free flight

5/82 Sep-Oct

vol libre

PRESIDENT'S MESSAGE

5 Aug 1982

In the past month I have had the pleasure of being present at two major Canadian soaring events, both of which you will read more about in this issue. The first of these was the National Soaring Contest at Rockton, Ontario hosted by SOSA Gliding Club, and the second was the Cowley Summer Camp hosted by the Alberta Soaring Council.

Both of these events were characterized by lots of sailplanes, lots of flying, and lots of sitting around telling and listening to stories. There were around forty aircraft at each event (in a few cases, the same ones) and an appropriate number of people to go along with them.

Unfortunately, timing did not permit me to attend the Nationals as a pilot but I was able to combine SAC business meetings with the final three days at Rockton. I was struck by the good feeling and the fact that the contest was a success from all points of view — weather, flying, safety, organization and, of course, competition. It is unfortunate that representation by pilots from the three western provinces was so sparse, but this will always be due to the geography of our country, and not the fault of the organizers. It will probably be the case for some time to come that the "local" pilot population will be heavily represented at any contest compared to those who are faced with a 2000 km plus journey. When participation in a Nationals has reached the point that it has to be earned by qualifying in Regional or Provincial competitions, soaring in Canada will really have arrived!

The Cowley Summer Camp was a special occasion this year, it was celebrating its tenth camp as a provincially recognized soaring site. I had taken my Standard Cirrus and crew from Winnipeg for a week of good soaring, and good soaring there was! On each of the nine days of my stay, there was a minimum of Silver duration and distance soaring, several 300 km flights and (on the day I left, inevitably) Diamond climbs. For most, the emphasis was on the enjoyment of flying amongst the mountain scenery. A (very) few of us even took delight in the 20 fpm "leather thermals" up the sides of some of these mountains on personally declared "rest days". This was a camp with a distinct international flavour, with visitors from at least four different states in the USA. In contrast to the Nationals, of course, the atmosphere was much more relaxed, laid-back even. Cowley was a special social event enjoyed as much for just being there, as for the flying.

It was a pleasure, both at the Nationals and at Cowley, to be invited to take part in the formal proceedings at the closing banquets, each of which was a well-attended festive affair. SOSA Gliding Club and the Alberta Soaring Council are to be congratulated and thanked for their own particular contributions to Canadian Soaring in 1982.

Russ Flint
President

S.A.C.

free flight

5/82 **Sep-Oct**

The Journal of the SOARING ASSOCIATION OF CANADA
Le Journal de L'ASSOCIATION CANADIENNE DE VOL À VOILE

2 Executive Director's Notes
Jim Leach

3 Opinions

4 The long flight
Hal Werneburg

5 A Gliding Aviary
Eric Newsome

6 1982 Nationals
Bob Carlson

11 Instructors' update
Ian Oldaker

12 Cowley Summer
Derek Ryder

14 The case for the 13 Metre Class
Gary Sunderland

15 Gossamer Odyssey
Chem LeCheminant

16 The Bluenose Soaring winch operation
Dick Vine

17 Cable Breaks
Ian Oldaker

18 Safety Column

19 Club News

20 FAI Badges
Boris Karpoff

Photo: Lloyd Bungey

Cover
Wave season is upon us. A delicious teardrop lennie is seen over Hope, BC.

Centrefolds
The Sep-Oct calendar is Dave Webb's "Tinbus" finishing at the 1980 Nationals at Claresholm. Photo by Mike Maskell. The Nov-Dec calendar was taken by Dan Pandur at Estrella, Az. Both calendar sheets have been donated by Dave Puckrin. See the 1983 calendar for great photos.

EXECUTIVE DIRECTOR'S NOTES

Jim Leach

MEMBERSHIP

As of this writing (17 August 1982) we continue to carry a 106 member increase over the same period in 1981. Our current membership is now 1498. To reach our 1981 membership figure, we require an additional 180 members. To realize our projected 5% growth, we will require an additional 263 members. While this may appear to be an impossible task, it should be noted that between 15 August and 31 December 1981, we realized a total of 286 members.

Clubs are reminded that SAC membership fees are reduced by 50% annually effective 1 September. Insurance fees are reduced by 50% effective 1 Oct annually. It is hoped that significant new membership campaigns will take advantage of these fee reductions. For those of you who are statistically inclined membership trends by provinces as of 17 August 1982 are as follows:

Newfoundland — no change	Nova Scotia — +30%	New Brunswick — -35%
Quebec — -10%	Ontario — -14%	Manitoba — +13%
Saskatchewan — -14%	Alberta — -10%	British Columbia — -12%

While it is too early to draw any final conclusions from these figures, it is obvious some well planned membership campaigns at the club level are required to ensure projected figures are realized. What should be a major concern to all is the fact that to date 559 members from 1981 have NOT renewed. That represents over 33% of last year's total and begs the question — why? We will be initiating a national program in September to attempt to answer this question. This will be accomplished by asking each person who did not renew — why? While some obvious answers are predictable, we may receive a sufficient sample of returns to assist us with our future programs.

INSURANCE

Two matters have surfaced since the last edition of *free flight* that will be of interest to members.

Members who trail their aircraft behind a vehicle are advised that SAC insurance does NOT cover the trailer should a claim arise. Trailer coverage is an extension of the vehicle insurance which varies in each province. Members are encouraged to check with their vehicle insurance companies to determine what coverage exists — if any, for trailers and to make the appropriate arrangements to insure coverage.

Microlight or Ultralight aircraft are NOT eligible for insurance through the SAC program. Aircraft must have Transport Canada registration and type approval to be considered for insurance within our program.

THE 1982 NATIONAL SOARING CHAMPIONSHIPS

While this topic is covered extensively elsewhere in this edition, members are advised that we now have a 28 minute video recording produced by Global Television, an Ontario TV network. This tape is available for your local showing and would be an excellent tool for promotional campaigns. Please contact us here at the National Office if you are interested.

1983 SAC CALENDARS ARE NOW AVAILABLE — $6.00 TO SAC MEMBERS

Your club has received one sample copy — have a look at it — it's great! The proof? Over 80 were sold at Cowley — almost everyone who saw it bought one. You should not miss ordering one of these beautiful portraits of our sport for yourself, and extras to sell to your friends or use as gifts. Remember that the calendar is also a publicity vehicle, so make sure local aviation centres, flying clubs, etc. and your office wall is covered. This calendar is also available for distribution to the retail businesses at a price of $7.50. Please obtain exact details from the National Office when you ask for a bulk shipment.

We have tried to show photographs from all over Canada — from Nova Scotia to Vancouver Island. Yet we want to expose this calendar everywhere through reciprocal agreements with other countries, and by 1984 we hope to have a network for the distribution of our Canadian calendars around the world. Imagine the golden opportunity to show off your photos beyond the Canadian borders and across the five oceans. Go and hunt for highlights in your club's activities, plan your shots before you click. Have you thought of different coloured backgrounds? Don't take only sunsets or gliders against a blank sky. Again, it is now you who needs to plan for the 1984 calendar. Shots must be taken now so they are ready in time. Photos can be submitted immediately to Dave Puckrin, 12644 — 126 Street, Edmonton, Alberta T5L 0X7.

SAC would like to say thank you to all of you who contributed to the rebirth of this fine calendar and we hope that you support us again in 1984.

TECHNICAL DETAILS — Original slides or original prints are required. Duplicates of slides cannot be accepted as the quality loss becomes too great in reproduction. All photographs for the 1983 calendar submission will be returned.

Dave Puckrin, Chairman Publicity

The SOARING ASSOCIATION OF CANADA

is a non-profit organization of enthusiasts who seek to foster and promote all phases of gliding and soaring on a national and international basis. The ASSOCIATION is a member of the Royal Canadian Flying Clubs Association (RCFCA), the Canadian national aero club which represents Canada in the Fédération Aéronautique Internationale (FAI, the world sport aviation governing body composed of national aero clubs). The RCFCA has delegated to SAC the supervision of FAI-related soaring activities such as record attempts, competition sanctions, issuance of FAI badges, and the selection of a Canadian team for the biennial World soaring championships. free flight is the Association's official journal.

Material published in free flight is contributed by individuals or clubs for the reading enjoyment of Canadian soaring enthusiasts. The accuracy of the material is the responsibility of the contributor. No payment is offered for submitted material. All individuals and clubs are invited to contribute articles, opinion, reports, club activities, and photos of soaring interest. Prints (B & W) are preferred, colour prints and slides are acceptable. No negatives will be used.

free flight also serves as a forum for opinion on soaring matters and will publish letters-to-the-editor as space permits. Publication of ideas and opinion in free flight does not imply endorsement by SAC. Correspondents who wish formal action on their concerns should contact their SAC Zone Director. Directors' names and addresses are given elsewhere in the magazine.

All contributions to the magazine will be acknowledged on receipt. We will endeavour to say when it will be used. All material is subject to editing to the space requirements and the quality standards of the magazine.

For change of address and subscriptions to non-SAC members ($15.00 per year) please contact the National Office.

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L'ASSOCIATION CANADIENNE DE VOL À VOILE

est une organisation à but non lucratif formée de personnes enthousiastes cherchant à protéger et à promouvoir le vol à voile sous toutes ses formes sur une base nationale et internationale.

L'ASSOCIATION est membre de "L'Association Royale Canadienne des Aéro Clubs" (RCFCA – Aéro Club National Canadien), représentant le Canada au sein de la Fédération Aéronautique Internationale (FAI, administration formée des aéro clubs nationaux responsables des sports aériens à l'échelle mondiale). Selon les normes de la FAI, le RCFCA a délégué à l'Association Canadienne de Vol à Voile la supervision des activités de vol à voile telles que: tentatives de records, sanctions des compétitions, délivrance des brevets de la FAI, etc. ... ainsi que la sélection d'une équipe nationale pour les championnats mondiaux biennaux de vol à voile.

vol libre est le journal officiel de l'ASSOCIATION.

Les articles publiés dans vol libre sont des contributions dues à la gracieuseté d'individus ou de groupes enthousiastes du vol à voile.

Chacun est invité à participer à la réalisation de la revue, soit par reportages, échanges d'opinions, activités dans le club, etc...Un "courrier des lecteurs" sera publié selon l'espace disponible. Les épreuves de photos en noir et blanc sont préférables à celles en couleur ou diapositives. Les négatifs ne peuvent être utilisés.

L'exactitude des articles publiés est la responsabilité des auteurs et ne saurait, en aucun cas, engager celle de la revue vol libre, ni celle de l'ACVV, ni refléter leurs idées.

Toute correspondance faisant l'objet d'un sujet personnel devra être adressée au directeur régional dont le nom apparait dans cette revue.

Pour chaque article reçu, nous retournerons un accusé de réception et donnerons la date probable de sa publication. Les textes et les photos seront soumis à la rédaction et, dépendant de leur intérêt, seront insérés dans la revue.

Les articles de vol libre peuvent être reproduits librement, mais la mention du nom de la revue et de l'auteur serait grandement appréciée.

Pour changements d'adresse et abonnements aux non membres de l'ACVV ($15.00 par an) veuillez contacter le bureau national.

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5

OPINIONS

MORE ON ROPE QUALITY

Addendum to "Lines about Lines" in 3/82.

When I wrote "Lines about Lines" in 1972 (published in SOSA newsletter) one type of man-made fibre rope, now commercially available, had only been made in a research lab, the other was just new.

I did not mention polyethylene rope in the original article. At that time it had a very bad name because of the low melt point characteristics of low density resin. While I had some experience with what looked to be a good fibre made in a research lab from high density resin, the melt point reputation lingered on and no commercial product developed. Now, however, polyethylene rope is being used in a number of fish-net applications and, as a consequence, it could appear as a glider tow rope. There is no reason why this product should not work as well as a monofilament polypropylene line provided the strength characteristics are acceptable. Also I know little of the respective shock loading characteristics of polyethylene. Since the cost advantage, if any, of polyethylene is likely to be slight with respect to polypropylene, I'd stick with the known material.

The other point I wanted to raise was the different kinds of polypropylene cordage. There is one type made from shattered, slit or fibrillated polypropylene film that can be in my opinion quite dangerous for two reasons: poor abrasion resistance, and really terrible sunlight resistance. Its only claim is that it is cheap. It can be recognized because it has a funny (to me) cut film "raspy" look and feel to it. A lot of imported polypropylene rope is made this way.

I'll be happy to correspond or help any club with questions they might have about cordage. The debate that took place a while back on weak links was a good one. There seem references to them in "New Soaring Pilot" and "Sailplane and Gliding" but so far I have not seen domestic data on use or experience.

Bob Carlson
SOSA

A HAND FOR INSTRUCTORS

I wanted to write you ever since I received the recent copy of *free flight* 3/82 with the publication of my article ($50!!). I have to admit it's quite an experience to see yourself in print and I am so pleased with the way you set it all up, and your little "intro". When I arrived at the Hope field, the president and many others of the Vancouver Soaring Association made nice comments to me regarding the article and I think it has helped me to get to know people here! So, I want to thank you for encouraging me with my article.

