



CULTURAL HISTORY MOUNT DIABLO STATE PARK

THE MOUNT DIABLO INITIAL POINT— ITS HISTORY AND USE

by John W. Pettley

Reprinted from the *Mount Diablo Review*, Spring 1998

Courtesy of Mr. Pettley and Mount Diablo Surveyors Historical Society, www.mdshs.org

The Legend of Mount Diablo

The Spanish tell the story that once in olden times they had a battle with the Indians on the mountain; it was going hard for the Spaniards when suddenly the Devil came out of the mountain, helped the Spaniards and the Indians were vanquished. Thus the story gave the name to the mountain.

History of Government Surveys in California

As part of the settlement of the Mexican War of 1846-1848, ownership of land in what is now California was divided into two categories—private holdings and public ownership by the United States government. Private land titles, or "ranchos", established during Spanish and Mexican rule, were honored by the Treaty of Guadalupe Hidalgo with Mexico.

Of those that existed at the time the treaty was confirmed, 617 ranchos were finally confirmed, covering nine million acres or 14,000 square miles. These were primarily located in coastal areas of present-day California and in the San Joaquin and Sacramento valleys.

Before the United States Public Land Survey System (USPLSS) surveys could begin, all rancho boundaries had to be surveyed. Most of these boundaries had never before been surveyed, or were established using crude surveying techniques. United States Deputy Surveyors were assigned to establish boundaries. During the 1850s more than 30 government survey parties were engaged in surveying the ranchos and, by 1859, a total of 196 ranchos had been surveyed.

Plans were underway, meanwhile, to begin subdividing federal land in California in accordance with the USPLSS. The customary procedure for surveys under the USPLSS is the establishment of a starting point, called an "initial point", from which a baseline is established true east and west, and the principal meridian is extended true north and south. For the surveys of a large portion of California and all of Nevada, the Mount Diablo Baseline and Meridian is the initial point.

Standard parallels are then established north and south at 24-mile intervals parallel with the baseline, and guide meridians are established east and west at 24-mile intervals, parallel to the principal meridian. Once these lines are established, public lands are divided into six mile-square townships and then further subdivided into 36 one mile-square sections.

The original plan for California was to establish one initial point to control surveys throughout the

entire state. However, due to the steepness of the terrain in many areas of California, it was suggested by Samuel D King, Surveyor General of California, that several initial points be established in different parts of the state. It was finally decided by the Surveyor General of the United States to establish three initial points for government surveys in California. These points were established on Mount Diablo in Contra Costa County, on San Bernardino Mountain in San Bernardino County in 1852 and on Mount Pierce in Humboldt County in 1853.

Because of its prominent location, Mount Diablo has been used by a variety of state and federal agencies as the location for important horizontal control monuments. Some of these agencies include the Department of the Navy, the California Department of Natural Resources and the United States Coast and Geodetic Survey (now the National Geodetic Survey).

In 1928 the Standard Oil Company of California built an airway landmark beacon near Mount Diablo's summit. (The lamp from that beacon still sits at the top of the rotunda of the Summit Museum and is lit each year for Pearl Harbor Day, ed.) Since then radio antennae have been erected on the peaks surrounding the summit. The California Department of Transportation, as well as local private surveyors, routinely use the tower atop Mount Diablo for backsights and azimuth checks.

In July 1851, Col. Leander Ransom, General Land Office Deputy Surveyor, labored to the top of Mount Diablo in oppressive summer heat. Under instructions from the Surveyor General for California, he was to establish an initial point at the summit, through which the new Mount Diablo base and meridian lines would run. Arriving at the top of the mountain, he chiseled a hole in solid rock on the highest point and erected a flagpole to be used as a sight to establish monuments on the base and meridian lines.

In 1852, R D Cutts of the Coast Survey traveled to the top of the mountain. His mission was to establish a triangulation station to be used for mapping the surrounding waterways and topography. After finding Ransom's point, Cutts set his point lower and to the southwest, on a flat ledge more suitable for setting up a tripod. He duly noted the relationship of the two points in his official notes, and even included a sketch. From that point on, confusion over the location of the two points began.

In 1986, I began researching the history of the initial point. As records were gathered, it was discovered that there were conflicting accounts concerning the relationship of the two points. One account stated that the two points were the same. However, the original Cutts notes clearly stated that there were two separate points.

At the top of Mount Diablo, inside the basement of the three-story summit observation tower, I located a copper bolt marking the triangulation station. Further searching revealed a rectangular-shaped depression in exposed bedrock three feet northwest of the copper bolt. The location and character of the depression closely matched the description of the initial point in both Ransom and Cutts notes. A field survey confirmed that the depression was indeed the initial point set by Ransom.

During visits to Mount Diablo, I noticed a plaque placed on the concrete column surrounding the triangulation station incorrectly stating that it and the initial point were the same. Mount Diablo State Park was contacted to see if the plaque could be corrected, but nobody knew who had placed the plaque, and there was reluctance to replace it with a new one. Finally, during the renovation of the buildings for the present-day museum, permission was granted to replace the plaque. However, the park service did not have the money for a new plaque. With the help of numerous surveying organizations, money was raised to pay for a new plaque which was installed in May, 1993.

On July 17, 1993, 142 years after Ransom's original survey, land surveyors from around California gathered on top on Mount Diablo to celebrate the installation of the new plaque. The newly-renovated Summit Museum and Visitor Center opened in October, 1993, and the plaque is a major showpiece of the exhibits. Californian surveyors are pleased that the Mount Diablo Initial Point is now correctly marked.

I would like to thank the following organizations which helped to make the plaque possible: Northern and Southern California Sections of ACSM, Mt Diablo Surveyors Historical Society, East Bay, Santa Clara/San Mateo, Monterey Bay Chapters of CLSA, Northern California Surveyors Joint Apprenticeship Committee, Kerney Pattern Works and Foundry.

For more information about Mount Diablo Surveyors Historical Society contact:

Treasurer

5042 Amethyst Court

San Jose, CA 95136-2601