

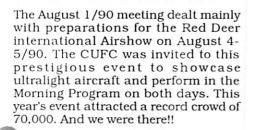
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Monthly Newsletter of the Calgary Ultralight Flying Club

September 1990

View From Above

by Paul Hemingson



Ve done good! To be invited and participate was a real treat. A big thank you to: Jim Creasser (Hiperlite), Gord Keegan (Beaver), Don Rodgers (Lazair), Russ Sirucek (J3 Kitten), Ron Sondergaard (Crusader), and Wayne Winters (Merlin). These pilots showed professional and responsible ultralight flying to the thousands.

The Airshow was an excellent forum to display our wares and instill a favourable perception about ultralights to the organizers of the show, the public, and general aviation pilots. With some planning and preparation I think we can advance the sport even further next year. I sent the orgaizers a thank you letter for their great hospitality and for considering us as part of the show. I guess we are now coming of age as a serious pursuit.

What we need to do now, is take stock of what we learned this year, and generate some ideas to make our participation even higher profile in 1991. Below are listed a few ideas I have, but I would also like to hear your thoughts. I will schedule a discussion at an upcoming meeting.

Here are the ideas:

1. Put together a display booth/table and make handout info available to



interested folks. Judging from the response I got, lots of folks don't know where to get started, what it costs, what it involves etc. We could also have some photos, slides, posters, copies of the newsletter, and of course application forms. The non-flying public is sometimes a bit intimidated about approaching a pilot standing beside his machine because of the fear of appearing like a dumbkin. Any volunteers wanting and willing to take on the task of putting together a display booth??

- 2. Put together a more varied Fly-by program. It might include things like slow flight, slips, spot landings, shortfield landings....to demonstrate the unique capability of these machines. What ideas do you have?
- 3. Prepare an informative, entertaining and witty "talking head" package for the announcer. I've already started on this, seeing as I got cajoled into announcing the Sunday program. I think I did OK, given the short notice, but can do even better next August. Got any more jokes I can use, John Collins?
- 4. Encourage and select 6 to 8 members with different machines to attend, so that a variety of aircraft are on display. This does not preclude anyone who wants to fly up from doing so, but the show organizers like to see different machines on the static display.
- 5. Lets not forget smaller local shows, like Springbank, Okotoks, Vulcan and Brooks. They are closer to home and good practice for getting down a routine.

Well, thats five ideas. I am sure you have lots more to add. Several members showed up on Saturday or Sunday and their perspective would be appreciated. All in all it was a great show. We impressed the organizers, and the public and I am sure we will be invited for '91. So lets plan now to make the most of it.

The flight up to Red Deer for the seven of us was pretty much uneventful. When those big HIGHS set up over the province it makes for near perfect flying weather. Jim Creasser and I flew back southwards in loose formation, except once when he was flying slightly behind and to my left and I thought he said turn left. I thought it was a strange request since we were pretty close already, but I thought "what the hell, if he wants to do a left turn in close ranks, why not". So over I went. The next transmission was "You cut me off". It turned out, Jim had said "Turn West", and not "Turn Left" as I had thought. The moral of the story is, if the message sent is not the message received then it won't have the desired intent. Guess its time for a Bud Light. New paragraph, new subject. I picked up some nifty Doorprizes at Checklist and the proprietor Jim Bradbury is willing to put up some prizes that members could qualify for by participating in Club activities. These are \$100 prizes, so I will fill in the blanks at the next meeting, to let you know how you can qualify to win. Video rentals from the Club are now \$2. A deal. We are also going to donate \$100 to the Calgary Aerospace Museum. One of our members, Bill Clark, has spend much time and effort in finding funding for this project to preserve aviation heritage. Got a card from Oshkosh from our Quebec member Paul Pontois, who will soon be sending us an article and photos. He sends a big "Bonjour to Y'all". Paul (continued on page 4)

Fly Paper

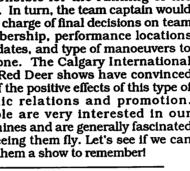
by Gord Keegan



The flight to, and in the Red Deer Air Show 1990, was a tremendous experience for me, and also for the others who participated. I would like to thank Jim Creasser and Paul Hemingson for their organizing efforts. The weekend proved to be an excellent opportunity to spend some time with the guys from the club, their families and the other pilots who were performing. I enjoyed thoroughly being able to see the "behind the scenes" action that occurs at such an event and rubbing elbows with a T-33 or F-18 pilot is not something I get to do very often.

