

October 5, 2001

Mayor Roy Moore
Brea Civic Center
1 Civic Center Circle
Brea, CA 92821

Mayor Moore,

This year is a very important one both in Brea history and the history of world aviation. Why? Because it marks the 75th anniversary of the construction and flight of the Humming Bird, the very first low-winged monoplane in the U.S., built in a tin garage on Brea Blvd.

What makes this so important is that almost all planes in the world today derive their basic design directly from what happened here so many years ago.

For several years I've been talking to the Planning Dept about the placement of a plaque or some other remembrance to commemorate this important event. Letters were written, promises were made, but as yet nothing has happened. In several conversations with then city planners Rad Bartlam and Lisa Donnell, I expressed my desire to preserve the garage and possibly place it on the National Register. Later I agreed not to pursue that route because of the City's need to widen Brea Blvd. I did so though by telling them that I would like, if possible, a plaque placed in the sidewalk at that location. I wanted it to be in a spot where it could easily be seen by the public.

I well understand that the development of the downtown area has been a top priority, but now that it has been basically completed, I'm approaching the City once again in hopes that those promises made over the years will finally become a reality.

As you can read in the attached background information I've included, the location of the garage was 120 N. Brea Blvd., just north of the new fire station. I've already met with Joel Shennum to talk about a possible outside plaque somewhere on the station's property. I've also written and talked to David Crabtree.

It's my desire that eventually some sort of city, state or federal historical designation be given to the location and possibly an historical marker sign placed on the boulevard telling of the plaque's location.

For years I've been corresponding with the daughter of the plane's designer, Fred Thaheld. I've also met with the grandchildren of Bill Tremaine, owner of the garage and co-builder of the Humming Bird. I'm certain they would be excited and very honored to see those long ago achievements of Bill and Fred finally recognized. Tremaine's granddaughter is even donating to the citizens of Brea a newly-found and restored propeller of the 20's to commemorate her grandfather's contribution to aviation history.

Please take time to read my attached summary of events and the various news articles. A few of the dates in those articles are wrong and sometimes facts are a bit skewed, but despite that, I'm hoping you'll agree with me that some sort of plaque or monument is certainly worthy of placement.

If there is any additional information I can provide, please call me at (562) 698-5339.

Sincerely,

Brian Saul

cc: City Council
Tim O'Donnell, City Manager

120 N. BREA BLVD.

As you drove along Brea Blvd., the building in question was one of those tin structures you might pass without giving a second look, but from an historical standpoint, it was certainly the most important building in the City and probably in the surrounding area. What occurred in it would undoubtedly have qualified it for the National Register of Historic Places as well as a state historical landmark. I'm speaking of the fact that within the walls of 120 N. Brea Blvd., then called Tremaine's Garage, the first low-winged monoplane built in the United States was constructed in 1925-26.

And what makes that so important? Well, almost all airplanes in the world today, from prop planes to passenger jets to the Space Shuttle are low-winged monoplanes and derive their basic design from what was constructed here in Brea.

Billed at the time as the smallest plane ever built and appropriately called the "Humming Bird", it weighed but 250 lbs. and had a wingspread of 21 ft. and a length of 15 ft. It was truly revolutionary in its design when compared to the cumbersome biplanes that were then in general use. It could travel at a speed of 140 m.p.h., much faster than biplanes were able to fly.

Designed by a young Austrian named Fred Thaheld, recently arrived in this country and who had been flying self-built gliders and powered planes since 1915, the Brea plane was actually a community project. In a 1953 article in the Brea Progress, Thaheld remembered that "as with many new inventions, the problem of finances presented itself often. Many Brea persons contributed their time, money and knowledge to the completion of the plane."

Probably the greatest of these contributors though was Brea Constable Bill Tremaine, whose teaming with Thaheld made the construction of the Humming Bird possible. Arriving in Brea in 1918 and opening his garage, he had previously owned a gold mine, a stagecoach line from Yuma to Needles, and had been a well-known race car driver nicknamed "Wild Bill".

Sometime in late 1925 they met. It could easily have been on Halloween Day at the first Brea Air Meet, which was held to celebrate the opening of the new Brea Airport built just east of town. In any case, it wasn't long before they decided to team up because by December the building of the little plane had begun.

In late February, 1926 the work was completed, and parked on the lawn in front of the Anaheim Elks Club, the Humming Bird was shown to the press and public for the first time.

Leaders of the day in the aviation field such as Donald Douglas, Boeing and Billy Mitchell were skeptical of the plane's future, although they had seen it fly several times on test flights from the Brea and Long Beach Airports. Thaheld recalled that Donald Douglas had told him, "Single-wing planes will never work."

After a change to a more powerful engine and other adjustments, the tiny plane was transported on a flatbed truck from the Tremaine Garage to the Brea Airport on the morning of April 24, 1926. It was the day of the second Brea Air Meet, and the Humming Bird was to be on display as well as make a few flights for the anticipated crowds.

Piloting the plane was a 21 year old flyer named Ray Freeman who had been warned by Tremaine and Thaheld not to fly over a certain speed. In fact, because of the installation of that more powerful, engine a block had been placed on the throttle to prevent it from being pulled all the way out.

Taking off from the field without difficulty, Freeman circled the barley fields west of the airport and joined the army planes that were racing around the track markers, or pylons. All was going well, but then the Humming Bird started to fall behind. Suddenly from below, people saw the plane shoot forward (later it was determined Freeman had removed the throttle block), and it wasn't long afterwards that the wings collapsed and the Humming Bird made a deadly 500 ft. plunge to the ground, killing Freeman instantly.

Feeling himself responsible for the crash, Thaheld rushed from the field, jumped in Tremaine's car and headed east in the direction of Santa Ana Canyon. There he abandoned the car and just disappeared. Searchers scoured the hills and Southern California for any sign of him but without success. During the following days, numerous news articles appeared in LA and Orange Co. keeping the public informed about the search. Then, 3 weeks later he was discovered in Lordsburg, New Mexico, and Bill Tremaine headed east to convince him to return. No criminal charges were ever filed against Thaheld.

On May 14, after a few days on the road, the two men returned to Brea. In an news article that appeared that same day, Tremaine told a reporter that Thaheld "would begin at once on the construction of an engine for a plane greatly similar to the Humming Bird.

That plane, a larger model with seating for 2 people, one sitting behind the other, made its appearance early the following year, 1927.

Also that same year Thaheld and Tremaine built another plane that brought them national attention. It was a large low-winged monoplane designed to fly in the 2,408 mile Dole Race to Hawaii in August. Dubbed the "mystery plane" because of its novel construction, but officially called "The Spirit of John Rodgers," it too was built in the garage at 120 N. Brea Blvd.

Test after test of the big plane was made. Finally on August 4 it left Brea for San Diego to pick up the naval pilot and navigator who were to fly it up to Oakland and then onto Hawaii. After stops in Santa Ana and Escondido to repair oil leaks, the plane finally arrived at North Island.

More tests followed. Since the plane had no windshield and the pilot and navigator were thus forced to look out the side windows to see where they were going (the area between the cockpit and the propeller was used instead to hold fuel for the long flight), a hole was cut in the roof for the navigator.

On the morning of August 10, which was described as being very foggy, the pilot, Lieut. George Covell, started up the engine, made a check of the instruments, rolled down the runway, took off and plowed into the side of Point Loma. Both he and the navigator, Lieut. R.W. Waggener, died in a huge ball of flame. It was later felt that because of the poor visibility Covell and Waggener had miscalculated their altitude.

