

# 5 Kywriter.

## Monthly Newsletter of the Calgary Ultralight Flying Club

# **June 1998**

# Across the Wing

by Wilf Stark

Our May meeting was rather interesting.

Bernie Kespe and Glen Bishell both shared recent experiences when their planes were in considerably less than optimal flying attitudes! Such experiences are never easy to share, but we all can learn so much from them. Thank you both for your candor, and willingness to help us become a little wiser and hopefully safer pilots.

Kathy Lubitz, current president of UPAC (Ultralight Pilots' Association of Canada) spoke to us about their current goals and efforts to promote ultralight aviation in Canada, and work in harmony with Transport Canada and other Aviation groups. She brought by a couple of Ultralight Information Manuals which UPAC sells. It is very comprehensive and up to date on current and proposed UL-related regulations. It also lists the other canadian aviation organizations that have an interest in ultralights. Kathy reported that there are currently over 500 dues-paying members. In the coming months we will hopefully have more dialogue at our meetings on the merits of supporting UPAC, and sharing their vision of being the voice that speaks for Ultralight Aviation in Canada.

Thank you Bruce, Chuck and Dan for your contributions to this month's newsletter! Personal anecdotes are always the most fun

to read, and keep the Skywriter interesting.

Don't be shy - do it again soon - it'll encourage others!

In last month's column, I had promised to report some more on Sun n' Fun and the Toronto Aviation Show. Hopefully that was covered during the May meeting. If anyone feels they just have to know more first-hand stuff, give me a call.

In February and March we had discussed planning an Adventure Flight (to be organized by Stu Simpson), and a summer Fly-in/Barbecue at Winters Aire Park (to be organized by Brian Vasseur). Both these events require help in planning and executing. Please approach both Brian and Stu at our June meeting and offer your help, so that both events can be more successful.

June will be our last meeting prior to summer's break. We meet again second Thursday in September. The Skywriter will not get a summer vacation. Safe Flying!

## **SUMMER EVENTS**

#### June 14th, Hinton, Alberta

Fly-in Breakfast and mini airshow. Breakfast is 9:00 to 11:00 a.m.. For more info contact Loran Luis at 403-865-7440.

#### June 14th, Innis Fail, Alberta

Annual fly-in breakfast. EM N52-04-43 W114-01-39. Breakfast is 7:00 to 11:00 a.m. H. Nelson at 403-728-3457.

#### June 18th to 21st, Edmonton, Alberta

COPA convention at the City Centre Airport. For more information contact Gord Oswald at 403-469-3547.

#### June 20th, Josephburg, Alberta

Strathcona Flying Club's annual fly-in breakfast 7:30am to noon.

#### July 8th to 12th, Arlington, WA

Northwest EAA Fly-in. For more information call 360-435-5857.

#### July 11th, Kirkby Field

Annual fly-in pancake breakfast (free), 8:00am to 12:00 noon, for more information contact Bob Kirkby at 403-569-9541.

#### July 18th, East of Carstairs, Alberta

2nd Annual Fly-in drive-in barbecue at club member Glenn Bishell's air strip. Tie downs and overnight camping available. Air strip 2700x100 ft. N-S. Flying events to be announced. For further info call Glenn Bishell at 337-2564.

#### July 29th to August 4th, Oshkosh, WI

Annual EAA convention. For information call 920-426-4800.

#### August 3rd, Vulcan, Alberta

Vulcan Flying Club's annual fly-in breakfast. Vulcan Airport N50-24-17 W113-17-00, 8:00 to 11:30 a.m.. Family (\$15), adults (\$5), children 6-12 (\$3) and under 6 (free). For more inf. contact Jack Deans at 403-485-6484.

If you have or know of an event that you would like to see published here please contact Bob Kirkby or Bernie Kespe.

