

# free flight

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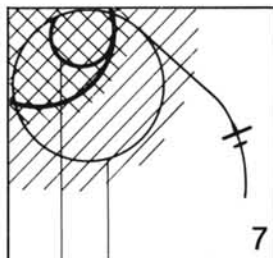
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# President's Notes

By the time you read this Christmas will have come and gone and I trust you and your families enjoyed the holidays. Most of our sailplanes are packed away, thereby keeping the insurance rates from going up. Winter is a good time to plan, both for clubs and individuals. There is a definite increase in cross-country soaring in Canada, and I hope many are plotting courses and reviewing weather maps in anticipation of the season to come. More clubs have changed their attitudes towards cross-country soaring and it is becoming quite routine to use club equipment for cross-country excursions during the week. And most important, more clubs are upgrading their equipment and there isn't much point in having fiberglass sailplanes just to hang around the airfield. Many provinces now make grants available to clubs for the purchase of equipment, so the trend to upgrading should continue. If your club has not yet explored

grants, delegate someone to contact your provincial government sports/recreation department and find out what is available in your province. Many clubs have already benefitted.

Our negotiations with the Airworthiness Branch of Transport Canada regarding type approval procedures grind on. Unfortunately I cannot report success at this stage. They insist on treating us just like the purchasers of 747's, apparently for no other reason than to "rationalize" their own procedures. It means that type approvals could take months to obtain, and that sailplanes (other than U.S. built and type approved) without Canadian type approval should not be imported. In case of doubt, contact the SAC. Our negotiations with Revenue Canada regarding exemption for clubs from federal sales tax had to start over again, since we now have a new Revenue Minister. Perhaps patience and persistence will prevail. For now we seem to be

getting big government and small results.

I hope that many of you plan to attend the Annual General Meeting in Toronto. The York Soaring boys have put much effort into their sales as hosts, and we thank them for their magnanimity. Please discuss the issues with your voting delegate, it's your association and you should make your views known.

I would also like to thank York Soaring and the Alberta Soaring Council for submitting bids for the 1979 Nationals. The directors have awarded the competition to York Soaring and I hope many of you from across Canada will enter the Nationals in 1979. We hope to be able to subsidize travel expenses for the pilots and I am sure York Soaring will provide an excellent organization team. Since the next World Championship has been set back to 1981 (to get out of the Olympic cycle) there will be another National in 1980, and I hope the Albertans will renew their bid then.

## SAC Priorities and how you see them

At the 1978 SAC AGM in Winnipeg a "Profile Questionnaire" was circulated to obtain feedback for the directors on what you (or your delegates to the AGM) saw as being SAC's role, and what you thought it should be. This same questionnaire had been used at the Winnipeg Gliding Club's AGM the previous year, and had indicated that club members generally felt that SAC was operating on the right track; in particular the highest priorities should be assigned to FREE Flight (1.0), Government Liaison (0.95), Insurance Scheme (0.82), Instructors' Schools (0.72), and Information Services (0.65), where the numbers in parentheses are relative ratings.

Government Liaison is a very wide topic and for the SAC questionnaire, it was split into three distinct activities; (i) Airspace problems, (ii) Medicals, licensing, etc., (iii) Funds and support.

The summarized results from the questionnaire are illustrated in the accompanying chart. It is evident the SAC members are

aware of (and appreciate) the high level of Government Liaison which is undertaken by SAC. Much of the work in this area requires considerable expertise and technical knowledge on the part of SAC's representatives and much time and effort is put in on our behalf by these spokesmen.

The insurance scheme is given a high priority. One of SAC's more recently entered endeavours, it has become a major service to clubs.

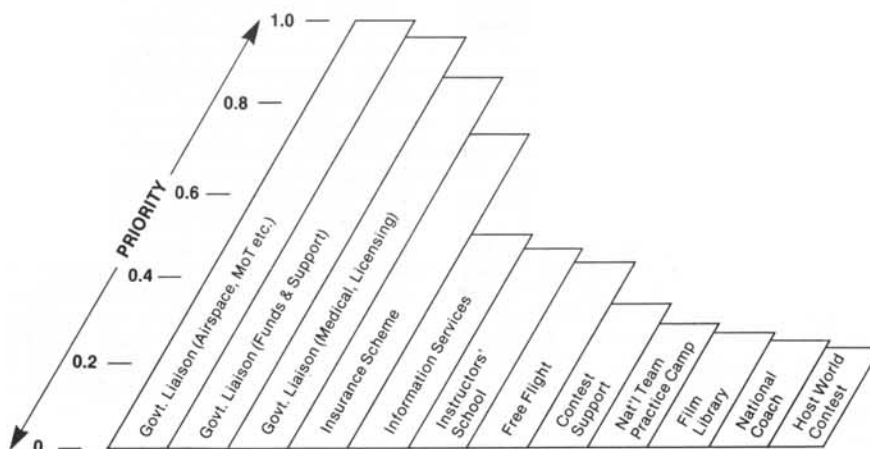
An area where SAC probably does not operate as effectively as members wish is in "Information Services". We do not have, for example, information which is sent out to new clubs wishing to join the organization, and a "letter to enquirers", but the executive is looking into ways of broadening information services to its members. ('How to run a contest', for example.)

The biggest rating difference between that assigned by Winnipeg Gliding Club and delegates to the SAC AGM was for Free

Flight. This probably reflects the greater awareness by the delegates to the AGM of the less "visible" services which SAC provides. Perhaps not surprisingly, the majority of club members see Free Flight as the main contact they have with SAC and assign it a correspondingly high priority.

Of the other items, hosting a world contest is not seen as a possibility in the near future. A "National Coach" on BGA lines is also not possible, although we are looking into the possibility of a temporary (summer) appointment if we can obtain funding from the Government. A film library has been tried before, but the films disappeared. (Information on how to obtain films for club meetings etc. will appear in Free Flight.) A National Team practice camp is a growing possibility, dependent on the resources of future team members and available funding. Contest support also is increasingly available, as for example in the form of travel assistance for competitors.

## SAC AGM CENSUS ON ORDERING OF PRIORITIES FOR SAC 1978





# S.A.C. Directors' Meeting — Calgary, October 1978

The following notes are by no means a complete account of all the business conducted at the recent directors' meeting, but are rather a summary of some of the more interesting points, and those that will affect us more immediately at the club level.

SAC President Al Schreiter opened the meeting at 9:30 a.m. on Saturday October 14th.

1. One of the first agenda items was the location of the 1979 Nationals. Two offers to host the event had been received, one from the Alberta Soaring Council and one from the York Soaring Association. Keeping in mind the general policy of rotating the event between East and West on a three-year cycle (two East to one West) the directors decided to accept York's offer. However, since the next World Championships is not until 1981, we will be holding another National event in 1980, and Rick Matthews, the Alberta Zone Director extended ASC's offer to host that contest, although the final decision on the 1980 location will not be taken for some time yet, and other clubs are welcome to bid.

2. SAC is constantly looking for ways to improve service to members. One way of doing this is to increase the speed and efficiency of transactions between the SAC central office and member clubs. Since much of this communication is related to memberships and the associated list-making, card issuing, etc., SAC is introducing a standardized membership form which will enable all the routine tasks associated with the annual membership registrations to be carried out by computer at the National Sport and Recreation Centre. All relevant information about each member (eg type of membership, instructor classification, O/O number, etc.) will be filled in on the form by club secretaries. The form will contain four copies, one to be kept by the secretary and the other three to be forwarded to SAC; one for SAC files, one for the Sports Centre (address lists, etc.) and one for the insurance agents, when applicable. In return clubs will receive computer-printed membership cards (much quicker than typing), complete alphabetical membership lists (updated and re-issued whenever changes are made) and club sets of gummed address labels (for a small charge).

Our Secretary-Treasurer Terry Tucker is very enthusiastic about these new membership forms and clubs will be receiving them in the near future for introduction and use in 1979.

3. Al Schreiter, who was Team Captain for the 1978 Canadian Team at Chateauroux gave a report on the financial situation of the "World Contest Fund". The government grant is applicable only to airfares and glider rentals; all other costs - entry fees, registration fees, living expenses, car rentals, etc. - are borne by the pilots or the World Contest Fund. In fact, each team member, (including crew) is expected to cover his room and board plus out-of-pocket expenses, which together mount up to several hundred dollars, and the WCF hopes to cover expenses directly connected with the competition. (e.g. car rental, gas, etc.) The current situation is that

the WCF is about \$5000 short of covering these expenses, though it hopes to make up this sum in the next year. Meanwhile, a loan of \$5000 from SAC general funds as been made to WCF to be paid back in full no later than November 1, 1979 with interest at 7 3/4% p.a.

4. The insurance picture is somewhat brighter this year. To the date of the meeting, twelve claims totalling about \$40,000 had been made compared to about \$130,000 in 1977. Since premiums collected this year amounted to over \$135,000 there is a good chance that premiums will be reduced for 1979.