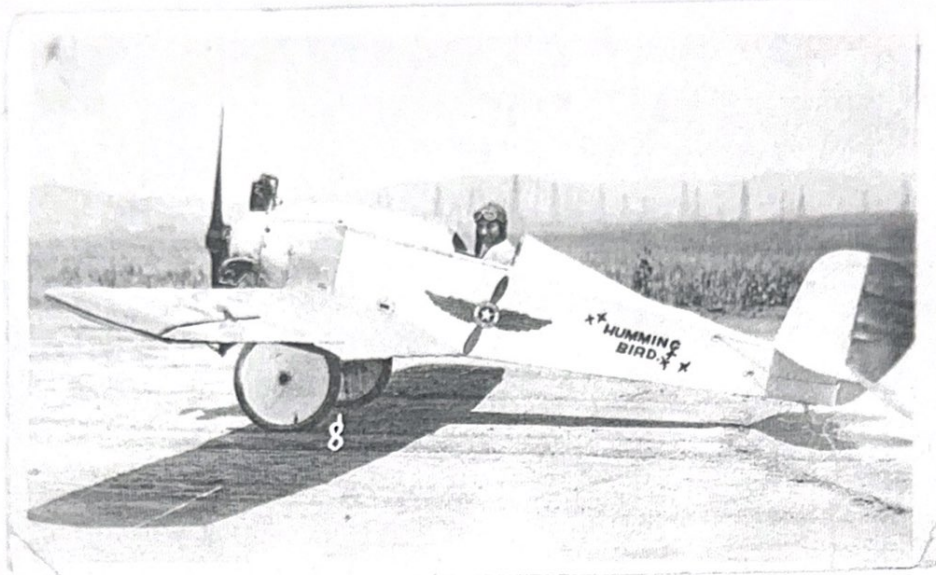
That second accident spelled the end of plane construction on Brea Blvd, and the Brea Airport gradually faded away, being replaced by the new one in neighboring Fullerton.

Thaheld left Brea not long afterwards, taking a position in Dallas, Texas with the Guiberson Co. as an advisor on aircraft and engine construction. One of his engines, of an entirely new design and powered by diesel, is currently on display at the Smithsonian Air Museum in Washington, D.C.

During World War II, he designed other diesel engines that were used in U.S. military tanks. These engines after the war were sold as surplus, and Thaheld teamed with W.D. Shaffer of Brea's Shaffer Tool Works to purchase several and convert them to power wind machines used in citrus groves to protect against frost damage.

Tremaine remained as Brea's Constable until 1942 when he retired and moved with his wife to Yucaipa where he died in 1951. Thaheld moved to Minden, Nevada, bought himself an airport and continued his research and development of new ideas and inventions. He died there in 1981.

Their collaboration in the 20's hadn't lasted all that long, but what they produced in that tin garage on Brea Blvd. was truly a remarkable advancement in the history of world aviation.



The Humming Bird at the Brea Airport
April 24, 1926



Designer Fred Thaheld-back row, 4th from left
Bill Tremaine kneeling at far
left

LIVES OF HEROES



in America are Mrs. George Fried, liner President Roosevelt, and Mrs. Harvey First Officer, who commanded the crew of the British freighter Anamor paid to their hero husbands in

AMENDMENT TO PRISON TERMS ASKED

Special Dispatch to The Daily Tribune
WASHINGTON, Feb. 24.—Another step to tighten the prohibition lid was taken today when General L. C. Andrews, dry czar, approved an amendment to the Volstead act which would make jail or penitentiary sentences compulsory in cases of convictions. Under the Volstead act as it now stands, federal courts have the option of assessing fines or jail sentences against first offenders. The amendment would eliminate the word "or" between fines and sentences and substitute "and." Minimum penalties would be considerably more severe under the Andrews amendment. The proposal was submitted to Attorney General Sargeant for approval. President Coolidge's backing was anticipated for the treasury's legislative dry program. Officials explained that under the new amendment federal courts would retain the right to suspend jail or penitentiary sentences during the good behavior

BREA AIR CLUB TO SHOW PLANE

'Air Flivver' of Radical New Design Constructed at Local Flying Field

Heralded as the world's smallest practical airplane, the monoplane built in Brea by William Tremaine and Albert Thaheld, will be on public exhibition for the first time tomorrow afternoon on the lawn in front of the Elk's club, Anaheim; under the auspices of the Brea Air Club.

The completed airship is the result of two month's work on the part of the two aviation enthusiasts, who are of the opinion that the public is ready to fly, and a "flivver of the air" should be developed to encourage the more general use of travel by air. The little ship differs from the standard design of aircraft in many ways. There is no upper wing, and all braces and controls are "built in", no wires or struts being visible.

Great secrecy has attended the building of this little craft, and flyers and manufacturers from all over Southern California, who have heard rumors of the revolutionary design and miniature dimensions of the plane, have threatened to flock to Anaheim for a glimpse of the new model.

Wing curves, angles of incidence, rudder surfaces, landing controls and everything connected with the design have been scientifically determined by the engineer, Albert Thaheld, a young Austrian, who has only been in America six months, and has applied his knowledge of glider construction to the designing of this new ship.

On account of the midget proportions of the new aircraft, which weighs only 250 pounds fully equipped, it will be possible according to Commodore Frank Mason of the Brea Air Club, to land and take off in a city street, and permission will be asked from the police and other officials to take motion pictures of maneuvers in front of the Elk's club building.

Flighting touches are being put on the monoplane this morning, in readiness for its exhibition tomorrow in connection with the dinner meeting of the Brea Air Club at the Elk's dining room, to which leading aviators of the southland have been invited. Many local men plan to attend this dinner, which is one of a regular series of such affairs sponsored by the Brea Air Club to stimulate interest in aviation.

START QUIZ ON

Briton Government Scored by Commons

LONDON, Feb. 24.—The British government was subjected to heavy fire in the house of commons this afternoon for its failure to take action in connection with the banning of Vera, Countess of Cathcart from the United States.

Mr Austin Chamberlain, foreign minister, stood his ground, however and declared that Great Britain will not intervene in the case, will not attempt reprisals and will not seek the United States to enter an agreement for reciprocal action whereby the granting of a visa by a consular will be tantamount to a guarantee that the holder of the visa will be granted admittance at the port of entry.

FORD WORKERS ROTARY GUESTS

Educational Show Force at Club Dinner Meet; J. H. Wray Speaks

Frank R. Carroll was in charge of a splendid program given at the Rotary luncheon this noon at McFarland's Cafe. He had as his guests members of the Ford educational road show which is now showing in Fullerton along with members of the Fullerton Ford agency.

When the program was turned over to Mr. Carroll, he made a few remarks about the significance of the show and then introduced J. H. Wray, director of the show, who explained just what work was being done during their extended tour. He emphasized the point that one of the objectives of the educational work which they were undertaking was to make the farming life of the country more interesting and attractive. He complimented the city of Fullerton and the local Rotary club highly for the reception which had been accorded.

The Standard Oil Company was next introduced and spoke briefly on several phases of the work. C. H. Jensen, also with the show, was introduced and told his listeners of good roads and what they meant to the country in which he stressed the necessity of present day civilization for rapid transit which was made possible only by good roads. Following Mr. Jensen's talk all of the members of the show gave three cheers for the Fullerton Rotary club and Frank Carroll.

