## CONDOR FIELD

# TWENTYNINE PALMS AIR ACADEMY





OCTOBER 7th, 8th, 9th, 2005

HIELD UNDER THE REIGN OF NOBLE GRAND HUMBUG

### Condor Field Twentynine Palms Air Academy

As early as 1937 the 29 Palms Chamber of Commerce made plans to acquire federal land at Mesquite dry lake for an airport, resort hotel and golf course. The local Valle de las Vistas Club had been active in road development on the north side of the area for scenic auto tours as well as access for potential homesteaders and tourists. Plans also included land yachting and sport soaring. These ambitious plans however never materialized as on December 7, 1941 World War II intervened and military needs took precedence.

Interest in the use of gliders as weapons of war first came to world attention with the successful use of glider borne troops by Germany in the capture of the Eben-Emael fortress in Belgium in May, 1940. This was followed in May, 1941 with the invasion of the island of Crete in the Mediterranean by German airborne troops using assault gliders. The U.S. government then decided to build a glider force "second to none in the world" in the words of General Henry "Hap" Arnold.

This event heralded great changes in the sleepy desert town of Twentynine Palms. It was here that the Army activated a glider training program at the 29 Palms airport on Mesquite dry lake under contract with the newly formed Twentynine Palms Air Academy. On October 3,1941 F.R. "Bob" Whyers, obtained a contract for training army glider pilots under the supervision of the West Coast Air Corps Training Center. The contractor was required to "furnish and maintain, without expense to the Government, all necessary equipment, flying fields, supplies and facilities, and to furnish competent ground school and glider instructors. No flying instructor was to be employed without the approval of the Contracting Officer, and all instructors were required to have appropriate certificates of proficiency from the Civil Aeronautics Authority." Due to the army's total lack of experience in training glider pilots the program got off to a slow start.

On January 1, 1942 two offices were appropriated in the Tinlin bldg. in Twentynine Palms for administrative use. According to the Desert Trail "The ground school of the first class (42-1) which consisted of twelve second lieutenants was held at the Smoke Tree Broiler. They slept in convertible houses near 29 Palms Hwy., such as are used on movie sets.

The Desert Trail on January 16 reported that initial construction of buildings and facilities on the base would employ some 200 men and take a month. These facilities would eventually include a canteen, bowling alley and a swimming pool 90 X 120 & 12 feet deep as well as barracks offices, hangers and a control tower.

At the start there were no buildings and only one glider." That one glider, a Schweitzer (Schweizer) TG-2 affectionately called the "gray goose" was launched by auto and winch tow. There were no tow planes available. Graduation ceremonies for the first class of 12 second lieutenants took place at the 29 Palms Inn on February 18, 1942.

The program called for 30 hours in two-place training gliders at Twentynine Palms which includes training in auto, winch, and airplane tow and further training in transport gliders at an advanced Army school. This was the start of what was to become the 1,000 Glider Training Program approved by General Arnold, Deputy Chief of Staff for Air on December 20, 1941 and formally inaugurated on February 19, 1942 which called for this number to be graduated by January 1, 1943.

"Among the policies established were the personnel procurement basis of enlisted men with previous aviation experience, promotion upon graduation to the grade of staff sergeant, the rating of glider pilot, primary training at civil contract schools, and advanced training at army schools."

The program was eventually increased in several phases to a 6,000 Glider Pilot Program on May 8, 1942. It specified that 3,000 pilots be trained by September 1, 1942 and the remainder by December 31, 1942.

It directed that "the 6,000 Program was to be accomplished by reducing the training program to six weeks duration. Trainees were now to receive 30 hours within four weeks on cub type aircraft, 8 hours within one week on one or two-place gliders, and 8 hours within one week on nine- or fifteen-place gliders, for a total of 46 hours' instruction."

