



Free Flight

THE NEWS LETTER OF THE SOARING ASSOCIATION OF CANADA

Issue 2/71.

February-March, 1971

1971 ANNUAL GENERAL MEETING

The 26th Annual General Meeting of the Soaring Association of Canada will be held in Ottawa on Saturday, 20th March, 1971. It will commence at 9:30 a.m. in the Main Auditorium of the National Research Council, 100 Sussex Drive, Ottawa, Ont. The AGENDA is on Page 4 of this issue.

The "Happy Hour" and Dinner will be held in the Holiday Inn (350 Dalhousie Street). This year a buffet-style supper has been arranged (at \$6.00 each) and will commence at 7:30 p.m., immediately following the "Happy Hour". For those who will be arriving on Friday evening, the President's suite (Room 442 at the Holiday Inn) will be available as the meeting place.

It is hoped that Mr. Paul Schweizer and his wife and also Mr. Tony Doherty of the Schweizer Aircraft Corp. of Elmira, N.Y., will be able to attend. Representatives of the Air Cadet League of Canada will also attend the meeting and will be presented with the Jonathan Livingston Seagull trophy.

An after dinner talk (with slides) will be given by Mr. John Delafield. Mr. Delafield is presently living in Canada whilst on a one year NATO exchange posting. He represented the U.K. at Marfa (placing 7th in the Open Class) and will talk on the subject of soaring in South Africa and Texas.

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 Walter Piercy, who was President throughout 1970.

Mail nominations for the two Directors-at-large to Mrs. N. Hamilton, Box 1173, Station "B", Ottawa 4, Ont., before March 15th. 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 the 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 A.G.M. 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 15th. Notices of proxy appointments may also be brought to the A.G.M. 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, which 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, Chateaugay, P.Q. (Telephone: (514) 691-4754).

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

The B.A.I.C. trophy is for the best flight of the year; the Canadair trophy is for the 5 best flights in 1970, and the "200" trophy is for the 5 best flights during 1970 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 A.G.M., the only flights which will be accepted for these trophies are those for which basic details were submitted within 14 days of their completion.

Flights to qualify for the above trophies should be sent to Bob Gairns (address above) before March 15th. Six have been received so far, from the following: R.C. Gairns, D. Gyorffy, M.A. Laviolette, E.A. Mortis, D.J. Marsden and J. Pomietlarz.

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.

MAIL ELECTION OF 3 ZONE DIRECTORS:

Quebec & Maritime Zone - TERENCE BEASLEY (Montreal Soaring Council)
Ontario Zone - WOLF MIX (SOSA Gliding Club)
Prairie Zone - DAVE TUSTIN (Winnipeg Gliding Club)

Pacific Zone: This year there were no candidates nominated for this Zone, by the Clubs of the Zone. The Pacific Zone Director will therefore be elected at the A.G.M. from the nominations and votes received from the floor. It is recommended that Pacific Clubs or individuals who wish to have a say in the election of a Director to represent them, should send in nomination(s) using the form at the bottom of Page 1.

VOTING POWER OF CLUBS AND INDIVIDUALS:

This year because of the increased fees and changeover of fee year, each Club will have votes related to its number of 1970 members, as of December 31st, 1970, and of its 1971 members, as of January 31st, 1971, as follows:

Club (Inc. Corporate)	-	20 VOTES
Club-Affiliated Member	-	1 Vote for 1970, 1 Vote for 1971
Married Couple Membership	-	1 " " " 1 " " "
Individual Membership (no Club)	-	1 " " " 1 " " "
Junior & Associate Memberships	-	NO VOTES

COMMITTEE REPORTS:

President Walter Piercy 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. (Reports already mailed to Paul Thomsen have been forwarded to Bob. ED.)

1971 NATIONALS:

Gatineau Gliding Club will be the hosts and the contest will be held at Pendleton A/P, Ontario, from July 6th to 16th, 1971.