During the luncheon the club

HOLD FOUR IN POLICE DEATH

Los Angeles Policeman Killed as Man Says He Fears Burglars

PROBE STARTED Man Asserts Visitors Claimed They Were Federal Officers

Special Dispatch to The Daily Tribune
LOS ANGELES, Feb. 24.—Patrolman Carl Drake, 28, was shot and killed here today on the steps of the home of A. W. McGuire. McGuire, according to police, admitted firing several shots at Drake, declaring he thought burglars were entering his home.

Mystery surrounds the visit of the policeman to McGuire's home.

Holding McGuire, an local, on suspicion of murder, and Jack Kaleser, who admitted he accompanied the officer to the Budlong avenue address "to promote some liquor," as a material witness, deputy sheriff began investigation of the strange affair.

Two other men, Paul G. Simpson, alias Paul Brock, 217 1/2 Binali place, and Benjamin Taylor, 22, 217 1/2 Binali place, also were arrested and held for questioning, several hours after the investigation began.

McGuire told officers that he fired the shot that caused the patrolman's death, but claimed that his home had been surrounded by bootleggers before he moved into it two weeks ago, and that hijackers had raided the place. He said that he thought the hijackers had returned, and he was detaching his family.

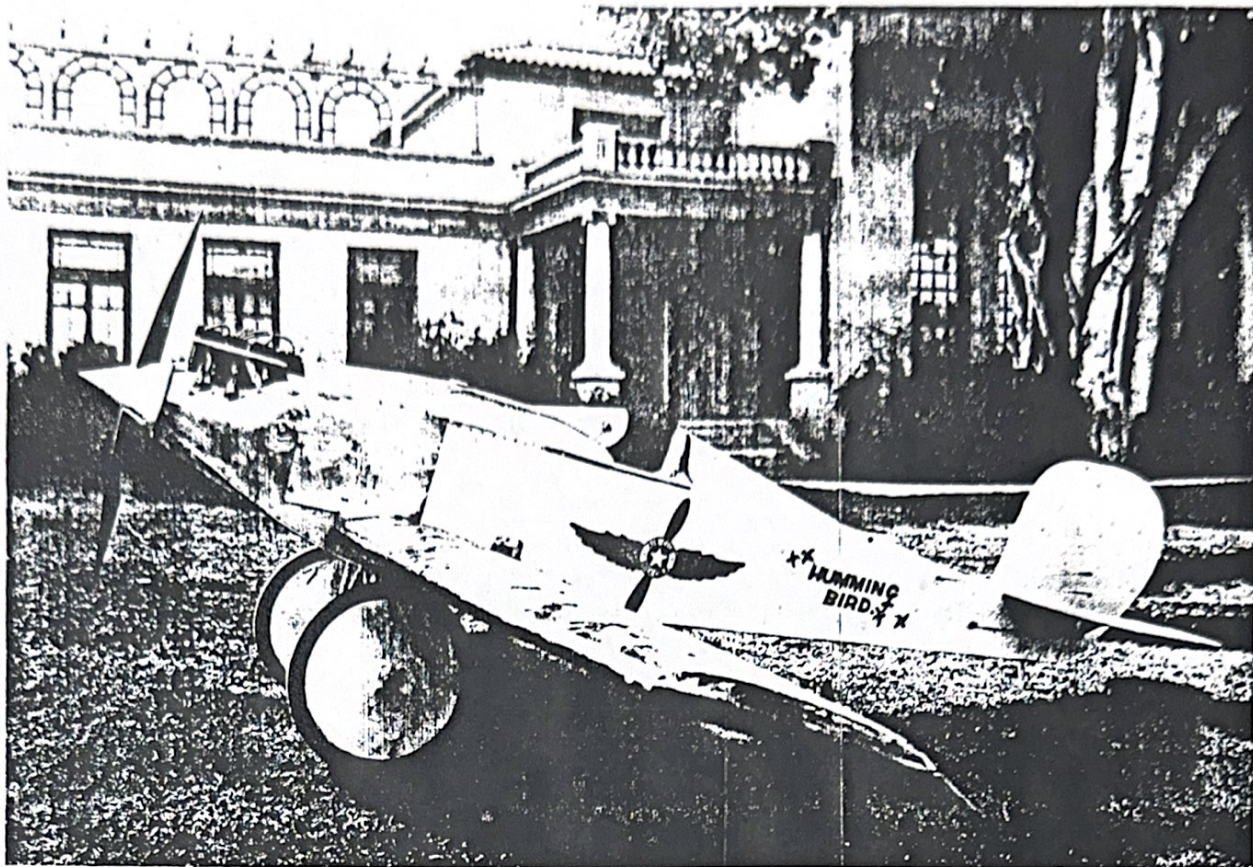
Last night, he declared, he was awakened by a knock on the front door.

"We are federal officers," he declared a voice said, and then a threat to smash the door was voiced, he continued.

Then, McGuire said, he saw his wife and children in the back room for safety, and arming himself with a revolver, he opened the door at the figures outside. He then opened the door and saw one man dragging the other away.

In the county jail he had little to say, except that he was sure that Drake had died. "I thought I was firing low, and as I passed through the door, I had no idea that anyone would be hit," he meant to "scare them away," he was defending my home.

ACCOUNTING IS



THE HUMMING-BIRD

Humming-Bird Monoplane, Midget Ship, is Built by Brea Designers

ONE of the most unique airplanes that has yet been produced in the West is the Humming-bird, a monoplane with a weight, including motor, of only 250 pounds, which has been built at Brea, California, by W. D. Tremaine, and F. A. Thaheld, engineer and designer.

The Humming-bird has a wingspread of twenty-one feet, and its length over all is only fifteen feet. Fuel capacity is eight gallons, which it is said is sufficient for a five hour flight with full throttle. The wing-surface of this tiny plane is eight square feet, the rudder surface is fifteen square feet, and the elevator surface seven square feet. The ship is designed for a speed of ninety-two miles per hour, and for a climb of 3281 feet in twelve minutes.

In its preliminary tests the ship was powered with a small motorcycle engine which refused to function after about five minutes in the air so that no real idea of what the little plane's possibilities are could be gained. But not-

withstanding this, the plane climbed to 700 feet without trouble and was going strong when the motor got hot, and the ship was forced to come down.

F. A. Thaheld, the designer and engineer of the ship is a young Austrian who has been in the United States only a short time. He had experience in airplane building in his own country, where he also did considerable glider experimentation on his own hook. The Humming-bird, while strictly his own design is similiar in general respects to the light planes which are far more common in Europe than in the United States.

W. D. Tremaine who financed the construction of the Humming-bird, and who added his own practical knowledge of mechanics to the work, is an old-timer in the automobile business, where he is nationally known as "Wild Bill" Tremaine. A decade ago "Wild Bill" was one of the best known automobile race drivers in America.

Thaheld and Tremaine are now engaged in building a motor for their lit-

tle ship. The engine is being constructed in Tremaine's shops at Brea, but beyond the fact that it will be radial in type and is designed to develop forty-five horsepower, with a weight of one pound per H. P. nothing has been given out regarding it. It is known that the motor is Thaheld's own design.