To accomplish these goals new Army glider schools were established under the jurisdiction of the Southeast, Golf Coast and West Coast Air Forces Training Centers. Two training centers were already operating, The Twentynine Palms Air Academy under the jurisdiction of the West Coast Training Center and the Elmira Area Soaring Corporation located in Mobile, Alabama, under the Southeast Training Center.

Times were tough and businesses were hurting. It was depression days but in this hardscrabble little town it was hardly noticeable. Many of the early homesteaders were World War I veterans and others afflicted with lung problems. They were sent out from Pasadena by Dr. James Luckie who would be later honored as the "Father of Twentynine Palms." Lincoln Stoneceipher an active member of the Chamber of Commerce and the Valley de las Vistas Club stated "The Academy is a wonderful thing for Twentynine Palms, for without it the town would probably vanish."

The base brought prosperity to the town. A massive building program commenced employing 200 men to construct the 25 buildings on what the Army renamed Condor Field. These included barracks, mess hall, hospital, recreation hall and canteen as well as a large swimming pool and bowling alley.

During Condor Field's Army days former child star Jackie Coogan flew gliders here and S/Sgt. Eduardo Cansino, Rita Hayworth's brother, was assigned to the weather station at the base. Lieutenant Jimmy Stewart once paid a visit. Pinky Garlock who worked as a cashier at the canteen remembers Jim Backus as a popular tow pilot. A steak dinner was 60 cents. Steaks were 1½ inches thick & 15 inches in diameter. Gwyn Ferry worked as a waitress and was voted Miss Condor Field in 1943. She eventually married pioneer Bill Keys' son Willis.

During the first year of operation 1240 aviation students and officers completed the glider pilot training course with only 39 eliminated. The amended contract called for the government to pay the academy \$561 for each student who passed the course and for those who failed, \$18.70 for each hour of flying instruction received. The initial contact called for four weeks of instruction including night flying.

Under provisions of a second contract dated March 27, 1942 the contractor was no longer required to furnish gliders and airplanes. The number of students in each class was increased to approximately 60 with classes starting at two week intervals. Total payment of contract not to exceed \$605,880. Instruction, not to exceed four weeks, now included instruction in night flying.

On June 13, 1942 a provision to the contract required the contractor to provide not less than \$50,000 insurance for damage to property of others.

The contractor was to provide lodging and board for the students not to exceed their allowance from the government for this purpose.

On August 4, 1942 the length of the training was reduced to two weeks with classes entering every week.

In order to get the gliders airborne various methods evolved. At first an auto would pull the glider which was attached to a long steel cable. This was replaced with a fleet of 12 especially designed Ford Mercury trucks with a 327 cubic engine and a one-speed transmission that would accelerate to approximately 50 mph and bring the glider up. Charley Matherly, who was in charge of maintenance and all ground equipment, and his crew than developed the winch system which went through several modifications. A chassis mounted engine would drive a drum containing the cable which was attached to the glider far down field. The winch operator sat in a protected cage and engaged the drum which would rapidly pull the glider until it was above the winch where the cable would be disconnected and the glider would be in free flight. The released cable would then parachute back down. A truck mounted version evolved which could launch two gliders side by side and finally to get more gliders into the air at a time an aircraft was used for towing. The first was the L1-A which could pull three gliders at a time.

Skyways Magazine in its November, 1942 issue stated:

"You must be a licensed power-plane pilot with thirty-five hours in the air before you can start." If you are accepted the next step is "five weeks' instruction at preliminary glider schools in light power-driven airplanes." The next hurdle is "two additional weeks in making 'dead stick' landings as an intermediate step to operation of gliders." And finally "Actual glider training will consist of a two-week course in two-place and larger gliders." The article goes on to state:

