



OX5 AVIATION PIONEERS TEXAS WING NEWSLETTER

June 2009

No. 41

George Vose, Secretary-Editor

Box 908, Alpine, Texas 79831 432-837-5788

gvose@yahoo.com

Message from the Secretary-Editor:

In reviewing the latest Texas Wing membership roster, here are some interesting facts: Currently we have 140 members. (124 annual and 16 Life). Sadly, within the past month we have lost two faithful members – Julian Dendy of Alvarado and Robert Baas of Southlake. Nine members live in other states – Florida, Georgia, Alaska, Colorado, Arkansas (2), Mississippi, Wisconsin and New Mexico – but they wish to retain membership in our Wing.



A decade ago the Texas Wing had only 38 members and this number has increased to 140 today. Why has this growth happened? Perhaps because our Wing has gained 103 “younger” members. (Seventy-four percent of our membership are in the group once designated as “Historian” members). This group has willingly accepted the burden of managing the whole shebang. (THANKS to them!). Perhaps the quarterly newsletter during the past decade has helped, as well as Bill Pritchett’s distributed Texas Wing roster and the frequent activities in various Texas locales*.

No matter what the cause of our Wing’s progress, let’s continue with it. It appears that we have the highest membership renewal rate of all of the 21 Wings.

***SOME ACTIVITY LOCALES:** Galveston, McAllen, Brownsville, Kerrville, Alpine, Fort Worth, Gainesville, Roanoke, Wichita Falls, Arlington, San Antonio, Seguin-Kingsbury, Tyler, Mineral Wells and Midland.

The Mystery Airplane

The parasol airplane on the right is a

Velie Monocoupe

Mono Monosport

Pietenpol Sky Camper

Mohawk Pinto

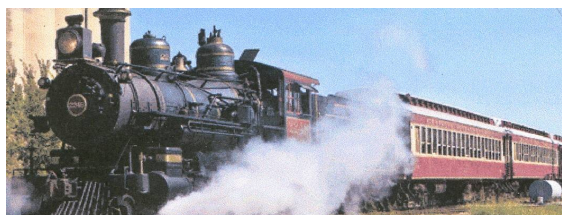


This classy two-place airplane is co-owned and flown by Texas Wing OX5 member Dr. Jim Hays of Brownwood.

(Information and description on page 3)

Ride on a steam train?

At our winter meeting in Brownsville, the Texas Wing decided to submit a proposal to host the 2009 national reunion in the Dallas-Fort Worth area. This ride might be on the agenda: We will travel by steam passenger train on the Grapevine Vintage Railroad to the Fort Worth stockyards and return to our hotel – all in one afternoon. Sounds like fun? As plans develop you will be notified through this newsletter and the national OX5 NEWS. Members are working on it. We'll let you know.



Earl Metzler's "Wings With Springs" (By George Vose)

Some time in the early 1950s I came across an interesting article in **Flying Magazine**. It told of Earl Metzler's "Wings With Springs" invention. I did not know that a couple years later I would have the opportunity of flying with Earl in his spring-strutted Aeronca Defender.

(Metzler's dihedral development is well documented in Richard Wissolik's book, A Place in the Sky, published by the St. Vincent's College Press in Latrobe, Pennsylvania. Some of the material in this article is derived from Wissolik's book).

Earl Metzler was born in Somerset County, Pennsylvania in 1914. In 1927, at age 13, Charles Lindbergh, the "All-American Hero", became Earl's hero, and a year later he hiked to the Hill Airport in Latrobe. There he met a young pilot who agreed to take him on a ten-minute flight in his Curtiss Jenny for three dollars. The flight lasted thirty minutes. The pilot would touch down and then apply power and go around. When they landed the pilot told him that he had just soloed the day before and needed the practice.

A couple years later Earl went to Chicago and took some flying lessons. He soloed, but the great depression had set in so he returned to Pennsylvania and joined his brother in long distance trucking. But aviation remained his first love, and a few years later he finally earned his private certificate.

