (left) and Storage Building, looking northwest, 20 July 2001. Photo by author.

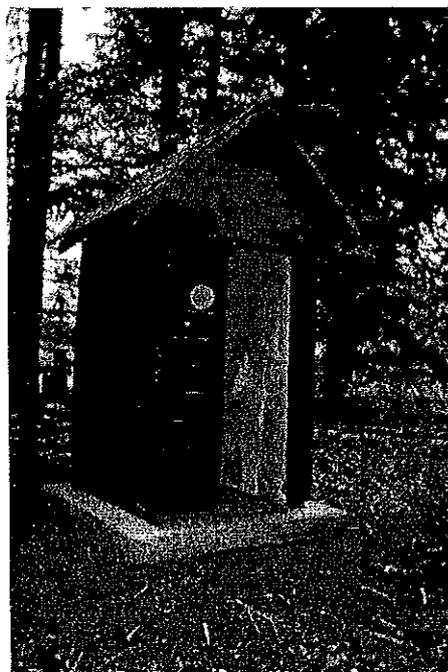


Figure 28 (right). Clearwater Outhouse, south and east facades, 20 July 2001. Photo by author.

OREGON BUTTE
Columbia County, WA
T. 7N, R. 41E, Sec. 4

Lookout – Building #4213

Date of Construction: 1931

Description: A gable roofed L-4 (1931 Revision) ground lookout.

Integrity: Good. It is the only surviving gable roofed L-4 lookout on the Umatilla National Forest and only one east of the Cascade Mountains in Washington or Oregon. It is also the oldest surviving lookout on the Umatilla NF.

NRHP Eligible: The Oregon Butte Lookout was previously determined eligible in 1994.



Figure 29. Oregon Butte Lookout, north façade, 13 September 2001. Photo by author.

Outhouse – Building # unknown

Date of Construction: Modern

NRHP Eligibility: Not eligible

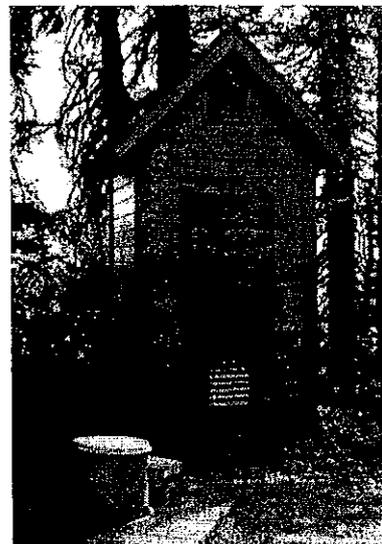


Figure 30. Oregon Butte Outhouse, front (north) façade, 13 September 2001. Photo by author.

SADDLE BUTTE
Asotin County, WA
T. 7N, R. 43E, Sec. 19

Outhouse – Building # None

Construction Date: 1932?

Description: An ~ 5 foot square building clad in board and batten siding of various widths. The moderately pitched, side gable roof is also covered with various sizes of boards in a “board and batten” pattern. The ridge cap is composed of two ~3 inch wide boards. The narrow door, also of vertical boards, faces north-northeast. In each gable, the vent openings are made from cutting off the two center siding boards and three battens, while leaving the two outer boards to extend up to the gable roof. The openings are covered with wire mesh. Inside, the walls are unfinished and the flooring is wooden boards. The toilet bench has wide flat boards on top, but the front side of the bench is completely covered with what appear to be yellow metal “center stock driveway signs” (some are quite rusted). A tree has fallen at an angle on the eastern side of the outhouse. This may be the cause of the building leaning to the east.

The outhouse is the only remaining structure at this lookout station. The outhouse had been abandoned and was only recently rediscovered. It is located 140 feet northeast of where the tower was located (NE anchor is used as datum). The path from the tower to the outhouse is still outlined with rocks.

Integrity: Good. No alterations are apparent.

NRHP Eligibility: **Not eligible due to loss of integrity of the setting.**



Figure 31. Saddle Butte Outhouse, north-northeast (front) façade, 8 October 2002. Photo by Jill Bassett.

TABLE ROCK
Columbia County, WA
T. 6N, R. 39E, Sec. 3

Lookout – Building #4225

Date of Construction: 1949-50

Description: A hipped roof L-4 (Standard 1936) cab, with a catwalk, on top of a 1-story concrete foundation. In 1989 (before it was 50 years old), major modifications were made to the lookout. The wood frame, four-light window sashes were replaced with vinyl clad, tinted glass, single-pane windows. A new stairway was constructed outside the catwalk with a gentler pitch for safety reasons.

At some later date, the shutters were removed (because they were no longer needed to shade the tinted windows) and the extended rafters that held the shutters up were trimmed to just a few inches in length. Also, T-111 siding replaced or was laid over the original siding. Inside, the walls and ceiling have been completely covered with knotty pine, tongue and groove finished boards. This lookout house looks completely modern.

Integrity: None. The modernizing of this lookout house has completely diminished its integrity.

NRHP Eligibility: **Not eligible.**

Outhouse: The outhouse is a portable outhouse and was not evaluated.

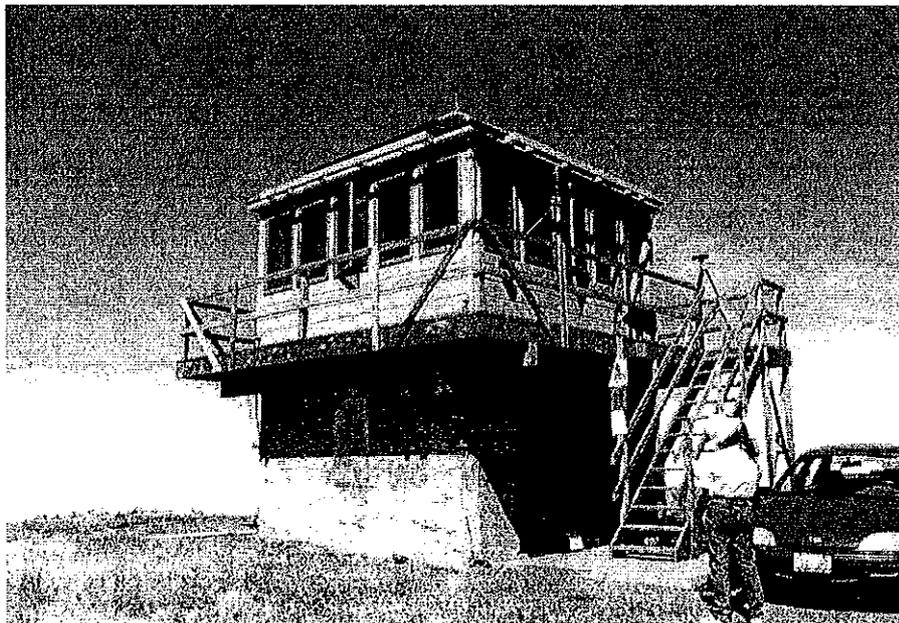


Figure 32. Table Rock Lookout, south and east facades, 30 August 2001. Photo by author.

OREGON LOOKOUTS

BONE POINT

Grant County, OR
T. 7S, R. 31 E, Sec. 6

Lookout – Building #4200

Date of Construction: 1961

Description: A 14' x 14' hip roofed, steel-clad, live-in house on top of a 40' steel tower. The lookout, which had been staffed by the Oregon Dept. of Forestry, is no longer used.

NRHP Eligibility: Not eligible.



Figure 33. Bone Point Lookout,
looking east-northeast, 5 July 2001.
Photo by author.

BONE POINT

Outhouse – Building # 14508-1

Date of Construction: Historic

Description: A shed roof structure with drop siding and wooden shingles on roof. The door is made of flat vertical boards. Guy wires are attached to the building. The outhouse is very weathered and in poor condition. The date of construction is unknown but by the style and materials is considered at least 50 years old.

Integrity: Poor. Despite the outhouse's poor physical condition, enough materials remain to determine its original condition. The integrity of the setting, however, has been impacted by the replacement of the historic tower with a modern steel-clad tower, and by the loss of the house. Without the presence of a major building from the historic period at the site, this lone outhouse does not retain enough integrity on its own.

NRHP Eligibility: Not eligible due to loss of integrity of the setting.

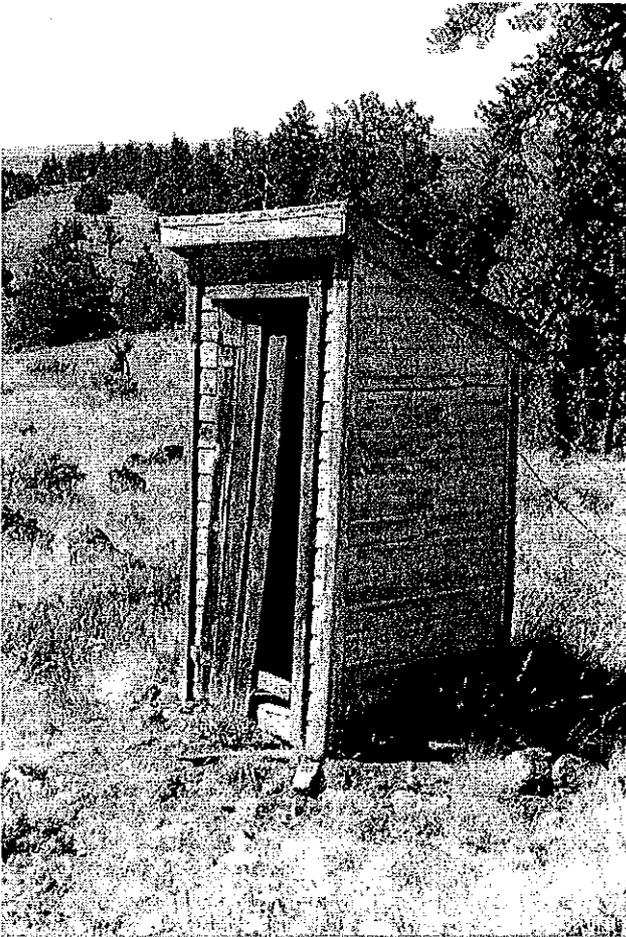


Figure 34. Bone Point Outhouse, front (south) and east facades, 5 July 2001. Photo by author.

DESOLATION BUTTE
Grant County, OR
T. 8 S, R. 34E, Sec. 30

Lookout Tower – Building #4201

Date of Construction: 1961

Description: An “R-6 Flat” style lookout cab on a 67’ treated-timber (TT) tower.