"On that field all the launching is done by tow planes, which take up two gliders at a time. The gliders stand ready at the take-off mark. The ropes are reeled out by the windlass car from near each glider to a common point where both will be attached to a plane. One rope is 300 feet long, the other perhaps 250-a precaution against the remote possibility of accident through the gliders' side-swiping one another. The pilots take their

places, the aides tilt up the right wing from the ground to horizontal and stand by to signal to the plane, the ropes are attached to the tow plane, to the gliders; the plane taxis slowly downfield until the cables tighten, each aid drops an upraised arm to show that the gliders are in motion, the plane moves forward more rapidly, the gliders speed up and presently leave the ground, the plane raises next, and all three are off for a predetermined height of, say 4,000 feet. When they are up there, you see the gliders cut loose and turn outward away from the plane-again a precaution, against a possible tangling with the now dangling tow lines. The gliders go about their business of doing lazy eight's, perfect stalls, precision spins, or whatever their specific ground instructions may have called on them to do. The plane circles round at a lower altitude, drops their cables conveniently and safely far down the field, the windlass car races out and reels them in, relays them in a V, and two more gliders take off. Presently the first two come slipping slowly, steadily, silently down, landing as lightly as a leaf.

The routine timing for such flights is fifteen minutes for going aloft and fifteen minutes for the downward glide, but in the long, hot afternoons there is a relaxation, and soaring can be done-with a two-hour limit. Riding thermals up to 10,000 feet is common and some exceptional records of 15,500 and 16,200 feet have been made... Night doesn't stop the work of this twenty-four-hour, seven-day sky school where time is of the essence. Here are some of the official orders as to night-gliding precision and technique: "Tow planes with double tow will be scheduled to take off at prearranged intervals, ranging from 10 to 15 minutes. The flight path of the tow plane will be so governed that the gliders may cut loose directly over the field at the end of 15 minutes of tow. ..The schedule has been so arranged and timed that it is absolutely imperative for each tow pilot to adhere to the scheduled times. This schedule has been so arranged to allow a

safe distance between each aircraft at any one time. Since there are to be several gliders and tow planes in the air at once, a hazard will be created if the tow plane is off schedule during any part of its flight from take-off through release, landing and taxiing back to

take-off position. Understanding this, no tow plane will take off except on exact

schedule."

operation.

Most of the students were enlisted men, preferably with some flying experience, who upon graduation from the advanced Army glider course became non-commissioned officers with the rank of Staff Sergeant. In all 1600 Glider pilots out of the 5000 that the Army produced trained at Twentynine Palms Air Academy during its 15 months of

Types of gliders flown were Schweitzer TG-2's, Aeronca TG-5's, and Taylorcraft TG-6's. To train glider pilots, Aeronca developed the TG-5 out of the 058, a standard liaison aircraft. The engine was replaced with a new front fuselage with a nose seat and the landing gear was lowered. The TG-6 built by Taylorcraft was a similar glider but with a wider wing span. Due to the wingload they were used for short duration take off and landing training not for long soaring flights.

The Bowlus all-plywood plastic glider was also successfully tested at Condor Field.

Entertainment in those days was at the Rollerink and 29 Palms Theater at Smith's Ranch. There were Saturday night dances at the Smoke Tree Broiler. The Joshua Tree, the

Mission Inn, the 29 Palms Inn and Jessie Harters (formally Graham's Cafe) at the Plaza were the best places to eat. The fountain at Kenney's Drug Store and Dean's Coffee shop were local hang outs. There was also a USO building in town. USO dances were occasionally held in the mess hall at Condor Field with young women in 29 Palms volunteering to be dance partners.

In March, 1943 the basic training of glider pilots was suspended at TAA as it was all over the country and Condor Field was switched to Power Pilot Training. PT-17 Stearman's were used as well as Vultee BT-13's. The base then came under the direction of the 17th. Army Air Forces Flying Detachment.

The town provided good lodging for the officers. In April, 1943, The Flying Condor, the base newsletter under the heading *The Adobe Condor Club* stated:

"Before the war the Adobe hotel was the mecca for the movie stars and tired business men who were seeking the relaxation that only the desert can bring. Now it has all been changed, for it has been taken over by the Academy and made into the BOQ for Condor Field Officers.