... Now that the Hope Camp has passed I wanted to let you know that we thought that we made some sort of a record on Tuesday. I was the only licensed pilot amongst seven or eight of the group of students, but on that Tuesday three of us soloed — all ladies! Monday afternoon one of the men soloed, 50% of the students were women. The CFI was George Eckschmiedt, a marvellous gentleman that we have all grown to love, a dedicated teacher who watched each student like a mother hen. He has a quiet humorous way that instills confidence, and VSA does very well now having him around. I watched George during each solo and he talked to each student in his/her entire solo flight by mental telepathy. Each time he'd say to himself "turn now" (or whatever) and the student would do so within seconds. It was amazing! I understand he did the same for me. I had the same experience with the CFI at Kars — Glenn Lockhard.

What quality of persons the sport of gliding enjoys — how lucky we are! Isn't it exhilarating to know such wonderful people! Again a special vote of thanks to CFI George Eckschmiedt of VSA.

I've really enjoyed my time at this camp and learning all over again. I've made lots of new friends and that helps.

Eileen Tomalty

AND THANKS FROM ERIC

Many thanks to Peter Myers of the Lahr club for sending a mass of material on weak links and including a long, thoughtful letter on the subject. Also to Robert Purves of Winnipeg for sending a copy of an article on weak links. It is nice to know that safety articles are read and that there are SAC members concerned enough to go to considerable effort to respond.

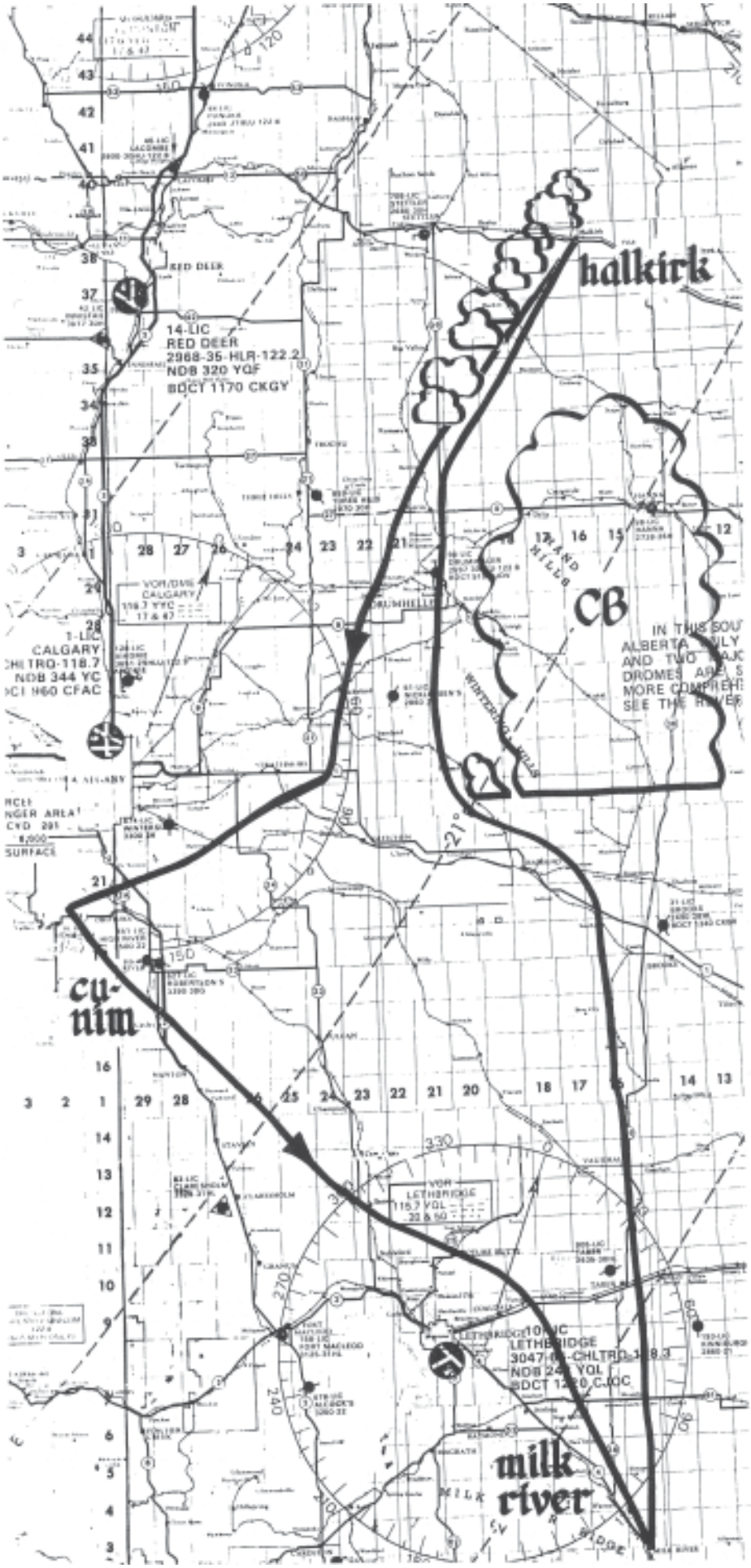
It was brought to me very forcibly, when a thick file of material was sent to me with masses of material on ropes and weak links arrived, that there must be a tremendous quantity of information lying around. Can there be any way of collecting it all together so that people wanting information can apply to SAC and be told exactly what is available.

Peter Myers suggested in his letter that with our rapid turnover of members, we have a constant need to know and a sad lack of easily available accumulated knowledge. His suggestion is that SAC take the lead in producing a loose-leaf manual of Standards Operating Procedures for the guidance of clubs. I think it is a first class suggestion. Any reactions?

Since the rejuvenation of *free flight* I have been quite delighted by the actual numbers of people who have sent in something for the Safety Column. The initial appeal for articles seemed to me to be something of forlorn hope — that it turned out not to be that way is very encouraging.

I also include a note of thanks to a few people who have shown some response to past articles. Nice to know someone out there is reading.

Eric Newsome



THE LONG FLIGHT

Hal Werneburg

... and it was time to make the major decision of the flight. Ahead lay the Drumheller Badlands, rough and uninviting. Thundershowers had forced me off course and I was about one hour behind my flight schedule in my attempt to break the existing Canadian triangle distance record of 753 km set by John Firth during a courageous flight across Central Ontario in 1976 (see *free flight* 5/77).

My flight declaration had called for me to take-off from the Black Diamond airfield (35 km SW of Calgary, Alberta), fly SE to Milk River (15 km N of the Canada — USA border), then N to Halkirk (35 km E of Stettler) and then back to Black Diamond on a SW heading for a total distance of 803.7 km.

The route had been chosen without any particular priorities in mind except that it allowed me a relatively easy return to base in case I decided to break off the attempt on the second leg.

The weather forecast had been optimistic and a quick call to the weather office on Saturday morning confirmed the suspicion that it was shaping up to be a good soaring day.

I had planned to be on my way by 1100 at the latest, but 1100 came and went and I was still on the ground. No cu! Finally, by about 1120, small wispy clouds started to form and I took a tow to 3000 agl. I worked weak lift over the airfield and by 1140 the heavily loaded Mini-Nimbus had climbed high enough to head out.

Leaving the field, the lift improved to 3 to 4 knots and I worked thermals to about 4000 agl. Progress was easy to the SE and after passing by the city of Lethbridge I reached the first turnpoint (230 km) shortly after 1400.

After taking my turnpoint pictures I headed due north across the relatively flat southern Alberta countryside. The clouds gave consistently good lift (4 to 5 knots) and working altitude had risen to 5 to 6000 agl.

The good life ended near Brooks where a cluster of thundershowers blocked my way north. Wind was light and variable at all levels to 500 mb (15,000 agl) and those showers certainly gave no signs of moving off to the east. A detour to the west was the only answer and this put me 30 km off my course line, an hour behind schedule and admiring the above mentioned Badlands, complete with steeply eroded hills, criss-crossed by small rivers in deep valleys with no landing fields in sight. A good place to hunt for dinosaur fossils, but no place to be for a hard working glider pilot!

A decision had to be made. The clouds still looked good to the north, but with the afternoon wearing on it was tempting to break off the attempt and head for home which I should be able to reach easily in about one-and-a-half hours. Checking my map I found I still had 325 km to go and with my watch indicating close to 1630 it meant I would be back at Black Diamond around 2000. The thought crossed my mind that no sane pilot starts a 325 km cross-country flight this late in the afternoon, but then who says that we all have to be totally sane! Let's go and see how far we'll get!

My mind made up, I pointed the Mini-Nimbus NNE and paid little attention to the terrain below me. Half an hour later my decision to carry on was richly rewarded by the sight of a cloud street lying directly on course in an otherwise somewhat clear looking sky. Lift under this street was 5 to 6 knots with occasional bursts to 8 knots, and with a cloud base around 8000 agl flying was a joy and I reached the second turnpoint about 1800 (585 km). After turning I headed due south again under my still working street, but eventually had to leave it in order to stay at least somewhat near my course line.

Huge blue holes were now the order of the day, with only a few mediocre looking clouds here and there. Gingerly stepping from cloud to cloud, the water ballast was long gone, I worked my way to a point about 80 km due east of the city of Calgary where I had to cross a large blue area with not much showing on the other side. After flying through dead smooth air for what seemed an eternity, I finally connected with a weak blue thermal a few kilometres SE of Calgary at about 1500 feet agl. Everything depended on this bit of lift. And it came through! The rate of climb improved to 3 knots and it lifted me to 7500 feet agl, enough for an easy glide home.

I landed at 1945 and was greeted by my happy crew, consisting of wife and boys who had so much confidence in their pilot that they only came out to the gliding field after 1700, ready to celebrate a successful flight.

I feel that with the right weather conditions, pure thermal flights of over 1000 km are certainly possible in Alberta and that with the interest shown by a well qualified group of pilots, it will not be long before this goal is reached. □

A GLIDING AVIARY

This is an extremely rare subspecies of 'Aeronauticus' and many experienced observers claim that the last place to spot this bird is on a glider airfield.

'Aeronauticus Designenicus' is a combination of sculptor, mathematician and the Marquis de Sade. His creations, in their most refined mode, reach the pinnacle of form following function. He pays meticulous attention to flowing shape, to perfect crystal finish, to minimum frontal area and to tucking away neatly all those things which must occasionally dangle in the breeze. But that's all on the outside.

The average pilot spends remarkably little time on the outside of a glider in flight but a considerable amount of time on the inside — assuming that he can get in. 'Designenicus' must, as a condition of entry to the designers club, be not more than five feet tall and weigh not more than ninety pounds soaking wet. If it were otherwise he would be tempted to design a glider with an interior space large enough to contain a normal, healthy, well-fed male. The agonies and indignities suffered by sailplane pilots in the name of pleasure are remarkable. To an observer unbitten by the gliding bug, the sight of a glider pilot being shoe-horned into the cockpit and then cowering down while the canopy is crammed down on his hat, must be as idiotic a sight as can be imagined. By comparison life in a submarine is like living in the wide open spaces.

Any pilot of a modern sailplane can be stirred to revile 'Designenicus' by any of the following questions: Have you ever tried reaching behind you and found yourself with one arm locked somewhere behind your neck at a critical moment? Have you ever dropped a map in the region of your left foot and had to land to pick it up? Have you ever tried to retract the wheel and found that you cannot get your elbow far enough back to complete the pull on the lever? Have you ever noticed how difficult it is to reach the instrument panel when strapped in tight? Have you ever managed to strap yourself in tight when, by an arrangement amongst designers, safety straps are fitted in such a way as to require pulling in an impossible direction? Ever thought of bailing out?

Why cannot 'Designenicus' evolve to the point at which he starts with an un-aerodynamic shape, that of the human body, and design on from there? Perhaps as an aid to stimulating development all designers should be required, before releasing their masterpieces, to certify that they themselves have been fattened to normal proportions and in such condition have flown for five hours in rough air.

Here's to 'Aeronauticus Designenicus'. May he be forced to learn and apply the lesson of:

There was a young fellow named Hirth,
Who was rather broad in the girth.
His glider was slim,
He couldn't get in,
And now he flies on it, not in it. □

1982

PROLOGUE

For almost the entire month of June, rain had fallen on Southern Ontario with maddening frequency and intensity. Crops were drowning, the "asparagrass" wouldn't grow and the strawberries were white.

Pilot apprehension grew. As the end of June approached, a high began to build over central Canada that gave promise of soarable weather to Southern Ontario. The ridge strengthened on June 28 — a lovely day. The next day was sunny, temperatures were rising, as was the wind. The practice day, June 30, dawned clear and cool. A high of 25 was forecast with strong NW winds. What better way to test pilots familiar and those new to the site than a 220 km triangle. Turnpoints were Stratford and Mount Forest.

