



# Skywriter



Monthly Newsletter of the Calgary Ultralight Flying Club

March 1993

♪ Off We Go ... ♪

by Wayne Winters



Kallabunga dude, what's the matter with the weather? The February cold snap shut down the flying school for longer than the December one, and that was a long time. Someone said the experts are wondering if we are going back to the ice age instead of global warming. I think the environmentalists are like the economists - some of God's frozen people.

#### Cross Country Excursion

The cold weather forecast, even from the night before, caused mostly a no-show for our February 13th cross country excursion. Crazy things happen though, and by mid-day it was warm enough to fly - even in the completely open jobs. Ron Sondergaard, Gord Tebbutt and myself were all standing around the Indus-Winter Aire Field contemplating heading for Ghost lake. We thought it might be a bit cold for a long flight, so we elected to do a little formation flying. Gord has this great idea of how, with 3 airplanes, you can make it look like you are doing a loop, without doing a loop. (See hand gestures in photo from New Years party in the February edition of the Skywriter.) How it is done is fairly simple. The 3 aircraft fly abreast and the centre one climbs and descends giving the illusion that it is looping (in relation to the other 2 aircraft). We wanted to try this maneuver and a few others, so we thought it would be best if we walked through them on the ground first. It must have looked good from the road to see three grown men, with their airplanes parked, walking around the taxi way with their arms outstretched, pretending to be airplanes flying

around, complete with putt, putt engine noises. Well, after ground rehearsal, we managed to get in our airplanes before the guys in the white coats showed up! Once airborne we almost lost sight of each other, and what we practiced on the ground had absolutely no resemblance to what we did in the air. We landed, practiced more on the ground, then tried again. The next time was much better, we were all within 1.5 miles of each other. Me thinks more practice is in order. Actually, it was not really that bad. We had fun!

Jim Creasser and Jim Corners, from Airdrie, went to Ghost Lake about noon. It turned out to be a party of 2 at the lake.

We are going to shoot for Ghost Lake on our Saturday, March 13 excursion.

#### Executive Meeting

The CUFC Executive had a meeting where it was decided to send a letter to Lindsay Cadenhead to let know our position, as a Club, on some of the proposed changes affecting ultralights. Copies were sent to the Ultralight Pilots' Association, the Recreational Aircraft Association and the Canadian Owners' and Pilots' Association. The letter is reprinted in this issue of Skywriter.

We are going to be affiliated with RAAC as a chapter affiliate. This will in no way affect our position as an autonomous club. What it will do is help keep us and them in touch with concerns that affect us as ultralight pilots, owners and enthusiasts. Many of our members are already members

of RAAC, and we encourage anyone thinking about it to join. Remember though, your membership in CUFC is completely separate and that the Calgary Ultralight Flying Club remains completely independent.

#### Red Deer Air Show

We received a letter from the air show people inviting a representative to go to Edmonton for a meeting relating to air shows. After discussion we decided that it was nice to be invited, but not necessary for us to be represented there. Thanks to Bob Kirkby for looking after this for us. We do look forward to the air show again this year and the opportunity to display our stuff.

#### Financial Report

We had the reading of our annual financial report and it was accepted by those present. Thank you Gord Tebbutt for preparing and presenting it.

#### Premises - RCAFA 783 Wing

It is looking like we will be able to continue in our present location up to and including our June meeting. We are still looking for alternatives. If you have any ideas, please let us know.

#### "Made me look like a fool"

Doug Ward played a tape for us at the meeting, from a radio station that called him, where the D.J. played the role of someone from Transport Canada in Ottawa. He discussed, at great length, the problems with trying to register Doug's Beaver 650, which have all been grounded. Doug fell for it, hook, line and sinker. If you weren't at the meeting have Doug play you the tape, it is good. Thanks for letting us laugh with you Doug!

*(continued on page 2)*

**Reports of projects in progress**

We were updated as to the progress on their projects by the following members: Bill Fleming (Super-Cat), Ed D'Antoni and Wilf Stark (Rans Air Rail), Bob Campbell (Zenair CH701), Chris Kirkman (Murphy Rebel) and Doug Ward (Beaver RX650). If I have missed anybody please forgive me and let me know for the next newsletter.

**Dave Loveman video**

We viewed a video prepared by Dave Loveman, President of UPAC, in which he discussed some of the history of the upcoming regulations, from his perspective. There were no real surprises as to information in it, but it did give everyone another perspective on a very delicate situation. It appears, like most problems, that the lines of communication must be kept open on all sides. Dave has done a lot of hard work on behalf of ultralights everywhere, and although we do not always agree with him, we appreciate all that he has done and is doing to protect and preserve our sport. Thanks for carrying the torch Dave!

**Update from Lindsay Cadenhead**

Last month we reported that the loophole allowing an ultralight pilot to fly a home built aircraft, as long as it was under 1058 lbs. and the stall was under 45 mph, was going to be plugged. This was not entirely correct. The intent was to not allow aircraft that are not on the Advanced list to be flown by an ultralight pilot. In other words, if the criteria are met (Advanced Ultralight) the aircraft could be registered as a home built, and flown by an ultralight pilot.

There is now a formal go ahead for the technical committee. It appears that there is going to be more representation on that committee by people who are actively involved with ultralights. One such individual is a gentleman by the name of Frank Hoffman who is very active in the ultralight movement in Quebec.

The best news of all is that there is a "formal policy change" that will let the 2-place "I" category aircraft stay the way it is now with an across the board increase of 20% in weight. This should become official with the first formal meeting of the Technical Committee which will take place in April of this year.

To help eliminate confusion, Lindsay would like to see the name "Advanced Ultralight" changed to something else.

He is open to suggestions for the name of that classification.

**March Cross Country's**

Cross country excursion dates for March are Saturday the 13th and Sunday the 28th. For Saturday the 13th we will try the Ghost Lake run once again. This time we will leave Indus-Winter Aire Park at 11:00 hours, and hope for warmer temperatures.

