




Skywriter



Monthly Newsletter of the Calgary Ultralight Flying Club

July 1990

View From Above

by Paul Hemingson



The evening of June 6 was perfect flying weather. It was also the evening of our regular monthly meeting. I did not feel like going to the meeting either... but duty calls. For those who went flying, I am envious... and emphathetic to your desires.

The main agenda item was Russ Siruceks' talk on the trials and tribulations of his various building/rebuilding projects. The theme here was that by simply adding horsepower, you end up adding a lot of other stuff. The weight, speed and performance of an airplane is a continuous set of tradeoffs. One lesson is that if you ever contemplate improving? remodelling? or modifying a proven design one needs to be sure he gives it the same depth of thought that the original designer did. Russ really "goes for the gusto" in everything he does. His enthusiasm and energy for flying are contagious. The lesson here was how easily and quickly weight can be added... just like dieting - it goes on easy and its' difficult to remove. The various methods of fabric covering and painting generated a lot of discussion. Sounds like a future meeting topic here.

The "Confession Session" resulted in Fred Maier taking home the much coveted "Booby Award". Fred's high speed taxi testing that turned into a departure stall was certainly a humbling but learning experience for Fred. An experience like that would make anyone a better pilot. The lesson here is to be prepared for flight at all times. The urgency of some pilot decision making does not allow for pondering alternatives... one needs to consider some consequences before

they occur. Take good care of the award Fred, the runner-ups might return next month to earn this fine example of curvilinear geometry... kind of reminds me of the smooth double compound curves of a Beech Staggerwing Recumbent bliss!

Many thanks go out to Gord Keegan, Bernie Kespe and Bob Kirkby for representing the Club at the Calgary Planetarium event. Also to Don Richter for taking on the task of organizing a BBQ? Social? Fly-In event at Indus, now scheduled for the afternoon/evening of July 14, 1990. Plan now to attend with friends and family. Don will confirm the plans at the July meeting and would also appreciate some help and commitment from members. The club is also encouraging members to participate in a two-stroke Aero Engine Survey which first appeared in "Kitplanes". The compilation of engine problems and statistics should alert astute pilots about the strong and weak points of these engines. Not that we don't already have a pretty good handle on them... but somehow knowing more will help separate fact from fiction. Jim Creasser handed out the data sheets at the meeting.

Transport Canada will be hosting an Instructors Workshop, mainly for Commercial UL pilots on November 1 and 2, 1990 in Edmonton. To enroll and/or get more information, contact a currently active instructor or contact Ernie Smith or Wayne Woloshyn of TC Calgary at 292-5227.

Gord Tebutt gave the Treasurer's Report, and the Club is in fine financial form. Almost enough money

for Gord to take a Caribbean cruise... but not to worry, he just returned from there.

A final reminder to get your insurance before July 15th. A word to the wise is all that is needed. Consult Jim Creasser's article in the June Skywriter for detailed info.

A group of flying fools left Indus on June 16th for a flight to Medicine Hat and points southeast... more on this in the safety corner column.

Coming Events

July 5-8 - Canadian Aerobatic competitions. Villeneuve (Edmonton).

July 12-16 - Arlington '90 Northwest EAA Fly-in. Arlington, Washington.

July 14 - Fly-in BBQ at Indus in the afternoon and evening. Contact Don Richter for details and to help organize (266-4823).

July 15 - Fly-in Breakfast at Vulcan from 8:00 am on.

July 27-August 7 - Oshkosh '90

July 29 - Fly-in Breakfast at Brooks from 7:00 am on. Everyone welcome.

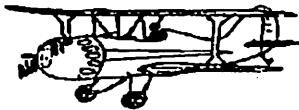
August 4-5 - Red Deer Airshow. Contact Jim Creasser for details re. club's participation.

August 10-12 - Abbotsford Airshow, Abbotsford, B.C.

July 15 - Fly-in Breakfast at Vulcan from 8:00 am on.

