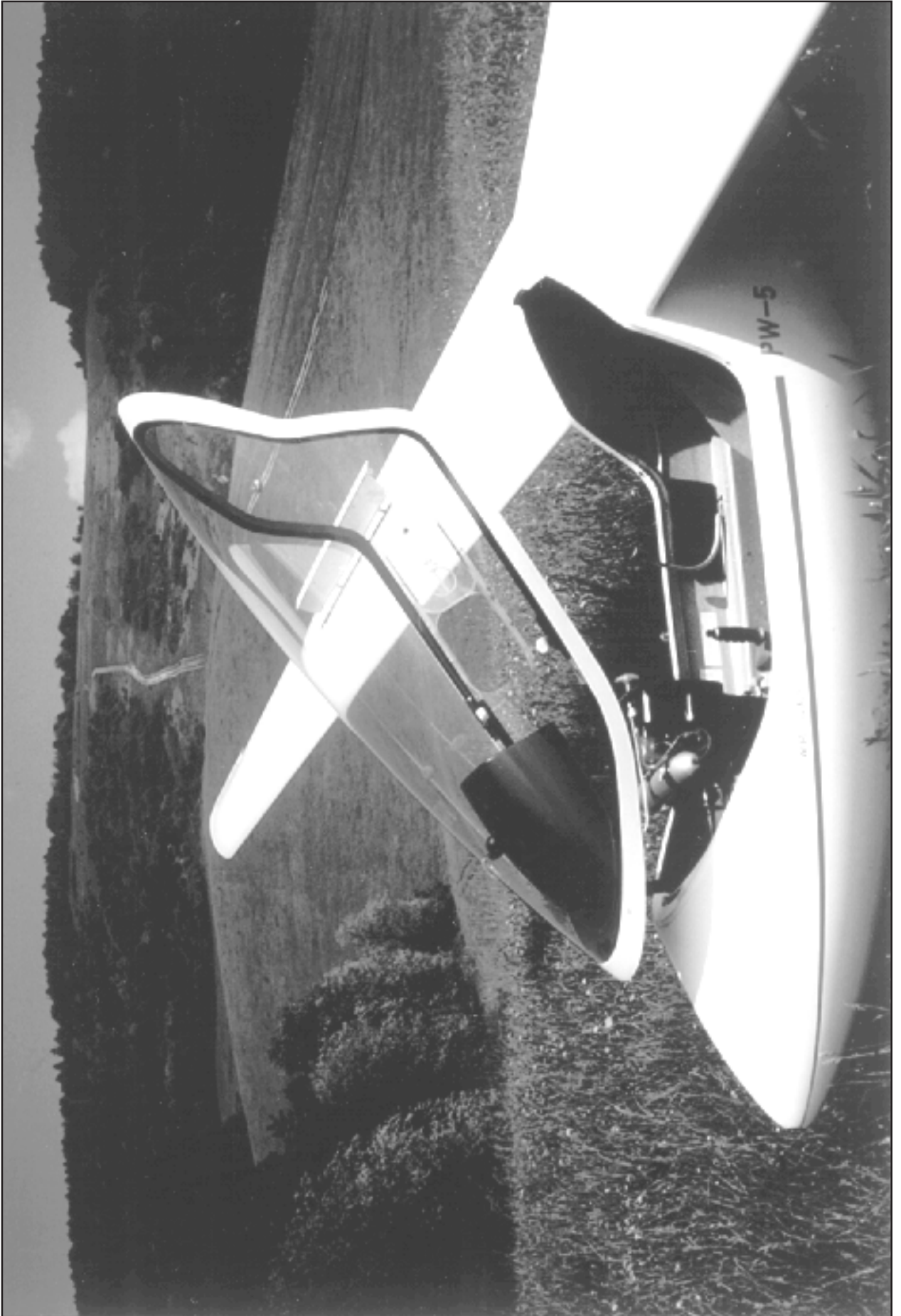


free flight • vol libre



5/2000
Oct/Nov



PRIORITIES

Richard Longhurst

WEATHER OR NOT TO FLY

My most enjoyable time in the sport this year was attending the final day of the 2000 Nationals at Pendleton. The turnout of participants was impressive, and the weather had held sufficiently that a more than adequate number of days could be flown. Everyone seemed in good spirits while the experienced team of Mercer and Brewin supported by their club members and towpilots from Hawkes-bury and SOSA ensured the contest ran smoothly.

In contrast, I started writing this page during the miserable Labour Day weekend, which also caused the cancellation of the 2000 Ontario Provincial Championships which were to be held at Rockton. Overall, this has been a particularly unfortunate season for weekend weather in eastern Canada, as it seems every weekend at least one day has been lost to poor conditions. The weather is probably the most significant factor in this year's decline in SAC membership. We are down by approximately 75 members, which is a significant loss in the budget. Our previous president made significant changes at head office to streamline the operation and minimize costs to the point where very little else can be done to decrease our administrative expenditures. The SAC Board will have to consider carefully at its October meeting how to make up for this shortfall, but clearly an increase in membership fees will be under consideration.

Unfortunately, the decrease in flying does not seem to have had a proportional effect on accidents. Several serious accidents have happened this summer, some of which had been actively discussed on the Roundtable. It is clear that more participation in and commitment to our safety program is required. The main responsibility here falls on club management to ensure that those delegated to run and overview flightline operations are properly instructed in the duties they perform. Completion of the SAC Safety Audit is a major step in this direction, and it is disappointing that few clubs have yet filed their documents with the FT&S committee. The final deadline for filing these reports is 31 December 2000.

The lack of response from Marsh, our insurance agents, following the departure of the last individuals who were knowledgeable in handling our account, has been disappointing. The Insurance committee was considering this problem when Grant Robinson contacted us. He was responsible for our account many years ago and always impressed us with his expertise in our business. He now represents the agency of Jones Brown and the committee's recommendation has therefore been adopted to switch to this agency for the 2001 renewal.

Please note the change in our head office address announced in the last issue. Jim is very busy currently with the move so patience in your requests will be much appreciated.

In the spring, I was hoping for better weather in late summer. I am now hoping for some late good fall flying – perhaps a trip to Lake Placid before turning my back to 2000.

Un été pourri, pourri, pourri! C'est tout ce que l'on peut dire d'une météo qui s'est acharnée sur nous spécialement durant les fins de semaines. En ce congé de la Fête du travail, je vous écrit au lieu d'assister aux compétitions provinciales de l'Ontario qui viennent d'être annulées. Heureusement que les Compétitions nationales n'ont pas connu le même sort. L'équipe Mercer-Brewin, supporté par les membres de Pendleton et d'Hawkes-bury, ont présenté aux nombreux participants un produit de première qualité.

Il faut croire que la météo a détourné de nos clubs des anciens membres et des candidats potentiels. Si la tendance se maintient, nous accuserons un déficit de 75 membres. Cette situation a malheureusement des conséquences économiques importantes. Mon prédécesseur ayant procédé durant ses six mandats à d'importantes réductions de coûts, il sera quasi impossible d'absorber la totalité de ce manque à gagner. Force sera au conseil d'administration de considérer d'autres alternatives telle qu'une augmentation de cotisations. Cette météo ⇒ p22

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5/2000 Oct/Nov

The journal of the Soaring Association of Canada
Le journal de l'Association Canadienne de Vol à Voile

ISSN 0827 – 2557

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Cover
A PW-5 down in a beautiful meadow
in Poland. See "Letters" for details.
photo: rafal mikke

Charles Barrie Jeffery

WE HAVE LOST ANOTHER OF SOARING'S GREAT OLDTIMERS. Barrie had been out of the sport for some years when he happened to get a motorglider ride at the Capetown, South Africa gliding club and asked if I might be interested in an account of the adventure. Of course – and it appeared in *free flight* 3/99. That started a sequence of stories that got him diving enthusiastically back into SAC affairs as our new Historian in late 1999. He took on the job just in time, as sadly he passed away shortly after finishing his long research on Canadian Grunau Babies. His research was helped by a soaring contemporary of his, Frank Woodward, who graciously wrote the following:

Grunau Baby Days was written by my friend Barrie Jeffery, sadly the last of his many contributions to *free flight* and the Soaring Association of Canada over the last 55 years. Barrie was a long-time member of SAC, and should be considered one of the true pioneers of soaring flight in Canada.

His soaring career started at the University of British Columbia in 1945, where he was one of the founding members of the Thunderbird Gliding and Soaring Club. The club built and flew a *Northrup* primary glider, and Barrie was one of the first members to try out his wings on that machine. In 1947, and primarily through his efforts, the club obtained one of the four "war prize" Grunau Babies from the National Research Council, and he was among an elite group of members privileged to fly it.

Following graduation from the University in 1948, Barrie joined the NRC Flight Research Group in Ottawa. Soon, he was very much involved with the Gatineau Gliding Club – instructing, towing, and working hard to earn his soaring badges, first in the Grunau Baby, and later in the Olympia sailplane. Several notable flights were recorded, one being a 140 kilometre flight from Carp to Coteau Landing in a Grunau in August 1949, a Canadian distance record at the time. His good friend John Dure (*prominent in Part 2 of Grunau Baby Days in this issue*) provided me with another interesting account of those early days:

"The Gatineau Gliding Club moved from Carp to Pendleton in 1951. On July 7, the field was socked in with steady rain and a 200 foot cloudbase. Suddenly, in the afternoon, the skies opened up and a huge cumulus towered over the field perimeter. I said, "I'll tow you up to that one, Barrie"; and he took me on. We rolled out the Tiger Moth and the Olympia. At just over 1000 feet we encountered strong lift and Barrie released. The rest of the members made a few flights, after which we put the aircraft away and anxiously waited for the phone to ring as we thought Barrie must be down by now. Then we saw a speck on the horizon to the east, which slowly grew larger. Barrie made a straight in landing on the hangar apron and taxiway. Great airmanship! This was Barrie's Gold C altitude leg"

In the summer of 1952, Barrie was chosen captain of the first Canadian team to enter the World Soaring Championships, held that year in Madrid, Spain. The Aero Club of Spain offered to loan the team two single-seat Weihe sailplanes, and a two-seat Kranich; and arrangements were made to airlift the team members to England aboard an RCAF North Star transport. Barrie flew the Kranich sailplane, with myself in the rear cockpit, and although our results were not spectacular, a precedent had been set for future participation by Canada in the Worlds (*see free flight, August 1952 for details*).

Shortly after returning from Spain, Barrie married Muriel Rice and settled down to raise a family. But soaring was still high on his agenda, and he spent many summer weekends at the airport instructing and flying the Olympia. On July 26, 1955, he made a 315 km flight from Carp to Windsor Mills, again breaking the Canadian distance record, and in so doing, earned the distinction of winning Canada's first Gold C badge.

But all of these events are just memories now. Barrie passed away at his home in Ottawa on July 30 of this year surrounded by his very caring family. To me, he was always a great friend, an outstanding soaring pilot and an important contributor to the success of SAC in its early days. May his memory continue to be an example to us all.

Much of Barrie's personal soaring history was related when he introduced himself to today's pilots in free flight 1/2000. Tony Burton



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 Aero Club of Canada (ACC), the Canadian national aero club representing Canada in the Fédération Aéronautique Internationale (FAI), the world sport aviation governing body composed of national aero clubs. The ACC delegates to SAC the supervision of FAI-related soaring activities such as competition sanctions, issuing FAI badges, record attempts, and the selection of Canadian team pilots for world soaring championships.

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A rare bird sighting

I enjoyed Bob Mercer and Ken Brewin's article *2000 Nationals Notes* in 4/2000 almost as much as the contest itself. I was privileged to be the guest towpilot, and it was my first experience at the "Nats". Those two hard-working fellows plus Bob MacPherson and Marcus Tittiger went out of their way to make my job easier and my stay very pleasant. I was always welcome to join in anywhere and never felt like an outsider. It was great to meet people from all over.

All the contest activities seemed to go like clockwork, and the social events were never dull. I fondly recall the "hootenanny" (do we still call it that?) led by Jeff Waters, where we should have stuck to singing a medley of the first three lines of a bunch of songs, because that's all we could remember. And who could forget the Dutch Synchronized Swimming Team, with their jaunty salad-bowl hats.

Modesty does not prevent me from noting that I won the day on one of the golf outings. As I turned in *free flight* to look at the contest results, I was pleased to see *Casey At The Nats* by the Bald Eagle on the opposite page. Appropriately, there was a draft copy of the poem posted at Pendleton beside the score-sheets. I used to see Larry Springford standing there every day, for quite a while, looking at either the poem or the scores on the board. I suddenly noticed his tonsorial situation and it dawned on me that, just like Clark Kent and Superman, I had never, ever seen Larry and the Bald Eagle together in the same room. Almost as eager as if I had sighted Elvis, I asked Larry to comment. He said, in his enigmatic way, "Let's just say that the Bald Eagle is an integral part of my crew." What are the odds?

Doug Scott

Grunau Baby ZBH

We read with great interest Part 1 of Grunau Baby days in the Aug/Sept *free flight*. Readers may be interested to know that the Grunau Baby IIb CF-ZBH was acquired from the (now defunct) Medicine Hat gliding club in the 80s and now resides at the Cu Nim Gliding Club.

The aircraft is not airworthy now. Our original intention was to restore and fly ZBH as a vintage sailplane. However, the more research we did the more we realized that this aircraft fills a significant space in Canadian soaring history. Flights by "Shorty" Boudreault and Dave Marsden, to name only two, are recorded in the logbook, and ZBH has been flown in several provinces and tasted the Cowley wave. Perhaps it belongs in the National Aviation Museum in Ottawa as part of some SAC exhibit?

ZBH is in storage and being kept dry to preserve it but the restoration is on hold. An Alberta museum, the Aviation Hall of Fame in Wetaskiwin (which has the Viking 104 sailplane) and several private collections are interested in acquiring the aircraft. We would prefer that it stay in Canada and be preserved for soaring posterity.

Loraine, Sara, and Dave Fowlow

Cover photo details

It is an unusual meadow. I can say it's our 'holy' grass at Slony Hill in Bezmiachowa. It was the Polish Wasserkuppe before WWII. Due to its unique configuration in the constant wind zone there are excellent conditions for a long soaring over the hill. Often a contact with wave is possible. In spring and summer, thermals are pretty good — all in the beautiful landscape of the Carpatia Mountains.

Now Bezmiachowa is becoming alive again. The just-established soaring school at the new Aeroclub of Bieszczady Mountains intends to continue the tradition of soaring at the famous "Bezmiachowa Soaring Academy". The fleet includes rare gliders such as PW-2 *Gapa* (a single-seater with an open cockpit — ideal for fun-flying) and PW-3 *Bakcyl* (a fibreglass two-seater with fabric covered wings). We hope that Bezmiachowa will be ready to invite visitors soon.

Rafal Mikke

Banff story an old one

Mike Glatiotis' story of his flight to Banff brought back fond memories of soaring and aerotows from the Banff airstrip and, yes, the same difficulties with Parks Canada, way back in 1969.

The Canadian Nationals at Innisfail, Alberta had just ended. John and Christine Firth had an arrangement with a film crew to make a documentary for CBC and were going for some final "spectacular" shots in the Rockies in his HP-11. A Citabria towplane was part of the deal and the pilot was familiar with the Banff strip.