1972 NATIONALS:

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

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

S O A R I N G A S S O C I A T I O N O F C A N A D A

26TH ANNUAL GENERAL MEETING, NATIONAL RESEARCH COUNCIL, 100 SUSSEX DRIVE, OTTAWA, ONT
 "HAPPY HOUR", DINNER & AWARDING OF TROPHIES, HOLIDAY INN, 350 DALHOUSIE STREET, OTTAWA
 SATURDAY, 20TH MARCH, 1971

AGENDA

- 09:30 a.m. REGISTRATION - Fee \$1.00 per person. (Main Auditorium of N.R.C.)
 10:00 a.m. INTRODUCTION OF THOSE ATTENDING
 10:15 a.m. AGREEMENT OF VOTING POWER OF CLUBS AND PROXIES
 10:30 a.m. MINUTES OF 1970 A.G.M.
 10:45 a.m. COMMITTEE REPORTS:
- Treasurer Mrs. Terry Tucker
 - Secretary Kerry Bissell
 - Membership Secretary Mrs. Terry Tucker
 - Statistics Paul Thomsen
 - F.A.I. Committee John Firth
 - F.A.I. Awards Vic Shobridge
 - Technical Terry Beasley
 - Safety Chem le Cheminant
 - Air Cadet Liaison Kerry Bissell
 - Instructors Walter Piercy
 - Radio John Firth.
 - Fitness Funds Walter Piercy
 - Free Flight Mrs. Sylvia Webb
 - Historian Chem le Cheminant
 - Communications Frank Cole
 - Meteorology Sepp Froeschl
- 12:30 p.m. LUNCHEON*
- 14:00 p.m. PRESIDENT'S REPORT
 14:15 p.m. THE MEMBERSHIP WILL BE BROUGHT UP-TO-DATE AND DISCUSSIONS WILL TAKE PLACE, AND/OR MOTIONS ON THE FOLLOWING WILL BE PUT FORWARD:
1. 1971 National Contest and S.A.C. Contest Rules.
 2. 1972 National Contest.
 3. Ministry of Transport Medicals for Glider Pilots.
 4. 1971 East & West Instructors' Schools.
 5. Endorsement and Active Promotion of Provincial Soaring Councils
 6. B.G.A. Instructor Publication Free to Club C.F.I.'s.
 7. Group Aircraft Insurance Club Survey.
 8. C.O.P.A. Administration.
 9. Air Cadet League and Training of Air Cadets.
 10. Jonathan Livingston Seagull Trophy for Air Cadet League.
 11. Procedures for Importing Sailplanes, inc. Procedure for Federal Tax Exemption for 2-Seater Trainers.
 12. Procedures for Personal Income Tax Exemption for Glider Training Costs.
- 17:00 p.m. OTHER PROPOSALS AND DISCUSSIONS.
 17:45 p.m. ELECTION OF TWO DIRECTORS-AT-LARGE AND PACIFIC ZONE DIRECTOR.
 18:00 p.m. ELECTION OF PRESIDENT & VICE-PRESIDENT BY 7 DIRECTORS.
- 18:30 p.m. "HAPPY HOUR" AT HOLIDAY INN. (Bombay Room South).
 19:30 p.m. DINNER AND AWARDING OF TROPHIES.

AGENDA ITEMS FOR ANNUAL GENERAL MEETING(AGENDA ITEM 4)

1. It is moved that an S.A.C. subsidy of one-half of the cost of the air time applicable to the 1971 Eastern and Western S.A.C. Instructors' schools be granted - to encourage attendance at these Schools. The maximum subsidy is to be \$200.00 for each of the two Schools.

Information concerning No. 1 Motion: For the 1967 and 1968 Schools, the TOTAL air time (only) was subsidized by S.A.C. In 1969, both the Eastern and Western Schools were subsidized by the Fitness Council, for living and travelling expenses only - there was NO SUBSIDY for flying expenses by either the Fitness Council or S.A.C. In 1970, both Eastern and Western Schools were subsidized as per the above Motion. No Fitness Council grant was received in 1970, and, at this writing, no grant appears to be available for 1971.

