

GLENN COUNTY AIRPORT ADVISORY COMMITTEE

Jaime Lely, Orland - Chair
Gerald Kraemer, Orland – Vice-Chair
Ken Hahn, BOS Liaison

Mike Peavy, Orland Airport
Taylor Michaud, Willows Airport
Ernest Pieper, Willows Airport

**Glenn County Public Works Agency
777 N Colusa Street
Willows, CA 95988
(530)934-6530**

AGENDA

WEDNESDAY, JULY 7, 2021 @ 3:30 p.m.

**Planning & Community Development Services
225 N Tehama Street
Willows, CA 95988**

CALL MEETING TO ORDER:

1. ROLL CALL

Jamie Lely, Orland, Chair
Jerry Kraemer, Orland, Vice-Chair
Mike Peavy, Orland

Ernest Pieper, Willows
Taylor Michaud, Willows
Ken Hahn, BOS Liaison

2. APPROVAL OF MINUTES

- a. Approve Minutes of April 7, 2021

3. PUBLIC COMMENT PERIOD

4. DISCUSSION ITEMS

- a. Budget/Staff Report – Talia & Alex
- b. California Historical Landmark WLW – Ted Atlas
- c. Continue Lease Review Discussion
- d. WLW Airport Layout Plan (ALP)

5. **ACTION ITEMS**

- a. None

6. **UNSCHEDULED MATTERS**

Receive comments from the audience, staff and committee members and, if deemed necessary, refer the subject matter for follow-up and/or schedule the matter on a subsequent agenda if required.

7. **CALL FOR AGENDA ITEMS FOR NEXT MEETING**

- a.
- b.
- c.

8. **NEXT MEETING**

Wednesday, October 6, 2021
Orland Airport Lounge
4115 County Road P
Orland, CA

Adjourn Meeting

Avfuel Corporation Sales Analysis
Glenn County Airport - Willows
Date Range 1/1/2020 to 12/31/2020

Customer Name	Gallons Sold
FBO Sales	
Avgas	
GLENN	21,363
GLENN1	29,390
Sub-Total	50,753
Grand Total	50,753

Avfuel Corporation Sales Analysis
Glenn County Airport - Willows
Date Range 1/1/2021 to 5/31/2021

Customer Name	Gallons Sold
FBO Sales	
Avgas	
GLENN	7,480
GLENN1	9,554
Sub-Total	17,034
Grand Total	17,034

National Register of Historic Places and California Historical Landmark
Designation for the
Willows-Glenn County Airport

National and state recognition as an historical site for the Willows-Glenn County Airport is long overdue as is the association with Floyd Nolta. Although Nolta's rice sowing mechanism was probably done at the original airport, there is no doubt that the further development and advances in that pursuit, as well as international recognition, took place at the current airport. It is fair to say that his efforts led to great advancements not only in rice production, but in other crops as well. Three decades later, Nolta, along with U.S. Forest Service Officer Joe Ely changed the way forest fires are fought when they perfected a method to drop water and retardants of vegetation to slow the advance of fires. The success of that endeavor also took the efforts of the original seven local pilots to perfect the methods to accurately drop the materials, while safely flying in the extremely hazardous conditions presented by mountains, deep valleys and rapidly changing air currents. As with the development of aerial rice sowing, it was not long before people from around the world turned to the work being done at the Willows Airport.

During World War I, Willows' resident Floyd Nolta served as an aircraft mechanic with Jimmy Doolittle who was an Army flight instructor at Rockwell Field in Coronado, CA. Lt. Doolittle gave Nolta his first ride in an airplane, an event which led to Nolta's lifelong vocation and his subsequent important contributions to aviation. Upon returning to Willows, and after learning to fly, Nolta borrowed the funds to buy a Jenny JN-4H biplane. As with many pilots in those early days, Nolta did barnstorming and gave many locals their first ride in an airplane.

In 1912 it was discovered that the hot days and cool night along with the non-permeable clay soils in Glenn and neighboring counties along the Sacramento River made for ideal conditions to grow Asian varieties of rice. By the late 1920s, there were 250,000 acres of rice production in Glenn, Butte and Colusa Counties. At the time rice seed was sown by tractors, laboriously driven up and down the fields. Migratory birds would often feed on the seed before the fields could be flooded.