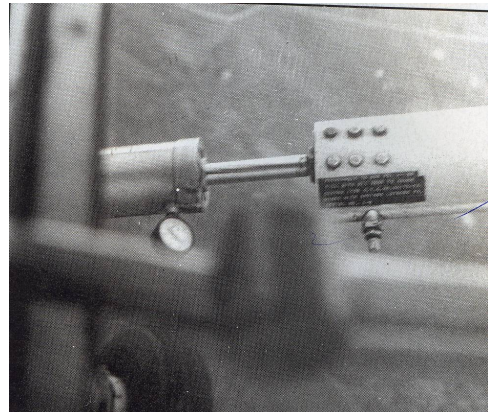
In the meantime Earl learned that the Ryan monoplane that Charles Lindbergh flew to Paris was unstable. At Lindbergh's direction the Spirit of Saint Louis was constructed with insufficient dihedral for stability. A similar Ryan was being modified in Pittsburgh by threading out the strut threads to increase dihedral. Earl looked on and asked the mechanics, "Why don't you use a hydraulic jack there to give any kind of dihedral that you want?" In 1931 Earl received a patent on what he called a "wing leveling device" and he received a CAA approval. Taylorcraft bought a number of kits. Then he put his shock-absorbing struts on a Cessna 170. "It practically flew itself", he said. "The Army looked at it for a while, but became disinterested. I just couldn't do the two inches of paperwork to get grants for the project, and my patents ran out".



Earl Metzler continued trying to market his invention into his later years, always without success, always with frustration. "No one will listen", he said. "No one will

give it a fair try. Some are afraid to go up in an airplane installed with the spring. Someday someone will listen and respond". But few people did.

One day in July, 1953, George Vose was grounded in Latrobe, Pennsylvania for engine repairs. **(Two years later the OX5 Aviation Pioneers would be organized in this very same hangar).** I surprisingly learned that the man featured in the **Flying Magazine** article that I had earlier read was sitting across from me in the hangar office. We talked. Earl Metzler sensed my interest and suggested that I take a flight with him in his two-place Aeronca Defender that was equipped with his invention. I accepted his invitation on that sunny, bumpy afternoon. I was quite familiar with the Aeronca Defender. After all, I soloed in one in 1941. Very frankly, I could see no real difference in the stability of Earl's airplane and the stability of the ones I had flown. (But I did not tell this to Earl). But perhaps I was distracted just by looking out and observing the tiny shaft of that hydraulic pump squishing in and out. What if the shaft failed? The whole wing would be long gone into the blue yonder.



But let's face it. Aviation would not be where it is today if we had not had dedicated experimenters like Earl Metzler. Earl passed away just short of his 90th birthday. Until the end he loved to talk about his Wings With Springs, but even more, he loved to talk about airplanes and flying.

The “Mystery Plane” on page 1. Yes it’s a Pietenpol Air Camper



This unique homebuilt airplane has been restored by James Hays and Harold Stieber in Brownwood, Texas. It was first flown, after restoration, two months ago. We heard about it via e-mail from Dr. James Hays (OX5 22474) on Sunday, March 20. This message from James: “After eight months of a partial restoration by Harold Stieber and myself the critical gust load tolerance turned out to be one mph faster than this afternoon’s wind! It

bounced around like a BB in a box car but stayed controllable throughout the flight. Looking forward to several more hours of flying out of the bird”.

We were intrigued and asked Dr. Hays (an FAA designated medical examiner) for more information. His reply:

“My neighbor and I bought the Pietenpol last July. It needed finishing and repair/restoration. It was damaged when a hangar partially collapsed. Bobby Jones, of Sanger, Texas did the structural repair and hung another 65 Continental on it, and it was purchased by Harold Stieber and myself. We did a lot of necessary assembly and repairs, painted old fashioned numbers, replaced brass placards and plumbed in the center-section with copper and brass. The pictures were made by Demita Crofford whose husband (an A&P) did the conformity inspection and signed our work”.

“The Pietenpol hops off the ground and climbs out with me only like a hopped up Cub, cruises about 70 indicated in rough air and stalls about 41 or 42 power off. It is a bit tail heavy, especially with me in it, and requires forward stick pressure. We will put a couple of 1929 style high tech washers under the forward stabilizer spar and a couple elevator shim tabs to see if it helps. The next move would be to put on longer diagonal cabane struts to move the wing back a couple inches”.