When John invited us (Bernie Palfreeman and I were partners in a Diamant 16.5) we were happy to tag along. By the time we arrived it was too late to fly so we secured the tug and parked the two glider trailers on the deserted strip. It was interesting to observe the two windsocks at each end of the 3100 foot strip pointing towards the middle. This is considered 'normal' and is caused by the wind blowing over the sheer wall of the 9800 foot Cascade Mountain just to the west (field elevation is 4583 feet). ➔ p26

Grunau Baby days – part 2

Barrie Jeffery, SAC Historian

Most of us: John Dure, Elvie Smith, Herb Henshaw, Blodwen Thomas, and Mel Miller, had little solo glider experience when we first flew the Grunau Baby. And yet we were all quite comfortable in it. It was slow, but responsive; it had effective controls, not least the spoilers. And yet, nearly every winter between 1947 and 1958 someone, somewhere, was patching up a fuselage or even a wing. This has been on my mind lately as I recall the pleasant summer days and cu-filled skies of my GB flying days.

The Agonies: what was this all about?

1948: "On 18 July 1948, the first cross-country flight [in CF-ZAR, the Kingston war prize GB] was attempted, but ended in disaster. The glider spun into the ground destroying the cockpit area of the glider back to the front bulkhead and damaging the wings. The pilot, W. Curran, escaped with both ankles broken ... by May 1953 the fuselage had been repaired" [by Earl Morris & Don MacClement.] *LB***, ff 4/89

1950: "The GB [ZBH] is undergoing minor finishing touches at Uplands Airport." *ff June 1950*

1953: *In a remarkable spirit of generosity, the [Queens' GB ZAR's] fuselage, freshly and laboriously repaired over a period of five years, was immediately loaned to the Gatineau Gliding Club to replace temporarily a newly-crunched fuselage so that the glider could be flown at the Kitchener meet.*

1948-56: "ZAR's wings which required a main spar splice four feet from the tip, were repaired by Walter Piercy and Hank Janzen." [Completed in 1956.] *LB, op. cit.*

1957: *Registration of ZAR was cancelled. "Reborn as ZCP, the Grunau was soon under repair again." In a takeoff accident, similar to Leonore Dure's, related below" ... 9 June 1957 ... a wingtip dropped into tall weeds, and before Walter Piercy, the pilot, could release, the glider was towed off, slewing sideways ... The ... forces were more than the skid undercarriage could withstand and it was torn off carrying part of the keel with it. Back to the workshop (Walter's basement!)" *LB, op. cit.**

1963-present: *ZCP moved from place to place after Queen's sold her in 1963. She went to Windsor, COSA (Central Ontario Soaring Ass'n) and Hope BC, owned by COSA member, George Mathias. In 1982 George gave her to the Victoria Branch of the Canadian Museum of Flight and Transportation, BC. [She never made it there. She's recently been found "in very bad shape due to glue delamination" in the Canadian Museum of Flight, Langley, BC. She might be made available for sale.] No more accidents were recorded in spite of a considerable number of hours flying with various groups. (from *LB, op. cit.*)*

**LB = Lloyd Bungey, writing in "Trying their Wings" (BC Soaring Society), or "The War Prize Gliders" (*free flight* 4/89). These references fill in many of the gaps in the text.

1950: *Agonies with a difference from the first editor of free flight, Doug Shenstone, after the SAC Meet at St. Eugene (ff, Aug 1950): "Delay in getting out this bulletin was occasioned by the Editor suffering a severe back strain at manhandling a glider at the Meet. At the moment he sits poker-stiff and in considerable discomfort. So far as he is concerned, until somebody puts a wheel on that g--d GB, it can stay in the long grass 'til it rots!"*

1951: It was probably an inadvertent early release that caused a young woman pilot to land one or two fields away from the Pendleton airfield. Squeaking in over a barbed wire fence, the Grunau suffered damage to its tail end. Back to the shop! But providence favoured us – a possible serious injury or even fatality was avoided – the wire left marks near the nose of the glider but passed under instead of over the nose. *Info by phone from Dr. Bruce Bigham, 13 May 2000. We were both there in '51.)*

19xx: "When they [Western Canadian Aviation Museum] received CF-ZEE, it had been wrecked and the fuselage had been destroyed. They restored the wings and used the fuselage from a home-built Grunau Baby that had also been contributed to the museum (reg. CF-CNJ) and which had apparently never flown ... They still have the parts of the original fuselage, but they are in pretty bad shape." *Howard Loewen, e-mail, 13 Jan 2000, about the Swedish-built glider, Ser. No. 012, that ended in the Western Canadian Aviation Museum, Winnipeg. CNJ is apparently one of the only two Canadian home-built Grunaus. At this point, I have no information on who built it or when or where.*

1951: "Repair of a GB formerly held by UBC [ZBD] is progressing well [in Vancouver]. Bulkheads have been built up, longerons spliced, and the inner skin on." *ff Jan 1951*

1951: "GRUNAU AT ROSETOWN, Sask: ... letter from Ralph Wiseman puts us in the picture regarding the new GB [CF-ZBT] he has completed ... But what now? ... the distance from Rosetown to Calgary is more than 300 miles – where the nearest qualified instructor (Norm Bruce) is located. Getting in the time to secure his pilot's licence is going to be a problem ..." *D. Shenstone, ff Jan 1951*

1951-52: *A story of bad glue in ZBD was a particular agony for the glider pilots of Vancouver. It was no fun for Frank Woodward and me either. We had trailed the glider from Arnprior to UBC, hovered over the renovation all winter of '47-'48, and been the first fliers, risking our necks perhaps, as it turned out. I later came across reports in the NRC library in Ottawa which indicated that urea-formaldehyde glue without filler would craze and disintegrate with time. In Vancouver they reluctantly opened a panel in the leading edge to investigate. Rib pieces could be lifted out freely. Pete van Groen, I believe, saw it as a totally impractical repair job and did the necessary dismantling.*



Ralph Wiseman's Grunau nearly built at Rosetown.

1953: "Between flying weekends the club's main activity (as usual) is repairing damaged gliders. The current project is a major rebuild of the centre section of a Grunau fuselage." *Elvie Smith, ff March 1953, GGC notes.*

The club started flying on Feb 28 that year. In spite of all, GGC flew 167 flights in 51 hours in a "Grunau" that year, as well as flying the Olympia and Pratt Read, towed by Tiger. But what mishap did that GB repair job represent? Was it the takeoff accident of 1952? Was there another GB accident early in 1953 (see below, LB)? Or was the 'rebuild' just the installation of a wheel? And which glider was it? Was it really ZBH or was it the "Navy" Grunau? Certainly, it was ZBH that had a wheel installed, probably after the 1952 season was over.

1952: How did ZBH (if it was ZBH) come to grief? Hear it in the words of pilot Leonore Dure herself:

"My Short Take-off and Landing in a Grunau"

The date in my log book is August 17, 1952. Nearly 50 years ago, but it stands out in my mind as if it was only yesterday.

The day was sunny and warm, typical summer weather. The Grunau was in great demand by the group standing around waiting their turn for the Gatineau Gliding Club's Grunau. Not many gliders were privately owned back then. Eventually my name got to the top of the list. The gliders were taking off and landing along the grass side of the runway which was no longer serviceable due to holes along the edge of the runway. The grass along this strip was kept short by the takeoffs and landings.

Late in the afternoon the wind changed direction just as it became my turn. The consensus was that operations would have to move to the other side of the field, which was seldom used due to prevailing winds. As a result the grass in the field had grown quite high. We moved the glider and towplane to the new location and I finally crammed myself and back-chute into the Grunau.

There were two wing-persons, one for each wingtip. The takeoff was slow and sluggish even for the towplane. Some bystanders said that it took longer than usual to take up the slack in the tow rope, but from my perspective in the cockpit I was more concerned with the wing-runners because the long grass would make wingtip-running more difficult. To my consternation they let go when I felt there wasn't sufficient speed to keep the wings level.

Some on-lookers thought this was the moment when the tow rope finally took up all the slack and the glider lunged forward. In hindsight I should have pulled the release considering the conditions but before I had time to react it seemed, the right wing dipped, touching the grass. Still moving forward, I tried to correct and the left wing dropped, touching the ground and spun me around in a ground loop. By this time the towplane had pulled the release.

I climbed out of the cockpit all in one piece but the same could not be said of the Grunau. It had sustained extensive damage. I heard someone say it would only be good for matchsticks but didn't inspect the damage myself. I wished the ground would open up and swallow me. I can't ever remember feeling so badly. With only three gliders available, I believe, I had totalled one of them.

However with the goodwill and optimism that must be born in glider pilots, the members of the club had me checked out and I soloed once more in a Grunau (which one?) on Sept 21, just before the end of the season. What a forgiving bunch! It's a great sport and happily I lived to reminisce about those good old days and also the camaraderie we enjoyed with the Buckingham Gliding Club.

Foonote: I expected that such STOL maneuvers would be removed from the curriculum! However as reported in *free flight* 4/89, page 7, 'War Prize Gliders'; a very similar accident happened to ZCP on 9 June 1957, at Queen's University Gliding Club. *Leonore Dure, 17 April 2000*

1953: "In May 1953, ZBH was again seriously damaged." *LB, op. cit.*

1953: "The Grunau CF-ZBD (or at least the remaining components thereof) has been sold by Crown Assets to Jack Davidson [Vancouver]:" *ff Feb 1953. The wings had been dismantled because of deteriorated glue. The fuselage, apparently extensively repaired after fuselage damage in about 1950 alluded to above, details of the accident unknown, soon was sold to GGC so that the borrowed Queen's fuselage could be returned. ZBD returned east and apparently assumed the identity at least for a time of a hybrid ZBD/ZBH, and "flew in this form for the remainder of the 1953 season." LB op. cit.*

The traumas continued. Strangely, we took it all in stride, pretty much, as each new incident occurred. Perhaps it was because only sticks and plywood were broken. No bodies suffered permanent damage or worse in a Grunau. The following story could have turned out to be an exception.

1954: A Grunau takes a header

"We had another not so pleasant experience that year. An experienced lady glider pilot (pilotes?) returned to Pendleton after not flying solo for a couple of months. She had a checkout in the Pratt-Read and was cleared for the Grunau Baby ZBD or ZBH, with Elvie Smith as towpilot and me in front on a "famil" trip. Takeoff and initial climb seemed normal. At about 700 feet agl a sudden jerk and the Grunau passes us in a steep high speed dive towards earth.

"We followed her and watched her approach the opposite end of the active runway and it appeared she would prang the Grunau into the trees at the west end of the takeoff landing strip. Luckily a few feet clear of the trees but hundreds of feet from the landing strip, she landed and ground to a halt within about twenty feet.

"We flew past her quickly and couldn't tell if she was injured but the wings of the Grunau were noticeably bent forward 10-15 degrees from normal mounting. Members got to her quickly, however, and besides a bent aircraft, the lady was shaken but not injured. We arrived to see the wings displaced, skid crushed and off to the side of the hull, some damage to the nose and a great skid mark and hole in the turf where she plowed in.

"What happened?"

"This lady was rather larger than the capacity of a Grunau cockpit. After getting airborne, she found she had very little if any stick movement... Luckily it was a happy ending but the glider was out of service for a year or more."

... from Peter Sneyd's memories of his teenage years at GGC. (The pilot was a mathematician at the National Research council who has since passed away. BJ)

On the same accident:

1954: "ZBH crashed at Pendleton the following summer, first flight on type for Helen(?). Extensive damage to the fuselage and some to the wing roots. No one was hurt!" (Eric Wimberley, e-mail, 18 March 2000).

Once again, a major GB fuselage rebuild! The Bauhaus design did pay off in reducing complexity of repairs. Wing repairs as well this time.

1956-57: Leo Smith (one of a series of *free flight* editors in the later 50s: Leo and his wife Lois were keeners at the GGC) was reported to have nearly completed repairs to the fuselage of ZBH. This would have been after the header of 1954 or even perhaps, after the unidentified accident of 1953.

1959: GGC sold ZBD to the Quebec Soaring Club. Alex Krieger reports that a pilot left one wing tip behind as it struck the rear window of a car on the airfield on landing.

1965: ZBD became the first of the war prize Grunaus to

be totally written off when it "was wrecked in the first hurricane that swept the country." *LB, op. cit.*

Why were there so many crashes – did the GB have a split personality?

Given that the GB was slow and easy to fly, what reason can there have been for the unending accidents over the years? I suspect the reasons are as diverse as a list of accident causes today, but several special to the Grunau have been brought up when I've raised the question amongst the pilots of the day.

- First, it is true that the Grunau was often the first light solo glider flown by new pilots. Having trained on Pratt-Read, TG3-A, L-K, or 2-22, there were bound to be transition differences.

- "Regarding recollections on the Grunau Baby — I recall it had very high rate of sink with spoilers fully deployed. This resulted in some heavy landings, particularly for those pilots making their first Grunau flight."

- "Also — I recall it had very poor penetration ability against any kind of head wind, again resulting in some poorly planned landings. Other than the above, I recall it being a very pleasant little glider to fly."
Eric Wimberley, e-mail, 18 March 2000

"Having the rudder pedals hinged at the top instead of at the heels was somewhat disconcerting — but it worked." *Alfred Wayman, e-mail, 17 Mar 2000. Alf had his first flight with me in 1951 at the age of 13, trained with the Buckingham Gliding Club under Brother Hormisdas, and flew with the Gatineau Gliding Club in the late 50s and early 60s, at which time he checked out in the GGC Grunau, ZBH. Although not lucky enough to catch a thermal in the Grunau, Alf was one pilot who avoided any accidents. That may have been helped by Bro. Hormisdas' characteristic approach path: he would make sure he had plenty of speed over the fence by nosing down steeply on the turn in.*

- The Grunau IIb had 1.7 degrees of washout or aerodynamic twist between root and tip. On the Grunau III, washout was increased to 3.0 degrees, the wing otherwise being almost identical. This suggests that some early tip-stalling may have been experienced on GB IIbs. Such a condition could easily have been a factor in Bill Curran's stall-spin outlanding accident of ZAR, the Queen's GB in 1948. The weather was windy and gusty; the Queen's lessons learned included keeping on plenty of speed in those conditions.

- The Grunau Baby IIb had a maximum load of 80 kg (176 lb). I doubt that any of us were aware of that limit when we were operating GBs. A cg shift may well have been one of the causes of the dive to the ground by Helen T. in 1954.

- On the above accident, Peter Sneyd also says, "Obviously, she forgot her cockpit ground checking routine, until it was too late ... She couldn't move the stick freely enough for safe flight."

The Grunau had a high lift wing. At zero geometric angle of attack (body and wings level) the wing was at a flying aerodynamic angle of attack. This meant that the tied-



John Dure in the GGC Grunau, CF-ZBH, Aug 1949

down glider would tend to fly in a wind. Open spoilers would only reduce the effect. The Quebec Soaring Club learned this the hard way when a windstorm broke the tied-down wings of their Grunau ZBD.