For Sunday the 28th we will plan a hop around to some of the local members' airports in the east side of the city (Not yet confirmed with airport owners). I was thinking of leaving Indus, once again, at 11:00 hours and flying to Ray Stefanich's strip (Then brothers) towards Langdon; from there to Bob Campbell's strip towards Strathmore; then to Bob Kirkby's strip back towards Chestermere lake; then to Ben Stefanich's strip 2 miles north; then to Jim Creasser's strip at Balzac; and return. Total flight time to be 2 days!

When the weather gets better Ivan Myslawchuk has volunteered his strip by Standard which we can use en route to Dumheller.

Tom Thomas, of Eckville, has volunteered his strip as a destination when we want to do a longer run (25 miles west of Lacombe). It would make a good stop off point on the way to Peace River for the air show!

Gotta fly.



**EXECUTIVE**

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Doug Ward 282-0806

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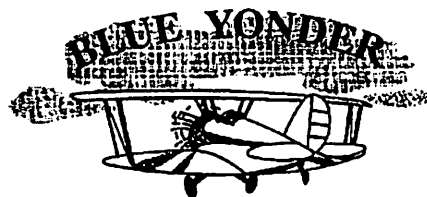
**Director**  
Stu Simpson 240-3019

**Skywriter Editor**  
Bob Kirkby 569-9541

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: Bob Kirkby, RR 7, Calgary, AB T2P 2G7

Meetings of the Calgary Ultralight Flying Club are held the first Wednesday of every month at 7:30pm at

R.C.A.F. Association  
110 - 7220 Fisher Street S.E.  
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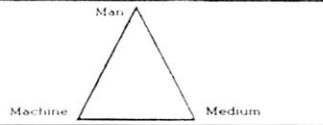
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- Ground School
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- Gift Certificates
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# Safety Corner

by Paul Hemingson



## Repetition....Friend and Foe

I have read somewhere that repetition is the fundamental rhythm of progress. I believe it! When it comes to flying, and many other motor skills in life, where mental and physical coordination is required, repetition is how we learn. Student pilots are taken up and introduced to the three axis of freedom, and from there go on to learn the basics of take-off, climbing, straight and level, and landing. The circuit provides a convenient way to repeat the basic elements of flight.

Repetition is how we learn to make conditioned reflex work for us. For example, in a stalled flight condition we learn to give a little forward stick to unstall the wing and regain flying speed and control. The pilot with inadequate conditioning will pull back even further on the stick, aggravating the stall. This happens more than many folks think, judging by the number of stall incidents on landing and take-off.

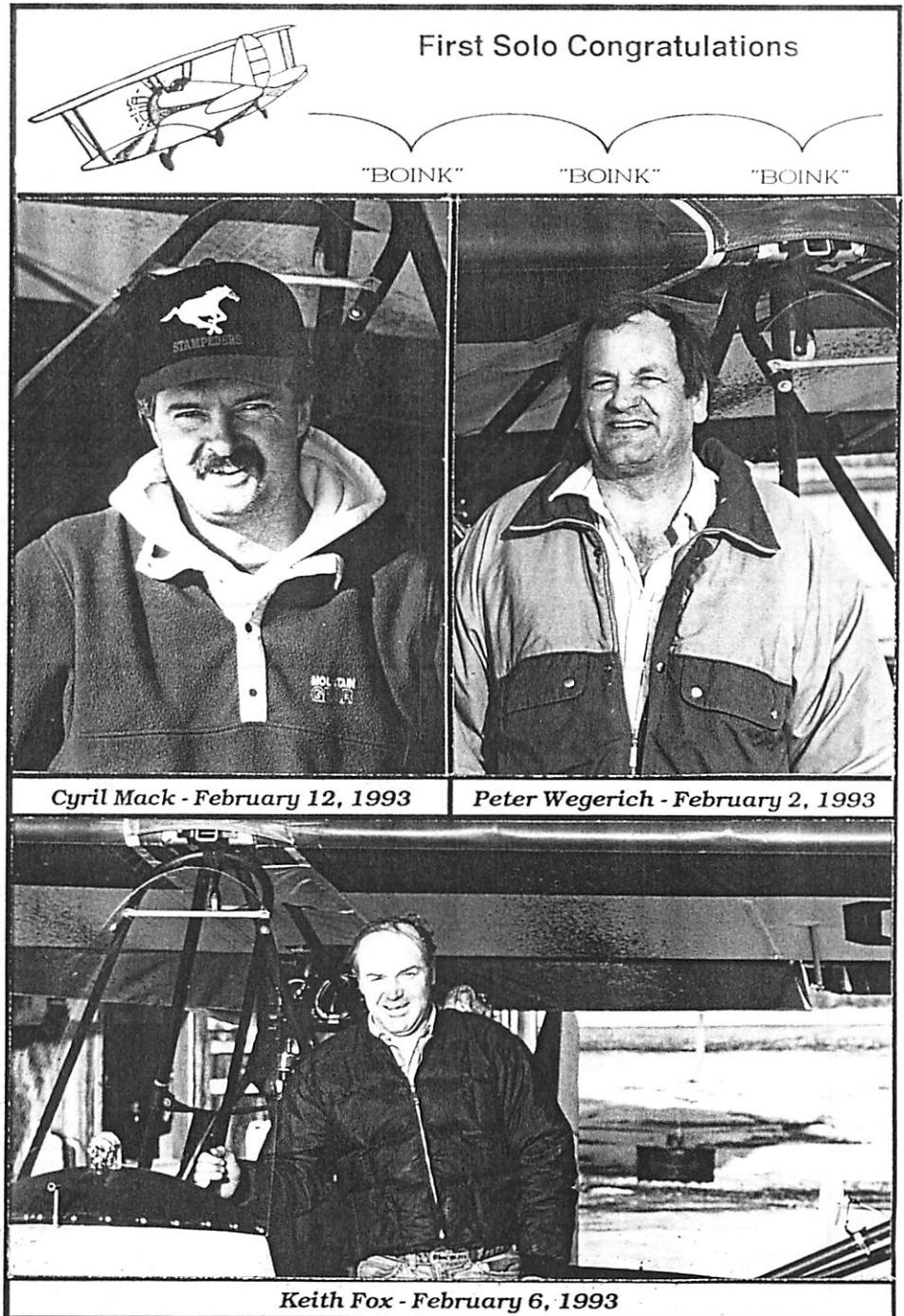
The conditioned reflex is particularly important in stall and spin recovery. There is usually not enough time to reason these things out from first principles. The repetition of stall type accidents and incidents are proof.