Those who persevered and went out on course had a good taste of trials to come. Ragged thermals, good visibility, cloud base to 6000 feet agl and strong winds. Five landed at or near Stratford. The first harvest of a new Ontario field crop — sailplanes — was complete.

June went into the record books with one-third less sunshine than normal, twice as much rain and an average temperature of 2.6 degrees C below normal. July had to be better! It was!

THE SITE

The SOSA Gliding Club has 140 acres of land approximately 12 km SE of Cambridge, Ontario, just adjacent to Kings Highway 8. On this land are the three runways of Rockton International, the clubhouse, two hangars, two trailer/camping areas and some woods. To the NW are the cities of Cambridge and Kitchener/Waterloo with its PCZ (20 km). To the SE is Hamilton (30 km) and the PCZ for Hamilton International. The Toronto TRSA is 80 km east. The land around Rockton was a dumping ground for glaciers. Swamps and hillocks are plentiful, as are rocks. Landing areas are common, but care must be taken in selection. Corn, grain, hay and cattle are the principal crops in the immediate area. In the larger contest area — Aylmer (SW), Flesherton (N), Orangeville (NE) and Hagersville (SE), tobacco and market vegetables are also grown.

The contest area is basically flat, the land to the north gradually rising to an elevation 1100 feet higher than Rockton.

In early July crops such as corn, tobacco and sunflowers are usually short (30 cm or less); by the end of July they are 150 cm high — expensive and damaging. Long hay or grain is a hazard almost all summer.

The proximity of the lakes Ontario, Erie and Huron ensures stable lake air; "lake effect" can move in when the wind is right (from the S or SW for Ontario and Erie, NW for Huron) and dampen or modify the thermals that are the soaring mode for virtually all of Ontario.

The most productive days are generally those after a cold front passes with a high located to give a W to NW flow of clear dry air. Hot, humid, hazy air associated with a warm front often flows up the Mississippi and Ohio River valleys (S to SW) to give weak to good thermals in poor visibility. Thunderstorms are common in summer. Tornados have appeared, more frequently it seems in recent years. Thermals can be as strong as 10 knots in this area. More commonly they are 2 to 6 knots. Often they are 1 knot or less. Cloud base can go to 9000 feet agl, more often it is 4000 to 6000 agl. Triangles as large as 500 km have been successfully flown from Rockton, and days with as much as 10 hours of soaring have been seen, but 6 to 8 hours can be expected, especially near the solstice.

DAY 1

1 July

Dominion Day dawned clear and bright. The briefing tent, blown down the previous day by the wind, was back up and music called the pilots and crew to their briefing.

The opening ceremonies were brief. The competitors were welcomed, with charm and grace, to Rockton by the Regional Chairman Ms Anne Jones. Bob Carlson, SAC Director-at-Large, welcomed the contestants on behalf of SAC, Colin Tootill on behalf of SOSA, Oscar Boesch was towed to 3000 feet above the field during the speeches, so that he could give us one of his flawless acrobatic flights to the words of "High Flight" and the music of "Born Free". An eloquent way to start the contest.

The weather forecast was promising. Morning winds were light from N to NW; they were to grow in velocity. The high was continuing to build north of Sudbury. Moderate thermals and cu were expected. The trigger temperature was to be reached about noon.

Standard Class
△ Aylmer – Lakelet 313 km

15 M/Open Class
△ Aylmer – Varney 340 km

There were gasps and muttering as the tasks were announced. Was it going to be that good a day? Six hours later we knew it was a testing day. The forecast cu didn't appear in any quantity. It was mostly a blue day. As the days to follow were to show, the clouds and the weather often looked great but the thermals and winds were never what you initially expected. Often the Rockton area weather was quite different from the remainder of the course.

The first two legs had crosswinds, the first leg SW to Aylmer being the easier. There was a nasty hole at Lakelet. Gaggle flying was common as was "follow whomever is in front of me." Those who stayed high fared best. Low down the thermals weren't organized and were rarely above 4 knots. Lift did go to 6000 feet agl however.

Seven of the fifteen Standard class starters came home, as did eleven of the seventeen 15 Metre and two of the five Open class starters.

Willem Langelaan set the pace and position in his Standard Jantar 2 that he was to hold in the Standard class, as did John Firth in his Open Kestrel 19. Hal Werneburg in his Mini-Nimbus finished at the head of the 15 Metre class, but he had a pack howling at his tail feathers; a sign of the tight competition in the classes.

Harry Pölzl earned the "Pechvogel" (booby prize) award for his steady 30:1 glide in his ASW-19 to his first outlanding, at Sheffield.

DAY 2

2 July

The high had moved to Pennsylvania and the winds backed into the SW at 25 knots. Blue thermals were forecast.

Standard Class
△ Tavistock – Brantford 124 km

15 M/Open Class
△ Hagersville – Woodstock 154 km

Lots of cu appeared with lift to 6000 feet agl. So did the lake effect. The trick of the day was to climb fast and stay high. Those who did, did well; those who did not landed out, some in interesting places.

George Adams in his Nimbus 2C became the day's star attraction at the Burch Correction Centre (it has an abandoned airport on its grounds). He was cautioned to lock his glider when he got out. The trailer was closely examined for extra cargo when it left. Colin Bantin landed his RS-15 in a corn field near Hagersville. He evaded a slavering dog when trying to use a phone in a shack that he found contained only a well-sozzled beer party. "Could we help take your toy apart?" "Er, well, no thanks" and on to the next house. Sober with telephone.

NATIONALS

Bob Carlson
SOSA

Those who stayed up had to contend with strong drift. Dave Webb in his rebuilt "Mini Tinbus" was seen at one point to be well on his way to Niagara Falls. The late starters were nailed by lake effect.

Willem continued his domination of the Standard class with Stan Janicek in the SOSA Hornet right behind. Only four landed out; Jim Carpenter in his LS-4 earning the "Pechvogel" award for his attempt to tie Harry's direct glide record.

The Open class was caught by the lake effect. All landed out save Teo Talevi in his Nimbus 2 who returned to Rockton.

The 15 Metre standings were turned topsyturvy when Wilfried Krueger in his ASW-20 started early and flashed round the course at 82.71 km/h to win the day. Lee Coates in his PIK-20B, Robert Von Hellens in his LS-3a and Ulli Werneburg in his ASW-20 were right behind. The hole at the Hagersville turnpoint caught seven; those who got through made it round. One who didn't was Peter Masak who arrived by commercial routes from Venezuela to compete in his ASW-20. He didn't arrive soon enough for DAY 1.

3/4 July 1982
The previous day, a low had been developing over Saskatchewan. It arrived Saturday morning with high cloud that developed into rain on Sunday. Both days became rest days.

DAY 3

5 July

A high that developed on Sunday over Northern Ontario moved in on Monday to give us a warm hazy day with a southerly flow of blue air. The high was expected to reach 30 and it did.

The initial tasks set were pretty ambitious, but the forecast of nearly isothermal air to 7000 feet and late thermals made the initial 200 km triangles chosen a bit chancy. Finally, out and returns were set:

Standard Class
O&R Stratford 128 km

15 M/Open Class
O&R Mt. Forest 171 km

All but seven of the Standard class made it home. Those who did not came pretty close save for Walter Herten in his Ka6E who won the day's "Pechvogel" award trying to outdo Jim and Harry.

John Firth joined Peter Schwirtlich in a demonstration of a "I just made it back by inches" landing, to be the only Open class finisher and hold on to his lead.

The rest of the Open class joined the entire 15 Metre class in landing out. A bumper crop of sailplanes littered the fields alongside Highway 6 from Guelph, the primary landing zone, and north to Arthur. The Mt. Forest turnpoint hole did in several as did termination of thermals as the sun set. Fortunately the corn was short. Chris Wilson in his Mosquito added another award winning location to his greeting, "I'm calling from a ...!" (read barn with loud cows; a toilet; a tractor cab, etc.) The day finished late for most, one of the more arresting sights was six trailers lined up side by side at "Mother's" pizza in Cambridge (it should have been seven but Ed Hollestelle left 'cause he didn't want seconds). Wilfried Krueger stayed on top with 163 out of 171 km. John Brennan and Peter Masak, both in ASW-20s, were just a field behind, and behind them were Ulli Werneburg and Robert Von Hellens.

DAY 4

6 July

The high that had been over Northern Ontario moved to Rhode Island, giving the clear dawning day a strong southwesterly flow of humid air. The maximum temperature was to be 32 degree C with useable lift to 5000 feet agl, winds 220 to 250 degree at 20 to 30 knots. Well, the lift wasn't that useable and the thermals were broken badly.

Standard Class
△ Tavistock – Woodstock 124 km

15 M/Open Class
△ Stratford – Woodstock 145 km

The scrappy lift resulted in a number of relights and restarts. The net effect of all this was a number of retirements for the day in the Standard and 15 Metre classes, as the pilots couldn't see sufficient reward for their efforts. The wisdom of this decision can be questioned only on the basis of the final standings. Only Jim Carpenter and John Firth made it home. John found some wave at right angles to a cloud street at Stratford, but his time was still long, 4.3 hours for an average speed of 33.7 km/h. Jim was a touch slower at 30.2 km/h.

There were only two finishers, and since twenty-one gliders did not exceed the marking distance, the day was highly derated. Jim and John each received only 400 points for their exemplary efforts. Willem still led the Standard class, Stan Janicek fell to fourth as Jim Carpenter began his charge, and Ian Spence in his Standard Jantar 2 and Jim Oke in his Standard Cirrus made strong showings. Frank Vaughan in his new ASW-20 won the 15 Metre day with Ed Hollestelle in his PIK-20 right behind. Wilfried Krueger was third, holding his lead. The 15 Metre and Standard class competition was tight, less than 100 points separated the group behind the leaders in each class, and except in the Open class, the leads were becoming precarious. George Adams and Hans Baeggli were nevertheless working hard to keep John Firth from becoming complacent.

The day was noticeable for two other reasons: penalties were assessed for photography infractions, and the residents of Tavistock registered their appreciation for their gliding visitors, as did several other communities, by giving our competition coverage in their local newspapers.

7 July 1982
The day dawned with middle cloud, a forecast temperature of 33, 40 knot winds, and the threat of thunderstorms. At noon the day was cancelled for safety reasons — everyone went to put their sailplanes into bed and tie the lot down.

The morning was used for meetings. The first was on the fidelity of the met forecasts, and Ian Tissot, who took some of his recovery time from a back operation to work at the contest, discussed and debated his forecasts, Ian worked hard and diligently to give the best analysis of the weather data available to him — a task that was appreciated by all.

Dave Marsden held the second meeting in his role as chairman of the Sporting committee. His interest was the feelings of the pilots about the results of his recent work on competition flying. Dave will be reporting in greater detail later; a significant point was the desire of the pilots present (who felt since they had come

that they were the serious pilots and were most affected) to have a Nationals every year that alternates between Eastern and Western regions (not necessarily every other year) with all three classes competing together. There was more, so watch for Dave's report.

DAY 5

8 July

The front passed with cool dry air behind. A high was centred SE of Minnesota tracking to the SE. The winds were expected from the SW at 15 to 20 knots. Thermals were expected to 5000 feet agl, trigger at 26, high 27 degree C. They were blue and broken. The initial triangles chosen were 276 km for the Standard class; 311 km for the Open and 15 Metre class. When the day obviously was not going to be that good, revisions were made.

Standard Class
△ Stratford – Arthur 190 km

15 M/Open Class
△ St. Marys – Mt. Forest 253 km

This was a day when everyone landed out. The Standard class had a 'no contest day' as only Peter Schwirtlich and Stan Janicek exceeded the marking distance. Willem Langellaan must have been relieved as was Ian Spence. Robert DiPietro damaged his Standard Jantar 1A enough the previous day that he had to retire from the contest.

The Open and 15 Metre classes fared better as enough of each class made it past the 50 km marking distance.

Ulli Werneburg won the 15 Metre day with a 128 km flight. Andy Gough in his Mini-Nimbus, Wilfried Krueger and Karl Doetsch in their ASW-20s were the next three at 95, 87 and 82 km respectively.

In the Open class, Hans Baeggli flew past John Firth and Teo Talevi to win the day with 113 km. This tightened the Open class race notably.

Outlanding tales: Wilfried Krueger was ushered to a swimming pool complete with refreshments, swimsuit and TV to watch the World Cup. He enjoyed all. Colin Bantin was not so fortunate: a cow pasture, well-fertilized, was his landing spot. He learned that electric fences can dent the leading edge of a wing and that there really is electricity in that wire. Joseph Doetsch, Karl's brother and crew, visiting from England, learned that local directions may not be correct as he wandered about St. Marys looking for County Road 19. To Karl's relief he finally found it.