Thaheld and Tremaine propose to build the Humming-bird in quantity as soon as they have perfected the motor, and completed satisfactory tests with the ship. The smallness of the plane, and the simplicity of its construction make it possible to build it quickly and cheaply.

TURKEY BUYS FLEET

Turkey has contracted with the Swedish plant of the German Junker Airplane Company for eighty fighting planes. A huge airplane armed with numerous machine guns and fitted with an armor-plated tower to enable firing in all directions is also under construction for an undesignated South American country.

Powered Flight Marks Golden Anniversary -

Brea Engineer Designed, Piloted Nation's First Single-Wing Plane

By JOE BROWN

One day in 1924 a heavy portion of Southern California aviation enthusiasts gathered about a sandy open field in Long Beach. In the center of the field — which since has become Long Beach Municipal Airport — squatted an airplane of entirely new design.

To the crowd, it was very odd — the plane had only one wing. In those days, the monoplane was "an impossibility." Only biplanes — aircraft with two wings joined by a complicated mass of struts and wires — were capable of flying.

But Fred Thaheld, today a Brea design engineer, proved the skeptics wrong.

STEEL FRAME BODY

A trim little single-seater powered by a 42-horsepower motor which Thaheld assembled from parts of other engines, the craft looked to the skeptics as completely non-flyable. Its fuselage was a steel frame over which was stretched a doped fabric.

But it took off gracefully, reached 140 miles an hour, and landed again.

The incident thrust a new name into the Air Age limelight—Thaheld's craft, designed and built in Brea, was America's first successful monoplane.

Today in Brea, the 52-year old Austrian-born engineer recalls the flight and his succeeding aerial exploits with quiet modesty.

MUCH TO CREDIT

Though his name has never reached the prominence of other Air Age pioneers, Thaheld has the following to his credit:

1. Participation in and successful completion of the Dole San Francisco-Hawaii flight in the '20s;
2. Development and practical application of the nation's first radical diesel-powered aircraft engine;
3. Setting the still-existing record for sustained hours aloft in a single-engine airplane; and
4. Design and development of diesel engines for tanks, during World War II.

The 1924 flight by Thaheld at Long Beach amazed even the most liberal-minded engineers:

"Still," Thaheld recalled, "Donald Douglas told me, 'Single-wing planes will never work.' Today Douglas is one of the biggest pro-

ducers of that type aircraft."

NOTED FOR ENGINES

Thaheld's name is not known primarily for his flying — his design of engines has been recorded as the Austrian's most prominent accomplishment.

He designed the diesel aircraft engine in the mid-'20s but saw its perfection in 1929. Testimony to his engineering skill came in March, 1946, when Thaheld held a diesel-powered single-engine plane aloft for 85 hours over Florida. That record still stands.

Now a design engineer in Brea for Diesel Power Inc., of Pennsylvania, Thaheld attended an engineer school in Austria after he had tinkered with engines for several years. In 1916, when he was 14, he rigged up a motorless glider and a 30-foot wingspan and flew it off his father's barn.

BECAME LANDLORD

Three years later, he learned to fly powered planes. He once traded an airplane for an apartment house, but found being a landlord wasn't as enticing as flying — so back to his pilot's seat and drawing board he went.

After designing the famous little low-wing plane in Brea, following his arrival in the United States, he organized the Pacific Aircraft Co. and set himself up in business.

The "Humming Bird" which made the initial flight at Long Beach was only the first of many other monoplanes to come off Thaheld's design board.

He was well advanced as a plane-builder in 1929, when he obtained a contract from the S. A. Guiberson Co. of Dallas, Texas. He and Guiberson together designed the nation's first successful diesel engine for aircraft.

FUEL CONSUMPTION

It was lighter than gasoline-powered engines, Thaheld pointed out, and its fuel consumption was less than half.

"On one flight," the Brea mused, "I flew from Long Beach to San Diego for 14 cents!"

One of his first diesel engines is on permanent exhibit at the Smithsonian Institute in Washington, D.C.

The diesel aircraft engine was the early '40s when World War II changed the picture almost overnight. Diesel engines were needed ready for big-scale production in

any of them still. for tanks, and the Guiberson company turned its production in that vein.

"ROOM" FIZZLED

An expected private aviation boom following the war dwindled away to almost nothing, Thaheld declared. The diesel engine in the air likewise dwindled away in the interest of aircraft enthusiasts.

Still the boom will come, Thaheld believes.

"And if and when it does, we'll be ready."

The Austrian-accented Brea engineer said his current hopes are pinned on the Navy's reported interest in a diesel engine for non-rigid airships. The advantage of low cost and extended cruising ability, Thaheld said, would make the diesel engine a valuable instrument for aerial patrol.

Among the latest developments of Thaheld, who works

in a design room in Brea, is Diesel Power's "Weathermaster," a thermostatically-controlled horizontal propeller-type frost machine. It has been widely used in Orange County.

AVIATION PROGRESS

Commenting on the progress of aviation during the first 50 years of the Air Age, Thaheld declared:

"Aviation is still an infant. The world hasn't even scratched the surface of possibility. We have swung from propellers to jets — but a whole new world lies ahead."

Speaking on his own field — engines — the designer said that aircraft bodies are far more advanced than their power plants.

"When we master the engine, we will have made more progress than that made in the first 50 years altogether."

Somewhere along the imposing list of aviation pioneers, many of whom Thaheld remembers as personal friends — Thaheld, too, deserves a special niche.

"No single man represents aviation progress," he said. "It's coordinated skill, personal endurance and the ability to look the skeptics straight in the eye that counts."

Thaheld looked them "straight in the eye" in 1924 on a sandy Long Beach field. With America's first low-wing monoplane and successful diesel engine to his credit, the mild-mannered Brea is ready for

Fred Thaheld Recalls Building World's First Full-Cantilever Monoplane in Brea

Twenty-nine years ago this month the first low-wing, full cantilever monoplane to be built in the United States was completed in Brea under the direction of its designer, Fred Thaheld, who presently lives at 239 S. Madrona.

The sleek little open cockpit plane, which was dubbed the Hummingbird, was built in a building that still stands at 140 N. Pomona and which is now occupied by George R. Brown. In 1924 it was the Bill Tremaine garage.

The plane was designed by Thaheld and its construction was directed by him, but it was actually a community project. As with many new inventions, the problem of finances presented itself often. Many Brea persons contributed their time, money and knowledge to the completion of the plane.

Thaheld recalled this week as he talked to The Progress that one of the persons involved in constructing and lending money for the plane was Harry Becker, now living at 1700 Brea Road. A lot of the work for the then unconventional plane was done by Brea Boiler Works and Shaffer Tool Works, according to the designer-engineer.

Flown From Brea Field

It took eight to nine months to build the low wing flying machine which Donald Douglas said would "never work." Thaheld was a ripe 25 years of age when it was completed and towed to a flying strip east of Brea known as Loftus Field near the corner of Imperial Highway and Carolina.

The first test pilots of the new plane were Ray Freeman and the designer himself.

After a few successful flights it was realized that the Hummingbird was underpowered. So Thaheld and his fellow Breans set to work building a new power plant. When completed it turned up to 85 horsepower, more than double the original engine.

It was known by Thaheld that this motor was too powerful for the ship to be flown under full throttle, so a block was put on the throttle to prevent it being pulled all the way out. Several successful flights were made by both Freeman and Thaheld with the new motor.