Situated on a high eminence overlooking the valley it combines rest and relaxation. A nine-hole golf course lies immediately back of the hotel and immediately in front of the sun parlor are seen the badminton and croquet courts with the shooting range near at hand. Great cactus gardens are tastefully distributed over the grounds and are now in full bloom.

The lobby, with an enormous fireplace, and the enclosed sun porch offer plenty of space for card parties whenever the urge strikes the officers for relaxation. The commodious dining room, under the vigilant eye of the chef, has made it the meeting place for those who desire to eat in quiet and talk over the problems of the day.

Under the management of M.Garnett Watkins the Adobe Condor club has proved itself to be one of the best BOQ's in the country and the list of waiting officers desiring accommodations there merely proves that it was a needed adjunct in the lives of the officers."

The Desert Trail of July 16, 1943 stated that over 98 per cent of the civilian crew at Condor Field including flight and ground instructors as well as mechanics joined the Air Corps Enlisted Reserve. "The induction, it is explained by officials, is in line with a nationwide move on the part of civilian flight schools, to assure retention of their experienced personnel for instruction purposes following recent announcement by the selective service organization to the effect that no further deferments will be granted men of military age."

The Army officially closed the base on April 30, 1944 with equipment moving to Victorville and March Field. The base was not idle for long for in July, 1944 the US Navy took over using it to train its flyers. It was officially called the Twentynine Palms Naval Auxiliary Air Station. Marston Matting was installed by the Seabees on the runway to accommodate the heavier aircraft. In all 51 squadrons completed gunnery, rocket and bombing training. In October the Adobe Hotel (later called El Adobe) on Two

Mile road provided accommodations exclusively for naval officers and their families continuing the tradition set by the Academy for Condor Field Officers.

The Navy announced the closing of the Naval Air Station in September, 1945 shortly after the Japanese surrender ended World War II. It was not until August, 1947, however, that the War Assets Administration (WAA) turned over the base with its 25 buildings to San Bernardino County. The Twentynine Palms Chamber of Commerce in turn took over the project for sub-leasing and in January, 1948 the chamber leased it to Cameron C. West and Dorothy West, local pilots who planned an air motel and resort project. The base was to be known as the Twentynine Palms Municipal Airport. Plans were also made for the CHP (Civil Air Patrol) to open an "Academy of the West" here for potentially several hundred students. Historian Lucile Weight stated, "Money had been placed in escrow against the lease, which would be transferred by the chamber to a San Bernardino civilian incorporated non-profit foundation, which in turn would be under direct CAP supervision. Plans called for a six-year course including academic subjects, flight theory, ground aviation, flight training, aeronautical engineering, and mechanical training. Cam West was to be retained as part of the operation". These plans were dashed when the CHP officials in Washington retracted their previous approval for the Academy.

Wright further states, "In Navy days, many top entertainers came here, and Twentynine Palms became widely known through the weekly broadcast. Jack Benny did a world broadcast from the Naval Station in April, 1945. Other favorites performing here were Rochester and Mary Livingston, Phil Baker, Edgar Bergen and Charlie McCarthy."

It remained in this state until 1952 when during the Korean War the Marine Corps took it over as a training center under the supervision of Camp Pendleton. It obtained base status on February 1, 1957. In 1979 it officially became known as the Marine Corps Air Ground Combat Center. The base covers 932 square miles.

The former glider pilots were a tough bunch. The "G" displayed on their silver wings they proudly said stood for guts. Gliders were used during the invasion of Sicily, at Normandy and in Holland, Belgium and Germany as well as in China, Burma and the Philippines.

