

OX5 AVIATION PIONEERS TEXAS WING NEWSLETTER

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Note from the Secretary: We had an excellent "mini-reunion" in Brownsville in mid-February. By coincidence, it was Valentines' day weekend. How appropriate that February 14th was the 62nd wedding anniversary of Jack and Susie Brouse. (Jack and Susie are Texas wing governors and Jack is a past-wing-president). We spent many nice hours in the hospitality room talking about old time aviation.



We talked about test changes for the better. <u>One</u>: Why, on the early private pilot written test, did one need to know the firing order of a nine-cylinder radial engine? <u>Two</u>: How about "radius of action with an alternate airport"? <u>Three</u>: Those messy compass turning errors. On the other hand, perhaps these items aren't so disposable after all.

I know a new pilot who had to return to Alpine to re-plan his route when his programmed <u>global positioning system-slaved-to-his-auto-pilot course</u> to Colorado led him right into Texas Mount Livermore. (Fortunately the weather was good so things turned out O.K. All things considered, pilotage (navigation by landmarks) and dead reckoning (navigation by time-speed-distance) still work pretty good. New gizmos are excellent, but let's not forget the basics.

The Brownsville winter reunion was great. We could use more members next year. A write-up about our meeting follows in this newsletter, beginning below on this page.

This letter's "mystery plane"



The airplane on the left was an exciting new design in the early 1940s. It cruised at 120 mph with a Continental 75 h.p. engine. It was one of the Culver series designed by engineer Al Mooney.

The airplane is a

A. Culver "Dart"

B. Culver "Cadet"

C. Culver Model V

D. Culver PO-14

Information and description on page 5

OX5 winter reunion (Where the palm trees grow)

The Rio Grande Valley could not have been prettier than during our February 14-16 reunion in Brownsville. What place could have been nicer, with temperatures in the low 80s and palm trees rustling in the on-shore breeze? The service and friendliness at the Holiday Inn Brownsville were the very best, and the food at their Galleria restaurant was excellent. We had a great time. It is unfortunate that more Wing members from the northerly parts of Texas did not attend.

Several members went shopping and dining (with complimentary margaritas) in nearby Progresso, Mexico. Because, at the time, we were uncertain about the new need



for passports when returning to the U. S., other members preferred the green hotel lawns and the Club Ruchi. (None of our group, it seems, swam in the pool, exercised in the gym, or even enjoyed the heated jakuzi in our hospitality suite).

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The hotel rates were moderate (we had a good OX5 discount), and there were no chartered busses. Thanks go to the volunteer drivers of personal automobiles who drove us to the Iwo Jima Memorial in Harlingen and to the CAF Hangar at Brownsville airport.

The Iwo Jima Memorial adjacent to the Marine Academy in Harlingen was impressive. The memorial is the

mold from which the full-size bronze statue in Washington was molded. Because it is not



perfectly weatherproof, it is maintained by visitor donations. In the nearby museum we watched the 30-minute movie describing the Battle of Iwo Jima. The film was introduced by a jovial octogenarian who said that he was a 20 year old marine when he participated in that battle. The photos show some of our group observing the memorial from a distance (left), and a photo of Hazel Fehmel photographing it from below its base (right).



The CAF Hangar at Brownsville Airport was good, but for those who have seen the CAF museum in Midland, where it was relocated several years ago, it was not quite as good as expected. The basic museum was very good, and the movie about the history of the CAF was well-done and informative. The aircraft display in the main hangar was



mostly WWII trainers – the Fairchild PT-19 (and the Canadian PT-26 Cornell), the Stearman PT-17, the Ryan PT-22, and other models A Piper L-4 represented the WWII liaison airplanes. The Beech C-45 was actually a post-war executive D-18.

Finally, the "Pilot Lounge" at the hangar exit provided snacks, sodas, beer and wine – an excellent respite after quite a lot of walking.

On Friday and Saturday evenings in the hospitality room, Jack Brouse gave interesting talks with videos about the procurement and reconstruction of an OX5 Alexander Eaglerock, and the development of the LTV four-engine tilt-wing XP-142. (Jack was chief of structural materials in its development). Most of the audience was unfamiliar with the airplane until this time. (A not-so-good picture from Jack's TV screen is shown on the right).



Brownsville, in the Rio Grande Valley, is about the same latitude as Miami. When one enters the Valley, it is almost like entering another state. There is a touch of Mexico. Most people are bilingual and very friendly. Let's have another reunion there next year!

After 80 years this Boeing 40C flies again

A few years ago, when Cessna Aircraft ceased building most single engine airplanes for a while, AOPA offered a prize of a "better than new" Cessna 172. On this same theme, in this article are great pictures of a "better than new" Boeing 40C.

After intensive restoration by Addison Pemberson of Spokane, with his sons Ryan and Jay, and wife Wendy (and many volunteer helpers) this big Boeing 40C flew again. It had crashed in the mountains near Canyonville, Oregon in October of 1928.