- In the “perish-the-thought” category, was the instruction somehow inadequate? We didn’t have a manual until Bill Curran drafted one in about 1951. Looking back somewhat reluctantly, I would have to admit that some of us (me) were not very rigorous or thorough. Could be something there.
- Finally, it is always a good idea to put the safety pins in the wing pins. After drifting down the Ottawa Valley for five hours in normal summer turbulence, I landed in a pasture by the St. Lawrence River. On taking the glider apart — and this is one thing I remember about the flight — I found the main wing root pins had not been safetied. The pins were still fully seated; a charmed life?

And on a more positive note ...

That flight completed two legs of the second Silver C for Canada and the Grunau ZBH (the altitude leg was flown two weeks later in a Pratt-Read), and made a short-lived Canadian distance record of 88 miles. Hank Janzen called the FF editor after doing an overnight retrieve, and free flight, August 1949, said: “Stop Press — record flight... As this bulletin was being printed, Barrie Jeffery was cracking the Canadian distance record by soaring the Gatineau club’s Grunau for 90 miles from Carp Airfield to a field near Coteau Landing, Quebec, ... some 14 miles south of Montreal. Towed up by Johnnie Dure on Sunday, 14 August at 12:48 pm, he released at 2000 feet and hit a high of 5000 to 6000 feet and a low of 2000, landing shortly after 6 p.m.”

Al Pow had flown 78 miles on 30 May the same summer, breaking Ralph Anders’ 69 mile distance record of 18 July 1948; in 1947 Jack Ames had the longest flight. In 1950, Frank Brame topped the 1949 record with 118 miles. A point about the Silver C is curious. Al Pow had done many more cross-country flights than most if not all other Canadian pilots, and free flight, Aug 1949 reported that at the Kingston Meet, 30 July to 7 Aug: “With the ground chock-a-block with Official Observers, Al Pow finally was credited with his oft-earned Silver C. Another mystery — why didn’t he have number 2?”

After my 88-mile flight, the newspaper said in an alleged quotation, “I just pulled back on the stick and prayed for a

crosswind.” On a really upbeat note, here is a story of a long flight, sticky beans, and ZBH’s third Canadian Silver C:

**– Eight hours aloft in a Grunau Baby –
a Canadian endurance record in 1949, by John Dure**

This story is based on my story in *free flight* in Sept 1949, with clarification and additional details.

I rejoined the RCAF for summer employment in 1949, having been a navigator in WWII and then a student in Engineering Physics at U of T, entering my last year. I requested a posting to the RCAF Detachment, National Research Council, Arnprior, ON (west of Ottawa). There, I took up gliding with the Gatineau Gliding Club (GGC).

I had previously obtained my Private Pilot licence in 1947. We flew out of Carp airport, using a Tiger Moth towplane owned by Bradley Flying School (Russ Bradley, ex-RCAF pilot). GGC owned a Pratt-Read, CF-ZAA, and a Grunau Baby CF-ZBH.

Thursday morning Sept 15 dawned clear and cold and I had every intention of catching a train back to U of T. However when a beautiful cloud-puff appeared about 10:00 I decided to have one last flight, taking a shot at five hours endurance, which would be my final qualification for a Silver C. I hitchhiked to Carp.

Russ helped me roll out the Grunau to the runway. We doubled (shortened) the tow line, to get enough prop-wash to raise and level the wings (no wingman). At 500 feet I remembered I had not started the barograph, so cut loose and landed. Shortly, we were airborne [again].

I released at 1500 feet, encountered 2 m/sec lift, then got the rate up to 3 and spiraled up to cloudbase at 5500 feet. After a while I decided to cross the Ottawa River to the Gatineau ridge so that if thermals died I would still have a chance of finishing the five hours, ridge soaring.

I had never ridge soared before so after an hour and a half of thermal soaring I decided to drop down and try it, the thermals being so good that I was sure I could pick one up and climb back up without trouble. At 200 feet I began looking for lift back of the crest and became apprehensive because my rate of descent was not easing off. Finally I was right over the crest and slipped across it and down another hundred feet before I encountered steady lift. This was one of the most thrilling experiences of my life, soaring just above the tree tops and cruising along 15-20 miles of ridge.

After a couple of hours I decided to try to regain thermal flying. I had noticed sharp uplift passing over a break in the ridge (Kingsmere) and had tried several times to circle in it without success. On my next try I anticipated, turned tightly, and spiraled up to cloudbase again.

It got very cold and I was not warmly dressed, so I decided to repeat the procedure, back down to the ridge. This time I found the lift 300 feet above the crest but perpendicular to the slope of the ridge. As I gained skill, confidence and altitude I began to imitate the birds I had seen soaring and was wheeling around where the air shot up crevices, then hovering with my nose into the wind and riding up several hundred feet in the ⇒ p24

Impressions of Invermere and the PW-5

Ian Spence, SOSA Gliding Club

THIS SUMMER Elsa and I were fortunate to be able to spend a few weeks in Invermere, British Columbia. Our good friends Geoff Fulton and Lynn Macdonald had generously made available their lovely cottage on the shore of Lake Windemere from the middle of May until the end of June. I hauled "Whiskey Whiskey", my ASW-24, out to the Columbia Valley, taking the southerly route along US Highway 2. It was a long four-day trip from Toronto with only Islay, our Sealyham terrier, to talk to — and she slept most of the trip. Elsa did it the easy way, via Air Canada.

Invermere is situated in the Columbia Valley near the headwaters of the great Columbia River. The valley is quite wide — up to ten kilometres in places — and runs from just north of Golden, BC in a southeasterly direction to the US border and beyond. The valley floor is about 3000 feet and the mountains on either side vary from about 7500 feet to 9000 feet. The best lift is found above peak height and it is a good idea to try to stay in a height band above the mountain tops. Finding lift lower down can be difficult depending on the time of day. If you have been soaring on a back range and get low, it is important to have a route out to the main valley since there is generally nowhere to land further back. The several airports in the main valley make outlandings ordinarily easy but there are a few sections without many really good places to land, so neophytes like myself are advised to be careful.

As a mainly flatland pilot, I was looking forward to learning how to fly the mountains. I have a fair bit of ridge experience and have also flown about a hundred hours in the mountains and deserts of Nevada and California; but the Rockies are a little bit different. My first two weeks were spent cautiously exploring the nearby ranges and listening intently to the advice of local experts — Trevor Florence, Mike Glatiotis, and Tony Burton, among others. Tony and Mike were there during the last week of May with the Calgary soaring camp. The weather during the camp was pretty good, though not outstanding, and Tony flew a creditable 608 km free 3TP distance flight in his RS-15 to recapture the existing Canadian territorial mark of Ulli Werneburg and Nick Bonnière. A few days later, as I gradually became more accustomed to the terrain, my flights became longer and, at the beginning of June, I flew a 709 km task which included a 618 km free 3TP segment that I could have claimed to beat Tony's effort. On the 26 June, I also flew a 620 km 3TP task that would have beaten the old record. However, Trevor in his PW-5 surpassed all our efforts ...

In common with many areas in North America this year, the month of June offered rather poor soaring weather, with the notable exception of 1 June. The day dawned cloudless and chilly with a gorgeous blue sky. Trevor, who operates the Invermere Soaring Centre, decided to

declare a free 3TP flight in his PW-5 and asked me to be his Official Observer. I happily complied and we got Trevor on his way at 11:35. (Earlier starts are difficult since the sun has to be high enough to warm the west-facing slopes.) By the end of the day, Trevor had flown 638 km to break the world record for World Class gliders and also to demolish the previously claimed Canadian Club (771 km) and Open (638 km) class records. His story appeared in the last issue.

On 14 June, I flew Trevor's PW-5. I had long been curious about the glider and I must admit that I was not entirely sure that the concept of a small, medium-performance glider was really well conceived. After all, one can buy a 20-year-old glass ship (eg. a Standard Jantar) for about the same (less than \$30,000) as a PW-5, so why would one want to accept the somewhat lower performance of the newer glider?

The rationale for the World Class glider design competition organized by the Fédération Aéronautique Internationale (FAI) was to establish a one-design competition class. The glider was also to be suitable for club use and training and to have low manufacturing and operating costs. In the interest of simplicity, the landing gear was to be fixed and there would be no provision for water ballast. The first stage of the competition attracted 42 designs from twenty countries and eleven gliders reached the prototype stage. Seven gliders were chosen for final evaluation and the PW-5 glider, developed by the Technical University of Warsaw under the supervision of Prof. Roman Switkiewicz, was judged the winner. It conformed to JAR 22 as well as FAI requirements and was certified for cloud flying. The PW-5 was subsequently produced by PZL-Swidnik, a factory that has many years of experience in manufacturing gliders made of composites. The University of Warsaw would also license the glider to any other qualified manufacturer provided that no changes were made to the specification.

The structure is a shoulder wing single-seater of a conventional layout. The wing (monospar construction and a sandwich skin filled with hard PVC foam) has a straight taper terminating in rounded swept-back tips. The airbrakes are on the upper surface only. The left and right spars are identical and the wings are rigged to the fuselage using two transverse pins. The quality of construction of the PW-5 is good; since the Poles have had better access to Western materials, their gliders are markedly improved over the earlier Jantars. The SZD-55 and PW-5 gliders are now comparable to other European ships. However, there are some gaps: for example, the canopy window is not quite up to the Mecaplex standard that we are used to in German sailplanes.

The seating position is rather upright but the cockpit is very spacious and comfortable; I fit quite easily (180 cm and 85 kg) and larger bodies would too. The cockpit layout is conventional with a nice central instrument con-

sole and a forward-hinging one-piece canopy. The air vent, in-flight rudder pedal adjustment, and release are all conveniently located at the base of the console. The airbrake handle, with bicycle-style wheel brake lever is on the left, forward of the very nice trim control. Everything is within easy reach — no Jantar-like stretches are required to adjust the altimeter! Belts are of the usual Polish variety with a transverse clip. The integral relief system found in all Polish gliders is something other manufacturers should emulate.

The day I flew C-GLDR was overcast, with occasional light showers and so I had the opportunity to do a little scratching as well as climbing in the stronger lift over the peak tops. I flew for about two hours in a 30 km segment up and down the range. I explored most of the flight envelope, including stalls and spins and I now feel that I have a reasonably good notion of the handling qualities of the aircraft and how it compares to others I have flown (over 2000 hours in more than 40 types: from Pratt-Read to ASH 25, from 1-26 and Skylark to Discus and LS6).

The PW-5 has three wheels: a fixed main gear with rubber shock absorber, a nose-wheel, and a tiny tail wheel at the bottom of a triangular appendage below the fin and stabilizer. The normal position of the glider — empty or with pilot — is resting on the nose wheel. Accordingly, at the start of the takeoff roll, a little back stick is called for. As soon as the nose comes up, neutral stick is held until the glider wants to fly — heavier pilots may want to maintain back stick for a little longer. Behind Trevor in the Pawnee PA25-235, the glider flies quickly even at the airfield elevation of 2820 feet. The takeoff is unremarkable and full control is achieved almost immediately. The instant impression is of lightness and responsiveness and it is easy to over-control; pilots new to the PW-5 should be advised of this, especially if they have been trained in an older two seater like the 2-33. The tow is effortless and almost no work is required of the pilot. The short wings create little adverse yaw and in any case the rudder has more than enough authority. I could have flown most of the tow hands-off.

The PW-5 is a medium-performance glider with a factory-measured maximum L/D of 33 at around 48 knots. As the speed is increased, the glide seems to remain fairly flat up to about 75 knots where the sink rate increases considerably. In eastern Canadian conditions, there would seldom be any reason to fly any faster. In strong Invermere conditions, maintaining 80-85 knots during most of a 600+ kilometre flight is no problem as Trevor has shown. At the higher speeds, the glider feels solid and comfortable although, because of its low wing loading, it reacts noticeably in the often turbulent mountain air. I could easily feel the feedback from the ailerons as sharp gusts buffeted the wings. The PW-5 climbs beautifully at around 42 knots and — with its light weight and small turning radius — it will probably outclimb most other gliders. I had no trouble getting away on a rather weak Invermere day.

At my weight (85 kg), it was difficult to stall the glider cleanly by gradually pulling back on the stick; the PW-5 wants to mush rather than drop the nose. However, a more vigorous approach produced a stall that was recovered immediately by releasing the back pressure.

There was no tendency to drop a wing. Spins were conventional, although at my weight the PW-5 would not stabilize for more than about one turn before it started to fly again. Lighter pilots will probably be able to maintain the stalled condition — and hence the autorotation — for longer. Heavier pilots may be unable to spin the PW-5 at all. Incipient spins are immediately recovered by releasing the back pressure, although the usual recovery procedure is recommended.

Landing the PW-5 presents no unusual problems. The upper-surface airbrakes provide good approach control and I cannot imagine that it would ever be necessary to sideslip the glider. Approach speed is around 50 knots and the aircraft touches down on the main wheel after a normal flare. A fully stalled-on landing is probably not a good idea since the glider's centre of gravity is ahead of the main wheel and the little tail wheel is mainly intended as protection for the empennage — no harm will ensue if the tail wheel touches.

So, why would one want to buy a PW-5 instead of an older but higher performance glass ship for about the same price? I'll use the Standard Jantar as a comparison since it is probably the most numerous older glass single-seater in Canada. I know the Standard Jantar 2 quite well since I owned one for seven years and won the 1984 Canadian Nationals in it. The Jantar is a good ship in many respects but I do not think it is ideal for the average, low-time club flier who logs less than twenty-five hours per year.

The PW-5 has first-class handling and is much more fun to fly; it feels like a modern, responsive glider, whereas the Jantar feels a little heavy by comparison. The PW-5 will happily fly, and even thermal, hands-off, while the Jantar requires constant stick attention. In light conditions the PW-5 climbs well while the Jantar struggles. Visibility in the Jantar is not terrific — forward and downward visibility is poor and the cockpit bar where the canopy is split is a constant distraction. The Jantar seating position is too supine for many (although I liked it!), whereas the PW-5 cockpit is roomy and comfortable. The forward opening canopy system in the PW-5 is a delight whereas the Jantar's awful canopy hinge and lock is always an accident waiting to happen. The gear operation in the Jantar can be tricky with its slightly flaky locking system while the PW-5 has no retractable gear to worry about. In sum, the PW-5 is much better.

On a day in eastern Canada where the thermals are averaging an honest 5 knots, an expert Jantar driver will complete a 500 km flight whereas an equally accomplished PW-5 pilot will do around 350-400 km.

If you are lucky enough to live close to Invermere, you have an excellent possibility of claiming world records in the PW-5. You have no chance of doing so in a Jantar. The combination of Invermere and a PW-5 is probably the only realistic chance that Canadians have of setting world records *chez nous*. Trevor has already made a world record of 638 km in his PW-5 and probably could have done close to 800 km that particular day, which was not outstanding by Invermere standards.

Eastern Canadians may be encouraged by the thought that a PW-5 at Ridge Soaring in Pennsylvania ⇨ p23

How good are your instructors

Graham Morris
from *Sailplane & Gliding*

Graham, a former CFI, is on the British Gliding Association Instructors committee and last year did 123 hours solo and 60 hours instructing. He has logged 2450 hours solo and 1080 hours instructing and is also a towpilot and motor-glider instructor. Although the instructor accreditation system in the UK is different than SAC's, as is clear from the text of this article, the reader will be able to pull the relevant points of contention from the author's words.