Repetition can also work against us. For example, the pilot who conditions himself to turn final over such and such a house is setting himself up for a future surprise. One day, when the wind is stronger than normal he will find himself going downwind much faster and then in trying to turn base or final will have to bank much more than normal. The pilot may then slow his plane up to get it going in his accustomed flight path and inadvertently stall. Repetition in this case, by always using the same ground point for reference has conditioned the pilot for an inappropriate response. The more experienced pilot will have thought things out before. He/she will recognize the conditions for what they are. Knowing the effects of the wind, optical illusions due to drift, and the response of his aircraft, the pilot will decide to turn base earlier than normal and his final leg may even be shorter to compensate for the wind 'setting him back'. The reasoned response is also a function of repeatedly thinking along these lines.

Another example of repetition adversely conditioning a pilot, is when he takes off on a hot day and does not pay enough attention to the airspeed. He feels he may be going fast enough relative to the ground, but on a hot day more speed is required. The airspeed indicator for proper take-off will always read the same, but the pilot may be using outside references. He

may be able to get a few feet off the ground, but quickly stall once out of ground effect.

Repetition is the fundamental way we learn. Conditioned reflex is learned by repetition. One just wants to be sure he is learning the correct things. After all, even bad habits are simply things done repeatedly until they too become conditioned reflexes. This is why they are so tough to unlearn. Get a buddy to check you out some day, to learn if you have developed any bad habits. Repetition can be a friend or a foe. The thinking pilot is a safe pilot.





# Calgary Ultralight Flying Club

c/o Bob Kirkby, RR.#7, Calgary, Alta., T2P 2G7

February 9, 1993

Lindsay Cadenhead  
AARRD  
200 Kent Street  
Ottawa, Ontario  
K1A 0N8

RE: New Ultralight Regulations

Dear Lindsay:

On February 3rd, 1993 the Executive of the Calgary Ultralight Flying Club had a meeting where it was decided that we would send you a letter on behalf of our 80+ members to keep you posted as to the Clubs' views regarding the up coming Ultralight regulations.

It was a relief in December when we found that the proposed deadline for registering 2 place 'I' aircraft was moved ahead to summer. It is our feeling that when, or if, this regulation comes into place there will be a lot of innocent people damaged. There are pilots, and would be pilots out there that are innocently building airplanes, not knowing that under the new proposals they may not be able to register their craft, hence owning a very expensive weather vane. With some of the projects taking many years to complete, it becomes a burdensome project to find and contact all these people. We are also very pleased to hear that the one time proposal of restricting Ultralights to 25 or 30 miles from home base has been dropped.

Regarding the 'I' registered 2 place aircraft, no one is really clear on why they should be eliminated. We find, in our area, that Ultralight Pilots are not attempting to carry passengers, and if there was an inclination to break the rule that it would be done just as easily in an Advanced Ultralight. Most of the machines we see people flying are the same ones that are on the Advanced list anyhow. What the extra seat is doing is allowing extra fuel, tools, and goodies that make the jaunts around the country side safer. We do not see a lot of accidents in these 2 place 'I' craft, even in training school applications. There is a concern that if these craft are eliminated from the Training Schools that the Schools will have a difficult time surviving because of the extra expense of buying and maintaining the Advanced Category Aircraft.

In respect to the weights of the 'I' aircraft it is agreed that the one time allowed, and proposed increase of 20% is a necessary amendment. Brakes, larger tires, better engines, instruments, and material for extra strength of the machines is in every ones best interest. When at the 20%, the instructor, the student, the floats, and the parachutes are all of a sudden up to almost the 1058 pounds of the Advanced Ultralight. Why not drop the old 'Maximum Launch Weight' in favor of a maximum T/O weight of 1058, with the manufactures maximum weights not to be exceeded? This way the existing machines, pilots wanting to carry additional camping gear, etc. and the Ultralight Flight Training Schools can all be accommodated.

On the topic of Advanced Ultralights there seems to be a real problem where the manufacturer goes out of business, falsifies the documentation, or simply refuses to correct a problem - the owner is simply stuck. The classic example is with the Beaver RX 650. One of our members has one, that is of course grounded, and nothing seems to be happening to rectify the situation. The thing that we do not understand is how the Advanced ones are grounded yet the ones with an 'I' registration are able to continue flying. It seems reasonable that they should all be grounded and the problems clearly identified, allowing the owners to correct the problems and re-register as 'I' category aircraft. Weights in the 'I' classification may be a problem, giving all the more reason to quickly amend the weights in that category. It is understood that no one wants to take the responsibility and liability of suggesting repairs, but it is only a suggestion, not a recommendation, that way we could at least give these owners an opportunity to get their air craft flying.

The last major area of concern is that of speed. Some of our members would like the opportunity of flying at very high speeds (120 - 200 mph), but most feel that those speeds in an Ultralight are beyond the reason for Ultralight flying. (Low stall speed, slow landing characteristics, safe emergency landing speeds, etc.). The fear is for pilots getting lost, the aircraft not being able to withstand the speed, serious accidents, and that a mountain of problems could result from trying to legislate after the fact. Perhaps some reasonable speed restrictions should be put in place unless the aircraft is flown by a Ultralight Pilot trained in navigation, weather, and high speed stresses placed on as air frame. Here is where a wing loading formula may need to be put in place, along with the maximum stall speed of 45 mph, as it now stands for Advanced Category A/C.

In conclusion, Lindsay, our membership covers a wide cross section of pilots, enthusiasts, and owners with experience as varied as you can imagine. We will be here, having to live with the new regulations, long after the Dealers and Manufacturers, who seem to be making the most noise, are long gone. We want to be part of the solution and offer ourselves to you and Transport Canada in anticipation that reasonable solutions for all parties can be achieved. Call on us anytime and we will be glad to respond with our input, and please, above all, lets keep the sport simple, safe, and affordable for everyone.

