

FREE FLIGHT

ISSUE 6/76 NOVEMBER/DECEMBER 1976





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Official Publication of the Soaring Association of Canada
Issue 6/76 November/December 1976

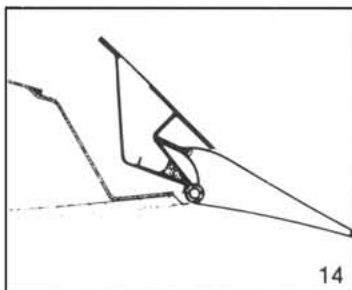
Editor: **Robert F. Nancarrow**

All material for future issues should be submitted to the editor
at: **43 Sealcove Drive, Etobicoke, Ontario M9C 2C7**, at least six weeks
before publication. Deadline for next issue is December 15, 1976.

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Ottawa, Ontario K1G 1T9**

Graphic Design by Roger E. Murray, Graphic Design Centre, Toronto
Printed in Canada by Dondi Printing Services Limited, Toronto

Cover: Bob Hyam took this self portrait while thermalling at 18,000' over Black Forest
during a Gold Height flight in June '75.



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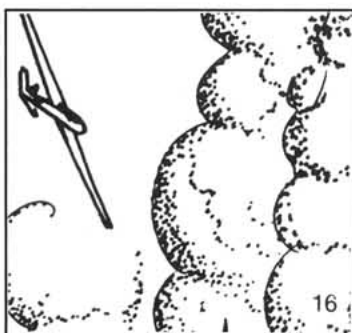
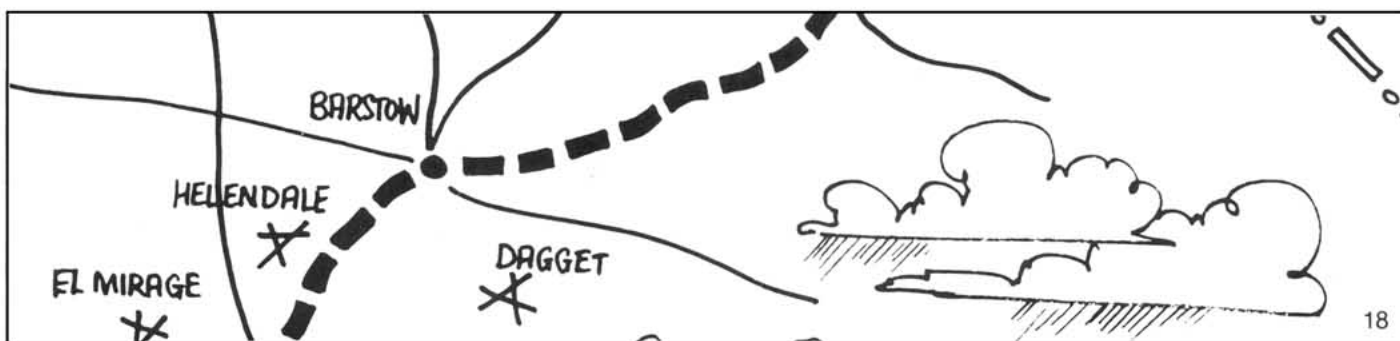
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Those Small, Unnoticed Changes Could Be Killers.

by Lloyd Bungey



ILLUSTRATION — SCOTT COOPER

Sometimes, we become so familiar with our surroundings that we don't notice the small changes which are going on around us. If we are not careful one of these apparently insignificant changes could turn into a killer.

On Sunday 15th August 1976, I overlooked a change which had occurred to our strip and almost had a serious accident, an accident which could very possibly have killed me.

The scene was as follows. I was making a late afternoon take-off in my SHK from the power runway beside our normal glider operating strip. This change in operating procedure had been made because the instructor-of-the-day had felt it was safer to operate from the power strip. The towplane was our club 230 h.p. Cessna 305A (L-19). There was a 15 mph wind with a crosswind component.

Just lately, to make it easier lining up on final, the power strip has been mowed into three strips of approximately equal width, each one being

visually distinguishable from its neighbor by a strip of grass approximately 18" wide left unmowed between them. This gives the visual impression of having three adjacent strips each about 80 feet wide. The whole width of the strip however is still unobstructed except for the unmowed grass lanes which were not higher than 15 inches at the time.

I lined up on the central portion of the power strip about 10' out from the grass strip divider. This meant that about half my right wing was beyond the lane of taller grass and was overhanging the northern third of the strip. I had already made two take-offs in the Blanik from a similar position earlier in the day and did not foresee any problems.

As my take-off commenced, I angled slightly left to get squarely behind the towplane which was more central on the strip. I was also keeping my right wing very slightly down on account of the crosswind. I could feel that the aircraft was about to become

airborne when suddenly it commenced a violent swing to the right. I slammed in full left rudder simultaneously dropping my left hand off my knee down to the release knob located by the base of the stick, between my knees. By the time my hand was on the knob the glider had become airborne in a skidding, climbing right hand turn with the angle of bank at about 45° and still increasing. I thought, "I've bought it". A strangely calm, regretful thought. But I was not done yet. I was off the ground, flying, albeit sideways due to the pull of the towrope. This still gave me a chance.

I threw a quick glance at the towplane. It was still going. Not on its nose yet. Plenty of elevator travel left. Good. I could hang on without endangering it for a while. I hung on. By this time I was at about 25 feet cranking in full left rudder, full aileron to the left and full forward stick. The towplane was below me off to my left at 10 o'clock and still on the ground. I was only flying because of its brute horsepower.

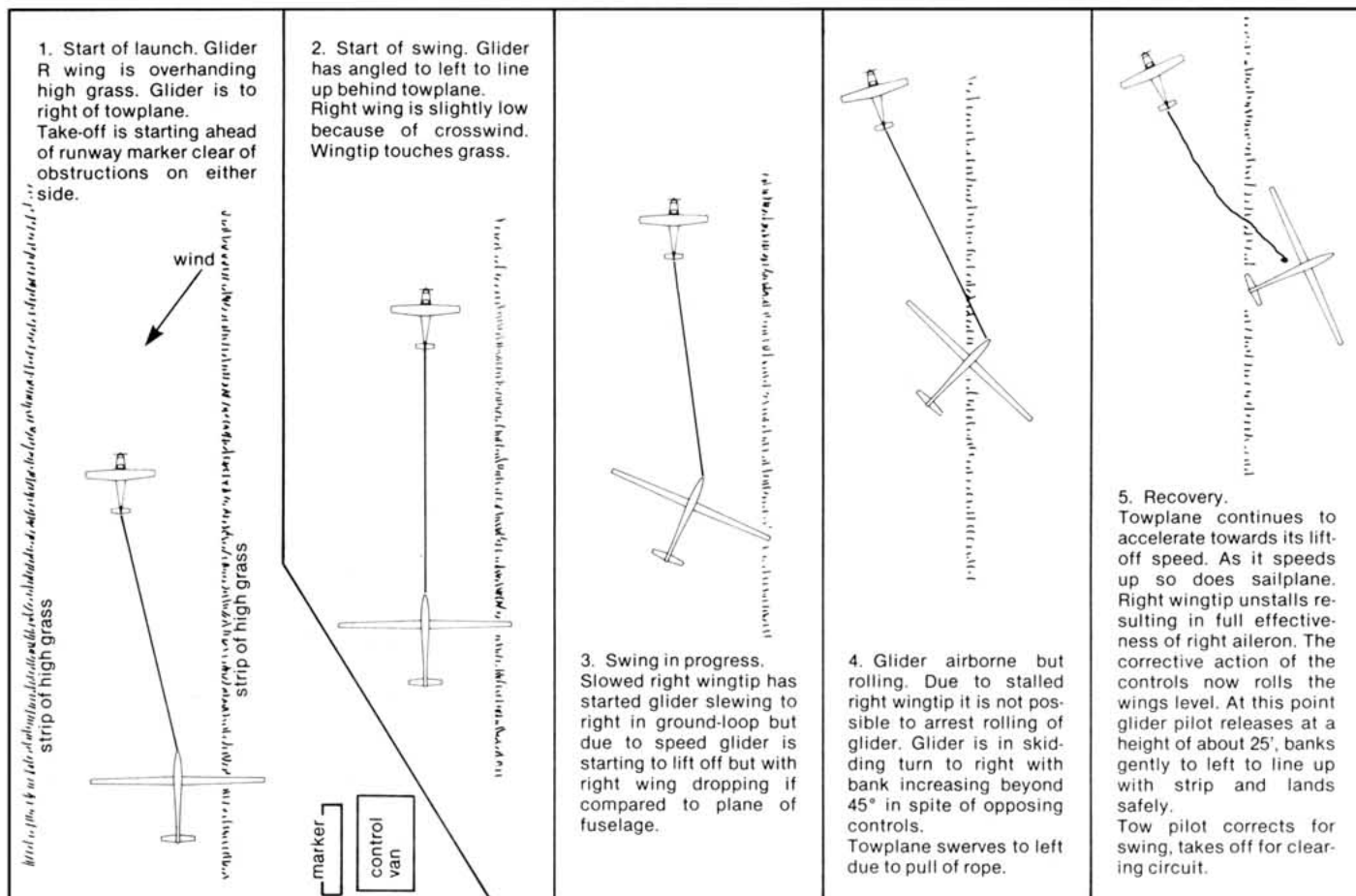
The ground witnesses stated that I rolled until I was vertical. I don't believe them. My impression was that at about 60° of bank the rolling stopped and my recovery action began to take effect. I could still see the towplane.

As soon as my wings were level again I released from tow and made a shallow turn to the left to align myself for a landing on our normal glider strip adjacent to the power strip. Freed of my disturbing influence the tow pilot corrected I is swing to the left and took off. On downwind I could see him weaving a little as he checked over his landing area to make sure there were no pieces of me smeared around. There being no such obstructions to his landing he came in to find out what had happened.

WHAT HAD GONE WRONG? Sitting in my cockpit looking out at my right wing I did not need to be told. That dark shadow on the last four feet was certain to be green stain when I could see it more closely. Grass stains. That small strip of unmowed grass I had hardly glanced at had almost cost me my life! I had most certainly caught a wingtip in the grass.

Never before had I considered the consequences of catching a wing just as you get airborne. Certainly, I knew of the countless groundloops caused by doing such a thing during a ground roll, but a cartwheel such as I had nearly performed is much more deadly.