It was noted that some clubs were very slow in sending their premiums in during 1978, and the 30-day submission period will be enforced in 1979.

5. Each year SAC receives a grant from the Ministry of Health and Welfare. However, only certain items which fall within the guidelines laid down by the Ministry may be covered.

A request of \$45,000 will be made this year for the following items (listed in order of priority, not budgeted amount):

- i Annual General Meeting
- ii Administration block grant
- iii Executive meetings(2)
- iv Instructors' Schools (2)
- v CFI Seminar
- vi National Competition
- vii International Meeting (CIVV)
- viii "Sports Leader" exchange
- ix Officials: a) National Contest Director  
b) Travelling "National Coach"
- x High-Altitude Flying Camp
- xi Equipment Purchases

6. SAC has always been responsible for carrying out type-approvals on gliders in Canada. In fact, the technical committee, under the chairmanship of Jim Henry has put hundreds of hours into this work on our behalf. Now MOT wants to take over responsibility for glider type-approvals to bring us into line with all other flying object type-approvals. This would mean both greater delays and considerably more expense since one of the requirements would be that all test flying and paperwork would have to be done by Canadian pilots or under Canadian supervision in the country of origin. SAC is fighting this. Meanwhile, any type approvals applied for while the battle rages are likely to be somewhat delayed.

It was felt that due to the large amount of time and effort required for a type-approval, SAC would levy a fee of \$250 plus expenses for the services of providing such a certificate. This would be payable, of course, only on the first model imported of any new type, and would frequently be borne by a dealer.

The foregoing, plus 14 other agenda items took us to 6:15 p.m. on Saturday evening, when we decided it was time to adjourn until the next day. George Dunbar and Bruce Hea of Cu-Nim found time (at very short notice!) to come and spend Saturday evening with us and discuss local news and airspace issues. With a little more foresight, we could have publicized our visit to Calgary locally and provided the opportunity for any of the local SAC members to meet with the SAC directorate for an evening.

We reconvened at 8:20 a.m. on Sunday with what looked like an impossibly long list of items yet to be covered before some of us had to dash off to the airport for early afternoon flights home.

7. As a result of the CFI's seminar held in Toronto in May of 1978 the instructors committee had come up with a list of thirteen items for approval, decisions, or discussions. Most of the items relate to training and licensing procedures, and these will be reflected in future publications of training materials.

One of the items which may be of wide interest is the decision to publish the complete set of papers from the CFI seminar, and to make these available at little more than cost to SAC members.

8. A perennial topic for discussion is the SAC by-laws. We are considering a major revision, which will result in a new reduced set of by-laws complemented by a set of "operating procedures". The rationale for this is that each time a by-law change is made, the new by-laws have to be "approved" by the Secretary of State before they can (officially) be put into effect. This is both time-consuming and an added expense to a tight budget.

An example of an item in the by-laws which really should never have been (and in fact was removed at the 1977 AGM) was the fee structure. Each time the membership fee was changed, a by-law change was required. Now the fees can be altered without such a change, though the same level of agreement from the membership (basically a two-thirds majority) is still required before any change in fees can be put into effect.

All we are presenting to the membership this year in terms of by-law changes is a number of "housekeeping" items, mostly to remove a few inconsistencies that have crept in over the years as individual by-laws have been changed. These are presented elsewhere in this issue of Free Flight.

9. An item of some concern is that Bob Nancarrow is resigning from editorship of Free Flight. Other commitments will be taking more of Bob's time and we must now find a replacement who will be prepared to put in the same dedicated effort that Bob has, to keep the quality of Free Flight at its present level.

10. The winners of the Roden Trophy, awarded annually for "optimum use of club equipment", have been determined each year by application of a 'formula' involving such variables as number of club aircraft of various types, numbers of flights, solos, badges and so on, but the Trophy Committee felt the formula as it stood no longer represented a true picture of an efficient club; club structures have changed over the years. Bob Gairns had, therefore, with the vast quantities of statistical information at his disposal, and many hours of reconsideration of the relevant factors, devised a new, more appropriate 'formula' for consideration by the directors. Your executive agreed with Bob's proposal and this new formula will be applied in determining this year's Roden Trophy winner. Details will probably be published in Free Flight.

Agenda item number 36 brought us to

*Cont'd. on page 11*

# Notices of Motion

The following notices of motion are presented for your consideration. They will be put forward at the 1979 SAC Annual General Meeting in Toronto.

1. *Motion:* Delete from By-law 3, beginning in line 7, the words "by the Board of Directors by by-laws and sanctioned by the the affirmative vote of at least two-thirds (2/3) of the members present at a special general or annual meeting of members duly called for the purpose of considering the said by-law, namely:-" and insert instead "as provided for by By-law 4".  
*Reason:* To bring By-law 3 into conformity with By-law 4 which was amended March 1978.
2. *Motion:* Delete from By-law 3(a) line 10, the words "S.A.C. Members" and insert "Club Affiliated Members and Married Couple Members".  
*Reason:* To bring the wording into conformity with that in By-laws 3(b) and 3(e).
3. *Motion:* To By-law 3(e) add the words "A married couple member wishing to exercise its vote independently of its sustaining membership shall have its vote deducted from its Sustaining Member Block".  
*Reason:* To give a "Married Couple" the same voting rights as a "Club Affiliated Member". (Note. There is still some ambiguity as to whether a "Married Couple" can be either "Club Affiliated" or "Without Affiliation".) (Ref. 3(b) & 3(d)).
4. *Motion:* Replace the first two sentences of By-law 5 with the words "The Corporation shall be managed by a board of directors consisting of six Zone Directors, two Directors-at-Large, and the Past President (ex-officio)."  
*Reason:* If the Past President is also an elected director, then the board will consist of only eight directors, not nine as required in line 1 of this by-law. (See Item 7 below re. quorum).
5. *Motion:* Delete the word "so" from By-law 7, line one.  
*Reason:* To provide for filling of vacancies on the board which have arisen for any reason (e.g. resignation of an elected director).
6. *Motion:* Reword By-law 20 thus - "Prior to each annual meeting, each club will be invited, by mail, to nominate a candidate from within any club of any zone for a Director-at-Large. Additional — Director. The members present at the Annual Meeting shall elect the Director-at-Large from the nominations received, using Sustaining Membership votes".  
*Reason:* This change was omitted in 1977 when alternating two year terms were introduced.
7. *Motion:* Add to By-law 8, the words "The quorum at meetings of the Board of Directors shall be four".  
*Reason:* This is transferred from By-law 5 as being more appropriate here.
8. *Motion:* By-law 25. Change lines one and two to read "The officers of the Corporation shall hold office for one year or until their successors are elected or appointed in their stead".  
*Reason:* This was amended with the change over to two year terms, but invites obvious conflicts (as for example, when a director becomes president in the second year of his elected term).
9. *Motion:* By-law 29. Lines 6 and 7. - omit the words "shall elect two directors at large, and".  
*Reason:* This is covered in By-law 20.
10. *Motion:* Begin By-law 33 with the words "At the first meeting of a newly constituted board of directors after the Annual General Meeting of the Association, the eight — etc."  
*Reason:* This formalizes current practice.

## 1979 S.A.C. AGM

March 23 - March 25, 1979

**CONSTELLATION HOTEL**  
Toronto, Ontario

The site for this year's annual general meeting of the Association will be the Constellation Hotel by the Toronto International Airport.

### PRESIDENT'S RECEPTION

Friday, March 23 starting at 7:30 p.m.

### GET TOGETHER LUNCHEON

Saturday, March 24 starting at 12:00 Noon

### AWARDS BANQUET

Saturday, March 24 starting at 7:30 p.m. Trophy and award presentations. Soaring movies and slides including the World Championships at Chateauroux.

### SEMINAR

Sunday, March 25 starting at 9:00 a.m. A seminar meeting and discussion is planned for Sunday morning.

The annual meeting of the Association will begin at 9:00 a.m. on Saturday with registration beginning at 8:30 a.m. Luncheon and award Banquet tickets will be available for purchase until 10:00 a.m. on the day of the meeting; however, up to \$7.00 can be saved by pre-registering. Tickets for both the Get Together Luncheon and the Awards Banquet will be in limited supply on the day of the meeting; therefore, purchase of tickets other than by pre-registration cannot be guaranteed.

### HOTEL RESERVATIONS

The Constellation Hotel has given us a special room rate of \$28.00 single or double provided accommodation for two nights. The hotel also provides free transportation to and from the airport for hotel guests.

## REGISTRATION FORM

PLEASE MAIL TO:

S.A.C. AGM.  
c/o Fred Mueller  
15 Brookbanks Dr. Apt. 804  
Don Mills, Ontario M3A 2S9

I will require:

\_\_\_\_\_ Luncheon Tickets @ \$ 9.00 \_\_\_\_\_

\_\_\_\_\_ Award Banquet Tickets @ \$15.00 \_\_\_\_\_

TOTAL AMOUNT ENCLOSED \$ \_\_\_\_\_

I will also require \_\_\_\_\_ single and/or \_\_\_\_\_ double room accommodations at the Constellation Hotel. Do NOT include room rentals on any cheques. The hotel will be advised of your booking and the special S.A.C. rate applied to your room accommodation. All members will be responsible for paying their own hotel bills.