NRHP Eligibility: **Not eligible.**

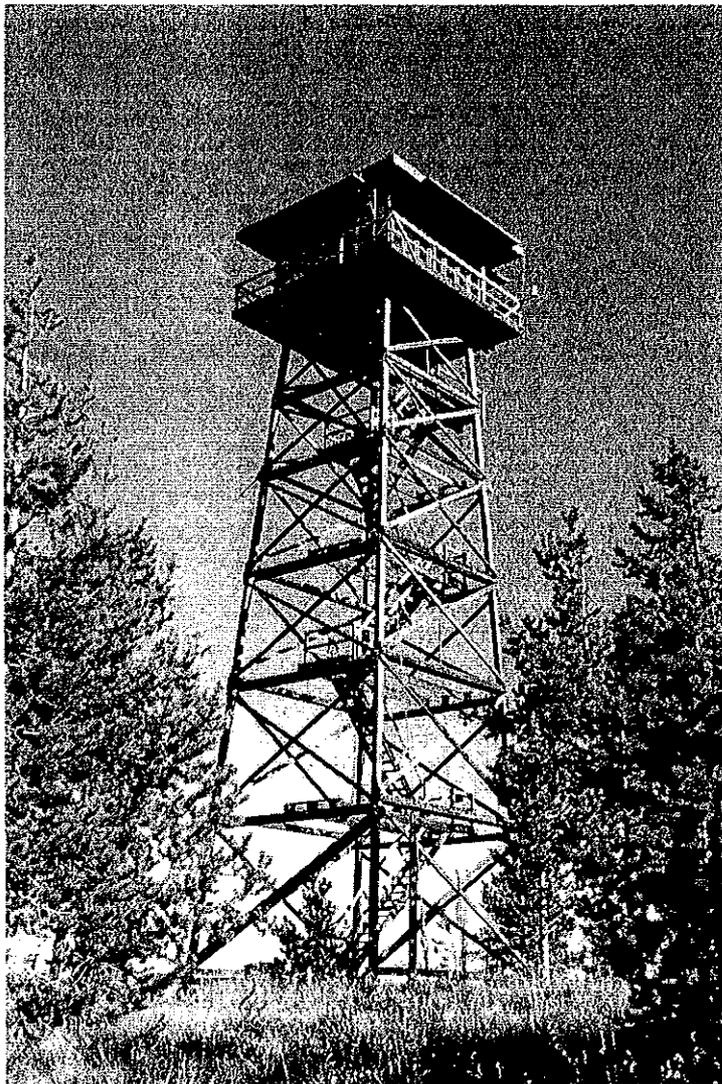


Figure 35. Desolation Butte Lookout, looking southeast, 5 August 2001. Photo by author.

DESOLATION BUTTE

Garage/Storage – Building # 1502

Date of Construction: historic, ca. 1920s-1930's

Description: The garage/storage building is 18' 3" x 14' 4". Wooden shakes cover the gabled roof. The siding is split cedar, 16 1/2" exposed to the weather. This cedar siding, of which some is missing, covers the original single V rustic siding. In the gabled ends, the siding is flat vertical boards with dog-eared clipped corners. On the west façade, are two symmetrically placed, six-light fixed windows measuring 40" high x 22 1/2" wide (most glass is missing). Both the garage door and the exterior door to the storage room are covered with single V rustic siding laid vertically. The foundation is poured concrete. On the south side the concrete was poured on top of a few layers of flat rocks. Inside the storage room is divided from the garage area by a single wall running east-west with the gable. A door near the front (east side) of the garage is again covered with vertically-laid single V rustic siding. The garage interior walls are unfinished with 2"x4" studs. The storage room walls, floor and ceiling are covered with a mix of finishes. The ceiling and west and east walls are covered with 3 1/4" wide double grooved boards; the north wall is covered with 7" wide boards; and the south wall is covered with single 3 1/4" boards. The floor is finished with 4" tongue and groove boards. A small bench extends across the west wall of the storage room.



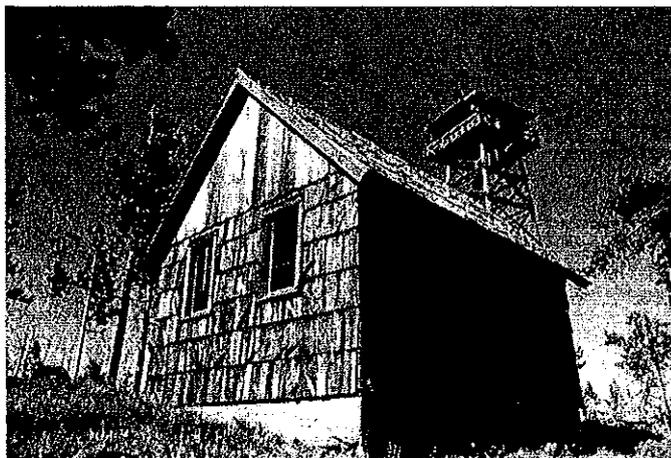
Figure 36 (above). Desolation Butte Garage, front (east) and north facades, 5 August 2001. Photo by author.

The building is in poor condition and evidently has not been used for quite some time.

Integrity: Good. Despite its poor condition, enough materials remain to determine its original condition. The integrity of the setting has been compromised somewhat by the modern lookout tower and the loss of the house.

NRHP Eligibility: Eligible under Criterion A.

Figure 37. Desolation Butte Garage, west and south facades, 5 August 2001. Photo by author.



DESOLATION BUTTE

Radio Building – Building #2816

Date of Construction: Modern

NRHP Eligibility: **Not eligible.**

Outhouse – Building #14511-1

Date of Construction: Modern

Description: A modern 4'4" x 5'2" structure. Exterior walls and door are clad with vertical board and batten siding. The roof is covered with composition roofing. The structure is set on a poured concrete slab.

NRHP Eligibility: **Not eligible.**

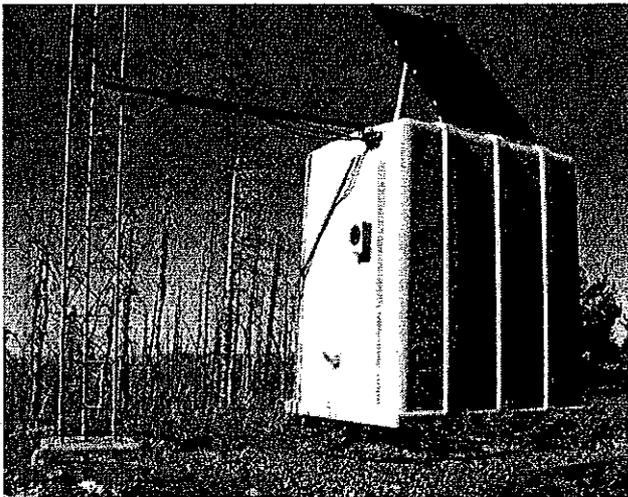


Figure 38. Desolation Butte Radio Building, looking northwest, 5 August 2001. Photo by author.

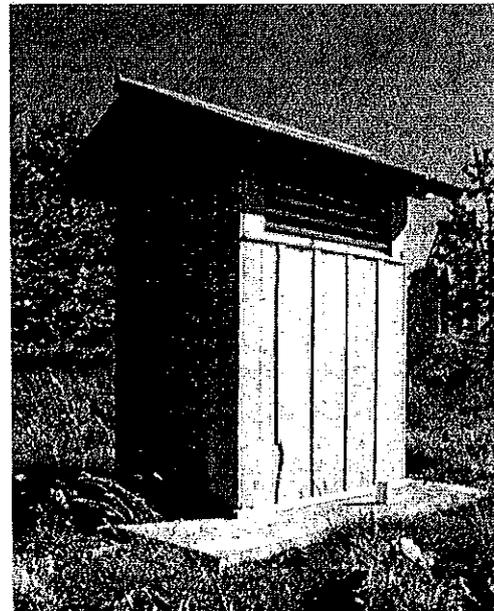


Figure 39. Desolation Butte Outhouse, front (northeast) and northwest facades, 5 August 2001. Photo by author.

GOODMAN RIDGE
Umatilla County
T. 1N, R. 37E, Sec. 5

Lookout Tower– Building # 4208

Date of Construction: 1936-37

Description: Different sources describe the cab as either 6'x6' (CR report 1988), or as an L-6 which measures 8'x8' (Kressek). The author was unable to measure the cab as the bottom section of stairs has been removed for safety reason. But from a visual inspection from the ground, the cab appears to be a wooden R-6 Standard 7' x 7' Lookout House (L-7) with a catwalk. The wooden treated timber tower is 67 feet high with internal stairs. The lookout was built by the CCC.

The lookout tower is in very poor condition and is no longer used.

Integrity: Good. Despite the poor condition, enough of the original design and materials are present. If funding was available, although unlikely, it could be restored to its original condition. The Goodman Ridge Lookout Tower falls within the historic period of significance and retains its integrity of location, design, setting, materials, workmanship, feeling, and association with both historic contexts.

NRHP Eligibility: **Eligible under Criteria A and C.**



Figure 40 (left). Goodman Ridge Lookout Tower, looking southwest, 1 August 2001. Photo by author.

Figure 41 (below). Close-up of Goodman Ridge Lookout cab, south and east facades, 1 August 2001. Photo by author.



GOODMAN RIDGE

Ground House – Building # 1022

Date of Construction: 1936-37

Description: The house is a single-story structure on a concrete foundation. The moderately pitched, cross-gabled roof has open overhanging eaves and is covered with wooden shingles. On the roof on the main part of the house which has the roof line extending east to west, the northern slope of the roof extends lower to the ground than the southern side. Inside these areas serve as closets and storage. The metal front door on the east side is flanked by two six-light windows that may have been casement windows. Two six-light windows are on the gabled-end on the north side [kitchen]. A pair of similar windows is also on the west façade. On the south façade is a pair of nine-light windows. The exterior of the building is clad with T-111 siding that does not appear to be original. A couple small holes in the siding reveals what may be shiplap sheathing or siding underneath. This house may have been built by the CCC, though there is no record of it. Only the lookout and a former garage are mentioned as CCC-built.

This abandoned building is in very poor condition from exposure to severe winds, vandalism and neglect. Most of the glass panes, muntins and trim are gone; the roof and siding have holes in them and need to be repaired or replaced. Inside, the rooms have been invaded by rodents and the walls and ceilings have been vandalized.

Integrity: Poor. The T-111 siding is most likely from the 1960s or '70s and can not be original. The shiplap underneath may be the original siding, but is most likely just sheathing, meaning the original siding was removed. The type of original siding is unknown. The metal front door is also probably a replacement. If these two major components were restored, the integrity might also be restored.

NRHP Eligibility: **Not eligible in its current condition.**

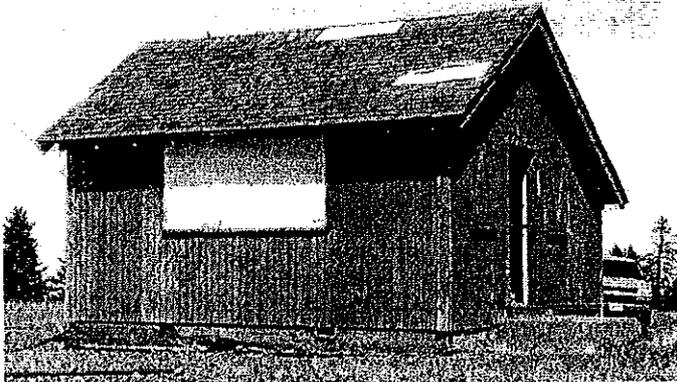


Figure 42 (left). Goodman Ridge House, south and east (front) facades, 1 August 2001. Photo by author.



Figure 43 (right). Goodman Ridge House Door, 1 August 2001. Photo by author.

HIGH RIDGE
Union County
T. 2N, R. 38E, Sec. 6

Lookout Tower – Building #4209

Construction Date: 1959

Description: An “R-6 Flat” style lookout cab on a 67’ treated-timber (TT) tower.