Due to my concern for the crosswind I had kept my right wing low. I had also angled slightly to the left. These two actions had resulted in the right wingtip being directly above the strip of tall grass. A slight dip of the wing



just as I reached flying speed brought the wing into contact with the grass and since the contact was at the tip, the point of maximum leverage, the drag of even this narrow a strip was enough to slew me.

The swing to the right which resulted also had the effect of speeding up the left wing which now developed extra life due to the additional speed and thus started to climb. The retarded, right wing did not develop as much lift hence the sailplane started rolling. Application of aileron to oppose this roll was not immediately effective because the retarded right wing was stalled at the tip. Hence the aileron on this wing was having no effect. Since this was the downgoing aileron it was the one which should have had greater effect on the recovery had it not been stalled. As it was the sailplane continued rolling until the glider/towplane combination worked up enough speed to unstall this wing. Once this occurred the recovery was easy.

THE MISTAKE I HAD MADE was to take off close to long grass. Not just close to it but actually overhanging it. Why? - Complacency. I have flown from this airfield for almost 3 years without any problems. I had taken off from the power strip many times, including twice that day in the Blanik. What I had failed to consider was that the strip now had a line of tall grass

which would be very close to my wingtip - small changes. In the Blanik with its greater tip clearance, the hazard was much less making its operation from the power strip somewhat safer but I should have considered the grass a hazard to it too. The small change I paid no attention to nearly cost me my life.

Reflecting of the incident 24 hours later I realised that there was probably one other factor which led to the incident and two factors which prevented it being worse. All three of which are worthy of mention here.

FATIGUE. had done a fair amount of flying that day including an hour of circuits in the towplane in the morning. I was definitely somewhat fatigued. Not enough to incapacitate me but enough to cause me to overlook a small detail. When fatigued it pays to be doubly careful.

LINING UP CLEAR OF OBSTACLES. Way back in the dim dark ages of my training days I had it pounded in to me never to line up with an obstacle close to my intended flight path. If there was anything solid closer than 70 yards away within an arc of 45° to my intended path then it was not safe to take off. Because of this I had lined up from ahead of the ground control vehicle. The launch prior had been pulled out to take off a hundred yards

further back than I. This was done because he was parked beyond two other gliders which were parked beyond the runway marker beside which was the ground base. Had I copied his procedure I would have likely hit the parked vehicle during my wild swing. There is no need to further convince me that it pays to have a clear escape route on both sides.

LONG TOW ROPS. I had been trained to fly on short tow ropes. I now fly with long tow ropes (175-200 feet). This was not because I preferred them; it was simply because the club insists we use them. I used to think that the short ropes were better. Not after Sunday!! Had I been using a short rope I would have undoubtedly pulled the towplane up on its nose, and thereby lost my propulsive force and the chance of regaining control of my glider - a double accident. As it was I was able to get quite high without pulling the tow-plane's tail up. In the future, its long tow-ropes for me.

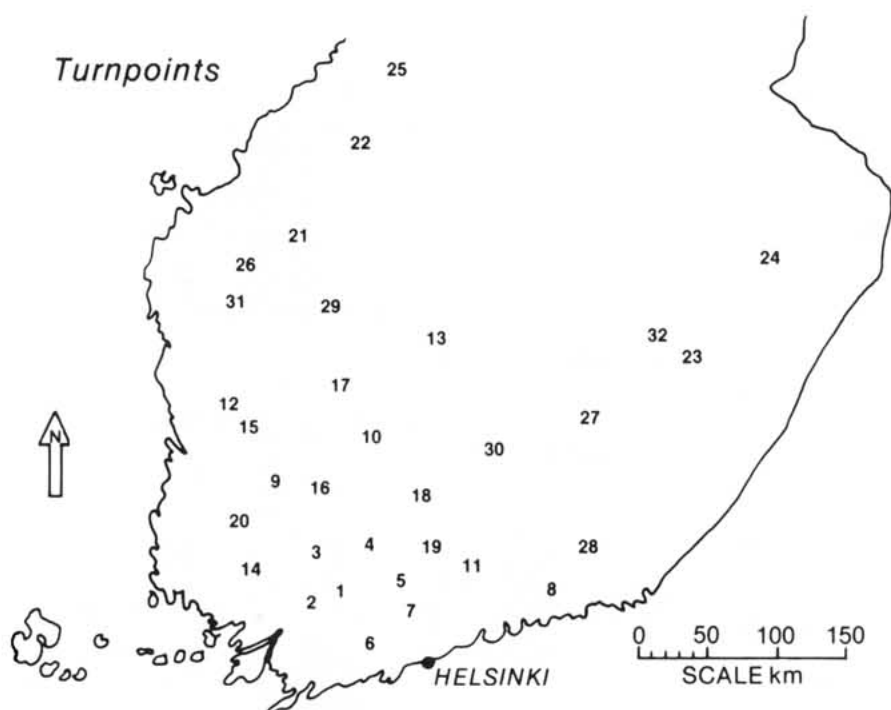
THE BIG LESSON I have learnt from this, apart from the obvious one of avoiding grass, is to be more careful about observing changes. Anytime some change takes place in our local area we should examine it closely and see if there are any dangers in it. Only by being alert to all the dangers can we ensure ourselves of many years of safe flying.

Rayskala Diary



by Terry Beasley
CANADIAN TEAM MANAGER

THE 15TH WORLD GLIDING CHAMPIONSHIPS



The following turnpoints were used during the Championships:

1. Räyskälä
4. Ahvenisto
7. Hyvinkää
9. Mouhijärvi
10. Eräslahti
11. Villähde
13. Jyväskylä
14. Oripää
15. Jämi
19. Hollola
20. Lauttakylä
26. Seinäjoki
28. Selänpää
30. Jalasjärvi

This article on the 15th World Gliding Championships is in diary form taken from notes and tape recordings made during the contest; supported also by the poor memory of the Canadian Team Manager. Information has also been gleaned from the special championships bulletin, "Groundloop" edited by Jyri Raivio, whose help is gratefully acknowledged.

Tables for both classes are included; they do not tell the whole story so details of the daily tasks, actual performance, for the three best, plus Canadians, are included. It is particularly important to realize that the winner did not necessarily earn 1,000 points each day; the winning score depending on the "day factor". The day factor is apparent from the daily results. The maximum possible score for the Open Class' seven contest days was only 5073, while for the Standard Class' six days the maximum possible score was 4,478.

Prior to the contest a list of all turn-

ing points had been supplied to the pilots; the sketch map and list of points actually used is included. There is no point in including the turn point names that were not used. For the daily tasks descriptions only the turn point numbers are mentioned; you can readily get an idea of the task by referring back to the list and the sketch map.

4th June - Friday

I arrived at Helsinki after a pleasant Finnair flight from Zurich. I had been in Germany for a week and the weather had been dreadful. It was pleasant to find the weather improving as we approached Helsinki and over-flying Finland was most interesting - particularly looking for fields between the lakes and trees. The terrain reminded me of Ontario's 'Lake of the Woods' area. I felt that I was getting close to a World Contest again when one of the first people I saw at Helsinki Airport was Rika Harwood, an old friend from my British Lasham days; British Team

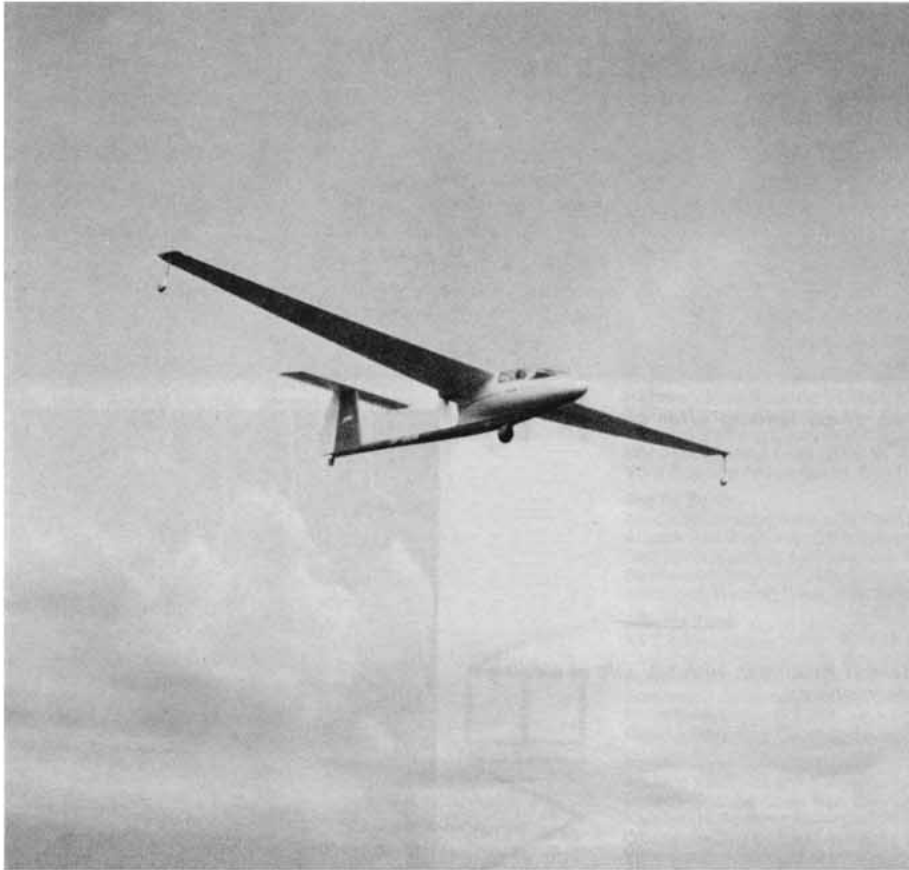
member and Sailplane and Gliding reporter.

5th June - Saturday

Explored the site and checked out accommodation details, meal tickets, etc. As usual the site was not quite ready; flag poles still had to be erected; power cables to be strung, etc. The plastic crew boxes had electric heaters which was a good thing as it was a surprise to find out how cold it was at night; one forgot to check that it was equivalent to being over a hundred miles further north than Churchill, Manitoba. Found out that some teams had been in the country for over a month and had visited nearly all the turnpoints in good practice flying; several 500 km triangles had been made. No practice flying today.