Most of the flying, according to Thaheld, was between here and Long Beach where the municipal airport was just an open field.

Aviation Leaders Skeptical

Even air conscious men such as Donald Douglas, Boeing and Billy Mitchell were skeptical of the plane's possibility. They saw it fly from the Long Beach and Brea airports several times. Brea was well-known among aviation circles because of Thaheld's work.

Whenever possible, Thaheld flew the plane for interested parties who might possibly aid in financing future models. It was hoped that some farsighted persons would see the possibilities in the low wing monoplane and offer to invest money so that it could be put into production. The engineering problems were overcome by the ingenuity of Australian-born Thaheld, but time after time he was slowed down or stopped by the lack of resources.

One day in March of 1925, about four months after the Hummingbird's maiden flight, the usual group of curious spectators gathered at Loftus Field to see a demonstration for Air Force General Billy Mitchell.

Prior to this the top speed of the ship had been 140 miles per hour, which was fast enough to allow it to run circles around the air force's clumsy biplanes of that day.

First Ship Crashes

Freeman took the ship up for the demonstration. It is not known, but perhaps he hoped to impress Mitchell with the ship's capabilities and thus gain an air force contract. Anyway, this was the first flight of the Hummingbird.

While in the air, Freeman took the ship off the throttle and gave the sleek ship the full power of the 85 horsepower engine.

The strain was too much for the steel-framed fuselage. The doped fabric started peeling off and the plane fell into a spin and crashed. Freeman was killed.

Six or seven other planes similar to the Hummingbird were built in Brea by Thaheld after the loss of the first ship, but the necessary financing for successful production never did come through.

Finally, in 1927, Thaheld built his last plane in Brea. It carried a five cylinder gasoline engine.

In 1927 Thaheld started concentrating on diesel engines where he was to meet with his greatest success. This is the field in which he is still vitally interested today.

Gets Backing

With Los Angeles oil man S. A. Guiverson backing him, Thaheld

started to work on a new engine for aircraft. It is not known if he perfected an engine and if it was an airplane for flight.

An enormous engine for aircraft. It is not known if he perfected an engine and if it was an airplane for flight.

One of Thaheld's diesel engines in the famous tute in Washington, D. C. next to Lindbergh's.

Records

Several records were set by Thaheld in his power plants. His altitude record for a non-supercharger, in 1946, he set at 85 hours for a plane on the books.

At about the time he and Guiverson had working models. But Guiverson's plane was on the books.



aspire
dim,
wishes
holiday
ain



tiny tear doll, set
house. I love you.
Mary Andruski
★ ★ ★

you come down the
will have some hot
the stove for you.
anta.

Harlen Bivens
★ ★ ★

doll and a pair of

Love,
Mescha Kiddle
★ ★ ★

Claus,
truck. I want a ping-
want a new wagon.
a Schwinn Traveler.
Donald Prichard
★ ★ ★

you're very jolly. I like
er. I want you to visit
his Christmas Eve. I
a bike.

Love,
Karen Carver
★ ★ ★

Dear Santa,
I want a bike and I want a
Toni doll. Will you please say
"hello" to Rudolph?

Love,
Lynne Harper
★ ★ ★

Dear Santa,
I want a gasoline truck, a tow
truck, a draw bridge, a dump
truck and a wood truck.

From Tommy Spencer
★ ★ ★

Dear Santa,
I want a bicycle, an army suit,
and a train. I love you, Santa
Claus.

Gordon Pugh
★ ★ ★

Dear Santa Claus,
I want a big tablet, a corsage,
an eretor (sic) set and a pair of
slippers. Thank you for the toys.

Kathy Ellis
★ ★ ★

Dear Santa Claus,
I want a dolly wit (sic) brown
hair and a suitcase (sic) fo (sic)
clothes to go with her. Thank
you.

Bonnie Fields



Christmas
Cheer

DOUGLAS SH
YOUR FRIENDLY PLUM
505 E. Date, Brea

DER'S

LOWEST SHE

The Extra Coin

By Frank Hall

George Hawkins has promised to have his sweepstake-winning drawing of Santa and the reindeer lighted up for spectators who missed it last week. He will have the lights on and the display in animation Wednesday and Thursday nights, he says. The address is Date and I Drona.

John Daugherty, local chairman for the St. Jude Hospital fund raising drive, is preparing his campaign for Brea. If you would like to make a personal contribution, call Mr. Daugherty.

This is be-kind-to-merchandise week - because - they - are - clearing-inventory. At the Ward Harrington office they are taking everything off the shelves and placing it in the middle of the office floor. Then, when they get it on the shelf, they count. Well, maybe that isn't right. Marvin Johnson was in the help count the knotholes.

Dick Winder and Thomas of Chiksan returned from a trip to Canada in time to spend Christmas in Brea. I bet getting to be quite an international traveler.

The home of Mr. and Mrs. Kirk Hill was in the critic during the fire in the Mt. San Antonio.

Next thing for excitement will be the Brea city election. Three council members will be voted on. It is not clear at this time if the incumbents will seek another term. Councilmen whose terms expire in spring are Hugh Frank Schweitzer Jr., and Monroe.

Don't touch us! We're not! Clieff Perrin and I are in the Publisher's list of a weekly newspaper publishing trade publisher with a national circulation. It happened like this. My name that I had been on Clieff's list because of activities last fall. I looked recording I don't know. So I did that paragraph in the newspaper.

Westensee and I are tired of these national Californians. We've been stuck in many times. It will never fade for snow again.

Mark Sullivan

started to work on a diesel engine for aircraft. By 1929 he had perfected an air-cooled radial engine and it was installed in an airplane for a successful test flight.

An enormous amount of money was spent by Guiverson in helping Thaheld perfect the diesel motor. When completed it was better than gasoline engines and its fuel consumption was less than half. In all he built 18 different models of diesel engines for aircraft.

One of Thaheld's first aircraft diesel engines is now on display in the famous Smithsonian Institute in Washington, D.C. It sets next to Lindberg's Spirit of St. Louis.

Records Set

Several records were set by Thaheld to prove the economy and reliability of his diesel power plants. In 1933 he set an altitude record of 22,000 feet for a non-supercharged engine. Later, in 1946, he kept a single-engine, diesel-powered ship aloft 85 hours for a record that is still on the books.

At about the same time that he and Guiverson joined forces, Thaheld had even developed a working model of a jet engine. But Guiverson decided to concentrate on the diesel idea and so

Thaheld worked with him for the next 17 years as his chief engineer.

Since then the diesel engine that had its creation on Thaheld's drawing board has been used in such varied things as wind machines and tanks.

The latest project on which a Thaheld-designed diesel motor may be used is under study by the Navy. The service's non-rigid air ships may someday be powered by a diesel motor designed in the Thaheld engineering office at 227 S. Pomona. Such a motor would be less likely to cause an explosion and could give the blimps an extended cruising range at low cost.

Diesel Jet Engine

Another one of the current projects of this father of many diesel engines is a dual combustion jet engine which would use diesel fuel.

The model which is on his drawing boards now could be perfected to get 50 per cent efficiency. The present day jet turbines obtain about 8 per cent efficiency from the fuel burned, according to Thaheld.

This 52-year-old man of Austrian heritage believes that the possibilities in aviation have barely been scratched. He believes that the aircraft engine is yet to be mastered and brought to the stage of advancement reached in aircraft bodies.