According to the Silent Wings Museum Foundation in Lubbock, Texas where they have a museum located at the Lubbock International Airport, the life expectancy of pilots in combat is:

Bomber Pilots 1 hour 46 minutes Fighter Pilots 19 minutes Glider pilots 17 seconds The Colonel's Tow

O.K. Here is my story, now mind what I say The Colonel went flying, and did it this way.

In a power plane with a tow astern New experiences he did learn.

He roared down the field in an 0-49 The gliders a bobin on the end of the line.

The barracks loomed up and he kept straight ahead Three puzzled students wished they were dead.

He came back on the stock; the students did too They all missed the roof by an inch or two.

They zoomed the pool and on the other side He opened the throttle full and wide.

Across the desert we all did go Dodging cactus to and fro.

We finally gained altitude to a certain degree An the Colonel went off on a regular spree.

Standing on wing tips I finally cut loose Flying along in the Old Blue Goose.

He turned a square corner with the 0-49 And down came King with the old tow line.

Bean cut loose with a startled yell And away went the Colonel like a bat out of hell.

To all future students we want you to know Don't fly with the Colonel on a triple tow.

Bob Ridgely Glider pilot, class 42-7

Glider Pilots

Out in the middle of the desert Where the lonely coyotes wail And the only Highways Are just a desert trail

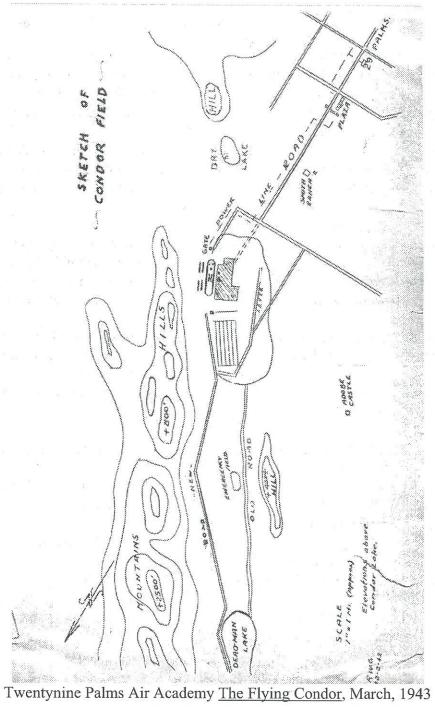
You'll find the Air Corp flying Neath the blazing sun Wherever we can take a ship Or mount an air cooled gun

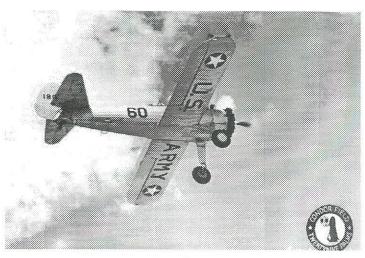
Many a lonely rattlesnake Crawl back in his hole As the shadow of a glider O'er the skies does roll

But we will keep 'em flying No matter where we be And by our flying We'll keep our country free

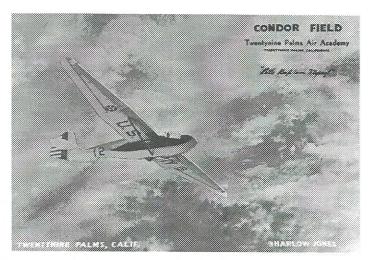
So lets go everybody Keep us in the air If you build the ships We'll fly 'em over there

We'll fly 'em and we'll land 'em It will be a great surprise When the glider pilots Drop down from the skies