Make cheques payable to: S.A.C. ANNUAL GENERAL MEETING  
Luncheon tickets sold on the day of the meeting will cost \$11.00  
Award Banquet tickets sold on the day of the meeting will cost \$20.00

\_\_\_\_\_  
NAMES (TO APPEAR ON BADGES)

\_\_\_\_\_  
ADDRESS

\_\_\_\_\_  
CITY PROVINCE POSTAL CODE

\_\_\_\_\_  
PHONE

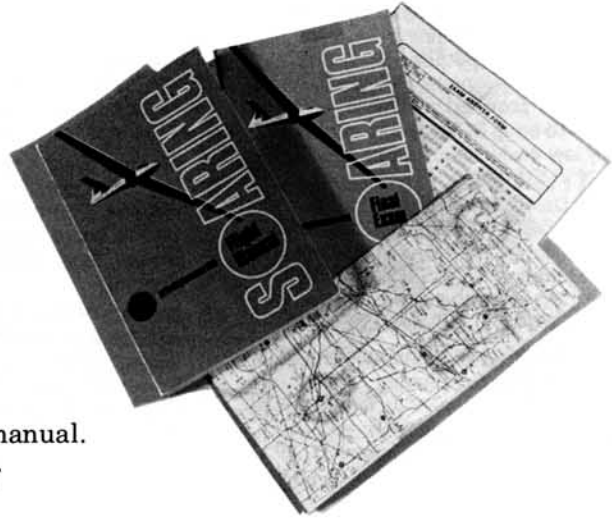
Glider training changes this month!

# SSA GROUND SCHOOL PROGRAM

The Soaring Society of America's official ground school program sets new standards for glider training in the United States. The consistently high quality and comprehensive nature of the course will improve safety in training and enhance overall enjoyment of sport soaring.

The ground school program includes:

- A textbook with workbook sections, a final examination booklet and answer sheet, and a reprint of a sectional chart.
- All required material for the FAA private and commercial glider written examinations *plus* practical flight training information.
- A student kit approach, with workbook exercises and testing, providing immediate feedback to students on their progress in training.
- Questions and problems in the workbook sections which correlate with instructional section of the manual.
- Photographs and artwork on almost every page of the manual to help illustrate points.



Chapter topics include:

- Aerodynamics for Soaring Pilots
- Sailplane Performance
- Flight Instruments & Radio Equipment
- Weather for Soaring
- Medical Factors
- F.A.R.'s for Sailplane Pilots
- A.I.M. and Airspace
- Computations for Soaring
- Aeronautical Charts and Navigation
- Personal Equipment
- Pre-Flight and Ground Operations
- Aero Tow Procedures
- Ground Launch Procedures
- Basic Flight Maneuvers and Traffic Patterns
- Soaring Techniques
- Cross-Country Soaring



Course can be used individually by students or in a classroom situation.

\$29.95 (Discounts available for quantity orders for SSA Chapters and Business Members.)  
Order from SSA, Box 66071, Los Angeles, CA 90066. Californians please add sales tax.

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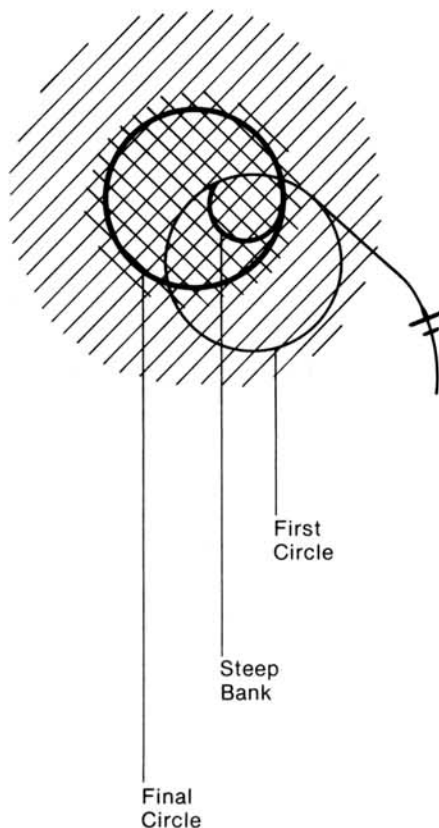
# A NEW TECHNIQUE FOR CENTERING THERMALS

from York Soaring's "Soartales"

Here is a rarely used technique that Heinz Huth of Germany developed over a decade ago to quickly locate thermal cores. The method proved so successful that he won the Standard Class Championships in a Ka-6.

As you approach an area of lift, indicated by increased turbulence and a decreased sink rate, pay attention to any signals that might indicate which direction to initiate your turn. If one wing seems to be forced up, immediately change course  $45^\circ$  in the direction of the uplifted wing. When the rate of climb increases somewhat unevenly, with an increase of flight noise, with changes shown on the variometer and from the upward surge of the aircraft, wait about one second. Then, with about  $40^\circ$  of bank, fly in the direction of the raised wing. On different days, the delay required between the moment of surge and the initiation of the turn will vary, but you can get a good feel for this in the first few thermals of the day. Once you have established the characteristics of the thermals for that day, whether they are weak, wide or narrow, maintain that time delay by counting.

Quite frequently, the initial climb rate will be lost after a few seconds, and the technique of centering begins. Many of us are taught to straighten out in lift, and increase our bank angle in sink, in order to shift the centre of our circle towards the thermal core. This doesn't always work, since we usually are flying with instruments that have an inherent three to seven second time delay. We end up



correcting on the wrong side of the thermal and the thermal seems to disappear, when, in fact, we flew out the wrong side and into sink.

Heinz Huth has a much more effective method. Should one fly out of the thermal during the first turn, the degree of bank and rate of turn should be maintained until the stronger lift is found again.

After a short pause, the rate of turn and bank is increased. After  $300^\circ$  (shortly before the turn is completed), the aircraft is returned to its normal turning pattern. As a result, the centre of the circle now being flown will also be the core of the thermal. If no mistake is made, then the centre will be found, on the second turn.

Many experienced people have their own pet ideas on how to thermal, but naturally the most important requirement is, in addition to a good mental picture of what is going on, accurate flying. Unless you are flying a sailplane with a well calibrated total energy system, many of the inputs on the variometer will be influenced by stick lift, gust, and yaw effect on the sailplane's static system. Try and centre the thermals by using the seat-of-the-pants flying; you should try to sense surges and downdrafts without using a variometer. An excellent way of developing this feel is to go up with an instructor in a 2-33 and try to stay up with a taped-over instrument panel. You will really develop a great deal of confidence when you outclimb the other guy in the same thermal.



# BETTER BADGE &

by Tony Burton

The following article is a draft excerpt from the new SAC Rules and Procedures Booklet for FAI badge and record flights which will be available in the spring. After one year on the job as FAI Awards Chairman, and seeing many claim applications of rather dubious quality, it has become apparent that many Official Observers don't have enough information on how to satisfy the intent of the FAI Sporting Code, and don't really appreciate the seriousness of the work they are required to do for the pilot. Also, the pilots were not often making the Observer's job any easier, for such reasons as poorly executed turn point photos.

In the rewrite of the booklet, I intend to present in a straight-forward manner not only what evidence is required to prove a flight claim, but also why it is required; and to add every possible helpful hint I and others can recall to illuminate the "straight and narrow way" to procedural righteousness. The FAI Badge Application Form has also been redesigned to eliminate certain errors of omission which frequently occur.

Once the new Rules and Procedures Booklet is available, it's hoped that the percentage of impeccable badge and record claims which reach the desks of me and the Records Chairman will climb high enough for us to throw away our form rejection letters.

