

Lockheed Propulsion Plant

The Lockheed Potrero Ranch site was first inhabited by Native Peoples and was home to the Cahuilla. Potrero is translated as “the place where the mares (or horses) are raised.” The Potrero Ranch was later a part of the San Jacinto Nuevo y Potrero Rancho, which was one of the six original land grants given to the San Luis Rey Mission by the King of Spain. Beginning in the 1860s several ranches, including the Smith Ranch, the Circle C Ranch, the Stewart Ranch, the Arnett Ranch, the Urton Ranch, and the Wolfskill Ranch have shared the acreage which was later sold to the Lockheed Propulsion Company in 1960 after its purchase of the Grand Central Rocket Company.

The early 1960s were tumultuous years in the United States. The threat of nuclear attack was prevalent and tensions between the United States and the Soviet Union reached a climax in 1962 with the Cuban missile crisis. Cities across America prepared Civil Defense drills and the San Geronio Pass was no exception. Plans were in place in Banning to construct bomb shelters under Repplier and Sylvan Parks to house the entire population of the city in case of nuclear attack. The shelters were to be constructed with sanitation facilities, air conditioning, emergency power equipment and a hospital staffed by local doctors and nurses.

Paralleling the collective fears of nuclear attack were the efforts to develop superiority in space. The National Space Program was viewed as a vital component to national security and was first documented in the headline of the *Banning Daily Record* newspaper on January 31, 1961, “Chimp Zooms Into Space.” This success was followed by astronaut Alan Shepherd’s launch into space in May of 1961, and John Glenn’s orbit of the earth in February 1962. It was within this national context that the Lockheed Potrero site was developed, becoming an important component of the national race into space with the futuristic goal of landing a man on the moon.

Lockheed initially purchased approximately 9,000 acres of the Potrero Ranch and later added another 3,000 acres. There were two test sites developed by Lockheed. Site #1 was the largest at approximately 9,100 acres and site #2 was approximately 2,600 acres located about 5 miles west of site #1. Both sites were used for the processing, testing and disposal of solid rocket propellants. The sites were intended for “static” testing, not launching.

An April 19, 1962, *Daily Record* article reported that “the Potrero site is encircled by hills which will provide a natural barrier for safety and insulation of the surrounding Pass area from the sound of testing operations.” Residents still heard and felt the tests which were followed by plumes of white and black smoke. Lockheed projected that by the Summer of 1962 they would

be manufacturing 6 million pounds of solid rocket fuel a month. The solid rocket propellant was a rubber and aluminum based material known as Polycarbutene.

In the Fall of 1962 Lockheed Vice President of Administration told the *Daily Record* that “everywhere Lockheed has gone it has been a good neighbor.” At the height of the Lockheed site’s success it was expected that as many as 3,500 – 4,000 individuals would be employed, providing an economic boom to the Pass communities. These numbers never came close to materializing but the facility did raise hopes of a better economic base for the Pass.

Massive amounts of cement were needed for the test sites. One Lockheed official commented that there was “enough cement to bury a city.” San Geronio Pass concrete contractors were kept busy for several years hauling cement into the Lockheed test sites. Two Banning residents worked with the building of the concrete bunkers, silos and other structures. Dan Higbee, Banning native and resident for 90 years remembers hauling numerous loads of cement into the Lockheed site when he worked for Beckham Brothers Ready Mix.

Ollin Tendeland, longtime Banning resident was an independent masonry contractor and had worked for several local banks on concrete projects. “Ole” worked on what he described as a “bomb shelter” at the Lockheed site in the 1960s. He constructed an 8 x 8 foot structure built into a hill. He used 2 x 12 inch planks for the rafters of the ceiling. The concrete block box was equipped with a periscope. He remembers being led to the site by guards where there was a large crane on site for use in construction. The work was completed in a short time because of all the deadlines of the project.

During the Summer of 1962 Lockheed installed one of the world’s most powerful X-ray machines, the 25 million electron –volt Betatron in a massive new concrete building at the Potrero facility. The Betatron operated at nearly 100 times the power used at that time for a human chest X-ray and was used to inspect rocket engines for potentially dangerous fissures before testing the engines. During this critical time of development Lockheed Propulsion Company President Robert F. Hurt said he believed, “It is in the national interest, the highest national interest, to pursue the simultaneous development of all rocket propulsion systems – solids, liquids, hybrids, nuclear, electric and others.” By 1963 the test firings at the Lockheed Potrero site had become an important component in America’s Apollo lunar exploration program.

Lockheed ceased operations at the Potrero site in approximately 1974 and the Lockheed Propulsion Company was reconfigured into the Lockheed Martin Company in 1995. Banning resident Bernie Howlett worked at the Lockheed site as a security guard in the mid 1980s. Bernie explored many of the concrete bunkers that were built into the hillsides. Most of these bunkers held the testing equipment for the rocket tests but by the 1980s all the equipment had

been dismantled and removed and the area, although a restricted one, was used at times by off-road enthusiasts and adventuresome teens.

Cleanup operations of the site ended in 1998. It is estimated there are more than 500 acres of contaminated soil where chemicals were dumped during the Lockheed use of the Potrero Ranch area. In 2004 Lockheed Martin sold the Potrero ranch site to the State of California for \$25.5 million. Riverside County contributed \$5.5 million to the purchase to create an endangered species habitat.

San Geronio Pass residents were proud to be included in the national space projects localized by the Lockheed Propulsion Company at the Potrero Ranch site during the 1960s. In the context of the times it is understandable that civic pride and the call for national security would overshadow any long term concerns or implications of a contaminated environment.

Thanks to all who participated in our Lockheed Potrero Ranch question of the week. Special thanks to Dan Higbee, Ollin Tendeland, Steve Moore, and Bernie Howlett for their contributions to this article. (Banning Record Gazette, April 29, 2011, by Bill Bell)

Photograph Caption for Article:

“Firing of the three-stage 156” rocket at the Lockheed Potrero test site, May 28, 1964.”