Yours Truly,

R.W. (Wayne) Winters  
President, Calgary Ultralight Flying Club  
CC. U.P.A.C. - Dave Loveman, President  
CC. C.O.P.A. - W.W. Poppler  
CC. R.A.A.C. - Mike Pothergill

## CALGARY ULTRALIGHT FLYING CLUB

### Balance Sheet As at December 31, 1992

#### ASSETS:

Bank Balance	\$445.54
Petty Cash	21.97
Total Assets	<u>\$467.51</u>

#### FUND BALANCE:

Opening Balance, Jan.1, 1992	\$287.73
Excess of Receipts over Disbursements	179.78
Closing Balance, Dec. 31, 1992	<u>\$467.51</u>

## Statement of Receipts and Disbursements For year ended December 31, 1992

#### RECEIPTS:

Membership Dues	765.00
Donations by members	47.50
Door Prize Receipts	62.00
VCR Rebate	100.00
Skywriter Ad (Blue Yonder)	100.00
Cap Sales	59.00
Bank Interest	7.82
TOTAL RECEIPTS	<u>\$1141.32</u>

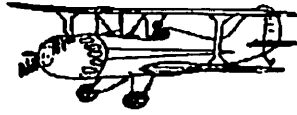
#### DISBURSEMENTS:

Honouraria(2)	100.00
Postage	252.08
Photos & Supplies	173.80
AGT	14.00
Mountain Flight (PH)	103.70
Corporate Registration Fee	8.00
Photocopies	29.96
Video Purchases	50.00
RCAFA -donation	180.00
-dues	50.00
TOTAL DISBURSEMENTS	<u>\$961.54</u>

Excess of Receipts over Disbursements: 179.78

# One Pilot's Opinion

by Bob Kirkby



## Alert

Since I published my articles on combatting radio interference last year, I have encountered two cases of ignition failure due to a breakdown of the NGK spark plug cap. The first occurred on my own aeroplane and the second occurred just recently on Ken Eastham's Beaver. Both scenarios are almost identical.

In both cases we had run shielding braid over the spark plug leads and the caps. After many hours or uneventful operation a severe mis-fire suddenly developed on one cylinder. In my case it was intermittent enough that the engine was able to get my back to my airstrip and an uneventful landing. In Ken's case the mis persisted for only a few minutes and then the cylinder quit firing altogether. He made an uneventful forced landing near the Indus airport.

Investigation showed the same thing in both cases. A hairline crack was discovered in the plug cap which resulted in a short circuit through the cap material to the grounded braid which covered the cap. We do not know what caused the crack to develop. It could have been a build-up of heat in the cap under the braid, or simply a failure due to vibration. Obviously, if the cap had not been shielded with braid the crack would probably not have caused a problem. Although, eventually it might have become worse and moisture on the cap and leads might have had the same result.

Due to the uncertainty of using shielding over these NGK plug caps, I am strongly recommending that you do not do so!

There are manufacturers of shielded spark plug wire and cylindrical plug shields, but I have been unable to locate a source for them in Calgary. I have further information on them in a publication called "Giving Two-Way Radio Its Voice", by Champion Spark Plug Company. I intend to contact them to find a source of these plug shields. When I get more information I will pass it on. Meanwhile, I suggest not using braid over these NGK plug caps. Better to keep the engine running and suffer a little radio interference than to end up in a field with crystal-clear reception.

## Where Will It End?

I just finished reading the latest issue of *The Recreational Flyer*, the RAAC bi-monthly magazine, which has several out-spoken articles on the AULA controversy. Boy, has Dave Loveman ever got them churned up!

The editor, Steve Thomas, starts the issue by pointing out that "there does seem to be quite a bit of smoke rising from the vicinity of the (Advanced Ultralight Technical) Committee". He goes on to imply that much of this smoke is not caused by fire but by a certain individual "creating a lot of friction". We all know who that is, of course.

Howard Bexon then devotes his article, *Research and Engineering, to Questions and Answers about Advanced Ultralights*. (Howard is the Engineering and Technical guru of both the Ultralight Technical Committee and the RAAC.) Howard usually writes a very factual and sensible article. In this one, however, I sense an undertone of defensiveness and irritation. He starts off by inviting reader's comments, but only if they answer the following two questions first:

- 1) "Do you have a copy of TP4310E and are you completely familiar with its history, content and intent?"
- 2) "Do you have a copy of the Proposed Ultralight Policy (including the history summary) and design spec TP10141? Have you studied and understood these documents?"

Well Howard, in case you should happen to read this, I do have a copy of both documents right here beside my keyboard, and yes, I have read and understood them. Hopefully that qualifies me to comment.

Howard then goes on to reply to a number of statements in a letter he received from a reader in Sault Ste Marie. The whole article really amounts to a bantering back and forth over the question of "what's going to happen to the "I-registered" ultralight when the new AULA program finally comes into effect?". Howard comments, "The Jan. 1993 date for the new policy has once again been

## Classified

**Quicksilver MX II HP** - 6 hrs TT, 503 D/C, 66" Ivoprop, Hagar wheels & brakes, seat tank, strobe, 12v, ASI, CHT/Tach, ALT, powder coated, DU1000 U/V installed, tail brace kit, hangared, logs maintained. **Quicksilver MX II 503 D/C**, 0 hrs TT, Competition 4-blade prop, CHT/Tach, ASI, wheel pants, new sails (not installed), powder coated. Extra 503 just rebuilt (not gear drive type). 277 FA disassembled, cyl. oversized ready for installation, 2.58 "A" gear box and propeller. Too many extra parts and accessories to list. Over \$30,000 value. Will sell as complete package for \$15,000, OBO, or separately. Brad Allore 604-465-0982.

**Airlight Model "A" Parasol** - Steel tube & rag, Rotax 503, Warp Drive, lots of instruments, 800 x 6 tires, strobe, CB & VHF hookups, folding Kolb wings, \$11,000.00. Jim Creasser 226-0180.