# Classified

Rotax 503 - Dual Carbs, points, 50 hours since complete rebuild, no starter, \$2600. Don Rogers 242-6549. (6/98)

Kitplanes Magazines - last 3-4 years - free for the asking. Gerry MacDonald 275-6880 (6/98)

Chinook 2-place - Rotax 503, dual carbs, B-box, 127 hrs., 2 props, Yamaha golf cart hubs, 8.50x8 tires, pneumatic tail wheel, alt, tach, dual EGT, VSI, new sails on elevator and rudder, large wing tanks, always hangared, \$7500. Dave Dedul 403-823-6054. (6/98)

Super Koala - C-IEIB (a 7/8 scale Taylorcraft look-alike). Only 26 months in use, with 503 DCDI engine and 66-34 Culver Prop. Lovely, docile, predictable. 60 mph. at 4600 rpm and 11 litres/hr. consumption. 45 liter tank. 75 mph top speed. 51 hours total on engine/airframe. Will consider any serious offer and/or interesting barter proposal. Hangarage at Wild Rose negotiable. Wilf: 935-4248

Props - 3-blade GSC fixed pitch for 277 pusher (R.H.) New 4-blade GSC Fixed pitch for 447 pusher (R.H.) Used. 10 Warp blades (R.H.) to make 72' Prop (you supply hub) new with nickle leading edge. Jim Creasser 226-0180. (4/98)

Beaver 2 pl - 1986 RX550, 275 hrs TTSN, Rotax 532, always hangared, no training history, complete panel, upgraded wing, brakes, \$11,500. Tony 217-5549 or Phil 246-2615. (4/98)

Chinook 2 pl - 1988, 186 hrs TT, Rotax 503, hangared, \$7990. Adrian Winship 640-7429 or 280-3631. (3/98)

Wanted - Ultralight aircraft, complete or requiring work. Allen 546-2588. (2/98)

Classified ads are free to CUFC members. Forward ads to Bob Kirkby.





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# June Meeting

#### **Guest Speaker**

A Picture is worth a thousand Words! Sometimes less.

Our June Guest will be the right dubiously honourable Rotax 532, lately residing in the Kespe Renegade. It will tell us, after a teardown at the meeting, why it quit with so little warning, giving Bernie a long winter rebuilding project that he really didn't need. Bring your notebooks.

#### June Draw

Our June Draw's main Prize is a doozie: A Magellan Pioneer GPS. Tickets for this one will be \$3 each or 2/\$5. Please support the club, and perhaps you'll win it in time for this summer's cruising!

A commuter flight on approach was advised of a Shorts 360 (a boxy, twin-engine turboprop) ahead of them.

The captain responded to ATC: "We've got him in sight. Oh no, wait a second! He just flew over a trailer park and we lost him."

#### Skywriter

Skywriter is the official newsletter of the Calgary Ultralight Flying Club and is published 12 times per year. Articles and letters are very welcome and should be addressed to Bob Kirkby Bernie Kespe or Wilf Stark.

Editor: Bob Kirkby 569-9541 e-mail: kirkby@accinc.ab.ca

Calgary Ultralight Flying Club Meetings of the Calgary Ultralight Flying Club are held on the second Thursday of every month, except July and August, at 7:30 pm, at the Northeast Armoury, 1227 - 38 Avenue NE.

President: Wilf Stark 935-4248 e-mail: wstark@compuserve.com

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# **Destinations**

Part of being a member of this great flying club is to fly with other members to new destinations around Calgary. The low and slow cruise can not be compared to any other mode of adventure. A lot of GA pilots, who start to walk away when you mention Ultralight flying, should slow down, lower their altitude and attitude and try an introductory flight at one of our U/L flying schools. I have read about rules, regulations and light plane safety in other countries and I have to say that Canada is the envy of the world. In Canada, U/L flying is the envy of aviation. Can I say more.

This months destination flight started with a phone call. It didn't take long to set up a time, meet at Kirkby's 'Wildrose strip', check the weather forecast, do a briefing before take-off, and we were ready to go. With Stu Simpson in the lead, I was off his right wing, and Bernie Kespe flying cover in his nimble 'Renegade', we laid out a course for High River. Climbing to an altitude of 4500' asl, we settled in for a scenic late afternoon flight that would take us over the U/L hub of Indus, across the 'mighty' Bow River, skirting Okotoks and with the snow capped mountains gleaming through the haze in the west, we would descend on our destination.