St. Marys turnpoint, a cement company's smokestacks, encouraged interesting photographic approaches: the view up to the top of the stack was quite arresting and incontestable proof of rounding the turnpoint! These imaginative turnpoint photos and the photo exercises in tailplane aspect and composition that many tried, made Steve Burany's super job of developing and evaluating the turnpoint films anything but dull.

For his sterling effort of going farthest for no reward, Peter Schwirtlich was awarded the day's "Pechvogel" award.

DAY 5/6

9 July

The high near Minnesota went NW to be over Northern Ontario and Eastern Quebec this day. Winds were from the NW and expected to back to WNW at 10 to 15 knots. The air was clear, and weak to moderate blue thermals were forecast. To say that pilots and crew had had their fill of character-building retrieves was an understatement. So it was with guarded relief that all saw the original 200 plus km triangles shortened when the weather did not develop as well as had been hoped.

Standard Class
△ Arthur – Orangeville 169 km

15 M/Open Class
△ Mt. Forest – Orangeville 204 km

Well, the thermals were blue, they were broken and they were weak, and the winds were stronger than forecast. The first leg was a beast, with scrappy lift and the duty blue hole over the first turnpoint. Once past the first turnpoint those who came home had straightforward flights. Less than 50% of the classes came back, and the Open class was derated.

Jim Carpenter finished first and moved to third place overall, Ian Spence was second to stay second and Willem Langelaan earned third over Harry Pölzl to hold on to first. His lead was now 383 points and falling.

In the 15 Metre class, Ulli Werneburg squeaked home ahead of brother Hal to take the day and second place overall. Hal, who had sunk to sixth, was coming back with a rush. A very tight race indeed. Wilfried came third, to hold onto first overall but his lead was now only 25 points.

John Firth was the only one to come home in the Open class. Thus, even though the day was derated he had virtually clinched the title. Only 30 points separated him from victory. Nevertheless, the other pilots kept pressing, especially to see who would pick up second and third places.

The day was marred by improper intrusions by some competing pilots into the Kitchener/Waterloo PCZ. Unsporting words were said on the radio that did little to enhance respect for soaring by ATC, and some citations of offending pilots may result.

Oh yes, Larry Springford earned the "Pechvogel" award for his attempt at Harry Pölzl's record.

DAY 6/7

10 July

The high moved to Pennsylvania with a ridge extending to Northern Quebec. There was a low to the east of Rockton and another high in central USA. SW winds were forecast, 10 to 15 knots, a high of 30 was forecast with a trigger temperature of 27, and weak to moderate thermals to 4500 feet agl.

The initial tasks were once again altered as the day did not develop as expected.

Standard Class
△ Woodstock – Tavistock 124 km

15 M/Open Class
△ Woodstock – Stratford 146 km

Again, the thermals were weak to moderate, mostly blue, and they didn't get above 4500 to 5000 feet agl. It was also quite hazy. Whichever or however the day went — it was slow, grinding and hot.

Once again, 50% or more of the Open and Standard classes landed out, 20% of the 15 Metre class. The 15 Metre class also suffered attrition from job needs. Peter Masak and Jock Proudfoot retired for this reason, and Seth Schlifer had a bent bird. Colin Tootill, to his credit and as a reward for organizing a superb contest, retired to sleep. He'll be making up for a lot of ground next year.

Throughout the contest, crew had come to dread the clarion call of Rebecca Hamilton over the PA "Would the crew for XX please come to the office." All quickly knew that this was not a social invitation. Since the banquet was on at 2000 hrs, it was with some concern that the first calls on this final day were heard. About half of the competitors landed out, but all were back in time for the celebrations.

At just over two hours after the start Willem Langelaan was the first home to win the Standard class day with a heart-stopping turn around the old oak tree and a low low whistling finish. Jim Carpenter was next to finish, followed by Peter Schwirtlich and Stan Janicek. One by one the others straggled in — low, and often slow – for almost two more hours. The loudest cheers and applause were for Walter Herten in "Sierra X-ray" who made it back on a very tough day. Speculation centred during these two hours on Ian Spence who had gone into the day less than 400 points behind Willem and less than 200 ahead of Jim. When the crew call came for "Whiskey, Whiskey" the suspense was over. Willem Langelaan was the Standard class Champion; Jim Carpenter was 661 points behind for second; Ian Spence 161 further for third. Stan Janicek and Kevin Conlin placed fourth and eighth. Their positions are notable because they did well and were using club ships. Nine pilots finished in the top 2000 points, a measure of the competitive level in the class. Dave Harper and Seth Schlifer in the 15 Metre class also used club ships.

The 15 Metre class finish was also an exercise in suspense as Hal Werneburg came home first to win the day followed very closely by brother Ulli. Watches were checked and start times scrutinized as we all waited for Wilfried. As the critical separation passed, Ulli became second for the day, and won the class. Wilfried finished sixth for the day to finish second overall, 93 points behind Ulli and 359 ahead of Hal who finished third. Karl Doetsch and John Brennan finished fourth and fifth respectively. The first five finishers were within a 1070 point spread. The next 1000 points included the next seven finishers, a strong statement of the depth of talent in the 15 Metre class.

Only two finished the day in the Open class. John Firth came home in the fastest time for the day of 63.8 km/h to win the day and the Open class. Peter Flanagan in his 16.5 M Diamant closed the contest as the last home to come second for the day in the Open class, finishing a credible fourth overall.

APPRECIATIONS

The purpose of any contest is to test and evaluate. By any measure this contest did that. It did not do it in an overwhelming atmosphere of strong lift and high speed. Rather the elements of success were tactical judgement, navigation, thermalling ability, weather sense and, above all, stamina. The ground and structural organization were the best ever seen. The start and finish gates were managed and run professionally by Art Schubert and his many helpers. Sid Wood and Pat Harvie marshalled the ground operation with many helpers. Bruce Findlay organized a tireless group of towpilots and the loan (for which all are grateful) of tow aircraft from York Soaring, the Montreal Soaring Council, and the Omemee Soaring Club. Al Schreiter kept humour and discipline in the morning briefings with his "Oom-pah-pah" music. He also was part of the task setting cabal with Jim Carpenter and Hal Werneburg. They were a demanding but flexible group. Rebecca Hamilton and Janice Young ran the office efficiently, and Kirstin Bantin kept the computer busy with her scoring program.

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1. Willem Langelaan accepts the Standard class trophy.
2. Stan Janicek gets a good luck kiss.
3. Open class winner John Firth (left) with Dave Webb.
4. 15 Metre winner Ulli Werneburg.
5. A Global TV crew from Toronto film the start grid action (and Jim Oke, Winnipeg)

photos: Steve and John Burany

Not to be forgotten were Neil Brennan and Christopher Herten who conscientiously made sure every pilot had his start photographs. Right behind were Susie Bantin and Feona Doetsch with film and tow tickets for those who forgot. Above all, Colin Tootill and his committee gave the pilots an organization and facility that served them very well.

The contest received financial support from the Province of Ontario through a Wintario grant and, for the first and we hope not the last time — MOLSONS Brewery. We also received close scrutiny from GLOBAL TV who spent at least three days recording all aspects of the contest for a 30 minute show. It will be telecast in Toronto in early August. Thanks too, must go to COCA COLA Ltd. (read John Brennan) for the limitless supply of soft drinks that kept the children happy — adults too! (Who can forget the sticky clubhouse floor).

Saturday's banquet was a satisfying, joyous event helped by a generous supply of free wine that disappeared at the speed of swallowing. There were prizes for the winners and many "Chuckle" awards for the people who didn't necessarily compete but made the whole thing go.

See you next year! □

1982 CANADIAN NATIONAL GLIDING CONTEST — RESULTS

	PLACE	PILOT	GLIDER		DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	TOTAL
OPEN	1	Firth, John	Kestrel 19	JF	1 1000	1 275	1 1000	1 400	2 306	1 800	1 1000	4756
	2	Baeggli, Hans	Nimbus 2	2C	2 925	2 190	2 709	5 21	1 467	2 374	4 536	3221
	3	Skensved, Peter	SHK-1	LM	3 597	3 112	5 207	4 29	5 94	3 281	3 602	1922
	4	Flanagan, Peter	Diamant	BG	5 412	4 110	4 338	3 102	4 119	5 104	2 651	1836
	5	Talevi, Teo	Nimbus 2	GK	4 529	5 0	3 704	2 150	3 290	4 119	5 0	1791
15 METRE CLASS	1	Werneburg, Ulli	ASW-20	MZ	7 943	3 832	5 664	5 184	1 542	1 1000	2 966	5132
	2	Krueger, Wilfried	ASW-20	K2	2 996	1 1000	1 715	3 221	3 335	3 924	6 848	5039
	3	Werneburg, Hal	Mini-Nimbus	24	1 1000	7 692	7 582	9 129	5 292	2 985	1 1000	4680
	4	Doetsch, Karl	ASW-20	EB	11 880	5 817	8 579	7 178	4 309	6 667	4 901	4330
	5	Brennan, John	ASW-20	77	6 969	13 253	2 696	12 0	7 289	4 899	3 955	4062
	6	Hollestelle, Ed	PIK-20B	A1	5 970	9 667	12 572	2 297	14 21	9 385	9 705	3616
	7	Von Hellens, Rob	LS-3A	IX	4 973	4 830	4 684	12 0	5 292	15 160	10 668	3606
	8	Wilson, Chris	Mosquito	W2	10 911	10 615	13 550	10 97	12 36	10 318	7 833	3360
	9	Gough, Andy	Mini-Nimbus	94	8 913	8 671	10 573	12 0	2 374	7 441	14 282	3254
	10	Bantin, Colin	RS-15	3B	8 913	18 159	8 579	12 0	11 43	4 899	11 657	3249
	11	Vaughan, Frank	ASW-20	OR	3 985	14 236	10 573	1 359	10 44	14 212	8 709	3119
	12	Coates, Lee	PIK-20B	TC	16 320	2 843	6 657	12 0	15 2	8 393	5 886	3101
	13	Proudfoot, Jock	ASK-20	TN	12 469	6 747	17 0	4 210	8 215	DNC 0	DNC 0	1641
	14	Webb, Dave	DBW-2	EZ	15 331	16 208	14 377	11 92	13 22	13 226	12 377	1608
	15	Harper, Dave	1-35	TT	13 457	15 234	17 0	8 165	9 59	10 318	13 331	1564
	16	Tootill, Colin	PIK-20D	T7	17 319	11 583	15 376	12 0	16 0	12 262	DNC 0	1541
	17	Masak, Peter	ASW-20	MO	DNC 0	12 258	2 696	5 184	DNC 0	DNC 0	DNC 0	1138
	18	Schlifer, Seth	1-35	SO	14 426	17 207	16 328	DNC 0	DNC 0	DNC 0	DNC 0	961
STANDARD	1	Langelaan, Willem	Std. Jantar 2	52	1 1000	2 848	2 989	3 189		3 844	1 1	4871
	2	Carpenter, Jim	LS-4	ZZ	3 865	15 31	1 1000	1 400		1 1000	2 915	4210
	3	Spence, Ian	Std. Jantar 2	WW	5 817	9 638	3 970	4 185		2 903	10 561	4049
	4	Janicek, Stan	Hornet	DW	4 853	4 810	4 912	14 0		6 634	4 767	3975
	5	Schwirtlich, Peter	Std. Libelle	22	6 797	3 830	6 843	7 119		11 219	3 798	3606
	6	Oke, Jim	Std. Cirrus	JO	2 903	8 660	13 527	2 293		12 213	5 742	3337
	7	Thompson, Paul	Std. Cirrus	T2	10 531	5 771	10 549	14 0	no	7 566	10 561	2978
	8	Conlin, Kevin	Astir	HJ	9 551	7 714	12 540	6 160	contest	10 245	8 565	2774
	9	Marsden, Dave	Std. Jantar 2	BD	8 635	1 1000	9 550	9 46	day	8 346	14 149	2726
	10	Springford, Larry	Std. Libelle	L4	14 152	6 742	7 828	11 42		14 117	6 676	2557
	11	Milner, Brian	Std. Jantar 2	GJ	13 370	11 516	8 774	5 165		13 195	13 514	2535
	12	Lockhard, Glenn	Std. Jantar 2	BW	7 742	12 359	15 0	9 46		5 808	9 562	2517
	13	Pölzl, Harry	ASW-19	7Z	15 15	13 194	5 906	12 34		4 833	532	2514
	14	Herten, Walter	Ka6E	SX	11 498	10 609	14 65	8 112		9 322	7 629	2235
	15	DiPietro, Robert	Std. Jantar 1 A	DB	12 452	14 64	11 541	13 22		DNC 0	DNC 0	1137

INSTRUCTORS UPDATE

... standards and regulation will become tighter, likely by next year.