The weekend inspired in me a desire to revive an idea which has been kicking around for a few years now. It is time that we formed a non-aerobactic formation drill team to perform at events such as this. The intent would be to have only pilots with the best machines nominated to the team by the club members. There would be regular practice schedules to maintain proficiency and formal training sessions on the subject of safe formation flying.

There are many safe and graceful manoeuvers that can be performed with our machines that would provide a totally different type of display from the usual airshow fare. In terms of organization, I believe one of the club directors should be primarily responsible for the running of the team. In turn, the team captain would be in charge of final decisions on team membership, performance locations and dates, and type of manoeuvers to be done. The Calgary International and Red Deer shows have convinced me of the positive effects of this type of public relations and promotion. People are very interested in our machines and are generally fascinated by seeing them fly. Let's see if we can give them a show to remember!





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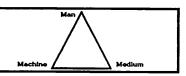
Skywriter is the official publication of the Calgary Ultralight Flying Club and is published 12 times per year. Opinions expressed by our writers are not necessarily those of the club. Articles and letters to the editor are very welcome from any readers. Address correspondence to:

> Skywriter c/o Bob Kirkby Box 4, Site 9, RR 6 Calgary, Alberta T2M 4L5

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



Sparking on the Pointy End

In a perfect world, everything would run right....including a Rotax. But ideology succumbs to reality when you're at 1000 feet and your trusty engine coughs to clear its' throat and remind you that the world will never be perfect.

Recently, I had a problem with my engine momentarily quitting. It only happened occasionally, but often enough to remind me that things were not perfect. An hours worth of flawless performance interrupted by a few seconds of imperfection makes you wonder what gremlins are at work. Mechanical things that exhibit sporadic spastic behavior are often the hardest to isolate and diagnose. A Rotax running at 6000 RPM means that one seconds worth of hesitation translates to about 100 misfires. Maybe not spastic, but the pilot becomes that way in just a few seconds.

It would run fine for a while in cruise, and then suddenly miss or hesitate before catching again. Mostly, it did this on take-off. This is when I discovered that it is difficult to select forced landing sites when the nose is high on climb-out...and why also its a good idea for a guy to preselect his forced landing site before taking off. This kind of Rotaxian behavior is not particularly conducive to peaceful piloting. I think I uttered things like "Gosh, golly, I wonder what the matter could be"? I hope I didn't hit the push to talk switch at the same time. Foul mouths follow from fouled plugs and should be accorded privacy. A pilots instinctive vocabulary is quite limited. but forthright. I am sure most pilots already know that it is a very private moment when the engine threatens to quit.

At first, I thought it was due to plug fouling, but then I remembered that each time the problem occurred I heard a loud buzzing or interference in my headset. This got me to thinking. For electromagnetic interference to be created, some form of arcing must be occurring, somewhere in the electrical system. When you think of electrical systems, your minds eye conjures up images of wires. I had a vested interest in solving this dilemma.

To solve the problem, I knew I would have to find the source of the arcing. I decided that a complete check-out of the electrical system was in order. I was looking for a loose contact, a corroded connection, a suspicious splice, a wayward wire....you get the idea. I checked everything from the kill switch right back to the coils. Nothing. At least nothing of significance. I was BAFFLED.

Finally, I decided to put everything back together, resigned to the possibliity that the problem would have to get worse before I could isolate it. More Gosh, Golly flights seemed to be in my future. I could hardly wait.

My final act of the day was to put the plugs back into the motor. I grabbed he plugs (NGK B8ES) and noticed that the top screw-piece on one of them was loose....No, not a whole bunch....about a 1/32 of a turn, maybe 0.003 inches from being tight to the metal base atop the porcelain. Could a few angstroms of looseness be responsible for so much anxiety? To investigate further I unscrewed the top, and on closer inspection I could see that half a dozen threads were blackened. AHAH! Found the little mother-arcer. I felt like an astrophysicist who just discovered a new star, that had escaped the NGK Blackhole.