NRHP Eligibility: **Not eligible.**

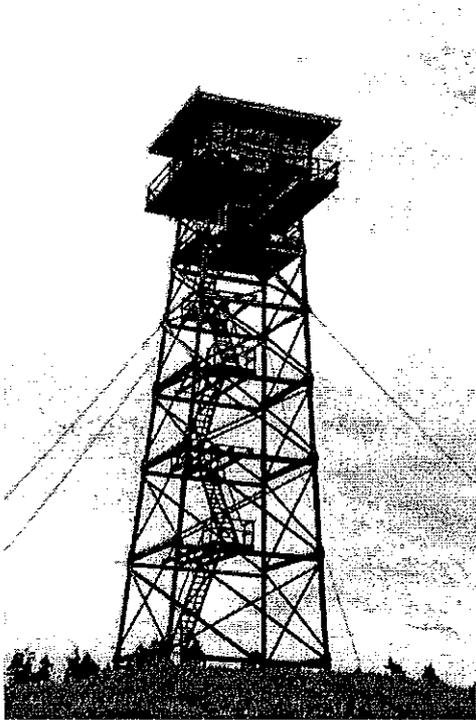


Figure 44. High Ridge Lookout Tower, view north, 1 August 2001. Photo by author.



Figure 45. High Ridge Lookout, interior south wall, 1 August 2001. Photo by author.

HIGH RIDGE

Outhouse – Building #14615-1

Construction Date: Modern

NRHP Eligibility: Not eligible.



Figure 46. High Ridge Outhouse, front (south) and east facades, 1 August 2001. Photo by author.



Figure 47. High Ridge Outhouse, north and west facades, 1 August 2001. Photo by author.

HOODOO RIDGE
Wallowa County, OR
T. 5N, R. 42E, Sec. 6

The Hoodoo Ridge Lookout Site is exceptional in that all the major structures built in 1933 (by the CCC) are present. The outhouse may be a later replacement, but may still be from the historic period. No other lookout complex on the Umatilla NF retains so much integrity.

Lookout Tower – Building #4221

Construction Date: 1933

Description: Aermotor ~101' steel tower, Model MC-39 or -40 (diagonal crisscrossing staircase with wooden treads on stair steps); with 7x7' steel cab. Built by the CCC.

Integrity: Very good. No alterations to the tower or cab were noted. The Hoodoo Lookout Tower falls within the historic period of significance and retains its integrity of location, design, setting, materials, workmanship, feeling, and association with both contexts.

NRHP Eligibility: **Eligible under Criteria A and C.**

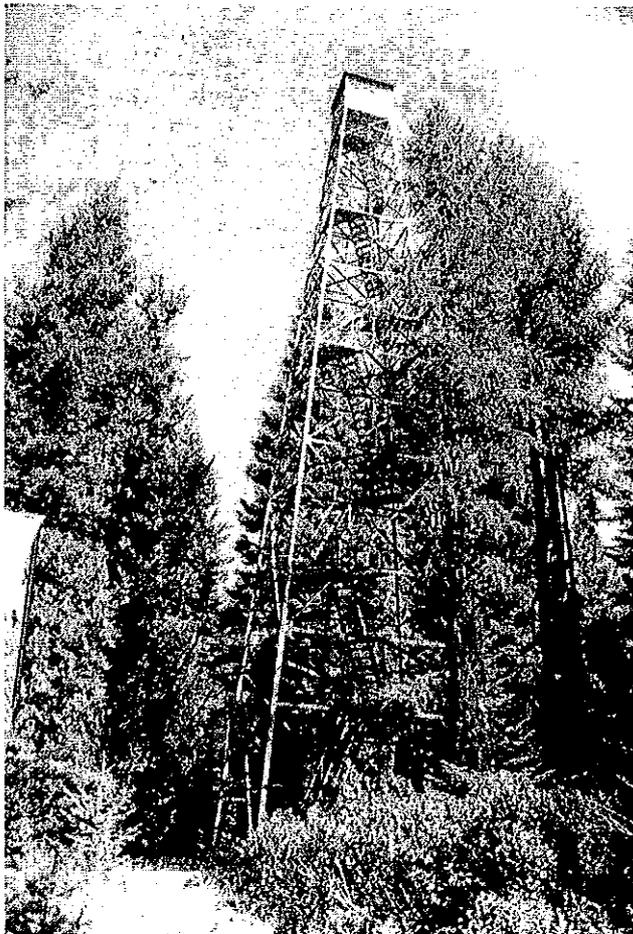


Figure 48. Hoodoo Ridge Lookout Tower, looking north, 8 October 2001. Photo by author.

HOODOO RIDGE

Cabin – Building #1043

Construction Date: 1933

Description: A two-room, 20'5" x 14'5" gable roofed building with a small covered front porch on the north side and a small stoop at the back door on the east side. The wooden siding is 6" wide horizontal single "V" rustic siding. The wood shingle roof has been covered with corrugated metal. A small brick chimney is centered on the south slope near the ridge. The front porch roof is supported by two square posts, and has simple balustrades on each side. A single window is located on each of the front (north) and east facades. Two windows are located on the west facade. The doors and windows are boarded up so the interior was not visible during site visits. This cabin was restored in September 2001 by Passport in Time volunteers, so that it could be placed on the Cabin Rental Program.

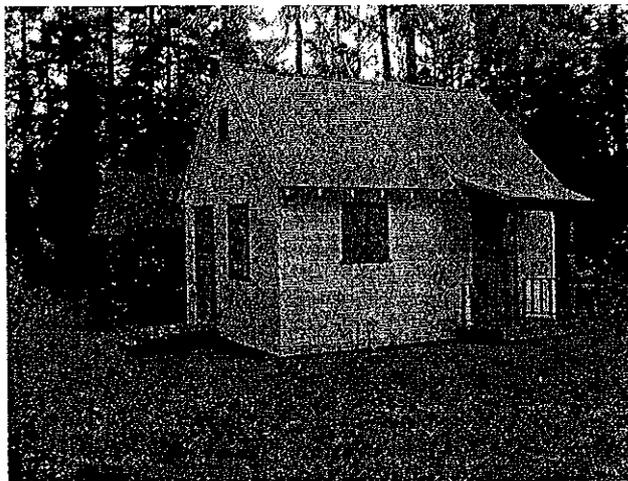
Integrity: Good. Other than the metal roof, no other major alterations were noted. The Hoodoo Ridge Cabin falls within the historic period of significance and retains its integrity of location, design, setting, materials, workmanship, feeling, and association with both contexts.

NRHP Eligibility: **Eligible under Criteria A and C.**



Figure 49. Hoodoo Ridge Cabin, east and north (front) facades, 8 October 2000. Photo by author.

Figure 50. Hoodoo Ridge Cabin after Passport in Time restoration project, September 2001. Photo courtesy of Jane Stuessy, Umatilla NF Facilities Engineer.



HOODOO RIDGE

Garage – Building #1533

Construction Date: 1933

Description: The gable roofed garage is 18'x16'4" with a single door opening measuring 9'7" wide on the east side. Wooden shingles cover the roof. The siding is 6" wide, horizontal single "V" rustic siding. The two sliding doors are constructed of vertical 3 ½" single "V" rustic siding. The exterior of each door is trimmed with ~6" wide flat boards and "X" cross-braced with similar boards. One small window is centered on the back (west) wall. During the summer of 2002, the garage underwent restoration as a second phase of a Passport in Time project.

Integrity: Good. All materials seem to be either original or replaced in-kind. It still retains enough integrity of location, design, setting, materials, workmanship, feeling, and association with both contexts.

NRHP Eligibility: Eligible under Criteria A and C.

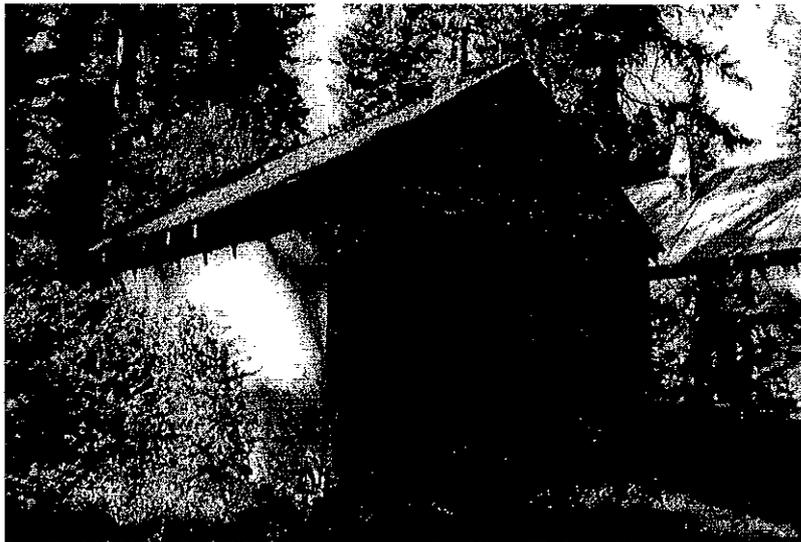


Figure 51. Hoodoo Ridge Garage, south and east (front) facades, 8 October 2000. Photo by author.

HOODOO RIDGE

Outhouse - Building #14606-1

Construction Date: unknown, possibly historic

Description: The slightly rectangular (5'3 ½"x4'4") gable roofed structure has a shingle roof (4 ½" exposed). The exterior walls are covered with 1 foot high split cedar that extends halfway up into the gable. The top half of the gable ends are covered with mesh for ventilation. Boards of ~4"x 5/8" cover the corners and frame the doorway. The siding covers 5" wide flat horizontal boards which can be seen from inside as the unfinished walls expose the board and the studs. The floor is made from 3 ¼" tongue and groove boards. The structure is supported by a concrete foundation.

The age of the structure is unknown but the split cedar siding (which may be historic) and new foundation makes the outhouse appear to be in better condition than the house or garage, and therefore younger in age. Whether it is over 50 years old cannot be determined.

Integrity: Very good. All materials are present. The split cedar siding may be historic which would not compromise the building's integrity. The outhouse may have been constructed by the CCC with the other structures which, if this is confirmed, would make the building associated with both contexts.

NRHP Eligible: Potentially eligible under Criterion A and C.



Figure 52. Hoodoo Ridge Outhouse, east (front) and north facades, 8 October 2000. Photo by author.

LOOKOUT MOUNTAIN
Union County
T. 4N, R. 40E, Sec. 3

Lookout Tower –Building #4222

Date of Construction: 1948-49

Description: Standard 1936 L-4 cab on top of 83-foot CT-4 wooden tower. As mentioned in the Lookout Style section under “Standard 1936,” this lookout house has five plywood shutters on each façade (one for each window sash). The shutters are strengthened with ~ 1” x 5” framing and “X” cross-bracing. This differs from the original 1936 design, but a 1939 document (of unknown source, found in a FS file at the NA), suggests variations to the original design, especially by 1949, could have been made. The original design of the shutters is not known, and they have likely been replaced at least once.

Structural deterioration, such as excessive deflection of the floor beams, has made the lookout unsafe to be staffed. Repairs are pending until funding is available.

Integrity: Very good. Other than the possible shutter replacements, no other major modifications were noted. The Lookout Mountain Lookout falls within the historic period of significance and retains its integrity of location, design, setting, materials, workmanship, feeling, and association with the primary context.

