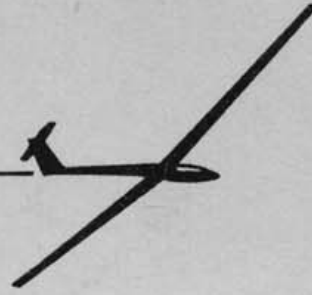


March 72



Free Flight

official publication of

THE SOARING ASSOCIATION OF CANADA

1972 ANNUAL GENERAL MEETING

The 27th Annual General Meeting of the Soaring Association of Canada will be held in Peterborough, Ontario, on Saturday, 25th March, 1972. The meeting will take place at the Holiday Inn (George Street) commencing at 9:00 a.m., followed by the "Happy Hour" at 6:30 p.m. and Dinner at 7.30.

The Agenda for the meeting and proposals received up to February 29th, 1972, are included in this issue.

NOMINATION OF TWO DIRECTORS-AT-LARGE:

After the Mail vote has been completed and the 4 Zone Directors have been elected, there will be an opportunity at the AGM, for the members present, and their proxies, to elect two Directors-at-large. Keep this in mind, and be prepared to nominate someone from any Zone, with enthusiasm, ability and time available to contribute to the Association. The seventh directorship will be held by David Marsden, who was President through 1971.

Mail nominations for the two Directors-at-Large to Mrs. N. Hamilton, Box 1173, Station B, Ottawa, Ont. K1P 5R2, before March 20th. The signatures of five current S.A.C. members are required for a mail nomination, together with the consenting signature of the nominee.

We, the undersigned members of S.A.C., hereby nominate -

_____ of _____
as a candidate for election to the Board of Directors of S.A.C.

Signed _____ club _____	Signed _____ club _____
Signed _____ club _____	Signed _____ club _____
Signed _____ club _____	

Candidate's consenting signature: _____

PROXIES:

A Club which is unable to have a representative at the AGM will lose its voting rights unless the club appoints a proxy. Written notice of a proxy appointment, signed by the Club President, should be mailed to Box 1173 before March 20th. Notices of proxy appointments may also be brought to the AGM by the proxy representatives.

TROPHY AWARDS AT A.G.M.:

The number of trophies increases every year, and reminders are necessary to obtain information to decide on some awards.

Roden Trophy:

This trophy is awarded annually to the club with the best utilisation of its equipment for the year. The formula gives all clubs, large and small, a chance to win. Will all clubs, who have not already done so, please submit their annual statistics - flights, hours, miles, for club and private aircraft, including number of machines and launch method - to Bob Gairns, 130 St. Francis Street, Chateauguay, P.Q. (Telephone: (514) 691-4754).

B.A.I.C., Canadair and "200" Trophies:

The BAIC trophy is for the best flight of the year; the Canadair trophy is for the 5 best flights in 1971, and the "200" trophy is for the 5 best flights during 1971 by a pilot who did not have more than 200 hours logged at the beginning of the season.

The rules and scoring for these 3 trophies are:

Free Distance	1.00	points/mile.
Distance to Goal	1.25	" "
Triangle	1.50	" "
Out and Return	1.50	" "
Altitude Gain	1.00	" /150 ft. gain.

ALL FLIGHTS MUST ORIGINATE IN CANADA

Note that, as a result of a ruling passed at the 1968 AGM, the only flights which will be accepted for these trophies are those for which basic details were submitted within 14 days of their completion.

(Winners are announced elsewhere in this issue).

Trophies - cont.

TROPHY AWARDS AT A.G.M.: (Cont.)

Instructor's Award:

This award is presented annually to the Instructor who has contributed the most to the Canadian soaring movement during the year. Will all C.F.I.'s, who have not already done so, please return their nominees.

VOTING POWER OF CLUBS AND INDIVIDUALS:

Club (Inc. Corporate)	20 votes
Club-Affiliated Member	1 vote
Married Couple Membership ...	1 "
Individual Membership (no Club) ..	1 "
Junior & Associate Memberships ...	No votes

COMMITTEE REPORTS:

President David Marsden requests all Committee Chairmen to prepare their reports for the A.G.M., as listed on the AGENDA.

ALL CLUBS are reminded that they should submit the usual Statistics reports, INCLUDING the information on the number of 'A' and 'B' badges issued, to Bob Gairns, 130 St. Francis St., Chateaugay, P.Q.

1972 NATIONALS:

S.O.S.A. Gliding Club will be hosting the 1972 National Contest to be held at Rockton A/P, Ontario, from July 25th to August 3rd, 1972.

1973 NATIONALS:

By tradition, these Nationals should be held in the West. Directors of the Clubs in the Western Zones should consider whether they will be able to act as Hosts.

A FIRM PROPOSAL is required at this A.G.M.

S.A.C. 27TH ANNUAL GENERAL MEETING

A G E N D A

- 9:00 A.M. Registration \$10.00 per person (includes evening meal)
- 9:30 Opening formalities
- 10:00 Committee Reports:
- | | |
|-------------------------|-------------------|
| Treasurer's Report | Mrs. Terry Tucker |
| Membership Secretary | Mrs. Terry Tucker |
| Statistics | R.C. Gairns |
| F.A.I. Committee | J. Firth |
| F.A.I. Awards | C.M. Yeates |
| Trophies & Awards | P. Trounce |
| Technical Committee | T.R. Beasley |
| Group Insurance | T.R. Beasley |
| Instructors | W.J. Piercy |
| Fitness & Amateur Sport | W.J. Piercy |
| Meteorology | S. Froeschl |
| Air Space | D.G. Tustin |
| Safety | A.N. le Cheminant |
| Historian | A.N. le Cheminant |
| Radio | J. Firth |
| Communications | F. Cole |
| Air Cadet Liaison | H. Bruhlman |
- 12:00 Luncheon
- 13:30 President's Report
- 13:45 Competitions:
- Report on preparations for Yugoslavia
 - 1973 Nationals
 - Proposal on Regional Contests
 - Proposal on Choosing our International Team
- 15:30 Self Launching Sailplanes:
- A brief review of the current state of affairs followed by a discussion of the goals that S.A.C. should establish for itself regarding pilot licensing requirements and rules for classification of the Self Launching Sailplane.
 - Proposal on pilots licencing (medicals)
 - Proposal on Trophies and Awards
 - Proposal on Instructors' Schools
 - Additional Zone Directors to give better regional representⁿ
 - Co-operation with the Air Cadet League.
 - Other Business.
- 17:45 ELECTION OF TWO DIRECTORS AT LARGE
- 18:00 Adjournment
- 18:30 "Happy Hour"
- 19:30 Dinner and Awarding of Trophies

S.A.C. 27TH ANNUAL GENERAL MEETING

PROPOSALS

The following Proposals have been received from S.A.C. President David Marsden. (They are listed in the order they appear in the Agenda for the meeting).

PROPOSAL ON REGIONAL CONTESTS:

It is proposed that during a year when there is an International contest, two regional contests be held instead of a single Nationals. This would allow more people to participate in contest flying and in particular would give western pilots the same opportunity to participate in Nationals level competition that eastern pilots have always had.

It is further proposed that during the years between international contests, a single Nationals be held to allow direct competition between pilots who might be on the international team and that whenever possible the Nationals be held in Manitoba to ease the problem of distance competitors must travel.

Advantages:

1. Allows a high standard of competition flying at reasonable expense.
2. The single Nationals on alternate years will allow comparative evaluation of pilot skill for selection of the international team.
3. This fits in well with the funding arrangements of the amateur Sports and Fitness Fund. - They will help with a National Contest or an International one, but not both in the same year.