Here was the problem! It was obvious that the loose top created an arcing at the threaded post end of the plug, instead of at the electrode. (Figure 1). The blackened threads were a result of arcing occurring between the toppiece and the threaded post. The errant arcing would create high voltage electro-magnetic interference that manifested itself in the radio. All the evidence fit. These NGK's have the potential to arc at both ends.... an interesting but alarming concept.

On retrospect, I think I might have induced the problem. Another case of pilot error? As part of my preflight I remove and inspect the plugs for oil pooling in the electrode end. When I reattached the plugleads I may have twisted counterclockwise and loosened the critical piece.

In the future, I will also check the tops of the plugs, and roughen the threads a little on new plugs to make the toppiece tighter so that vibration won't be as likely to loosen the top-piece. In addition I will be more careful in pushing on the plugcaps so that I do it in a tightening fashion. PS, if your going to use pliers to tighten the top-piece, be careful, you can easily destroy the plug if you torque it up too much. Another solution might be a judicious drop of LockTite where it will do good, but not insulate the threaded post from the top-piece.

I have been told that you can get BSES plugs with a solid top, but I have yet to find or see any. If you come across some, buy a thousand gross or two, you won't have any trouble finding takers.

The loosened plug top is not a new problem, other guys have experienced it before, but in those cases the degree of loosening was more severe. Some cases even involve a top-piece that falls right off. I think my experience shows that the problem can happen with only a very slightly loosened top. I had given the plugs an eyeball on the way out earlier that day and they looked fine. They were an obvious place to look for the problem. The reason I didn't catch it earlier was that the amount of loosening was so little that it wasn't visible. The moral of the story is check both ends of the plug on a regular basis. Even if the plug end looks OK give it a twist of the finger just to be sure. Like so many things in flyinng, you had best make sure your assumptions are valid.

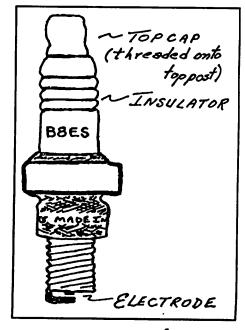


Figure 1. B8ES sparkplug and topcap which can come loose from threaded top post, causing arcing between cap and threads.

Jim's Place

by Jim Creasser

Oshkosh '90

Oshkosh Wisconson is a quiet small city of about seventy-five thousand people. It lies near the shore of Lake Winnebago about 150 miles north of Chicago. Surrounding the city are endless miles of dairy farms and flat lands.

The main industry in Oshkosh is the college, with Oshkosh Trucks and Oshkosh B Gosh clothing the major companies. And of course the HQ of the Experimental Aircraft Association, Whitman Field, is in Oshkosh with its many buildings used for one week of the year and the year round Museum Buildings housing hundreds of very interesting aircraft.

Our pilgrimage this year didn't turn out as planned. We anticipated leaving Airdrie Airport Wednesday morning (show starts Friday) early and arriving nine flying hours later, plus an hour or two for stops (three planned). As I was working nite shift Tuesday nite I had arranged for my relief to come in early Wednesday morning at 0530 hrs. I picked up Ken at 0545 and headed home under a low ceiling with a breeze from the north.

This was the sticker, as Ken's Cheetah was parked at my place and we needed a south wind to get it out and over to Airdrie to load up for the trip.

About eleven o'clock or so the wind died down to almost nothing so Ken was off and I loaded all the necessities

(View continued from page 1) built a Skypup some years ago and I look forward to his thoughts.

You may have noticed that some of my Safety Corner articles are now appearing in the Canadian General Aviation News under the heading "CALLING UL PILOTS". I think the orginal versions in the Skywriter were better, because our editor Bob Kirkby included unedited text and all the figures and diagrams. Nevertheless, the intent of the articles in Ultralight news is to inform and educate ultralight pilots outside of the CUFC. So far, I have not received any feedback, which I take to mean that those who read it are in agreement.

while Ken checked with weather and although it didn't look good we headed out east. Our two planned routes were not possible as thunderstorms lined the U.S. border all the way to Brandon, Manitoba so that's where we went. My first trip to Brandon, and we were lucky to get that far.