High River airport located is approximately 40 miles S.S.W. of Calgary. It is easily located a mile west of highway #2 and about 2 miles south of the High River townsite. The airport is at 3431' elevation and features two runways. The paved surface of 06-24 is 3000' long, and the gravel surfaced 14-32 is 2950' in length, both 75' wide. If you are radio equipped call UNICOM on 123.0 at 5 miles out and inform other traffic of your intentions. If you are NORDO, follow appropriate airport procedures. A light east wind favored runway 06 and moving to a line astern we lined up with ample separation, landed and rolled out on the paved surface. I am use to grass fields and it takes a little longer to come to a stop on asphalt. The coffee percolator was shut down for the day but pop machines and chocolate bars are available in the

comfortable pilots lounge. This is a very good destination, whatever you fly. High River airport has a U/L flying school plus many GA aircraft, so be vigilant when you fly in there. As usual, wherever we go, our visit to the airport drew a crowd. Pictures were snapped and even a seemingly dead airport comes to life as people come out of the woodwork just to be in our midst. More and more interest in our obvious choice of spending our precious lifetime is being sparked. Happy landings.

# A Birthday Surprise

by Bruce Piepgrass

The biggest (and best) surprise I have had in many a year (perhaps ever) came on October 6, 1997! It was a late anniversary gift from my wife, Jennifer. Back on August 30th., I had came home with 11 roses (for 11 years), and she suddenly realized that she had forgotten about our anniversary. (Most unusual!) However, she recovered quickly and said that she was working on her gift and that it wouldn't be finished for a month or so. I knew it must be something big. Some evenings she would lock herself in the spare room to "work on my present". Although I didn't go snooping around, I never did notice anything that might be the big present.

The day before the big surprise she gave me money for an hour's worth of flying for the following evening, and told me that this was the first part of my gift. I had to be out of the house for at least two hours so that she could get the house ready for the big surprise. She would not be there when I got home from work since she would be out getting "stuff".

When I got to the airport the next evening, the Easy-Flyer which I was to fly was still in the air doing circuits. Wayne Winters said that the pilot was a new student and suggested we walk out to the runway and critique a few touch and go's. Wayne had his video camera and was recording the event as a favour for his student. On the second landing, instead of taking off again, the Easy-Flyer turned around and taxied back. It stopped in front of us and who should be sitting in the pilot seat, but my wife, Jennifer!!!!!! I just about fell over.

Jennifer had secretly started taking lessons from Wayne in Aug. 97. When she locked herself in the spare room to "work on my present" she had been studying, reading the "Ultra-Light Aeroplane and Hang Glider Information Manual" and listening to Wayne's tapes. (I knew that she had started reading the Skywriter once I had finished it, but then I had been pointing out articles that I thought she might enjoy.) She had soloed on Sept.29, and then set up the big surprise for Oct.6. I was completely in the dark. I didn't have a clue!

(continued on page 4)



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#### Surprise - continued from page 3

What made it even more surprising is that Jennifer has a major fear of heights. When she took an intro. flight with Wayne the year before, she had not really enjoyed it, much to my disappointment. What a devious woman I married! What a fun surprise!

Later she told me a bit about how she had conspired with Wayne to keep it a secret. He could only call while I was at work, and could not leave any messages on the answering machine in case I happened to listen to them. The hardest part was not being able to share the excitement of learning to fly, of soloing, or being able to

ask my advice when she had questions. However, she said that the look on my face made it all worth while. What a great anniversary present! What a girl! What a great time we can have flying together! (Hmm... should I build a two seater (dual controls) or two single seaters?...)

# One Great Ride

by Dan Mitchell

It is not uncommon for me to return to the airfield at Indus and think to myself, "That was a great flight, one of my best ever."

Of course for me, with just over one year of UL flying experience it doesn't take

much to for it to be "the best ever", "ever" hasn't been very long. Nevertheless, one flight does stand out above the rest.

It was late in September and an absolutely perfect morning to be out flying. By that time I had about 50 hour's total, and the opportunity to try my hand at a number of different flying experiences; "formation" flying, low flying, and a number of visits to other airfields. On this day I would put these experiences all together for one great ride.

My flying partner for the morning was Jack Barlass. Jack and I had done a fair amount of flying together throughout the summer. We had developed a few hand signals to communicate while in the air but we relied heavily on

planning our flights before takeoff. This Saturday morning we had planned a trip to the High River Airport for a touch 'n go landing and then return to Indus.

