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Lockhart General Merchandise Store

Regarding my input to the public hearing in Barstow on the Abengoa Project, please include reference to the following:

Eligibility Criteria

An historical resource must be significant at the local, state, or national level, under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

Rio Grande Oil

2. It is associated with the lives of persons important to local, California, or national history;

The Lockhart Family

3. It embodies the distinctive characteristics of a type, period, region, or method or construction, or represents the work of a master, or possesses high artistic values;

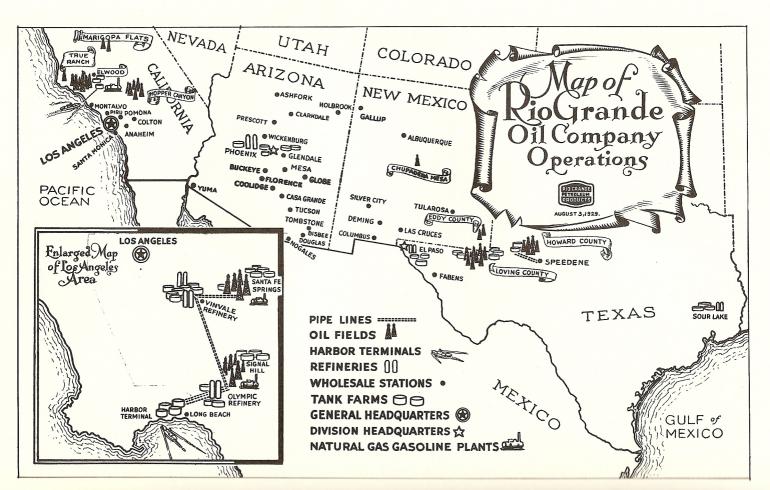
Gas Station Architecture

4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Harper Lake was the site of the July 5, 1944 flight of Harry Crosby in the first and only manned x-wing rocket powered flight of the secret MX-324. (You can watch this historic event yourself on Youtube in the file Northrop Aircraft 1 at about 4 minute into the video.)

The owner of the Rio Grande Oil Company and a dry goods business in Chicago, L.M. Lockhart has his name on this building. His impact on the oil business and California is significant, beyond this building. He allowed Howard Hughes and Northrup to use his private airstrip on the property to test secret aircraft for the Army during WWII. All of this history is represented by this structure, which is sound (has Integrity) and useful for the solar plant being proposed.

Glenn MacLean



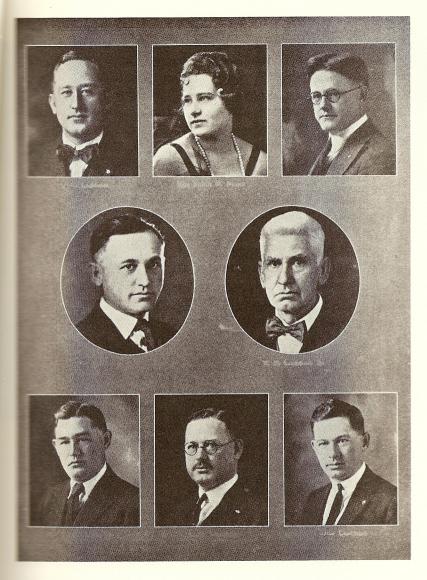
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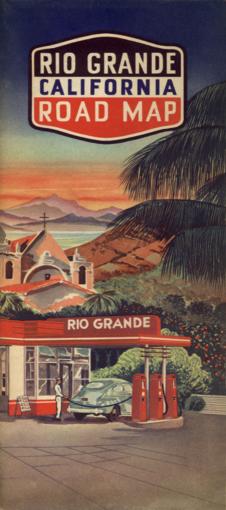
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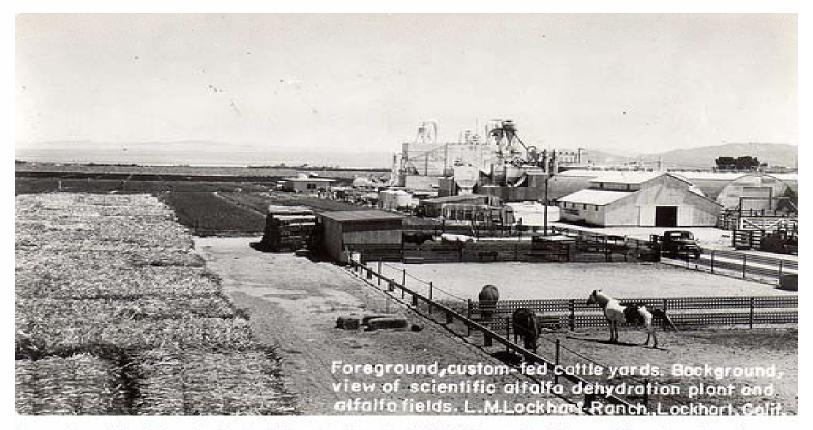
The Lockhart family. Top row, left to right: Herman L. Lockhart, Mrs. Frank H. Pierce (a sister), Arthur M. Lockhart. Center row, left to fight: Lloyd E. Lockhart, the founder of Rio Grande Oil Company, and Charles H. Lockhart (the father). Bottom row, left to right: Cecil E. Lockhart, Leslie Marion Lockhart, and Lynn L. Lockhart. From National Petroleum News, 1922.