6th June - Sunday

Jim Carpenter, Hal Werneberg and John Firth all flew. John Firth was using a borrowed PIK as his was not yet ready. This is as good a time as any to express our thanks to the PIK



Polish "Ogar" motor glider.



Control tower area.

people for all their help in solving problems and helping whenever they could - even if you were not flying a PIK. Dave Webb and his crew arrived today - too late to fly.

7th June - Monday

In the evening an informal meeting of Team Managers was held in order to discuss general issues. I felt honoured to be elected Chairman and Spokesman for the Team Managers; pleasant recognition that I must have said something sensible once or twice in past events.

8th June - Tuesday

All our team is now on site. All pilots flew and had a good practice day. Hans Werner-Grosse (who was not competing but visiting another nearby club attempted a 1,100 km triangle and achieved 1,080 km.

9th to 12th June

Further practice days helped our pilots get used to their ships and see some of the terrain.

13th June - Sunday

Opening ceremony, with no practice flying. A fairly good air show, complete with MIG-21, and a pair of home-built Pitts. We were pleased that the Canadian Ambassador and his wife visited us and wished us the best of luck.

14th June - Monday

The first day's contest briefing was held under a totally overcast sky. It was hoped that weather would improve to allow tasks to be set at a later briefing. The weather did not improve and the day was finally scratched. There was some dissatisfaction; some people thought they should have waited longer before cancelling and set a task as soon as conditions got better - which they did. I did not agree as it could have involved a large luck element. I think this opinion was proved correct on later days which were considerably de-rated; I believe at least 80% should complete a speed task for it to be considered good task setting.

15th June - Tuesday

Tasks cancelled again due to poor weather and two more bad days forecast! We spend the afternoon at Hamenlinna, the nearest town, and also visited the world famous Iittala glass factory. An interesting day but we would rather have been flying.

Raykala Diary

16th June - Wednesday

At last the weather allowed tasks to take place - despite two postponements of briefing. For the Standard Class the task was a 120.9 km triangle, turn-points 7 and 4; and for the Open Class a bigger triangle of 199.1km, turn-points 7 and 11.

Although it was a contest day in both classes it could not be considered a success as the day was de-rated in both classes.

Results - Open

| | | Pts. |
|--------------|-------------|---------------|
| 1 Kuil | Netherlands | 64.2 km/h 269 |
| 2 Jinks | Australia | 62.2 km/h 267 |
| 3 Ziobro | Poland | 60.2 km/h 264 |
| 31 Carpenter | Canada | 63 km 33 |
| 37 Webb | Canada | 50 km 14 |

Only five pilots completed the task, and only 15 exceeded 199 km.

We were concerned about the possibility of damage in outlandings due to the strong wind and poor terrain. Our fears were baseless as there was no reported damage.

Results - Standard

| | | |
|--------------|-----------|---------------|
| 1 Kuittinen | Finland | 55.2 km/h 587 |
| 2 Karlsson | Sweden | 52.5 km/h 564 |
| 3 Rizzi | Argentina | 50.6 km/h 547 |
| 18 Firth | Canada | 41.7 km/h 470 |
| 42 Werneberg | Canada | 42 km 9 |

Twenty-five pilots completed the task.

17th June - Thursday

When we woke up (and it is daylight very early in the morning) it looked like a good day in the making; by briefing time it looked lousy again. Tasks were set as the weather was expected to become flyable. For Standard a 152.6 km out and return to turnpoint 14 and for Open a slightly long O and R of 186 km to turnpoint 20. Both tasks were out over Finland flatlands with abundant out-landing possibilities. Take-off started at 13:00 into a tricky cross-wind.

Results - Open

| | | |
|--------------|-------------|----------------|
| 1 Lee | Gt. Britain | 97.1 km/h 1000 |
| 2 Butler | U.S.A. | 96.8 km/h 995 |
| 3 Holighaus | W.Germany | 96.1 km/h 984 |
| 14 Carpenter | Canada | 87.7 km/h 859 |
| 38 Webb | Canada | 64.9 km/h 503 |

All pilots completed the task - the slowest getting more points than did the winner on the first day.

Results - Standard

| | | |
|--------------|-----------|----------------|
| 1 Renner | Australia | 98.1 km/h 1000 |
| 2 Firth | Canada | 90.0 km/h 883 |
| 3 Kuittinen | Finland | 89.2 km/h 871 |
| 4 Nurminen | Finland | 89.1 km/h 869 |
| 42 Werneberg | Canada | 62.1 km/h 454 |



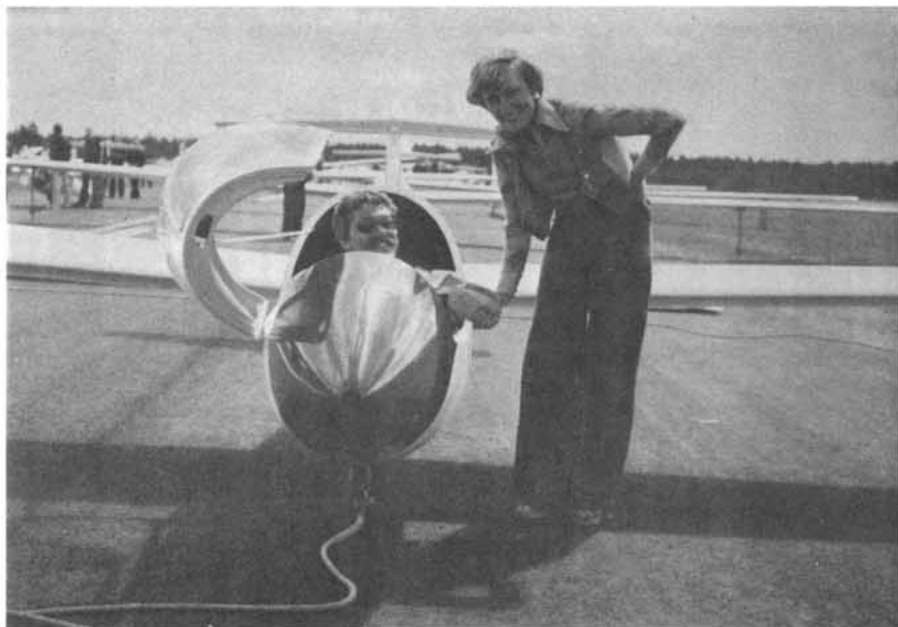
Two ships landing after crossing finish line.



Helmut Reichman with his wife at closing ceremonies.

Campsite operation by a local gliding club as a fund raising venture.





Jim Carpenter being wished luck by Frauke.

Rayskala; trees, lakes, rocks and more trees.



Two pilots did not complete the task. Hal Werneberg had photographic penalty points deducted, but this did not affect his placing this day or overall. We were all very pleased with John Firth's performance which moved him up to fourth overall. There was considerable pleasure in evidence amongst the Finns too, particularly any one associated with PIK. PIK 20B's were in the first six places this day and the first seven overall.

An interesting note regarding the long hours of daylight in those northern regions. After supper we rigged Jim Carpenter's Nimbus, filled the water tanks, washed it and then noticed that it was just gone midnight and still day light ... then the birds woke us again at about 0500!!

22nd June - Tuesday

After a whole week with only two contest days' spirits were low but were raised somewhat by promises (?) of good flying weather on Tuesday morning's briefing. Showers were expected to be a threat but adequate lift was expected to enable a task to be flown. The opportunity was taken to set the obligatory distance task; prescribed area distance (cats cradle) was chosen for both classes, turn-points being 1, 14, 15, 10, 30 and 11 with Open Class being launched first. In accordance with the rules launching was in order of score sheet; it was surprising that this caused concern amongst some pilots although the CIVV change in ruling had been published months in advance. Launching had to be postponed until 12:15 and a number of Open ships had to take relights; it was soon obvious that it was to be a difficult day. A huge raining thunderstorm was very close when the first Standard ships were due to be launched and some team managers (including Canada) believed launching should be postponed. However, it was too close to the start time to find an official willing to take the decision, so launching started. When the storm struck many (wise) pilots refused to take their tow, and those airborne in the vicinity of the field hurried back to land.

Rayskala Diary

Results - Open

| | | | |
|--------------|-------------|--------|-----|
| 1 Fitchett | Gt. Britain | 408 km | 115 |
| 2 Ax | Sweden | 308 km | 84 |
| 3 Wilson | Australia | 272 km | 73 |
| 21 Carpenter | Canada | 95 km | 17 |
| 28 Webb | Canada | 50 km | 3 |

Twelve pilots exceeded 100 km; the day was severely de-rated as seen by the winner's score; 10 pilots earned no points. Not a good day; Dick Butler's ship was broken in a groundloop and Wilson wiped out his gear. Butler's crew, with many able assistants, started immediate repair work but unfortunately for Wilson the gear assembly had torn out of the bulkheads rendering repairs impossible with the facilities available.

Results - Standard

Too few ships exceeded 100 km to make it a contest day.

Fortunately none were damaged to the extent of being out of the contest.

John Firth could enjoy his overall fourth placing for another day!

23rd June - Wednesday

At last the briefing promised really good weather and the task was set accordingly. For Open a 526.6 km triangle, turnpoints 14 and 26 and as Standard had not yet had their mandatory distance task they got the prescribed area distance again, with the same turnpoints as for the previous day. Standard was launched first and seemed to have trouble in getting away before the big birds were launched. By the time the Open were in the air conditions had deteriorated and some relights were called for. A round of applause from the spectators greeted Dick Butler as his repaired 604 was wheeled out for take-off. A truly fantastic example of international co-operation of experts had worked all night to get the ship ready.

Results - Open

| | | | |
|--------------|-------------|------------|------|
| 1 Lee | Gt. Britain | 112.0 km/h | 1000 |
| 2 Fitchett | Gt. Britain | 110.9 km/h | 985 |
| 3 Ragot | France | 108.6 km/h | 955 |
| 8 Webb | Canada | 106.0 km/h | 922 |
| 22 Carpenter | Canada | 98.4 km/h | 822 |



Ingo Renner, Australia at the results board.



Terry Beasley and John Firth studying task board.



PIK-20E motor glider.

37 out of 38 still competing pilots earned speed points. General opinion was that it was a reasonable task. The British were, of course, delighted, and Dave Webb's performance showed that he could still give them some competition.