I had booked a plane from Wayne Winters at Blue Yonder Aviation for 7:00 AM. Wayne had the E-Z Flyer out of the hanger, fueled up and ready to go when I arrived at the field. Jack was already there preparing his plane. After a short review of our plans, I left Jack to get myself

prepared and do my pre-flight inspection.

The air was cool and smooth as we took off. I lifted off from runway 28, behind Jack's yellow E-Z Flyer. It was only about 4 degrees C on the ground but warmed up nicely as we gained altitude. Jack had headed straight out from runway 28 for some distance before turning south. This made it possible for me to lift off behind him and fly southwest on a heading to

almost look like we knew what we're doing, flying along together like that.

As we flew over the Bow River at 4000 feet, we approached the abandoned runways of South Calgary. I signaled to Jack that I was going to descend toward the runways. A low pass over one of these runways is always a blast and Jack knew exactly what I had in mind. Pushing the nose down slightly and easing back on the



Jack Barlass in his E-Z Flyer, C-IJLB. Photo by Wayne Winters

intercept him before he reached the Bow River. Our timing isn't always prefect, but on this morning we were right on the money. I pulled up directly off Jack's left wing, signaled my plan to go up and over, and settled into my customary position off and slightly back of his right wing. I have become comfortable with this position in our two-plane formation and prefer it to flying the left side or the lead. When the air is smooth and we're both having a good day (some days ARE better than others) we

throttle I began a very long gradual descent. I like to refer to this type of approach as a "Brown" landing or approach. This style of approach is named in honor (?) of fellow CUFC member Winston Brown who's long, long, looonnnnggg approaches are sure to become legendary around Indus. I would suggest that turning near the Carsland Plant for final onto runway 28 is not too much of and exaggeration for Winston's standard circuit. (continued on page 5)

#### Ride - continued from page 4

Rolling out just above the long-neglected pavement, and pushing the rev's up to 5500, I skimmed along the pavement just above the tall weeds that grew up through the cracks and holes. The conditions were and smooth and I was able to keep the plane right where I wanted it, as the ground sped by beneath me. The rush was over all too soon as the end of the runway approached. As I began my climb I spotted Jack still at 4000 feet but slightly to my right and I knew that now it was his turn for some fun. I believe Jack is trying single-handedly eliminate to unemployment in the Alberta construction industry. There isn't a bridge around Indus that he doesn't bomb on a daily basis, and some busy construction workers rebuild every night.

I continued my southward climb, staying clear of Jack, allowing him room to maneuver his heavily loaded bomber into position. The target for the day, identified simply as Bridge #2, was a small green bridge over the Highwood River. I watched from a distance as Jack lined up on the bridge and dropped his imaginary load of bombs. I couldn't help grinning to myself as he banked to the left to rejoin me. Another successful mission to add to his record.

We continued south, giving each other room for wandering and site-seeing. The foothills to the west and the mountains beyond were a spectacular sight that morning. The air was smooth and the trip to High River was a relaxing one. It seemed as though we had the sky to ourselves.

Just north of the town of High River and west of Highway 2, is the site of EFTS #5, the Elementary Flight Training School #5, where Jack learned to fly during the Second World War. Except for one low red brick building, little remains of the facility today. Even though the land is now being farmed, the triangular impression formed by the three runways and the adjoining taxiways can still be recognized as you fly overhead. I watched as Jack briefly dipped his wings in silent salute to the men he served with so many years ago.

Climbing to 4200 feet and swinging a little further east, we skirted the edge of the town of High River. The airport is due south of the town and it was in site by this time. Paying close attention for other traffic in the area, we began our descent. Since neither of us were equipped with radios it was critical that we kept our eyes open and follow proper procedure as we joined the circuit.

A small single engine plane had just left from runway 24 as we were approaching from the north. Jack lead the way, crossing the field at the intersection of the two runways. The sock was hanging straight down and there was no other traffic in the circuit or on the ground. We turned left and joined the downwind leg. Backing off a little on the throttle to increase the distance between our two planes, I began to think about my approach. I had landed at High River once before and found the paved runway a little intimidating. It looked so unforgiving compared to the grass strips at Indus.