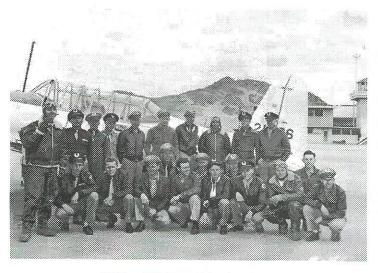




Vultee BT-13 Tow Plane



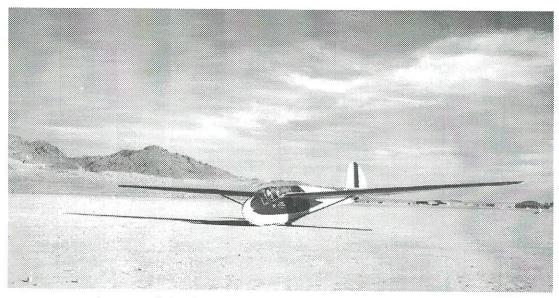
Schweizer TG-2 Glider



Glider Pilots and Instructors



Bill Helling and Tow Plane BT-13



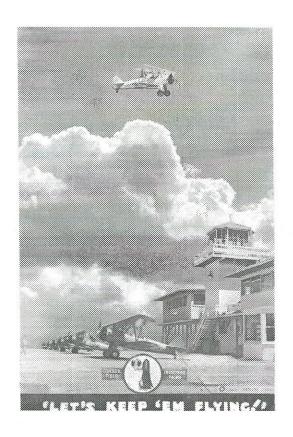
Schweizer TG-2 Landing at Condor Field

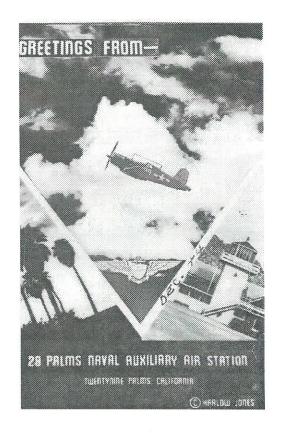


Glider Pilot and Schweizer TG-2



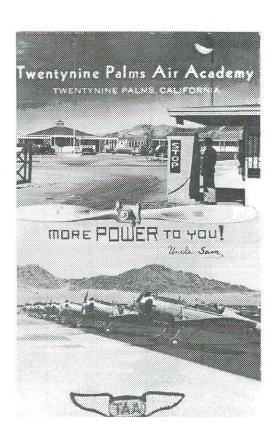
USO Desert Battalion Visit to Condor Field, June 1943. Photo by Harlow Jones

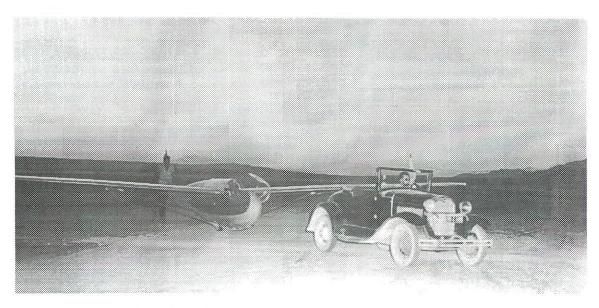




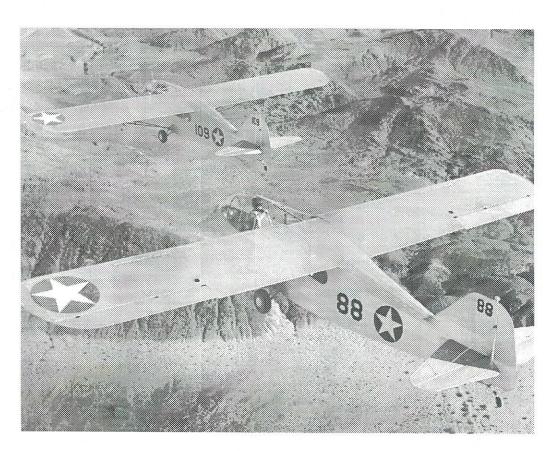








Early method of towing Schweizer TG-2 Glider using Roadster



Aeronca TG-5's

#### **Condor Log**

#### Twentynine Palms Air Academy

Twentynine Palms, California F.R. Wyers, Civilian Contractor

Jan. 19, 1942. Class 42-1 started flying. Class consisted of 12 Officers. One school-owned Schweizer glider available to fly them by using Pulley tow. Operations from two small flight shacks on the lake.