NRHP Eligibility: **Eligible under Criteria A and C.**

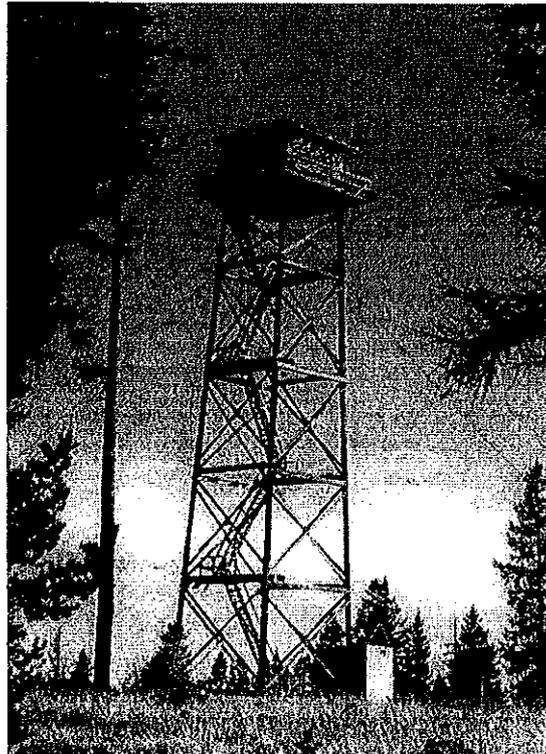


Figure 53. Lookout Mountain Lookout Tower, looking southeast, 8 October 2000. Photo by author.

LOOKOUT MOUNTAIN

Outhouse - Building #14613-1

Construction Date: Modern, ca. 1980's

NRHP Eligibility: Not eligible.

Radio Building – Building #2820

Construction Date: Modern

NRHP Eligibility: Not eligible.



Figure 54. Lookout Mountain Outhouse. Photo courtesy Jane Stuessy.

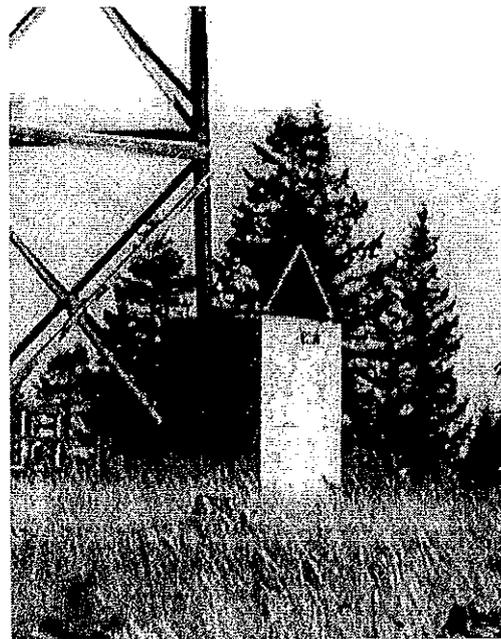


Figure 55. Lookout Mountain Radio Building, 8 October 2000. Photo by author.

MADISON BUTTE
Morrow County
T. 5S, R. 27E, Sec. 29

Lookout Tower – Building # 4207

Construction Date: 1957

Description: Flat-roofed cab, 13'4" square, clad in metal with steel catwalk on 37' steel tower.

NRHP Eligibility: **Not eligible.**

Battery Building – Building # 2822

Construction Date: Modern

NRHP Eligibility: **Not eligible.**



Figure 56. Madison Butte Lookout Tower and Radio Building, looking NNW, 22 July 2001. Photo by author.

MADISON BUTTE

Outhouse – Building #14207-1

Construction Date: Modern

NRHP Eligibility: Not eligible.

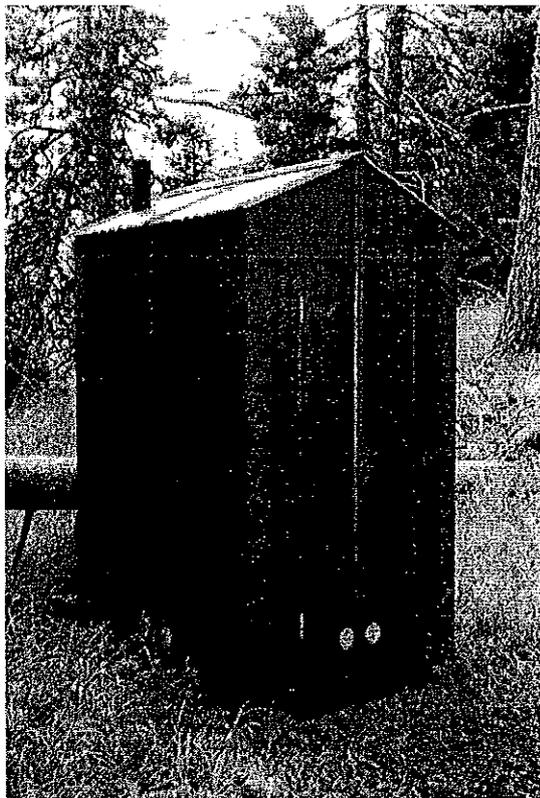


Figure 57. Madison Butte Outhouse, looking southwest, 22 July 2001. Photo by author.

TAMARACK MOUNTAIN
Grant County
T. 8S, R. 26E, Sec. 18

Lookout Tower – Building # 4205

Construction Date: ca. 1933-34

Description: Aermotor approx. 100' steel tower with 7'x7' cab, possibly an LX-24 because it originally had an outside ladder that was replaced ca. 1948 with an inside wooden stairway. This structure was probably built by the CCC.

Integrity: Very good. No alterations to the tower or cab were noted except that some type of shutters may have been hinged to the outside just above the windows (the strap hinges are still present). The Tamarack Mountain Lookout Tower falls within the historic period of significance and retains its integrity of location, design, setting, materials, workmanship, feeling, and association with both contexts.

NRHP Eligibility: **Eligible under Criteria A and C.**

Radio Building – Bldg. Owned by OR Dept. of Transportation Construction Date: Modern

NRHP Eligibility: **Not eligible.**

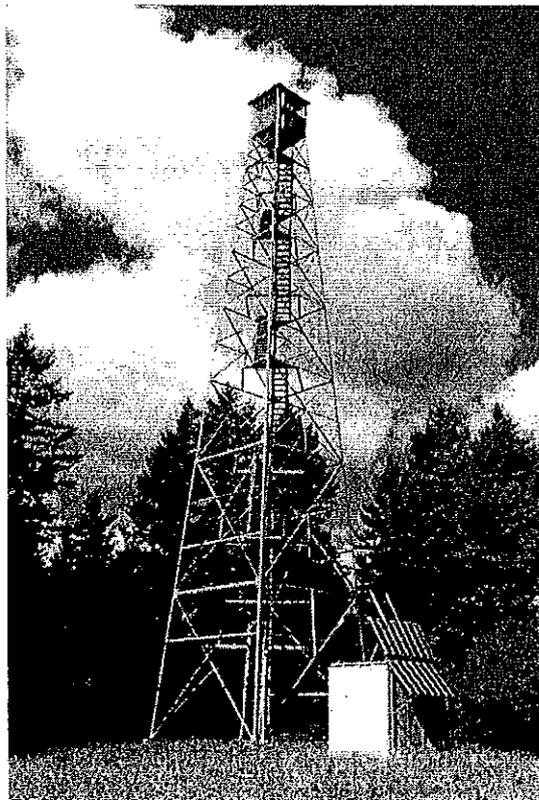


Figure 58. Tamarack Mountain Lookout Tower and Radio Building, looking northeast, 22 July 2001. Photo by author.

TAMARACK MOUNTAIN

Cabin (former garage) - Building # 1084

Construction Date: 1933-34

Description: This ~18'x24' gable-roofed structure has 5" wide single "V" rustic siding. Formerly the garage for the site, it was converted to a cabin sometime after the original cabin burned down in 1966. Modifications that are evident include, on the front façade (east), the removal of the garage door that was to the left (south) side, and replacement with a window, door (although the door may have been moved from another location) and front offset porch. The windows on the south and north sides appear to be modifications. The window on the west (back) side may be original. The small porch and door on the north side also appears to be a later addition. The interior of the cabin has also been altered because of its new function. This building was built by the CCC.

Integrity: Poor. The modification from a garage to a cabin in the 1960s has significantly affected the integrity of this structure.

NRHP: Not eligible.

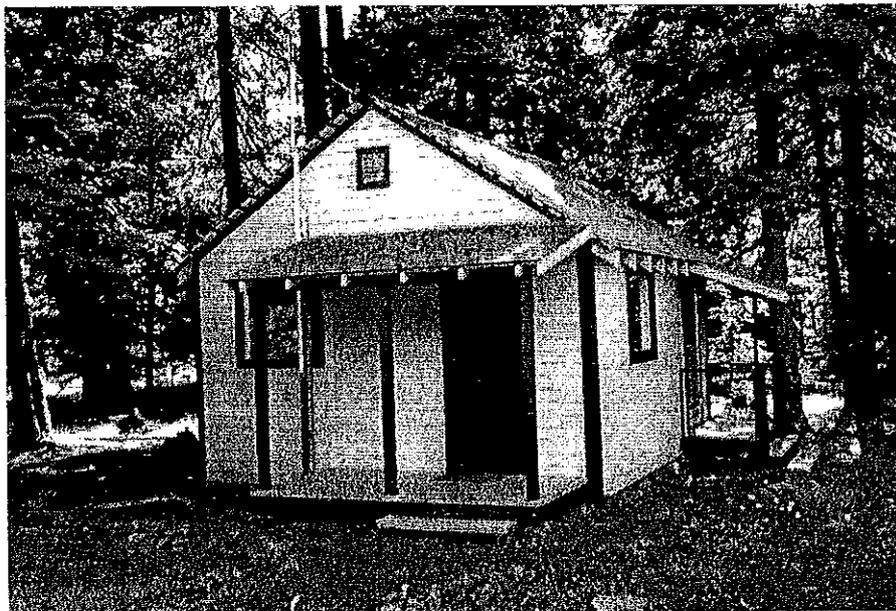


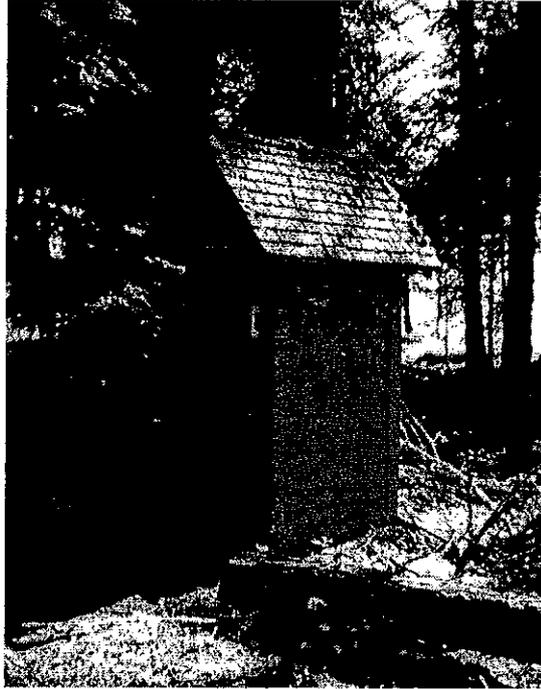
Figure 59. Tamarack Mountain Cabin (former garage), front (east) and north facades, 22 July 2001. Photo by author.