After touching down Jack continued rolling, picking up speed to takeoff again while I began my descent. I was lined up on the runway, my approach speed was just over 50 miles an hour, and I was focused. With lots of pavement in front of me I rolled out and I held the plane off for a while longer than necessary making sure I was straight and level. I was a little disappointed by the lack of sound effects as the plane settled onto the runway. I had been hoping for a distinctive squawk as the tires met the pavement, but no such luck. It was, however, a landing I would have been proud to have anyone witness.

The flight was half done and it was time to head back to Indus. Jack had already left the circuit and was heading east towards Highway 2. Once again I set a heading that would intercept him as he swung north. There are a number of roads and power lines east of Highway 2 near High River. We maintained our altitude until well clear of them and then descended to a comfortable level above the fields for a thrilling ride north. Several miles of unobstructed open fields between High River and Indus provide a great opportunity for low flying. The occasional patch of trees and the odd gravel road with a telephone line strung along beside them are the only obstacles that necessitate gaining altitude. The gentle rolling terrain is perfect for a little "contour" flying. With the sun over our right wing, we flew above the fields, two small planes, two happy pilots, and our shadows skimming along beside us.

It was time to gain some altitude as we approached the Bow River in preparation for our return to Indus. We climbed to 4200 feet and once again, I moved in on Jack's right wing. The plan was to fly over the airfield in formation prior to landing.

As we approached Indus I spotted a third ultralight to the west, at the same altitude and on a heading that would bring it directly toward us. Thinking that we may have to turn to avoid this new plane, I was considering pulling away from Jack to give us room to maneuver, when I recognized the plane as Wayne's second E-Z Flyer. I delayed moving away from Jack. As the plane got closer, I recognized the blue helmet with the white peak. It was Wayne himself flying the plane, and he was alone.

I stayed in close to Jack's wing and watched as Wayne pulled in off Jack's left side to form a flying "V". We stayed in that formation for a few minutes and then Wayne dropped down beneath us and came up off my right wing. With the three of us in a row we passed to the east of the airfield, made a gradual left turn and flew directly over the intersection of runway 28 and 34. Separating at that point, we entered the circuit for a landing on Runway 28.

It was a terrific thrill to have our instructor come up and join us for a quick spin around the field. It turned out to be the perfect end to a fabulous early-morning flight.

# That which does not kill us makes us stronger

by Chuck Duff

On a cold, moderately overcast day some 12 years or so ago, a new flying friend of mine, Ken Wright, who unfortunately has since passed away, called me at home and asked if I was interested in seeing if I could keep up with him on a flight from Indus to Okotoks if he promised not to take the throttle past the half way mark.

Ken was flying a two place Rotax-powered Beaver, and I my Cuyuna-powered Mirage, king post and all, 'nuf said. So who in his right flying mind could resist a challenge like this one and under an hour later I was pre-flighting my orange Pegasus while warming up all 30-something ponies packed into my Cuyuna 430r powerplant (I'm not sure what the "r" stands for but I don't think its "race").

Being a somewhat cold morning I thought it would be prudent to not only bring along my usual winter boots, mitts and snowmobile suit, but also a nine foot wool scarf my wife Belinda had just finished knitting for me (she started it after watching an old rerun of a British t.v. show called Dr. Who)

When Belinda gave it to me she said she hoped it would keep me warm on some of my longer winter flights as my bird had neither a cowling nor windshield to block the elements in any way.

At this time it didn't occur to me that she had never in the past shown any interest in whether my core temperature dropped below 97 degrees or not, and any complaining of the cold by me was met with "Serves you right for flying that thing in the winter anyway" in the way that only a wife of some years can do.

I also never thought of inquiring how a nine foot scarf can keep you any warmer then a four foot one, so as I climbed into the sling seat of my trembling steed, I made the final adjustments to my helmet while completing 6 or 7 wrappings of my Dr. Who scarf, tucking the remaining 5 feet or so into the front of my snowmobile suit, which of course prevented the zipper from being pulled up enough to close the upper part of the suit.

After removing the safety pin on the ballistic 'chute and getting my seatbelt on, I turned my head up and back to insure the motor wasn't vibrating too badly and the propeller was tracking o.k, before glancing at my starboard strut at the only "instrument" I had on board, a plastic Halls airspeed indicator, oh uncomplicated flying at its best.

A nod from Ken and a touch of the throttle broke me free of the shallow rut I had been sitting in. Some left rudder along with more throttle put Pegasus not only 20 feet behind the Beaver but more importantly 30 feet closer to the thrill of liftoff (since I'm a low-time pilot and can call it any thing I want to).