One Pilot's Opinion

by Bob Kirkby



I have just finished reading my June COPA Newsletter. It reported, that as of June 20 DOT has decreed that the Ottawa control tower will start speaking French as well as English. This is a result of section 22 of the official languages act.

It would appear that the Federal Government is not only prepared to bankrupt the country to effect bilingualism, but it is also busily degrading safety in the air. COPA seems to take the position that air safety degrades considerably when bilingual communications is used. I agree.

Although I do not fly in controlled airspace, and consequently do not depend on radio communications, I do listen to air traffic communications a lot. I also consider myself to have good communication skills in the English language. It is quite apparent to me that a very large amount of the short, bursty type of interaction that goes on in controlled airspace can only be understood properly if the listener is anticipating the communication. It is very rare to hear an exchange take place that properly follows the prescribed radio operator format. This format is designed not only to provide the necessary sender and addressee information, but also to frame the message so that the attention of the listener is focused on the message itself. Without proper formatting of the communication, only the experience of the listener (i.e. ability to properly anticipate the message) insures proper interpretation.

On top of this existing problem, air traffic controllers now have the added problem of switching languages at the start of each exchange. When a message is heard, the listener must first determined the language before

starting to decipher it. Given the fact that the first 2 or 3 syllables are usually mumbled or clipped anyway, the probability that they will be misunderstood has just increased significantly. Add to this the observed fact that messages are not properly framed and you have a very high probability that the first few syllables of the heart of the message will be incomprehensible or misunderstood.

An equally bad situation is created in the cockpit. The unilingual pilot will only understand those messages that are in his language. In other words, there could be many messages addressed to other traffic in the area that he (or she) will not understand. That means he will not have a complete picture of what is going on around him.

How will the controller keep track of the language preference of a particular pilot? In an emergency, when the controller has to tell a pilot to make an immediate turn to avoid a collision, will he use the correct language? Let's hope so.

How long will it be before this bilingual policy spreads to other airports, and eventually across the country? In my opinion this is a regressive move that will only result in much higher costs of service, much less efficiency and certainly a lower safety margin. DOT complains now that they can't afford enough controllers. How many fluently bilingual controllers can they afford? I do not wish to sound revolutionary, but somehow the message has to get through to the politicians that they are reeking havoc with this country of ours.

Someday, if we ever have a space program, Canada will have the first bilingual space station!



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Skywriter is the official publication of the Calgary Ultralight Flying Club and is published 12 times per year. Opinions expressed by our writers are not necessarily those of the club. Articles and letters to the editor are very welcome from any readers. Address correspondence to:

Skywriter

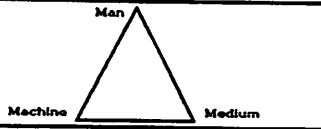
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Meetings of the Calgary Ultralight Flying Club are held the first Wednesday of every month at the R.C.A.F. Association, 110 - 7220 Fisher Street S.E., Calgary at 7:30 PM.



Safety Corner

by Paul Hemingson



Flight to Brooks & Medicine Hat

Every flight has the potential to turn into some kind of adventure... especially when you consider flying cross-country in a lightly wing-loaded Ultralight. Well, me and some of the boys, decided to head southeast towards Medicine Hat on Saturday June 16/90.

Figure 1 shows the group doing some last minute planning just before blastoff from Indus. The intrepid included Russ Sirueck (Hiperlite), Gary Kneir (Falcon), Wayne and Ralph Winters (Merlin), Gord Keegan (Beaver) and myself, Paul Hemingson (Hiperlite). I decided to write a bit about this flight because I think there are a few lessons learned that qualify it as Safety Corner fodder. Besides, I am running short on ideas for the regular "Safety Corner" sermons. First off, we made it OK because we planned ahead, but this is not to say that we didn't encounter some problems... but being prepared is half the battle... and we were at least half prepared for what Mother Nature threw at us.