After an overnight stay the motel manager drove us to the airport at 0700 hrs and, as we neared the strip, we saw the revolving white lights, I.F.R. conditions, closed for V.F.R. (that's us). A visit to the weatherman was very depressing, he informed us of a large band of thunderstorm cells joined together stretching from the U.S. Border south three states and moving slowly north.

This meant either going east to Toronto and then south or south around the bottom end and east then north again. Either choice was much too far so we took the third choice, park the Cheetah in a hanger, rent a car and drive through all these storm

cells which we did. We met a couple of guys at Brandon from Banff & Canmore in a homebuilt also on their annual trek to Oshkosh and they shared the car expenses (and it was expensive). It took us 15 1/2 hours to a arrive at Whitman Field at 0330 hrs Friday and after a very short sleep were there at 0900 hrs to stand in line for our tickets. This weather pattern wasn't supposed to get as far east as Oshkosh but it did and the campers were soaked for three days, as well as most spectators although it didn't dampen the enthusiasum. I heard the attendance record was broken to the tune of two hundred and fifty or so thousand on one day and a day with rain showers to boot. Thanks to the Then Brothers, who had bought two rain coats each, we managed to stay

The airport was closed on Friday as it is every year, no more room, about fifteen thousand aircraft taking every possible parking spot. I think I heard there was over twenty thousand registered at the E.A.A. camp ground and there are others. All of these people as well as all of those in the motels, hotels, college dorms, rooms in houses etc. all eat lunch at the airport so lineups are the order of the day. On (Continued on page 5)

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(Jim's continued from page 4)
Friday & Saturday morning we went straight to the U.L. area to meet Wayne Winters at 10 o'clock but he didn't nake it, this gave us a chance to look over all of the displays and aircraft.

The most interesting machine in this area was a Rotax powered helicopter. Yes you read that right, a single place lightweight helicopter prototype powered by a 582LC Rotax Engine, and power it has, enough to do the job it seems. Dennis Fetters of Gyro fame has gotten together with an Argentenian designer to form a new company called Revolution Helicopter Corp., and are in the process of producing a kit with fiberglass fuselage, bubble cockpit etc. Selling price to be \$22,000 U.S., for a complete kit including instruments, lights and electric start. Assembly time of one week is advertised with deliveries projected for November 1990. We watched this hummer fly and it was impressive to say the least.

Back to U.L's there wasn't much new at the south end of the field, Homer Kolb had his new low wing Laser there on Saturday after its first flight on Thursday and the test pilot reported an excellent flyer, as we would expect from Holmer. Some numbers for the Laser - Wing Area 100 sq. ft., empty weight 350 lbs with 503, gross wt. 850 lbs, + 6 -4, 4130 Fuselage, aluminum & steel wings. Price with 582LC, less radiator, \$12,995 U.S. + extras. NOT CHEAP.

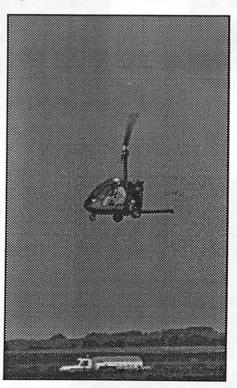
We sat in the new improved, much wider Twinstar Mark III which has been beefed up in the wings etc. for the 582, and is a super performer as we witnessed on Tuesday as they allowed the manufacturers to show what they could do at the U.L. strip.

While we were watching this 'showcase' we were keeping an eye on the main circuit around the N/S runway and noticed an old lockheed. like the one Air Canada restored, trying to make the runway with one engine out. At about forty feet altitude he turned into his dead engine and, you guessed it, that wing stalled, hit the ground, broke and cartwheeled the craft out of our sight. We thought for sure all aboard would be dead but the pilot was in serious condition, one passenger in stable condition, one treated and released and one not injured, very lucky people. We heard the pilot was even older than me and a director of the E.A.A. Probably thousands of hours experience and still made an instant bad decision.