TAMARACK MOUNTAIN

Outhouse – Building #14208-1

Construction Date: Modern

NRHP Eligibility: Not eligible.



**Figure 60. Tamarack Mountain
Outhouse, east (front) and north
facades, 22 July 2001. Photo by author.**

TOWER MOUNTAIN
Umatilla County
T. 6S, R. 34E, Sec. 13

Lookout Tower – Building #4218

Construction Date: ca. 1932-33

Description: Aermotor ~88' steel tower, Model MC-39 or -40 (diagonal crisscrossing staircase with wooden treads on stair steps); with 7x7' steel cab. Possibly built by the CCC.

Integrity: Very good. No alterations to the tower or cab were noted. The Tower Mountain Lookout Tower falls within the historic period of significance and retains its integrity of location, design, setting, materials, workmanship, feeling, and association with the primary context, and if evidence is found that the CCC constructed the tower, then it would also be associated with the secondary context.

NRHP Eligibility: **Eligible under Criteria A and C.**

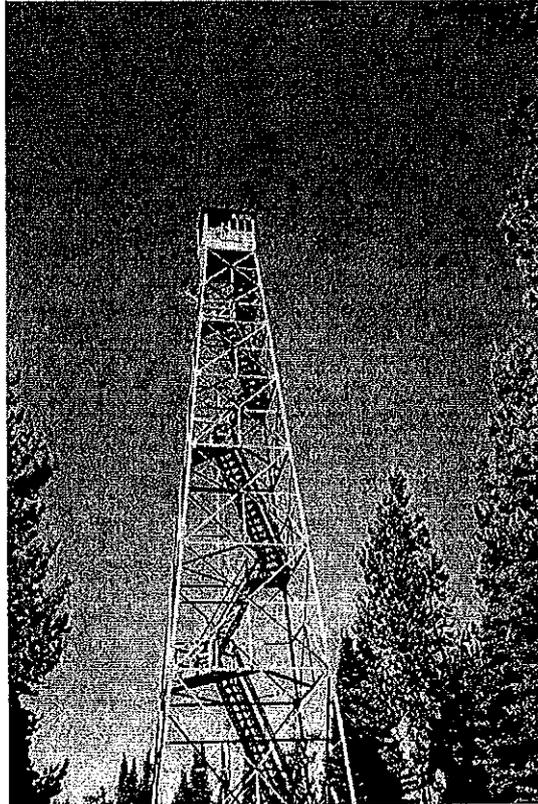


Figure 61. Tower Mountain Lookout Tower, looking north, 5 July 2001. Photo courtesy of Jane Stuessy.

**TOWER MOUNTAIN
Cabin – Building #1034**

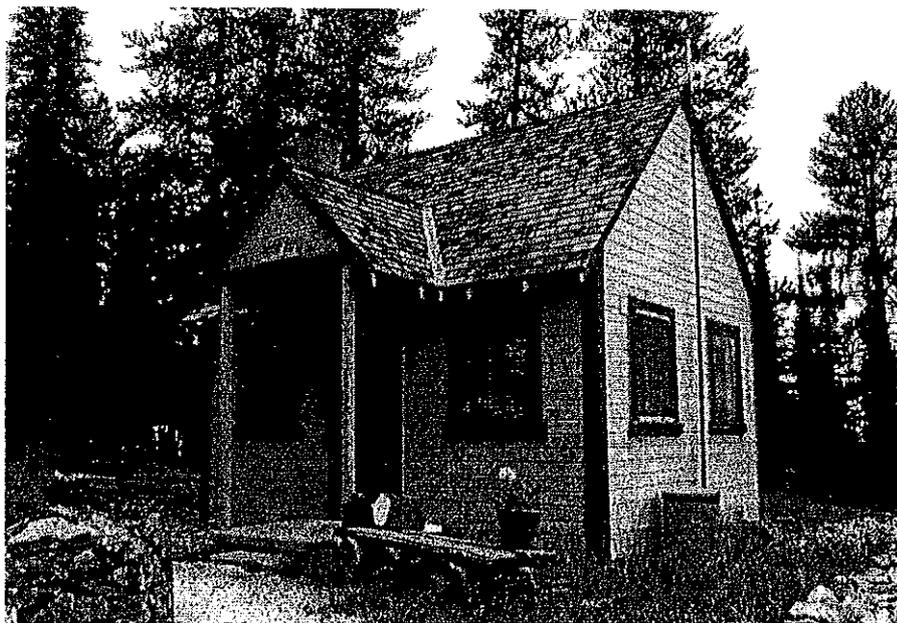
Construction Date: ca. 1933-42

Description: This wooden structure with gable roof measures 18' x 14'9" with a small cross-gabled roof porch centered on the front façade (facing SSE). The exterior walls are clad with 5" single "V" rustic siding. The building sits on a cement foundation. The roof is covered with wooden shingles and a brick chimney is located near the ridge on the west end of the building. Six nine-light windows of the same size are found on the building (a seventh on the back side has been covered over by a small utility addition). On the front façade, two awning windows (hinged at the bottom) flank the porch. Another awning window is located on the west wall. The three remaining windows, two on the east and one on the north façade, are the same dimensions but have casement window sashes. On the west side, an external, attached storage room with a shed roof was added sometime in the 1960s. Behind the storage room is a log pole tank stand that holds two water tanks.

This cabin was reportedly built by the CCC at the Lucky Strike Lookout site. It was moved to the Tower Mountain Lookout site in 1949, a couple years after the previous Tower Mountain cabin was burned down (the lookout staff stayed in a tent in the intervening years).

Integrity: Very good. Aside from the two small additions on the building on the west and north sides, the house appears to retain its integrity of design, setting, materials, workmanship, feeling, and association with both historic contexts. Because the house was moved, from a similar setting, over 50 years ago it has acquired historical integrity in its new location.

NRHP Eligibility: **Eligible under Criteria A and C.**



**Figure 62. Tower Mountain Cabin looking northwest, 5 July 2001.
Photo by author.**

TOWER MOUNTAIN

Radio Building – Building #2817

Construction Date: Modern

NRHP Eligibility: Not eligible.

Outhouse – Building #14507-1

Construction Date: 1992

NRHP Eligibility: Not eligible.

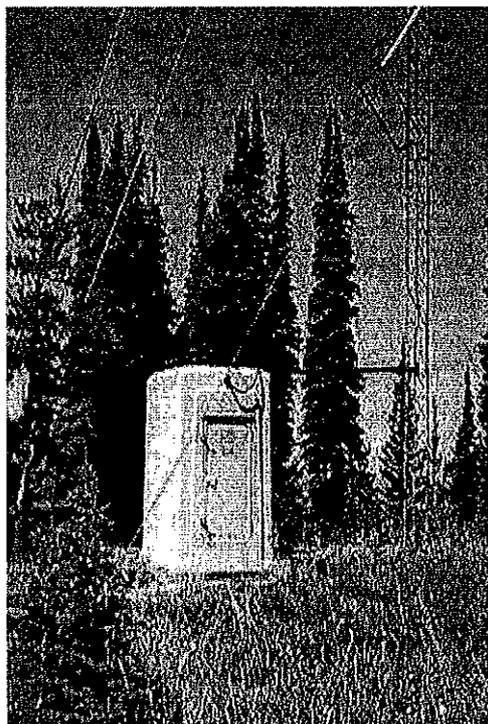


Figure 63. Tower Mountain Radio Building with tower, 5 July 2001. Photo courtesy of Jane Stuessy.

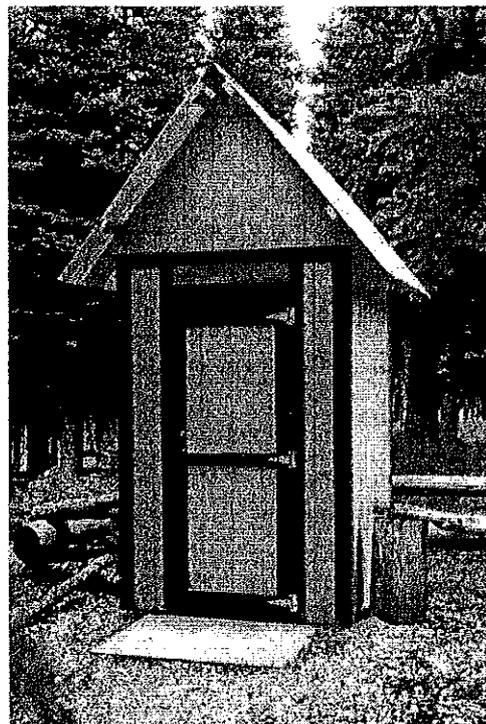


Figure 64. Tower Mountain Outhouse, front (west) façade, 5 July 2001. Photo by author.

CONCLUSIONS

The Umatilla National Forest has witnessed dramatic changes in fire detection practices throughout its history. The records of the early years are sparse, but indicate the Umatilla NF was establishing lookout stations and building lookout structures by 1914. While the highest number of stations in existence at one time is not known, the Forest had at least 53 different lookout locations over the years. Today, only 14 stations with structures remain, and a few of these are no longer in use.

This evaluation of the extant structures has concluded that 14 of the 19 structures built before 1954 are eligible for listing in the National Register of Historic Places. The Goodman Ridge House, the Tamarack Mtn. House and Table Rock Lookout have been modified too extensively and do not retain enough integrity to be eligible. The Bone Point and Saddle Butte Outhouses have lost the integrity of their settings with the loss of their historic lookouts, houses or garages so they are also not eligible. Two of the outhouses, at Big Butte and Hoodoo Ridge, are still undetermined as their date of construction is not known as of this date. They should be managed as potentially eligible. The remaining 19 structures are not eligible because they are all less than 50 years old. The determinations of eligibility are summarized in Table 2.

**Table 2
Summary of Determinations of Eligibility**

Eligible	Undetermined	Not Eligible
Big Butte Lookout (WA) Big Butte Garage	Big Butte Outhouse	
		Bone Point Lookout Bone Point Outhouse
Clearwater Lookout (WA) Clearwater House		Clearwater Heliport Office Clearwater Storage Bldg. Clearwater Outhouse
Desolation Garage		Desolation Lookout Desolation Outhouse Desolation Radio Bldg.
Goodman Ridge Lookout		Goodman Ridge House
		High Ridge Lookout High Ridge Outhouse
Hoodoo Ridge Lookout Hoodoo Ridge Cabin Hoodoo Ridge Garage	Hoodoo Ridge Outhouse	
Lookout Mtn. Lookout		Lookout Mtn. Outhouse Lookout Mtn. Radio Bldg.
		Madison Butte Lookout Madison Butte Outhouse Madison Butte Battery Building

Oregon Butte Lookout		Oregon Butte Outhouse
		Saddle Butte Outhouse
		Table Rock Lookout
Tamarack Mtn. Lookout		Tamarack Mtn. Cabin Tamarack Mtn. Outhouse Tamarack Mtn. Radio Bldg.
Tower Mtn. Lookout Tower Mtn. Cabin		Tower Mtn. Outhouse Tower Mtn. Radio Bldg.