We checked with the flight briefer, and he confirmed that the weather would be great... light winds, no storms, and perfect for flying....he was mostly wrong, but this shouldn't come as a big surprise for anyone who has lived in Alberta for a while. We also checked the maps, familiarized ourselves with the airports we might use, and made some prior decisions about speeds and altitudes, and discussed some preventive and contingent actions in the case of somebody having a problem. We were all radio equipped and agreed on a common "yak" frequency (122.75). So far, so good, so what?

Things started to go wrong from the start. Our planned 7 am departure turned into an 8:30 departure....and even before that, when I left my Priddis home strip at 6:15 am, a Deer ran across in front of me just before lift off. Eastbound in the early morning sun I skirted the south side of Calgary and as I cast my eyes over the sleeping city I wondered at the marvel of being able to look out over half the population of Alberta. Such is the pleasure of a solitary pilot on an early morning flight.

I arrived at Indus about 6:35 and found Wayne doing some last minute adjustments to his engine, and Russ going over his maps and flight data. Gary and Gord arrived by 8:00 having had some problems in getting away earlier. The photo in Figure 1 shows the rendezvoused group making some last minute plans at Indus, just prior to our 8:30 departure. We figured on making it to Brooks for a pit-stop. Some of the group flew higher and faster, while Gord, Russ and I stayed low and slow in loose formation. Russ and I went into the slow flight regime to stay even with Gord's Beaver, it took a while to get used to the nose high attitude of slow flight. I was rusty. Still, it was an economical and quiet way to cruise along at 4700 rpm, with airspeed indicated at 55 mph.

The air was smooth up to about 10:00 am and we had a beautiful flight southeast across the flood swollen Bow River, which we followed east and southwards across the Gleichen Indian Reserve. The low angle slanting rays from the early morning sun create some beautiful textures and shadows on the landscape that only the pilot can know. Once again I was reminded of how much I love this country of Canada, and Alberta in particular. All things considered I don't think there is a finer place... I Love This Country. The Bow River Corridor and the Reserve terrain does not look

particularly suitable for forced landings and any houses appear to be miles apart. Keep your altitude going thru here and everything will be fine. The radio was a bit of a safety blanket.

Enroute, we kept in radio contact, but about a half hour out of Brooks I knew Gord's radio was failing... his transmissions were breaking up, and then a few minutes later... Silence. I felt he might be able to receive, so I occasionally transmitted blind to keep him posted. A few miles out of Brooks I noticed Gord's Beaver setting up for a landing... problem is there wasn't an airport in sight. I reckoned he might be running out of gas, so I circled around and watched him land safely. I then radioed that Russ and I would go onto Brooks and return with some fuel. Russ and I continued onto Brooks and I announced our joint arrival on the Brooks Unicom. We squeaked onto the asphalt of runway 12 about 1.5 hours into the flight.

Figure 2, taken on the apron at Brooks shows two Hiperlites and a local Agplane that was spraying in the area. The little cotton ball cumulus clouds in the background were a sign of better? ones to come that afternoon. The thermals were already becoming strong when we landed at Brooks, and as we taxied up to the apron, Gary and Wayne were there waiting. Before we could commandeer a vehicle to help Gord, in he flew. Apparently, he had only made a precautionary landing as he was low on fuel, but had packed some additional gas for just that purpose. Good foresight. Better to make a precautionary landing (continued on page 4)



Figure 1. The pre-flight briefing at Indus before departing for Brooks.

(Safety continued from page 3)

with everything running than chancing things and doing it deadstick.

We refueled in Brooks with 100 LL Avgas, (\$3.35/gallon) and refreshed ourselves. Nice little airport, with all the facilities you could want, and friendly folks. They are having a Fly-in breakfast July 29 and we are all invited. At this point the flight broke into two groups again. Gary, Wayne, and Russ headed south to Medicine Hat, while Gord and I were committed to a return flight. A quick glance westward though was not encouraging. The cumulus clouds were already building and a long line of towering CUs stretched along the Foothills, assuring us that the stewardess would not be serving coffee on the return flight. On the trip southwards to Brooks we had a light headwind as forecasted, so we expected a nice little tailbreeze on our return trip. Tailbreezes are as rare as a politician fulfilling his platform promises. It seems wherever I go, its against the wind and against the sun.