PROPOSAL ON CHOOSING OUR INTERNATIONAL TEAM:

1. To be eligible, a pilot must have flown in the Nationals immediately preceding the International contest.
2. The members of the previous international team will be on the seeding list (subject to rule 1).
3. The first four finishers on the most recent Nationals will be on the seeding list.
4. The first three finishers at each of the eastern and western regionals will be on the seeding list, subject to rule 1.

Cont'd.

PROPOSAL ON CHOOSING OUR INTERNATIONAL TEAM (Cont.)

5. Pilots who apply to the S.A.C. Directors may be included in the seeding list on the approval of the Directors, subject to rule 1.
6. If special circumstances warrant it, the Directors may waive rule 1, but only if it doesn't contravene the spirit of this proposal that the team should be selected from pilots who have flown against one another in a recent competition.
7. The team will be chosen as soon as possible after the Nationals.
8. A deposit of \$200 will be required of each pilot selected for the international team as evidence of his willingness to go and to cover the cost of entry fees.

PROPOSAL ON THE 1974 INTERNATIONAL TEAM:

The 1974 international contest to be held in Australia will take place in January 1974, and this raises some special problems in timing the selection of our team.

We should try to make a team selection in Oct. 1972 in order to give them a little over a year to arrange for equipment to fly in Australia, and make personal arrangements for holidays in January, etc. We should consider some alternative procedures for team selection for this particular contest:

Alternative 1. Proceed as outlined in the above proposal on selection of international teams, except that S.A.C. would have to undertake the responsibility of finding suitable sailplanes to fly in Australia, and these would be taken over by the pilots selected in August 1973.

Alternative 2. A provisional team of about 6 pilots could be selected in October 1972 and this list would be reduced to a final selection after the results of the 1973 Nationals in which all members of the provisional team would compete.

Alternative 3. A team would be selected in October 1972 based on the results of the international contest, the contest at Rockton, and the contest at Claresholm.

Proposals - cont.d ..

PROPOSAL ON PILOTS LICENCE MEDICALS:

- (a) There is a concensus for acceptance of the current medical exam. requirement.
- (b) Contrary to some opinion there is no indication of a desire to increase the standard or frequency of medicals for passenger carrying and instructing.
- (c) There is agreement that qualifying time for the licence be increased. The Department is currently asking an increase to ICAO standards of 6 hours of glider flight time of which 2 hours shall be solo and include a minimum of 20 take-offs and landings. It is recommended that we accept.

PROPOSAL ON TROPHIES AND AWARDS:

The proposal would be to accept the report submitted by Peter Trounce. (For report see next pages. Ed.)

PROPOSAL ON INSTRUCTORS' SCHOOLS:

That S.A.C. should pay travelling expenses (10¢ mile) and a \$25.00 per day honorarium to the instructor in charge of instructor seminars to be held in both eastern and western Canada.

Comment: These instructors' courses which have been held at Pendleton and Penhold in the last few years have been very successful indeed and a lot of fun besides. The aim is to upgrade the abilities of flying instructors and to bring a degree of uniformity into our instruction syllabus.

This kind of activity is of enormous importance to the health of Soaring in Canada, particularly since this is the single most effective way that we can improve on the safety in flying sailplanes, through the quality and attitude of our flying training.

Walter Piercy and Don Skinner have done an excellent job in running these instructors' courses and we should try to be sure that they don't find it too much of a financial burden to provide this service for us.

SOARING ASSOCIATION OF CANADA ANNUAL REPORTS (Cont.)

Report of the Trophies Committee, 1971:

Purpose:

To enumerate and document SAC trophies and suggest improvements.

Notes:

1. Attached is a summary of the Committee's understanding of the Trophy situation.
2. As far as is known, there are no Trophy travel boxes. It is recommended that all trophies be collected at the upcoming AGM and SAC pay for boxes to be made.
3. It is recommended that trophies awarded at the AGM remain in SAC custody after the meeting.
4. It is recommended that trophies awarded at the Nationals be retained by SAC. In the case of the Hawkesbury and SOSA trophies, there are currently no replicas. In other cases, replicas will be given at the AGM.
5. "Compiler" in each case means the party responsible to recommend the award to the Directors based on information collected by the compiler.
6. It is recommended that the rules of award be collected at this time for Director approval. After approval, any further changes will be put into effect only after the Trophies Committee has had their recommendation accepted by a majority of the Directors.
7. Trophies should be kept in Ottawa as their normal home. If SAC cannot provide space, COPA should be approached for storage room (and perhaps display).
8. R.C. Gairns has documented the rules of the Roden Trophy.
9. J. Agnew will document the current holder of each of the trophies.
10. On inspection at the AGM, the Committee will arrange to supply any missing engraving on each trophy.
11. Rules for the "200", Canadair and BAIC trophies have been circulated and Bob Gairns has provided the final recommendation to the Directors.

Cont'd.

Report of the Trophies Committee (Cont.)

12. There is an interface between the Trophies Committee and the FAI Committee in that both are interested in high performance flights.

To prevent frayed tempers, it is recommended as above that Trophy rules be proposed to the Directors by the Trophy Committee, with copies in all cases to the members of the FAI Committee with an invitation for their opinions.

It should be an objective of the Trophies Committee that the rules be consistent with current evolution of the FAI - for cross-country trophies - with such abbreviations and simplifications as are appropriate to our wish to place a good measure of faith in people's honesty.

13. At the AGM all trophies should be inspected for possible repairs. For instance it appears the Hawkesbury trophy has a power plane on it - this surely should be changed!
14. Concerning the Jonothan Livingston Seagull trophy given to the Air Cadet League, it is recommended that SAC sponsorship of perpetual engraving, miniatures and autographed books is inappropriate since SAC does not do this for its own trophies, e.g. Canadair, SOSA, 200, Hawkesbury, Roden, Ball and Chain.
15. It is understood that Walter Piercy has been putting up the cost on the Instructor miniatures from his own pocket. It is recommended that SAC offer Walter our copious thanks and suggest that SAC would be happy to undertake this at the next opportunity.
16. It is recommended that the Ball and Chain and the Instructors' trophies be awarded solely on the discretion of the President and Instructors' Committee respectively.

P.C. Trounce,
Chairman,
SAC Trophies Committee

Attachment

<u>Trophy</u>	<u>Purpose</u>	<u>Trophy/Plaque</u>	<u>Replicas</u>	<u>Compiler</u>	<u>Awarded</u>	<u>Action</u>
Canadair	5 best flights (R)	Trophy	No	Gairns	AGM	Agnew to arrange base with name of all previous winners
Shell	Nat. Champ.	Trophy	Yes	None	T.@ Meet R.@ AGM	None
Carling	Nat. Team	Trophy	Yes	None	T.@ Meet R.@ AGM	Agnew to contact Carling for replicas
BAIC	Best flight from Canada (R)	Trophy	Yes	FAI Committee	T.@ AGM R.@ AGM	Trounce to contact BAIC for replicas
SOSA	Best first-time Nats. pilot	Trophy	No	None	Meet	
Dow	Nats. triangle	Plaque	No	None	Meet	Agnew to contact Dow for supply
Dow	Nats. O.&R.	Plaque	No	None	Meet	Ditto
Dow	Nats. Goal	Plaque	No	None	Meet	Ditto
200	5 best flights pilot under 200 hours (R)	Trophy	No	Gairns	AGM	
Hawkesbury C.of C.	Runner-up in Nats.	Trophy	No	None	Meet	
Roden	Best use of Club equipment (R)	Trophy	No	Instructors' Committee	AGM	
Ball & Chain	Significant Performance by a married pilot	Trophy	No	President	AGM	
Instructor's	Best instructor	Trophy	Pins	Instructors' Committee	AGM	

(R) denotes that award is determined by a set of rules rather than by self-evidence or nomination.