The Umatilla National Forest is home to several unique lookout structures. Oregon Butte Lookout is the only gable roof L-4 (1931 Revision) lookout east of the Cascade Mountains in either Oregon or Washington. The Forest also has four steel Aermotor towers, at Clearwater, Hoodoo Ridge, Tamarack Mtn. and Tower Mtn., all possibly constructed by the CCC. This may be the largest number of Aermotor towers on any Forest in Region Six. Goodman Ridge Lookout may be one of the last Standard 7' x 7' Lookouts in the Region, as most were replaced by live-in L-4s and R-6 Flats. The two Standard 1936 L-4 Lookouts at Big Butte and Lookout Mountain still retain exceptional integrity. And finally, the intact complex of CCC-built tower, house and garage (and possibly outhouse) at Hoodoo Ridge is very exceptional and worthy of restoration for a cabin rental. The Umatilla National Forest should be proud of the few remaining historic lookout structures and their associated buildings that still exist on the Forest. Every effort should be made to retain the integrity of these structures as they represent the Forest Service's legacy as the primary forest fire detection and suppression agency.

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APPENDIX A

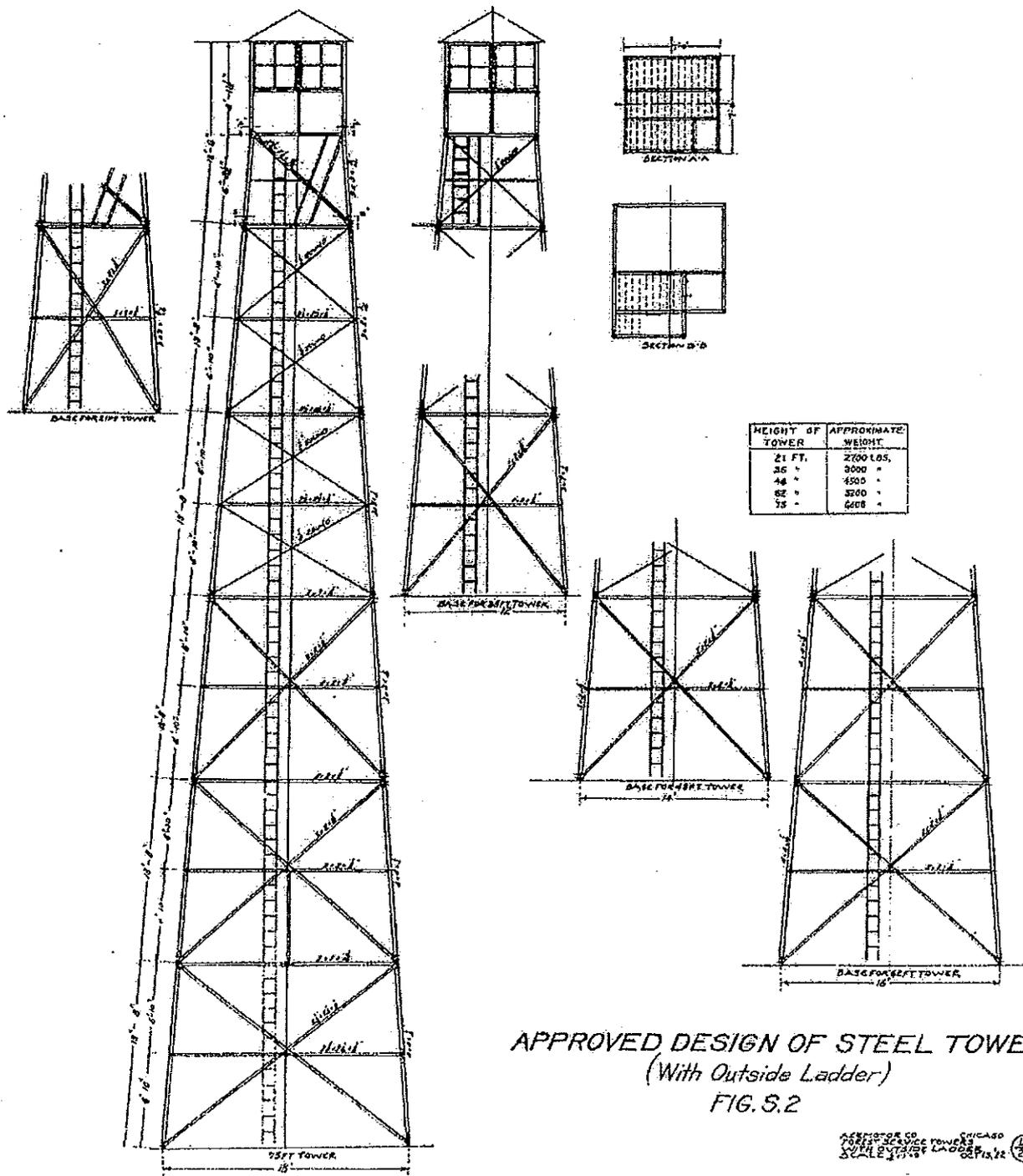
Fire Lookouts on the Umatilla: A Chronology

APPENDIX B

Lookout Plans

APPENDIX C

Historic Property Inventory Forms

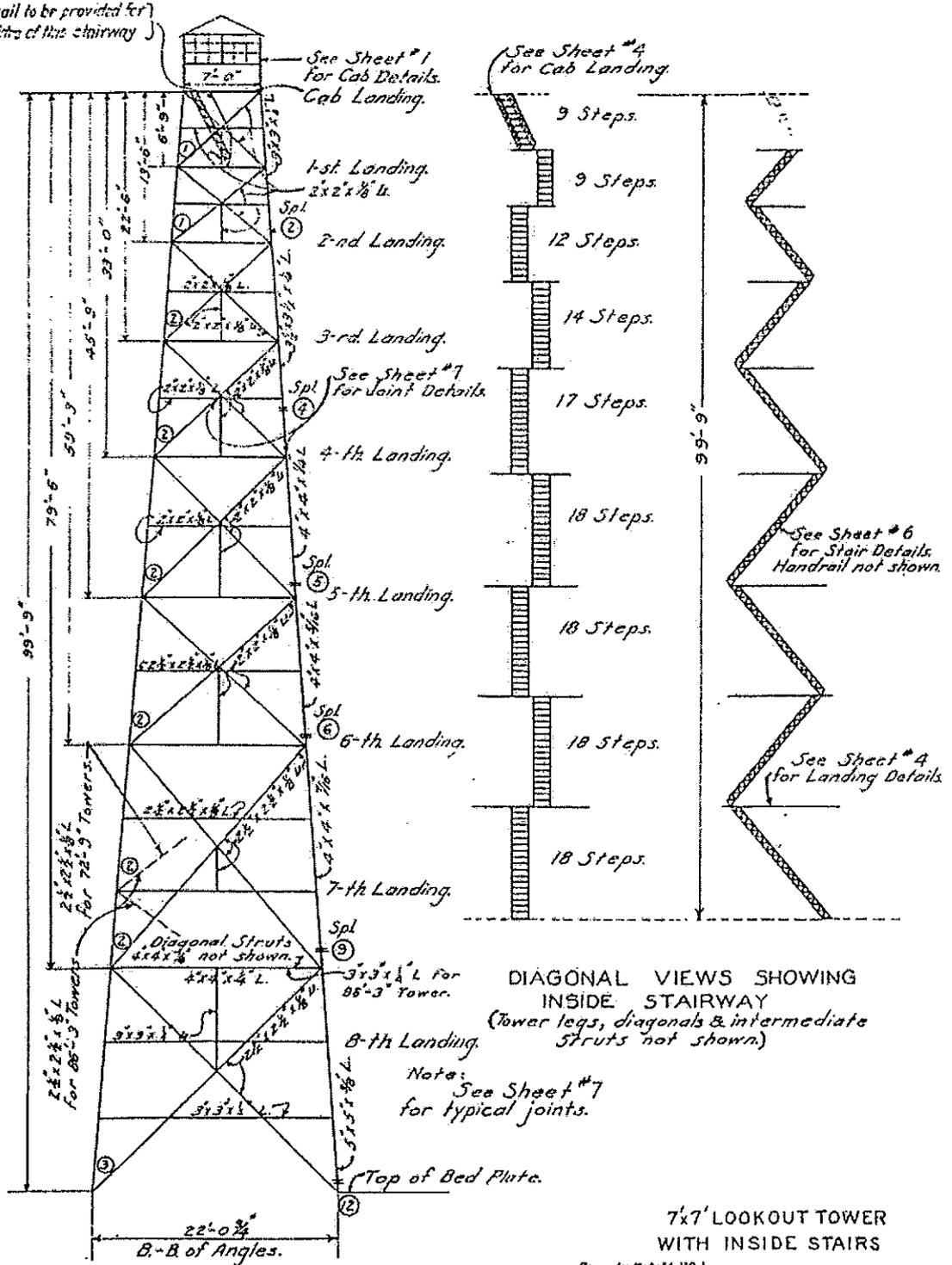


APPROVED DESIGN OF STEEL TOWER
 (With Outside Ladder)
 FIG. S.2

AER MOTOR CO. CHICAGO
 TOWER SERVICE DIVISION
 SCALE 1/4" = 1'-0"
 27

Aermotor Steel Tower Design for Model LX-24, 1922. This style may have been built at Desolation Butte in ca. 1923. Source: *Specifications and Plans for Lookout Towers*. USDA, Forest Service, 1924.

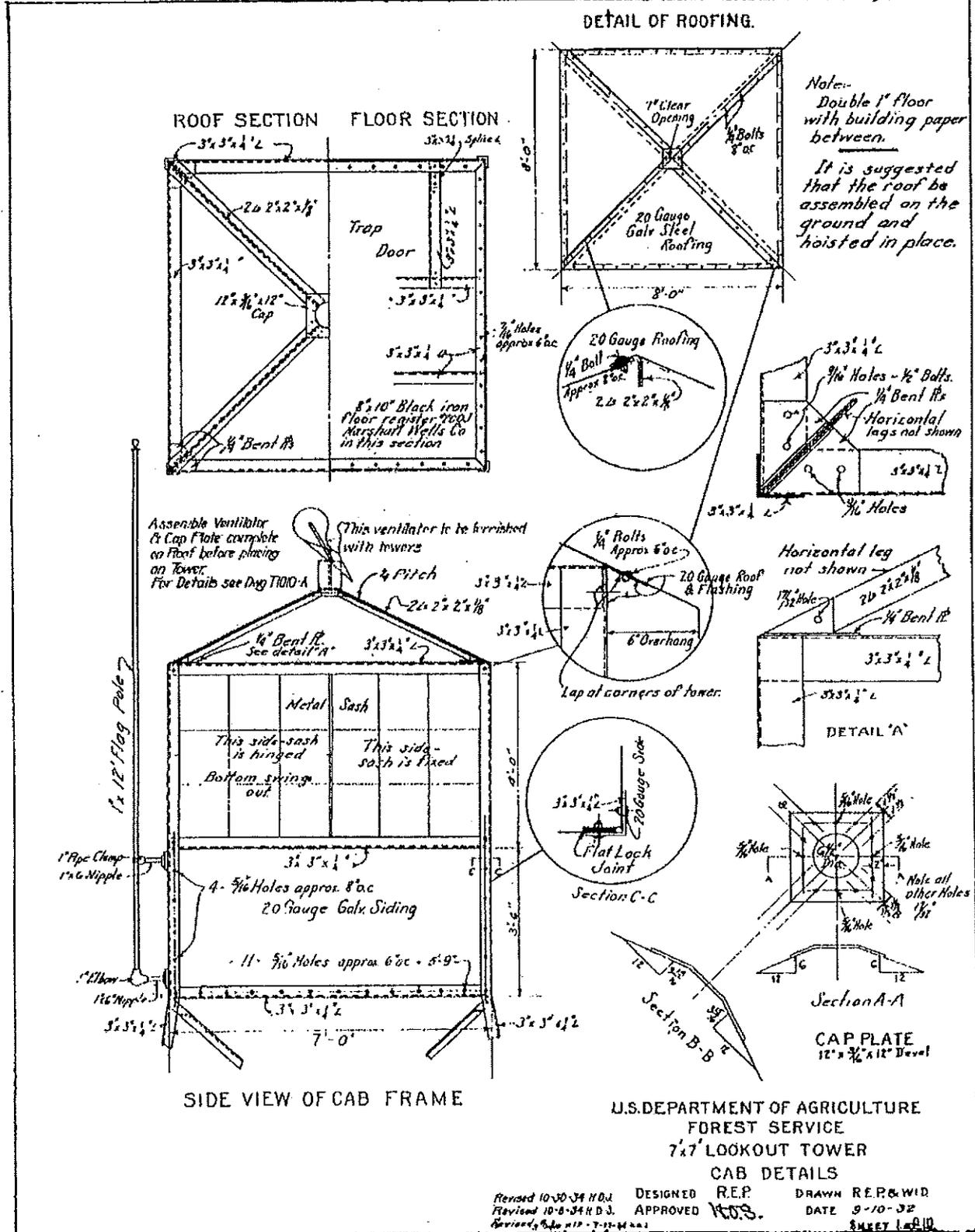
Handrail to be provided for both sides of this stairway