Gord and I watched the other members takeoff and head south to the Hat, and then we soon departed for the return trip to our home strips west of Calgary. It turned out to be a long and tiring trip. The convective turbulence made altitude keeping plus or minus 300 feet difficult, and the further along we got the stronger the wind blew, forcing us to contend with both convective and mechanical turbulence. The winds were coming from all around the clock. We spotted a few dust-devils and felt

the instability of the air. An occasional glance to the West gave a view of towering CUs stretching from North to South along the Foothills. Not a pretty sight from 4500 feet.

By the time we were abeam of Bassano the base of the CUs were only slightly above us, and we were not flying high! The Wind had switched 180 degrees to the North. So much for the tailwind dream. We did a lot of dancing on the rudder pedals and stirring of the stick to keep the greasy side down. By the time we reached Cluny it was getting marginal for ultralight flying. I tried different altitudes but couldn't find any smooth air. I noticed some loonies fall out of my pocket and roll/vibrate along the belly to the back of the fuselage, whereupon they fell thru an opening. Loonies over Cluny in more ways than one. Must have seemed like Mannah from Heaven for residents of the Reserve.

A half hour later we picked up the distinctive skyline of Calgary on the horizon, as we crabbed along pointing Northwest but heading West. Indus airport soon came into view as a welcome sight, even if the Windssock was straight out and flipping like an unattended firehose. On final approach to runway 34 our ground speed was such that you would have to set up stakes to detect any motion. We had lots of good reasons to land...low on fuel, low on energy, and low on enthusiasm. It is amazing how much more clearly you can think standing on the ground. We debated a bit about making a run for our Foothills
(continued on page 5)



Figure 2. So this is Brooks, eh? Where's the washroom?

Classified

ABC Ballistic Chute - never used, hermetically sealed, excellent, Airspeed indicator, Altimeter, offers. Paul Hemingson 931-2363.

Beaver RX-550 - 2 place, Rotax 503 air-cooled engine, pitot airspeed, altimeter, tach, EGT, CHT, Hobbs, hydraulic brakes, wheel pants, custom paint, ballistic chute, wing covers, less than 200 hrs., always hangared, never damaged. Hangar space available at Black Diamond. First \$10,000. offer flies it away. Call Gord Keegan, 238-0177.

Fisher FP101 - fantastic flying ultralight yet looks like a conventional aircraft. New, fly it away. \$7000. Wayne Winters 936-5347.

Boom Mic - M-87 low impedance dynamic microphone, fits most headsets, new, 2 available, \$25. each. Bob Kirkby 226-0720.

Braid for shielding spark plug leads and ignition wires, \$2. per foot. Bob Kirkby 226-0720.

Hagar Wheels - 1 pair of 6" Hagar wheels, new, \$30. Bob Kirkby 226-0720.

Ivo Prop - updated 3-bladed, ground adjustable pitch, 60" diameter, composite blades, L.H. tractor or R.H. pusher, new, offers, Paul Hemingson 931-2363

Rotax 277 - rebuilt in Vernon, belt drives, 2 sets of pulleys, complete exhaust. Offers. Russ Sirocek 274-8526.

Chinook - single-place, rebuilt 377, new prop, long range tanks, make an offer. Sky Master 335-3306.

72" Prop - maple with right-hand 40 pitch. Never used and undrilled. \$150. Bill Clark 931-3143.

Rotax 503 - Dual carbs, electric starter, TT 130, excellent condition. \$1650. Gary Knier 281-3577.