## Photographic Evidence of Reaching the Turn Point

1. Generally, the camera substitutes for an Official Observer at the turn point of a flight. As such, it must have the same integrity and offer the same proof of accomplishment as can be provided by the witness.
2. Proof that a pilot has reached a turn point (TP) is therefore shown by a photograph of the TP which has been taken within the correct observation zone. This zone is a 90 degree sector on the ground having its apex at the TP and oriented evenly about the extended bisector of the two course lines meeting at the TP. The glider has no limitation in altitude or distance from the TP.
3. Photographic evidence is acceptable provided that all photographs concerning a flight

are on a single uncut length of film and that there is proof that these were taken:

- a) by the pilot (or his passenger if any) on the flight in question,
  - b) of the declared TP's in the correct sequence,
  - c) between the time of leaving the departure point and arriving at the finish point.
4. The uncut negative strip must contain as a minimum:
    - a) first, a photograph identifiable as having been taken just prior to the flight and under the supervision of the OO. This is best done by photographing the flight declaration card.
    - b) one photograph of each TP in the declared sequence.
  5. Hints to the pilot
    - a) it is preferable that you do not use colour film. Colour negatives can be more difficult to interpret, and the OO is most likely limited to sending the undeveloped film to "assembly line" colour processors who may cut the negative strip regardless of directions to the contrary.
    - b) For an important flight, have the OO send the undeveloped film to a local portrait or commercial photographer who will take more care in processing and who the OO can see personally.
    - c) Practice your turn point photography before setting out on a flight that counts. Check the camera mounting to ensure that the canopy rail is not obscuring a portion of the photo.
    - d) If the turn point is obscured by a portion of the glider or by cloud, etc. the evidence is not invalidated provided that the photo shows related ground features that prove the glider was in the approved sector.
    - e) Be prudent and take more than one photo of the TP, particularly if the camera is handheld.
    - f) Interpretation of the precise camera position from an oblique aerial photograph is a complex skill to master. Don't make things difficult for your OO by taking your TP photo near the edge of the allowed sector, or by having the camera tilted with respect to the horizon because the glider is

not in a level turn or the camera is held crookedly. The closer you are to the center-line of the allowed sector, the less chance you will have of an otherwise correct photo being misinterpreted and disallowed.

- g) Choose your turnpoints with care. Good ones are well known to the Observer, are well known to other local pilots, have clearly recognizable or unusual ground features which show up on a map of the area, and have at least one large vertical feature in the area such as a tall building, grain elevator, water tower, mast, etc.

## Photographic Control Methods

1. The film must be under the control of the O.O. at all times in order that he is *certain* that the photos were taken on the flight in question. His "control" during the flight is the camera seal or a mark on the canopy.
2. The O.O. must personally load the camera with an unused film if the flight is to be submitted for external recognition. He must know the film is unused by buying the film himself or breaking the foil wrapping. It is not necessary for an unused film to be used for badge flights or national record flights when an INSTAMATIC-type sealed cassette is used.
3. If the camera is to be hand held, it must be sealed by the O.O. If the camera is to be mounted in the cockpit, the O.O. will mark the outside of the canopy in front of the camera lens with a random line just before the pre-flight photograph.
4. The first photograph(s) of the flight evidence shall be taken of the declaration card just prior to the flight. It shall be taken by the O.O. or by the pilot under the O.O.'s direction. The declaration should be clearly printed in bold letters and be photographed closely enough to the camera as to fill most of the negative. For fixed-focus cameras, this means using a fairly large card or board. The declaration must contain the following information:
  - a) date
  - b) time-of-day
  - c) type of flight to be attempted
  - d) description of turn point(s), if any, in order

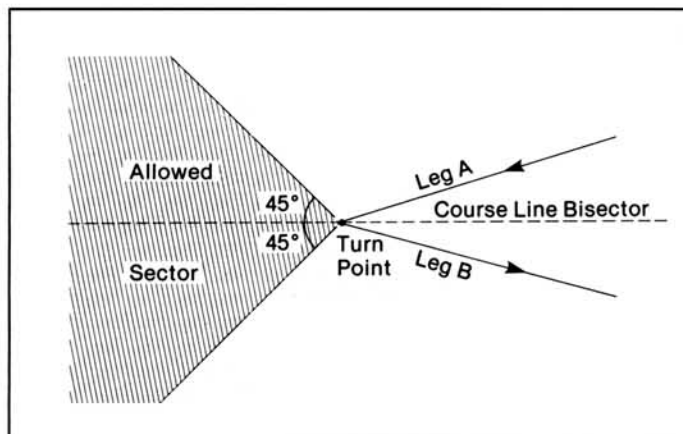


FIG. 1

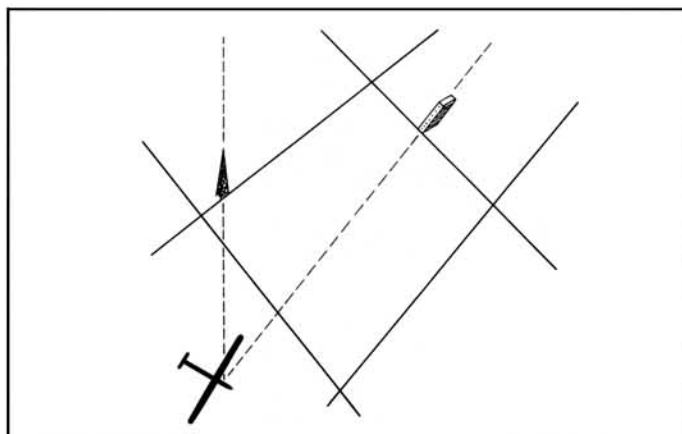


FIG. 2



# RECORD CLAIMS

- of progression
- e) pilot's signature
  - f) O.O.'s signature
  - g) make, model and registration of glider
5. The pilot or passenger, if any, shall take at least one photo of each TP from the approved sector, and in the declared order.
  6. After landing, it is desirable that the pilot or O.O. take closing photographs as additional proof that TP photos could not have been taken outside the time of flight. A new photo of the declaration with new time of day is good. If the pilot lands out, a photo of the area or landing witnesses will do.
  7. As soon as possible after the flight the O.O. is to take charge of the camera and personally unload the film and have it developed. The *entire* negative strip must be uncut for flights requiring external recognition. For badge and national records, only the flight evidence negatives must be on an uncut strip. The O.O. is then to study the negatives and get whatever additional prints and maps of the TP area that are necessary to establish undeniable proof that each TP was reached. The O.O. or a reliable witness shall certify each TP, preferably on the reverse of the TP print. Unless it is absolutely clear from the orientation of ground features in the TP photograph that the glider was in the correct sector, the O.O. shall also have performed sufficient analysis of the photo and maps to prove the glider was within the sector.
  8. If the O.O. who processes the film is not the O.O. who controlled the preflight photograph, a mounted camera must also be sealed.
  9. Hints to the official observer.
    - a) Note that it is *not sufficient* that you are personally sure the photographic evidence of a flight is complete, it is necessary that the proof be incontestable to a third party (the SAC Awards of Records Chairman for example) who is disinterested in the flight in question and examines the evidence at some later date. For example, it is not enough to simply sign the claim application that verified the TP photos, you must *prove* it. It may be necessary to submit an adequately sized print of each TP together

with a sufficiently large scale map segment of the TP showing the approved sector and best estimate of the glider's position over the ground. The more "bland" the TP is, the poorer the quality of the photo, the closer to the edge of the sector the photo is taken, the more carefully must the proof be presented.

- b) If the O.O. in charge of the photographic evidence cannot identify a particular TP, he may have a second O.O. who is familiar with the area separately verify it.
- c) Photocopies of map sectionals are allowed.
- d) You do not have to send in the entire map, the relevant portion containing the TP area is suitable; however include the map serial number and scale if the portion you have used as evidence contains few commonly known landmarks.
- e) The map scale to be used must be large enough to clearly show the important distinguishing landmark of a TP.

## Photographic Interpretation Techniques

1. Some methods described here to determine the position of a glider from interpretation of TP photos in conjunction with a sufficiently detailed topographic map of the TP area have been extracted from an article in the Australian Gliding Year Book 77/78 by C.E. Wallington.
2. *Vertical Features.* A geometrically fundamental characteristic of any vertical feature in a turn point photo is that it always points (from its top to its base) to the ground position over which the photograph is taken. Thus, straight lines through the photographs of the towers in the below figure 2 always intersect at the ground position of the glider. So, if there are two separate and distinctive vertical features in a TP photo the problem of determining the glider's position is simple - provided that the two lines are not parallel or very close to parallel. It is not easy to find turning points with a convenient pair of vertical features, but even one such feature can at least provide a line on the glider position.
3. *Horizontal Features.* The alignment of horizontal features on the ground can be used to determine the glider's position over the ground.

The obvious features on a photo which line up are those which lie on edge of the photo. First, as accurately as you can, delineate the top, bottom and sides of the photographed area onto a topographic map of the TP region. The photographed area will have a shape on the map similar to Figure 3, - in which the letters T, B and S denote the straight line boundaries corresponding to the top, bottom and sides of the TP photo, and D denotes the diagonals of the resulting quadrangle drawn on the map. The technique is then; extend lines T and B to their intersection, similarly find the intersection (I) of the extensions of the sides (S). Join these intersection points with a straight line (V) and finally draw the last line (P) at right angles to line V through the intersection of the diagonals. If the camera was level or almost level with the horizon when the TP photo was taken, then lines T and B will be essentially parallel and line V cannot be completed. In this case, the glider's position will be at point (I) or slightly towards the side to which some convergence of the lines T and B is evident. If, as is likely, the boundary lines of the photograph cannot be determined exactly on the map, then extend pairs of parallel lines while doing the above geometry, letting the line-pair's spacing be a measure of the uncertainty of the boundary. The glider position will then resolve itself to a most likely area.