Back to U.L.'s again, the Mini Max did

an impressive flight demo complete with smoke. Most of the newer 2 place machines weren't at the south end but at the other end of the field, the north display area. Here were the Zenair, Kitfox, Avid, Rebel, Kestrel Hawk, Rans, Protech, Macair Merlin, and a few others I can't remember.

On the trip from the U.L. area to the north display area, this year there was a steady supply of Trams so we rode as far as we could and then walked and walked at the start of the trek was parked the Australian aircraft used in the Mad Max movie, very unique craft. On the Heavy Duty Tarmac Parking area was a Super Constellation, which I hadn't seen before, the Concorde, the Stealth Fighter, a Harrier, a second world war B- something Bomber, and three Tri Motors - Ford, Stinson and Junkers flying by in the circuit as we passed this collection of interesting planes. Further north the NASA X29 forward swept wing proof of concept was on static display across from the Beech Starship which they demonstrated daily. I missed one exciting aircraft on the Tarmac, Burt Rutans newest, his entry into the military market, a small composite Jet Fighter which put on an impressive flying display daily within the confines of the airport, very manouverable and at about 1 million dollars per copy you could have a whole airforce for the price of one CF-18. We will end this trip for now and continue next month.



Gyrocopter demonstration at Red Deer Air Show. Yes - there is a tail fin, you just can't see it against the blue sky. Looks like he's about to try in-flight refueling.

Classified

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

Beaver RX-550 - 2 place, Rotax 503 air-colled 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. Ralph or Wayne Winters 936-5347 or 238-0406.

Ritz Standard A - single place, ready for covering, with everything but chemicals, Zenoah motor, \$5500., 335-4594.

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

Goldwing 1986 - 60 hrs TT, instruments, brakes, BRS chute, flies great, Cuyunna 430. Romeo 204-878-2744.

Hiperlight SNS-8 - single place, S/N 1, factory built, TTAF 45 hrs, new Rotax 377, new R.P.M. adjustable prop with spinner, new candy apple paint, instruments, brakes. Jim Creasser 226-0180.

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

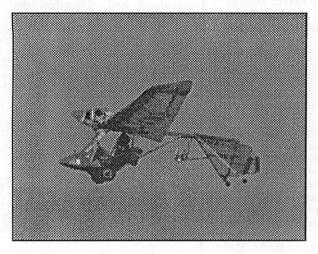
Quicksilvers - MX-II, Rotax 503, 100 hrs, inst. pod, parachute, needs fabric, \$4000.; also MX, Rotax 377, 75 hrs, needs fabric, \$2500. Garry Miller 343-7082, Red Deer.

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

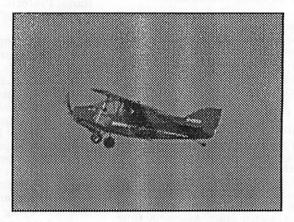
72" Prop - maple with right-hand 40 pitch. Never used and undrilled. \$150. Bill Clark 931-3143.

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

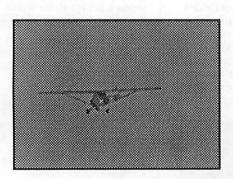
Ultralight Fly-By At Red Deer Air Show



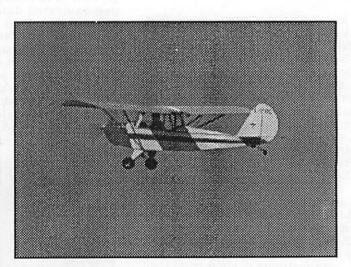
Don Rogers - Lazair



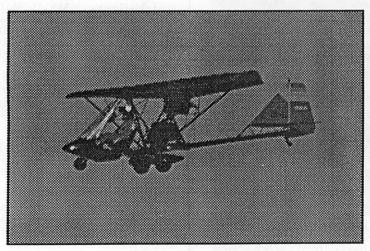
Jim Creasser - Hiperlight



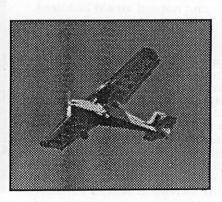
Russ Sirucek - J3 Kitten



Ron Sondergaard - Crusader



Gord Keegan - Beaver



Wayne Winters - Merlin