Bernard Harold Pietenpol built the first of this model in 1929, and partial plans were published in **Modern Aviation** magazine in 1931 and Pietenpol started to sell plans in 1933. (All six pages!) Originally designed for a Model A Ford engine, other engines were used. Pietenpol himself built several airplanes and adapted them to the Corvair engine”.

“If the wind ever dies down we will fly off the rest of the required hours so we can take it cross-country”.

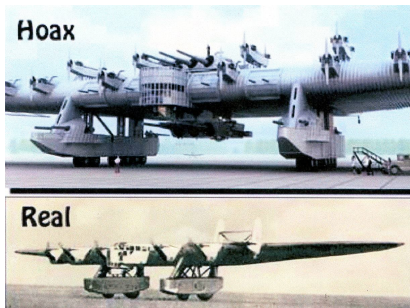
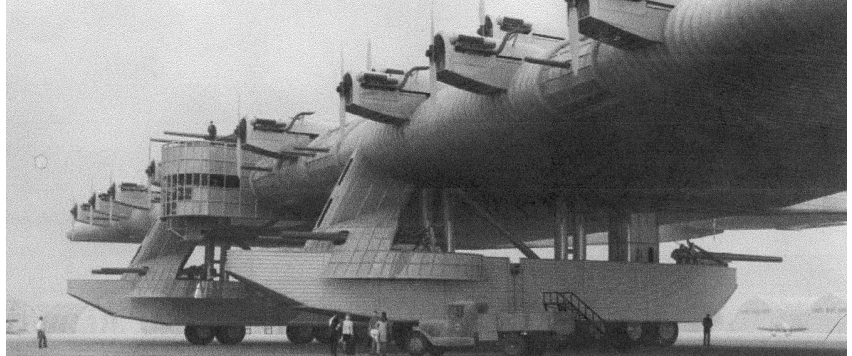


The Air Camper is fun to fly

The internet ... Don't believe everything seen on it

Some people seem to have fun concocting hoaxes. One item presently going around on the net which shows a gigantic Russian monstrosity with sixteen engines that supposedly flew in the 1930s. Its text reads: "In 1930 the Russian Army was obsessed with the idea of creating huge airplanes. At that time they proposed to have as many propellers as possible to help carry those huge flying fortresses into the air ... Not many photos were saved at that time because of the high secrecy levels".

The Russian Bomber was the Kalinin K-7. One was actually constructed but it was not nearly so big nor had so many engines as the doctored picture on the internet (shown on the right). It crashed on a test flight killing fourteen people aboard and one on the ground. The project was abandoned during the Stalin regime.



The real K-7 is shown on the left (bottom) with the doctored picture immediately above. Its empty weight was 27 tons, not as heavy as a Boeing 747. It had seven 750 h.p. engines. Here are some internet comments about the faked 18-engine Kalinin K1: "It's clearly a hoax. To lift its nose on takeoff it would have to pivot around the rear wheels which are too far behind the center of gravity." "If it ever those guns were fired the recoil would tear it apart". "Too much drag. (Fixed gear, external cannons, corrugated skin, etc.)"

Rest assured. The Pietenpol airplane on page 3 is not a hoax!

The OX5 Waco 10, a classic "classic"

In Joseph P. Juptner's aviation volumes, the "U. S. Civil Aircraft Series", hundreds of airplanes are described in the order of their A.T.C. (Approved Type Certificate) numbers. Three pages in Volume 1 describe the famous Waco 10 OX5 biplane, A.T.C. #13. We will quote some of the descriptions of the Waco 10 as written by Juptner. (We know that a number of Texas Wing OX5ers once enjoyed flying this airplane).



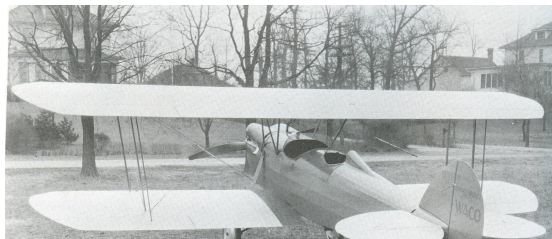
"Tucked away in the memory of literally thousands of flyers are fond recollections of happy associations with the friendly and thoroughly lovable old "Waco 10" biplane. The "Ten" was an airplane that will go down in aviation history as just about the most popular airplane of its period. Its trim and simple beauty and pleasant character, together with its gratifying performance with the OX5 engine, made it extremely popular with the small operator

and private owner. The 'Ten' was used for about everything from passenger hopping, dual instruction and solo rental, to charter trips to out-of-the-way places"