The following matter has been brought to the attention of the S.A.C. directors by Peter Trounce who requested that it be considered at the AGM:

Text of memo from P. Trounce:

"On Feb. 12 the writer attended the RCFCA Ontario Annual Meeting. One of the business items was Crash Position Indicators. We have all read in the magazines that the U.S. is going to require these for many types of aircraft.

"To my surprise I learnt that there is a Canadian regulation awaiting signature by the Minister of Communications. Approval is expected in "two weeks to two months" and these radios will become mandatory this year - as reported by RCFCA Director and Representative of Leigh Instruments.

"In answer to my specific question as to whether gliders and school aircraft will be exempt, the answer was "our understanding is that they will be included."

"A set was demonstrated at the meeting and it is anticipated that cost installed will be about \$300 in quantity, including the external antenna (mandatory).

"Since this will involve S.A.C. members in expenditures of say \$40,000 - \$50,000 it seems clear that S.A.C. is involved.

"I don't know if this is already being dealt with by one of our committees, but if not, I would suggest we take immediate steps to gain exemption from the requirement on a basis of demonstrated lack of need, and also that this be an urgent A.G.M. item."

Peter Trounce,
S.A.C. director-at large

S.A.C. MEMBER-CLUB SOARING SITE DIRECTORY:

Will clubs who have not already done so, please arrange to pencil a rough sketch showing their flying site location, along with two contacts, and forward this to W.J. Piercy, 184 Churchill Crescent, Kingston, Ont. Walter will arrange to sketch them on an 11 x 17" sheet for inclusion in 'Free Flight'. At the same time, please indicate if you wish copies of your Club's location map, as these can be run off at the same time as the issue goes to press. The cost will be \$2.00/100 copies.

W.J. Piercy,
Director.

AIR CADET LIAISON COMMITTEE REPORT:

General

Gliding familiarization programs were carried out at Summer Camps in Penhold, Trenton, Bagotville and Greenwood. In addition a number of Cadet Glider Pilots were trained as part of a trial program at each of the camps. A breakdown of activities is made in Appendix A, Air Cadet Gliding Activities. Winch launch was the basic launch system with the exception of commercial air tow used at Penhold and Sherbrooke Mobile Operations.

In all parts of the country excepting the Atlantic provinces steps have been taken to carry out glider operations on a local or area basis. This program has advanced more in Ontario where a working agreement has been developed between Air Transport Command and the Ontario Provincial Committee resulting in the formation of Gliding Centres at Trenton, North Bay, Camp Borden and Chatham which operate during the Spring and Fall. In the western provinces because of the distances involved in transporting cadets a mobile operation consisting of a winch and glider is moved into different areas.

The need for additional equipment is growing and consideration is being given to powered sailplanes with their introduction into the Air Training Corps of Great Britain. A trial program with one of these machines could afford the opportunity to determine what place if any powered gliders should occupy in the future planing for Air Cadets as well as determine what the M.O.T. position with regard to pilot licensing, instruction, and aircraft licensing might be for this type of glider.

The present Air Cadet League/Canadian Forces agreement with regards to gliding is outlined in Appendix B to this report. With the emphasis swinging from familiarization flying to training in order to keep qualified personnel available in the system modifications to this agreement will no doubt be negotiated.

Training

On a number of occasions, the Service has carried out so-called "gliding instructor courses" for the purpose of training personnel to operate the Summer Camp gliding programs. However, it must be admitted that these were really glider pilot courses, rather than instructor courses.

Assuming that there will be a continuing need for properly trained and fully qualified gliding instructors within the Air Cadet program, it is suggested that talks might be initiated between the League, the Service, and the Soaring Assoc. of Canada with a view to conducting an annual Instructors' course, possibly at one of the Summer Camp sites, immediately following the close of the camp. It is suggested with the League equipment, Service material support and Soaring Association "know how" a first rate Instructors' course could be provided for selected personnel who are already well qualified as glider pilots and who intend to continue their activities within the Air Cadet program.

The Service has prepared for publication, Glider Pilot training manuals, Instructor's Handbook, course training standards for glider pilot training and glider instructor training as well as SOPs for Air Cadet Gliding operations.

Two courses, one an instructor and one a pilot conversion are planned in Ontario for June.

AIR CADET LIAISON COMMITTEE REPORT (Cont.)

Jonathan Livingston Seagull Trophy:

This trophy, donated by the Soaring Association of Canada, has been awarded to Cadet Sergeant Serge Valade of 67 Sherbrooke Squadron, Quebec. Sergeant Valade took basic gliding training at Sherbrooke last spring and qualified for his Air Cadet Gliding Wings. He worked as a crewman at the Bagotville Summer Camp, earning sufficient flying time to qualify for his "C" Soaring Badge.

S.A.C. Involvement:

Requests in reply to a questionnaire sent to all Air Cadet Gliding centres are as follows:

From Quebec: Aid by S.A.C. member clubs in promoting Air Cadet Squadrons in the area serviced by the club. This could take the form of providing familiarization flights or gliding scholarships.

From Ontario: Provision of S.A.C. publications and information. The OPC gliding committee will be providing S.A.C. membership for each of the Co-ordinators of their gliding centres in order that they receive S.A.C. material.

Provision of qualified instructors for proposed courses.

As Air Cadets graduating from squadrons will no doubt turn to S.A.C. member clubs for the continuation of their gliding activities, Clubs should give consideration to offering assistance wherever possible to local Air Cadet Squadrons.

H.H. Bruhlman,
Chairman,
Air Cadet Liaison Committee

AIR CADET GLIDING STATISTICS 1971

Appendix A

Province	Facility	Total Flights	Cadets Trained	Adults Trained	Instruct. Trained	Gliders Type	Launch Method
Alberta	Penhold Summer Camp	2917	12			4 2-22	Air/Winch
Saskatch.	Mobile Operations (Oct - Nov)	238				1 2-22	Winch 1
Nova Scotia	Greenwood Summer Camp	2620	2	6	1	2 2-22	Winch 1
Ontario	Air Cadet League (Ontario)						
	Trenton Summer Camp	2117	1	1	3	3 2-22	Winch 2
	Trenton Gliding Centre (Sept-Dec)	469				1 2-22*	Winch*
	Borden Gliding Centre "	145				1 2-22*	Winch*
	North Bay Gliding Centre "	250				1 2-22*	Winch*
	Chatham Gliding Centre (June)	197				1 2-22*	Winch*
Ontario	Local Air Cadet Squadrons						
	44 Sarnia	Glider damaged at first of season				1 2-22	Winch 1
	294 Chatham	2932	12		2	2 2-22 1 1-26	Winch 2
Quebec	741 St. Thomas (Fly with London Club)	173				1 TG3 A	Air
	Air Cadet League (Quebec)						
	Bagotville Summer Camp	1718	3	1	2	2 2-22	Winch 2
	Sherbrooke Mobile Operations	422	4	2		1 2-22	Air
	* Equipment moved from summer camp						
	Totals	14,198	34	10	8		

Air Cadet League/Canadian Forces Gliding Agreement

The League has been advised by CFHQ that the Service is prepared to assume the following responsibilities:

1. Will support a glider program involving up to 16 gliders and 8 launching winches.
2. Will accept operational control of gliders during the designated Summer Camp periods and during specified glider instructor training periods.
3. Will accept responsibility for the servicing and maintenance of gliders and winches, including the incorporation of modifications deemed necessary by the Service design authority.
4. Will accept responsibility for the provision of the personnel necessary to permit familiarization gliding to be given to all Air Cadets attending Summer Camp.
5. Will accept responsibility for the establishment and enforcement of qualifications standards for all personnel concerned with Air Cadet gliding activities.
6. Will promulgate flying orders, flight safety procedures and standard operating procedures concerning cadet gliding operations.