BELIEVE that too many instructors don't do enough gliding. The result? The standard of instruction is often very poor — below what pupils have a right to expect — and less safe than it should be. As a Senior Regional Examiner, I take a keen interest in the instructor renewal statistics; each year the picture is similar. This article details the problem, proposes changes to the renewal requirements and will, I hope, spark a productive debate.

I had graphed the most recent renewal statistics for my region, the South West and South Wales. Each pilot's instructing time was plotted against their solo time. There are 179 instructors — 64 Full, 74 Assistant and 41 Basic (BI) — for 1268 members. Nationally, 1766 instructors support 8802 members. The BGA minima for annual renewal is five hours instructing, ten hours solo and a total of twenty hours. Nine instructors were on the wrong side of these minima and have either not been renewed or have satisfied a Regional Examiner or BI Coach that they were fit to do so.

Most striking was the large number of instructors doing very little solo gliding: 30% reported less than 15 hours solo. Many totals are also very low: 24% did less than 30 hours and 11% did less than 25 hours. Only 12 instructors had flying time 'off the scale'. Based on my view of suitable renewal requirements, the table below categorizes the instructors into groups and outlines the instructing they do.

	Instructors (number)	Instructors (%)	Instructing hrs (%)	Instructing launches (%)
Sufficient gliding	76	42.5	55.3	53.7
Insufficient total hours	5	2.7	2.0	2.1
Insufficient instructing	18	10.1	3.7	4.5
Insufficient solo time	66	36.9	36.1	36.5
Insufficient everything	14	7.8	2.9	3.2

The biggest group does at least sufficient gliding to enable them to be competent instructors and many of these are very good. Fortunately, they do more than half of all instructing. A tenth of the instructors did sufficient solo gliding but too little instructing. This group is generally of an acceptable safe standard but would probably improve if they did more instructing. Just over a third did sufficient

instructing and too little solo, but still found time to do over a third of the instructing. Sadly, those who do insufficient solo are commonly very poor instructors. Needless to say, the small group doing insufficient gliding (solo or instructing) contains few effective instructors, but fortunately only does a few percent of the instructing. If you are in one of the latter two groups, I'm sorry if my comments seem offensive but they are based on experience.

It is interesting that the percentage of the instructing launches made by each of the above groups closely relates to its percentage of hours: high instructing hours are achieved through hard work rather than lengthy flights.

Given that quality of instruction today directly affects how many people stay in the sport as well as tomorrow's accident rate, what constitutes insufficient gliding for instructor renewal purposes?

Firstly, how much instructional flying is needed? Basic Instructors teach a limited range of exercises and can do all of them quite a few times in the existing five-hour requirement. This is therefore sufficient to maintain their instructing skills. However, Full and Assistant Instructors cover a much larger range of exercises. Most ab initio pupils take about five to ten hours to get solo. By then, they should have seen all of the pre-solo exercises and been given appropriate time for practice. It seems unrealistic, therefore, to expect to maintain an acceptable instructing standard unless doing at least, say, 15 hours per year. Even then it would be necessary to specifically practise some exercises to stay current.

Secondly, what solo time is required? Some instructors resent a requirement to fly a certain amount of solo time, even at the current minimal level. When I fly with instructors it is plain that there is a very good correlation between the amount and quality of solo gliding they do and the quality of instruction given. Without enough solo gliding, the amount of instructing makes little difference to the quality of the instruction. I am convinced the handling standard of instructors doing the minimum amount of solo gliding per the current renewal requirements is often inadequate. If the minimum is the norm, year on year, it is often seriously inadequate. Frequently, such instructors are unable to handle familiar two-seaters well enough to demonstrate effectively the required exercises, and not just the difficult ones. Handling ability has a direct effect on safety.

This is a damning indictment of many instructors who are often doing significant amounts of instructing. But if this is put to a body of instructors, several excuses are offered. As well as time and money, pleas for towing or motorglider hours to be taken into account are often made, as are references to 'high' levels of experience, implying no need for currency.

I sympathize if time is a problem, but I find this excuse is often made by those who spend a great deal of time at their clubs, instructing poorly.

If the problem is cash, I sympathize, but as instructors we must stay in practice to instruct, not the other ⇒ p15

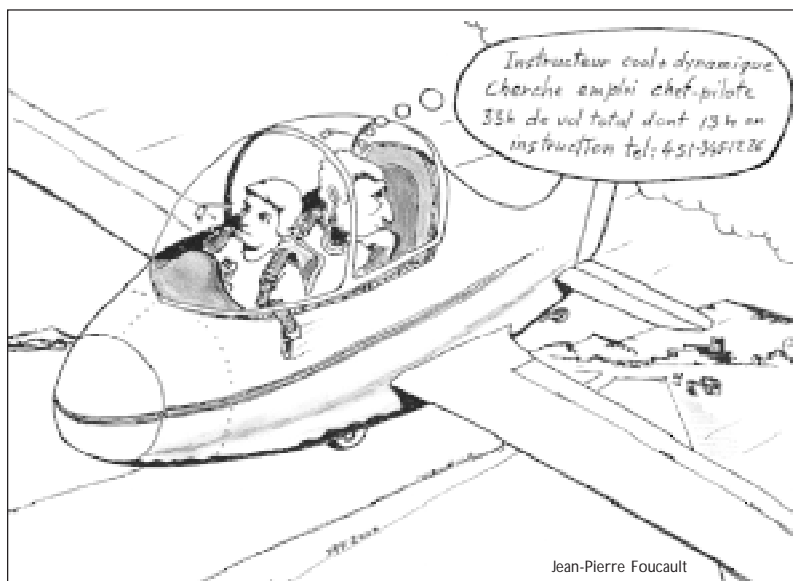
Sécurité et formation

Jean Richard
CVV Québec

DANS UN ÉDITORIAL RÉCENT, Howard Loewen comparait certains pays européens au Canada en matière de sécurité. Les faits nous sautent en plein visage: le bilan canadien n'est pas très reluisant. Histoire de mieux frapper l'imagination, j'ajouterai que si l'Allemagne et la France réunies affichaient un bilan comparable au nôtre, on y dénombrerait plus de soixante-quinze morts par année. On est bien loin de ces chiffres.

En France, les accidents mortels se produisent en grande majorité dans les Alpes, région particulièrement difficile et encombrée. Malgré tout, le bilan du pays tout entier est cinq fois moins élevé que le nôtre. Pour la France sans les Alpes, la proportion passe bien au-delà de dix. Qu'est-ce qui pourrait expliquer cette différence? Et si la formation était en cause?

En vol à voile, si l'Allemagne est le pays du matériel, la France est sans doute celui de la formation. Et le nœud de cette formation, c'est le CNVV, le Centre National de Vol à Voile. Le CNVV est né de la fusion du SEFA (voué à la formation des instructeurs et des cadres) et du CFHN (formation de haut niveau, vol à voile, vol en montagne, compétition et voltige).



À quoi ressemble le CNVV? Il ne s'agit pas d'un aéro-club mais bel et bien d'un centre de formation. On y va en élève, pas en touriste (pour le tourisme vélovole, choisissez plutôt Fayence car un stage au CNVV ce ne sont pas des vacances, qu'on se le dise). Comme le vol à voile français crée des emplois, l'État s'implique dans la formation, comme il le fait pour les autres métiers. Il convient d'ailleurs de préciser ici que contrairement à une idée reçue, l'État français ne subventionne pas les aéro-clubs, mais la formation (celle des instructeurs, des cadres et des jeunes).

En France, on n'improvise pas: tout s'apprend. Un jeune qui serait admis comme stagiaire au CNVV (dans le cadre d'un programme Emploi-Jeunes) pour devenir animateur permanent d'un aéro-club (les aéro-clubs d'une certaine taille s'offre des employés à temps plein) passerait par une formation complète, étalée sur plusieurs mois, et qui comprendrait les stages d'instructeur pilotage, instructeur vol à voile, pilote remorqueur, pliage de parachutes, parachutisme, administration, entretien mécanique de base et autres. Le tout dans l'encadrement d'une véritable école, avec ses salles de cours, ses ateliers, son matériel volant (du Janus au Nimbus 4D pour les bi-places et du Piwi au Nimbus 4T pour les monos), son matériel pédagogique (plusieurs publications de qualité, dont le célèbre livre bleu, adopté avec succès par plusieurs vélovoles québécois, mais que certains boudent par excès de xénophobie), ses horaires... C'est un peu comme si on ajoutait l'option vol à voile au Cégep de Chicoutimi.

Regardons de plus près la formation des instructeurs. Il y a deux catégories d'instructeurs: l'ITP (instructeur en techniques de pilotage) et l'ITV (instructeur en techniques de vol à voile). On pourrait aussi ajouter les formateurs, ceux qui forment les instructeurs. Tous les formateurs sortent du CNVV. Pour les instructeurs, les centres régionaux et certains aéro-clubs sont autorisés à les former s'ils ont la structure et les ressources requises.

On commence sa vie d'instructeur comme ITP. Pour devenir ITP, il faut d'abord passer par le stage d'évaluation. Ce stage, d'une durée de deux semaines, consiste en une révision théorique et pratique des techniques de base, ainsi que d'une évaluation psychologique du candidat. C'est à ce niveau qu'on écartera les gens non motivés, ceux qui veulent simplement devenir instructeur pour le standing, ou pire, pour voler gratuitement aux dépens des élèves. Pour être admis à ce stage, il faut un minimum de 200 heures de vol planeur comme commandant de bord.

[suite page](#) ⇨

Summary Comparing the Canadian safety record to the European one makes it clear that their skies are far safer than ours for glider pilots. Comparing Canadian training standards to theirs can help to explain this.

In Canada, you can be a glider instructor with ten flying hours, total time, including training. In France, a basic training instructor will have not less than 200 flying hours as PIC before he can begin his instructor training course. That figure can be compared to a Canadian aeroplane basic instructor and doesn't appear to be excessive. To stay current as a glider instructor in Canada, you need three instruction

flying hours in the last twelve months while in France, it's 75 hours for the last two years. What a difference! Transport Canada should revise the glider pilot licence and instructor rating standards and bring them up to the same level as other ICAO countries. Present standards are ridiculously low and are not representative of the real ability needed to fly a glider safely in a soaring activity.

Better training and higher standards are not the only keys to better safety records, but we are convinced that it can help greatly. ❖

Sécurité et formation

from page 13

Le stage d'évaluation réussi, on s'attaque au stage ITP proprement dit. Ce stage dure trois semaines, incluant seize matinées de formation théorique (technique, météo, sécurité, facteurs humains, pédagogie, communications...), bien des heures d'étude personnelle, et entre 40 et 60 heures de formation en vol.

Après avoir complété et réussi le stage ITP, on peut obtenir la qualification instructeur. Pour que cette qualification reste valide, il faut justifier 75 heures d'instruction ou 100 heures de vol dont 40 en instruction par période de deux ans. À défaut du minimum requis, il faut repasser par un stage d'actualisation et un contrôle (d'une durée de deux semaines, sauf erreur). Tous les instructeurs doivent d'ailleurs passer par un stage périodique d'actualisation, tous les six ans.

L'ITP enseignera les techniques de pilotage, mais il ne peut donner de leçons de vol sur la campagne, pas plus qu'il ne peut devenir chef-pilote. Ces privilèges sont réservés aux ITV. Pour devenir ITV, il faut d'abord acquérir une certaine expérience comme ITP (un minimum de 100 heures supplémentaires comme commandant de bord dont au moins 50 comme instructeur). Puis il faut reprendre le chemin de l'école.

Avant d'entreprendre un stage ITV, le candidat sera soumis à des examens théoriques et pratiques. Si les résultats sont trop faibles, il pourra être admis en stage préparatoire. Autrement, il s'attaquera directement au stage ITV, d'une durée de deux semaines, dont onze matinées de formation théorique (pédagogie, aérologie/météorologie, techniques de communication, rôle et responsabilités de l'instructeur, bases théoriques du vol sur la campagne ...), plusieurs heures d'étude personnelle, et plus d'une trentaine d'heures de formation en vol.

Enfin, pour devenir formateur d'instructeurs, il faut avoir accumulé 300 heures supplémentaires après l'obtention du niveau ITV, et un minimum de 400 heures d'instruction au total. Cette formation débute par un stage d'actualisation et se continue par un stage spécifique de trois semaines, mené parallèlement à un stage de formation ITP.

En comparant les exigences françaises aux nôtres, on pourrait croire qu'elles sont excessives. Pourtant, restons au Canada et comparons la licence de pilote de planeur à celle du pilote privé et les qualifications d'instructeur respectives à chacune d'elles. Qu'on m'explique pourquoi il faut un minimum de 45 heures de vol dont 12 comme CdB (commandant de bord)

pour devenir pilote privé alors qu'il ne faut que six heures au total dont deux comme CdB pour devenir pilote de planeur. Piloter un Katana ou un Cessna 152 est-il sept à huit fois plus difficile que piloter un Blanik L13? Absolument pas! Le niveau de difficulté est comparable (et je serais porté à dire que le planeur est un peu plus exigeant). Qu'on m'explique aussi pourquoi il faut un minimum de 230 heures de vol pour devenir instructeur classe 4 (débutant) avion alors que dix heures suffisent pour être instructeur planeur.

Il y a longtemps que Transports Canada n'a pas mis ses normes à jour en matière de pilotage planeur. On soupçonne les Cadets de l'Air d'être derrière tout ça et d'avoir trop d'influence sur Transports Canada. Est-ce vrai? Est-ce faux? On sait que les Cadets de l'Air sont les seuls à accorder des licences et des qualifications sur ces bases moins que minimales. Or, si c'était le cas, il faut savoir que les Cadets accordent aussi des bourses pour former des pilotes privés, que la formation de ces jeunes pilotes est confiée à des écoles professionnelles, et qu'en aucun cas ils n'échappent aux normes en vigueur. Jamais le milieu de l'Aviation Civile n'accepterait que les normes soient révisées à la baisse pour ne pas trop gruger le budget des Forces Armées. Pourquoi serait-ce acceptable en vol à voile? Tout cela reste hypothétique, bien entendu ...

Transports Canada devrait donc revoir ses normes en matière de délivrance des licences et qualifications planeur et ce, en s'inspirant de ce qui se fait dans les autres pays membres de l'OACI. Pourquoi des normes plus élevées? Parce que visiblement, il y a un lien entre le niveau de sécurité et le niveau de formation. Ce n'est pas la seule explication, mais c'en est une. On pourrait rétorquer que l'environnement joue un plus grand rôle que la formation en matière de sécurité. Or, un niveau de formation plus élevé ne pourrait qu'influencer l'environnement dans le bon sens. Si la rigueur est enseignée dès le début, elle fera vite partie de la culture du club. Si au contraire on s'en tient au minimalisme, c'est ce dernier qui dominera nos habitudes. Après trois stages en France (tant au CNVV qu'en aéro-club), je persiste à croire que la rigueur et le haut niveau de formation contribuent grandement à la sécurité. Et comme dirait Howard, si ça marche en Europe, pourquoi ça ne marcherait pas ici?