"Its popularity became so great that the Waco factory was forced to turn out over 365 in 1927 alone. That was quite a sizeable production for those times. Very much like the previous Model 9, the Waco 10 was also a three-place open cockpit biplane and was powered with the

8 cylinder Curtiss OX5 engine of 90 h.p. We can see the 'Ten's' refinements over the previous Model 9. It had roomy and comfortable cockpits, an easy entrance passenger door, adequate wind-shielding and a streamlined head rest for the pilot. It had a split-axle type long leg 'oleo spring' landing gear of fairly wide spread and 'spring leaf' tail skid".

"It was continually built until 1930 when the available supply of OX5 engines finally ran out and then a few planes were equipped with 'Whirlwind J5' engines. In the 1928 Air Derby from Los Angeles to New York, well-known pilot 'Tex' Rankin flew an OX5 powered Waco 10 ahead of all other OX5 powered airplanes".



"The fuselage framework was chrome-moly tubing, faired to shape with wood strips and fabric covered. The fuselage tank of 37 gallons was good for 5-1/2 cruising hours under normal conditions. The selling price at factory in 1927 was \$2460 and reduced to \$2385 in 1928".

LEFT: A Waco 10, showing the un-cowled OX5 engine and oleo-spring landing struts.

A nice time in Gainesville By Texas Wing Governor George Chandler

(Photos by George Chandler, Bill Pritchett and Dale Gleason)



The 2009 summer reunion of the Texas Wing was held June 12-13-14 in the Tomlinson hangar at the Gainesville airport. It was again held with the annual Fly-in of the Texas Chapter of the Antique Airplane Association. This is the largest Fly-in in Texas.

We lucked out on the weather. It was great, with over a hundred airplanes in attendance. Thunderstorm activity a few days earlier had some aircraft owners crossing their fingers. Beautiful old and new airplanes flew in, and the golf cart provided by Jack Brouse was kept busy touring the flight line. There was a lot to see. The star of the show was an out-standing P-40 in



"Flying Tigers" National Chinese markings. Next to the cockpit was Tex Hill's name. Tex was a World War II Ace with the Flying Tigers and a member of the Texas Wing OX5. He has "gone west", but not forgotten.





Wing Secretary George Vose and Wing Governor Cade Woodward flew in from Alpine in George's Cessna 172. George is in the process of having the 172 stripped for painting. Partly stripped, part old paint and paint partially stripped, it really was an eye catcher. George said it was not hard to find on the flight line.

It was really nice of David Vinton, the Gainesville Airport Manager, to let us use an air conditioned lounge in the terminal building for our meeting. The Tomlinson hangar was crowded and noisy. The meeting was called to order at 12:10 by First Vice President Bill Pritchett. Discussion was held about the 2009 National Reunion to be held in Grapevine. More on the details later. As time is being taken for putting on the national reunion together, a time and place for our next Wing meeting was not decided. More information will follow in the newsletter.



George Vose, Barbara Kraemer and Bud Johnson



George's and Dale Gleason's "Four Deuces"



1931 Waco RNF with Kinner B-5 125 hp engine

TO: Texas Wing OX5ers !!



Check the envelope this newsletter came in. Is there a yellow line under the address?

Every once in a while it is necessary to check our mailing list to see if members have paid their 2009 national dues. If there is a yellow line below the address on the envelope, **this might be your last Texas Wing Newsletter.**

Have you paid your 2009 national dues? If not, simply send your \$20 check to George Vose OX5, PO Box 908, Alpine, TX 79831

At this time, since the national secretary has resigned, George must do the work of national president, national secretary, membership manager, and even clerk of the OX5 store. We agree that in this dilemma there may be errors in our dues system. If you think that you have paid your 2009 dues, (and there is a yellow line below your address), just respond saying "I have paid my 2009 dues". We'll take your word for it. As we say in this part of the Lone Star State, "Gracias". (Texas OX5ers who have paid their national dues through September 30 will be listed in Bill Pritchett's membership booklet to be distributed to all Texas members).