F.A.I. COMMITTEE:

Low Point for Altitude Flights:

The new F.A.I. Rules (3.2 - Barographs) clearly indicate it is the responsibility of the pilot to "ensure that a low point is indicated on their barograms following release in order that the starting altitude may be exactly as determined."

Many pilots believe that this is not required if a certificate of release can be obtained from the tow pilot. This is not correct and, claims for altitude recognition that do not substantially go beyond particular badge requirements will not be approved.

It is suggested the pilots experiment on a thermal day to establish how much of a drop in altitude and how much time is required to appropriately mark barograph traces. This could make the difference some day on a marginal goal or diamond climb.

Chas. M. Yeates,
Chairman, FAI Awards

FIVE BEST FLIGHTS & "200" TROPHIES:

Results of the scoring for these trophies are:

"200" Trophy:

1.	B. Hea	Cu-Nim G.C.	1,166:2	points
2.	A. Grenville	Erin	599:6	"
3.	D. Pandur	E.S.C.	551:6	"
4.	P. Coleridge	G.G.C.	529:1	"
5.	J. Nagy	S.O.S.A.	528:5	"

(J. Nagy would have received 745 pts., but two flights were unacceptable as they were not endorsed by an Official Observer).

FIVE BEST FLIGHTS Trophy:

1.	B. Hea	Cu-Nim G.C.	1,166:2	points
2.	D.J. Marsden	E.S.C.	1,149:3	"
3.	A. Dumestre	Cu-Nim G.C.	1,036:9	"
4.	J. Firth	Unattached	983:0	"
5.	R.C. Gairns	M.S.C.	973:5	"
6.	D.B. Webb	M.S.C.	930:2	"

R.C. Gairns

ROYAL CANADIAN FLYING CLUBS ASSOCIATION

The following is the text of a letter received by SAC from the RCFCA dated December 13, 1971. Your comments are invited - please send them to SAC President, David Marsden, 3920 Aspen Drive W., EDMONTON 73, Alberta.

"Our Association - as I am sure does yours - constantly seeks ways and means of maintaining club member interest in aviation activities generally and in our own Association clubs' activities in particular. To this end, clubs stage fly-ins, breakfast flights, barbecues, dances and the like, all of which are designed to encourage club members to intermingle and to talk and exchange flying experiences, all to their mutual enjoyment.

"We all of us are aware that the other segments of aviation as a sport are equally attractive to their followers. We are also aware that relatively few power pilots come into contact with the soaring, model and parachuting interests even occasionally in spite of the fact that many would like to if the opportunities were to be provided. All of which brings me to the subject of this letter. It is simply an idea.

"For want of a better name, let's call it "Aeromingle". Within the word is the suggestion that at specific times in specific places, we in the promotional arena of sporting aviation should start mingling to show off our wares - not to the general public necessarily, but to ourselves!

"Why not ask the Podunk Flying Club or the Sassyfras Soaring Society to organize a sporting aviation day or half day? Why not ask the modellers, the power set, the para boys and girls to come over some Saturday afternoon to show what sporting aviation means to them?

"With a little organization, these people could put on their intensely interesting displays for their counterparts in the other aviation segments. We visualize, for example, an hour set aside for each - model aircraft in action, parachutists dropping close to the small crowd of club members present, gliding as it is done from the beginning, and precision power flying demonstrations.

"We further visualize the general public, except for guests of club members, would not be present. And we finally see a barbecue and/or dance in the hangar afterwards, with simple, reasonable costs being met by those participating.

"Do you think it could work? Would members of your segment take an interest in such an undertaking?

"If so, the RCFCA would offer to start "Aeromingle" rolling. We could come up with a basic display programme, select a club at a suitable airport and, given names and addresses of local people in your segment, make the initial organizational contacts.

"Your early reply would be very much appreciated. We should know as soon as possible so that we can make plans for the Spring.

"And from our segment to yours, best wishes for the best in 1972."

(Signed: Bill Tovell)

W.H. Tovell, President RCFCA

LETTER FROM ALEX GRENVILLE

Courtesy R.C. Gairns

"I have weathered Christmas and the New Year in good shape and have started the 1972 flying season with a Diamond flight at Black Forest on the 11th January, 1972. Our club (York) once again has organised a 'Wave Camp' at Black Forest gliderport and a good time was had by all. Twelve members, plus 2 from SOSA, attended and we returned with 4 Diamonds and 1 Gold.

"It was a hectic experience. I have flown at Black Forest previously (1967 to 28,000 and 200 ft. short of dia. height) and consider that site to be one of the safest, even for relatively 'low time' pilots.

"Flying operation was suspended all day January 10th because of extremely high winds. On the 11th January the windmeter in the Operations room still registered gusts from 15 mph - 85 mph. By midday the needle was still jumping up to 50 mph. I had the 1-26 (91 Sierra) 'gassed' up and ready to go all morning and I decided to have a go.

"Dick Sayers the Operations Manager must have had faith in my flying abilities and gave me the O.K. We dragged the aircraft to the short gravel runway to take off directly into wind (2 men at the wingtips and myself at the tail). One of the towpilots volunteered to take me up and I requested a relatively low tow towards the Air Academy and the Rampart Range, release to be around 11,500 A.S.L. when in wave.

"The 1-26 was airborne in a 20 ft. roll amongst clouds of dust. The ground effect was vicious and a good part of the 20 min. in tow was flown with spoilers fully out to 'kill' lift and stop the 1-26 skyrocketing. The whole length of the tow equalled the rough turbulence normally encountered only in the rotor zone. The closer we got to the Rampart range, the slower was our headway by reference to the main highway. Finally, the vario showed 600 fpm in tow, the air was smooth, ALT. read 11,500, the tug waved me off and I released. The vario dropped to 300 FPM, a quick ground reference and right then the rate of drift backwards away from the highway and the Range struck me as alarming. Just watching the ground moving forward, I could compare a 30-40 MPH carspeed at ground level - only I was going backwards. I increased my speed to 75 MPH and I was still 'inching' backwards. At 80-85 mph, I maintained my stand. Only trouble was that the vario dropped to 100 FPM down at that speed. I radioed Black Forest, gave my position, lift strength, height and ASI going backwards. I was sacrificing more than I was gaining. In no time I was down to 11,000 ft. (3,800 AGL). This was no way of gaining a climb to 30,000 ft. I eased back on the stick, got my 300 ft. gain again and let myself drift back towards the secondary or possibly the tertiary wave, and hoped for a corresponding drop in wind intensity away from the range. After the down came the up (Soaring pilots way of thinking). The vario climbed to 500 FPM, quick ground reference, increase in speed to 70 MPH, ground reference, increase in speed to 75 MPH, ground reference, speed 80 MPH, vario reading 100 FPM up and I had it. The first initial climb to 14,000 ft. was the hardest and comparable to a .5 m thermal scrape. At 14,000 the windstrength began to ebb and I eased back on the stick whenever a forward gain was evident and in no time I was climbing at 500, 600, 700, 800, 900, 1000 ft/min. At 17,000, Black Forest tower confirmed that the 'area' was opened up to 31,000 ft. At 24,000 in strong 1000 ft/min. plus, I radioed and

requested Black Forest tower to get Denver ATC clearance to 40,000 ft. (At 28,000 ft. up radio transmitters cease to function due to the extreme cold temperatures -50°C - most transmitters work well to 22,000 ft. or -10°C.)

My oxygen regulator started playing games from 24,000 up and every $\frac{1}{2}$ minute or so decided to go full blast; - the oxygen was rushing past the mask seal making rude noises at me. A quick blowback cured the situation for half a minute.