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way around. Instructing should be viewed as a privilege, to do well, not a right, to do poorly.

Towing and motorgliding broaden experience but there is no evidence that they contribute to glider handling standards. As for high levels of experience, this is an excuse often used by instructors who do little meaningful solo gliding. I repeat: it is recent flying that matters. Handling tarnishes without constant polishing.

So how much solo gliding is required to ensure an adequate handling standard for instructors? Certainly more than the 10 hours currently required. Bill Scull wrote in *Sailplane & Gliding* more than 25 years ago that at least 25 hours a year was required just to stay in practice — more to progress. I asked our two National Coaches what level of gliding typically marked a break point below which candidates struggle to complete Assistant Instructor courses. One suggested about 30 hours a year, the other 30–40. As instructing does involve some, albeit very limited, handling I believe that 20 hours solo should be an absolute minimum for instructor renewal purposes.

I would, therefore, require the following renewal minima: For BIs: 20 hours solo, 5 hours instructing with a total of 30 hours. For Full and Assistant Instructors: 20 hours solo, 15 hours instructing and a total of 40 hours. Renewal via a Regional Examiner, or BI Coach for BIs, would be retained, so that if an instructor can demonstrate the required standard, despite lacking the hours, they can still renew. Where soaring really is impractical, instructing time should be credited at 1 hour per 10 launches. It's worth noting that the average of Regional Examiners' actual renewal returns (excluding the few professionals) are 50 hours instructing and 54 solo.

So what would happen if this proposal were introduced? No doubt a few instructors would leave, but evidence suggests very few. In the mid-eighties Nympsfield introduced — and still maintains — a local renewal requirement: double the BGA requirement plus 500 National Ladder Points. The latter was intended as the equivalent to a very slow 100 km triangle in a Std. Cirrus, just to ensure that instructors left the circuit at least once a year. (The best place to improve handling is of course at 1200 feet, 20 miles from home!) The result — all instructing ills cured overnight? Hardly, but only one instructor departed as a direct result. Those who had struggled to make the BGA requirement now struggled with the new one: in other words, they tried harder and were at least current, credible pilots in the process. Occasional concessions have been made for good reasons. Rumour says some instructors who hadn't flown away from site for decades actually enjoyed it!

Instructors must do sufficient gliding, both instructing and solo, if they are to remain safe and effective. It does not mean they automatically will be, but in the absence of sufficient gliding it is highly unlikely. In proposing an increase in the renewal requirements, I am not suggesting overnight implementation. I would like to suggest a series of steps over several years to allow time for a new culture to be established: instructors earning and working to keep the privilege of instructing, not instructing by right regardless of ability. ❖

If you are a CFI or an instructor,

ARE YOU GLIDING ENOUGH to be safe and effective? If not you owe it to yourself and, above all, your pupils, to improve. You are most likely to achieve this by more solo gliding in a deliberate attempt to improve your handling. If this is difficult at your club, either it needs some reorganization, or you must do some soaring elsewhere. If you're a CFI, are your instructors doing enough gliding? Try plotting them out on graphs. If some are on the minimum solo hours line then you almost certainly have problem instructors. It is highly unusual to find "exceptions" who do not need more solo gliding. Look also at previous renewal records. Are many low timers year after year? Some instructors have good years and bad years, but too many only have bad years. You owe it to your club members to ensure they do better. Do you have instructors you simply can't get out of the two-seater and who complete the minimum solo just before renewal? I am forced to conclude that they don't really like solo gliding! If I'm right, how will they inspire pupils? How about your own renewal requirement? If you cause instructors who do insufficient gliding — especially solo — to do more, you will create an environment conducive to higher instructing standards and greater safety. This is a vital art of a CFI's job.

Finally, beware of the *Smashing Bloke Syndrome*. The Bloke can be of either gender but is, of course, the proverbial good egg. This is often true of instructors who are not up to scratch and can make it difficult to tell them so. Once, after I explained to a CFI that his candidate for a full rating had been found wanting, his immediate response was, "He's a smashing bloke, you know!" And so he was, but that's not the point. It is potentially dangerous if the instructor's handling is not up to scratch, and poor instruction can result in accidents long after the pupil is solo. We must test our instructors in the air and, no matter how nice they are, we must tell them when they are inadequate.

Ian Oldaker comments on this and Jean Richard's article on the low minimum requirements for instructing in Canada.

The question of instructor currency has been the subject of much discussion by the Flight Training & Safety committee. The article from *Sailplane & Gliding* is a good exposé of the problem facing a CFI. The CFI of a larger club in Canada has the additional task of assigning instructors to assist with evaluating pilots' competencies as well as standard instructing duties. For example, the CFI and assistants will be assessing if a pilot meets the requirements for flying passengers or flying the next club glider cross-country. How will he or she best do this? Is it by mere numbers of instructing and solo flights last year, or do we include the need for dual demonstration flights? Jean Richard's article also discusses minima, and suggests our standards are far too low. ⇒ p19

Don't you land at SOSA any more?

Ray Wood, SOSA

When someone comes up to you at the Saturday night BBQ, after yet another retrieve, and asks, "Don't you land at SOSA any more?" you tend to become more cautious. After the aggressive and goal-driven flying required for badge pursuit, I was content to fly locally and venture off as conditions allowed but taking care to arrive back at SOSA after each flight, now that the quest for Silver was complete.

This leisurely low risk flying pace changed one evening while talking to my partner in adventure and discussing plans for the August long weekend. Eric informed me he was planning on flying B1 in the Mud Bowl, and there was probably still time for me to ask the board's permission to use a club 1-26 for the same purpose. Much to my retrieve crew's dismay (retrieve crew is also spelled 'wife/daughter'), we were off in pursuit of high adventure again. The board quickly approved my request, one board member stated with my experience (translating as number of outlandings), I should have little trouble flying a contest in a 1-26.

With a practice flight in MJM the week before the contest, I was primed and ready to go. I was reluctant to use QDZ in the contest as it didn't have a radio, so the good luck charm of my 50 km adventure sat in the hangar. The weather on Saturday could only be described as ugly — rain and wind, definitely not a contest flying day. Sunday morning dawned looking very flyable, and so the preparations began. At the pilots meeting, as I looked about the room, it occurred to me I was about to go out and fly in my first contest with pilots who had recently competed at the world championships and at least one I knew who had won his class at the Nats, and here I was, flying with them, in a 1-26.

At the pilots briefing, I was really impressed by the professional manner the day's information was handed out — just like the video I'd watched earlier this year on a big time contest in Texas — really impressive for a fun contest. As predicted by the experienced pilots I had talked to over the past few days, a PST was called with one mandatory turnpoint, close in, to assure everyone would arrive safely from the same direction. I was launched early in the grid and took advantage of the opportunity to see what conditions were like on my proposed route. The lift I encountered was great, as good as I'd seen all season. I struck off toward Ayr and found conditions were very good.

The route I had chosen was Ayr, Brantford, Reid's field (mandatory) and return to SOSA. Reality came crashing in when I heard the announcement that the start gate would open in ten minutes, so I raced back to the field. As I got near SOSA, I knew I had burned off enough height to be at risk of requiring a relight. Now there's a real demonstration of skill. Just as I passed 1500 feet with less than five minutes to the start gate opening, I connected with another good thermal. When the gate opened my altitude was just over 5000 feet, so I departed on course, to Brantford. (Why I did not retrace my steps to Ayr, as planned, I will always wonder.) The run

into Brantford was quick and easy other than narrowly missing the GPS turnpoint. Turning towards Ayr the story changed. Reviewing the GPS trace at the end of the day showed that the upwind struggle was more than a pilot of my experience in a low performance glider was prepared for. My progress was in fact better than I thought but I allowed impatience to end my day too soon.

I believe the original plan may have worked better, but we all can speculate, with the benefit of 20/20 hindsight and a GPS trace in hand, how well we may have done if...

The outcome of the day was me sitting in a field listening to AR call Rockton ground, "Are you aware that MJM has landed in a field just north of Paris?" As he passed by at 6000 under picture-perfect cu, I waited as my crew retrieved QDZ which had landed out nearer SOSA, on an attempted height gain (I'm having a bad influence on the other 1-26 pilots).

The farmer and his young family at my landout site were delighted to take pictures of each of the children settled in the cockpit. The crew eventually arrived and whisked MJM and myself back to SOSA. What a crew, a double retrieve and home in time for dinner! After dinner, a check of the day's data and much discussion convinced me I would be a better pilot for the experience.

Day 3, the second flyable day, looked even better than the day before but I opted for a more conservative task with the plan of simply finishing the day without a retrieve needed. It was not to be; as I approached the 401 enroute to Guelph, it was clear that I was not finding lift and would have to land at the grass strip near Puslinch Lake. The strip owner and his guests were very helpful and allowed one of SOSA's towplanes to retrieve me.

Once airborne again, I radioed Rockton ground to request a restart, amid some good natured heckling on the radio. The request was granted. I later discovered that a restart is not normally possible, but off I went again. This time the task I set was simply to hit the mandatory turnpoint and return since I had already landed out, short of that, for the day. This time I made my goal and returned to SOSA. I was the second contest glider to land for the day and hit all the mandatory turnpoints. Best of all, MJM never needed the trailer, today!

I had a great deal of fun and learned much from the experience in spite of the fact that I was not in the contest from the aspect that I would dethrone any of the reigning champions, the other contestants took my questions seriously and made this a great learning opportunity.

If you have a chance to enter a local contest, I would highly recommend it as an opportunity to learn from the best, and grow. On the evening of the final contest day, I announced my retirement as a 1-26 pilot. Adventures in glass, here I come. ❖

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Western Instructors Course

The 2000 Instructors Course was held 9–14 July at Cu Nim near Black Diamond. Nestled in the Alberta foothills south of Calgary, this site provided a great variety of conditions for the glider pilots. Mother nature cooperated nicely with temperatures from 20–30°C and some booming thermals that created some wonderful scenic soaring flights. Rapid wind direction changes, pockets of heavy sink, and a high density altitude runway are factors that must be taken into consideration when flying at this site.

Five instructor candidates attended and all passed with high marks. The group had a diverse flying background; everyone had both glider and private pilot licences, two had previous glider instruction experience and four had experience as towpilots. As a result there were good interactive classroom discussions with viewpoints from both ends of the towrope.

The course consisted of morning lectures and afternoon flying. The lectures worked through the SAC instructor curriculum; the topics covered in the morning were applied in the afternoon flying. Students were given topics to present in the form of briefings and the course finished with the exam.

Safety was the first priority of the course. The airwork was flown in beautifully maintained Blanik L-13s aerotowed with Bellanca Scouts. Three Cu Nim instructors assumed the role of students. This system worked very well since all were familiar with the local conditions and kept the training safe. They also showed us typical student pitfalls, gave us helpful tips and emphasized always staying alert and looking ahead of the situation.

The course director was Terry Southwood who is well known and respected for his experience, knowledge and views on instructing in sailplanes. He freely devoted his time and effort to prepare the text material, present the lecture sessions, instruct in the air, and process the paperwork. On behalf of all of us that attended the course — we are sincerely grateful for all your effort.

A special thank you to Karin Michel who took a week of her holidays to instruct us in the air. Since I needed a lightweight pilot to stay within the Blanik's C of G, I was very thankful. I had the pleasure of being her student for her 100th hour of instructing — congratulations on reaching another milestone!

I would also like to thank Cu Nim's CFI, Rick Zabrodski, who also instructed us in the air and hosted a lovely barbecue at his home. Thanks for your hospitality. A final thank you to the towpilots Hal Werneburg, Lyn Michaud, and Ted Mani who found some great thermals for me.

What a week! Beautiful countryside, wonderful people and learning more about soaring — what else could one wish for? If you have the desire to become an instructor, why not plan on attending next year? As for myself, I have a new learning curve to climb!

Andrzej Konarzewski

SAC accidents to date

Following is a synopsis of nine SAC accidents reported to date. I have not done any analysis so far, but recurrent patterns exist with respect to off-field landings, stall/spin situations, and spoiler inattention/confusion.

Fatal Standard Austria entered stall/spin from 50 feet on a winch launch. Slight tailwind gust at take off. Glider seen to pitch up 20° before stall. Trim actuator reported missing in wreckage. Pilot experienced.

Pilot injured/write off Single seat fibreglass glider is stall/spun in low turn from base leg to final in off-field landing attempt. Pilot experienced.

Write off Towplane flips over during landing when braking hard to avoid deer. Pilot experienced.

Write off Trainer landed in trees in off-field landing attempt after pilot becomes disoriented on local flight and cannot find field. Pilot newly licensed and unfamiliar with area.

Substantial damage A Blanik is hard landed after an undershoot in which contact is made with bushes on approach to the runway. Spoilers observed fully open throughout base leg and final approach. Pilot experienced.

Substantial damage A K7 two seat trainer undershot the runway on a passenger flight and struck trees on approach. Pilot had noted heavy sink and turbulence on base leg and closed spoilers. Spoilers opened unnoticed on final contributing to the undershoot. Pilot experienced.

Substantial damage Citabria towplane's gear collapses while taxiing after landing. The king bolt holding gear under the fuselage sheared as a possible result of overtorque during gear removal/installation for non-destructive testing.

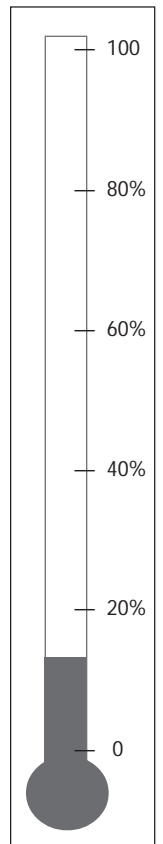
Damaged rudder Libelle collides with rudder of another glider on runway following heavy landing on soft field and directional control is lost. Other glider in collision was still partially on active runway because of the difficulty moving it in the soft turf. Pilot experienced.

Minor damage Single-seat glider sustains minor damage in off-field landing attempt in difficult desert terrain. Pilot experienced.

Dan Cook, Safety Officer

Safety Audit Thermometer

Percentage of clubs who have completed the SAC safety audit this year (no change in two months!). Next year's SAC insurance will require its completion.



The Western course (l to r): Terry Southwood (director), John Gruber (Saskatoon), Andrzej Konarzewski (Winnipeg), Karin Michel (Cu Nim), Marty Petrucha (Edmonton), Dick Parker (Edmonton), Jim Anderson (Silver Star).

New instructors for 2000

Many congratulations to the following pilots who attended upgrade clinics and who were upgraded to higher levels this year:

to Class I: Dan Cook Gatineau
Ian Grant Gatineau
Richard Parker Edmonton

to Class II: Larry Bogan Bluenose
Gord Jeremic SOSA

The Flight Training & Safety committee also congratulates those pilots who attended instructors courses and passed the exam this year, and who have been classified as SAC Class III instructors:

James Anderson	Silver Star
Calvin Andrews	Rideau Valley
Boris De Jonge	Bluenose
David Donaldson	Great Lakes
Leili Pede Foster	York
John Gruber	Saskatoon
Ross Hoffman	Guelph
Andrzej Konarzewski	Winnipeg
Rosemary McCallum	York
John Mitchell	Rideau Valley
Charles Petersen	York
Niels Petersen	York
Martin Petrucha	Edmonton
David Willis	York

Comments ...

from page 15

If we had the type of national funding enjoyed by the French, would we be better off? Maybe. But we can certainly aim as high as possible. How do we do this?