Hopes to Continue Here

Thaheld hopes to continue living in Brea, but he fears that he may have to move to Pennsylvania to be near the firm which he is now design engineer Diesel Power, Inc. At present he flies east every month to keep tabs on latest developments in the production of his designs.

Season's Greetings



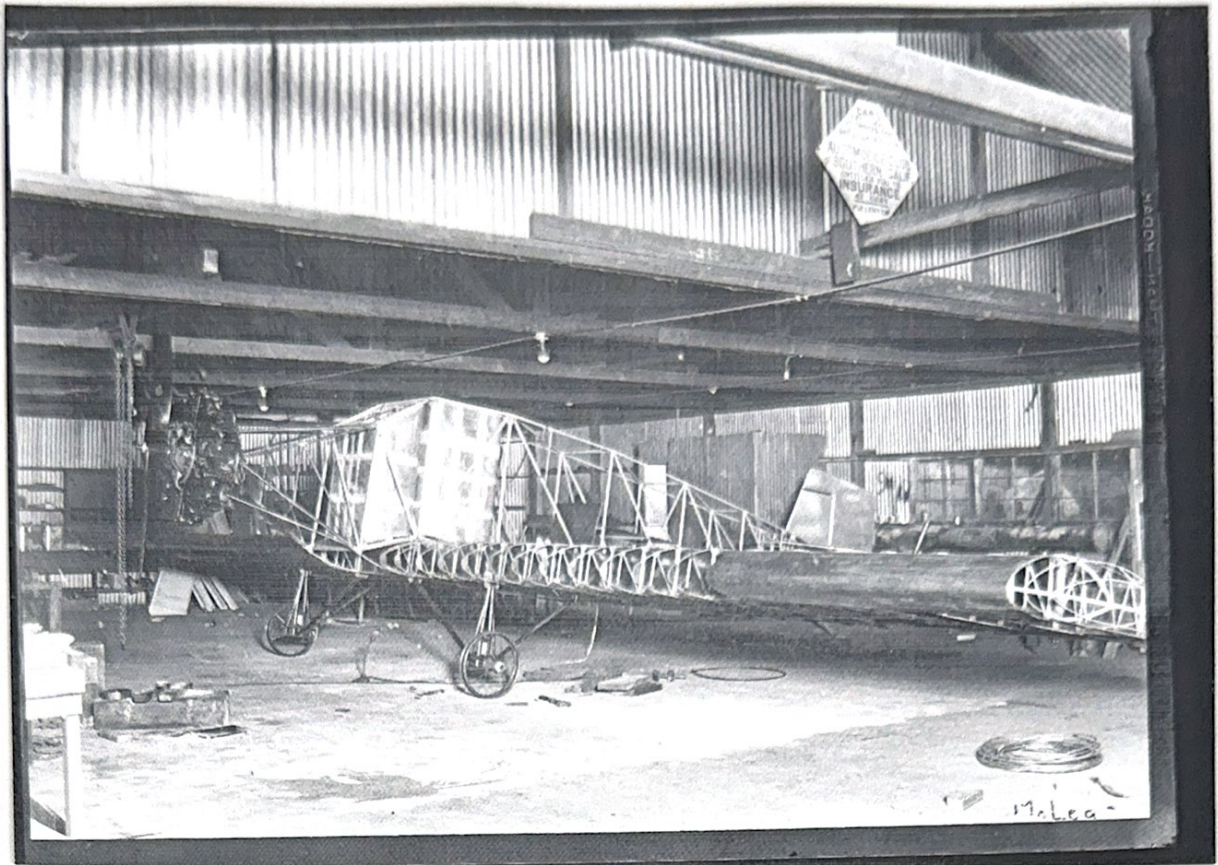
May yours be filled with pleasant people all through the Holidays.

BREA ELECTRIC
524 E. Imperial

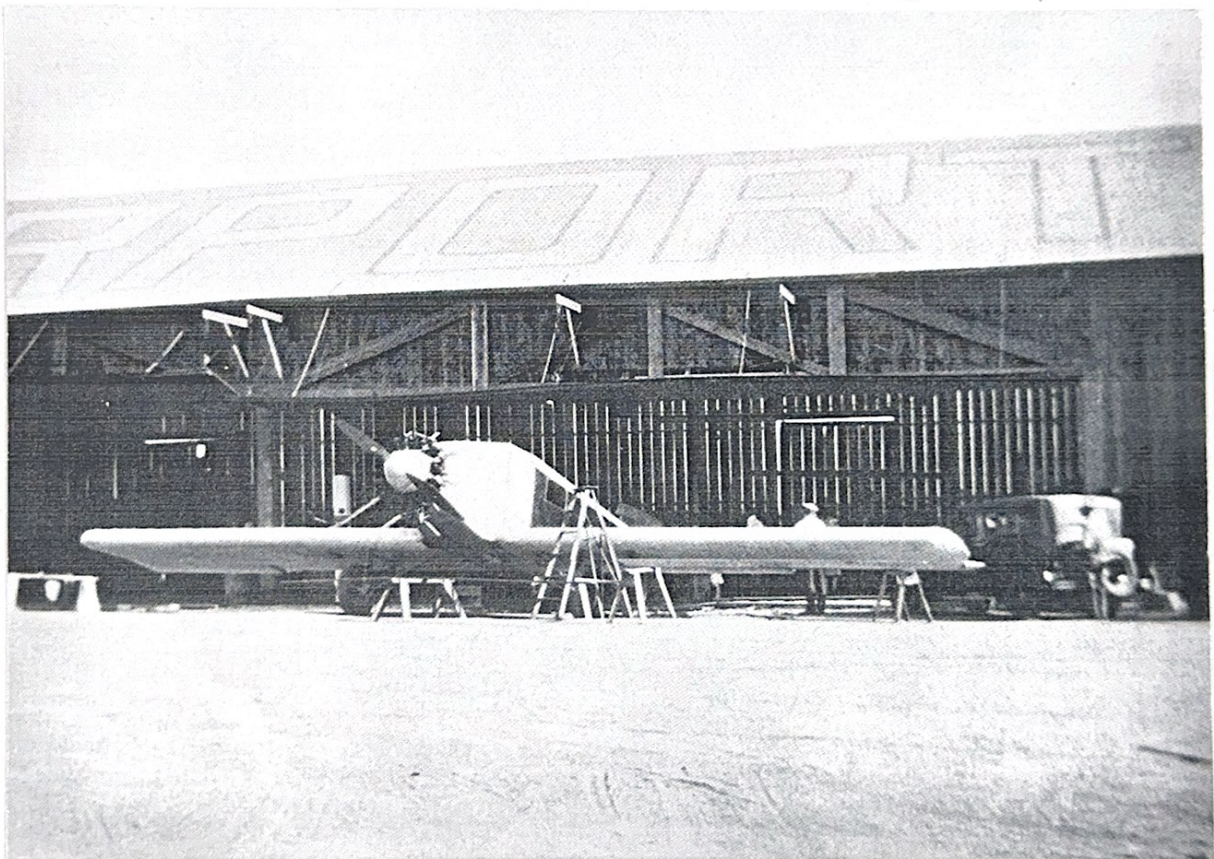


Christmas cheer

LAS SHARP
FRIENDLY PLUMBER
JAasper 9-3006



The Dole Race plane in Tremaine's Garage - 1927



Later at the Brea Airport

TEST FLIGHT OF BREA MYSTERY PLANE NEAR

Airman Ready to Soar Into Air in Initial Tests

With a hundred-odd details awaiting the finishing touches of skilled artisans, but ready for the air nevertheless, the mystery ship of the trans-Pacific hop being constructed at Brea by William Tremaine and Fred Thaheld, is to have its test flight this evening. Five o'clock is the hour tentatively set.