Things got worse at 28,000; the oxygen was cutting in on full pressure every 10 seconds, requiring one hand to press the mask to the face for clearing; - the canopy started to ice up at an alarming rate even though the cold air vent was fully opened at ground level. I gave up trying to clear a small window at the front of the canopy and concentrated on the sides. My right glove has a slit on the palm side, so I got my fingers out and I scraped with my fingernails, a 3" x 2" hole on the left side, switched hands on the stick and scraped a small hole on the right side, the only trouble was that the left one closed up again. In the meantime, the mask demanded constant attention (Yellow for jealousy would have been a more appropriate colour for the mask). The altimeter read 30,400, vario 700 ft. per min. The diamond was in the bag with a 2,000 ft. plus safety margin and I wanted to go higher. Spoilers out to stay below 31,000 ft. (if exceeded without ATC clearance above 31,000 the flight will not be verified I could hear Dick's voice from the night before cautioning me to stay well below 31,000). At that moment Dick Sayers must have read my thoughts and his voice was clear and still audible on almost full volume "91 Sierra! have you got your diamond height?" Needless to say my transmitter was knocked out, but my carrier wave was still audible. "If you have your diamond height, click your mike twice." Dick's voice came out of the earphones. I groped for the mike button with my left hand, clicked twice. Scraped the ice on the right, looked out, wings level, altimeter 30,500, spoilers out, dropped to 30,200, oxygen mask gurgling. "Are you above 29,000 ft?, if so click twice". Left hand on the mike, click twice; I cant see! Scrape the left, it's OK, wings are level, vario 700 fpm up, height 30,400, spoilers, oxygen mask requires clearing every 10 seconds, down to 30,100. "Are you above 30,000?, click twice". - left hand on the mike button on my chest, oxygen going full blast, going up fast, altimeter 30,500, spoilers and dive down to 30,100, Canopy iced up completely, scrape, scrape ... At that moment I remembered and wished for my ice scraper that I had to use in my 58 Morris 1000 Wagon when returning from skiing trips from up north in Ontario. The windows were icing up in the same fashion, snow falling into your lap when scraping. I could not keep this pace up and was relieved when Dick's voice came over the phones "ATC clearance denied - very busy traffic, come down to 18,000 ft.

Spoilers out and down, scrape, look out, stay clear of airway from Peterson Airfield. I came down faster than I could clear my right ear; I couldn't be bothered to hold my nose to blow. At 16,000 I levelled off as my right ear began the tell tale sign of aching; but by that time it was too late. (It took 12 days for the partial deafness to go and the familiar 'clicking' sounds in the inner ear were greeted with relief; by the way, drinking beer from the bottle seemed to do the trick; each gulp was followed by a 'click' (on the 10th day) until normal inner ear pressure was restored. In the meantime I almost learned to lip read listening to customers in a very busy and noisy car dealership workshop).

I landed almost 2 hours after take off and the winds were still blowing hard. The flying operation was suspended after my first radio message and all the gliders stayed safely tucked away in the 3 hangars.

That evening watching the news on TV in the Black Forest glider port comfortable lounge and drinking beer to celebrate, the damage caused by the high winds in Colorado was expounded. Winds of 178 MPH were clocked at Boulder, Colo. House trailers were overturned and ripped apart, roofs were torn off, Hydro and telephone services were disrupted, highways were closed (in Colorado Springs too), trees were uprooted and havoc reigned.

That is a 'brief' description of the flight, an appropriate title for which should read "Diamond Height the hairy way" or "Scraping for Diamonds".

I am submitting this flight towards my 5 best for the year 72. It is still being processed via SSA and will be forwarded to Chas. Yeates in due course. "

*

P.S. 'I have sent \$10.00 worth of plastic stick on insul windows to Black Forest (Wave Flights) to stick inside the canopies. Apparently they can't get any in the USA.

Signed: Alex Grenville

S.A.C. MEMBER CLUBS:

We are pleased to welcome the following as a newly registered member-club of S.A.C.

Pacific Zone:

Comox Gliding Club,
C/o Cpl. D.V. Webber,
CFB Comox, LAZO, B.C.

The following article was written by Professor D.W. Clarke, Ph.D., of the Department of Physiology, University of Toronto. The article was prompted by discussions at a recent wave-camp which Dr. Clarke attended.

**

HYPERVENTILATION

In discussions of high-altitude soaring the subject of hyperventilation seems to be frequently mentioned, yet a recent experience at a wave-camp suggests that a good deal of information on this subject is lacking amongst soaring pilots, and that perhaps some unnecessary apprehension is being created. The purpose of this brief note is to deal with some of the facts and fancies about hyperventilation.

To understand what is happening when this condition is brought about, we should have some knowledge about the fundamentals of respiration and its control. The purpose of the respiratory process is to make oxygen available to the cells inside the body so that they may carry on their normal function - nerve activity, muscle work, glandular secretion, growth and repair etc. Depending on the circumstances, the needs of these cells for oxygen may vary considerably - e.g. working muscles require far more oxygen than do muscles at rest. The increase in respiration associated with exercise is an expression of the fulfilment of this increased need.

The first step in ensuring a supply of oxygen to the cells is to take oxygen into the lungs. Obviously, if there is an inadequate concentration of oxygen in the inspired air, the body will suffer. The next step is the diffusion of oxygen from the lungs into the blood which circulates through the lungs. As far as we are concerned here, there is usually no difficulty with this process. From the lungs, the oxygenated blood must be carried to the tissues. If the blood vessels are constricted, then there will be interference with blood flow, and hence delivery of oxygen to the tissues will be impaired. Note that there may be adequate oxygen in the lungs, and adequate diffusion into the blood stream, but if for any reason the blood does not circulate to a given part of the body, that part will suffer from oxygen lack, or hypoxia. We shall see an example of this situation in the discussion to follow.

The regulation of the muscles which are responsible for the act of breathing - i.e. the diaphragm and the muscles in the chest, is the responsibility of a group of cells located near the back of the brain, and this group is sometimes called the "respiratory centre". Nerve impulses sent out from this centre alter the rate at which we breathe, as well as the depth of our breathing. The centre does not act independently, but is in turn affected by many factors. Both the amount of oxygen in the air we breathe and the amount of carbon dioxide in the blood reaching the brain and the respiratory centre have an effect. If the oxygen content of the surrounding air falls, as by ascending to a high altitude, then two

HYPERVENTILATION (Cont.)

clusters of cells which are located in the region of some of the large arteries near the heart, and whose purpose is to monitor oxygen concentration is this arterial blood, send appropriate impulses to the respiratory centre with the result that breathing is increased. The increased ventilation may thus make more oxygen available to the blood circulating through the lungs. The role of carbon dioxide is more complex and more interesting. If, for any reason, the blood reaching the brain has a higher than normal concentration of carbon dioxide in it, then the response of the cells in the respiratory centre is to increase the ventilation. Conversely, if there is a decrease in carbon dioxide level, the response is such that breathing is reduced. Now this regulatory mechanism is exquisitely sensitive. Very small changes in the level of carbon dioxide can produce marked changes in the breathing, and it appears that one of the major factors which governs breathing is carbon dioxide. Note that this substance is not just a waste product, to be expelled from the body as soon as possible, but is rather a very important agent in the control of normal respiration. Additionally, and of equal importance as far as this discussion is concerned, is the fact that carbon dioxide has a great influence on the diameter of the blood vessels, including those that supply blood to the brain. The whole picture of the effect of carbon dioxide on blood vessels is complicated, but here we might just note that it does play an important part. Ordinarily the level of carbon dioxide in the blood is rather precisely regulated. The body cells, as they use foodstuffs, produce it and give it into the blood stream. This transport system takes it to the lungs, where it is disposed of by the act of exhalation. Note that there is a dynamic equilibrium - the amount which is given off to the atmosphere just equals that which is produced, and thus the concentration in the blood leaving the lungs and supplying the brain and the respiratory centre is held to a certain value. If however, a person were to increase either the rate or depth of respiration, or both, then it can be understood that the rate at which the carbon dioxide is being "pumped out" of the body by the lungs will increase. Assuming it is being brought to the lungs at a given rate, the necessary consequence is that there must be a reduced concentration in the blood leaving the lungs and supplying the brain and the rest of the body. This is the situation in hyperventilation. Most of the consequences of hyperventilation result, directly or indirectly, from this reduction in concentration of carbon dioxide.