Ian Oldaker, Chairman Instructors' Committee

LICENCE STANDARDS

At the AGM this year a motion was passed that SAC recommend to Transport Canada (TC) a change to the licensing requirements for a glider pilot. It has been SAC policy for several years but could become law if implemented by TC. The recommendation is for 8 hours total time of which 6 must be solo.

To help clubs interpret what the SAC Instructors' committee consider to be the "standard" that should be demonstrated by a student pilot, a draft document has been drawn up and mailed to all club CFIs. This may be used by the check instructors together with the a check sheet for the two (minimum) flights. I should point out that the SAC list includes a rope break check — if your club is not now doing this or other checks, such checks should be *instituted with great care*, and with the *proper checking out* of the procedures with your instructors.

If your club is not now working to the standards implied or explained in the write-up to CFIs, YOU SHOULD START WORKING TOWARDS THIS NOW. You will soon find that the 8 hours minimum time — even for a power pilot who is converting to gliders — is a bare minimum, and many pilots will have much more than this in their log books when they are licensed.

INSTRUCTOR CLASSIFICATIONS

Transport Canada wish to implement a three class system, to be administered by them. The policy that SAC is adopting is that SAC should continue to administer the system (in future from our National Office).

We are working with the Air Cadets through the Dept of National Defence to come up with a mutually agreed system for them and us, and will be proposing this to TC fairly soon.

EFFECTIVE IMMEDIATELY, all SAC upgradings and initial classifications of instructors will be done by the National Office. Note that you must state that a *new* instructor is competent to teach full spins, and that *two signatures* from senior instructors are needed for upgrading. In all cases the Transport Canada endorsement *must be valid*. SAC does not check these — IT IS UP TO YOU TO DO SO AT THE CLUB.

TC may well be administering the classifications of our instructors starting in 1983, and it is strongly suggested that you update your SAC classifications as soon as possible. If you have CLASS III instructors now who could be upgraded you should carry out the upgrading check flights and make the recommendations soon. TC will honour our ratings without a need to go through their exams, however, if your instructors have no such SAC classification they may start at the TC CLASS III only.

INCIDENTS/ACCIDENTS

Every incident has its lesson. An incident is an accident that was avoided because the pilot recognized what was happening and took actions, or he was lucky.

How many incidents do you know occurred in your club in the last year? Did you analyze them with the pilots concerned? Did the pilot learn from it? Did the rest of the club learn from it? If not, then a golden opportunity for avoiding a similar incident in the future has been lost.

Each club should be appointing a **Safety Officer** whose main task is not necessarily to please the CFI. The CFI should feel very open to safety suggestions from the Safety Officer — but an important function of the Safety man or woman is to collect incident notification forms and send them to SAC as soon as possible. It is only in this way that we can begin to pinpoint where our safety and training programs need to be improved.

An increasingly important reason for submitting these notifications is in our relations with Transport Canada. For example they stated that the reason for introducing TC instructor classifications is because of our accident rate! "Better instructing" is needed they say. How do we do this?

One way is to analyze incidents and to see whether a trend is developing, but only if SAC receives these notifications will we be able to respond and to warn people.

I suspect that many pilots are reluctant to "own up". However, if new pilots and the instructors start now to submit these, then in a few years such an action will be "normal", and we should be receiving them much more regularly. This is what we want — now it is up to you to persuade at least these few pilots to respond.

If we had a good reporting system in operation now, TC would be much more open to the suggestion that we continue to administer our own pilots. If we are perceived to be a dabblers with no "professional" attitudes, TC will be right in there.

COURSES

We hope to have courses run in each Province by a "Provincial Course Director", and to this end we will be appointing our first such Course Directors this year. The active participation by provincial associations will mean possible funding for instructor/competition courses by provincial sports organizations. These coaches will hopefully form a group who will be willing to travel short distances to other clubs to run courses and give our sport more "visibility". I will keep you informed as to how this program is going.

AEROBATICS

In parallel with further development of the instructor classification system, we are developing requirements for aerobatic instructor classification. At present we only have a basic level, but we are adding an advanced level, and to help us in this, Manfred Radius who has competed twice now in the international contest in Germany, has agreed to join the Instructors' committee. The advanced level will be truly an advanced level and we believe that only very few instructors will even wish to get that far. Nonetheless it is appropriate to have the requirements spelled out by SAC.

Regarding aerobatics in airshows: if any pilots are involved may I suggest that these pilots be thoroughly practised before they go off to perform, and that they take a letter from the CFI authorizing them to perform at an airshow. This could have possible insurance implications, and also this action may satisfy Transport Canada requirements which indicate an element of control. TC involvement with overseeing airshows is becoming much tighter and they are requiring more in the way of "checkouts". It is in all our interests that any pilots who are performing in front of the public, do so in a thoroughly professional and competent manner.

YOUR INSTRUCTORS COMMITTEE

The members of this committee are always looking to you for input. In the absence of this they will use their own experience and knowledge to plan for our future. They are:

Ian Oldaker (Erin Soaring), 135 Mountainview Rd. N, Georgetown, Ont. L7G 3P8

Alex Krieger (CVV Quebec), 1450 Oak Ave, Quebec, Que. G1T 1Z9

John Firth (Rideau Valley SS), 542 Coronation Ave, Ottawa, Ont. K1G OM4

Manfred Radius (York Soaring), 78 Milverton Blvd. Toronto, Ont. M4J 1T8

Tom Bell (Base Borden SG), Box 118, CFPO 5056, Belleville, Ont. KOK 3RO

Garnet Thomas (Edmonton SC), 16623 - 93A Ave, Edmonton, Alta. T5R 1K1

Eric Newsome (Vancouver SA), 131 - 13710 67th Ave, Surrey, BC V3W 6X6

Do write. We are always interested and hopefully will respond by doing what you want. □

COWLEY SUMMER

Story & photos: Derek Ryder

Summer's here! I'm for that.
I've got my rubber sandals
Got my straw hat.
Got some cold beer
I'm just glad that it's here.
It's my favourite time of the year.
And I'm glad that it's here ...

James Taylor

Perfection. Everyone seems to strive for it, many seem to look for it. The concept is ideality — weather, location, people. And it was Cowley 1982.

THIS YEAR'S COWLEY CAMP WAS SUNSHINE

Sun for ten straight days. Sun beating on the swimming hole in the Oldman River whose source is just some kilometres east at 9800 asl. Sun on the hills, sun at 27,000 feet, sun creating monster 10 knot plus thermals over the mountains, from Calgary to deep in Montana. All of it, every last square mile was flown by at least one of the one-hundred-and-four pilots who attended from all over western North America with 43 sailplanes. But then that is the lure which drags pilots thousands of miles to Southern Alberta. Summer soaring, better than anywhere else in Canada.

IT'S PEOPLE

The meeting of old friends, the new friendship. The camaraderie which seems to flow from club to club. The talk of soaring in California, Colorado, Idaho, Winnipeg, Grande Prairie, and anywhere else that's flat ground. The characters. The beer runs to Montana for COORS. The retrieves from Mormon country where liquor is as hard to find as lift on a rainy day. The need to build up hours. The need to fly long cross country tasks, the desire to fly the Cowley wave.

THE PLACE ITSELF

Impressive mountains, cloudbase at 14,000 feet, visibility of 40 and 50 miles. The huge airstrips, the peaceful campground. The wonderful Oldman River, its serene swimming hole and joyous rapids cooling one and all.

A Cowley regular from Moraga, California, Stu Tittle tries a solar hot water shower from wife Linda.

Blake Mather checks out his mask fit while Al Stirling tests the hose for air tightness.

This year was especially important, as it marked the Tenth Cowley Summer Camp. And what a celebration it was! A small inn, in Middle-of-Nowhere, Alberta, overgrossed its dining room to twice normal capacity with pilots bound by a love of soaring. The commemorative banquet featured keynote speeches by those wonderfully indispensable politicians who, with some of our own pilots, saved Cowley for the soaring movement in Alberta, it featured gliding "old-timers" who had flown at Cowley since its beginning in the '50s, and it featured the introduction of a beautiful new trophy for wave soaring excellence.

WHAT WAS COWLEY 1982?

Cowley was a worrisome overnight retrieve after learning that the downed pilot could not contact us because the phone at the airport would not ring. Cowley was wave on the last two days with diamond climbs in the Livingstone Block — opened in one-half hour after a request to Calgary ATC — What cooperation! Cowley was fantastic organization from Tony Burton, Ken Palmer, Bruce Hea, and a multitude of others. Cowley was Hal Werneburg's cross-country school — a first time try to continue in the years to come. Cowley was Ursula's "Cowley Story", a great history book sponsored by the Alberta Soaring Council, and given to every pilot there. Cowley was Grande Prairie's Blanik mating with Cu Nim's 1-26 at very low speed and even lower altitude. Cowley was over 1000 km of cross-country by one new pilot in day after day of six and seven hour flights. Cowley was the football games, the soccer games, the evening fires, the northern lights, Cowley was the kids, the dogs, the dinosaur dig, trips to Waterton Park and the Frank Slide. Cowley was 30 degree days and 10 degree nights, coyote pancakes on the flightline, popcorn and more parties at the fire.

Even in the rougher times it was perfect. Fantastic views of towering, building thunderstorms, menacing on the horizon.

Perfection? Glider pilot heaven? Even the visitors up from SSA's Soaring Safari thought so. Will the eleventh or the twentieth camp be as good? There is no question. We'll be here celebrating summer.

It's my favourite time of the year
And I'm glad that it's here. Yeah.

THE
KLAUS S. STACHOW

WAVE TROPHY

Canadian glider pilots now have a magnificent new trophy to vie for.

To help make the Tenth Cowley Summer Camp a very special occasion in 1982, Klaus Stachow (who has been flying from Cowley for many years) believed that a trophy should be established to recognize excellence in high altitude flight.

Designed by Tony Burton, the now complete 20 inch high trophy features a small pewter sailplane suspended within a solid block of plastic shaped to represent a classic mountain wave scene. Klaus donated the funds required to have the trophy crafted, and the result is a true work of art.

At the Cowley banquet, it was presented to pilots for the first time by Mike Apps, President of the Alberta Soaring Council, and it was accepted on behalf of SAC by Russ Flint. The trophy has plaques on each side of the base.

On the left is engraved:

“Established 1982 on the 10th anniversary of the Province of Alberta granting the Cowley airfield to the Alberta Soaring Council for the primary use of the sport and science of soaring. Klaus S. Stachow, one of the pioneers of mountain wave soaring in the Cowley area, was the architect of the proposal to establish the Cowley airfield as a permanent soaring site.”

On the right is:

“Awarded annually by the Soaring Association of Canada to the soaring pilot achieving the highest altitude flight in Canada. The trophy symbolizes the unique tranquility and beauty of high altitude wave flight.”

The award recipient will be the pilot having the greatest altitude greater than a Diamond climb.

THE CASE FOR THE 13 METRE CLASS

Gary Sunderland
reprinted from his Homebuilders column
in Australian Gliding, “Hammer and Soar”

What the soaring movement really needs are sailplanes to help fill the void between training and national competitions to fill the requirements of the recreational pilot. A low priced, easy-to-fly sailplane can attract a good number of soaring pilots. Many of these pilots are after soaring badges and some want to fly friendly competition in regattas or sport class competition, but most want to get the maximum enjoyment from the sport at a reasonable cost and with maximum safety.

This requirement is the same as the original concept of the International Standard Class of 1956. But the Standard class developed into expensive and sophisticated sailplanes that are a far cry from the original concept. They are also too heavy! My wife and I cannot rig a modern fibreglass Standard c lass machine because of the weight of the wing panels. The introduction of carbon fibre structures is not a solution as we could never afford to own such expensive sailplanes.

The same considerations probably apply to the great majority of soaring pilots, outside of the small band of top contest pilots, who have the money, time and expertise required for championship flying. The remainder have been called “the other 95% of soaring pilots”.

With such a large potential market available it would be expected that glider manufacturers would be successful in providing suitable aircraft and then reap the rewards for their initiative. Unfortunately it is not quite as easy as that. There have been many attempts to provide a sport sailplane. The most successful attempt was the Schweizer 1-26, now superseded as too low in performance. In this day and age a minimum gliding angle of 1:30 is expected, if for no other reason that this is the performance of the typical club training two-seater.

This is the rationale behind the new Schweizer 1-36 Sprite, the older Start+Flug Salto, the Club Libelle and a host of Club class sailplanes launched on the European market in recent times. But these efforts are probably all doomed to failure because they are competing directly with second-hand 15 Metre Standard and Racing class sailplanes in roughly the same price bracket which have a performance advantage.

The economics of factory production are such that, even with a span less than 15 metres, a fixed wheel and other simplifying features, the sports glider price is still only marginally under the price of a new Standard class glider.

The present cost structure is making soaring a high income sport and one which offers fewer opportunities for the young person with a low income but with time, enthusiasm and the desire to fly. Many take up hang-gliding with all the attendant risks involved in reinventing the pre-Wright brothers technology of flight.