**Wanted** - Broken crankshaft from a Rotax 503 or 447. Doug Ward 282-0806.

**Rear Fairing** - for RX550, white, new, \$50.00. Doug Ward 282-0806.

**Ivo Prop** - updated 3-blade, ground adjustable, 60", composite blades. New - \$300. OBO. Paul Hemingson 931-2363.

**Rotax 503** - single carb, excellent condition. \$1200. OBO. Paul Hemingson 931-2363.

**Beaver RX550** - Rotax 503 dual carb, 60 hrs, ASI, Tach, CHT, ALT, Ballistic chute, \$9000. Barry Ochitwa, W 530-4031, H 236-9392.

Classified ads are free to CUFC members. Call Bob Kirkby, 569-9541 to place your ad.

postponed, largely because of blocking action by individuals who are determined to kill the advanced ultralight proposal". Does he really believe that?

Perhaps those involved in this proposal should step back and ask why they are getting so much smoke from the ultralight community.

A little further into the issue I found R. Wilco's article, "Read Back", which really floored me. While Dave Loveman's writings on the subject generally appear to be over-reactive and disjointed, Roger Wilco's article is an over-reaction to an over-reaction.

(continued on page 6)

He burned up three full pages ranting and raving about Loveman, UPAC and the decadence of the ultralight community in general. He definitely needs to step back and try to see beyond the smoke.

I am the first to admit that Dave Loveman's tactics are crass and his writings are not very articulate, but if one does not like the messenger, one should not simply dismiss the message, as Mr. Wilco appears to do.

I, for one, am tired of being tarred by the same brush as our very distant cousins in the east. We in the west also have some grave concerns, not so much about the AULA program, but about what the new policy might have done to the "I" category. Elsewhere in this issue is a copy of the second position statement of the Calgary Ultralight Flying Club to be sent to Lindsay Cadenhead on the subject. Suffice it to say that the concerns of the 80 plus members of CUFC have been clearly articulated to Lindsay, both in writing and in person during his visit with us in March of last year.

It is worth noting that, to my knowledge, not one of the members of our group (CUFC) is a member of UPAC. There is a very good reason for that. I can not speak for the rest of the members, but personally, I am not interested in letting UPAC represent my interests. In fact, I find it quite offensive that these members of the policy development group would try to lump us together with UPAC. We are quite fortunate that Lindsay Cadenhead seems to be a little more broadminded, and is able to see through the smoke a lot better than those who spend their time chewing at each other in the media.

I'd better shut up before I get sucked into the inferno myself. If you are interested in a few chuckles, borrow a copy of the January/February issue of The Recreational Flyer and read it for yourself.

Mr. Wilco's final swipe at UPAC is hidden in the last paragraph of his article, in which he lists the organizations that are supposedly represented on the Ultralight Technical Committee. UPAC is conspicuously absent from his list. Freudian slip Roger?

I wish the authors of the AULA program had chosen a different name than "Advanced Ultralight". Perhaps if they had named it "Easy-build Home Built" instead, the real ultralight enthusiasts could distance themselves

from the great debates, and carry on enjoying flight as it should be.

## A Little Prop Wash

by Douglas J. Ward

In my last article about the use of fasteners in your aircraft, I discussed the various properties which must be an integral part of any bolt or cap screw which you would use in your machine. While each component of a fastener assembly (cap screw, washer, nut, etc.), must of necessity have certain basic strength, hardness and other characteristics, the actual relationships of these parts in usage together may many times be neglected. A builder may use the highest strength cap screw, but may pay little attention to the washers or nut which he is using with it.

A person may unknowingly use a nut which is actually too hard for the bolt it is installed on, or use a "soft" washer that will dish out under the load which it was installed to hold. This fastener assembly may appear tight and seem to work for a short time, but the stress and strain of it's working condition may perhaps cause a failure. Not a great thing to happen in an aircraft airframe. Why does this happen?

Many things, including carelessness, can cause these failures. Neglecting to actually tighten fastener assemblies beyond their working load (please see last article) accounts for over 75% of all fastener failures. The use of even one, less than satisfactory component in a fastener assembly can ruin the best efforts of even the most careful and devoted builder. Don't be tempted to use any of that "looks like it should work" fastener stock. Your life is much more valuable than a 3 cent washer.

The actual working strength of a bolt or cap screw varies greatly, depending on it's quality. The same holds true with each of the other elements of a fastener assembly. Unlike cap screws, however, the quality of washers and nuts are not identified by any standard marking system. Yet the holding power of any fastener assembly depends on the performance of all the components of the assembly. The use of an inferior washer or nut can literally destroy the best efforts of any good aircraft assembler. It is impossible to tighten an assembly properly unless the nut and the washer used with it are capable of helping, rather than hindering the development of proper tension (preload) in the assembly. In other words, only top quality washers

and the proper nuts should be used in any fastener assembly. This in turn helps provide the margin of protection and safety required for efficient and safe operation in your airframe.

In my next article I will try to describe why a nut, which does in fact fit onto a specific bolt, can hinder the strength of the assembly because of its over-strength. Please take great care when assembling. Your life is definitely worth it.

## Letters

From readers



Mr. Bob Kirkby  
c/o Skywriter Magazine

Dear Bob,

RE: Article in November magazine implicating hot air balloons

On November 23, 1992, I was made aware, by an officer of Transport Canada, of your article published under the caption "One Pilot's Opinion", wherein you felt you would be called upon as a witness by the accident investigators as a result of witnessing the actions of a coupler of hot air balloonists.

Although I respect your opinion as to what happened, witness the title of the article, I would like to take this opportunity to explain what, in the opinion of the balloonists involved, actually happened.

On the day in question, Sunday, November 1, 1992, several balloonists launched from one of their normal launch sites in Calgary, the Glenmore Spillway. They proceeded East across the city and out into the country, as is the norm. Their ground speed in the light Chinook flow over the city was about 12 - 15 knots, well within the limits of the balloons. Once the pilots cleared the city, they came lower to the ground to take advantage of the lighter winds. This afforded them an opportunity to slow down to less than 5 knots and expose the passengers to the beauty of hot air ballooning. There are times when the pilots are within a coupler of inches of the ground during their flight.