What are the consequences? After a prolonged period of hyperventilation, the carbon dioxide "drive" to the respiratory centre is reduced to the point where the individual can hold his breath with no feeling of discomfort for a much longer period of time than usual. In itself this would not cause the soaring pilot any difficulty. However, another rather bizarre symptom which could give rise to difficulty is a twitching of facial muscles and a stiffening of certain arm and hand muscles so that the limb tends to assume a peculiar but characteristic position, not at all compatible with adequate control of a glider.

Cont...

HYPERVENTILATION (Cont.)

Furthermore, as a result of the lack of carbon dioxide, certain of the blood vessels constrict and by reducing the circulation, effectively cause an hypoxia of the region which they serve. Unfortunately, one of the sensitive regions is the brain, so perception is interfered with, and unconsciousness may come about. Speech may be slurred both because of lack of cerebral activity as well as lack of muscle control. Giddiness and laughter are common. Paradoxically, once a person starts to hyperventilate, he sometimes continues to do so, possibly because the constriction of blood vessels supplying those cells which monitor oxygen concentration has effectively caused them to perceive an oxygen lack, and thus they tend to drive the respiratory centre to greater activity. Constriction of the blood vessels on the skin is sometimes very noticeable, for the decreased blood flow ultimately results in cyanosis - the bluing of the skin seen as a result of insufficient oxygenation of the blood, - as well as a reduction in temperature of the skin. An additional cause of this paradoxical hypoxia during a period of deep breathing lies in the peculiar chemistry of hemoglobin, the material in the red cells which is responsible for the binding of oxygen in these cells and its carriage to various parts of the body. With the drop in carbon dioxide concentration, the ability of the hemoglobin to release its bound oxygen is reduced, so that the body cells may be starved for oxygen in the midst of circulating plenty. Thus the main features of hyperventilation are very similar to the features of hypoxia, with the added complication of difficulties with muscular movement and co-ordination. So far hyperventilation sounds rather terrifying, and so it could be. What brings it on? How may it be recognized? What can you do about it? Aside from the deliberate act of hyperventilation, probably the main cause in normal individuals is apprehension or tension. Under these circumstances - flying an unfamiliar aircraft, extreme turbulence, as in rotor flying, or during the training period, there may be a tendency to increase the rate of breathing. However, and here is a point which I would like to stress - usually it requires a fairly long period of several minutes of hyperventilation to bring on the symptoms noted above. In other words, if you feel like taking a deep breath or two, go ahead. It is not going to lead to hyperventilation. It is the prolonged period of greater breathing which is going to cause trouble. How long is prolonged? This is impossible to say, for it must be noted that there is a considerable individual variation in the susceptibility of the individual to the hyperventilation procedure. A few show symptoms very early, and all of these symptoms will be complicated by the possibility of additional hypoxia, depending on whether or not you are using oxygen equipment at the time.

How do you recognize hyperventilation? This may be particularly hard, because the very fact that you may be hypoxic, for whatever reason, makes self-diagnosis much more difficult. However, if you feel funny, or if there is any alteration of perception difficulty in reading

HYPERVENTILATION (Cont.)

instruments, etc., then hyperventilation should be suspected. Try to check your rate and depth of breathing. Is it faster or deeper than normal by a considerable margin? Fingers feel stiff? Give yourself a good breath or two of oxygen. If you feel better, probably you were suffering from simple anoxia. If this does not clear matters up, probably you are suffering from hyperventilation. In that case, make a conscious effort to hold the breath. You will probably find it very easy. Don't worry about passing out if you seem not to want to breathe for a long long period of time. Take a few shallow breaths if you want. Gradually your normal breathing rate should be restored. The oxygen mask should be kept on, to ensure that simple hypoxia does not occur.

And now to finish with a few further words. Note that by definition hyperventilation refers to the act of increasing the amount of air going in and out of the lungs, over and above the requirements of the body at that time. The deep breathing associated with exercise, when there are additional oxygen requirements is not hyperventilation. A well known textbook on soaring indicates that hyperventilation is an "increased production of carbon dioxide...". This statement can be confusing. It is true that there may be an increased production of carbon dioxide with an increased amount being given off through the lungs, but the consequences are due to the ultimate decrease in carbon dioxide in the blood leaving the lungs. And a word of caution for the swimmers. Do not hyperventilate for a prolonged period of time before swimming, in the hopes that you may be able to hold your breath longer and thus swim faster or further, especially under water.

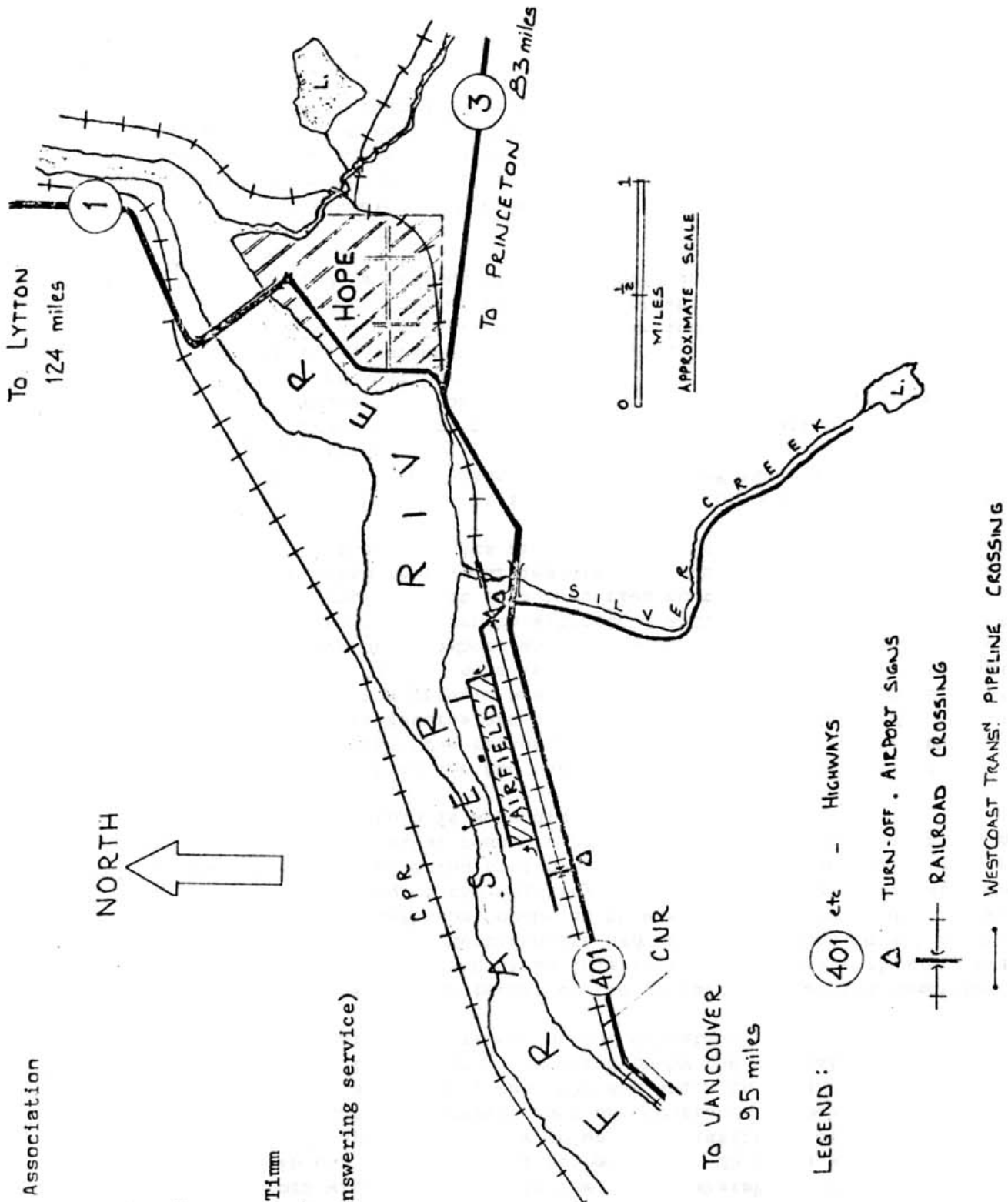
While I don't think the evidence is complete on this matter, it is sufficiently suggestive that this may be a dangerous procedure to warrant putting in this strong cautionary word. In summary then, hyperventilation can give rise to marked difficulties, probably accentuated if there is additional hypoxia from lack of sufficient oxygen in the inhaled air. Though there are marked individual variations, the symptoms of hyperventilation are not brought on by a few deep breaths - they usually require a longer period of deep breathing to show up.