The new glider class must be homebuilt to have any chance of success. Only the homebuilt will be much cheaper than existing gliders on the second-hand market. A homebuilt class already exists in embryo with such sailplanes as the Woodstock, Monett Monerai, and Duster, which are all of less than 13 metres span and designed for home construction.

The tentative success of these homebuilt sailplanes indicates what is possible, but the gliders under construction are still a small fraction of the potential number. Apart from France, no country seems to place any value on homebuilding as an activity. The French government subsidizes amateur construction, and club facilities are placed at the disposal of constructors. A member of the Australian Sport Aircraft Association who builds an aircraft is eligible for a gold medal as recognition of his achievement. At least one glider pilot who is also a member of SAA qualified for a gold medal by completing a sailplane.

As an introduction to the value of homebuilding to the rest of the soaring movement, the guru of homebuilders, Stan Hall, had this to say at the 1980 SSA National Soaring Convention:

“I am encouraged by the growing awareness I see in our soaring community of the necessity for developing a more thorough understanding of the real anatomy of a sailplane. Permit me to observe that nothing promotes this understanding better than building a sailplane with your own hands. For those who have never built a sailplane, let me express my own feelings regarding what homebuilding has to offer.

First, of course, you get into the air in the most economical manner possible. All you pay for is the material you use, plus the cost of any special services you may require — which are usually minor. Saving money is always an incentive, and this factor alone draws its share of people to homebuilding, even though one compensates the savings in dollars with the expenditure of time. However, in my exposure to homebuilding and the people who engage in it, I have come to realize that there’s much more to homebuilding than saving money.

There is that compelling urge for people to create, which to a greater or lesser degree likely exists in everybody — and nowhere is that urge more amply satisfied than in the construction of a sailplane. When you create, you think, you contemplate, you reason. And strengthening the intellect by constantly testing it is, in my opinion, an essential part of what life is all about. Homebuilding gives you a sense of accomplishment, a sense of worth, a sense frequently missing from the workaday process of earning a living. In building a sailplane you have no one to answer to but yourself, and you are a difficult taskmaster. You find and develop ways of doing things yourself, without assistance, because the more help you have the less the sailplane belongs to you.

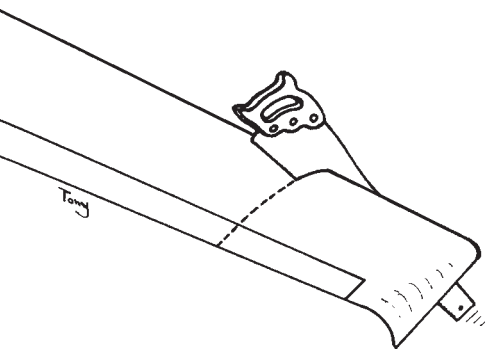
It would seem to follow then, that people drawn to building sailplanes are the problem solvers, the kind who are unhurried in their work and precise and conservative in outlook. It is possible that to a large, perhaps even major, portion of homebuilders, the flying is almost incidental, representing for the most part the trophy one gets for winning the competition with one’s self.

For me, I find the joy of building to be the joy of discovery, the joy of discovering what one can do with one’s hands and one’s mind if given half a chance. And I find building to be a sensory experience too. For example, what can compare with the fragrance of spruce as it goes through a power saw? What sensation can equal the feel of a smoothly contoured fibreglass shell? And what visual experience can equal the sight of a lace-like latticework of ribs and gussets, freshly varnished?

These sensations are all heightened by the knowledge that one day the device you are building will come alive and have a personality of its own. You will not only fly upon wings, but upon wings in which you created every tissue, every bone, every muscle. And it will leave its impression on you.”

Though homebuilders are generally in agreement that sailplane construction could be on the edge of tremendous advance, needing only a slight shove to provide the initial impetus required, there are various ideas about how this could be applied. Both the BGA and SSA are currently running homebuilt sailplane competitions. These will no doubt decide on the “best” design of homebuilt. Or at least decide what the contest judges decide is the “best” design. We will presumably then all rush out and build one. But what if the judges make a mistake and choose the wrong design, or, more likely, if an emphasis is incorrectly placed in the rules, based on incorrect assumptions?

For example, the Australian Gliding 13 Metre contest rules stressed cross-country performance. In the SSA rules, cross-country performance does not get a mention but the ability to fit an engine is a major consideration. In my view the best way to encourage homebuilt sailplane activity will be to establish a separate contest class. The success of the Standard and 15 Metre classes indicates the results possible by this approach. It would be a considerable boost to amateur-building and I believe a step of great and lasting value to



the soaring movement as a whole, if there were an internationally recognized class for amateur-built sailplanes.

Small sailboats that can be homebuilt have been responsible for the tremendous growth in yachting as a popular sport. A special class would also act to encourage the many amateur designers in the world. In my view it is not necessary or desirable to conduct a design contest to select a particular type to represent the class. On the contrary, it would be better to encourage as many designers as possible to complete aircraft and enter them in National 13 Metre Class competitions. At some stage it may even be considered worthwhile to conduct international 13 Metre class competitions but this would not be necessary at the start. The object of the National 13 Metre contest would be both to encourage homebuilding and introduce newcomers to contest flying. The following basic rules are suggested:

- Span not more than 13 metres
- Fixed wheel
- Dive brakes, spoilers or plain flaps only
- Homebuilt — to be built from plans or a kit with not less than 51 % of construction by the builder.

An orthodox 13 metre sailplane is well within the state of the art and the capabilities of most designers. It would have flight characteristics not too dissimilar from two-seater training gliders and bridge the gap to the more expensive Standard class machines.

I am sure that if there were an internationally sanctioned homebuilt class, designers throughout the world, both amateur and professional, would eagerly rise to the challenge and develop even more efficient and safe gliders for homebuilders. Without such a class, development is inhibited. First, because potential designers are unsure what sort of glider will find ready acceptance. Second, because potential constructors recognize that they may one day wish to compete and are therefore influenced towards buying a high-performance sailplane rather than building.

In these days of rapidly increasing cost, the value of a new class of fairly simple, cheap and relatively light sailplanes would be of great benefit to the development of soaring. □

"GOSSAMER ODYSSEY"

by Dr. Morton Grosser

Houghton Mifflin Co.
Boston, Mass.

Book Review . . .
Chem LeCheminant

It was inevitable that the story of the 1979 winning of the two Kremer prizes would appear in book form, becoming the third and possibly the last book on human powered flight. That it has been done in such a professional manner is of great personal satisfaction to myself as a long time admirer of Paul MacCready. Dr. Morton Grosser has put together a book that does justice to his subject and to his own background of engineering and history. The book is given a suitable international flavour by an introduction by Prince Charles, who on behalf of the Royal Aeronautical Society, presented both prizes to Dr. MacCready and his group, which the author has rather aptly named The Gossamer Squadron. To win in your own backyard (so to speak) is one thing, to invade the host country and triumph in their home territory savours something of a conquest. Yet all was accomplished under an umbrella of simple magnificent cooperation, that saw the RAF ferry the contender to England, solve all the problems of customs, licences, radio frequencies, accommodations and gather a small armada of boats in just six short weeks. It was a feat which must be read about and about which we may all well wonder.

Apart from the existing visual records of the epoch making original Kremer course triumph by the Gossamer Condor and the more startling English Channel crossing by the Gossamer Albatross, there could be made two, possibly more, documentary films using the book as source material. These could delve deeper into the genesis and subsequent development of the aircraft and its pilot than did the earlier more newsworthy efforts only concerned with getting the final result before the public eye.

The technical illustrations and colour photographs have been both well chosen and well reproduced, and for further personal satisfaction a little of Canadian talent found its way unexpectedly into the pages. In writing of the first prize giving in London mention is made of Beverley Shenstone as the "Man who started the whole thing". It was a great pity he did not live to see the second prize giving but I have little doubt, had he been able, his satisfaction would have been as great as was the occasion. My own small screed ('So The Kremer Prize Has Been Won', CASI Journal Nov.-Dec. 1978, p. 399) included a sketch by John Dubord of Ottawa, which at this point could well be named, 'The Race That Never Was'. Nevertheless it appealed sufficiently in its depiction of a possible international cross-channel race for human powered aircraft that it has found a place in the book. The race was won before anyone else literally got off the ground – so much had MacCready and Allen accomplished with the faith and devotion of many others.

They have all been brought to life for posterity in this book which makes a trilogy of those now published on the subject: Dr. Keith Sherwin's "Manpowered Flight", David Reay's "The History of Manpowered Flight", and Dr. Morton Grosser's "The Triumph of Human Powered Flight". "Gossamer Odyssey" is a book to be read and cherished.

To add a footnote to the opening sentence of the above review, when in 1962 or thereabouts I agreed to join the CASI Manpowered Flight Section as the representative of the Soaring Association of Canada, one of the motivating factors was the hope that any success arising from the development of manpowered flight might contribute to improvements in soaring flight vehicles. MacCready's No. 3 backup, the Gossamer Penguin, has now turned into a world breaking solar powered aircraft, an idea first mooted I believe by Frank Irving of the British Gliding Association and the Cranfield College of Aeronautics. With the obvious drawbacks to general flight of prize winning human powered aircraft it seems the only gainful progress has to envisage more power than is available from the average human frame. Will not then the development of a solar powered aircraft make the following scenario possible?

A bright sunny morning and a good soaring day, our eager sailplane pilot arrives at the hangar, Dl's his almost orthodox sailplane that also sports a propeller, opens the hangar doors and trundles out the machine single handedly, climbs in, switches on the motor, battery powered but already being trickle-charged by the solar cells that repose under the transparent upper covering of the wing, taxies to take-off position and climbs away to his first thermal of the day.

This I feel is the nearest thing to idealized human flight. No noise, no pollution, and after the initial no doubt high capital expenditure, cost free. The triumph of human powered flight may well have solved the worst bugaboo of soaring flight – getting airborne. When could such happen? Imagine a combination of MacCready, Kremer's money and Dupont materials and this decade could see a vehicle in worldwide use. Canada 1000, USA 12000+, UK 2000, Germany 3000 — These are just some possible numbers — France, Switzerland, Finland, Poland and many more. The building could surely mean jobs for many and ultra-satisfaction for some half million happy glider pilots; rid forever of towplanes, winches, and multi-person launch procedures. □

The Bluenose Soaring Winch Operation

Dick Vine

The Bluenose Soaring Club has enjoyed remarkable growth in the last three years. Membership has climbed and the number of flights has gone up: 1979 — 765; 1980 — 1444; 1981 — 2000; and this year we are 100 ahead of last year.

Our club fleet — 2-22, K7 and private owner ships Ka6E, Skylark 4, Open Cirrus and Standard Austria — expanded with the addition of the K8 and a single-seat Astir, and it appears that we are able to finance their purchase over five years, still keeping fees and flight charges low.

There are several reasons for all this, of course, but the main one is our inexpensive winch. We have developed a workable and productive technique for dealing with the various issues involved in winch launching from maintenance, cable repair and driving skill to safety and signalling procedures. And that is one of the most important factors for our progress.

THE WINCH

The winch was built several years ago by members of the club and was recently mounted on an old truck (see photo by Lloyd Bungey). It can now be driven into position and the field can be reversed to accommodate a wind direction change in twelve minutes. We used a single drum 5 inches wide, with an 18 inch barrel diameter, and 48 inch diameter flanges with no level wind. A 310 HP Ford V8 engine of great age with automatic transmission is the power source. An azimuth pulley guide is mounted about 5 feet from the drum with 12 inch grooved pulleys and side rollers of one-and-a-half inch SC80 pipe. This assembly is very heavy, but has enough inertia that it smoothly adjusts to the desired angle of the cable.

CROSSWINDS

Quite strong crosswinds of 20 mph at 90 degree to the launch direction can be tolerated provided the pilot lays off for drift. However, if there is a downwind component we change ends, since high revolutions are required to maintain speed and the wire would descend onto the winch — all very hard on winch, wire and driver's nerves (not to mention the pilot).

We use 0.135 inch diameter piano wire. It is much stronger than necessary, and some care is required to avoid kinks. After a while it bends at the point where it touches the drum at release. Last year we managed 1100 launches before a break and this year we hope to do better. After the first break, others happen more often, probably because people are less cautious.

CABLE REPAIRS

Once we suffer a break, the wire receives a careful DAILY INSPECTION, and doubtful joints are fixed before flying begins. Of course, this saves climbing trees and wading through swamps and loss of time, all associated with cable breaks.

We repair breaks by passing the broken ends through three 5/32 inch Nicopress sleeves, heat the bare ends of the wire and peen it into a mushroom end about 1/4 inch diameter. We then draw the joint together so that all sleeves are touching with 3/8 inch between the mushroom and the end sleeve. The sleeves are then crimped into the wire. Such joined wire lasts about 200 launches before it wears away on retrieves, so that it is no longer strong enough. It takes about 5 minutes to do a joint if the crew is experienced.