4. *Vertical Areas.* This is a simple method of determining where the position of the glider is *not*. Then, by the process of elimination, one may narrow the area in which the glider must be located. The method does require that the TP photo be sharp, and large enough that the sides of some features are visible in it. Examine the sides of features such as bridges, buildings along a straight road, etc. which may have vertical sides which are visible. If so, then the entire area of the photo behind that visible face may be eliminated. Other similar areas transferred to a map will narrow down the location. This process is most valuable when considering features which are oriented generally top to bottom in the photo, because areas can be eliminated which are close to the true position of the glider.

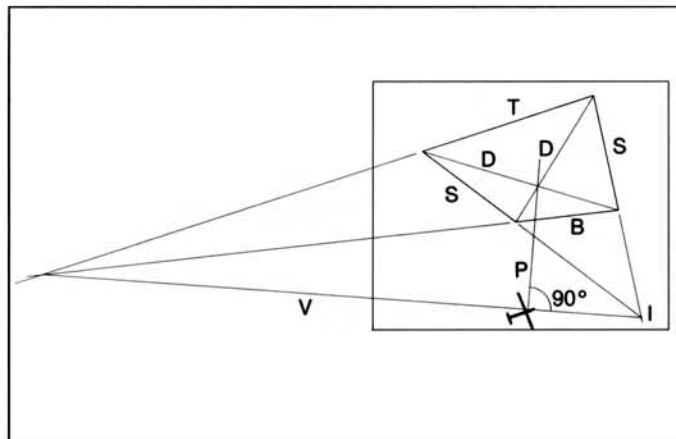


FIG. 3

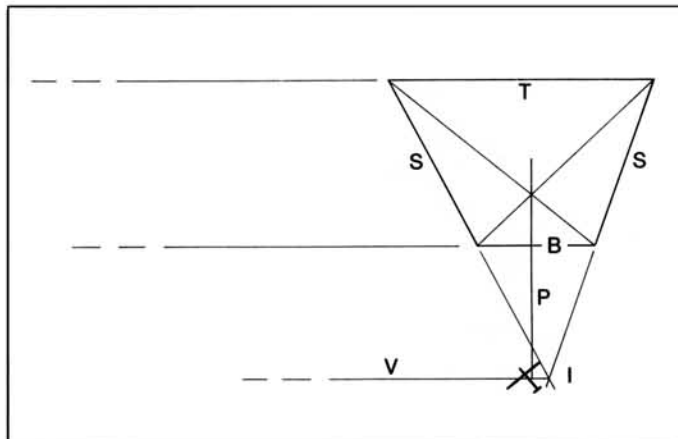
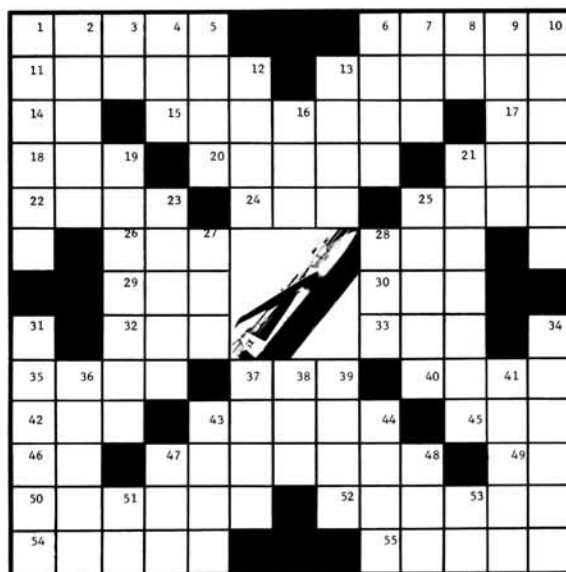


FIG. 4

## ACROSS

1. Pictured two-place
6. Type of word or phrase
11. Ended;less
13. Seen at oil field
14. Niobium (chem. symbol)
15. Slipped by (as time)
17. Pres. Shreiter to friends
18. Base Borden's Bell to friends
20. Unnecessary ornament; a ruffle
21. Three (comb. form)
22. Tiny particle
24. Type of knockout (abbrev.)
25. Act of lending
26. Negative function word
28. Country's Air Regs. (abbrev.)
29. Time period
30. To direct
32. Decay
33. Anger
35. Formerly Persia
37. Comrade (colloq.)
40. A sharp, cracking sound
42. Me (French)
43. Firm; not liquid
45. Pedal digit
46. Barium (chem. symbol)
47. Wolf Hirth's gull wing
49. F. Nightingale's followers (abbrev.)
50. Some of the bridegroom's attendants
52. Scold; rebuke severely
54. Meat and vegetable dish
55. Place as filled by a substitute

# Crossword



## DOWN

1. Polish Sailplane - SZD-41
2. Monastery head
3. Sodium
4. Shoshonean Indian
5. One's own identity
6. Honey (French)
7. Not young
8. S.A.C.'s - ., Beasley
9. Jeweled headband
10. Eying amorously
12. Slingsby Sailplane
13. Capital of Norway
16. High-performance from Finland
19. Latest kit sailplane (USA)
21. Agony; agitate
23. Feeble-minded person
25. Dens
27. To make handmade lace (verb)
28. Awards Tony Burton handles (abbrev.)
31. Hal Wernburg flew mini version
34. Unfolded; first lead
36. To cook in an oven
37. Nerve fibers; Varolii
38. "The Greatest"
39. Appendage
41. Large artery
43. Title of respect (plur.)
44. Do (3rd. person singular)
47. European gull; cat sound
48. Knack; craft
51. Pronoun; male
53. One (Northern Scot. dial.)



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# 14 Laws of Soaring

Submitted by A. O. Schreiter

## S.A.C. Directors' Meeting Cont'd.

lunchtime and the end of our meetings. It had been a busy two days; we all left with some sense of accomplishment and a host of new tasks to be worked on before our next meeting in January and the 1979 AGM.

Perhaps we should just mention that the government pays our fares to the meetings; without that assistance these meetings would not be possible and SAC would be the poorer for it!

Russ Flint  
SAC Director-at-Large

**CLUB PRESIDENT'S LAW:** If you explain something so clearly that nobody can misunderstand, someone will. If you do something that you are sure will meet with everyone's approval, somebody won't like it. Procedures devised to implement a purpose won't quite work.

**MEMBERSHIP SECRETARY'S LAW:** You can lead a horse to water, but if you can get it to float on it's back you've really got something.

**MAINTENANCE DIRECTOR'S LAW:** Everything put together will sooner or later fall apart.

**FIELD MANAGER'S LAW:** Any improbable event that would create maximum confusion if it did occur, will occur.

**STUDENT'S LAW:** In a crisis, most people make the worst possible choice.

**INSTRUCTOR'S LAW:** When in doubt, mumble.

**HOT PILOT'S LAW:** A pilot with one vario knows whether he is going up or down. A pilot with two varios is never quite sure.

**PILOT'S LAW:** If you thermal by the book and are going up, something has gone wrong.

**OLD PILOT'S LAW:** The truth of his stories has nothing to do with their credibility, and vice versa.

**CROSS COUNTRY PILOT'S LAW:** The chance of thermals quitting 50 miles from home is directly proportionate to the cost of your sailplane.