Around Calgary there are landowners who do not wish to have balloonists overfly or land on their property. We call those areas P.Z.'s (prohibited zones) and they are well marked on the (continued on page 8)

# Around The Patch

by Stu Simpson



## An Angel's View of Forever

The forecast read like an ultralight jockey's mid-winter dream...blue skies, light south-westerlies and plus 8 degrees. Winter weather around here just doesn't get much better. And on such a day, every pilot who can lay hands on a pair of wings will make hamburger of the guy who stands between him and the runway.

But sadly, there exists a huge gap between dreams and reality. Conditions on the surface weren't exactly what the weather dudes had predicted. Shocking, but true.

Take the wind for instance. Northeast at 10. And the temperature dangled at about minus 4 - hardly balmy. But it was the sky that was most peculiar. Not the clear blue yonder as promised, but a strange white haze that leaked plenty of sunshine. I just figured it to be the inversion layer, only a little deeper than usual, and closer to the ground.

I was just pulling the Beeve out of the shack when the unmistakable buss of two ultralights tickled my ears. Just barely discernable through the haze, Don and Ron were making their way to Kirkby Field.

"Raymond!", I yelled. He was in his hangar putting the tail of his Renegade back together. "Company's here."

Raymond poked his head out of the hangar and watched intently as the two airplanes droned through the scattered sunshine.

Don was renting the Easy Flyer for the afternoon while Ron flew his Crusader. Don landed first, after a straight-in approach to Kirkby's runway 34, while Ron completed an overhead circuit. Then, he too taxied in and shut down.

The four of us spent some time hangar flying and having a boo at Raymond's plane. The conversation eventually got around to our destination for that day, as yet undecided.

Ron took a look at his gas gauge and decided he'd best head back to Indus. I asked Don what the conditions were like upstairs. He stated the inversion layer lasted only about 400' AGL, and it was very well defined. The layer was cold and blustery, he reported, but

once on top, things smoothed out nicely and the temperature rose to +8 degrees.

Since neither of us really wanted to venture far, we agreed to just hang around the neighbourhood, maybe shoot some circuits at a nearby strip, and generally just play around.

Ron worked the choke and throttle for me as I hand-propped the Beeve and we soon got it running smoothly. I began donning my winter flight gear as he fired up the Crusader and took off for Indus. Don and I blasted off a few minutes later.

I went first. I pulled the Beeve into the sky, the haze now wrapped around me like a thin grey veil. I levelled at about two hundred feet and circled, waiting for Don. He joined me a moment later, parking the Easy Flyer off my right wing as we turned north.

In unison, we began a steady climb. We were on top a few seconds later. Just like that. One minute we could only see a couple of miles through the mist, the next, we had an Angel's view of forever.

The sight was breathtaking. We floated over a duvet of dazzling white cloud spread out beneath us, soft, puffy, infinite. The sky was the bluest I've ever seen. A rainbow, straight as a sunbeam, spread across the horizon, bonding the cloud layer to the sky.

Here, reality transformed itself into a dream. We were suspended in time - we could have been doing 55 mph, or 155 mph - the sensation would be exactly the same. All we could see was sunshine and heaven.

We turned our planes to the northeast and Don switched sides, sliding behind me to perch off my left wing. We could still see the ground directly below us, about a mile or so in any direction. With the cloud layer blocking so much light, though, each glimpse of the earth was no more than an under-exposed black and white photo in my mind.

I dropped the Beeve toward the top of the clouds and watched my shadow as we merged on a collision course. We came together as I zoomed through a misty peak. The shadow tried again and again to get away, ducking into

the low valleys between one crest and the next. We played this game for a few more minutes until I pulled the nose skyward again and spotted Don. He was doing exactly the same thing, skimming the clouds as his shadow raced to catch him.

Suddenly, we were enveloped in cloud, able to see up much better than down. I pulled the stick back and held it there until I popped out again. I saw Don a few seconds later, his nose high as he too climbed out of the soup. It occurred to me that this might not be a harmless layer of haze, but quite possibly a growing fog bank. The same thought must have occurred to Don because he pointed to the southeast, indicating we should head back to Kirkby Field.

We turned back and formed up in a tight left echelon. I peered down, hoping to see some familiar landmarks. We weren't really worried because we were close to home and over territory we knew well. Still, landing soon was a definite priority due to the uncertain weather.

I recognized a plot of land ahead, a vast grain field bisected with a gravel road. It's where I like to practice my nap-of-the-earth flying, and I know those few square miles intimately. I began a shallow descent, regretting that I had to go home now, that we couldn't stay a little longer in God's playground.

Visibility improved once we dropped to about 200' AGL. We soon spotted Kirkby's and landed a few minutes later on runway 34. We chatted happily for several minutes after we shut down. Our hands zoomed through imaginary cloud tops while we recreated the highlights of the flight.

Half an hour later Don was strapping in and assuring me he'd be fine on the trip back to Indus. He'd stay low and follow the road, he said. I knew he would.

I shielded my eyes from the sun's glare as he back-tracked on the runway. Then he spun around, fire-walled the throttle and raced into the sky again.

I waved to him as he went by, he replied with a quick nod of his head. As Don faded into the haze I turned to the Beeve and began rolling it towards the hangar.

**"Trust your hunches. They are usually based on facts filed away just below the conscious level."  
- Joyce Brothers**

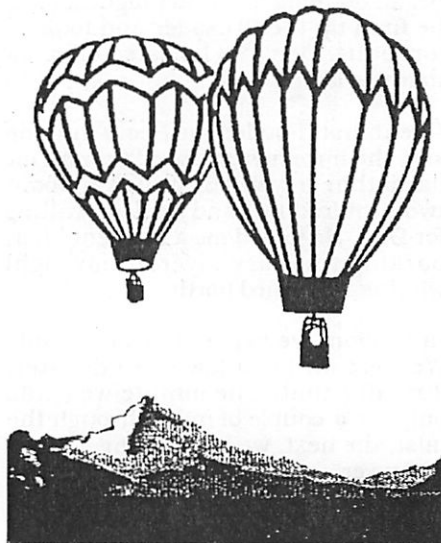
flight maps (1:50,000 scale topos) that are carried by each pilot. Just prior to when you noticed the balloons approaching the high tension power lines, two of the pilots had arranged, by radio, to land in an area Southeast of Chestermere Lake, specifically Bill Lester's farm. The prevailing winds at any altitude above 150 feet A.G.L. would carry them toward a rather large P.Z., but the winds at or near the surface would take them southeast of this P.Z. As a result, the pilots had to stay near the ground for as long as they could in order to achieve the proper track to avoid the P.Z., "popping up" at the last minute, well within the safety limits, to overfly the power line, losing some of their good track in the process, and then return to the surface to continue on the good track. Both pilots managed to avoid the P.Z. and landed safely after about an hour in the air.