(AGENDA ITEM 5)

- 2 (A) It is moved that the Association endorse and actively promote the establishment of Provincial Soaring Councils, consisting of an Alliance of S.A.C. Member-Clubs within each Province.
- 2 (B) It is moved that the Association will allow its Directors to be appointed by the Provincial Councils, as formed, with one Director from each Council.
- 2 (C) It is moved that the By-Laws of the Association be altered to provide for the 6 Directors to be appointed by 6 Provincial Councils (existing or to be formed - in British Columbia, being formed; Alberta, already formed; Saskatchewan; Manitoba, already formed; Ontario, being formed; Quebec).

Information concerning No. 2 Motion: If there is one voice for the sport of soaring in each Province, there appears to be opportunities in most Provinces for Provincial financial subsidies for sharing administrative costs, for conducting competitions at both Provincial and National levels, and for sponsoring Provincial participation in a National Contest. Also, under the present Pacific and Prairie Zones, it is difficult for a Director to fully represent his Zone because of the geographical size of his Zone.

There is no attempt, in this motion, to force Clubs in each Province to form a Council. Even under the present status as above, Alberta and Manitoba would, if the Motion were approved, each elect a Director to S.A.C., and British Columbia (if the Council did not become formed) and Saskatchewan would continue to have their Election of Directors supervised from Box 1173 by mail for the 2 existing Zones, until such time as Councils were formed for these two Provinces. Ontario and Quebec would also carry on in the Zone method until Councils were formed. If additional Provinces in the East became involved in gliding, then it will be necessary to change the S.A.C. By-Laws again to allow more than the present 6 plus Past-President (or 7) Directors. Note that if this Motion is approved, there will be no requirement to elect 2 Directors-At-Large from the floor of the A.G.M., as in the past.

(AGENDA ITEM 6)

3. It is moved that the quarterly publication, "B.G.A. INSTRUCTOR" be bulk-purchased by the Association from the British Gliding Association, and issued free to each C.F.I. of each Member-Club.

Information concerning No. 3 Motion: This publication comes out approximately each Quarter from B.G.A. and gives very good information for the Instructor. The purpose of the Motion is to make sure that each Club C.F.I. will have the latest information concerning advances in instructor techniques. The cost is estimated to be 75¢ Canadian per issue, including postage. This, then, amounts to \$3.00 annually for each C.F.I. of the 36 Clubs, or a total of \$108.00 annually.

Walter J. Piercy,
President of S.A.C.

(This issue of FREE FLIGHT includes 'Notices of Motion' for the A.G.M. received up until 18th February, 1971).

S.A.C. NEWS

TECHNICAL COMMITTEE:Schleicher K-6E and K-14 Glider Modifications:

A letter has been sent to the Chief Aeronautical Engineer of D.O.T. recommending that an Airworthiness Directive be issued a.s.a.p. so that owners of the subject gliders can obtain details and kits from the manufacturer and incorporate the modifications prior to the commencement of the flying season. The following is an extract from the S.A.C. letter:

"We are advised by the British Gliding Association Inspectors' News-sheet 11/70 that the manufacturer has issued Modifications No. 18 and 3 respectively for the subject gliders.

It had previously been pointed out that it is possible to assemble the horizontal stabilizer and push in the locking Pip-pin such that it completely misses the end of the tube. In this case all that one could see of the defect would be an excessive clearance existing between the root of the elevator and the fuselage. The clearance could be equally spread on both sides and could possibly be overlooked. The results could be disastrous. The manufacturer's modification involves rivetting a short length of tube into the end of the elevator tube such as to render it impossible to instal the Pip-pin without it actually entering the intended hole.

The manufacturer recommends that the modification should be considered mandatory.