So, in short order I was 2000 feet above the ground, tucked under the Beaver's starboard wing just barely keeping up when Ken started pointing to various interesting "stuff" on the ground which I didn't dare look at, because I was at the edge of my flying envelope just trying to keep more than 20 feet separation between the our two Birds.

I didn't even pay any attention to the fact that I was getting colder as the wind had pulled five feet of my nine foot scarf out of my suit, which must have made me look like one of the WWI aviators in his Spad fighter with his scarf blowing in his slipstream behind him.

Unfortunately his Spad fighter has the propeller in the front while my spad has it in the rear.

You guessed it folks; the next thing I felt was my head being slammed into the back of my seat and a burning sensation on my neck as the remaining 4 feet of scarf released its hold on my throat. After pulling out of the ensuing dive and not realizing what had actually happened, I banked around to see if I had somehow nicked Ken's wingtip, when the culprit scarf came floating past me like a reptilian Predator eyeing some prey that got away.

Upon reflection, the trip back to the airdrome is still a little hazy but I think I can remember that as I had completed the 7th wrapping of the scarf my wife suggested that I knot it prior to tucking the remaining 5 feet into the front of my suit; hmmmmm, I think I'll just go now and check my insurance policy.





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#### **CHAMPION LANCER 402**

by Ed Wawzonek

#### CHAMPION LANCER 402, 1961-1965

Specifications:

2 seat

Gross weight: 2,450 lbs. Empty weight: 1,790 lbs. Fuel capacity: 60 gallons.

Engines: 2 - 100 Hp Continentals.

Performance:

Top speed: 130 mph. Cruise at 75%: 120 mph.

Stall: 62 mph. Climb rate: 640 fpm. Range: 510 miles. Ceiling: 12,000 feet. Takeoff run: 500 feet.

The Champion Lancer was, during its lifetime, the least expensive twin produced in this country. Champion's aim was to offer a twin with design simplicity, easy maintenance and low operational costs. The Lancer was also designed to handle unimproved landing strips. The lancer first flew in 1961 but production didn't start until 1963. During that time several revisions were made including the relocation of the engine nacelles to their final position above the wing. Construction of the Lancer was all metal



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with a fiberglass covering. In all, 36 Lancers were produced in the first year of production.

Very few Lancers were actually built, but it represented an interesting attempt to produce a "mini twin" at the lowest cost. It is unique among twins in its tandem two seat configuration and in the proliferation of struts necessary to brace the long main landing gear legs. These extend down from the nacelles which housed the pair of Continental engines above the high wing. A total of 10 struts were necessary to brace the whole assembly, not including the wires that supported the horizontal tail.

Champion held high hopes for its design as a basic multi-engine trainer, but it suffered the same fate as the Tri-Traveller and Tri-Con single engine Champions: not enough buyers. Constructed with welded steel tubing and covered with fiberglass, the Lancer was designed to be suitable for operation from short, unprepared airstrips. With a wing loading of 14.4 lbs per sq. foot and power loading of 12.24 lbs per horse power, its climb performance did not match some of Champion's single engine ships. Its largest defect, however, was that buyers of multi-engine equipment wanted to haul more than two persons, and training schools could get low cost used

> which Apaches had capability. If two seats are enough for you, the Lancer offers 750 miles of range and the little Continentals will drink less than 5 gph apiece at 65% power while giving you 115 mph, which is a nice switch from something like the Twin Bonanza which burns 34 gph for less than twice the cruise. It may be hard to find a Lancer these days, but people will notice you wherever you go.



Champ Twin Lancer - the smallest general aviation certified twin (1965-66)

# Limbach Aircraft Engines

compiled by Bernie Kespe

In more than 30 years the name LIMBACH has grown as a synonym for reliability and quality as an international supplier of engines for unmanned aircraft, motor gliders, light and ultralight airplanes.

There are more than 5,000 four cylinder four stroke engines in use in aircraft world wide and 62 service stations in 22 countries.