Vancouver Soaring Association

Contact:

Vic Shobridge
1849 Burrill Ave.,
North Vancouver.
Tel: 988-6279).

Peter & Christine Timm
1461 Terrace Ave.,
North Vancouver
980-5313 (24 hr. answering service)



LEGEND:

(401) etc - HIGHWAYS

Δ TURN-OFF, AIRPORT SIGNS

+|+ RAILROAD CROSSING

—|— WESTCOAST TRANS. PIPELINE CROSSING

REPORT OF THE S.A.C. LICENCING COMMITTEE

As most S.A.C. members are aware the Association has been in correspondence and discussions with MOT about the licencing of Glider Pilots. A proposal from MOT to require a medical examination was agreed to by the 1969 Directors without referral to the full membership. This change, a fundamental one in our modis operandi for more than 25 years when licences were first required, appeared to many to be a submission to officialdom without full consideration. To prevent such an occurrence happening again a change to by-law 17 was approved by the 1970 AGM which in essence stated that any future proposal of this nature be voted on by the general membership after study and production of a report on the situation.

This text is the report of the so called licencing committee continued after presentation of an interim report to the 1971 AGM. Prior to the interim report a questionnaire had been circulated to all clubs, the returns from which left some doubt as to whether its results did in fact represent the feeling of the majority. The aim of the questionnaire was to gather information relating to licencing and also opinions as to what effect the new requirement might possibly have on S.A.C. membership as a whole. An analysis of this return is Appendix "A".

Subsequent to the AGM the Regional Directors were asked to circulate their respective regions in an endeavour to obtain further information. These returns are summarized in Appendix "B". The excellent job originated by the Ontario Region under Peter Trounce and Peter Folkes should be noted. Also to note is the success of this questionnaire which was directed to individual members and not the clubs. It would appear there is merit in using this approach although S.A.C. being essentially an organization of clubs should direct such inquiries to the clubs in the first instance. The Ontario questionnaire modified slightly subsequently appeared in a copy of Free Flight; these results are also contained in Appendix "B".

- From both tables it is believed the following highlights emerge:
- (a) There is a consensus for acceptance of the current medical exam requirement.
 - (b) Contrary to some opinion there is no indication of a desire to increase the standard or frequency of medicals for passenger carrying and instructing.
 - (c) There is agreement that qualifying time for the licence be increased. The Dept. is currently asking an increase to ICAO standards of 6 hours of glider flight time of which 2 hours shall be solo and include a minimum of 20 take offs and landings. It is recommended we accept.

A discussion with Dave Marsden in October resulted in thoughts that the Association should adopt as policy the principle that we accept MOT requirements as minimum and that unless we have very good reasons we should not request raising of standards but where needed institute our own as in the case of instructor ratings.

Ottawa, December 1971


A.N. le Cheminant

SUMMARY OF PRE 1971 A.G.M. LICENCE QUESTIONNAIRE

	QUES 1			QUES 2		QUES 3	QUES 4		QUES 5	
	What intances where individuals (a) were unable to pass med. (b) Had to Request concession (c) Have not applied	(a)	(b)	(c)	Has medical imposed a hardship by (a) Excessive travel (b) Any other way		Estimate possible members turned down or discouraged	Has new requirement (a) created problems (b) improved safety or operations	Have you had a accident if yes (a) Brief circumstances (b) Any med facet evident	(a) (b)
Lakehead	1	1	-	-	no	no	3	yes	no	-
Melville Dis	no	no	-	-	no	no	-	no	no	-
	2	-	-	-	no	no	2	no	no	-
Buckingham	-	-	6	-	yes	yes	8	yes	no	-
Aljoma	2	1	1	-	no	no	2	no	no	-
Bellville	-	-	-	-	no	yes	-	yes	no	-
Pioneer	-	-	-	-	no	no	-	no	no	-
COSA	2	-	1	-	no	no	1	no	yes	-
Rideau	-	-	-	-	no	no	-	yes	no	-
Windsor	-	2	-	-	no	yes	3	yes	no	-
Red River	2	-	1	-	no	no	3	no	no	1 no
Regina	-	1	-	-	no	no	-	no	no	-
SOSA	-	-	-	-	no	no	-	no	no	-
MSC	-	2	-	-	yes	yes	-	Cond	Cond	-
Toronto	1	-	1	-	yes	no	3	Cond	no	-
Champlain	-	-	-	-	no	no	-	no	no	-
Bonnechere	-	-	1	-	no	yes	1	no	no	-
London	-	-	-	-	no	no	-	no	yes	-
York	1	-	-	-	no	no	1	no	no	-
GGC	-	4	-	-	no	yes	-	yes	Qual	-
Pioneer	-	-	1	-	no	cost	1	no	no	2 no
Quebec	-	1	-	-	no	yes	-	no	no	-

SOARING ASSOCIATION OF CANADA

APPENDIX "B"

SUMMARY OF POST 1971 A.G.M. LICENCE QUESTIONNAIRE

	TOTALS	QUEBEC REGION	ONTARIO REGION	MISC. RETURNS TO SAC OFFICE
<u>QUES 1</u> Present MOT requirement is medical every 5 yrs				
(a) Remain same	121	7	98	16
(b) Be more frequent	52	1	39	12
(c) Less frequent	7	0	1	6
(d) Eliminated	28	1	19	8
<u>QUES 2</u> Should medicals be more stringent for Passenger carrying Cross Country Instructing	yes no	yes no	yes no	yes no
(a) Passenger carrying	64 133	3 6	45 105	16 23
(b) Cross Country	12 176	0 7	8 135	4 34
(c) Instructing	77 124	4 5	56 95	17 24
<u>QUES 3</u> Requirement now 3 hours for GP Licence increased decreased same	158 158 0 45	yes no	yes no	yes no
(a) increased	8	119	31	
(b) decreased	0	0	0	
(c) same	1	36	8	
<u>QUES 4</u> Min. requirements for GP Licence				
(AVER) DUAL SOLO TOTAL	5.1 5.8 12.08	DUAL SOLO TOTAL	DUAL SOLO TOTAL	DUAL SOLO TOTAL
		5 7 14	5.5 5.5 11	4.8 4.9 11.1
<u>QUES 5</u> How much gliding experience should a power pilot have Passenger carrying Cross Country Instructing		SAME LESS LESS	SAME MORE LESS	SAME MORE LESS
(a) Passenger carrying	3 0 5	87 5 60	18 1 18	
(b) Cross Country	5 0 3	90 6 55	20 0 19	
(c) Instructing	6 0 2	99 12 41	26 0 12	
<u>QUES 6</u> Background of replayer Licences GPL Student GP Instructor Power Pilot Cross Country Approx total hrs --Glider --Power		yes no	yes no	yes no
(a) Licences GPL	9	118	35	
(b) Student GP	0	40	4	
(c) Instructor	5	56	26	
(d) Power Pilot	4	62	17	
(e) Cross Country	7	83	17	
(f) Approx total hrs	320 hrs. 160 hrs.	169 hrs. 578 hrs.	113.5 hrs. 551 hrs.	