(Signed) T.R. Beasley,
Chairman, Technical Committee

23RD CANADIAN NATIONAL SOARING CHAMPIONSHIPS:

The competition will be held at Pendleton Airport from the 6th to 16th July, 1971, with a practice period from the 3rd to 5th July.

Gatineau Gliding Club will be the hosts and have announced the following organization: Dave Parsey is Contest Director with "Chem" LeCheminant his deputy. John Firth is Regulations Director, i/c of Competition Rules & Procedures, Scoring, Registration, etc. Nick Pattinson is Operations Director, i/c of Field Operations, etc. Arthur Klinge is in charge of Publicity for the contest. John Johns is Facilities Director, i/c of contestants, gliders, crews, radio, telephone, food, lodging and repairs. (Tent & trailer sites and some indoor accommodation will be available at the airfield).

Complete details of the contest will be published in the May 1st issue of "Free Flight".

COMMUNICATIONS:

During the Canadian National Soaring Championships held last summer in Carman, Manitoba, amateur radio was used as a communications link between VE4JK at Carman, and VE3BDS at Tweed, Ontario.

Nightly schedules were set up on the 20 meter band using single sideband equipment, and contact was established every night during the contest. Weather conditions and daily pilot standings were then forwarded from Tweed to Walter Piercy, S.A.C. President, in Kingston, with the co-operation of local radio amateurs, using the 75 meter band.

In addition to message handling, several contestants visited the home of VE4JK and talked directly to their families back East.

It was due to the excellent co-operation of Joe Knowles, VE4JK, that this communication link was possible. Joe would drive to the airport, pick up the daily pilot standings, and then pass them back East at sked time.

Hopefully, we will be able to establish a similar, and expanded communications system for participants attending this year's Nationals at Pendleton.

It would be desirable to have an amateur station in operation from Pendleton, and able to work on both the 20 and 75 meter bands. This would provide coast to coast coverage, as well as local traffic into the Ottawa, Montreal, Toronto, Hamilton areas.

To set up a usable system, it will be necessary to arrange, in advance, for amateurs in the various areas to handle traffic during the competition. Anyone interested in pilot standings, or in passing messages to contestants, would phone the participating amateur in their area for this service.

A few S.A.C. members are also radio amateurs. It would be appreciated if these individuals would drop me a line, at P.O. Box 73, Tweed, Ontario, indicating their call letters, if active on the air or otherwise, and if willing to help organize our Contest Communication System. After compiling a list of active amateurs, we will arrange skeds to further plan our Contest Communications Network.

Eventually it is hoped to be able to organize an S.A.C. amateur radio network, thus enabling interested persons to discuss gliding matters on a regular basis, coast to coast. Such a network would be of considerable benefit to S.A.C. members.

Any ideas or suggestions re the above would be appreciated.

Frank Cole, VE3BDS,
Communications Committee

Changes to the F.A.I. Regulations:

A new copy of the Sporting Code, Section 3, has been received. The following changes will be in effect from January, 1971. Copies of the revised Code will be available from S.A.C. at a later date.

1.4.2 Evidence of Reaching the Turning Point

- (b) The Pilot presents a satisfactory photo of the turning point taken while flying beyond the turning point along the course line just flown. The maximum angular deviation from this extended course is 45 degrees.

We interpret this to mean a photo taken from a 90 sector symmetrically placed about the extension of the course just flown.

2.1.7 Ratio between Loss of Height and the Distance Flown

The loss of altitude between the Starting Altitude and the altitude of the Landing Place must not exceed 1% of the distance flown for distances less than or equal to 100 km. For greater distances, if the loss of height is greater than 1 Km the distance flown will be reduced by 40 times the excess over 1 Km.

3.1 Official Control. Official control shall be effected by Observers approved by, or acting on behalf of, a National Aero Club.

(See also 4, table A).

Certificates from Air Traffic Controllers on duty are also valid for observation of take-off, Start and Finish Lines, Turning Points, and Landing Places only. Out landings may also be certified by two independent witnesses who give their addresses and state precisely the location of the Landing Place. (4, Table A).