At that time Otto Shaffer, to whom has been intrusted the task of taking the ship into the air for the first time, will taxi onto the runway at the Brea airport.

The great Wright whirlwind motor, identical with those which carried Lindbergh, Chamberlin, Byrd, Maitland and Smith to fame in over-ocean flights, will roar into life. Short run up and down the field will "feel" out the controls. Brief hops will "feel" the ship.

Then a run into the wind and the great ship is expected to leave the ground with an ease which belies its size and carrying capacity.

Radically different from the type of monoplane now being constructed, the Brea ship has the wings set below the fuselage, instead of at or near the top. Instead of being suspended from the wings, the cable compartment within the streamlining body rests upon them.

Widespread landing gear is attached to the wing structure at a point beneath where struts from the top of the fuselage are attached. Control wires are largely eliminated and where necessary to move ailerons and rudder are enclosed in a cutting down wind resistance.

Hundreds of persons have visited the Brea airport hangar where work of assembling the plane has been progressing during the past few days. It was expected that more than a 100 world kites at the airport this afternoon to watch the initial testing of the ship in the airport this afternoon to watch the initial testing of the ship in the air.

Wet Courts Delay Davis-Cup Tournney

Fear-Man's Spine Is Fractured When Timber Crushes Him

Caught beneath a heavy timber while it was being unloaded from a truck on West Santa Fe avenue, where hoisting operations were in progress today, Lloyd Annin, 33, of this city, suffered a possible fracture of the spine.

Annin was taken to the Fullerton hospital and later to the Anaheim sanitarium where X-ray pictures were taken with a view to determining the exact nature and extent of his injuries.

Mrs. Annin, wife of the injured man, who is a nurse at the Anaheim hospital, was called to his side. Following the X-ray, the injured man was brought back to the Fullerton hospital, where the course of treatment to be followed will depend upon the outcome of the pictures of his injured spine.

Annin was born in Fullerton and is well known here. He is a nephew of Bert Annin, city trustee. Two years ago he suffered a fractured skull in an accident which occurred while employed by A. D. Moody in moving a house. He was working for Moody when the accident occurred today.

'Sleeping Girl' Is on Way to Recovery

By Daily News Tribune U.P. Leased Wire
LOS ANGELES, July 29.—In a bungalow somewhere beyond the city limits, the address of which is being kept secret, Clara Brummont, "sleeping beauty" of Fresno, sat up unaided today, the second time since she was attacked by the strange malady 122 days ago.

"A momentous occasion in the case of this paralyzed girl, who, but a little more than 100 days ago could hardly lift an eyelid, can now sit alone," said Dr. William J. Peacock, in reporting the latest development in his patient. According to Mrs. R. F. Tyler, her nurse, the "sleeping girl" now cries when hungry and can feel when she is being moved about.

Through fear of intervening city authorities, the girl was removed from a private sanitarium to the bungalow, where she will remain until her slow struggle to recovery is over.

Ex-Indiana 'Dragon' Faces Scandal Quiz

CHEERING FOLK GREET WALES AT QUEBEC

Baldwin, Party Member Seeks 'New Confidence' in Canada

By Daily News Tribune U.P. Leased Wire
QUEBEC, QUE., July 29.—The Prince of Wales, Prince George Premier Baldwin and party landed in Quebec today, coming ashore at 10:02 a. m. from the Canadian Pacific liner Empress of Australia.

Cheering crowds awaited them on the wharf. Formal welcoming ceremonies began immediately.

It was 9:40 a. m. when the great Canadian Pacific line Empress of Australia cast anchor in the river opposite Quebec. She was bedecked in flags and the royal ensign of England's ruling family was flying from her mast head. Shipping was hung with pennants, streets were lined with people and colorful in their decorations of Canadian and British flags and the plumed crest of the Prince of Wales.

Forty newspaper correspondents were the first to board the liner. The river current made the task of bringing their cutters beneath the gangway difficult.

As the boat was maneuvered Premier Baldwin, smoking a big pipe-stemmed pipe, suddenly stuck his head in a porthole high up on the liner and grinned broadly. The correspondents cheered. A few minutes later, Mrs. Baldwin, wearing a black feather trimmed hat and black satin trimmed dress, looked out and smiled interestedly.

Premier Baldwin received the correspondents in a small writing room over the main ball room of the ship.

"You have come a long distance to meet me and I have come farther to meet you," Baldwin said. "I was last in Canada 37 years ago and to look at you, none of you were then born. I came on the 7000 ton steamship Alaska and was so kindly treated by the crew that I wish I could see some of his family now."

It developed that he and another young man were guests on that occasion of the late Sir William Price, former man of Quebec.

Baldwin spoke familiarly, rubbing his hands from time to time

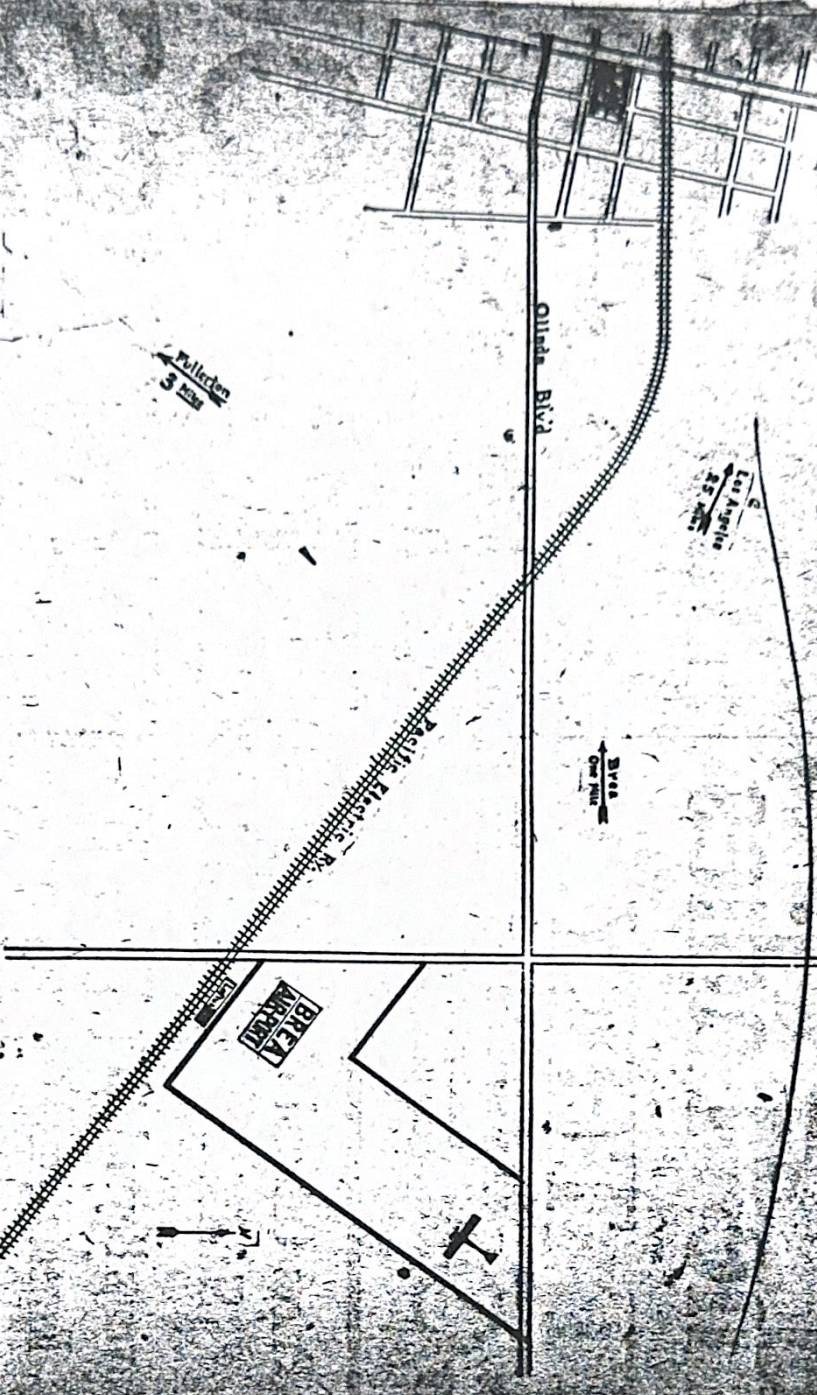
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By Daily News Tribune U.P. Leased Wire
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By Daily News Tribune U.P. Leased Wire
LES, July 30.—Fu-
will be held here