The engines available are listed as:

L2400 DE3X 4 cylinder air cooled, 90 hp at 3200 rpm, dry weight 87.5 kg. L2400 EB 4 cylinder air cooled, 87 hp at 3200 rpm, dry weight 82 kg. L2400 EF 4 cylinder liquid cooled heads, 100 hp at 3200 rpm, dry weight 85 kg. L2000 EA 4 cylinder liquid cooled heads, 80 hp at 3400 rpm, dry weight 69 kg. L2000 EB1 4 cylinder air cooled, 80 hp at 3400 rpm, dry weight 73 kg. L1800 EAX 4 cylinder air cooled, 64 hp at 3400 rpm, dry weight 68 kg. L1700 EA 4 cylinder air cooled, 60 hp at 3600 rpm, dry weight 73 kg. L1700 EO 4 cylinder air cooled, 68 hp at 3600 rpm, dry weight 73 kg. L275 E 2 cylinder two stroke, air cooled, 20-25 hp at 7300 rpm, dry weight 7.1 to 7.5 kg.

and the feature engine:

#### The Limbach L 550 E

Four cylinder, horizontally opposed, air cooled, two cycle engine, with solid state magneto ignition, mixture lubrication. Suitable for pusher and tractor installations.

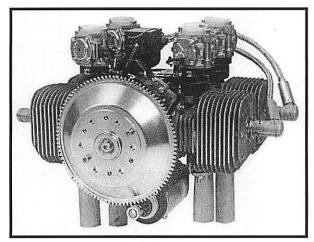
Performance: 50 HP at 7500 rpm Bore: 66 mm / 2.60 inch Stroke: 40 mm / 1.57 inch

Displacement: 548 cm<sup>3</sup>/ 33.44 cub.in Crankcase: Aluminum casting

Pistons: Cam ground, cast aluminum alloy
Cylinders: cast aluminum alloy, with
nicasil coated barrel

Ignition System: Solid state magneto ignition

Crankshaft: Drop forged, seven piece



Limbach L550E

Firing Order: Two opposing cylinders simultaneously, 180 degree. offset Carburetor: 4 diaphragm all position carburetors

Starter: 12 Volt optional (+4.0 kg)

Generator: without

Dry weight: approx. 16 kg

Fuel: AVGAS 100LL or 90 Ron mixed with a suitable oil to the ratio of 1:25 or 1:50(synthetic oil)

Optional Equipment: Cylinders with additional heat sinks (+1.2 kg) Shielded ignition system, Left hand rotation, Exhaust stacks

For more information contact: Limbach Flugmotoren GmbH & Co. KG Kotthausener Str. 5 53639 Konigswinter, Germany Phone: (02244) 9201-0 Fax: (02244) 920130 or visit their web site at www.limflug.de; e-mail sales@limflug.de.

Apparently Limbach has no active North American dealer at present. I contacted the listed dealer in Illinois and he has since dropped Limbach due to lack of prompt service from the factory citing 6 to 10 week delivery on parts and engines. I emailed Limbach four days prior to this writing and have yet to receive a response, however they may be sending the catalog

that I requested, which may take several weeks to arrive by snail mail.

# New Engine from Teledyne Continental

Like to be able to outfit your bird with an engine that costs half the current going price, run it to a 3,000 hour TBO, then throw it away? Teledyne Continental Motors is working on just such a thing under a NASA General Aviation Propulsion development contract, and this past week, TCM president Bryan Lewis gave members of the Cessna Pilots Association, meeting in Tucson, Ariz., more details.

The test engine is a two-stroke lightly-turbocharged four-cylinder design with compression ignition and high-pressure direct injection, and is designed to operate on Jet A fuel. Lewis adamantly refused to use the term "Diesel," but we will.

Most shocking, TCM says the diesel engine is designed not to be disassembled or overhauled, but rather, replaced when it reaches TBO. (Lewis didn't elaborate on what happens if it doesn't reach TBO.)

#### Blind Man's Bluff

The first announcement started with the familiar, "Ladies and gentlemen, there will be a slight delay. If you would like to stretch your legs in the passenger lounge..." You know the routine. Well, as it happened, Ray Charles was on the aircraft and the Captain asked him if he would like to stretch his legs. He replied "No, thank you, but I would appreciate it if you could take my dog for a short walk." The Captain cheerfully obliged, but they say it took three hours to get the passengers back on the plane after seeing the Captain walk through the passenger lounge with sunglasses and a seeing-eye dog.