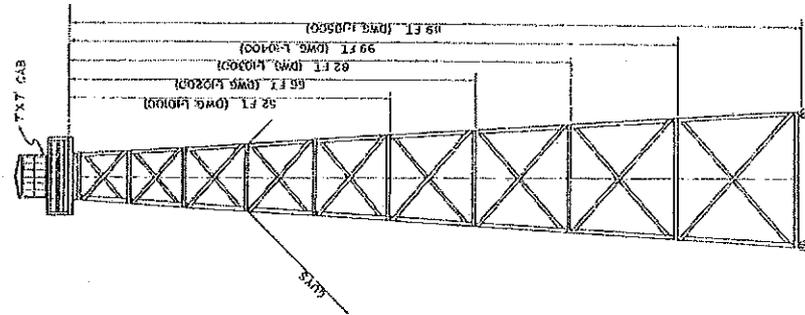
Revised - 10-8-34 H.O.J.
 by 7-17-31 J.W.S.
 H.A.S. 11/15/32
 Revised by: 5/10/38 M.L.B.

SHEET 2 of 10

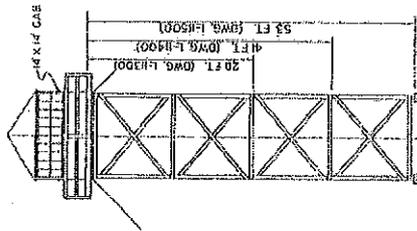
Source: Region One Handbook: Construction and Maintenance of Forest Improvements. USDA Forest Service, Revised Edition December 1935.



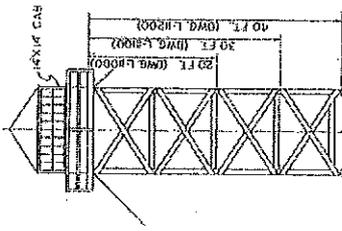
Source: Region One Handbook: Construction and Maintenance of Forest Improvements. USDA Forest Service, Revised Edition December 1935.



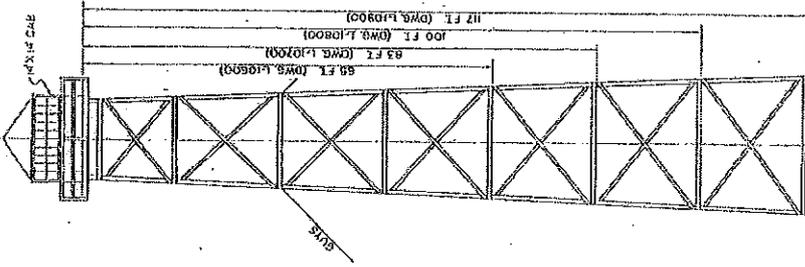
TYPE CT-1
CREOSOTED
RING CONNECTED
FOR TRUCK HAUL ONLY.



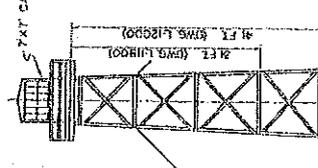
TYPE CT-2
CREOSOTED
RING CONNECTED
FOR TRUCK HAUL ONLY.



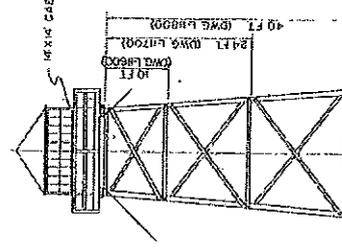
TYPE CT-3
CREOSOTED
SPIKED NESTED LEG
TO BE USED AS SUBSTITUTE
FOR TYPE CT-2 ONLY WHEN
PACK HAUL IS NECESSARY.



TYPE CT-4
CREOSOTED
RING CONNECTED
FOR TRUCK HAUL ONLY.



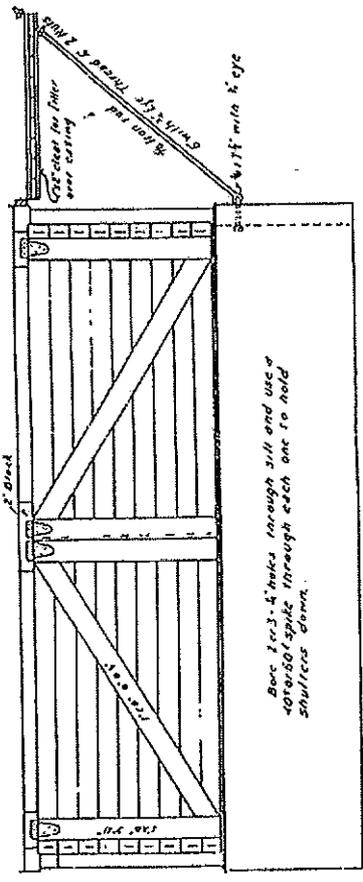
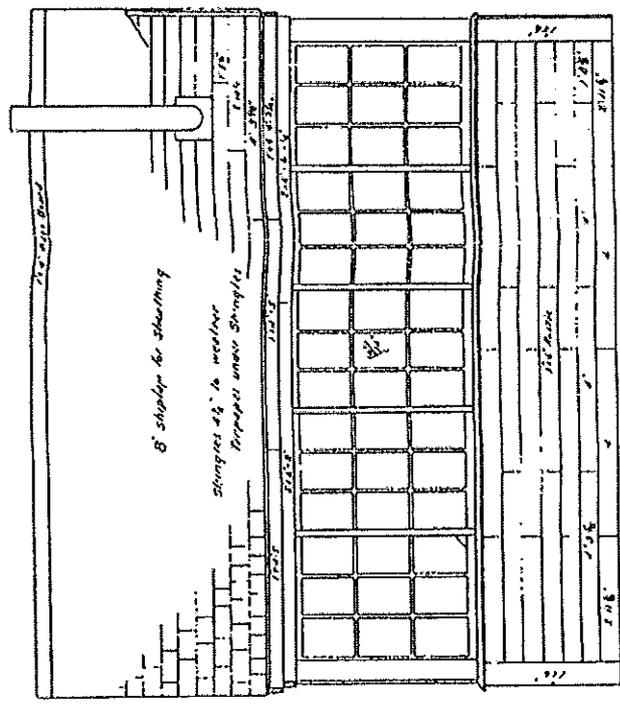
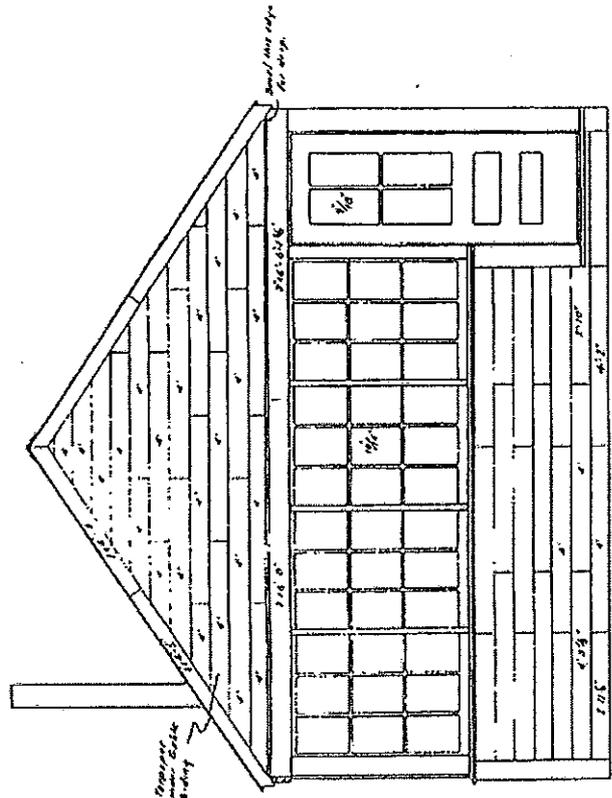
TYPE CT-5
CREOSOTED
RING CONNECTED
FOR BOTH TRUCK AND
PACK HAUL.



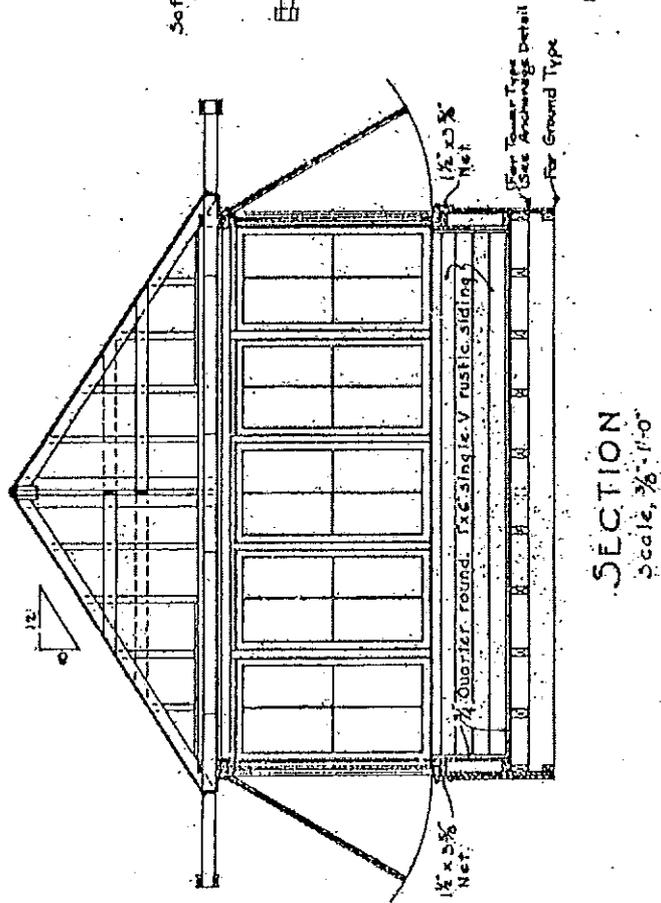
TYPE RT-1
UNTREATED
ROUND TIMBER
FOR USE WHERE HULLING
COSTS FOR OTHER TYPES
ARE PROHIBITIVE.