Standard ships were still in the air after 8:00 PM and the results showed that it was a good day weatherwise but possibly too good for prescribed area distance.

Results - Standard

| | | | | |
|----|-----------|-------------|--------|------|
| 1 | Burton | Gt. Britain | 731 km | 1000 |
| 2 | Peter | W. Germany | 725 km | 991 |
| 3 | Anderson | Sweden | 719 km | 983 |
| 20 | Firth | Canada | 659 km | 895 |
| 38 | Werneberg | Canada | 475 km | 630 |

The shortest distance was 243 km.

24th June - Thursday

Another day's good weather was too much hope for with a low pressure area moving in from the west possibly bringing in some high clouds. Organizers were optimistic and set fairly long triangles, 480.8 km, turnpoints 13 and 28 for Open and 393.1 km for Standard with turnpoints 10 and 28. The first and last parts of these routes are over generally good outlanding fields but the way to 10 and then to 28 for the Standard is somewhat difficult, including crossing a fairly large lake. The only mid-air collision of the contest occurred close to the field and both pilots realized that it was only a 'brush' but in accordance with the rules landed for inspection. We were all pleased to see them on their way again in less than half an hour. Conditions were not as good as required for these tasks as the results indicate.

Results - Open

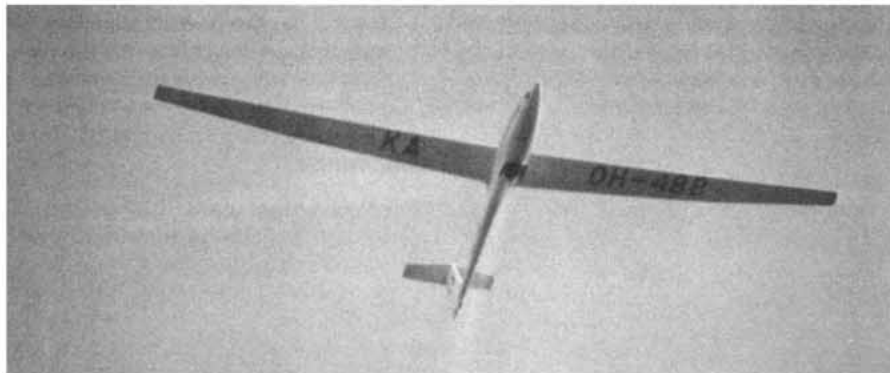
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|----|-----------|-----------|--------|------|
| 1 | Jinks | Australia | 459 km | 1000 |
| 2 | Widmer | Brazil | 452 km | 983 |
| 2 | Braes | Denmark | 452 km | 983 |
| 15 | Webb | Canada | 398 km | 859 |
| 15 | Carpenter | Canada | 398 km | 854 |

So it was not a speed task; all pilots competing exceeded 100 km.

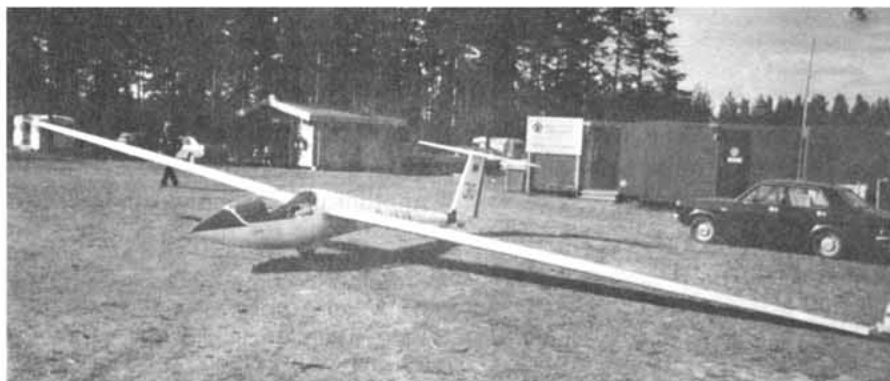
Results - Standard

| | | | | |
|----|-----------|--------|--------|-----|
| 1 | Karlsson | Sweden | 297 km | 891 |
| 2 | Pozniak | Poland | 282 km | 839 |
| 3 | Beltz | U.S.A. | 273 km | 808 |
| 20 | Werneberg | Canada | 235 km | 676 |
| 33 | Firth | Canada | 98 km | 201 |

Rayskala Diary



PIK-20B, KA, Nurminen of Finland crossing finish line.



ASW-19, 30, Johannesen, Norway; office boxes in background.



Dick Butler's 604 showing overnight repair job.



The Russian LAK-9 Lietuva.

Fourteen pilots did not exceed 100 km, nine lay between 100 and 200 km. John Firth's bad luck in having to go down dropped him from 5th overall to 23rd overall.

25th June - Friday

Friday morning was clear, sunny, and warm at last! Robin King, the met man, promised fairly good gliding weather even though there was still risk of high cloud coming in. Possibly influenced by the disappointing task results of the previous day somewhat shorter triangles were set, this time 339.0 km for the Open, around turn-points 14 and 11 and for Standard 300.3 km around 14 and 19. The tasks were over what was, by now, familiar territory with reasonable outlanding possibilities.

Results - Open

| | | | |
|--------------|-------------|------------|------|
| 1 Lee | Gt. Britain | 100.3 km/h | 1000 |
| 2 Butler | U.S.A. | 99.8 km/h | 993 |
| 3 Gavazzi | Italy | 99.1 km/h | 983 |
| 19 Webb | Canada | 93.1 km/h | 892 |
| 28 Carpenter | Canada | 90.1 km/h | 848 |

All competing pilots earned speed points, 29 of them exceeding 90 km/h; it was obviously a reasonable task and seconds really counted. With only one contest day left and having experienced the vagaries of the weather George Lee did not have it in the bag as there were some 16 pilots within 500 points of him.

Results - Standard

| | | | |
|--------------|-------------|-----------|------|
| 1 Burton | Gt. Britain | 94.6 km/h | 1000 |
| 2 Renner | Australia | 82.1 km/h | 823 |
| 3 Oeye | Denmark | 81.9 km/h | 821 |
| 39 Werneberg | Canada | 64.6 km/h | 576 |
| 43 Firth | Canada | 27.9 km/h | 304 |

No penalty points were deducted in the Open Class, but in the Standard Class Lapitaure of France exceeded the permitted recognition time and lost 50 points, this moved his daily placing from 8th to 23rd; Petroczy of Hungary lost 50 points for poor photography and this dropped his daily position from 19 to 34. In the big league you cannot afford to make mistakes.

Five pilots did not earn speed points, George Burton explained his incredible 12 km/h more than the runner-up to me by saying *"I don't really know how I did it, I suppose I thought the day was better than it really was!"*

It was quite a blue day and George never got really high in bubbling but quite frequent thermals - it was only on the second half of the second leg that he got higher than 3,000 feet. From then on it was easy under good cumulus and George was able to fly fast as he still had full water on - in fact he passed some Open ships.

Perhaps the midsummer eve party prompted competitors to get back as their crews may not have bothered to get them until after the party! For me it was an eventful day as I flew not one but two superb new gliders, the PIK 20D and the Kestrel 2. It was nice to see the site from the air - I had certainly seen it well from the ground by now.

26th June - Saturday

There was already a feeling of sadness as the contest was approaching the close. Torrential rain during the night did not do much to help - particularly for the campers. However, our indomitable met man believed that the cloud cover would fade away by the afternoon and the day would be flyable. Briefing was delayed until 11:30 when a small triangle was set for the Open; only 234.5 km around 9 and 20 and an out and return of 203.6 km to 9 for the Standard.

It was a very poor day, Open started launching at 14:00 and the big birds staggered around trying to stay up. Where there was a bit of lift large gaggles soon developed and flying in poor visibility in lousy lift led some pilots to radio their Team Managers to suggest that Standard should not launch until Open had got away. Once again the contest machinery could not be changed and launching started. Several Standard pilots did not take their allocated launch slot but waited in the hope that things would get better. They did not, so through the start gate they went - some to a straight glide to their last contest landing in Finland and some to turn around and land back at the field to avoid a retrieve.

Results - Open

| | | | |
|--------------|----------------|--------|-----|
| 1 Matousek | Czechoslovakia | 219 km | 689 |
| 2 Braes | Denmark | 205 km | 635 |
| 3 Holighaus | W. Germany | 197 km | 604 |
| 24 Carpenter | Canada | 69 km | 112 |
| 31 Webb | Canada | 55 km | 58 |

George Lee made 190 km which gave

him 578 points while Ziobro came in equal 3rd at 197 km for 604 points leaving George in the lead by 59 points.

Results - Standard

No contest as no one exceeded 100 km. 64 km was flown by four pilots; 13 exceeded 50 and 18 did not land out. A disappointing day even for Ingo Renner who was now Standard Class champion. As the gaggles of Open ships landed in the Humppila area Ingo watch them from the ground after a flight of 55 km. He said later that he was sure he had won the contest because it would not be a contest day but he would rather have had a really good last day. There was a superb party that night around the German/Swiss camp complex where the wonderful spirit of World Championships was most apparent.