SOARING ASSOCIATION OF CANADA

TECHNICAL COMMITTEE ANNUAL REPORT (March 1971 to March 1972)

Once again your Committee has not been involved with any special projects during the past twelve months.

Our activity has been confined to processing applications for approval of additional types of sailplane, as follows:-

Outstanding from last year's report

General It was mentioned last year that a member wished to import a used Diamant 18 from the USA where it had been flying under an 'Experimental' licence. Although the purchase did not go through we did reach agreement with MOT that in such cases it may be possible to obtain a Canadian C of A where the specific glider has had an Export C of A from the country of origin and adequate records exist to show that it still conforms to the type certificate.

Members are cautioned to contact the Technical Committee prior to finalising any such purchase.

LS-1 Type Approval G-89 issued, dated 31st. May, 1971

Kestrel Type Approval G-90 issued, dated 25th. June, 1971

ASW-15 Type Approval G-91 issued, dated 30th. December, 1971

New Activities

Rhonlerche

The new Cold Lake Club have imported a used Rhonlerche from Germany. This is a glider of very similar performance to the 2-22 and it should be an adequate trainer. A Permit to Fly was issued for evaluation purposes. Pilot's and engineering appraisals have been prepared and we are ready to apply for Type Approval as soon as we receive outstanding data from the manufacturer.

We have been advised that the Air Cadets are also interested in using this type.

Meetings

A visit was made to MOT, Ottawa, on 24th August, 1971, and the general procedures used in obtaining Type Approvals for imported sailplanes was discussed. Notes on the meeting were published in 'Free Flight' and will not be repeated here.

Miscellaneous

Shortly after we had completed our application for Approval of the ASW-15 we received details of a fatal accident in the USA, which was attributed to structural failure. We have supplied MOT with the manufacturer's report on the incident, which is not in agreement with the US National Transport Safety Board's preliminary

findings. We have recommended to MOT that no action should be taken until the final accident report is published.

In the writer's personal opinion the accident points out the need for careful consideration of a pilot's training and proficiency before letting him graduate to one of these new slippery ships. In particular, no pilot should be permitted to fly them until he has read and understands the literature on pilot induced oscillations. Having already perhaps stepped on the toes of both our Safety Committee and Instructors' Committee I will quickly bring this report to a close.

Acknowledgements

This report would not be complete without my expressing thanks to those members who have assisted me in the work of this committee.

Respectfully submitted,

T. R. Beasley

(T.R. Beasley)

Director,

Chairman, Technical Committee

SOARING ASSOCIATION OF CANADA

SELF LAUNCHING SAILPLANES COMMITTEE ANNUAL REPORT, (March 1971 to March 1972)

INTRODUCTION

As an introduction I would like to point out that we have decided to adopt the name self launching sailplane (SLS) for a sailplane that has a self contained power source capable of supplying sufficient power to meet the accepted take off requirements. The term auxiliary powered sailplane (APS) will be used for sailplanes having a power source incapable of supplying sufficient power to meet the accepted (FAI) take off requirements.

These terms are used by the Soaring Society of America and we have adopted them because they take the emphasis off the motor and leave it on the sailplane, where it belongs.

HISTORY

This committee first reported at the 1970 AGM when we announced that a member had purchased an ASK-14 and a special Permit to Fly had been negotiated with MOT for evaluation purposes. Last year we reported that tentative proposals had been submitted to MOT regarding both aircraft licencing and personnel licencing. The report was accepted by the meeting.

1971 REPORT

Little progress has been made in the past year, and we have not pushed very hard as interest has not been very great; it is considered wise to make haste slowly so that we can watch developments in other countries and attempt to establish rules with the MOT that we can live with for a long time.

It does appear that we will be able to reach some agreement with MOT regarding the aircraft licencing, but unfortunately they insist on regarding them as airplanes, albeit of a special class, and they will not agree to let us handle certification in the same way as has proved so successful with gliders. Self launching sailplanes were developed by gliding enthusiasts for gliding enthusiasts, and we therefore believe that gliding enthusiasts are the most qualified persons to evolve sensible regulations regarding their use. We must therefore deplore the MOT reluctance to accept our recommendations. We have not yet been supplied with full details of the MOT position, and there may still be changes made. However, we must record some thanks that it does appear that a category will be introduced that will allow us to operate SLS in Canada.

It is of interest to note that in West Germany, where these machines have been chiefly developed, their Government Authority has co-operated in recognising the SLS as a new breed of aircraft that requires a fresh approach. The authorities have accepted the challenge and there are now nearly 500 SLS being successfully and safely operated with new categories of aircraft licence and pilots' licences.

PERSONNEL LICENCING

We have made some minor revisions to the recommendations that were discussed last year. These have been submitted to MOT as a basis for negotiation, and we can assure our members that nothing will be finalized until all clubs have had the opportunity to comment.

The revised proposals are:-

1.0 Instructor

A licenced glider pilot holding an instructor endorsement may be endorsed for instructing on SLS on presentation of a letter of recommendation and showing evidence of a minimum of 50 hours flying time as pilot in command on gliders and 10 hours flying time on self launching sailplanes. This latter to include a minimum of 20 take offs and 20 air starts. If the applicant holds a private pilot's licence these latter figures may each be reduced by one half.

2.0 Private

A licenced pilot, having a total of over 10 hours as pilot in charge of gliders, may apply for a licence on production of a letter of recommendation, signed by an instructor endorsed for SLS, and showing evidence of a minimum of 5 hours flying time on SLS, to include a minimum of 10 take offs and 10 air starts.

Note As an interim measure, where no two seater self launching sailplane is available the required flights may be made in a single seat SLS provided that they are under the direct supervision of an instructor endorsed as above, or, where no such instructor is available, are under the supervision of a glider instructor who also holds a power licence.

3.0 Student

3.1 Instruction in a dual controlled SLS may be taken under the supervision of an instructor endorsed as in 1.0 above by the holder of any of the following permits, student glider, student power, or any higher rating. We see no requirement to introduce a student permit for SLS.

3.2 A single seat SLS may be flown solo under the supervision of an instructor fulfilling the requirements of the note in para. 2 above, provided that the SLS pilot holds a glider pilot licence with a minimum of 50 hours as pilot in charge of gliders, and he has also soloed a powered aeroplane.

4.0 Written Examination

Applicants for endorsement in either the private or instructor category shall write the MOT examination on engines as required for private (power) pilots. This requirement shall be waived in the case of power licence holders.

5.0 Power Pilots

Power pilots must satisfy the conditions of 2.0 above.

It should be noted that it is recommended that this Association should strongly oppose any suggestion that power pilots should be permitted to operate SLS without their having gliding experience. We believe that the greatest danger to the successful introduction of the SLS into Canada is the risk of accidents caused by improper use by non gliding pilots.

It is sincerely hoped that by next year's meeting we may be able to report that we have completed our negotiations with MOT and that the SLS has really arrived.

Respectfully submitted,

T. R. Beasley
(T.R. Beasley, Director, ~~Chairman~~, SLS Committee)