Harper Lake – Then and Now

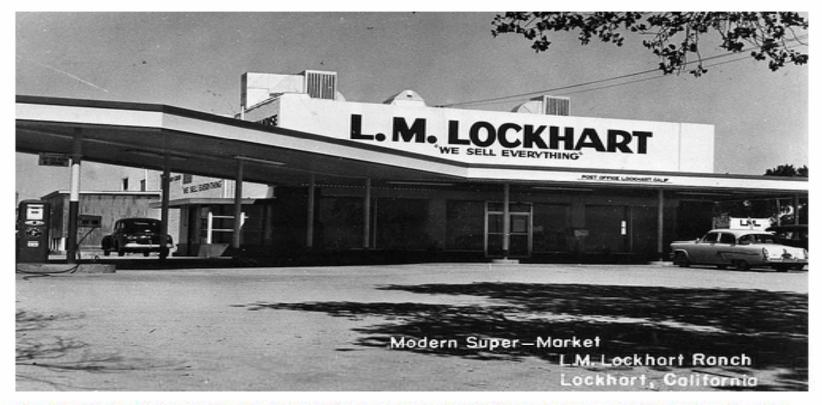
Some History and Trivia

L.M. Lockhart Ranch Lockhart CA west of Barstow CA early 50's?



I knew Lockhart Ranch had quite a heyday, but didn't know that it was this extensive. One more picture coming next week. This was obviously before the water table dropped and most of the alfalfa farms ceased to exist. Also, this is a link to the solar plant at Harper Lake, which is a part of Lockhart. Iudb.clui.org/ex/i/CA4986/

L.M. Lockhart Ranch Store west of Barstow CA 1950's



I thought I had this posted, but here it is again. Several flickrites have posted pics of what is left of this store. Not much. I always thought Lockhart was beautiful. It was still green with alfalfa fields when I lived nearby in Hinkley. There was even a landing field in Lockhart.





Lockhart Store Now



This dry lakebed in the Mojave Desert was the site of secret flight test programs conducted by the Hughes & Northrop aircraft companies during the 1940s, including the historic first flight by an American rocket-propelled aircraft.

When Howard Hughes' secret D-2 prototype was ready for final assembly in May 1943,

it was relocated from Hughes' <u>Culver City</u> facility to Harper Lake, where a hangar & other installations had been constructed to conduct a flight test program in secret.

In characteristic fashion, Howard Hughes himself began the D-2's flight test program on 6/20/43.

However, after only a few brief hops, it was clear that high control forces were a problem,

and modifications commenced to the planes wing, ailerons, and flaps. When Hughes flew the D-2 again on 8/2/43, the modifications proved insufficient to correct the control issues.

The wooden airplane remained in its air conditioned, humidity controlled wooden hangar

until it was destroyed on 11/11/44 by a fire that was said to have been sparked by a lightning strike.

However, it has been reported that the fire was not accidental, and it has also been reported that Hughes tried to intentionally damage the troublesome D-2 during earlier taxi tests so that he could start over with a fresh design.