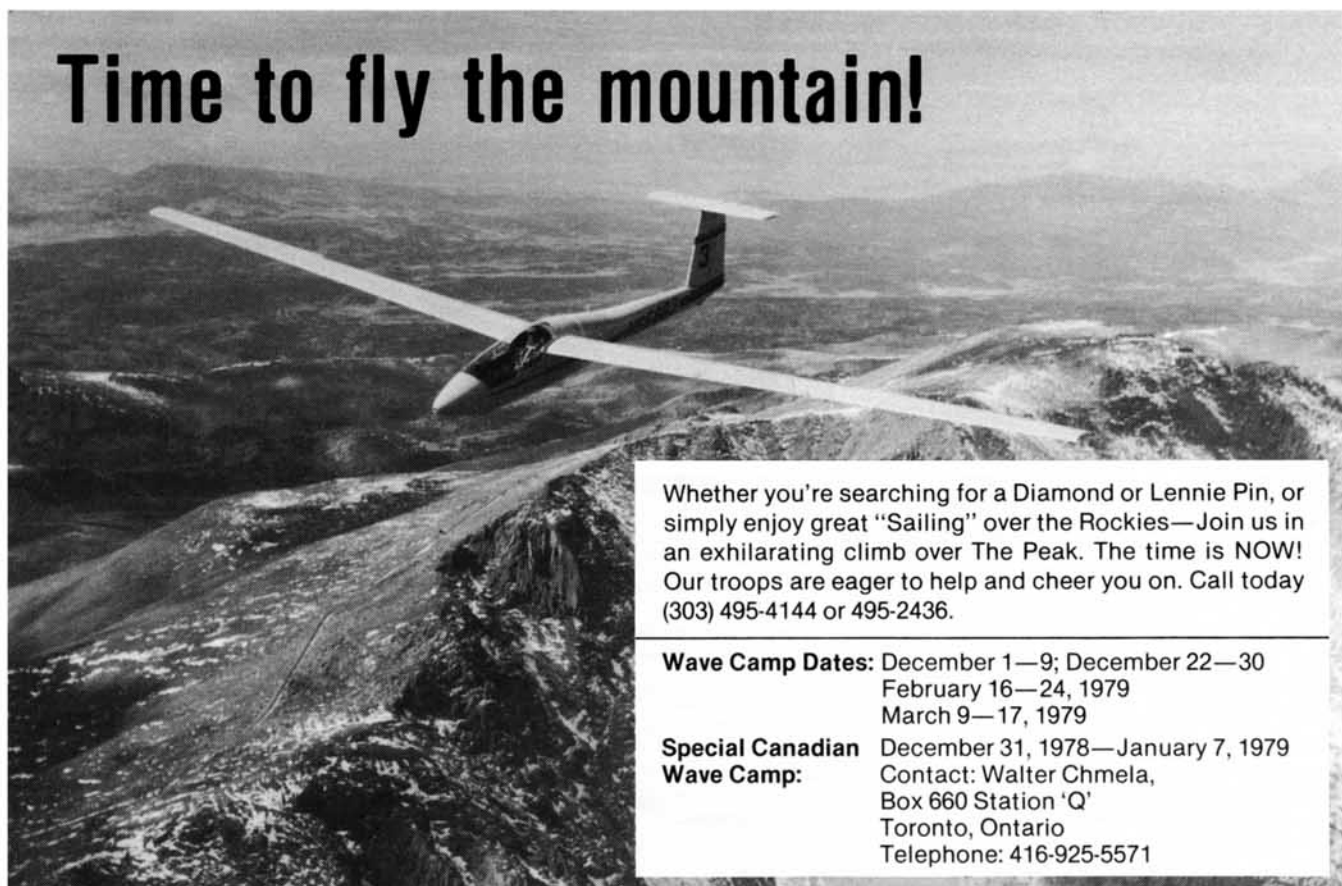
**HOMEBUILDER'S LAW:** If you tinker with something long enough, it will break. Failures will always occur in the most inaccessible location.

**DESIGNER'S LAW:** Build a system that even a fool can use, and only a fool will use it.

**SCHREITER'S FIRST LAW OF EVOLVING SYSTEM DYNAMICS:** Once you open a can of worms, the only way you can recan them is to use a larger can.

**MURPHY'S LAW:** If anything can go wrong, it will.

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ASW 12



K7



ASK 13

# Schleicher's 50 Years

by Mark Perry

ASW 19B

The Alexander Schleicher Segelflugzeugbau in Poppenhausen (Wasserkuppe) can celebrate a special kind of jubilee this year: its 50th anniversary - which means that Schleicher is one of the oldest sailplane manufacturers in the world. However, the Schleicher company not only represents a long tradition, they also proudly point to high quality, outstanding performance, and the most modern developments in sailplane manufacture.

#### "Hol's der Teufel"

In 1928 skilled joiner Alexander Schleicher founded the sailplane works in Poppenhausen/Rhon after he had surprisingly won a training competition of the Wasserkuppe the year before. He won the competition with a homebuilt 'bus' the air-

worthiness of which was doubted by the experts of the time and was therefore called "Hol's der Teufel" - "the Devil take it" or, "hang it". As an active glider pilot Alexander Schleicher carried out pioneer work for the new sport on the Wasserkuppe, the birthplace of gliding.

The gliders designed by Alexander Schleicher and built of wood soon became well-known, notably for their solid construction, and in the early years a considerable number had already been produced for export. Because Schleicher intended further development of sailplane manufacture in accordance with the spirit of the times, he had new designs prepared by graduate engineer Hans Jacobs, the world record glider pilot Heini Dittmar and by Prof. Alexander Lippisch: a large number of the *Rhonbussard*, as well as the *Rhonadler* left the works in the early Thirties. These were followed by the *Kranich*, *Condor*, *Meise* and the *Grunau Baby II*.

The quality of Schleicher gliders is not only illustrated by the fact that some of these types are still flying today, but is also

pointed out by the striking successes at national and international competitions.

In 1938 the factory gave work to more than 100 employees. Schleichers then had to change over for the mass production of training gliders for basic training of the Air Force.

#### A New Start in 1951

After World War II the firm of Schleicher first produced furniture and other items because the Allies prohibited gliding for reasons of defence politics. After the re-admission of gliding in 1951 Schleicher resumed the manufacture of gliders. The switch from furniture to gliders was effected without difficulty because the skilled workers who had been manufacturing gliders until the end of World War II were still employed by Schleicher.

First the single-seat *Baby III* and the two-seat *ES49* both instruction and training gliders designed by Edmund Schneider were manufactured under licence. The high-performance two-place *Condor IV* was also manufactured.

#### Schleicher's Own Designs

In the fall of 1952 the first new Schleicher designs after World War II, designed by Rudolf Kaiser, were put on the market. From his drawing board originated the K-2, K-6, K-7, K-8 and ASK-13, among others, all wood-steel construction.



ASW 15



The K-6 built from 1955 onwards was particularly successful: in 1958 this glider carried off the OSTIV prize at a design competition and Heinz Huth became world standard class champion in 1960 and 1963. Owing to these successes the K-6 was manufactured in unprecedented numbers.

The designs for the ASK-14 and ASK-16 motorgliders also originated from the drawing board of Rudolf Kaiser. Both gliders were manufactured in wood-steel composite construction.

#### **The Revolution in Sailplane Manufacture**

In the early Sixties a revolution in sailplane manufacture began. Conventional wood-steel construction was superseded gradually by glass fibre reinforced plastic construction methods because of the performance increases obtained. In 1964 Schleicher put their first high-performance glass fibre glider on the market, the ASW 12 designed by Gerhard Waibel, then German Open Class Champion. The ASW 12 was outstanding for its low empty weight and in its overall design the glider was far ahead of its time. Even today Hans Werner Grosse still holds the 1400 km Straight Distance made in the type.

The successful ASW 12 was succeeded by the ASW 15, and the no less successful ASW 17 designed in 1970. The ASW 17 presently holds almost all distance records.

American Karl Striedieck flies this glider brilliantly and has twice made the longest out and return distance of more than 1600 km. In similar perfect style Hans Werner Grosse has completed more 1000 km flights with his ASW 17 than all other pilots together.

#### **"FRP", now "CRP"**

Since 1974 the ASW 17 has been manufactured with carbon fibre reinforced plastic (CRP) in the primary structure, an improvement on glass fibre reinforced plastic (FRP). Schleicher now has extensive experience with this new material which in the opinion of the experts is the coming material in sailplane manufacture.

#### **Reorganization of the Classes.**

In 1974 a reorganization of the glider classes was decided by the FAI. Instead of the two classes, Standard and Open, there were now to be three classes; Standard Class, FAI 15m Class and Open Class.

In accordance with the reorganization of the classes Schleicher adjusted its production program: For the Standard Class the ASW 19 and for the FAI 15m Class the ASW 20 were designed. The ASW 17 participates in the Open Class.

#### **Triumph at the 1978 World Gliding Championships.**

The 1978 World Gliding Championships

at Chateauroux, France became a unique triumph for Schleicher gliders: in the Standard Class Dutchman Baer Selen became champion with an ASW 19. With the ASW 19 it was the first time a glider placed first on eight of a total number of eleven flying days. In the FAI 15m Class Karl Striedieck became vice-world champion with an ASW 20, with only 44 points less than the world champion Helmut Reichmann of West Germany who won for the third time, this year with the "SB-11" - which is no production line glider. As well as the ASW 20 flown by Striedieck four others of this type came in among the first seven winners.

The greatest success, however, was the winning of the open class by George Lee of England who retained the title from 1976 in an ASW 17.

In the Open Class altogether four ASW 17's came in among the first seven winners and the ASW 17 placed first on six of eleven flying days.

Through this year's successes Schleicher took the lead of the "all time greats" because Schleichers have up to now built most of the world champion gliders.

#### **The Line-Up**

The current production program consists of single-seater, two-seater instruction, training performance and high-performance

gliders. For the Standard Class the ASW 19-B is offered, a further development of the ASW 19, with lower empty weight (only 240 kg) and higher all-up weight (max. 454 kg) that give better climb performance and a lower sink rate at high speeds.

For the FAI 15m Class the ASW 20 is available. With this glider the advanced pilot and competition pilot get a top class product: the ASW 20 is "just unbeatable" for approach and landing: landing flaps at +55° and extended top surface dive brakes allow a steep and slow approach with a short landing distance.

The ASW 20-L which may be flown in both FAI 15m and Standard Classes is a development of the ASW 20. By means of attachable wing tips the span may be extended 2 x .75m to 16.5m. Construction of the ASK 13 two-place instruction glider continues as before.