The Pratt & Whitney Hornet-powered biplane was among the first airplanes to carry passengers along with air mail service.

In the early days of flying, pilots challenged the wind and weather in open cockpits. Enclosed heated cabins were a thing of the future. In the Boeing 40C the pilot continued to face the wind and weather in a far-back open cockpit while the four passengers, who braved the perils of flying, sat in a warm cabin between the engine and the pilot. While the Pemberton-restored 40C shows a handy intercom for conversation between the pilot and passengers, it is



probable that there was no passengerpilot communicating capability in the 1920s. No meals and drinks were served by flight attendants. And probably the noise level was pretty loud. And the heater may not always have provided enough comfort in the insulated "cabin".



Front passenger seats

Back passenger seats

Some of Addison Pemberton's notes: "With my son Ryan in the cockpit, we engaged the inertia starter for the first time in 80 years, ran it through six blades, and hit the mags. The 1340 Pratt lit off strong and smooth before he could even get to the booster coil on the first try! We ran the airplane for 20 minutes, which included a full power run that rattled every window in town".

"The test flight this weekend went perfect with my sons, Ryan and Jay, flying chase in our Cessna 185 loaded with video and camera ... I was able to fly the airplane hands-free within a few minutes of flight ... in all configurations I never used more than 1-1/2 degrees of trim change, including slow flight at 55 mph. The airplane is very comfortable and pleasant with excellent ground handling, good elevator, very good rudder control and heavy but effective ailerons, with a disproportionate amount of rudder needed for more than 50 percent travel. The visibility is very poor, but not difficult. The overwhelming surprise is stability! Like a rock".

"Landing is a very pleasant final at 80, 70 over the fence and hold 3 degrees nose high, and the big 36-inch diameter wheels and soft 11-inch travel oleo gear make a transport touchdown in the 50s almost imperceptible".







For more information and photographs on the restoration of the Boeing 40C by the Pembertons, click on:

wwwPembertonAndSons.com

Turbine VS Round Engines

This item was sent to us by OX5 member David Sanderson of Alaska and Texas. While one word is not in everyone's vocabulary, we thought it was cleaver enough for publication in our newsletter.

DEDICATED TO ALL THOSE WHO FLEW BEHIND ROUND ENGINES (OR WERE TOLD ABOUT THEM BY OLDER PILOTS)

We gotta get rid of those turbines - they are ruining aviation and our hearing.

A turbine is too simple minded, it has no mystery. The air travels through it in a straight line and doesn't pick up any of the pungent fragrance of oil or pilot sweat.

Anyone can start a turbine. You just need to move the switch from "OFF' to "START" and then remember to move it back to "ON" after a while.

Cranking a round engine requires skill, finesse and style. You have to seduce it into starting. On some planes, the pilots aren't even allowed to do it.

Turbines start by whining for a while, then give a ladylike poof and start whining a little louder.

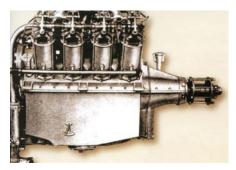
Round engines give a satisfying rattle-rattle, click-click, BANG, more rattles, another BANG, a big macho FART or two, more clicks, a lot of smoke and finally a serious low pitched roar. We like that. It's a GUY thing.

When you start a round engine, your mind is engaged and you can concentrate on the flight ahead. Starting a turbine is like flicking on a ceiling fan. Useful, but hardly exciting.

Turbines don't break or catch on fire often enough, which leads to aircrew boredom, complacency and inattention. A round engine at speed looks and sounds like it's going to blow any minute. This helps focus the mind!

Turbines don't have enough control levers or gauges to keep a pilot's attention. There's nothing to fiddle with during long flights.

Turbines smell like a boy scout camp full of Coleman lanterns. Round engines smell like God intended machines to smell.



Certainly the favorite engine of our distinguished group is the hand propped OX5. We recall the audio tape played in Roger Freeman's car adjacent to the fall bratfest at Old Kingsbury Aerodrome a couple years ago.

Some of us remember the gradual replacement of OX5 engines by radials as more power was needed. Then came turbines and jets. The chuckling purr of the OX5 engine is gone. It was music to our ears.

Roger Freeman: How about preparing a tape or DVD of all the aerodrome engines and selling them to OX5ers?

A remarkable OX5er

Go to any Texas or National OX5 reunion and you will probably meet Hazel Fehmel. Without any doubt, she will be there. In 1975 Hazel attended the national reunion in San Antonio (she still has that program in her collection),



and has attended almost every national reunion since then. Reunion locations have been in such large cities as San Diego, Seattle and San Francisco, and more off-beaten places such as Corning, N. Y., Dearborn, Minn., Anchorage, and Niagara Falls.