Feb. 3, 1942. Three Army Schweizers arrived and put into operations. Class 42-2, consisting of 18 Officers, started flying. Flying time 12:58 with four gliders. Thompson became Flight Operations Mgr.

Feb. 5, 1942. Double pulley tow tried and proved unsuccessful due to lack of power of tow car.

Feb. 7, 1942. First emergency landing. Pilot Lt. Hobart, minor damage.

Feb. 10, 1942. Double Airplane Tow tried and proved to be successful. Tow plane was L1-A, then designated as 0-49.

Feb. 14, 1942. First night flight tried and proved successful. Flight was double tow with Lt. Rawl and Lt. Trueblood in the gliders. Lt. Adair flew tow plane.

Feb. 20, 1942. Class 42-1 graduated 100% from the 30 hour course, but 7 days behind schedule. Class 42-3, made up of 23 Officers, started flying.

Feb. 21, 1942. Lt. Salisbury had forced landing in Glider #1 five miles from field, walked back and reported major damage to ship.

Feb. 22, 1942. Wind Velocity 42 m.p.h., no flying. Wreckage of Ship #1 brought in.

Feb. 23, 1942. Newsreel men here for stories and pictures.

Feb. 24, 1942. High wind. Ship #4 blown over on its back while being towed to starting line. Major damage. Two gliders left in operation out of original four.

March 5, 1942. One new Cinema glider arrived and went into operation, nicknamed the "Ruptured Duck."

March 10, 1942. Lt. Thomas made unauthorized parachute jump, was later eliminated from the course.

March 13, 1942. Glider #1 back in operation, also 2 new gliders. Lt. Paulson had forced landing five miles ENE of field, no damage. Glider towed back by tow plane next morning.

March 14, 1942. Class 42-2 finished 30-hour course, 15 days behind schedule.

March 16, 1942. Class 42-4, made up of 24 Officers, started flying.

March 17, 1942. Two ships flew by Winch tow from Deadman Lake.

March 19, 1942. Continued use of two ships on Deadman as auxiliary field, total of eight ships in operation.

March 22, 1942. Lt. Wojcik in Glider #1 flew through telephone lines by parking lot, causing major damage to ship. Lt. Wojcik was seriously injured, was picked up by a ship from Douglas Aircraft at 11;30 P.M. and taken to March Field, where he died a few days later.

March 25, 1942. Class 42-3 graduated 12 days late. Class 42-5, consisting of 24 Officers, started flying.

March 30, 1942. Three more L1-A's arrived today.

April 4, 1942. Refresher course started.

April 5, 1942. Two solo ships collided while working a thermal, both landed safely with only minor damage.

April 6, 1942. Class 42-4 finished 10m days behinds schedule. Class 42-6, consisting of 24 Officers, started today.

April 10, 1942. Lt. Helm and Lt. Konchis collided in mid-air in ships #10 and #11. The ships locked together and landed on a pile of rock just over the ridge north of the field. Both students instantly killed and ships totally wrecked.

April 17, 1942. Flying called off due top high wind. Two ships were unable to get back to field and were blown over on their backs. No injury to personnel. Four gliders left in commission.

April 19, 1942. Class 42-5 graduated 9 days behind schedule.

April 27, 1942. Class 42-7, consisting of 22 enlisted men and a Lt. Colonel, started flying.

May 2, 1942. Class 42-6 finished 8 days behind schedule, leaving only 42-7 to fly.

May 18, 1942. Class 42-8 (40 enlisted men) started flying.

May 27, 1942. Instructor's refresher course started.

May 29, 1942. Class 42-7 finished 4 days late.

June 3, 1942. Class 42-9 (51 students, enlisted and Officers) started flying.