27th June - Sunday

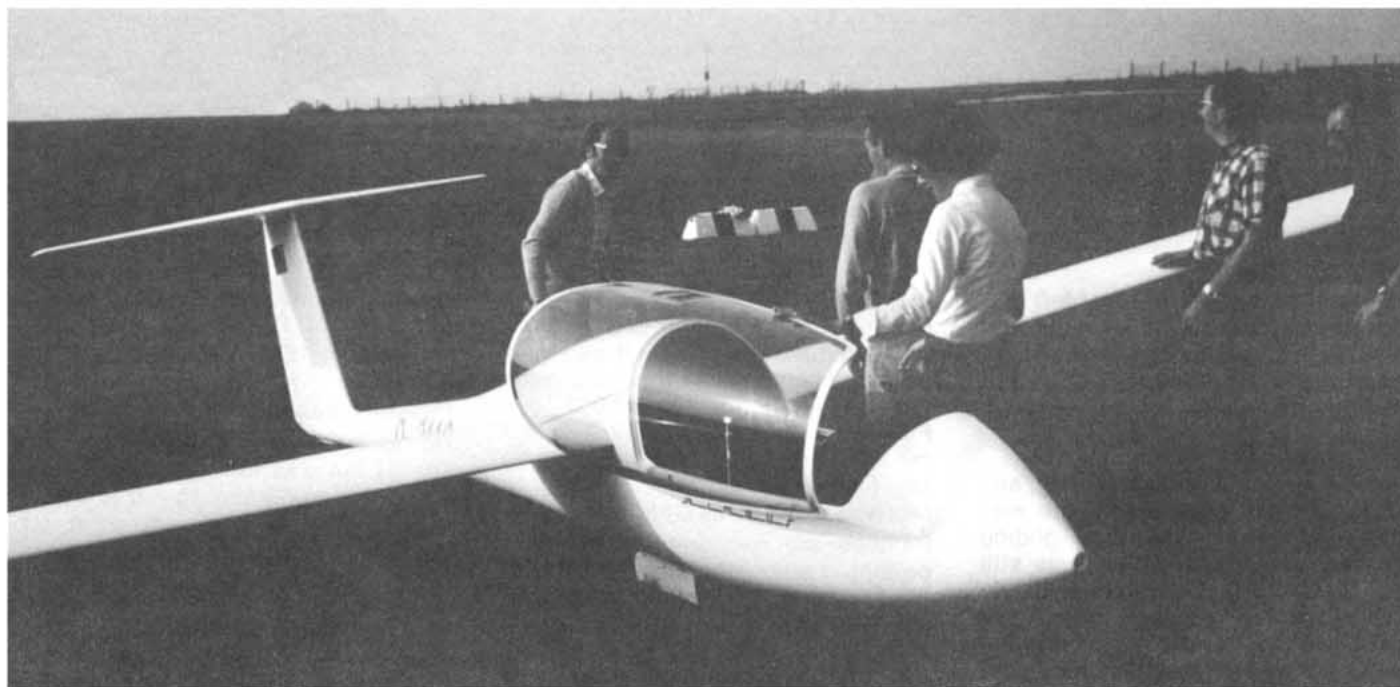
Naturally, superb soaring weather and we stood around for the closing ceremony. No one begrudged the winners their moment of glory - particularly Ingo Renner who had come so close in Australia. He got plenty of applause so did Waltzing Matilda which most of us heard played for the first time as Australia's anthem. George Lee of Great Britain had flown superbly and deserved his win in this his first World Championship.

I seem to have forgotten the 19m class and well I might because it is surely dead. There were only three 19m ships and the trophy was won by Hahner of Hungary who flew a Jantar 1 to 21st place - beating several better ships. A class within a class did not work for the Open; let us hope that it will not have the same sad result for the 15m restricted class.

And so to a pleasant closing banquet and sad "Auf Wiedersehens" to all my dear friends of 20 years. Hope to see you in 1978 in France or Germany.

28th June - Monday

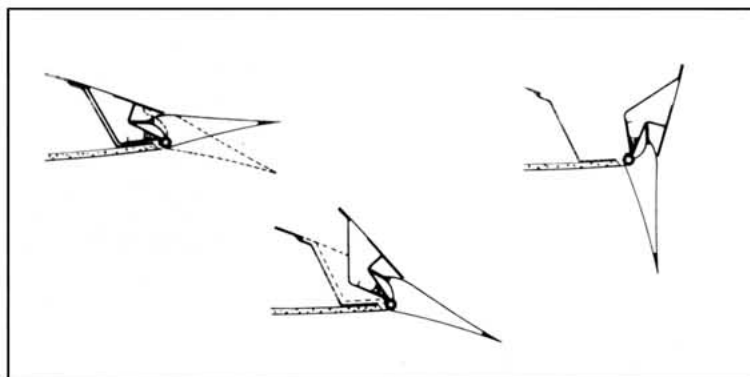
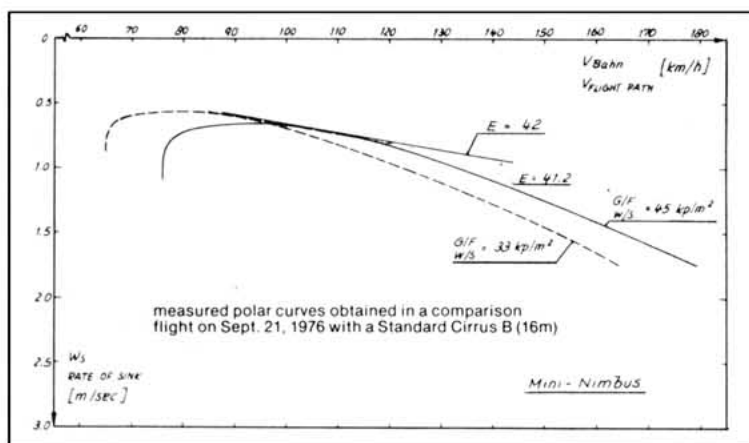
Drove to Helsinki as a passenger of Jim Oke of the Lahr Gliding Club; he had crewed for John Firth. We spent a pleasant day exploring Helsinki and looking at the superb soaring cumulus clouds. Finally, last goodbyes, Jim heading for the car ferry and a long drive back to driving his 104 Starfighter and me to the Airport to Finnair's flight back to Zurich.



On the left is Klaus Holighaus head of Schempp-Hirth and designer of the Cirrus, Nimbus, Janus and now the Mini-Nimbus.

The Latest In Fiberglass

by Al Schreiter



S

ome days work out better than others. I had made arrangements with Glasflugel to fly the Mosquito during my summer holiday visit, but when I arrived and stopped for a brief chat with Klaus Holighaus at Schempp-Hirth it turned out that the long awaited Mini-Nimbus had also left the factory and had its first flight on September 18, 1976.

Although only the precious prototype was available, Klaus Holighaus in what I considered to be a fit of excessive generosity offered to let me fly it. How could I refuse? So off we went in the morning to the Hahnenweide and there, in all their glory were both the Mini-Nimbus and the Mosquito. Both aircraft are a visual delight, sleek and graceful. Let's take the Mini-Nimbus first.

Cockpit accessibility is assured with a Nimbus - Cirrus type canopy hinged on the right. The cockpit is truly Nimbus size and should comfortably accept the largest pilots. To a Libelle jockey like myself it seemed to be dance-hall size. An inflatable cushion behind the back rest allows infinite adjustment of seating position and may be in- or deflated in flight. Should be a real boon on a long hot day. Wheel retractor lever is on the right, also water ballast release. Wheel brake is on the stick, and tow release and rudder pedal adjustment just under the stick, between the pilot's legs. Flap and dive brake lever, as well as trim, are on the left, easily within reach. The closed-in channels for various instrument piping and rudder wires proved roomy arm rests on both sides. A large vent opening should provide ample ventilation even in hot climates. After a short briefing, Klaus Holighaus warmed up the towplane and away we went. Take-off and tow took place with flaps in the first + position and was surprising because of the stability of the aircraft. One had the immediate feeling of complete control, and the aircraft followed the towplane with a minimum of "interference" on my part. Visibility through the large canopy is excellent both forward and sideways. After release the wheel retracted easily, flaps back to normal and the first impression was the silence of the aircraft. My Libelle is certainly a quiet aircraft, but this was even better. A few turns assured me that the aircraft would be a pilot's joy on a long day. Flaps back to thermal position, and now came the real surprise. Holighaus had assured me the aircraft would stall at about 37 mph, but I did not quite

believe him. I should not have doubted his word. At 41 mph the aircraft still felt stable, and only when we reached about 39 mph did it give stall warning, and stalled very gently at about 37-38 mph. I then tried a 30° banked turn at 43-44 mph and much to my surprise nothing happened. The aircraft simply turned and gave no indications of being unstable or too close to the stall.

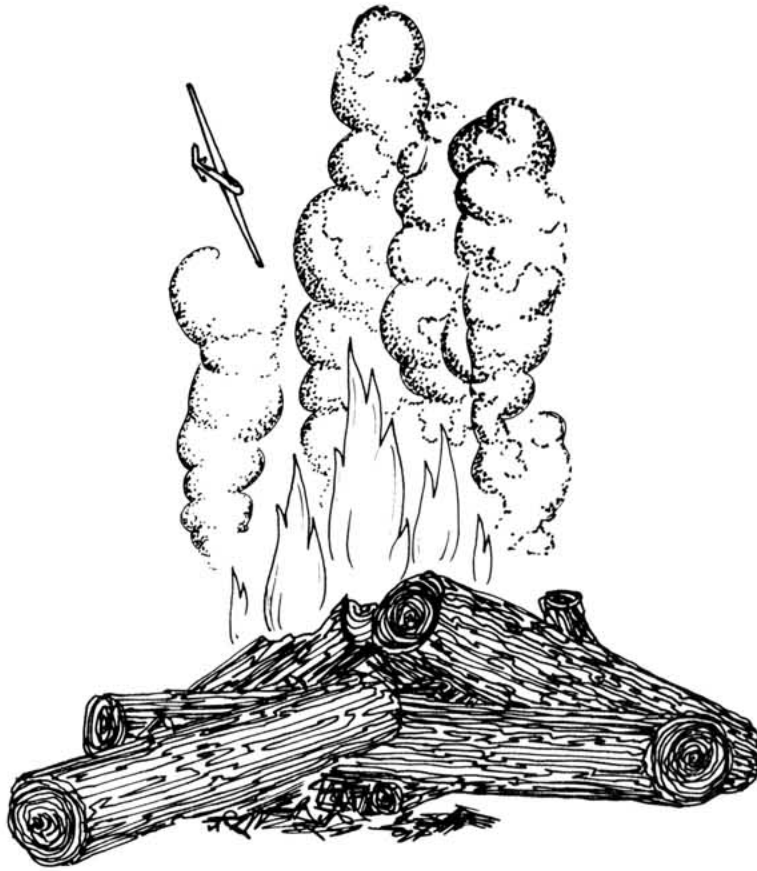
The Mini-Nimbus has an ingenious trim system. One trims once to the pilot weight and then after that each flap setting automatically produces the proper trim for that speed. I set the flap to - first position and hands off the aircraft nosed down, accelerated to about 75 mph and levelled off again maintaining that speed. The same thing happened in the high speed setting, at about 125 mph, but because of the extremely weak thermal conditions I could not do any prolonged high speed runs. Again, the stability and silence of the aircraft were impressive. Flaps back to thermal position, and some scratch work in very weak stuff. I was amazed that I could regain some height, I would have been happy to maintain zero sink. For the relatively heavy prototype (Holighaus thinks he can shave 20 or 30 lbs. of the production models) the slow speed performance has to be experienced to be believed. And finally on to the landing. Everyone had raved about the steep approaches possible with the combination trailing edge dive brakes and flaps. I had some experience with SOSA's Club Libelle as to the effectiveness of the trailing edge dive brakes. I decided to fly the circuit much too high and planned to turn onto final at almost 600 feet. In my Libelle this would have been an invitation to suicide, and I had some qualms, but it was too late to change my mind. Flaps were already in landing position, and the two-stage dive brake lever half opens the dive brakes in the first stage, and in the second stage automatically opens the dive brakes fully and extends maximum flap. The result has to be experienced to be believed. I have flown some steep approaches in Blaniks, but this was unbelievable. At 40° to 45° descent the aircraft actually slowed down. It felt like one had thrown out an anchor and was descending on the anchor chain. Completely stable, silent, true as an arrow. I had been told that one could fly like this right to round-out and then simply set the aircraft down. I rounded out a bit too soon because from that steep angle of descent the ground seemed to rush up a bit too fast. To my surprise the aircraft rounded out completely normal and the ASI indicated 41 mph. After the steep descent this seemed incredible, but the soft touch down