Hughes eventually went on to develop a larger, higher-performance evolution of the D-2, known as the D-5. Under the military designation of XF-11, it would eventually be built & flown from the Hughes Culver City facility. Another chapter in the history of Harper Dry Lake involved the diminutive Northrop MX-334 flying wing.

The MX-324 had first been flown as a glider at nearby Muroc Army Airfield in late 1943 & early 1944.

At which point Northrop technicians installed a 427-pound Aerojet rocket motor in the squat, tailless aircraft.

The motor nozzle, protruding through the trailing edge of the thin wing, was the only outward evidence of the engine's presence,

although the actual motor, 4 pressure tanks, 2 propellant tanks, and hydraulic & electric control equipment were carefully fitted into the wing.

One of the considerations in the design of this airplane was protection of the pilot from the mono-ethylaniline fuel & red fuming nitric acid oxidizer.

- The fuel tank was installed on one side of the pilot & the oxidizer tank on the other side.
- A heavy neoprene curtain was installed on each side of the pilot to protect him from any rupture of tanks or lines.

Beginning on June 20, 1944, exhaustive ground tests of the rocket motor were conducted at Harper Dry Lake,

culminating in taxi tests on the desert floor by Harry Crosby.

By the evening of July 4, the craft & Crosby were ready for their momentous flight.

Finally, almost 3 years after the successful maiden flight of the German Me 163, Harry Crosby eased himself into the prone position in the cramped cockpit of the MX-324.

With his head resting in a special sling behind the large glass windshield, Crosby had a clear view of the long tow line & the P-38 Lightning that was to tow him up to release altitude

off the cracked, dry surface of Harper Dry Lake.

Early in the morning of July 5, 1944, P-38 pilot Martin Smith' towed Crosby and his strange-looking craft over the dry lake at about 8,000'.

Crosby tripped the towline release, braced himself in the narrow confines of the cockpit,

and pressed the propulsion trigger on the control stick.

Ignition of the 200-pound thrust Aerojet XCAL-200 rocket motor produced remarkable acceleration.

America's belated entry into the era of rocket-powered flight had been made.

A short flight of over 4 minutes ended with a gentle landing on the dry lake bed.

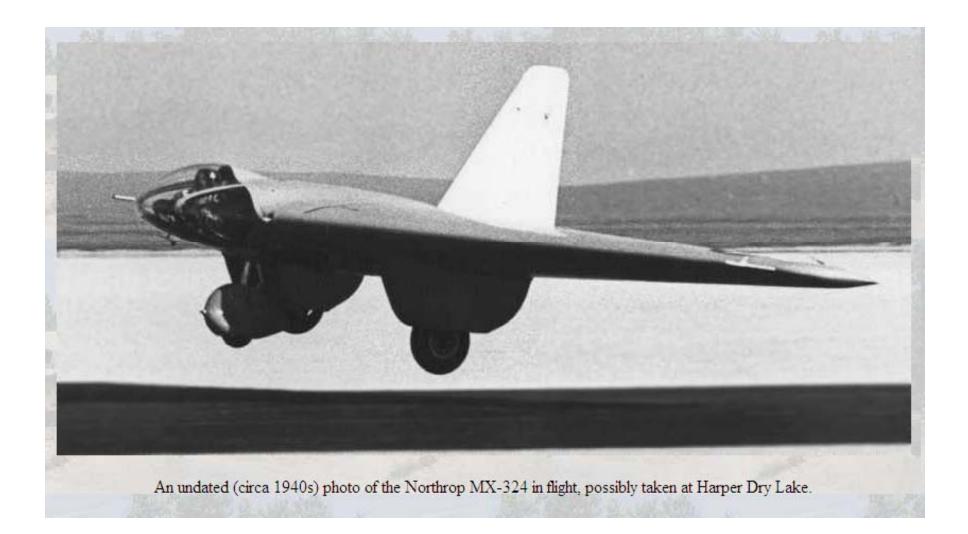
Following Crosby's July 5th flight, other powered flights of the Rocket Wing were conducted.

Some of these featured the early use of telemetry to transmit flight test data by radio to ground-based recorders.

Despite the progress in the test program, however, the lack of more powerful rocket engines

and a redirection of priorities resulted in termination of the project.







A circa 2005 aerial photo depicted the remains of the 2 runways on the southwestern edge of Harper Dry Lake.

No trace of any buildings were recognizable.