The joint can carry about 1900 pounds load plus/minus 10% and is repeatable by anyone so we haven't worked on any other system.

PRECISION ORGANIZATION

Our field at Stanley, Nova Scotia, is 5500 feet long, running north/south. We share it with EAA 305. When they aren't flying we use a 90 degree runway to land if the wind is suitable, thus improving our cycle time. Training cycles are about 12 to 15 minutes due to briefings and long landings, etc. But once soaring conditions develop, we can cycle in 6-1/2 minutes. We retrieve at 18 to 20 mph with a beat-up truck. It has a small gantry to tow the wire to one side so that the truck can stay on the pavement (avoiding much shaking to wire and driver) and the wire is pulled over the grass.

PERFORMANCE

The 5300 foot cable gives us an average of 1400 feet release height. Of course, the K7 is a very heavy bird (900 lbs), thus students with instructor on board reach only 1100 feet, and at solo stage at least 1400 feet. The K8 and the Open Cirrus are super-winchers and generally reach 2000 feet; a 1800 feet release height is very common for all our single seaters.

In order to achieve fast cycle times, all must work together: both winch and retrieve driver must be efficient at their end of the field, and the field manager at the launch site must see that the correct aircraft is pushed up with crew ready (parachutes on and strapped in) as soon as the cable is on hand. We don't rush the pilot through the flight preparation stage, but if he is not ready another aircraft waiting with crew receives preference.

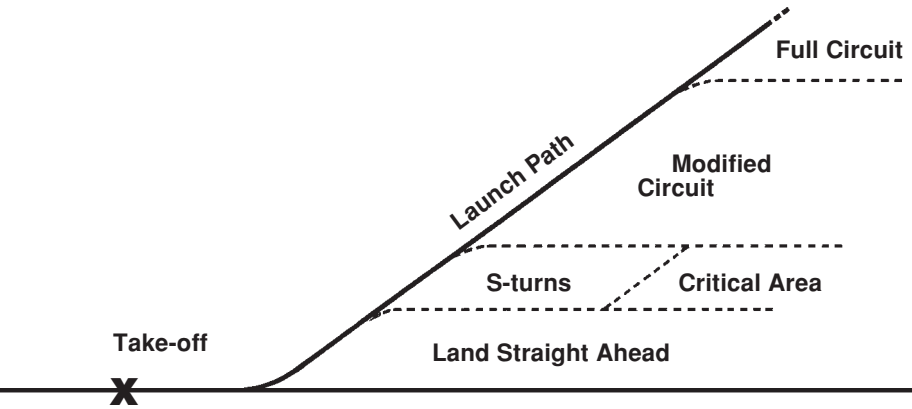
SUMMARY

Any club can run a winch operation, provided the field is long enough so that good height can be achieved without too steep a pull-up, and safe landings straight ahead can be made from faulty launches. This requires about 5000 feet of runway, but a little less is okay.

To be successful you must commit yourself to the winch process. Considerable practice and skill are required to consistently achieve fast cycle times. Don't expect an efficient operation if the winch is only used in case of an unserviceable towplane.

If clubs want to continue to operate over a long term, there is no doubt in my mind that a more economical launch system will become necessary. And for once, I think, Nova Scotia is the wave of the future. □

The BSC winch



CABLE BREAKS

reprinted from *Australian Gliding* with editorial amendments by

Ian Oldaker

It is appropriate perhaps to review cable breaks and the actions to take as winches may well start a comeback soon, and some clubs will have to go through the learning curve again! We have had our cable break/spin mishaps in Canada, some fatal, and so it is opportune to have a think about your own individual performance, ie. what would you do if you had your first winch launch cable break in years?

Are the procedures fresh in your memory? The launch, for the purposes of cable break procedures, can be divided as shown above. If the cable breaks or the winch motor fails you will have to make some rapid decisions. Successfully handling such emergencies depends to a great extent on pre-planning; so before take-off go through your cable break procedures for the different heights — and be prepared.

Before the launch you must also assess the conditions. What if any are the obstructions on the field? Where is the cable retrieve vehicle? Spectators? Other aircraft near the circuit, including power aircraft? Remember power planes have much worse visibility. Most important, what is the wind strength and direction? If it is not straight down the runway and you have to turn, ALWAYS TURN AWAY FROM THE WIND. The reason for this is shown below. Looking at these figures you will see that your final approach will be into wind. Decide now what your final approach speed will be.

Apart from this pre-planning, which you should do before giving the ALL OUT signal for take-off, you should be aware of what to do if the cable breaks at all stages of the winch launch.

In order:

1. Lower the nose to retain flying speed (don't overdo it, you could confuse the reduced 'g' sensation with being stalled, so check the ASI when you have that nose lowered);

2. Get rid of the cable;

3. If you have room to land STRAIGHT AHEAD do so — now open the spoilers and don't worry about the walk back!

4. Only if you can't land straight ahead decide to do an "S" turn or a modified circuit if you are sure you have ample height to get round — and don't try to land at the launch point. Otherwise lose height with an "S" turn;

5. Check your AIRSPEED again (nose well down and chosen approach speed on the ASI), MAKE SURE YOU ARE NOT NOSE HIGH AND DECELERATING, the aircraft must have sufficient speed; it may take up to 5 seconds to reach your selected speed. Now start your turn;

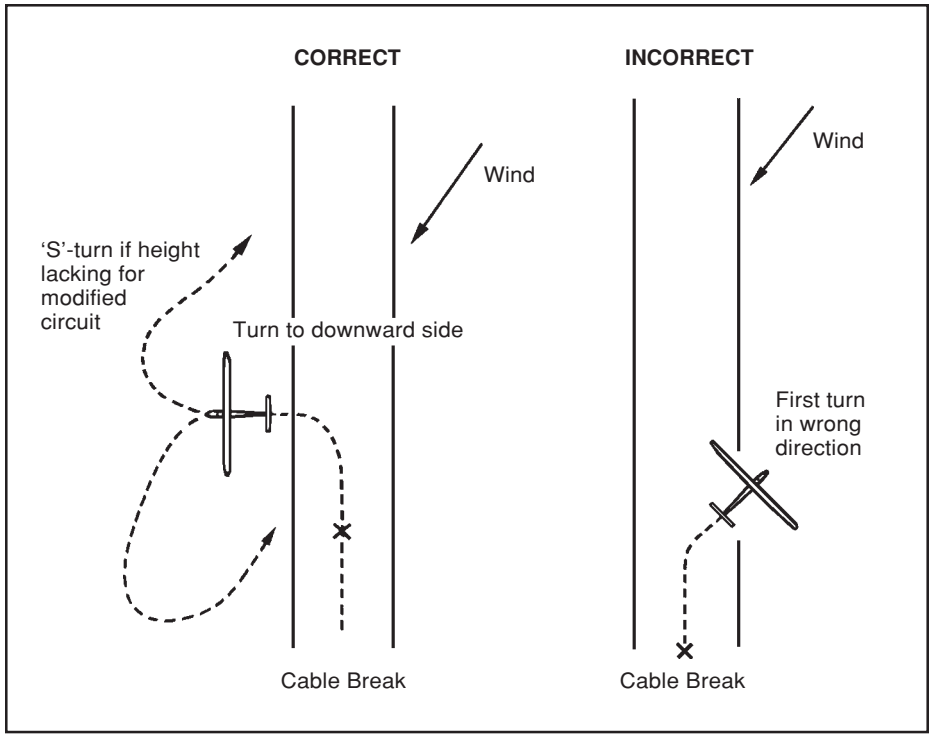
6. INITIALLY ONLY TURN 90 degrees. Don't overdo the rudder and angle of bank;

7. Then after a short base leg turn into wind. Carry out a quick pre-landing check (wheel should already be down), and you should be retrimmed by now;

8. Adjust height as necessary;

9. Land, probably well into the field;

10. NEVER try to stretch the circuit and/or the glide to land back at the take-off point. (It is better to retrieve the glider the length of the field than to make an exhibition of yourself and pick up the pieces in front of your friends).



POWER FAILURES

As these are gentler than an actual cable break, pilots must be aware of the problem; the most insidious, and hard to detect quickly, is a power failure following a fast initial launch and signal for less speed. Apart from the feel of the aircraft, constant monitoring of the ASI is needed.

If a winch launch has been persisted with in spite of the aircraft not climbing (heavy sink or a tail wind might be the cause), the glider could get into a serious position for which the pilot must be prepared, see the CRITICAL AREA in the diagram above.

Action could include a 180 degree turn and a downwind landing, though this might be into wind if the cause of the non-climb was a tail-wind. The danger to beware of here is another glider in the normal circuit approaching to land. Alternatively, land in an adjacent field, but maintain airspeed and don't change your mind and suddenly initiate a turn low down! It is easier to cartwheel a glider than you think.

You may also wish to review "Winch Launching", page 50-53 in the SAC Soaring Instruction Manual and also look again at pages 46 and 47 which deal with procedures to handle rope breaks. □

SAFETY COLUMN

A BOTCHED CIRCUIT

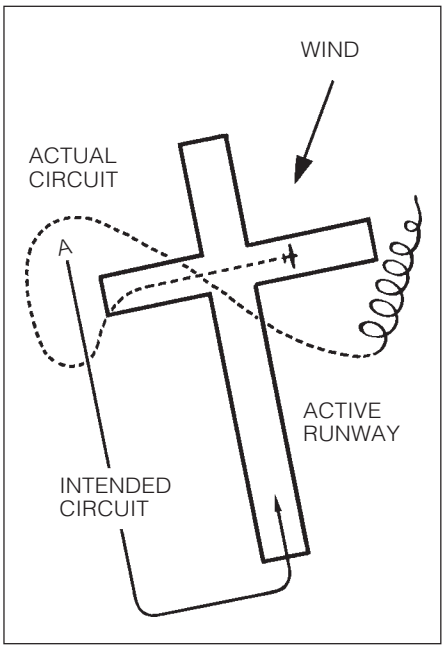
This helpful confession, of special value to new pilots, comes from the Grande Prairie newsletter, "Hangar Rash".

Something I would like to encourage all members to do is to share their experiences with everyone else — both good ones and bad ones. None of us are immune to error and perhaps we can learn from each other. By the way, if you disagree I think you are sadly mistaken. The following situation happened to me some time ago, but its lesson remains indelibly in my memory:

In my log book is an entry dated Oct 4/75 in a 1-26D registration CF-SDI. It shows I was aerotowed at Arthur, Ontario, landed at Arthur, Ontario, attained a height of 3500 feet asl, and flew for 20 minutes. In the remarks column are just two words: stupid landing!

This flight was my sixteenth in a 1-26 and there had been a small amount of weak lift. However, I was unable to stay up and had begun to drift downwind, so with about 1200 feet I began to attempt to get to point (A) (see diagram) to begin my circuit. As I flew along it was becoming painfully obvious I wouldn't reach (A) with enough altitude to do a proper circuit. So with that terrible sinking feeling in my stomach, a death grip on the stick and my toes clenched so hard I couldn't have felt the rudder pedals if I had wanted to, I flew the circuit shown by the dotted line.

To this day I can still remember turning final very steeply, looking at my yaw string which was way out to one side and quickly seeing my airspeed showing 80 mph (that's whistling in a 1-26 by the way). In fact, that speed is probably all that prevented me having a serious problem.



Anyway, I landed and rolled across the intersection to a stop. My heart was going 150 mph and my knees were weak. I staggered out of the cockpit trying desperately to look cool, calm, and collected. When the troops arrived and I explained my stupidity, the only comment was, "Well, you know what you did wrong. Now get back in and do it right." Which I did.

What was so stupid about this situation? I mean, I got it down in one piece didn't I? Well, there's many:

1. First, knowing the poor penetration of the 1-26 I should never have been where I was at 1200 feet in the first place. But, I had been scratching around in zero sink trying to play competition pilot, all the while getting too far downwind for that altitude.

2. When I initially realized I was going to be low, I could have headed straight across for an abbreviated downwind leg or just angled toward the base leg turning point. After all, I had the wind to help me somewhat. By initially insisting that I had to reach point (A) to start my circuit I completely ruled out any chance of returning to a normal circuit.

3. By not flying coordinated or at proper airspeed, I was creating potential extra problems for myself. I was also not flying the glider to maximize its performance to assist me out of my predicament. I had become distracted by the predicament I was in.

4. The slight crosswind for the active runway worked to my favour in final. However, I think it also contributed to my trying to rudder the ship around with a steep bank as I turned final because it was blowing me past my intended track to line up with my chosen runway.

5. My high speed on final caused me to roll across the intersection after landing. It was only sheer luck that no one was taking off at that moment. On the ground no one had seen my predicament because a lot of other things were going on. So it wasn't a case that take-offs were held up until I landed.