Your estimated observations may have been very close as to distance and elevation. Balloons are a unique form of aviation, in that they can achieve tremendous vertical climb in little or no horizontal distance. Through negotiations with Transport Canada, balloonists in Canada have established a minimum criteria for launching balloons, as a reflection of their capabilities and performance. A "generic launch site" can be any area that complies with the following directive:

"... shall be from a launch area that is at least 100 feet in diameter,....., where the centre of the circle shall be no closer than 1:1 (1 foot vertically for every 1 foot horizontally) from any obstacle downwind in the take off path;"

The 1:1 factor is the key here, and this criteria is used for obstacle avoidance. Balloons are capable of rising at a rate of over 1,000 feet a minute after "pouring the propane" to them for only 9 seconds! Our burners put out a converted value of over 5,000 horsepower when operated at only 50% pressure! This is our safety factor, and pilots train for many hours in sharp approach and climb out techniques for obstacle avoidance, in order to be able to miss things like those "hummers" safely. The power lines in question are about 80 feet high, and the balloonists did not "tempt fate by dropping to 20 feet AGL just before ...", but rather were flying, in relatively level flight, less than 30 feet off the ground and pulled up to clear the power lines with time and distance to spare, as you noticed. I can assure you that the pilots in question

are personally known to me, and neither of them is a "thrill-seeker". I can only that they have flown this area many times, as I have, and they are very familiar with the power lines in question. Quite often, when the balloonists rise to clear the lines, they actually "stall out" over the lines, forcing them to spend quite a time clearing them, even at altitude. It has been demonstrated that the more positive technique for clearing lines, in light of detrimental winds, is to use the positive ground wind to develop the speed you need, rise up, within safety limitations, to clear the lines in the least time possible, and then return to the positive wind as soon as possible.



Bob, we know that we, the balloonists in the world, have a constant challenge to fly safely and reduce the risk taking at all times, as do all pilots. Also, we recognize that not everyone understands how a balloon operates, and the more we can do to explain our operations, the better the "outside world" understands our methods. We envy the ultralight people with their ability to just literally "jump in and go somewhere", because we have to put in 5 hours for every 1 hour in the air, what with flight planning, passenger co-ordination, layout, launch, flight, recovery and return to base. By the same token, we know that we enjoy the pure silence when flying in a balloon (the burners are only on for 5 - 10 seconds every 2 to 3 minutes) that can not be achieved in ultralights. We both have our "good points" and our "bad points", but I hope I have explained our side of the story. We appreciate comments from "the outside" because it constantly demonstrates that people are watching and wondering. I am sure that same thing is true in ultralights.

Good luck and may you enjoy many hours of great flying.

Yours truly,  
Leigh Spicer  
Past President, Alberta Free Balloonist Society

*Thanks for this very enlightening and well written letter, Leigh. I certainly did not wish to appear critical of the balloonists I observed in flight that day, but simply had a genuine concern for their safety, given my lack of knowledge of hot air balloon flying. I have a particularly acute respect for power lines, as you can probably tell from the end of my article, because a good friend collided with one a few years ago. Fortunately he lived to fly again, but he is the worse for the experience. I also have a power line within 200 feet of the end of my runway which is etched into my mind.*

*This fascinating description of balloon operations is very interesting and only wets my appetite for more information. I believe a presentation by Leigh at one of CUFC's meetings would be extremely interesting and worthwhile, if it could be arranged. (Wayne, take note.)*

*Leigh, you and your cohorts are very welcome to "drop in" at my place anytime you are flying the area. I have 80 acres dedicated to aviation and it is most definitely not a P.Z. But watch out for that power line at the end!*

-Editor

## New Members

**Cyril Mack - 285-0625**

Cyril is 39 years old and works in the pipeline industry. His brother-in-law introduced him to the idea of flying ultralights. Neither of them had ever flown before. Cyril tried it on February 2, liked it, pursued it, and soloed on February 12th. Congratulations!

By the time a man realizes that maybe his father was right, he usually has a son who thinks he's wrong."

- Charles Wadsworth



# Of Dreams and Stearmans

by Kevin Maher

*The world smiles at lovers and dreamers. Neither are a threat to anyone and everyone is capable of both. Lovers and dreamers are in harmony.*

*When a person is in love they become a different person. When a person has a dream, the same change occurs. The secret to happiness is to have both a dream and a lover at the same time. The you become whole. Whatever else we do in order to make our way through life, we must pay attention to both love and our dreams. We can live cheaply and eat oatmeal three times a day if necessary. We can put up with what other people consider hardship and sing all day long - if we have a dream.*

*A dream gives us freedom. Freedom is the highest state a human can evolve to. It is a mental state, just like love and dreams are mental states. Dreams cost nothing. However, pursuing dreams requires courage because dreams take us beyond the controlled known into the unknown. Dreams then turn into adventures.*

*Adventure is a reckless state which requires the best of each of us. Pursuing dreams and freedoms makes us responsible and self-reliant far beyond the crowd. We begin to live on the leading edge and experience the rarefied air only a few brave men and women have known and never*

*understood by cowards.*

*Fortunately dreams never die. The tragedy is that so many people die without ever finding the inner courage to live their dream.*

John and Pat Samson

**Brackett Field, California, Dec. 14, 1992:**The center section of the upper wing towered above me. Twenty-five years of crop spraying had not been kind to her. Ridden hard and put away wet so to speak, her engine dripped black oil on to the ground between her two recently inflated tires. In place of her front cockpit was now an odorous smelling chemical hopper, her baggage compartment was now an oil tank, and her remaining seat had been moved way back to keep everything balanced. I touched the control column and wondered how many military cadets had sweated slips to a circle landing and how many ag pilots had sweated a shuddering near-stalled turn at the end of the spray run. I inhaled the smell of hot fresh-slung oil and listened to the "tick, tick, ping" of the R985 cooling as a crowd of helpers gathered 'round. Suddenly I let out a great whoop of delight, for I had just flown the oldest remaining Stearman biplane - serial 003, built in 1936 - and she is mine, all mine!