Western Convention

by Jim Creasser



The RAA (Recreational Aircraft Association of Canada) holds various events across Canada each year. The weekend of June 15 was the RAA Western Convention, held in Medicine Hat this year. The "western" part encompasses Saskatchewan, Alberta and British Columbia. Because of imperfect weather, I believe attendance from other provinces was nil. Several Alberta areas were represented, with the largest group being from Calgary.

Everyone enjoyed having the two Ultralights fly in from Indus, along with the homebuilt Falcon from Springbank. Wayne Winters, along with his senior pilot, Ralph, flew his beautiful Blue Yonder Merlin to the convention. Russ Sirucek flew his old Hiperlight, now belonging to Larry Everett.

Quartering head winds were encountered most of the way, which made for a fairley long flight. About four hours flying time, with a stop made at the Brooks airport. A lot of interest was shown towards these aircraft once parked at the Medicine Hat airport. I am sure the Winter's, Russ and Gary Knier enjoyed answering questions about their respective craft.

I flew with Ken Whittington in his Cheeta, leaving Airdrie about 0700 hours and arriving Medicine Hat about 0824 hours, using approximately eleven gallons of fuel. The return trip Saturday afternoon was quite different in the weather department. Flight Services in Medicine Hat warned us of a thunder storm at Springbank with a possibility of hail. We just skirted several black clouds but were able to fly direct to Airdrie. Gary, Russ and Wayne were forced to stop at Brooks overnight and continued on to Indus Sunday morning. Even though they encountered some bad weather, I'm sure they all enjoyed the trip.

Has anyone seen the new RANS aircraft? It looks a little like a Kolb Twinstar with no pod or windshield. I expect it flies very well, as we come to expect from RANS.

Quicksilver also has a new model, the GT-500. A strut-braced 2-place, tandem with flaps. Holmer Kolb has made some changes to the Twinstar, the new designation is Mark III. Flaps have been added as well as the gross weight increased to 1000 lbs.

The Pong Dragon radial engine has surfaced again with a company in Houston, Texas now doing flight tests. It could be a very interesting design. Murphy Aviation announced that they sold 27 Rebels at Sun-N-Fun. Its hard to believe that many people would pay for a new design that hasn't even flown yet.

Looking at a list of Ultralight definitions for different countries, almost all have a single place weight limit of 331 lbs., except the US, Mexico and Italy, which all are at 254 lbs. There are changes coming in the USA soon, single place to 331 lbs., fuel capacity to eight gallons, stall speed increases to 29 knots from 27 mph, top speed increases from 63 mph to 61 knots.

Two-place changes: empty weight increases from 350 lbs. to 490 lbs., fuel from five to ten gallons, stall speed from 33 mph to 31 knots and top speed also to 61 knots.

All this and still no pilot license, training or registration required. This is a free country. Of course no passengers allowed. An instructor can't even fly to another airport solo to pick up his student. Instructional use only means just that in the USA.

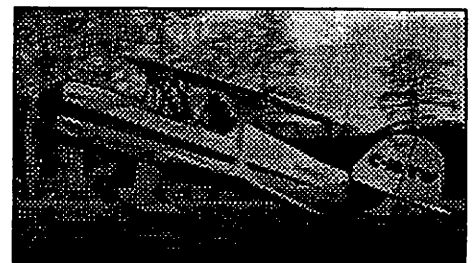
The deadline is past, so that's all for this month.

PS. If you need good fuel line, I have lots.

Remember - insurance is now mandatory!

(Safety continued from page 4) homebases, but things didn't look good. Thunder and lightning, strong winds, and a belt of towering/boiling Cumulus Horribilus's blocked our path into the Foothills. A call to the weather office confirmed the winds gusting to 45 km and Gord and I decided that more of what we came thru was beyond our limits. Ron Sondergard happened to be at Indus doing some work on his machine and kindly offered to drive us home. This was a good idea, since I didn't notice any airplanes around and a hail/rain storm was already in progress.