6. I could have done a right hand circuit. Again this oversight was caused by the fixation with flying a particular circuit and not looking to see if there were better alternatives.

Food for thought next time you go up on "harmless" local flights. ☐

BAD PACKING + PILOT NEGLECT = USELESS PARACHUTE

Paul Pentek

The pilot chute in this Security 150 (on the left) was placed UNDER the top and bottom canopy covering flaps rather than on top, the manufacturer's proper way of packing (shown above). As a result of this mistake, the pilot chute cocked itself sideways inside the container. When the ripcord ws pulled (luckily for this pilot, on the ground) the pilot chute moved sideways rather than vertically, creating a total malfunction. This parachute had not been serviced for eighteen months, although the pilot was very uncomfortable with the pilot chute digging into his back. ☐

CLUB NEWS

Hazel Flint has won the Special Volunteer Award, given each year by the Province of Manitoba to those volunteers who do outstanding work in their particular sport. Hazel won her award this year in soaring for her outstanding organization of the 1981 Western Regionals and the Manitoba Provincial Soaring Championships.

Not only has Hazel proven a dependable and dedicated volunteer with a special gift for organization but she also achieved personal distinction as a woman glider pilot, as an instructor and as a competitor in her favourite sport SOARING. She always gives of herself unstintingly in anything she undertakes. Many projects have prospered under her capable hands.

It gives me great pleasure to publish the citation given in the Manitoba Outstanding Volunteer Sport Awards Booklet. I know that I speak for all members of the Winnipeg Gliding Club when I say it would be hard to find a more dedicated volunteer anywhere:

Hazel Flint — Manitoba Soaring Council

When the Manitoba Soaring Council looks for help to run a competition you can be sure they will call Hazel Flint. Thanks to Hazel's hard work and superb organization, the first Manitoba Soaring Championships and the 1981 Soaring Association of Canada Western Region Soaring Championships held concurrently in July 1981 at Carman, were a grand success. As Chairman of the Organizing Committee she provided leadership, showed initiative in the planning, encouraged additional input, set the example for getting things done, and kept things moving systematically. She communicated with prospective competitors. She obtained volunteers for manning the start gate, marshalling, finish gate, scoring and for setting up ground facilities. She contacted the business community in Carman, got their support and generated tremendous goodwill between Carman residents and the gliding visitors. She contacted the news media and stimulated interest in the soaring contests and the sport of gliding in general. She organized the guests and awards. Without a doubt the success of the championships was largely due to Hazel's unstinting efforts and her ability to encourage cooperation from everyone involved.

Ruth Moore, Winnipeg Gliding Club

INVERMERE / OLIVER CAMP A VSA SUCCESS

With almost 2500 km (officially) flown by pilots in nine flying days out of fifteen, no one can call it anything else but a success.

The two weeks were attended by Chuck Wilson and his wife Patricia, Don Hill, Joe Gegenbauer and Bruce Feuchuk with Felix Zurbuchen. Andy Potomak and his wife Helen participating for a few days.

Don Hill started the mileage counter going when lacking both a barograph and declaration, he headed north to Golden (100 km), returned to Invermere (thermalling only once on the return flight), continued on to Canal Flats and return to Invermere again for an unofficial 306 km flight in three hours and 40 minutes. Bruce Feuchuk celebrated his first landing away from Hope (and on asphalt) by landing hot and finally stopping 30 metres past the end of the runway on the grass. He did inquire as to whether or not it would count as an off-field landing, but was told NO.

May 17 marked the arrival of Felix Zurbuchen coming from Alberta with the club's newly purchased Jantar. Unfortunately the first mishap of the camp occurred to Felix, when upon landing the gear apparently collapsed, causing the glider to belly-land on the runway (the pilot recycled the wheel up, thinking he was putting it down – ed).

May 19 was almost an historic event for the club when three different distance badge legs were attempted. First was Bruce attempting his first cross-country flight of 50 km in a 1-26. Next was Joe attempting a 300 km flight, then Chuck going around for a 500 km. After a few hesitant starts, Bruce finished his 50 km flight (Radium Hot Springs to Canal Flats) in two hours. However it was discovered later that he had released approximately 30 metres too high. He managed to do the flight again several days later (taking a bit longer and working at staying up a bit harder — ed). Joe did what we believe to be the first officially declared 300 km triangle flight originating in British Columbia by flying Invermere — Canal Flats — Golden — Invermere in four hours and twenty minutes. Chuck managed to fly from Invermere to Elko, back to Invermere and as far as Spillimacheen before being forced back to Invermere due to the weather. However, he did fly an estimated 390 km in five hours and forty minutes.

May 20 brought Andy and Helen Potomak (LS-1) and after what was first thought to be a rope break on his first take-off, Andy landed within minutes to ask someone to turn on his barograph. He took off again and flew to Canal Flats and back (100 km). Don attempted his second of the meet but first declared 300 km flight in the Astir. He was forced back due to weather after 190 km. He also was thinking about landing out because at this time he was down at 1500 feet agl and 30 km north of Invermere. However, after working on a last minute thermal, he managed to climb high enough to land back at Invermere with plenty of height to spare.

May 21 was when Bruce did his second "50 km flight", this time correctly. Joe took his ASW-19 and left to do two days flying at Innisfail, Alberta over the long weekend. This day also marked tragedy when Andy, during a 300 km attempt, was forced to make an off-field landing but crashed several hundred feet from Highway 95, south of Brisco, suffering a broken arm as a result. Andy managed to extract himself from the LS-1 and walk to the highway where he was picked up and taken to hospital for first aid.

May 23 had Don try again for another 300 km triangle, but due to poor conditions and after a long struggle, he landed at Canal Flats.

On Friday, May 28 the group headed out to Oliver to fly Saturday and Sunday. On Saturday Joe and Chuck both flew to Princeton, with Joe continuing all the way to Hope in two hours 25 minutes (this is a first in BC to fly XC INTO Hope, a great achievement – ed.), and Chuck returning to Oliver via Penticton. Sunday's scratchy lift was enough to enable Bruce to stay up five hours 10 minutes to complete his Silver C badge requirements.

Special thanks go to Swansea's George Duthie and his wife Thorra and their sons, without whom this trip could never have happened.

And lastly, the group thanks the North Okanagan Soaring Club for their part in organizing the two flying days out of Oliver.

from *Vancouver Soaring Scene* May/June 1982

FAI BADGES

Boris Karpoff
24-1/2 Deloraine Avenue
Toronto, Ont. M5M 2A7 (416) 481-0010

The following badges and badge legs were recorded in the Canadian Soaring Register during the period May 29,1982 to July 29, 1982.

DIAMOND BADGE

44	Hans D. König	Cu Nim	World No. 3137

GOLD BADGES

190	Kenneth O'Toole	Edmonton

SILVER BADGES

620	Bruce Wilkin	Winnipeg
621	Bruce W. Feuchuk	Vancouver
622	Mike Maskell	Winnipeg
623	Ralph A. Olive	Bluenose
624	Kevin A. Bennett	Cu Nim
625	Fred Sinclair	London

DIAMOND DISTANCE 500 km (310.7 mi)

Hans D. König	Cu Nim	512 km	Mini-Nimbus	Black Diamond, Alta
Kevin A. Bennett	Cu Nim	509.4 km	Open Cirrus	Black Diamond, Alta

DIAMOND GOAL 300 km (186.4 mi)

Kenneth O'Toole	Edmonton	311 km	ASW-15B	Chipman, Alta
Kerry Bissell	Edmonton	316 km	Std. Libelle	Chipman, Alta
Kevin A. Bennett	Cu Nim	509.4 km	Open Cirrus	Black Diamond, Alta

GOLD DISTANCE 300 km (186.4 mi)

Kenneth O'Toole	Edmonton	311 km	ASW-15B	Chipman, Alta
Kevin A. Bennett	Cu-Nim	509.4 km	Open Cirrus	Black Diamond, Alta

SILVER DISTANCE 50 km (31.1 mi)

Jay Beattie	Regina	83.5 km	1-23	Odessa, Sask.
Bruce W. Feuchuk	Vancouver	54.0 km	1-26C	Invermere, BC
Mike Maskell	Winnipeg	91.0 km	Pioneer II	Pigeon Lake, Man.
Richard N. Vine	Bluenose	50.5 km	K8	Stanley, NS
Ralph A. Olive	Bluenose	50.5 km	Open Cirrus	Stanley, NS
Fred Sinclair	London	63.0 km	Ka6CR	Embro, Ont.

SILVER DURATION 5 hrs.

Bruce Wilkin	Winnipeg	5:40	IS28B2	Pigeon Lake, Man.
Charles N. Fowler	Cu Nim	5:10	1-26	Black Diamond, Alta
Bruce W. Feuchuk	Vancouver	5:10	1-26C	Oliver, BC
Kevin Bennett	Cu Nim	5:57	Open Cirrus	Black Diamond, Alta

SILVER ALTITUDE 1000 m (3281 ft)

Roland G. Hawes	Tucson	1442 m	2-33	Tucson-Ryan, Ariz
David R. A. George	Grande Prairie	1219 m	1-23A	Johnson, Alta
Bruce W. Feuchuk	Vancouver	1829 m	1-26C	Invermere, BC
Richard N. Vine	Bluenose	1021 m	K8	Stanley, NS
Ralph A. Olive	Bluenose	1844 m	Open Cirrus	Stanley, NS
Kevin Bennett	Cu Nim	1900 m	Open Cirrus	Black Diamond, Alta

C BADGE 1 hour duration

Barbara Estebany	Montreal	1:03	2-33	Hawkesbury, Ont.
Robert Labrosse	Champlain	1:12	Duster	St-Antoine-Richelieu
Roland G. Hawes	Tucson	?	2-33	Tucson-Ryan, Ariz
David R.A. George	Grande Prairie	1:58	1-23A	Johnson, Alta
Michael Savage	Bonnechere	1:13	1-26E	Deep River, Ont
Henry D. Phillips	Cold Lake	1:15	1-26	Medley, Alta
Leslie Waller	Erin	1:05	2-33	Grand Valley, Ont
Claire A. Stevens	Winnipeg	3:24	?	Pigeon Lake, Man
Christian Aubut	Champlain	2:43	Duster	St-Antoine-Richelieu
Suzanne Bergeron	Montreal	1:06	1-26	Hawkesbury, Ont

FAI RECORDS

RUSS FLINT

Congratulations to **Hal Werneburg** for a new Canadian Soaring Record: Distance around a triangular course: June 12, 1982, 803.7 km, Black Diamond — Milk River — Halkirk — Black Diamond in his Mini-Nimbus "24".

This record supersedes the flight of 753 km by John Firth in 1977.

NEW FACES

DAVID HENNIGAR

Prairie Zone Director

Dave was born and educated in Nova Scotia. His first attempt at age 10 to fly in a homebuilt was quashed by his parents when they heard of plans to launch from the barn roof. The Air Cadets and the RCAF were more encouraging a few years later. Dave flew as pilot from 1951 to 1956 on transport aircraft. The last 25 years were spent in commercial aviation working out of Winnipeg, Manitoba.

Lorraine and Dave have four children, now pretty well grown and doing their own thing.

Introduction to gliding was provided by George Dunbar in the old Gull Gliding Club at Stanley, Nova Scotia. Dave flew in the RCAF Reserve and filled the available spare time until the mid 70s to work in the Air Cadet gliding program. After a few flights in Winnipeg and a fast conversion at Schweizer, the hook has now firmly embedded. A few frustrating months waiting for club aircraft prompted a fortunate entry into an HP-14 syndicate. HPI has provided a lot of enjoyment and three diamonds, as well as a lot of work.

Soaring in Manitoba is good but there is the long, cool winter. Dave has flown in Colorado Springs and Boulder and has made several rewarding "pilgrimages" to Pincher Creek/Cowley, Alberta. The last couple of winters have provided some very interesting flying at Narromine in Australia.

COMING EVENTS

Now is the time to announce your winter programs! 6/82 deadline: 5 Oct; 1/83 deadline 5 Dec.

Oct 2-3, SAC Directors meeting, Vancouver, BC.

Oct 9-11, Cowley Wave Camp at Cowley airfield. Hosted by the Alberta Soaring Council. Contact Lee Coates (403) 242-3056 H or Ken Palmer (403) 284-1396 H.

Jan 8-9 83, SAC Directors meeting, Ottawa, Ont.

Mar 4-6 83 SAC AGM. Calgary. Hosted by Cu Nim. Details to follow.

Jun 20-Jul 10, 1983 World Gliding Championships, Hobbs, New Mexico.

NOTICE

DUE TO THE SHORTAGE OF ROBOTS, SOME OF OUR TOWPILOTS ARE HUMAN AND WILL REACT UNPREDICTABLY WHEN ABUSED.

... seen recently on a hangar bulletin board ...

For Sale and back page omitted