The mechanically minded Floyd Nolta had a better and faster way to seed a rice field so in 1928 Nolta invented a way to speed the process of planting rice by mounting a hopper in the forward cockpit of his Jenny JN-4 biplane. A sliding valve with a threaded knob allowed him to measure precise amounts of fertilizer and seed that dropped from the hopper into a box. The wash from the propeller spread the product over a 50-foot swath. Nolta's invention vastly improved rice propagation by calculating and then controlling product, each load having a specified release rate based on its mix. Flying at 100 mph and an altitude of 25-30 feet, Nolta could spread 800 lbs. of rice seed in three minutes. Reloading often meant landing on a dirt road near the field and having assistants empty heavy pages of seed into the hopper. Nolta added a flag man at the ends of the field to guide his path. Word quickly spread about this method of sowing seeds. Nolta began receiving inquiries from other rice growing regions with some letters written in foreign languages.

Along with his brothers, Dale, and later Vance, Floyd established the Willows Flying Service to provide agricultural services including sowing of seed and fertilizer as well as water-borne ag products along with other flight services. Nolta purchased a Hisso Travel-Air which he named "Rice Planter #1," which he used in the 1929 planting season.

Faced with encroaching development in 1928, Willows and Glenn County each purchased 160 acres, approximately one mile to the west, and established the current airport. In 1929 the Bureau of Airways of the U.S. Department of Commerce named Floyd Nolta as the first manager of Willows Field. In 1930 Nolta was appointed by the Sheriff as the Glenn County Flying Officer. As a special deputy sheriff, Nolta was empowered to enforce state aviation safety and licensing laws. Nolta served in that role without pay. In order to promote the airport, in 1930, Nolta began to hold air shows. With as many as 100 airplanes, and thousands of spectators, the were able to raise funds to build a hanger.

Operating out of their own wood-sided hanger, the Willows Flying Service continued to grow. A newspaper article in 1931 stated that Floyd Nolta planted 50,000 acres of rice that year. In 1940, the Nolta brothers purchased land near Artois and moved the Willows Flight Service to their own airfield. After almost a century worth of progress in agricultural aviation, the mechanism used by modern pilots to release rice, wheat and other types of seeds is still the one developed by Floyd Nolta in 1928.

Both the Willows Airport and Floyd Nolta served the country during World War 2. The Army leased most of the airport from Glenn County. Adding a second runway, it became an auxiliary airfield to the Chico Army Airfield.

In preparation for the secret bombing raid of Japan, in March 1942, the B-25B Mitchell bombers, led by Lt. Col. Doolittle, were flown to McClellan Field in Sacramento for final maintenance procedures. Because of his relationship with Floyd Nolta, Lt. Col. Doolittle knew of the Willows-Glenn County Airport. Doolittle asked Lt. Henry Miller, the Navy pilot assigned to train the Army pilots, brought a cadre of bomber crews from McClellan Field to Willows, where they practiced the short-takeoff procedures necessary to achieve the objectives of the plan. The citizens of Willows were aware of this unusual occurrence, as the take-off procedure required a full run-up of the twin 1700-hp engines before releasing the brakes and taking off, but in the spirit of the times kept the training a secret. No official record or documentation was made public at the time, even after the successful raid but Lt. Miller included it in his official after action report made upon his return to Naval Air Station Pensacola in May 1942.

Floyd Nolta rejoined the U.S. Army Air Forces in 1942. He was recruited by Paul Mantz, the famous stunt pilot, to be part of the Army's First Motion Picture Unit. Nolta flew all types of airplanes for training and morale-building films. According to his family, he flew a B-25 Mitchell under the San Francisco-Oakland Bay Bridge during the filming of *Thirty Seconds over Tokyo*, the 1944 feature film about the Doolittle Raid.

The Willows Airport reverted to public use in 1945 and Nolta returned to Willows after working as a Hollywood stunt flyer. Neither were done contributing to the public good.

In 1955, Joe Ely, of Willows, was the fire control officer for the Mendocino National Forest. He received permission from a Forest Supervisor to go forward with his idea to drop water from an airplane to fight a wild land fire. Previous attempts to drop water from an airplane had little effect on a fire and were abandoned.

Ely asked Floyd Nolta about using an agricultural spray plane for this purpose. Within a week, Nolta had cut a hole in the bottom of his Boeing Stearman 75 Caydet biplane and added a 170-gallon tank, along with a hinged gate and a rope to release the water. On 23 July 1955, Floyd's brother, Vance, took the plane up and easily doused a grass fire they lit to test the device.