and short roll obviously could come only from a slow landing. Although there was no wind, I could keep the wings off the ground until the aircraft had almost come to a complete stop. Again, impressive stability, and the heavy shock-absorber in the landing gear gives very gentle touch downs. It's hard to believe that a 15 m ship can be all of these things; stable, fast, slow, comfortable, easy to fly and more. But Holighaus and his team obviously have come up with another world class winner.

The following day, Klaus Hillenbrand from Glasflugel got out the towplane and away I went in the Mosquito. Since the Mini-Nimbus and Mosquito have identical wings and dive brake/flap systems, it was impossible for me to notice any substantial differences in the two aircraft. Cockpit size and layout is very similar, but the Mosquito canopy opens over the nose, giving easy access behind the instrument panel. The Mosquito has the Kestrel type anti PIO stick, and a separate wheel brake lever just below the stick, between tow release and rudder pedal adjustment. I'm used to having the wheel brake on the stick, but it's a minor matter. Both aircraft have T tails, the Nimbus all-flying and the Mosquito with elevators. I could not notice any difference in the flight characteristics. Right from tow the stability of the aircraft and the ease of the controls was impressive. When one looks at the maze of levers and other machinery which make up the flap/aileron interconnection, it's amazing that the controls work so effortlessly. I'm used to the Kestrel/Libelle type trim and found the Mosquito trim every bit as good. Literally a one finger job. I had the feeling that the Mosquito required about 2 mph faster speeds for thermalling but that could just as well have been instrument error in either aircraft. In any case, the low speed performance is truly memorable, and the Mosquito has a red line of 168 mph. I only flew it up to about 130 mph and found the flat glide and the silence of the aircraft impressive. Since much has been written about the Mosquito already, I will not take up valuable space for repetition. Let me just say that whatever good news you have heard about it is true and the only fair way to decide between the two aircraft would be to flip a coin.

I'm convinced that next summer will bring contest confirmation that the Mosquito and the Mini-Nimbus are the two best 15 m ships on today's sailplane market. My sincere thanks to Klaus Holighaus and Klaus Hillenbrand for their kindness and hospitality.

Auf Wiedersehen.



ARMCHAIR COMMENT

by E. Feather

Sitting by my fire the other evening watching the smoke curl up from the embers reminded me of a conversation earlier this season with an airline type as he sat in his supership ready for takeoff.

On one of his airline flights he recounted how the stewardess had come forward to ask why it was so bumpy today. My friend, explaining that he was somehow always supposed to know the answers to all these sorts of questions, cleared his throat and replied; "We are circumnavigating the effervescent flow around a thermal low".

Apparently the stewardess went away happy.

This got me thinking. What if the lift were to be around i.e. on the outside of the thermal? Now this isn't all that strange because sometimes I have seen a fellow circling really tightly and have gone to join him thinking he is in a great updraught, and have then outclimbed him by describing a huge gentle turn outside him. Maybe he was circling in sink after all; some fellows do you know. But then what to do when the lift gets weaker? One more circle is really going to take too long and you don't want to cross the central sink hole. Ah! So that's where sink holes come from. I have often wondered, but when I have found one (inadvertently mind you) I have never found the surrounding lift.

Talking to some other pilots we agree that a good deal more research is needed in this field before we can come up with a logical explanation. We are working on this one, and on how to adapt the MacCready ring to show, in addition to the speed to fly for any given sink rate versus achieved climb rate, the optimum angle of bank for each instantaneous climb rate.

Perhaps it is a good thing that hot air always rises and our view clears with altitude, I get too stupified in front of a blazing fire, getting warm with a (fade in music).

Have a Merry Christmas!

CLASS. ADS

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Ka-6CR in excellent condition, fresh C of A. Two varicos (one Moore electric with audio), ASI, Altimeter, Mentor Radio, Oxygen, Trailer, Factory made wing, tail, fuselage covers, Tail dolly, Tools etc.

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Appalachien Soaring Club, Box 271, Sherbrooke, P.Q. G1H 4G8
Ariadne Soaring Inc., 735 Riviere aux Pins, Boucherville, P.Q. J4B 3A8
Buckingham Gliding Club, c/o J. Bisson, 1601 - 680 St. Joseph Blvd., Hull, P.Q.
Champlain Soaring Association, 111 Mgr. Tache, Boucherville, P.Q. J4B 2K2
Lahr Gliding Club, c/o Capt. E.N. Bernston, 1 CAG HQ., CFPO 5000, K0K 3R0
Montreal Soaring Council, Box 1082, Montreal, P.Q. H4L 4W6
Missisquoi Soaring Association, Box 189, Mansonville, P.Q. J0E 1X0
New Brunswick Soaring Association, 521 Blythwood Ave., Riverview, N.B. E1B 2H3
Quebec Soaring Club, Box 9276, Ste. Foy, P.Q. G1V 4B1

Ontario Zone

Air Cadet League (Ont), Mr. H. Bruhlman, 1107 Avenue Rd., Toronto, Ont. M5N 2E4
Air Sailing Club, Box 2, Etobicoke, Ont. M9C 4V2
Base Borden Soaring Group, Box 247, Borden, Ont. L0M 7C0
Bonnechere Soaring Inc., Box 1081, Deep River, Ont. K0J 1P0
Caledon Gliding Club, R.R. No. 1, Erin, Ont. N0B 1T0
Central Ontario Soaring Association, Box 762, Peterborough, Ont.
Chatham Air Cadet Gliding Club, 561 Lacroix St., Chatham, Ont. N7M 2X1
Erin Soaring Society, Box 523, Erin, Ont. N0B 1T0
Gatineau Gliding Club, Box 883, Station B, Ottawa, Ont. K1P 5P9
Huronia Soaring Association, c/o M. Badior, 435 Hugel Ave., Midland, Ont. L4R 1V4
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Provincial Motorgliding & Soaring Association, R.R. No. 2, Blackstock, Ont. L0B 1B0
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Rideau Valley Soaring School, Box 93, R.R. No. 1, Kars, Ont. K0A 2E0
SOSA Gliding Club, Box 654, Station Q, Toronto, Ont. M4T 2N5
Toronto Soaring Club, Box 856, Station F, Toronto, Ont. M4Y 2N7
Windsor Gliding Club, 2050 St. Anne St., Windsor, Ont. N8N 1V7
York Soaring Association, Box 660, Station Q, Toronto, Ont. M4T 2N5

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Edmonton Soaring Club, Box 472, Edmonton, Alta. T5J 2K1
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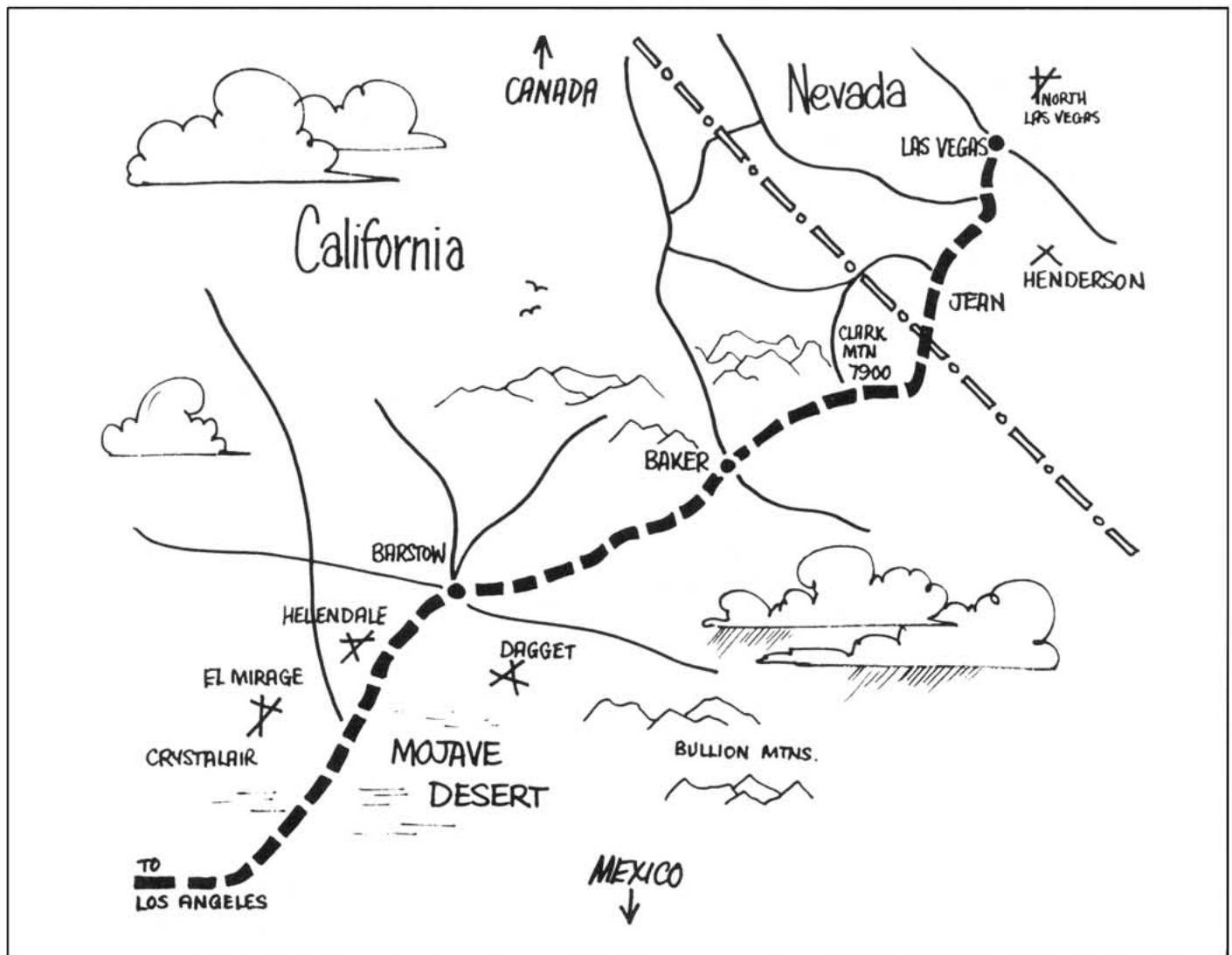
by Antonia Williams