The articles suggest solo flying is important to maintain handling skills, and flying a variety of gliders is of course better than flying the dual-seat trainer only! I hope we have none like that in our clubs because this does not make for good instruction of our upcoming pilots. I do not think we will get better instruction by increasing the legal requirements alone; Canada already follows the ICAO recommendations, but yes, we need to shoot for a higher level. In the Association we require much more flying time and numbers of flights before we will take a pilot on an instructors course, and we have required this for many years now (exceptions are accepted under certain conditions, but we do "wash out" some candidates!). Regarding currency, the FT&S committee has clarified the system this year for our clubs; every CFI must report annually to the committee as summarized below (full details are available from each CFI) for instructors to retain their current instructor classification. Should we be adding a requirement also for solo flying, or should this be left to the CFIs?

Currency The CFI is to certify to the FT&S committee that the pilot is competent to instruct at the current level. If the instructor has not maintained currency in the previous season by instructing a minimum of twenty flights, checkflight(s) are to have been conducted within the previous six months to make this certification. This certification may be done by e-mail.

To upgrade a pilot from Class III to Class II, the instructor may attend a SAC upgrade clinic, or may be upgraded by the club CFI, plus one other Class II or Class I instructor.

To upgrade a pilot from Class II to Class I, the instructor must attend a SAC upgrade clinic, usually run in conjunction with instructor courses. As an alternative, the club CFI may request a Class I upgrade clinic be run at his/her club by contacting a member of the FT&S committee closest to you, and suitable arrangements will be made.

To ensure all instructors are covered, the CFI is to send in the club instructor list each year. All instructor classifications will be renewed for two additional years. Failure to request renewals will result in the classification being dropped in the succeeding year.

Your comments are invited!

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Hangar flying

CAS News

CAS has had another active summer holding two cross-country clinics, and assisting with GGC's May Fly, SOSA's Mud Bowl, and the Ontario Provincials. The first clinic held at MSC saw ten students introduced to the challenges of cross-country flying. Walter Weir was the lead instructor for the course, and was ably assisted by Andy Gough, John Bisscheroux and Bernie Palfreeman. Next year CAS will hold a clinic in St-Raymond hosted by CVVQ. Hopefully, this eastern location will attract a few students from the Atlantic Region as well as Quebec.

The second clinic was held at SOSA and had seven students. Again, some great instructors were available to help the students, (Jim Carpenter, Jörg Stieber, Walter Weir to name a few). There will be another clinic at SOSA in August again next year. Remember the basic requirement for the clinic is your Silver badge, so if you want to learn about cross-country flying, there is still time before the clinics to finish off your Silver badge.

The CAS AGM was held during the Nationals at Pendleton. One major change that occurred this year was an increase in the CAS board. The CAS board now has five positions instead of three. The incumbents are:

<i>President</i>	Dave Springford
<i>Past President</i>	Jörg Stieber
<i>Treasurer</i>	Paul Thompson
<i>Membership/Sponsorships/Promotion</i>	Andrew Parker
<i>Secretary</i>	Ed Hollestelle Jr.

This change was made to try and lighten the workload on the current board and to allow CAS to take on a leadership role in trying to promote the sport and find corporate sponsors for the Nationals and Canadian Team.

The results of last year's Decentralized Nationals were also announced at the AGM. Unfortunately, this ladder-style competition was not well publicized last year and we had a small number of entries. The competition is meant to encourage people to fly cross-country. Changes made this year to encourage more participation include removing the requirement to be a CAS member to enter the competition. The British National ladder has over 200 participants, so make sure you enter your four best flights from this season, you have until 31 December. The following people have volunteered to be the point of contact at their club for this competition:

Calvin Devries – York Soaring
Chris Luxemburger – COSA
Ron Walker – Gatineau
Charles Yeates – Bluenose

If you would like to be the contact at your club, let me know. Rules for the competition can be found on the CAS website at:

www.sac.ca/cas/casdnats.html

The 1999 winner in the Open class was Dale Kramer from SOSA, who flew well over 20,000 cross-country kilometres last year. The winner in the beginner class was Alain Berinstain from GGC who completed his 300 km flight last year. Congratulations to both!

Dave Springford

The DG-1000 flies

The DG-1000, the two-place glider developed and built by DG Flugzeugbau GmbH in Bruchsal, near Karlsruhe, successfully made its first test flights on 27 July. The DG-1000 was specifically designed for basic glider instruction, advanced cross-country soaring instruction, and full aerobatic instruction. The DG-1000 has two versions:

- DG-1000 CLUB, 18m wingspan, fixed gear, box with trim weights.
- DG-1000S, 20m wing span, wing parting, winglets, retractable gear, water ballast, box with trim weights. Its special airfoil design will make it the highest performing 20m two-seater available. Production will start in early 2001, with first deliveries to customers in April/May.

In 2003 two more versions of the DG-1000 will be produced, a motorglider and a competition mark, both with flaps.

Meanwhile, DG has added many refinements to its current DG-800 motorglider. These changes are significant enough that it has been given the 808B designation:

- Larger fin for improved rudder control,
- New flaperon seals to minimize the aileron force,
- Tail wheel fork fitted with ball bearings to reduce the rudder force,
- Swiss interior as standard,
- Parking brake as standard,
- Piggott-hook to avoid uncontrolled open-



- ing of the airbrakes,
- A new manual engine extension and retraction switch which will be placed in the cockpit panel in order to have space for other instruments in the side panel,
- Improved engine installation,
- Improved fuel unit installation,
- New manual.

Deliveries for 2001 of all previously ordered 800Bs will be built as 808B.

The company began in 1973 with the DG-100. It was founded by aeronautical engineer Wilhelm Dirks and building contractor Gerhard Glaser. Wilhelm Dirks remained with the company and heads the design department.

The Vintage Glider Club

The club arose from the wish of the vintage glider owners at the very successful first International Vintage Glider Rally at Husbands Bosworth, England, in 1973 to encourage the preservation of worthy gliders of the past, particularly by the ownership and active flying of these machines. It is truly international in character, having members from 34 different countries. The President is Chris Wills, (son of the British gliding pioneer Phillip Wills), and Vice Presidents are from Switzerland and the Netherlands.

The objectives of the club are:

- to promote the international preservation, restoration and flying of Vintage, Oldtimer and Classic gliders; to collect, preserve and publish information about the above;
- to locate and preserve documents and artifacts connected with gliding;
- to cooperate and negotiate with government bodies and other interested organizations to ensure that members' best interests are protected;
- and generally, to do all such acts as may be conducive to the objectives of the Vintage Glider Club.

The club organizes several rallies each year, including international rallies. To date there have been two international rallies at Elmira, NY, the last one being in July, 2000. At this recent rally there were at least five Canadian registered gliders in attendance, including the Breguet 905 Fauvette, which I used to own. It has been beautifully restored by Leo Schober. There was also a nice LK entered by Herrie ten Cate. This has been restored to the configuration it was in, including colour scheme, when owned by the old Queen's Gliding Club. An interesting ex-Canadian glider was a Mü-13. This is the one that was allocated to the McGill Gliding Club in 1947 from the batch of four gliders (the other three were Grunau Babies) that were brought to Canada by the Canadian Navy as war booty! The Mü has changed hands several times and has

improved with each owner. It is now in really excellent condition.

Interestingly, there were more Canadian gliders present at Elmira than Canadian members of the VGC! I have been asked to try and increase the Canadian membership so any readers interested are invited to contact me, Terry Beasley, at <trbmsc@hawk.igs.net>

For those of you who are on line, interesting sites which all provide links to others, are:

- The Vintage Glider Club
<www.vintagegliderclub.org.uk/>
- US Vintage Glider Club
<www.iac.net/~feguy/VSA/>
- US National Soaring Museum
<www.soaringmuseum.org/>

Terry Beasley

Seeding list for world comps

Pilots for the next World Championships in 15m and Standard classes are selected from the 15m and Standard seeding list in the order of their ranking. Pilots for the Club class Worlds are selected from the combined seeding list for 15m, Standard and Club classes in order of their ranking. A total score of at least 85% is the minimum requirement for entry on the Canadian Team. The seeding list for 2000 is given in the table.

Jörg Stieber,
SAC Sporting Committee

Alberta Provincials a success

Contests depend on weather and interested cross-country pilots of course, but only one contest in Alberta in the last four had the required two days to be 'official', no matter where or when it was called. Holding the contest at Cowley can be a good news / bad news prospect. The good is that the organization is already in place for the Summer Camp and the pilots are there (so no extra travel/holiday time), the bad is the weather can be stable by the end of July and not allow more than local soaring (though "local" is spectacular). However, contrary to speculation that the soaring was uniformly bad across Canada this year, it has been good in southern Alberta — so we are official again.

The rules were kept very simple and scoring could be done with pencil and paper (there is something to be said for no electricity!). Tasks were PST, points were earned at 1 per km and 1 per km/h and then handicapped, and close-in TP were allowed for Blaniks.

Thursday, 3 August. Day 1 Lift started before 2 pm but the SE wind deadened the convection over the usual release area on the south end of the Porcupine Hills just east of the airfield. The task got shortened to two hours. I was the sniffer and off at 14:40.

Soaring Association of Canada 2000 Competition Seeding List							
Name	1998		1999		2000		Total
	Pts	Score	Pts	Score	Pts	Score	
15 metre							
1 Ulli Werneburg	2574	85.8%	WGC	96.03%	4801	100%	98.81%
2 Nick Bonnière	1779	59.3%	WGC	98.44%	4411	91.88%	93.85%
3 Jim Oke	2999	100%			4094	85.27%	89.69%
4 Walter Weir	1114	37.15%	2810	81.73%	4051	84.38%	83.58%
5 Dave Springford	1172	39.1%	2258	65.68%	3764	78.40%	74.58%
6 Wilfried Krueger	1555	51.85%	USA	88.38%	USA	98.10%	55.92%
Standard Class							
1 Ed Hollestelle	3060	100%	WGC	100%	4888	100%	100%
2 Jörg Stieber	2101	68.66%	3537	100%	3598	73.61%	81.53%
3 Dave Mercer			2393	67.66%	4141	84.72%	79.60%
4 Ian Grant			2851	80.61%	3228	66.04%	70.41%
5 Dale Kramer			2771	78.34%			23.50%
6 Ian Spence	2185	71.41%					21.42%
Club Class							
1 Heri Pölzl			3438	100%	3864	100%	100%
2 Charles Yeates	1173	75.73	WCC	66.59	2827	73.16%	73.93%
3 Calvin Devries	434	28.02			2680	69.36%	56.96%
4 Ed Hollestelle Jr.					2584	66.87%	46.81%
5 Team Langlois					2101	54.37%	38.06%
6 Ron Walker					1951	50.49%	35.34%

Rob Hellier, our visitor from Holland, had by now checked out in the Cu Nim Jantar and was in the game. He was thoroughly enjoying flying at Cowley and remarked that his take-off elevation (3876 feet) was higher than he usually gets back at his club!

Getting a good overhead start photo was the most difficult part of the day. The only local cu was to the NE back into the Porkies and one had to make a fairly long glide back into wind to reach the start point and then turn back to the lift again.

Everyone used northerly turnpoints up the valley chasing the cu. But, as the afternoon developed, so did the cu in the middle of the valley, and by 5:30 there was a great solid cloudstreet at 10,000 feet heading NW from

Cowley up to the north end of the Livingstone Range. This is what won the day for me — with about ten minutes remaining to fly I was back at Cowley under the cloudstreet and was able to turn around and cruise back to the Livingstone fire lookout turnpoint and return with hardly a circle. It was a "free" 72 kilometres at just the right time.

Day 2 After a one day delay while some weather passed through, this was the best soaring day, no question. A three hour PST was set and launches got started at 12:45. The extra moisture in the air did give some spreadout in the valley but the airmass was drier to the south and southeast — the cu in that direction were well-formed and streeting NW-SE. Russ Flint, Al Hoar, and I used southerly TPs to advantage, although Lee

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Coates got his second place distance making use of the Livingstone ridge line lift.

After going to Centre Peak, I headed south towards Waterton and then had a very good run down the cloudstreets to the Cardston Mormon Temple turnpoint and back and finished off the three hours in the valley. Lee Coates and I had speeds over 100 km/h (me 107.4 / Lee 101.1), a contest benchmark which I am rarely able to manage. Phil Stade, a relatively low time cross-country pilot, also got down to Cardston in his HP-18 but must have flown around all the thermals on the way back and landed out 25 kilometres east of Pincher Creek. That was the only landout of the contest.

Day 3 With two days done, it was finally an official contest, but with one more day of flying remaining this Sunday and conditions still favourable, another task was set for the remaining competitors (some had left for home, and others had higher priorities).

This was the day that a cold front was to bear down on us from the north. I wanted to get the pilots off at first lift but we had to do a runway change right at the planned grid time. The start organization was so messed that the regular mass launch and start gate opening 15 minutes later was dropped. I let everyone launch when they could and start when they wanted to: it didn't seem to give any advantage, and it adds another variable into the pilot's tactical decision-making.

When I launched at 2:30 the prefrontal cirrus was already moving down into the valley. I made a radio call to everyone to cut the task to two hours.

There was good looking cu under the cirrus in the valley early on. Going into the compressor station turnpoint 37 km north up the Porkies, I wasn't comfortable being only at 8000 feet, especially when the lift was getting noticeably softer and it didn't look too bright going back south. However, the east was still in sunshine and the cu that way were solid so I fled towards Claresholm. The lift was good once I got out from under the cirrus shadow. I turned at Claresholm airport, and just to the southwest got 9 knots to 14,200 feet! From that exalted height I could see Cowley 45 km ahead, and I got back at 11,000. That was the boost that won me this day with 198 km.

Rob had also gone east to Fort Macleod and flown farther (219 km), unfortunately he forgot about the rule which disallows out and return legs and lost almost 42 km as a result of eliminating the disallowed turnpoints.

Phil got a late start as he first had to fulfil a promise of giving his wife a Blanik ride, but he flew a short task to add to his score.

And that was it. Thanks to all who competed and helped out in many other small ways. It

was an easy competition to run, and gave maximum enjoyment for a minimum amount of everyone's effort.

RESULTS		pts	
1	Tony Burton	RS-15	1015 3/3
2	Buhr/Flint	Std Cirrus	725 3/3
3	Rob Hellier	Jantar	630 3/3
4	Lee Coates	PIK-20	579 2/3
5	Al Hoar	Std Cirrus	384 2/3
6	Team ISK	Blanik	323 1/3
7	Mike Swendsen	HP-16	323 2/3
8	Phil Stade	HP-18	234 2/3
9	Struan Vaughn	DG-400/17	183 1/3
10	Jeff Anderson	ASW-15	57 1/3

Tony Burton

Oops – correction to Nats scores

It has been brought to my attention that there was an error in the Nats score sheet published in the last issue. In the Standard class, the total score figures of Ian Grant and Jörg Stieber were transposed (all daily scores are correct) which would also switch the final placing of these pilots.