#### **New Designs Orientated to the Future**

Since the firm of Alexander Schleicher is constantly exerting itself for improve-

ment of models so far produced, and in new designs, in late fall last year a new instruction and performance two-place ASK 21 was presented, a glider interesting not only from the point of view of its performance but for ease of maintenance. A roomy safe cockpit for both pilots is as characteristic of the ASK 21 as is the tandem arrangement of the landing gear and the resulting low tailskid weight. In addition the ASK 21 is particularly suited for advanced instruction or for when the student flyer can take to a glass-fibre single seater with problems.

#### **"Partner of Glider Pilots"**

The firm of Schleichers, which can now look back on the manufacture of 8000 gliders, observes strictest quality inspections especially for increased production. Mass production at the expense of quality and thus safety is foreign to Schleicher. Therefore Alexander Schleicher Flugzeugbau continues to be a reliable partner in gliding for all lovers of gliding - whether student or record flyer.





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# THE FAI STORY

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If the Fédération Aéronautique Internationale, which plays a major role in the regulation of private flying and homologates world aerospace records, were to be dissolved today it would have to be revived tomorrow, or be replaced by a body with the same powers and functions. It is one of aviation's indispensable organizations.

By the beginning of the 20th Century the balloon and the airship had revealed the international character of flying. In 1903 the aeroplane emerged from the experimental into the practical era and added a new dimension to human movement between countries.

By then, many local and national aero clubs and similar organizations had been formed, and it reflects much credit upon those pioneer clubs that they brought the FAI into existence within two years of the first flight by a heavier-than-air craft, and three years before the first true aeroplane flight in Europe, the Fédération's birthplace.

The principal founders were Count de la Vaulx, then Vice-President of the Aero Club of France, Fernand Jacobs, President of the Aero Club of Belgium, and Major Moedebeck of the German Airship League. Their views on the subject were made known to the Olympic Congress in Brussels on June 10, 1905; the Congress welcomed them and passed the following resolution:

"The Congress, recognizing the special importance of aeronautics, expresses the wish that there be formed in each country an association having the mission of regulating aeronautic sport and that there be formed later a world federation of aeronautics, including all the national associations, with a view to various needs and general regulations for the popularization of aeronautics as a science and a sport."

The Aero Club of France was invited to call a meeting of all interested countries to give effect to the resolution. Eight nations -



*SOSA's three year old  
Citabria suffered  
wheel strut fatigue  
on take-off roll,  
bending wingtip,  
prop. and crankshaft.*





Belgium, France, Germany, Italy, Spain, Switzerland, the United Kingdom and the United States - sent representatives. The meeting was held in Paris on October 12, 1905, and the Fédération came into being in that city two days later. The first President was H.I.H. Prince Roland Bonaparte, of France, who held the office for twenty years.

Today the Fédération co-ordinates, controls and regulates international sport, competitions, races, and records relating to balloons, dirigibles, aeroplanes, seaplanes, amphibians, piston-engined aircraft, turboprop aircraft, turbojet aircraft, rocket aircraft, gliders, motor gliders, helicopters, autogiros, model aircraft, parachute jumps, jetlift aircraft, man-powered aircraft, space vehicles and air cushion vehicles. It also observes and homologates records made between specified points.

As a new form of airborne activity is introduced and becomes a practical means of transportation and/or sport so it is given recognition by the FAI, the rules for its use as a vehicle for sport or competition, or for establishing records, are framed and put into practice on an international scale by the Fédération. One of the latest sports to be brought within the Fédération's competence is hot air ballooning.

All the rules for sport and records for each type of aircraft or spacecraft are contained in the FAI Sporting Codes which consist of the main code containing basic principles and general rules covering all aeronautical sports and records, and separate codes for the different vehicles mentioned above. Among other things, the rules stipulate the margin by which a new record must exceed an old one.

The principal legislative authority of the FAI is the General Conference which ordinarily meets once a year and to which every member of the Federation may send one or more delegates. The Conference makes fundamental decisions on matters of interest to the FAI but has the power to refer agenda items, as necessary, either to the Council or to a committee set up for the purpose.

Responsibility for ensuring that the record bid is made in accordance with the rules falls upon the aero club representing the country in which the bid is made. The FAI has only a small staff and is not in a position to send officials to supervise every record attempt.

The substantiating evidence supplied to the FAI must be beyond dispute. Each class of record has its own procedure. Height records, for instance, require the aircraft to carry a sealed and exactly calibrated barograph. This instrument is also carried on endurance

and distance record bids. Supporting data in both instances is supplied either by standard flight instruments or instruments specially installed. Stop watches, laboratory-tested for accuracy, play an important part in most records. Attempts to break records between two specified points require accurate calculation of distance by spherical trigonometry; speed record courses need to be accurately surveyed to ensure that the distance is precisely determined. The official observers compile a file of information and this is sent to the FAI for examination. If it proves that all the rules have been observed the record is homologated.

The first speed record to be homologated by the Fédération was made by Santos Dumont, a wealthy Brazilian aeronaut living in France; he reached 37.378 Km/h (23.2 mph) on November 12, 1906. On the same day he also set up a distance record of 220 metres (722 feet). The first height record to be homologated was set by Hubert Latham (France) on August 29, 1909, at 155 metres (508.5 feet).

These modest achievements were the first "absolute" records; the corresponding records today are: Speed - 3,331.507 km/h (2,070 mph); Distance - 20,168.78 km (12,531.391 miles); Height - 95,935.99 metres (314,750.065 feet). (The height record was made by an aeroplane launched from another; the record for an aeroplane making a conventional take-off stands at 34,715 metres - 113,891 feet.)

The FAI caters for all classes of airborne vehicles and devices and each class is broken down into an appropriate number of categories. (For instance, there are no fewer than thirty categories of free balloon records.) Some point-to-point records can be broken, and frequently are, in the course of normal air route flying. The various classes include categories exclusive to women.

Another subject which came under the FAI's review in the early days concerned the qualifications to be acquired by applicants for the issue of a pilot's licence. In due course the Fédération framed regulations based on those governing the issue of licences by the Aero Club of France drawn up in 1901 and 1909. The regulations were adopted by the FAI at a meeting on October 28, 1910; by today's standards the terms were not exacting, but they were stiff enough at the time. Normally, licences were issued (and still are) by the appropriate government department of the various countries, usually through the national aero club, whose officials conduct the necessary tests. But some countries adopted the international regulations and still issue FAI licences. These, being recognized all over





the world, facilitate the movement of their holders between one country and another.

Canada has recently gone a step further and introduced a method which makes a pilot's status obvious at a glance. Qualifications, additional to those required for the issue of the licence, are indicated by different coloured seals, the colours corresponding to specific qualifications. A fully qualified pilot carries a gold seal on his licence. The scheme will doubtless be followed by other countries.

Present-day air traffic rules grew out of the procedures adopted by the FAI on June 20, 1912. These introduced a measure of standardization and made things easier and safer for pilots who crossed national boundaries to land on "foreign" soil.

Customs difficulties were overcome by the issue of a "Triptyque", introduced by the Fédération at the suggestion of the aero clubs of France and Italy, in January, 1913. This exempted the aeroplane from the import

duty which would otherwise have had to be paid.

Later, this document was superseded by a "Carnet de Passage en Douanes", or Customs Carnet, the validity of which was recognized by twenty-five countries. Now, the Carnet has been replaced by the "General Declaration" and the regulation "Flight Plan".

Sometimes the interests of private and sporting aviation conflict with those of commercial aviation. For this reason the FAI has a permanent representative at the Montreal headquarters of the International Civil Aviation Organization, to take action should any ICAO proposal appear to threaten or unnecessarily restrict the scope of those sectors of aviation that lie within the FAI's province.

Further to encourage the sport of aviation and private flying as well as to reward the breaking of all kinds of records, the FAI each year awards a number of medals and diplomas. First comes the FAI Gold Air Medal, which has long been established as the Fédération's most important award. Other

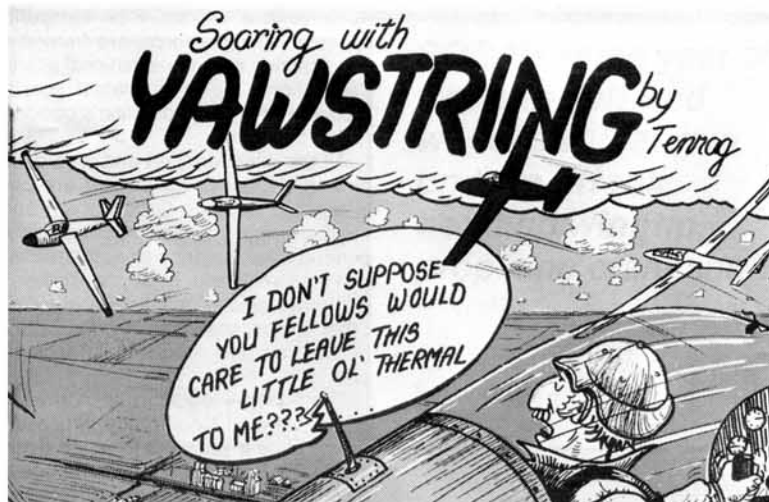
## Book Review

### SOARING WITH YAWSTRING

by Tenrag

Puckrins Production House

60 pages, \$5.00



Yawstring is a cartoon character already familiar to members of the Edmonton Soaring Club as a result of regular appearances in their club's newsletter "Towline".