NOTES ON PURCHASES
WHEN ORDERING TOWERS SELECT
TYPE DESIRED WHICH IS DEPEND-
ENT UPON CAB SIZE AND HALL-
ING FACILITIES. THEN IN THAT
TYPE, SELECT THE NEAREST
AVAILABLE HEIGHT THAT SATIS-
FIES SITE CONDITIONS. FOLLOW
OTHER ORDERING INSTRUCTIONS
AS OUTLINED ON FORM RE-01.

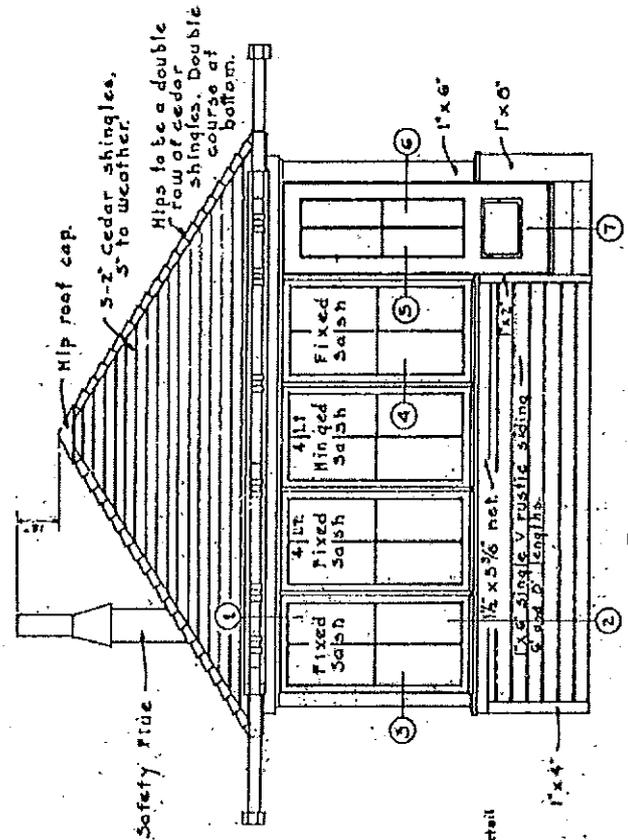
U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
WASH. DC. 20250
STANDARD
TIMBER
LOOKOUT TOWERS
L-10003



Portion of "Lookout House Plan L-4,"
 1931 Revision, Sheet 2 of 5. Source:
 Courtesy of Charles and Beverly Heebner.

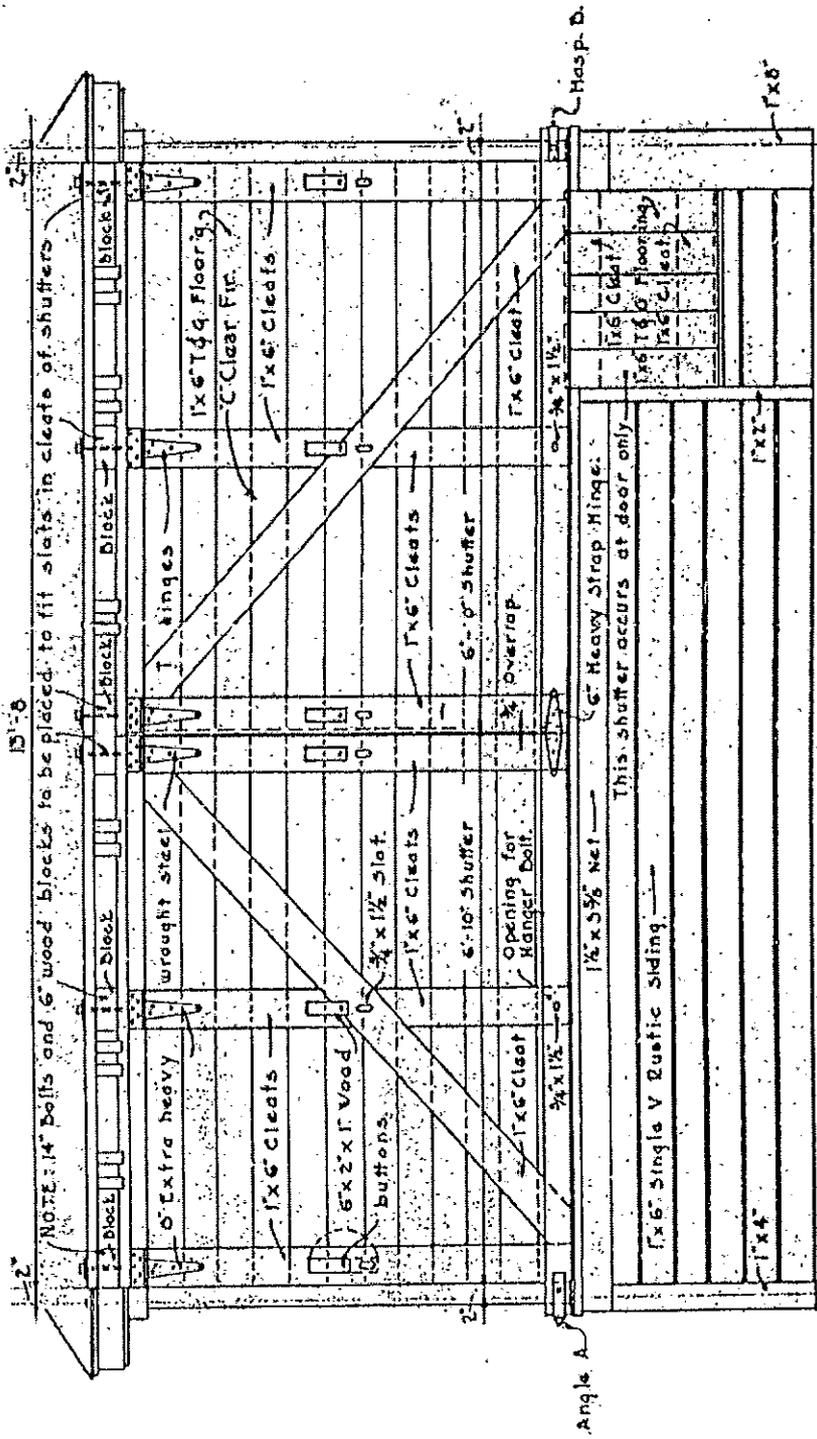


SECTION
Scale, 3/8" = 1'-0"



ELEVATION
Scale, 3/8" = 1'-0"

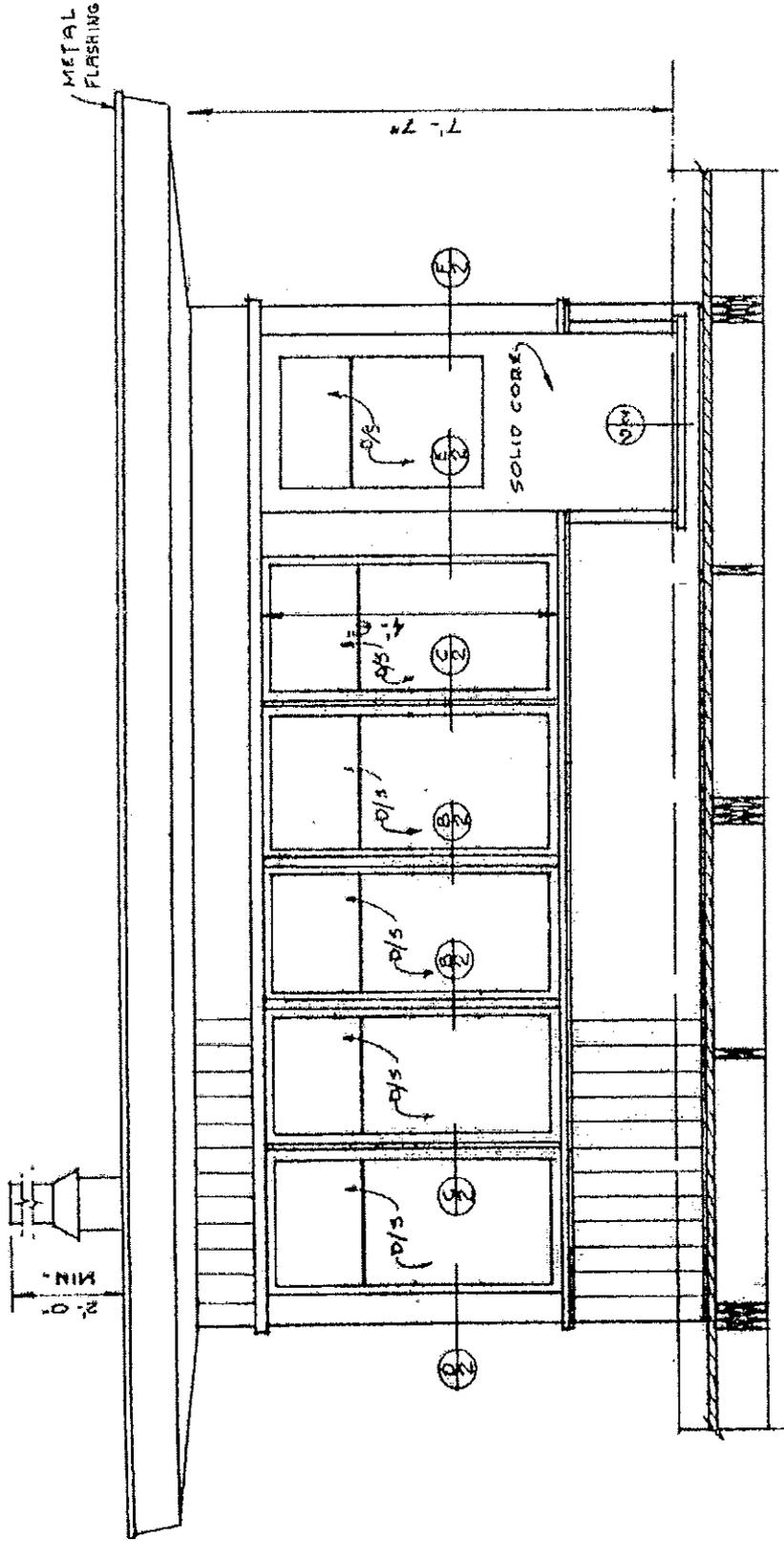
Selected drawings from *STANDARD - 1936 14' x 14' LOOKOUT HOUSE*, Revised Sept. 19, 1940. Source: USDA, Forest Service, Umatilla National Forest Engineering files.



ELEVATION OF TYPICAL SHUTTER

Scale, 3/4" = 1'-0"

Selected drawing from *STANDARD - 1936 14' x 14' LOOKOUT HOUSE*, Revised September 19, 1940. Source: USDA, Forest Service, Umatilla National Forest Engineering building plans.



ELEVATION E-1
SCALE: 1/2" = 1'-0"

Selected drawing from LOOKOUT HOUSE: PLAN - ELEVATION & DETAILS, Revised April 9, 1964 [R-6 Flat] Architect: A. P. DIBENEDETTO. Source: USDA, Forest Service, Umatilla National Forest Engineering building plans.