Tony Burton

Priorités

from page 2

dégeulasse n'a pas permis aux vélivoles du Québec de profiter des prévisions météo adaptées au vol à voile que Jean Richard a généreusement mis à leur disposition par courriel. Je veux remercier Jean pour son initiative et pour son labeur durant tout l'été. C'est grâce à de telles actions généreuses que le sport progressera. J'ose espérer que l'exemple de Jean en inspirera d'autres.

Si la quantité de vols a diminué cet été, la courbe des accidents et des réclamations d'assurance n'a pas, malheureusement, suivi la même tendance. L'Audit de la sécurité est une étape importante dans l'établissement d'un plan d'opération sécuritaire. Il est regrettable que si peu de clubs ont soumis leur rapport au Comité formation & sécurité. Je me permets de signaler que la date limite pour soumettre ce rapport est le 31 décembre 2000.

Veillez prendre note que notre bureau national a déménagé récemment. Jim McCollum est présentement occupé à réorganiser nos nouveaux locaux. Ceci pourra causer quelques délais. Votre indulgence sera appréciée.

Pierre Pepin prendra quittera le conseil d'administration au début de 2001. Pierre est activement à la recherche d'un ou plusieurs candidats à sa succession. Veuillez prendre contact avec lui.

Bon vols cet automne et au plaisir de vous revoir, peut-être au Lac Placide. ❖

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Impressions of ...

from page 11

might do just as well. Thirty years ago, Karl Striedieck did close to 1000 kilometres in a K8, which is not nearly as good a ship as the PW-5.

Clubs thinking of a PW-5 will also be interested in the two-seater version, the PW-6, which has just flown. The PW-6 looks like and flies very similarly to the single-seater and provides a neat solution to conversion problems with low time pilots. The training version is available at an attractive price. Finally, the PW-5 is a new design whereas the typical Jantar offered for sale is 20+ years old. Ten years from now the Jantar will be 30+ years old and possibly beyond its operational life. The Jantar is thus not likely to retain its value well into the future.

So, in conclusion, if you want to fly in the best conditions and the most scenic location in Canada, go to Invermere. Trevor Florence and Ernst Schneider are developing a first-class operation there. There's lots to do on non-soaring days, including hiking, golf, riding, hot springs, and all the other outdoor sports and recreations. The Invermere Soaring Centre website will soon be online at <www.soartherockies.com>. And if you want the most fun glider around — with world record possibilities — get a PW-5!

PW-5 specifications

Wing span	13.44 m
Wing area	10.16 m ²
Aspect ratio	17.80
Fuselage length	6.22 m
Empty weight	185 kg
Maximum weight	300 kg
Weight of one wing	36 kg
G limits	+5.3 / -2.65

measured performance at 250 kg

Maximum speed	220 km/h
Minimum speed	62 km/h
Best L/D at 80 km/h	33
Min. sink at 73 km/h	0.64 m/s
Sink at 100 km/h	1.0 m/s
Sink at 140 km/h	2.2 m/s

Dittel Radio ad

Solaire Canada solairecanada@sprint.ca

4 Monteith Ave, Thorndale, Ontario N0M 2P0
ph/fax: (519) 461-1464 or ph: (519) 293-1132

jet of air. Excitement changed to exhilaration as I realized human ambition — to soar as effortlessly as gulls, eagles or hawks. Also new to me was being able to waste altitude, knowing I could fly to a jet of updraft and regain thermal flying.

Once again I found a thermal and climbed to cloudbase. After 6-1/2 hours had elapsed I decided to go no longer than 8 hours as I was becoming quite tired. At one stage I crossed my legs around the stick and, using the ailerons to control yaw, cruised back and forth under a big cloud which was affording some lift.

At 18:20, with 2500 feet on the altimeter, I encountered 2 metres/sec of lift and hurriedly uncrossing my legs, spiralled up about 2000 feet. However it was so cold that I soon dropped down again, being too tired to care if I stayed up any longer.

At 19:20 I was at 2500 feet again, looking over the farmer's field I had chosen to land in. I needed shelter, a telephone, a landmark for Russ, and a field for an aerotow retrieval next morning. Just then I encountered 1 metre/sec of lift. I was dismayed and frustrated and couldn't decide whether to climb in it or not! I was also annoyed at the Grunau because it refused to descend by itself and I hated to force it down!

Finally, I opened the spoilers and pointed the nose down, landing at 19:38 for 8 hours 9 minutes duration. This qualified me for Canadian Silver C #3 and the Canadian endurance record.

The farmer helped me push the Grunau into a corner of the field and move the cows (who were licking the lacquer on the Grunau) to another field. I was very hungry having taken along just two chocolate bars and was pleased when the farmer's wife offered me beans heating on the stove. I'll never forget how dry they were and stuck to my mouth so I could barely swallow them!

In the morning Russ found me directly. With a doubled towline, we were out of the field and back to Carp. After a most memorable summer I made my way back to U of T.

Biographic note:
John Dure married Leonore Patterson in June 1950 and they moved to Ottawa. Leonore got her Private Pilot licence in 1951 and flew gliders from 1951 to 1954. In 1952 she crashed a Grunau Baby within the first 100 feet of the takeoff run and was unhurt (see story above). John flew as tow-pilot and instructor for the GGC until 1955, when he moved to Quebec City and continued flying with the gliding club there until 1957 when operations came to a halt upon the crash of the Tiger Moth tow-plane CF-CJJ. John and Leonore live in Maple

Bay just outside Duncan on Vancouver Island.

Lloyd Bungey's article ("The War Prize Gliders", ff 4/89) mentions that Dave Fowlow of the Cu Nim Gliding Club bought ZBH (originally the Gatineau Gliding Club war prize machine) in 1987 and stored it in 1988 with the goal of restoring it to as-new condition. Dave said recently that ZBH might be made available to a museum or other good home. ZBH was bought from Medicine Hat; her last flight logged to date was at Cowley, to 12-14,000 feet, in the 1980s.

Now, probably the longest ever Grunau flight:

Gold C distance in a Grunau ... they laughed when he declared his goal but he made it!

1979, 14 May: Dave Baker set out from Chipman, Alberta, in the Wiseman Grunau, CF-ZBT, on his second cross-country flight. Six and three-quarter hours later he squeezed the last foot of altitude out of the last upward breath of air and eased into the North Battleford airport with a whole 400 feet to spare: 317 km and Gold C distance. And why not a Diamond for the goal?

Chronicled in ff 5/79 and 1/95. Dave Baker, an airline pilot formerly with CP Air and a past-president of the Vancouver Soaring Association, is now based in the Seychelles Islands. ❖

THE DISCUS MAKERS

DISCUS CS, T

The legendary DISCUS – more than 800 have been built so far. Winner of the Standard Class World Championship six times in a row. But this glider is by no means only suitable for the top pilots. Thanks to its pleasant and docile flight handling characteristics, the DISCUS has long been a favorite with clubs too.

DISCUS 2, 2T

The DISCUS-2 – Based on an optimized wing geometry with a higher aspect ratio and a new airfoil section of lower drag and less sensitive to bugs, the aerodynamic advantages of the swept-back and bent-up outer wing portion as proven by the second VENTUS generation featuring a higher level of performance and even more pleasing handling qualities.

DUO DISCUS, T

The DUO DISCUS is a two-seater purposely conceived by Schempp-Hirth for advanced training and instruction cross-country flying. It features the well known pleasant handling characteristics of the single-seat DISCUS and perhaps even better harmony of controls. For performance, the DUO DISCUS with its 20m wing span (65.6 ft) is the best two-seat sailplane for normal club operation and cross-country training.



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VENTUS-2,a,b,c,T,CM

The VENTUS-2c is a fundamentally new composite 15/18m class sailplane with a 4-piece wing. By using optional 'racing tips' (with winglets) of 1.8m length, it may also be flown successfully in 15m class contests.

NIMBUS-4,4T,4M

The NIMBUS-4 is a newly developed single-seat Open class competition sailplane which incorporates the perfect realization of all aerodynamic potential currently available. With the substantial performance data emerging from this research work (L/D >60), the NIMBUS-4 clearly ranks at the top of its class, whether as a pure glider or as a powered sailplane.

NIMBUS-4D,4DT,4DM

With a wingspan of 86.9 ft (26.5 m, aspect ratio 39.1), the NIMBUS-4D is the largest aircraft so far produced in series by Schempp-Hirth. With a best L/D of about 1:60 and outstanding abilities at low speed and in circling flight, the NIMBUS-4D is a match for the comparable single-seater, but it has distinctly improved flight handling.

Club news

Winnipeg

Water, water everywhere! I think I need a drink. Better yet, make it a double! What a frustrating year it has been for the members of the Winnipeg Gliding Club, situated it seems in the heart of the wettest place in Canada. We had more rain in one rainstorm than we normally receive in a full month. Imagine if you will 75 mm of rain in one eight hour period. And that was just the beginning of June.

But enough griping about our lack of flying. We are a hearty lot and even a bit of rain isn't enough to curb our desire to fly. Mosquitos are another story — our provincial 'bird' was out in full force from the end of June and fierce enough to cancel some outdoor events in the city. But we persevere, and with the first good killing frost we can say good-bye to the pests and look forward to a great fall flying season. The crops are coming in, and the stubble fires associated with the harvest can kick off some pretty fine thermals. Even the heat from combines can trigger enough thermal activity for some limited fall cross-country flying.

Our season saw a record number of students join and under the direction of our new CFI, Fred Sharp, many are well under way in their flight training. Our club also has a new instructor, Andrzej Konarzewski. A member for several years, he took part in the basic instructors course at Cu Nim this summer and already his services are being put to good use. It is encouraging to see that some of the newer members of the sport are giving so eagerly of their time in order to put something back into their respective clubs.

A local flight training organization located at Winnipeg International Airport has brought a Katana Extreme motorglider into their fleet on a trial basis. They have contacted our club about our interest in utilizing the Extreme for our own flight training and thus far we have indicated a very positive response in our desires to make it happen. Several of our members took advantage of introductory flights around the city and reported that it is a very well behaved aircraft and could fit into our ab-initio training of students. As it is late in the season, we will likely hold off on any firm commitments until the following season.

On an operational side, we have seen a marked decrease in overall flights but an increase in total hours being flown. This is in part attributable to our members' successes at thermalling — when the weather had been good enough for soaring, most were there to take advantage of it. There has also been considerable mid-week flying for those fortunate to be on holidays or retired.

We also have been fortunate in that our fleet has held out well. We haven't had any serious safety breaches. The continued efforts by our Safety Officer Larry Morrow to see that members are receiving timely safety information, are challenged to do a pre-season quiz prior to flying and, (new this year) are given discounted rates for short 500 feet "rope-break" practice flights.

Later we are going to do actual off-field landings near a local crop duster runway that will allow members to plan and fly a landing into a stubble field and then be towed out off the runway. Controlled exercises such as this give our pilots some extra confidence for the eventual first cross-country off-field landing.

Mike Maskell

Current SAC Membership - 20 Sep

Club	Membership		% avg
	90-99 avg	2000 total	
ASTRA	10	8	80
Air Sailing	26	16	62
Alberni	13	14	108
Base Borden	14	5	36
Beaver Valley	12	10	83
Bluenose	36	33	92
Bonnechere	9	6	67
Bulkley Valley	9	1	11
Central Alberta	10	9	90
Champlain	62	60	97
Cold Lake	23	15	65
COSA	40	31	78
Cu Nim	62	63	102
East Kootenay	15	13	87
Edmonton	63	39	62
Edm. Gliding Centre (cadets)		3	100
Erin	32	13	41
Gatineau	88	93	106
Grande Prairie	10	14	140
Great Lakes	10	11	110
Guelph	28	33	118
London	40	25	63
Montréal	101	95	94
Outardes	27	28	104
Pemberton	11	7	64
Prince Albert	11	16	145
Québec	42	46	110
Regina	31	22	71
Rideau Valley	36	28	78
Saskatoon	15	17	113
Silver Star	10	14	140
SOSA	135	156	116
Swan Valley	6	2	33
Toronto	19	23	121
Vancouver	93	86	92
Winnipeg	67	72	107
York	87	112	115
Non-club	15	26	173
<i>totals</i>	<i>1318</i>	<i>1265</i>	<i>96</i>

The Mont Valin, Rideau Gliding, Westman, and Wheatbelt clubs have either dropped to zero in 2000 or have officially dissolved.

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The following badge legs were recorded in the Canadian Soaring Register during the period 10 July to 9 Sept 2000.

SILVER BADGE

930 Art Grant Winnipeg
931 Pierre Brousseau Quebec

DIAMOND GOAL (300 km goal flight)

Otto Doering	MSC	314.9 km	DG-400	Hawkesbury, ON
Roy Eichendorf	Saskatoon	300.9 km	Open Cirrus	Invermere, BC
Frank Pilz	Vancouver	302.2 km	PW-5	Invermere, BC
Greg Bennett	MSC	302.6 km	LS-1	Hawkesbury, ON
Horst Loeschmann	Vancouver	302.3 km	Twin Astrir	Invermere, BC
Allan Spurgeon	E. Kootenay	301.8 km	PW-5	Invermere, BC

GOLD DISTANCE (300 km flight)

Otto Doering	MSC	314.9 km	DG-400	Hawkesbury, ON
Roy Eichendorf	Saskatoon	300.9 km	Open Cirrus	Invermere, BC
Frank Pilz	Vancouver	302.2 km	PW-5	Invermere, BC
Greg Bennett	MSC	302.6 km	LS-1	Hawkesbury, ON
Allan Spurgeon	E. Kootenay	301.8 km	PW-5	Invermere, BC

SILVER DISTANCE (50 km flight)

Keith Andrews	Prince Albert	109.0 km	K-7	Cudworth, SK
James Thompson	Regina	245.9 km	1-26	Cudworth, SK
Pierre Brousseau	Quebec	71.2 km	Std Cirrus	St-Raymond, QC

SILVER DURATION (5 hour flight)

Ed Mitchell	York	5:15 h	1-34	Arthur East, ON
Pierre Beaulieu	Quebec	5:12 h	Pilatus B4	St-Raymond, QC
Denis Trudel	Champlain	5:05 h	Pilatus B4	Hawkesbury, ON
Jacques Dussault	Quebec	5:30 h	Grob 102	St-Raymond, QC
Rick Shire	York	5:08 h	1-23	Arthur East, ON

SILVER ALTITUDE (1000 m gain)

Ian Ward	Vancouver	1550 m	Grob 102	Hope, BC
Art Grant	Winnipeg	2000 m	Jantar Std	Starbuck, MB
Jacques Dussault	Quebec	1750 m	Grob 102	St-Raymond, QC
Michel Jobin	Quebec	1310 m	Blanik L13	St-Raymond, QC

C BADGE (1 hour flight)

2649 Denis Trudel	Champlain	5:05 h	Pilatus B4	Hawkesbury, ON
2650 Roland Vajs	MSC	2:22 h	1-26	Hawkesbury, ON
2651 Jeffery Ellis	Toronto	1:13 h	1-26	Conn, ON

2652 Jacques Dussault	Quebec	5:30 h	Grob 102	St-Raymond, QC
2653 Michel Jobin	Quebec	2:13 h	Blanik L13	St-Raymond, QC
2654 Rick Shire	York	5:08 h	1-23	Arthur East, ON

Noteworthy flights:

Jim Thompson went straight out in a 1-26 for 246 kilometres to complete his Silver distance, and Frank Pilz and Allen Spurgeon did their Diamond Goal flights in a PW-5.