July 6, 1942. Class 42-12 (51 enlisted men) started flying on new program of 17 hours in two weeks. Instructors and tow pilots checking out at night flying. Field lighting and plan of night operations worked out and presented to Army supervisors for final approval.

July 10, 1942. Three flight shifts started, morning, afternoon and night.

July 13, 1942. Class 42-13 (42 students) started flying.

July 15, 1942. Nine-plane glider test flown off this field today.

July 18, 1942. Class 42-12 finished today on schedule.

July 20, 1942. Class 42-14 (20 students) started flying.

July 25, 1942. Class 42-13 completed course on schedule.

July 27, 1942. Class 42-15 (64 students) started flying.

July 28, 1942. Class 42-14 finished four days ahead of schedule.

August 3, 1942. Class 42-16 (53 students) started flying.

August 7, 1942. Instructor Wells and student landed at Ferry Command Field, Palm Springs. Glider hauled back in trailer.

August 8, 1942. Class 42-15 completed course on schedule. Instructor Tuntland and student had forced landing on north end of Deadman Lake just before dark. A search was started and continued until 9:30 P.M., at which time it was called off. A short time later the student and instructor walked in. Instructor Kimball and Morrison's ships collided while on double tow at night. Minor damage to ships, no personnel injury.

August 10, 1942. Class 42-17 (39 students) started flying.

August 16, 1942. Class 42-16 completed course 1 day late.

August 18, 1942. Class 42-18 (58 students) started flying.

August 23, 1942. Class 42-17 completed course.

August 25, 1942. Class 42-19 (78 students) started flying. Eight government loaned Instructors started working.

September 1, 1942. Class 42-18 completed course 3 days late. Class 42-20 (69 students) started course.

September 13, 1942. Class 42-19 completed course 3 days late.

September 14, 1942. Class 42-21 (67 students) started course.

September 18, 1942. Class 42-20 completed course 7 days late.

September 21, 1942. Class 42-22 (75 students) started course. Program changed back to 30 hours in four weeks.

September 24, 1942. Link Trainer time started today and incorporated into curriculum.

September 26, 1942. Class 42-21 completed course 8 days late.

September 29, 1942. Class 42-23 (150 students) started course.

October 13, 1942. Class 42-22 finished course 2 days late. Started use of BT-15's as tow planes. Class 42-24 (150 students) started course.

October 24, 1942. Two fields in operation on night flying.

October 26, 1942. Lt. Stockton crashed on Deadman Lake in a BT while supervising night flying there, killing himself and demolishing ship.

October 29, 1942. Flying schedule stepped up to 24 hours per day. day shifts and two night shifts.

November 10, 1942. Class 42-23 finished course 16 days late. Class 42-25 (150 students) started course.

November 16, 1942. One TG-5 and several TG-6's damaged by windstorm of previous night.

#### REFERENCES

Kidwell, Art; In The Shadow of the Palms Volume 2 Desert Moon Press 1987 Chapters 40, 42 and 43

Ludwig, Colonel Verle E.; <u>U.S. Marines at Twentynine Palms, California</u>
History and Museums Division Headquarters U.S. Marine Corps Washington D.C. 1989

Shettle, M.L., Jr.; United States Naval Air Stations of WWII Schaertel Publishing Company 1997

Slaten, Dr. A.; Wakefield Soaring Sails Skyways Magazine, November, 1942

Thompson, Norman D.; Flight Operations Manager Condor Log Glider Operations March 20, 1943

The Glider Pilot Training Program 1941-1943 USAF Historical Division, Archives Branch, Maxwell Air Force Base, Alabama

The Flying Condor, March, 1943 April, 1943 Twentynine Palms Air Academy

Weight, Lucile; The Big Birds of Twentynine Palms The Desert Trail, July 1, 1976

Photos from archives of Twentynine Palms Historical Society Harlow W. Jones was the official photographer of Condor Field

Draft prepared by Al Gartner Twentynine Palms Historical Society