Vancouver, BC, Jan. 23, 1993: I read

the piece at the top of this page frequently these days. "Comfortable Junk" as she had come to be nicknamed, fills my recently enlarged workshop and I have just about finished cataloguing what will be required to restore her. The two-foot high stack of thickness-planed spruce boards are destined to be spars. The 1600' of stick-like capstrip will soon become 76 handcrafted, lift-producing wing ribs. Her hell fer stout, life saving truss fuselage is mercifully free of corrosion but will require a half-dozen or so tubes replaced to return her to original. The Feds will let me keep the big Pratt engine and the four aileron setup, but only if I first do a whole lot of calculatin' and drawin'. (The fact that the airplane has flown 8900 odd hours like this isn't good 'nuff.) From where I will acquire that front cockpit stuff I have no idea.

But notice the subtle transformation. What began as a dream many years ago is now a full-blown adventure. I eat oatmeal three times a day and drive a rusty old pickup so that I may buy birch plywood and steel tubing, but I have never been happier in my life. The spirit that lives in the old biplane's tubing tells me that if I rebuild her, she will give me another 60 years of safe flying adventures. I am awed by both the privilege and responsibility of owning such a rare old airplane. I owe it to the world to restore and fly her to the best of my abilities and to myself to live the dream.

- reprinted, with permission, from *Canadian Aviation News*, Feb. 15, 1993.

## New Technical Committee Formed

*With the cutbacks in funding undertaken by the government, the Advanced Ultralight Technical Committee was forced to find another method of acquiring its operating funds. This new funding alternative appears to be a contractual method, whereby the "committee" is contracted to provide a service to Transport Canada at a fixed price. This presumably must be re-done periodically in order to keep things rolling (probably every March 31).*

*In the process of doing this the name is changed to the "National Recreational Aviation Council". This makes sense from a funding point of view. The following are the Terms of*

*Reference of the new NRAC, as provided to us by Transport Canada on February 16, 1993.*

### 1. Objective

To assist Transport Canada by undertaking the tasks hereinafter set forth, in ensuring that Advanced Ultralight Aeroplanes are manufactured, maintained and operated to an adequate level of safety.

### 2. Scope of Work

The following activities are to be undertaken by the National

Recreational Aviation Council (NRAC):

i) Examine and propose revisions to the current personnel licensing standards for recreational aircraft;

ii) Provide Safety Promotion and Education for the recreational aircraft community in the following manner:

- by operating the Safety Data Exchange Bulletin Board in conjunction with the Federal Aviation Administration to be accessed by recreational aircraft owners and pilots; and

- by producing and providing educational material in the form of video tapes and handbooks; and

- by conducting and promoting seminars for the purpose of education and information at aviation  
*(continued on page 10)*

symposiums, conventions, local flying clubs and schools and other similar venues.

iii) Review and propose changes to TP10141, DESIGN STANDARDS FOR ADVANCED ULTRA-LIGHT AEROPLANES;

iv) Review the existing Advanced Ultra-light Aeroplane maintenance policy and make appropriate recommendations with regard to the following:

- Existing manufacturer maintenance programs;

- Recommend procedures to be followed for modifications to Advanced Ultra-light Aeroplanes for which the Advanced Ultra-light Aeroplane manufacturer will not approve the modification yet the change will have no adverse affect to the safety of the aircraft.

v) Review and make recommendations with regard to compliance with existing Advanced Ultra-light Aeroplane manufacturer requirements.

### 3. Contractor Qualifications & Responsibilities

The NRAC members must be familiar with:

a) The Transport Canada Aviation Organization;

b) The Transport Canada Ultra-light Aeroplane Policy, Version 1.6.

The NRAC must provide any work materials required to carry out its responsibilities.

### 4. Support and Available Documents

The NRAC may have access to the following material upon request:

- The Aeronautics Act;
- The Air Regulations;
- The Air Navigation Orders;
- The Airworthiness Manual;
- The Personnel Licensing Handbook;
- The Transport Canada Aviation, Ultra-light Aeroplane Policy;
- TP10141, Design Standards for Advanced Ultra-light Aeroplanes;
- Other relevant material collected to date.

### 5. Project Authority

R.I.J Rohr  
Director  
Aviation Licensing  
Transport Canada

### 6. Project Contact Person

Lindsay H. Cadenhead  
Superintendent  
Special Flight Operations and  
Standards  
Transport Canada

Centennial Towers  
200 Kent Street  
6th Floor  
Ottawa, Ontario  
K2P 2J8  
(613) 990-1036

### 7. Reports/Meetings/Consultations

Meetings with the Project Authority or his designate shall be attended by representatives of the NRAC as required.

### 8. Deliverables

The deliverables of this contract are the reports, recommendations, video tapes, handbooks and seminars to be provided pursuant to Section 2 of the Terms of Reference.

### 9. Acceptance

All work and services provided by the NRAC will be subject to acceptance by the Project Authority.

### 10. Inspection and Audit

The activities of the NRAC, financial and otherwise, are subject to ongoing review by the Project Authority. Should the actions of the organization be brought into question or Transport Canada feels that the contract agreement is no longer in the public interest, the contract may be terminated with reasonable notice.

Invoices, receipts and vouchers related to this contract shall be kept and such accounts and records shall be open on reasonable notice, to audit and inspection by an authorized representative of the Government of Canada. A financial report shall be produced and submitted to the Contract Authority within sixty (60) days of the termination of the contract.

### 11. Method of Payment and Cost

The NRAC shall invoice Transport Canada for the lump sum amount of \$29,960.00 (\$28,000.00 for services and \$1960.00 for Goods and Services Tax) for the duration of the contract.