He seems to have done it all; from upsetting the patient instructor in the back seat, to bragging to the new members about his memorable flights, or praying when on final into a strange field.

Every pilot who ever took a glider off the ground will "see himself" somewhere in this series of cartoons of Yawstring and his antics. Rather than a series of unrelated cartoons, "Tenrag" has produced a series that start with Yawstring's first visit to the glider field. You then follow him through his intro flight

and instruction. You see him at the ground school, timekeeping and all the familiar activities around the gliding club.

His problems on cross-country and with retrieves will bring back memories for pilots and crew alike. Yawstring has also been involved in homebuilding, and being a family man he has had his share of household "chores" to perform before escaping to the field.

Tenrag's style makes Yawstring relate to you - no matter if you are a seasoned contest pilot or a student still struggling with towing technique some of Yawstring's actions will bring a smile, a chuckle, or perhaps make you laugh out loud.



awards of long standing are the de la Vaulx Silver Medal for absolute records made during the year; the Louis Bleriot Medal for records established during the year in the first two categories of light aircraft; the Lilienthal Medal rewards outstanding flying performance in gliding.

More recent medals adopted and awarded are: the FAI Gold Space Medal; the "Yuri Gagarin" Gold Medal; the FAI Gold Medal for parachuting and the FAI Bronze Medal for persons who have rendered valuable services to the FAI. In addition to the medals there are the Montgolfier Diploma for ballooning performances; the Leonardo da Vinci Diploma for parachuting; the Paul Tissandier Diplomas for services rendered; the "V.R. Komarov" Diploma for pilots of multi-seat space craft and finally Honorary Group Diplomas for groups of scientists and engineers of a particular organization. Walter Piercy received the first Tissandier Diploma in Canada in 1972 for his outstanding contribution to gliding instruction.

Like many other international bodies, the FAI holds its annual meetings in one or other of the member countries. Today, there are sixty-four members, all of whom still subscribe to the objects defined in the by-laws adopted when the Federation was formed sixty-seven years ago:-

To secure international regulation of aeronautic sport.

To favour the development of international touring.

To assure the unity of the aeronautic movement and safeguard the material and moral interests of aeronautics in all the countries represented, and

To concern itself with everything relating to aerial activity, directly or through its permanent or temporary committees.

To these ends the Fédération Aéronautique Internationale has discharged its obligations efficiently and consistently for well over half a century.

# YAWSTRING

A collection of gliding cartoons by Tenrag guaranteed to bring back memories good, bad and embarrassing \$5.00 in the U.S. and Canada (other countries add \$1.00 postage and handling)

Our apologies in advance to all hardworking glider instructors

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| Span                    | 15.0 m                  | 15.0 m                  |
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| Empty weight            | 220.0 kg                | 290.0 kg                |
| Max. weight             | 450.0 kg                | 470.0 kg                |
| Water ballast           | 140.0 kg                | 120.0 kg                |
| Wing loading            | 29.45 kg/m <sup>2</sup> | 36.47 kg/m <sup>2</sup> |
| Best L/D (max. wt.)     | 42 @ 117 km/h           | 41 @ 117 km/h           |
| Min. sink (min. wt.)    | .56 m/s @ 73 km/h       | .61 m/s @ 77 km/h       |
| Stall speed (min. wt.)  | 60.0 km/h               | 66.0 km/h               |
| Rate of climb           |                         | 4.0 m/s                 |
| Take-off to 15 m height |                         | 300.0 m max.            |
| Cruise                  |                         | 135.0 km/h              |
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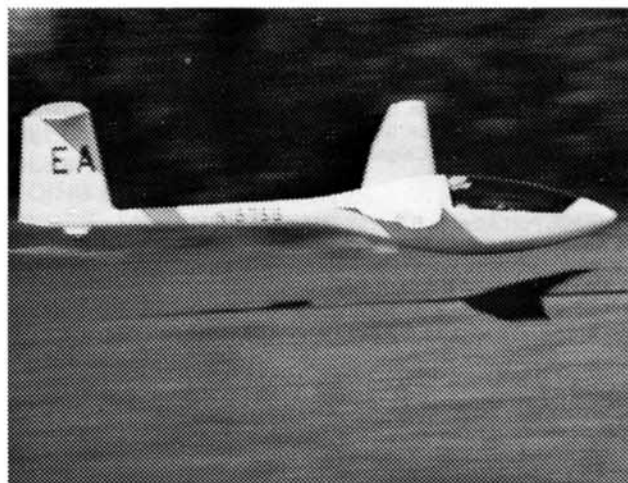
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|     |  |             |
|-----|--|-------------|
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"STREAKER" PPK-208, Oviedo, FL. Photo by Tom Chitty, Jr.

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| 2  | 3 Labor Day  | 4  | 5  | 6  | 7  | 8  |    |
| 9  | 10   | 11 | 12 | 13 | 14 | 15 |    |
| 16 | 17   | 18 | 19 | 20 | 21 | 22 | 23 |
| 23 | 24   | 25 | 26 | 27 | 28 | 29 |    |

# Letters

Dear Bob,

I would like to comment on Oscar Boesch's letter on glider aerobatics in the May/June issue of Free Flight.

I fully agree with his recommendations to novice aerobatic pilots, particularly the second one, requiring dual instruction by a qualified instructor. However, it is extremely ironic that, due to a placarding error, it is illegal to do this in one of the very few types of aerobatic two-seaters in Canada - the Blanik L-13.

The Canadian type approval for the Blanik, requires, among others, the following placard:

"Aerobatics prohibited if gross weight exceeds 900 lbs."

Since dual gross weight falls in the range

1,000 - 1,100 lbs., this placard prohibits dual aerobatics. The Blanik Flight Manual shows that this placard is in error and that it should read along the lines of the FAA Blanik Placard:

"Maximum Weight  
Limited Acrobatics (2 occupants)  
1,100 lbs.  
Acrobatic Category (1 occupant)  
880 lbs."

The survival of this anomaly for so long, may be due to the fact that hardly anybody reads cockpit placards. Some people may feel that this is a trivial point, and I know that Blaniks are routinely used for aerobatic instruction, but I wonder what the legal and insurance implications might be if there was an accident involving a Blanik doing dual aerobatics?

Yours sincerely,  
Simon Youens

Dear Bob:

Reference page 22, Sept/Oct 1978 FREE FLIGHT. I bow, albeit creakily, to Alex Fulton of the Gatineau Gliding Club for achieving his Silver C at age 67. Congratulations Alex - feels good, doesn't it!

For what it's worth, the reaction to my own claim to "oldest Canadian Silver C" (page 3 Nov/Dec 1977 FREE FLIGHT) ranged somewhere between "ho-hum" and "who cares". At any rate no one disputed it.

I say, that makes you current title-holder and I think SAC should issue you at least a certificate to that effect (ancient buzzard award?) suitable for framing, to impress our contemporaries and (sigh) maybe even a few of our juniors.

How now Alex? Plotting 300 km triangles already?

Don McKay

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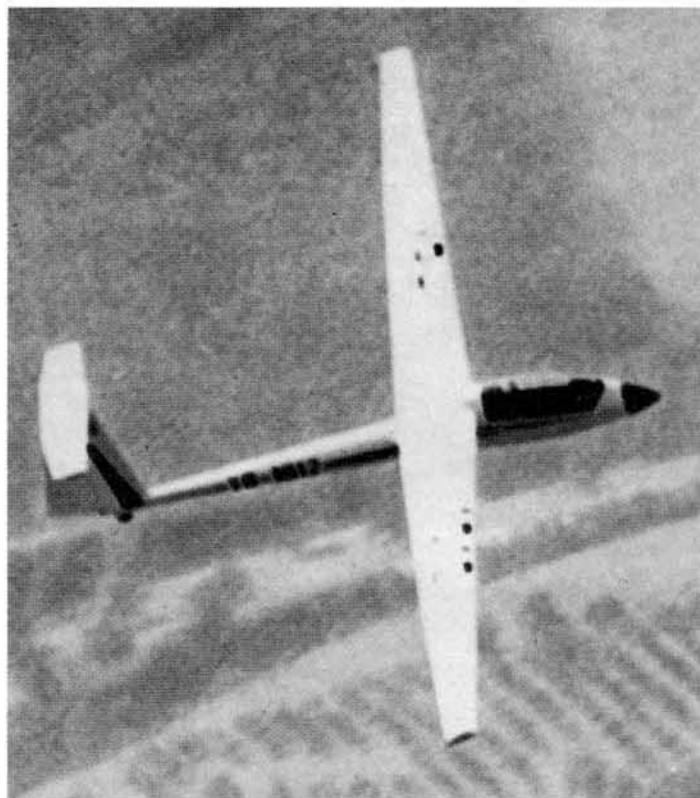


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