Antonia Williams started flying in Budapest in 1947 and began instructing in 1949; she completed her Silver C in 1952. While in Hungary she made five national records and she learned aerobatics and flew in airshows.

After coming to Canada in 1956 she didn't return to flying until 1967 but now holds nine Canadian Feminine records and has her Gold C with one Diamond. She and her husband own a Standard Cirrus and fly at Hope, B.C. and Ephrata, Washington.

There is nothing unusual about a glider pilot taking his plane with him and going off by himself leaving the family behind, if for some reason they cannot come along. The picture is somehow not quite the same if your wife takes the glider. I asked, "Why not?" Husband did not find a good enough reason. I had been determined to finish my Gold C this year. Doug Mumford, Director of VSA, had been plan-



ning to go to Crystalair also; he offered to help me with the driving; so I left with our Standard Cirrus. It is true I had never put the Cirrus together on my own but I knew I could if I had to. My confidence began to fade as I left the house and Monty's martyr face did not help.

It was a rather pleasant drive to California - the customs officials were upset by seeing the familiar rig without its familiar driver and asked several trying questions - I got stopped only once for speeding - Doug became fed up explaining what was in the box and vowed he would tell the next person that it was an alligator, but that person replied, "Come now, is that a standard class sailplane or an open class one?" You should have seen Doug's face drop! He treated the public with respect after that.

On our arrival at Crystalair, Fred Robinson and his friendly staff greeted us and got us going. Fred gave us a crash course on what to do, where to go and how to survive in the desert. Three days and nine salt pills

later I began to know how to deal with the heat: 1. keep head wet 2. drink water often, 3. have a cold shower before flight, 4. put ice on neck while flying. Finally I felt fit enough to go cross country.

While I was preparing the chart my good friend Fred Hefty (my first flying instructor from way back when) showed up to crew for me - a welcome surprise. Fred told me the task for the day was Las Vegas. I wasn't about to argue with him, he lived in L.A. flies from El Mirage and he's the expert on desert flying. He made the declaration form, studied the chart, I gave the key of the truck to Fred, showed him the gas switches and everything I could think of in five minutes.

At 12:30 One Victor, a Diamant piloted by Oliver Dyer Bennett took off for a 300 km triangle. I was next. I had my cold shower, ice on my neck. Fred ran my wing tip with a big smile and said, "See you in Las Vegas". I released 1000 feet above the field and in the process of notching the barograph, I almost landed. The ground

temperature was 96° F. and the black-top runway provided a fair sized thermal. At nine thousand feet my thermal disappeared. I had been told to get twelve or thirteen thousand feet before leaving the airport. I did not have the time to waste, Fred had already left the airport; so I had to start, altitude or not. Well, El Mirage is only 30 km away so I can land there, I thought. Over El Mirage I spotted a plane circling over the north east hills. According to George Moffat the best variometer is a circling aircraft and I agree with him.

Hopping from one airport to another, El Mirage, Helendale, Barstow, I found the fields nicely spaced with the thermals. Almost landed at Barstow but I couldn't find the airport. One Victor to the rescue! He reported good lift over the warehouses between the town and the airport, and I climbed to ten thousand.

If a successful cross country flight is achieved by having a long glide between thermals, I'm a winner. Looking towards Baker (my next airfield)

The approaching hills looked far taller than the chart said they were supposed to be. Perhaps my judgement was impaired by heat dehydration. My

TOWER: Ma'am, you telling me you

Fred, faithful crew, came with the red dolly and some rope. Had to take the ship apart right there and then with at least twenty people asking questions; "From Canada, what's that accent?" It was hot - 120° F. - and I was very impatient by then. I wanted to get to the telephone and tell Monty I made it - I MADE IT!

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"Local" Map
by George Vakkur

Ridge season begins the first of September and runs through May.
Tie down space available. Limited bunk space on field.

Great winter flying!

LETTERS TO THE EDITOR

Dear Sir,

I am compelled to write to you after reading "Elemer's Briefs" in your last issue of Free Flight.

It is unfortunate that a lack of good material necessitates publishing an opinionated, inaccurate article of a non-soaring nature. It's distressing that the author tries to create the illusion of an authority while being ignorant of IFR procedures used throughout the world.

I am one of the many airline pilots who is also a member of SAC. I dislike the derogatory implications and remarks made about me and my profession on the pages of this magazine. Let me assure the soaring community that I don't suffer from lockjaw or deafness. Neither am I a fanatic, racist or bigot, as implied. Whether you take the legal or moral connotation, I am only interested in safety.

Soaring is an international sport, as evidenced by the varied ethnic backgrounds of its members like myself. We are all in pursuit of a common goal, so let's not spoil this with petty political and inter-racial confrontation.

My association with soaring pilots is a rewarding one. I can glean and perhaps impart some knowledge of flying in the pursuit of enjoying myself. This is, after all, what it is all about, isn't it?

Sincerely,

Chris Pedersen

Dear Bob,

I am greatly disturbed by the apparent fact that FREE FLIGHT has entered the political arena with the printing of Elemer's Briefs in issue 5. We have enough problems and other positive areas to explore without having to read "one man's opinion" on a totally unrelated topic.

From my experience from meeting pilots involved in gliding, all Canadians can relate because we speak from a common bond - our love of soaring.

I would suggest that Elemer's Briefs be hauled down and a liberal lashing of the Editor's plume be administered. Let's talk SOARING.

Dave Tustin,
Winnipeg

SIX SIX SIERRA

It was with sincere regret that we learned of the untimely death of Geoff Morgan of the Okanagan Soaring Club. Geoff, a New Zealander in his late 20's, was one of four pilots who flew to Phoenix earlier this year to pick up a 2-33 for the Okanagan club. He recounted their experiences in the article "The Retrieval of Six Six Sierra" reprinted in the September/October issue of FREE FLIGHT.

Notice to Advertisers

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Don't be an MOT statistic

Q40069

Kestrel Glider

CF-YAW

DATE: 15 July 74 1505 EST

OPERATION: Private-recreation DAMAGE: Substantial

PLACE: 45/46N 75/10W Hawkesbury, Que.

LOCALE: Soil clearing 2000 by 2000, 235 asl.

WEATHER: Cloud 3500 scattered, vis. 15, temp 80, wind NW 15

PILOT: Commercial & Glider

TOTAL HOURS: 1060 ALL 130 ON TYPE

LAST 90 DAYS: 36 ALL 21 ON TYPE

CASUALTIES: Crew: 1 uninj.

OCCURRENCE: During the landing roll out in high grass, directional control was lost and the glider groundlooped.

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- All other items available from Box 1173, Station B, Ottawa, Ont. K1P 5A0 or Mrs. T. Tucker, 786 Chapman Blvd., Ottawa, Ont. K1G 1T9.
- All cheques payable to S.A.C.

1976 Western Instructor's Course



BACK ROW: l to r. Art Rivington, George Geddes, Peter Bandorf, Ken Thom, Alf Pratt, Jim Juryn, Colin di Cenzo, Ian Oldaker.
KNEELING: l to r. Fred Kisil, Mike Basford, Ken Holmes.

The 1976 Western Instructor's Course was planned for Penticton in the beautiful Okanogan valley, a great place for a holiday, but was moved at the last moment to Hope, B. C. the home of

the Vancouver club, a beautiful place to fly.

It was a real experience for the flatlanders who are used to regular cumulus to be suddenly surrounded by an

unlimited supply of cumulus granite that develops lift whenever the wind blows, which in Hope is all the time.

Flying started on Sunday with local check-out flights. I must at this time praise the members of V.S.A. at the tremendous way they stepped in with about one day's warning and hosted this most excellent course. We had planned to fly from Penticton airport; full details had been worked out with A.T.C. and we would have stayed in a brand new "Skytel" there. Unfortunately, three towplanes fell through; so at the last minute the Okanogan club had to call on the V.S.A. for help, which they certainly did. They made available to us their clubhouse, L-19, 2-33 and Blanik, the only stipulation being we had to take Alf Pratt too.

The tow pilots from V.S.A., Jack Barron the Hope weatherman and Dave Baker a C.P.A. pilot, did a great job towing us to Hope Mountain and working all night and all next day in mid-week to do a C.C.I. inspection on the L-19 so we could fly each day.

Fly we did, I have seen some enthusiastic pilots, but this bunch took the cake. We flew in the rain, after supper, in fact whenever Ian would take his eyes off us for a minute.

The course also provided a romantic interest of sorts for a couple of the students. Peter Bandorf fell in love with a Blanik, and Jim Juryn developed an attraction for Max, the Oldaker's dog, who incidentally has the worst case of jungle mouth you could imagine.

It was a good course, with great weather for the first couple of days and wind and rain in mid-week. However, it must have been better than the Eastern course, we did more flying.