So, what did we learn? I guess the traditional lessons and wisdoms were reinforced. If you have lots of time... go by air, and it might be a good idea to pack your toothbrush. If you decide to leave early, try to leave early. Always take a forecast for what it is... a forecast... and alter your plans accordingly. Turbulence is tiring, but up to a point its good for improving your skills. All in all it was a satisfactory flight, and Gord and I got in some good time, and enough mileage for one day to feel pleasantly tired. We got there and back safely. Every flight has the potential to turn into an adventure...great stuff, that is why we all like flying... adventure. The other members of the original flight group returned safely on Sunday, due to weather, and I hope to get their story at the next meeting.

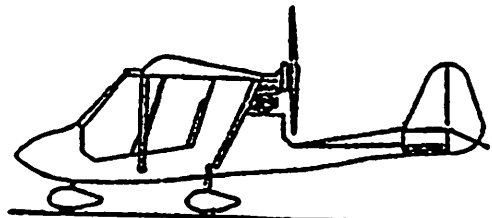


Bob in his Renegade leaving Paul's place.



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Fly Paper

by Gord Keegan



This is the first in a series of articles on ultralight aircraft and products available on the market. I will strive to provide factual and objective information and opinions on each, with performance figures published by the manufacturers. The first article in the series will deal with the Macair Merlin manufactured by Macair Industries in Baldwin, Ontario. The local dealer is Wayne Winters, who operates his flying school and dealership at Indus. The designer of the Merlin, John Burch, was a Beaver dealer when I first spoke to him at the Sport Aircraft Expo in Toronto a couple of years ago. He was putting the finishing touches on his prototype C-IHRP at that time. The Merlin can be flown with the Rotax 503 but the powerplant of choice, particularly at our altitude ASL, is the liquid cooled 532. The Merlin is a high wing taildragger with ample room for two, side by side, in a cockpit which is surrounded by large windows, giving good all around visibility. The plane carries an 11 gallon metal fuel tank located in the leading edge of the mid-section of the wing.

An example of the Merlin's performance at 750 ft. ASL and +18C, with a 10 mph quartering headwind is quoted from CGAN (November 1989) as follows:

"Ground roll approximates at 60 ft., climb speed is held at 40 mph. We pass through 1750 ft. at 63 seconds, 2750 ft. at 2 minutes 12 second. This equates to 950 fpm for the initial 1000 ft. of climb. I level and throttle back to 4800 rpm with the IAS sitting at 55 mph."

Some power to speed ratios at 3000 ft. and OAT +12C are as follows:

RPM	IAS	TAS
3500	44	50
4000	48	55
4500	53	59
5000	58	63
5500	64	68
6000	69	74

A comfortable approach can be flown at 35 mph with touch-down and roll-out in as little as 110 ft. with moderate braking.

Next month I will describe my flight in the Merlin and how the published

figures compare to observed performance at Indus. For more information on the Macair Merlin contact Wayne Winters.

Pictures Anyone?

Send me a picture of your aeroplane, or give it to me at a monthly meeting, and I will put in in the newsletter. We all like to see someone else's pride and joy.

- the editor

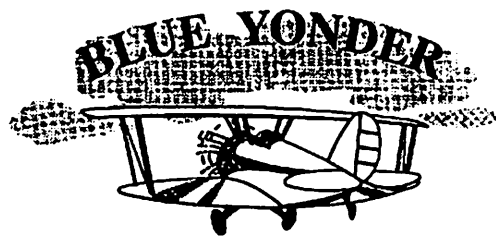


PILOT DECISION MAKING

Am I displaying any of the five hazardous thought processes?

- Anti-Authority
- Impulsivity
- Machoism
- Invulnerability
- Resignation

- D**etect Change
 - E**stimate Significance
 - C**hoose Outcome Objectives
 - I**dentify Plausible Options
 - D**o Best Option
 - E**valuate Progress
- TO DO THE SAFEST THING**



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