FINAL NOTICE: Once again, pilots must get their completed badge claims to me before 1 December. Late arrivals will not get processed until April 2001.

Letters & Opinions

from page 5

On 12 July 69 we all had good flights. It was particularly impressive to be towed along the western face of Sulphur Mountain and after release slope soar and eventually draw even with the famous Banff lookout. After out-climbing it, we made the occasional high speed pass past all the spectators. This may have had a negative effect on the local economy since very few people were returning on the chairlift and the lookout was becoming crowded. It certainly drew a lot of attention to us.

On 14 July, after another spectacular flight to 12,000 feet, and having returned to give Bernie his turn, a Parks Canada truck with a bear trap on the back arrived at the field. The driver, a deputy warden, claims that "the gliders are disturbing the bears". If any of 'my buddies' land back at Banff, even off the airfield, the gliders will be impounded. He points out that the aerodrome is operated by the National Parks Division and that the orders come directly from the Park superintendent. When I point out that a US-registered Beech Bonanza which has just landed is much noisier than gliders, he simply answers that they are tourists who spend money and don't camp on the field like you people. So, both John and Bernie soar out of the mountains and land at Two Rivers Ranch, a private strip known by the towpilot.

The next morning as we head back east, I manage a seven hour flight to Lake Placid, Bernie and I contemplate the Adirondack Mountains and conclude that they are puny indeed in comparison to the magnificent Rockies.

Hillar Kurlents

SAC SUPPLIES FOR CERTIFICATES AND BADGES

1	FAI 'A' badge, silver plate pin	\$ 6.00
2	FAI 'B' badge, silver plate pin	\$ 6.00
3	SAC BRONZE badge pin (available from your club) (12 for \$55)	\$ 6.00
4	FAI 'C' badge, cloth, 3" dia.	\$ 6.00
5	FAI SILVER badge, cloth 3" dia.	\$12.00
6	FAI GOLD badge, cloth 3" dia.	\$12.00
7	FAI 'C' badge, silver plate pin	\$ 5.00
8	FAI SILVER badge, pin	\$45.00
9	FAI GOLD badge, gold plate pin	\$45.00
	<i>Items 7-12 ordered through FAI awards chairman - see Committees list</i>	
	<i>Items 10, 11 not stocked - external purchase approval given</i>	
10	FAI GOLD badge 10k or 14k pin	
11	FAI DIAMOND badge, 10k or 14k pin and diamonds	
12	FAI Gliding Certificate (personal record of badge achievements)	\$10.00
	Processing fee for each FAI application form submitted	\$15.00
13	FAI badge application (download from SAC website forms page)	n/c
14	Official Observer application (download from SAC website forms page)	n/c
15	SAC Flight Trophies application (download from SAC website forms page)	n/c
16	FAI Records application (download from SAC website forms page)	n/c
17	Flight Declaration (download from SAC website forms page)	n/c

Please enclose payment with order; price includes postage. GST not required. Ontario residents, add 8% sales tax. Items 1-6 and 13-17 available from SAC office. Check with your club first if you are looking for forms.

ARTICLES ACVV POUR CERTIFICATS ET INSIGNES

Insigne FAI 'A', plaqué argent	
Insigne FAI 'B', plaqué argent	
Insigne ACVV BRONZE (disponible au club)	
Insigne FAI 'C', écusson en tissu, 3" dia.	
Insigne FAI ARGENT, écusson en tissu, 3" dia.	
Insigne FAI OR, écusson en tissu, 3" dia.	
Insigne FAI 'C', plaqué argent	
Insigne FAI ARGENT	
Insigne FAI OR, plaqué or	
<i>Les articles 7-12 sont disponibles au président des prix de la FAI</i>	
<i>Les articles 10, 11 ne sont pas en stock - permis d'achat externe</i>	
Insigne FAI OR, 10k ou 14k	
Insigne FAI DIAMAND, 10k ou 14k et diamants	
Certificat FAI de vol à voile (reçu des insignes)	
Frais de services pour chaque formulaire de demande soumis	
Formulaire de demande pour insignes	
Formulaire de demande pour observateur officiel	
Formulaire de demande pour trophées de vol de l'ACVV	
Formulaire de demande pour records FAI	
Formulaire de déclaration de vol par feuille	

Votre paiement devrait accompagner la commande. La livraison est incluse dans le prix. TPS n'est pas requise. Les résidents de l'Ontario sont priés d'ajouter la taxe de 8%. Les articles 1-6 et 13-17 sont disponibles au bureau de l'ACVV.

Trading Post

Personal ads are a free service to SAC members (please give me the name of your club). \$10 per insertion for nonmembers. **Send ad to editor**, not to SAC office. (Address at bottom of page 5 masthead)

Ad will run 3 times unless you renew. Please tell me if your item has been sold sooner. Maximum ad length is 6 lines and subject to some editing as necessary.

single seat

L-Spatz, CF-UJZ, 1966, recent fabric and overhaul, basic instruments, radio, Varicalc, open trailer. \$6000. Winnipeg GC (204) 837-8128 or <info@wgc.mb.ca>

Tern, CF-BWA, 195h, basic instruments, enclosed trailer. \$5000 obo, Walter Mueller (780) 539-6991 or Karl at <ksoellig@agt.net>

L-33 Solo, like new with 76h, basic instruments, all ADs, showpiece paint & upholstery, overhauled tow hook, tail dolly, canopy cover. \$US20,500. Trailer avail. \$US1000. In Pemberton. Rudy Rozsypalek <pemsoar@direct.ca> (604) 894-5727.

1-23H-15. Ser #68, built in 1964. 2500h, standard panel, open trailer is included. Good shape with a blue & white paint scheme. Asking \$US11,500 Contact: Rob Harling (416) 923-3080 W, (416) 425-6627 or e-mail <harnai@pathcom.com>.

PW5, Two total energy varios, one SB7 electric with averager, electric T&B, Dittel FSG 71M radio, trailer and ground handling gear. Type Certified and C of A for Export. \$US26,000. PW6 coming. Charles Yeates, <yeatesc@sympatico.ca> or (902) 443-0094.

ASK-14 motorglider, 851h – engine 137h, good cond, 28/1, launch for pennies. Gehrlein metal trailer. \$US15,000 obo. Willi Terpin (250) 365-8378.

RS-15, C-GAYN, '74, 1200 h, Cambridge with audio & Mark 4 director, O2, Radair 10 radio, Schreder trailer. Iron paint fall 1990. Based at York. Asking \$14,500 (about 2.5 L/D points/\$1000!) Alf Waymann (905) 451-2427.

HP16, C-GAUZ, 534h, centre console, basic instruments, Winter audio vario, adjust. back rest, lowered seat floor for tall pilots, white Schreder trailer, self-rigging equip with tow bar & wing wheel, covers. Asking \$13,000 obo. Willi Deleurant (416) 755-0359.

The Book of the Best

by Ursula Wiese

the complete history of soaring achievement in Canada is freely available on the SAC documents webpage.

I Learned to Fly for Hitler by Joe Volmar

An action-packed autobiography of an American teenager who was in Germany and learned glider training in the Hitler Youth.

US\$14.95 + \$6 p&h

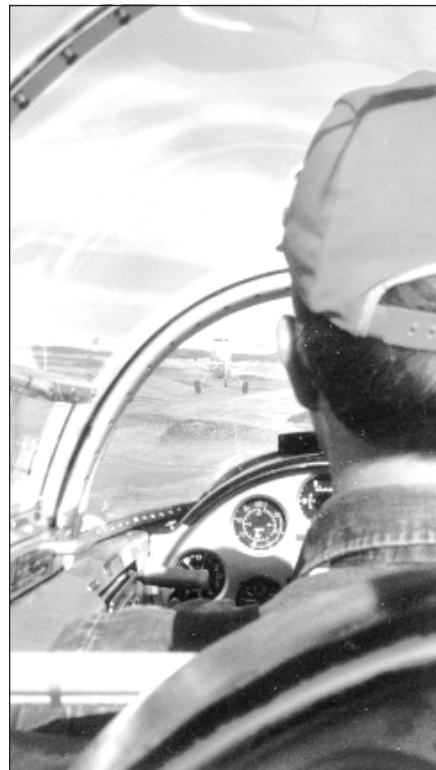
Kron Publications, 1864 Irish Rd, Dundee, MI 48131 USA (800) 767-4929, ext 29 www.volmarjoe.com

LS-4, C-GTGO, best kept LS-4 in country, winner of five Cdn titles, built '84, approx 1200h, all ADs, no damage, never left outside, 4a landing gear mod, Peschges computer, Dittel FSG 50 radio, Komet trailer. \$US29,950. Jörg Stieber, (519) 662-2840 ext 224, fax (519) 662-2421, <jorg@odg.com>

DG-303 Elan, all with winglets, automatic control hook-ups, retractable gear. Club model has turbulator tape; Standard has turbulator blow holes under the wings. Club, 1:41.5, DM67,488; Standard, 1:43, DM72,779 (±C\$49,000; ±C\$52,500). Acro versions available +7g,-5g. Willem Langelaan, (905) 823-4687 <willem@langelaan.com>.

SZD-55, C-FTVS, single owner, new in '96, full instruments (excl. GPS), rugged Trailcraft trailer, always kept in trailer, never damaged. Avail now, complete package \$70,000, Colin Bantin (905) 469-1980 (H), (416) 543-9222 (B) <ccbantin@sympatico.ca>

SZD-55-1, C-GENQ. New, with basic instruments. FOB London, ON. Trailer available. \$US36,000. Ph/ Fax (519) 461-1464.



two seat

2-22, CF-PLT, 1950 h, shown in Dec/Jan 1999 *free flight*, great trainer. Reconditioned '99, fresh paint. Asking \$10,500. Dawson Campbell, (705) 686-3672.

2-22, C-FAZG, 2000 h, 1970. Hangared, new fabric in 1993. Basic instruments. Club aircraft, BSI. Sturdy trainer, trailer available. Erik Hagberg, evenings (613) 584-4636 <Fitz@magma.ca>

L-13 Blanik, 2800 h, excellent condition, new upholstery, overhauled instruments, radio, new tire, factory tail wheel. Asking \$US15,000. In Pemberton. Rudy, (604) 894-5727, <pemsoar@direct.ca>

Lark IS28B2, C-GXML, 1000 h, damaged in outlanding, partial repairs completed but additional work required. Open trailer. Price negotiable. Peter Vesely (403) 270-8225, <pvesely@agt.net>

Krosno - wanted, in good condition for MSC. Contact Roly Niklaus at (514) 685-2739 or George Couser at (450) 655-1801 or <george.couser@sympatico.ca>

misc

Towplane, 1946 Stinson 108-1, 165 hp. 2800tsn, 700 smoh, fabric & inside is 9/10, 1500 fpm @ 70 mph with climb prop w/o glider, 500-700 fpm with. Beautiful inside and out. At Invermere, BC. \$42,000. (250) 342-3006, <kaz@rockies.net>

PIK 20B or D canopy, factory new. \$1500 obo. Willi Terpin (250) 365-8378.

Glider trailer, suitable for 15m or Std class. Interior dimension - 26' long. Aluminum tube style, designed and built by SST. \$3000 obo. Larry Springford (519) 396-8059, <larry_springford@hotmail.com>

magazines

SOARING — the monthly journal of the Soaring Society of America. Subscriptions \$US43. Credit cards accepted. Box E, Hobbs, NM 88241-7504. (505) 392-1177, fax 392-8154. <74521.116@compuserve.com>

NEW ZEALAND GLIDING KIWI — the monthly journal of the New Zealand Gliding Association. \$US32/year (seamail). Private Bag, Tauranga, NZ. <john@roake.gen.nz>

SAILPLANE & GLIDING — the only authoritative British magazine devoted entirely to gliding. Bimonthly. BGA, Kimberley House, Vaughan Way, Leicester, LE1 4SG, England. £17.50 per annum. fax 0116 251-5939 <bga@gliding.co.uk>

AUSTRALIAN GLIDING/SKYSAILOR — bimonthly journal of the Gliding and the Hang Gliding Federations of Australia. \$A40.50 surface mail, air \$A55. Payable by Bankcard, Visa, Mastercard. Box 1650, GPO, Adelaide, South Australia 5001. fax (03) 9379-5519. <AdminOfficer@gfa.org.au>

MOTORGLIDING INTERNATIONAL — bimonthly jointly published by the Soaring Society of America and the British Gliding Association. \$US34 per annum, (505) 392-8154. <info@ssa.org>

suppliers

Canadian Soaring Supplies Borgelt instruments and soaring software. Svein Hubinette, 343-150 Rue Berlioz, Ile des Seours, QC H3E 1K3, (514) 765-9951 <svein@videotron.net>

MZ Supplies Dealer for Schleicher sailplanes and parts, Russia sailplanes, Becker radios, most German instruments. Ulli Werneburg, 1450 Goth Ave, Gloucester, ON K1T 1E4 <wernebmz@magma.ca> ph/fax (613) 523-2581

Invermere Soaring Centre

Schempp-Hirth sailplanes, PW-5, Microair radios and transponders. Glider import and brokerage, glider rental, mountain flying instruction. Ernst Schneider / Trevor Florence, Box 2862, Invermere BC, V0A 1K0, ph/fax (250) 342-7228, cell (250) 342-7662, info@soartherockies.com, website www.soartherockies.com


Solaire Canada SZD-55-1, Krosno, PW-5, trailers, GPS, instruments and other sailplane stuff. Ed Hollestelle, ph/fax (519) 461-1464, <solairecanada@compuserve.com>

XU Aviation Glider repairs in all materials. Chris Eaves (519) 452-7999, fax (519) 452-0075, <xu-aviation@sympatico.ca>

Barograph calibration, most makes and models, Walter Chmela (416) 223-6487

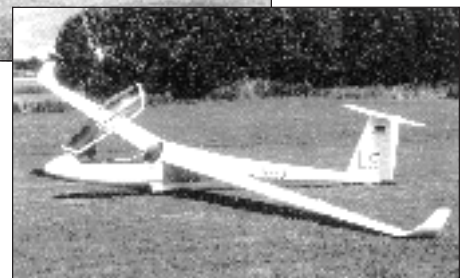
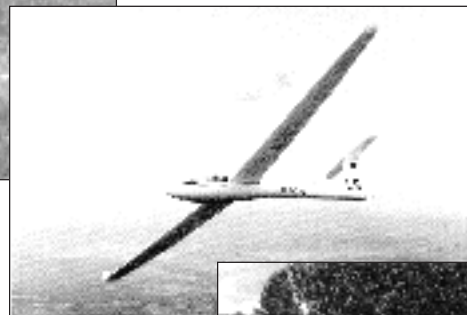
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