NEW BREA AIRPORT HELD ADVANTAGE TO WHOLE COUNTY

Johnstone Oct 19, 1933



Above is shown map giving lo-as bo-
 sities of new Brea Airport, where prise
 nearly 100 airplanes are already of the
 stand up for a huge serial dem-mo-
 onstration on October 31, which
 will include Army and Navy were in
 planes as well as aircraft entered pilots
 its faithful owners. Many of the their
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 wire of the big air meet at the of
 Brea Airport a week from next that
 Saturday, according to officials, some
 who declare that the event will last

port Harbor will be a feature
 of the event of the celebra-
 tion of Orange county's first air-
 meet at Brea will be the air line
 from Brea to Newport Har-
 bor, for which the City of Newport
 Beach will order the trophy.
 The air meet is scheduled for
 Brea, Saturday, October 31st, begin-
 ning at 11 a. m.

NAME NOT HEAD OF

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Dallas Engineer Invents Guiberson Diesel Engine To Be Used in Army Tanks

Fred Thaheld Is Pioneer in Low-Wing Monoplane Design.

International recognition has come to a Dallas automotive and aeronautical engineer with the decision of the war department to locate the \$2,500,000 Guiberson Diesel Engine Company plant at Garland.

Fred Thaheld of Dallas, member of the Guiberson organization, is the inventor of the radial type Diesel engine which the ordnance department of the United States army has found fully suitable to propel tanks of varying type. Soon the Guiberson Diesel engine, Thaheld's brain child, will be turned out in large numbers at the local plant. Already, hundreds of these engines are being manufactured at Harvey, Ill.

Invention of the Guiberson Diesel engine, a military motor which may play as an important part in this world war as did the famous Liberty Motor in the first conflict, is only one of Fred Thaheld's notable achievements.

The young engineer also is credited with having designed the first low-winged monoplane in the history of American aviation.

Native of Austria.

Fred Thaheld was born in Austria, but is a naturalized citizen of the United States. As a mere youngster, he evinced a talent for repairing and designing automobile and airplane engines. He worked as a stunt man for Ernest Lubitsch, famed European moving picture producer, in Vienna. He raced motorcycles through flaming buildings, took hard falls, jumped from airplanes and risked his life almost daily as part of his work.

Young Thaheld lost no time in coming to the United States when he got an opportunity. He located in Hollywood in 1923 and made his way as a parachute jumper. In one of his first jumps at San Diego, his chute caught in some high-powered electric wires and caught on fire. Thaheld swung beneath the wires and escaped with a few bruises.

In 1924, Fred Thaheld designed the first low-winged type monoplane ever seen in the United States. It was revolutionary when compared to the cumbersome biplanes then in general use. He christened the little plane the "Hummingbird."

It attracted nation-wide attention in aviation circles. Donald



FRED THAHELD

Fred Thaheld, a Dallasite, whose brain-children could play a large part in an American victory over the axis, is inventor of the radial type Guiberson Diesel engine. He also is credited with invention of the low-wing monoplane, the design most popular today in military aviation. Hundreds of the powerful motors will be made at Guiberson's new Garland plant, now under construction.

Douglas of Douglas Aircraft, and Prof. A. A. Merrill of Caltech, gave the machine an examination and test. In a few years Douglas Aircraft and other manufacturers generally adopted the low wing design for their outputs.

Developed Monoplane.

In 1926, Thaheld developed a low-wing plane for the disastrous Dole flight from San Francisco to Hawaii. The plane he designed was of the low wing model and was known as the "Spirit of John Rodgers." Lieutenants Covell and Wagner, of the United States navy, were to fly the plane to Honolulu

from San Francisco. Flying from the San Diego naval base, preparatory to the start of their trans-Pacific flight, the two officers crashed their plane into a mountain in a dense fog near Point Loma, and were killed instantly.

In 1926, Fred Thaheld designed what he then called the Thaheld Aero Diesel engine for planes. This was the forerunner of the present Guiberson Diesel engine, which will soon be manufactured in quantity in Dallas. It was a radial engine, air cooled, with no spark plugs, carburetor or electrical transmission.

Fred Thaheld met S. A. Guiberson, Jr., president of the Guiberson Corporation, in California in 1929, and showed him the blueprints of his Diesel. "I don't know a darned thing about engines," Mr. Guiberson told him, "but my son, Allen, is very much interested in automobile racing and automobile engines, and has designed and built three cars."

Allen Guiberson thought the engine well worthwhile and told his father so. "How much will it cost to develop the engines?" S. A. Guiberson asked Thaheld. The young inventor said that he guessed that it would cost about \$5,000. Mr. Guiberson made that amount available, but before the Guiberson Diesel engine reached its present state of perfection, the Guiberson interests had spent \$1,500,000 on the idea. It took years of work and experiment before the war department picked the Diesel radial as ideal for use in army tanks, but the principle of the engine is the same as in 1926.

Tested by Navy.

The Guiberson Diesel engine has been tested by the United States navy in airplanes and has been licensed by the U. S. department of commerce as being suitable for airplanes. However, World War No. 2 arrived and the demand went up for tanks and still more tanks. The entire energy and output of the Guiberson organization was put to work developing tank engines.

The Guiberson Diesel tank engine is heavier and stronger than the airplane engine, being several hundred pounds in excess of the weight permissible in aircraft. When the present emergency passes the company will resume the manufacture of their airplane engine.

Thaheld is working on still more startling devices. He is at present busy with plans for a new type of aircraft which he believes, if successful, will revolutionize aerial warfare. This plane, which he calls the turbine plane, has no propeller and its engine has no pistons, crankshaft or other reciprocal parts. It is shaped like a cigar with retractable wings and rudder. It is designed for stratosphere use, and Thaheld hopes that it will attain terrific speed and towering altitude.