Attending the course were Ian Oldaker, course leader; Fred Kisil, Peter Bandorf, Art Rivington, from the Winnipeg Gliding Club; Mike Basford, Red River Soaring Association; Jim Juryn and Colin di Cenzo, Cold Lake Soaring Club; Ken Thom and Ken Holmes, Okanogan Soaring Club; Alf Pratt from the host Vancouver Soaring Association; and from the far west, George Geddes, Alberni Valley Soaring Association.

George Geddes.

Footnote: At last year's course most of the pilots had instructed prior to the course; some had considerable experience. This year only one pilot had previous instructing experience and unlike this year's Eastern course, most had no power experience, i.e., were purists! Jim Juryn visited the W.G.C. in September to find Maxi is now cured - no more scraps!

Ian Oldaker.

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CLUB NEWS

Vancouver Soaring Association

Since our last report in May, we have been experiencing a most atypical season. June & July were about a 50:50 mixture of good & poor soaring days, but August was a disaster with rain practically every weekend. Most unseasonal. However, after the Labour Day weekend, we seemed to get out of the bad weather and have had some good soaring.

Some individual club members have had successes this season with Mike Apps obtaining his gold c height at Hope in June, and in July, Stan Pytel, one of our members from just across the border com-

pleted his 5 hours and picked up a gold c height for good measure on the same flight. That makes a total of 4 gold c heights obtained in the Dog Mountain wave so far this season.

Cross-country flying from Hope is restricted by the mountains (too few places to land except on the real good days when one can get really high) so most of the V.S.A. members prefer to do their cross-countries either in the U.S.A. or on the prairies. Ephrata, Wash. is the closest site so it is usually preferred. This year several members have attempted 500 km flights from this site and in late June Lloyd Bungey completed a 500 km triangle in the syndicate SHK. About 2 weeks later Lothar Schaub almost made it in his Ka6 falling only 20 miles short. Lothar seems to get about 20 miles closer each year so maybe 1977 will be his year. The only other club pilot to complete a badge cross country

flight this year is Ernie Dumka who completed a 300 km triangle also starting from Ephrata.

In mid-July the V.S.A. most unexpectedly played host to the Western instructors Course when the Okanagan Soaring Club's arrangements for a tow plane fell through at the last minute. The course was favoured by a week of fine weather enabling the participants to also get an introduction to the art of ridge soaring.

In spite of several days lost to rain the amount of flying being done by the club ships has been about the same as in previous years, although the private owner activity has been down some. One pleasing change, however, has been the greater interest by both private and club pilots in visiting other sites. The club Blanik has made 2 trips to Ephrata and the 1-26 has been to the Okanagan. This is an activity we hope to see more of in the future.

HANGER FLYING

The '76 Regionals

It was a disappointment that the Western Regionals organized by the Winnipeg Gliding Club had to be cancelled due to insufficient entries. Apparently trailering across Western Canada in August can be a deterrent to even the keenest competition pilots.

SOSA Gliding Club was host for the Eastern Regional Championships from July 24th to August 2nd. There were seventeen competitors in three classes; five in Open, eleven in Standard and one Sports. There was reasonably good weather throughout the contest with six contest days out of ten. There was only one day when a task was launched but failed to qualify as official when the required minimum number of pilots failed to cover 50 km.

The Open Class winner was John Featherstone (York), runners-up were the team entry of George Adams and Jim Henry (MSC). Standard Class was won by Hal Werneburg (SOSA) with Wilfred Kruger (SOSA) as runner-up. Paul Thompson (SOSA) was in the Sports Class by himself and on all but two days flew the same tasks as Standard and Open ships.

The contest was good fun with good competition and good weather. We were fortunate to have Don Layton as our forecaster from the Atmosphere Environment people. Don worked hard each day from the early hours, rain or shine, to predict the weather we might expect. He has the rare distinction of forecasting a contest day where 12 out of 17 contestants completed a 318 km out and return.

FINAL STANDINGS - OPEN CLASS

| | Pts. |
|-------------------|-------------------|
| J. Featherstone | 16.5 Diamant 5496 |
| G. Adams/J. Henry | Nimbus II 4293 |
| F. Markut | Kestrel 19 4123 |
| K. Doetsch | HP-14 3446 |
| C. Bantin | Skylark 3B 3295 |

FINAL STANDINGS - STANDARD CLASS

| | | |
|-----------------------|--------------|------|
| H. Werneburg | Std. Cirrus | 5000 |
| W. Kruger | Std. Libelle | 4887 |
| F. Vaughan | RS-15 | 4794 |
| J. Nagy | Std. Libelle | 4351 |
| J. Brennan | Std. Libelle | 4320 |
| G. Geyer-Doersch | DG-100 | 3845 |
| C. Wilson | Austria S | 3701 |
| A. Gough | K6-CR | 3560 |
| J. Knowles | Std. Libelle | 3464 |
| K. Kovacs | PIK-20 | 2742 |
| G. Hicks/H. Kirschner | LS1-C | 2299 |

SPORTS CLASS

| | | |
|-------------|-------|------|
| P. Thompson | Pirat | 5000 |
|-------------|-------|------|

George Adams in a Nimbus II won the trophy for the fastest out and return with a 96.4 km/h on the second day task to Bellwood Bridge.

Report by Jack Knowles - SOSA News

The '77 Nationals

LOCATION: Hawkesbury, Ontario.
Midway between Ottawa and Montreal

DATES: 18 to 27 July, 1977

CLASSES: Open, Unrestricted 15 m*, Standard and Sports. *If five or more pilots enter. Since this is a new class, will interested pilots please contact the 1977 Contest Committee, c/o G. W. Couser, 735 Riviere aux Pins, Boucherville, P.Q., J4B 3A8. (a post card is sufficient)

Free Flight Co-Editors

John Bachynski of Edmonton Soaring Club has offered to become co-editor of FREE-FLIGHT in charge of Club News. With John's help contacting the clubs across Canada, we hope to have more regular news of club activities. There are probably events at you club that can be of interest and benefit to other soaring clubs; so let us hear what's going on. We hope all clubs will help John - his address is 9303 Saskatchewan Drive West, Edmonton.

In the coming months we are looking

forward to having other co-editors working with us on FREE FLIGHT; taking care of advertising, photography, safety, contest reports, SAC news and reports, overseas news, etc. If any of these subjects are of particular interest to you, contact the FREE FLIGHT editor.

'77 A. G. M.

Keep Saturday, March 5th, 1977 free for the Annual General Meeting of S.A.C. The host club for the meeting this year is York Soaring Association and arrangements are being co-ordinated by Fred Mueller. The Airport Holiday Inn will be the location - 920 Dixon Road, across the street from Toronto International. Special room rates will be available from a block of 50 rooms reserved for S.A.C. members; so reserve early. There will be a reception for the members in the President's suite on Friday evening, March 4th with the business meeting on Saturday. If you have any questions or need any assistance in connection with the AGM contact Fred Mueller, 34 Cicerella Crescent, Scarborough M1K 5B5, or phone (416) 751-3924 (H) or (416) 633-7310 ext. 273 (B).

SAC Insurance News

Looks like 1976 will be a good year. Total claims reported so far are less than \$4000. If you have any claims not yet reported please get them to me or Wyatt & Taylor as fast as possible. If you haven't had a claim yet, please refrain from flying both low and slow at the same time, remember not to make steep turns near the ground, keep your wheels and flaps down on landing, and always stop before the fence hits you. It's also a very good idea to keep out of trees and telephone wires, and away from other aircraft and large birds. The insurance company is beginning to believe that 1975 was an exception, let's not give them any last minute reasons to change their mind. If you have any suggestions for the 1977 policy year (other than lower Premiums) send them to me before Christmas.

A. O. Schreiter
Chairman, Ins. Comm.



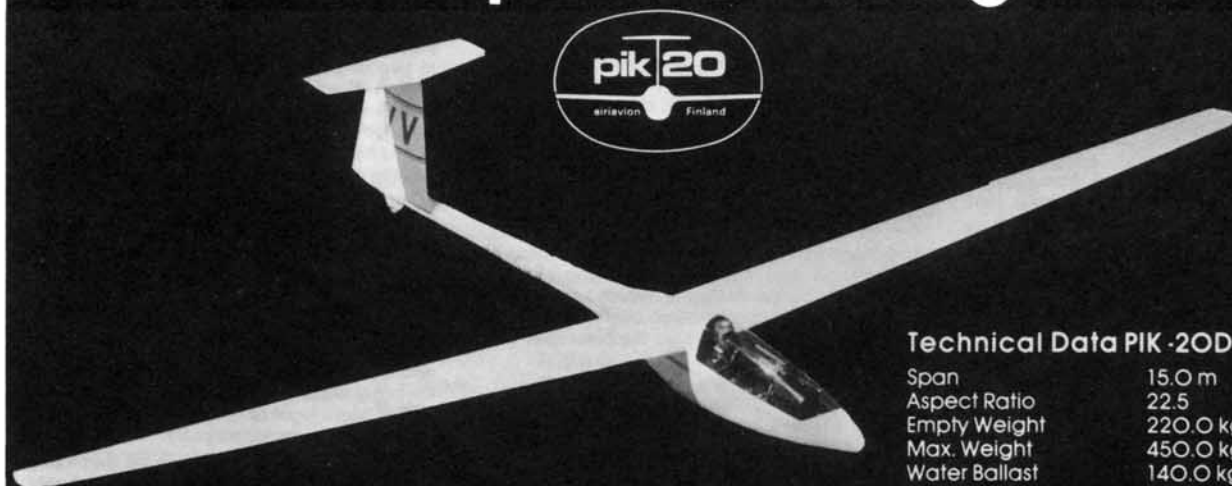
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PIK-20E Motor Glider - retractable, electric start engine.

Technical Data PIK-20D

| | |
|---------------|---------------------------|
| Span | 15.0 m |
| Aspect Ratio | 22.5 |
| Empty Weight | 220.0 kg |
| Max. Weight | 450.0 kg |
| Water Ballast | 140.0 kg max. |
| Wing Loading | 30 - 45 kg/m ² |
| Load Factor | + 7.1 to -5.1 |
| Best L/D | 42 @ 108 km/h |
| Min. Sink | .63 m/s @ 85 km/h |
| Stall Speed | 60 km/h @ 300 kg |
| Max. Speed | 262 km/h |

For further information please contact:

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735 Rivière aux Pins,
Boucherville, Quebec, J4B 3A8
(514) 655-1801