This method was first used on 13 August 1955 to assist a crew on the Mendenhall Fire in the Mendocino National Forest. Vance Nolta became the first pilot to ever make a free-fall water drop on a forest fire. Nolta made several drops on that fire and was then directed to another fire in the same forest.

By the following summer, there were seven biplane air tankers based at the Willows-Glenn County Airport, three of which were flown by Floyd, Vance, and Dale Nolta. The squadron flew Boeing Stearmans and N3Ns. Both models were trainers used by the military before being purchased for agricultural use. They also had a Tri-Pacer monoplane, piloted by Lee Sherwood which flew a Forest Service officer to direct the air tankers and coordinate with the ground crews. The other pilots were Harold Hendrickson, L.H. McDurley, Ray Varney, Warren Bullock, and Frank Prentice.

They spread the word to all State and Federal forestry units that the service was available by calling "Willows 80" -- Dispatcher Charlie Lafferty. The squad went out on twelve fires the first month, and by 1957 were operating all over the state. That year they added more, and larger, planes.

They learned that, in hot weather, of the 100 gallons of water dropped at 50 feet, none reaches the ground. Ely and others added sodium calcium borate and the planes became known as borate bombers, a name which stuck even after they stopped using borate. They experimented with other phosphate and sulfate compounds, as well as thickening compounds to create gels.

Ely enlisted Wim Lely, of Orland, to develop a mechanical unit that could mix a thousand gallons of water and chemical and pump it into an airplane in a matter of minutes. Lely's Orland Manufacturing contracted for many years to supply mixing machines to the Forest Service.

After the initial success of the Willows-based tankers, aerial firefighting grew exponentially. The California Division of Forestry (CDF) established their own unit and the idea spread to other states and around the world. With the addition of PBYS and other larger planes, they could drop 1000 gallons, and by 1959 they had planes capable of carrying 2000 gallons of fire retardant.

The Forest Service continued to base their air tankers at the Willows-Glenn County Airport until 1982.

The contribution to this effort to preserve America's forests is commemorated at the National Museum of Forest Service History in Missoula, MT, where a piece of the fuselage with the aircraft number of the Nolta's Boeing Stearman 75 Caydet airplane is on display.

The following is from the criteria for National Register of Historic Places:

Properties can be eligible for the National Register if they are associated with an event or events that have made a significant contribution to the broad patterns of our history. The property may be associated with a specific event marking an important moment in American pre history or history, or it may represent a pattern of events or a historic trend that made a significant contribution to the development of a community, a State, or the nation. To meet this criterion, a historic property needs (1) to have existed at the time of the important event and (2) be associated in a significant way with the event.

Under Criterion B, a property can be eligible for the National Register if it is associated with the lives of persons significant in our past. The person must be important as an individual and within a historic context, not simply representative of a group or class. The individual's association with the historic property should be compared with that person's association with other properties in order to determine relative importance of the property in question.

To qualify as a California Historic Landmark in must meets the requirement that a place be *associated with an individual or group having a profound influence on the history of California.* A location can be listed in both the national and state registries and the Office of Historic Preservation administers both programs.

The Willows-Glenn County Airport clearly meets the criterion outlined in the first paragraph of the federal program and the state requirement of having, "a profound influence on the history of California. The airport meets those requirements for both the development of aerial rice seeding and aerial firefighting. The close relationship between Floyd Nolta and the airport somewhat meets the criterion in the second paragraph of the federal requirements.

There are currently nine California State Historic Sites related to aviation, only two of which are still in operation (Shafter Airport in Kern County and Rockwell Field in San Diego County which is now NAS North Island.) Two are related to the Pan Am China Clippers and the others are related to either first flights or aeronautical research. In comparison, Shafter Airport was the site of the first human-powered flight in 1977-a nice achievement but did not lead to further advancements in flight. The Pan Am China Clippers still hold an historic fascination but did not lead to long-term advances in aviation as the use of large seaplanes was abandoned after World War 2 in favor of the development of ever-larger land-based planes and eventually commercial jetliners. There is no other location that contributed two different applications of aviation, both of which still have, "a profound influence on the history of California."

Note: The use of the Willows airfield to finalize the training of the Doolittle Raiders is not sufficient to qualify for historic status as it was only a small part of their training regimen. It is included here as part of the history of the airport.