In Brownsville last month Hazel showed members two of the several massive volumes she has compiled about the Texas Wing and the National OX5. She has carefully preserved every item, all letters received, and reunion programs over a 33-year span. Each is in a plastic cover in a ring binder. If we need an item, location or a date, Hazel will have it ready for us. The Texas Wing had no official historian until our winter reunion in McAllen in 2002. When we learned about Hazel's extensive collection, the office of Wing Historian was immediately formed, and she has been our historian ever since. Hazel was awarded the title of National OX5 Historian of the Year at San Carlos in 2004.

Hazel's husband, Bill Fehmel, at age 24 first became involved with "ag" flying in Mississipp and dusted cotton with a J-S Travel Air in 1939. During WWII Bill

instructed primary flight to air force cadets in Corsicana and Bonham, Texas. Post War, after a stint of commercially flying a Cessna T-50 in Denison, Texas, he and Hazel, with their children, moved to Bay City and established an aerial application business using war surplus Stearmans. The business soon expanded to the use of six turbine AgCats for spraying cotton, rye grass, soy beans, wheat, but mainly rice. The business was known, and still is known, as "Fehmel Planes". They were not afraid of something new, and soon their AgCats were equipped for precise spraying applications with "Satloc" (satellite location),

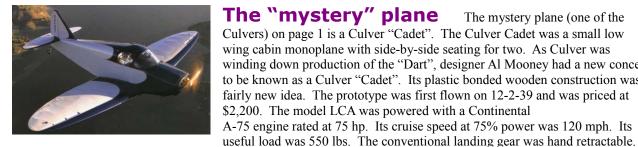
Bill Fehmel passed away on May 8, 2001 at age 85. In the early 1990s, even in failing health, Bill went to the flight strip every day to check on the six turbine airplanes and pilots. When Bill was wheel chair bound Hazel escorted him on many trips to national OX5 reunions. At one reunion she pushed Bill with his wheel chair into Mexicali, Mexico and returned.

Since the late 90s Hazel continues to operate Fehmel Planes. She rises at five o'clock every morning in order to open her "crop dusting" business at sunrise. The business employs a number of ground staff and pilots waiting to make early-morning engine sounds over croplands all around the Bay City area.

Hazel still attends almost every OX5 activity. At all Wing reunions she can be relied on to set up a "Hazel's Table" in the hospitality room, loaded with appertizers, good food, drinks and spirits. When chores are needed, Hazel always does them before anyone else can volunteer.

Our Wing is fortunate to have you, Hazel. We APPRECIATE YOU! Bill Fehmel with "round" engine





The "mystery" plane The mystery plane (one of the Culvers) on page 1 is a Culver "Cadet". The Culver Cadet was a small low wing cabin monoplane with side-by-side seating for two. As Culver was winding down production of the "Dart", designer Al Mooney had a new concept to be known as a Culver "Cadet". Its plastic bonded wooden construction was a fairly new idea. The prototype was first flown on 12-2-39 and was priced at \$2,200. The model LCA was powered with a Continental A-75 engine rated at 75 hp. Its cruise speed at 75% power was 120 mph. Its

The Cadet was first manufactured at Port Columbus. Ohio and later moved to Wichita, Kansas as Culver Aircraft Company. Walter Beech was president, and Al Mooney, the chief designer of the airplane, was vice president. Information from Juptner, Joseph, U.S. Civil Aircraft Series, Vol 8, McGraw-Hill, 1980.

A message from the Wing President Dan Brouse

I hope this message finds everyone healthy and happy and you are having a great 2008. We have had our first meeting of this year, which was in Brownsville, Texas. Unfortunately, Kaye and I were unable to be there. Kaye had to be in court that week. I can't make all of the events, but I try to be at as many as I can. Our next gathering will be the second Saturday in June in Gainesville with the Texas Antique Airplane Association's yearly fly-in.

From what I understand, the meeting in Brownsville was extremely good although not many members could make it. They had wonderful tours of the CAF hangar and the Marine Military Academy. The speaker was fantastic. (I would say that because it was my Dad). He had a video and discussed the rebuild of his 1929 Eaglerock. What a great airplane! For that matter any old OX5 still flying is a great airplane.

This year the OX5 Aviation Pioneers turns 53, and the FAA will be 50. As most of you know, the FAA started out as the Federal Aviation Agency and then, in 1966, changed to the Federal Aviation Administration – about the time I started logging time. As I look back, flying seemed to be a lot easier than it is today. I don't mean the physical part, but all the regulations part. And then there's the electronics. In 1958 the Narco Omnigator MK II was state of the art for general aviation aircraft. This was the first radio I used in Dad's Cessna 150. Even though Narco was up to the MK 12 by that time. It was a great radio and it was even able to get me all the way to Atlantic City and back. All this GPS stuff is confusing and hard to understand how to use it properly. I ask some of the young pilots and they say "Yes sir. It's easy. I'll show you". Damn kids, what do they think? An airplane is a video game?

Hope to see everyone in Gainesville.

Dan Brouse

TEXAS WING OFFICERS AND GOVERNORS 2008				
GOVERNORS		OFFICERS		
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