Certificates are valid only from Official Observers present at the event for which certification is required.

An official observer may not act in this capacity for any flight in which he is pilot or passenger.

3.5 Photographic Evidence of Reaching the Turning Point

Photographic evidence is acceptable provided that all the photographs concerning a flight are on a single uncut length of film, and there is proof that they were taken:-

- (a) By the pilot of the glider or his passenger on the flight in question.
- (b) Of the declared turning points from the correct position (1.4.2.b.) and in the correct sequence.
- (c) Between the time of the last crossing of the Start Line and the crossing of the Finish Line.

Stereoscopic cameras and telephoto lenses are not permitted.

3.5.1

- (b) The camera is held in fixed mountings in the cockpit so that every photograph will show the wingtip. The lens housing shall be no further than 25 mm from the inside of the canopy or camera window. Just prior to each take-off an Official Observer shall mark the outside of the canopy or window across the front of the lens with a random line about 2 mm in width and then display the Declaration Board for the pilot to photograph with the camera installed. Following the landing an Official Observer shall take charge of the film and have it developed and kept uncut. If the same Official Observer is controlling the pre-flight photograph and the development of the film, it is not necessary for the camera to be sealed.

7.3.4 Badge Flight Requirements

Diamond Goal: a flight of at least 300 kms over a triangular or out-and-return course.

Notes: (1) A zig-zag may have only one turning point but need not be to a goal.

(2) There is no 28% requirement for badge triangles.

(3) ,...

Changes to F.A.I. Regulations (cont'd)

- 7.3.4 Notes: (3) Gold or Diamond Distance may be claimed from an incomplected triangle, provided that the required distance is flown and the glider is landed within 10 km of the line of the last leg.
- (4) If a Silver Distance flight also qualifies for Gold or Diamond, it may count for Silver Distance notwithstanding the straight flight requirements.

Canadian Records. These are recognised in two categories:

A Territorial Record established by a flight originating in Canada, by a pilot of any nationality,

A Citizens Record established by a Canadian Citizen anywhere in the World.

Both categories are subdivided into Open and Feminine classes. This will continue unless the Feminists protest strongly.

Application for a Citizens Record will be acceptable to the F.A.I. Representative. Only in the case of difficulty will it be referred to the country of origin.

Changes in requirements for Canadian record applications:

(a) Turn Point Verification:

The time between successive starts must not normally be more than 40% of the elapsed time for the course. Pilots should ensure that they make observed starts at shorter intervals than this. Should this not be possible, or should the pilot decide to return for another attempt before completing the course, he must photograph one T.P., return and photograph his base before making another start.

His photos would then show something like this:

- | | |
|--|----------------------------------|
| 1. Declaration or picture of Official Observer | |
| 2. Turn Point 1 | |
| 3. Start line. | 5. Turn Point 2 |
| 4. Turn Point 1 | 6. Declaration or picture of O.O |

OR

- (b) The pilot shall take a recognisable picture of a prominent object near the start line which is moved to different locations at intervals by the O.O. The pilot should then make his start as soon as possible and in any case within the 40% elapsed time limit as in (a). The O.O. shall satisfy himself from the photograph that it was taken within the time limit allowed before the start and shall sign a statement to this effect.

Note: A white bedsheet by the side of a runway is a suitable object. An Instamatic camera will record this from below 2,000 ft. if care is taken to avoid movement at the appropriate instant.

The O.O. shall sign a complete record of all timed starts and finishes.

This procedure should ensure that the pilot visits both Turn Points during his timed flight. The 28% rule still applies for record triangles.

Barograph time scale calibration:

Observers are required to inscribe a time scale on the chart after the flight. This should be performed at suitable intervals up to the time of the last start, from the time of take-off. Maximum periods between marks should be $\frac{1}{4}$ hr., with subdivision near the start points.

Note: This is conveniently done by winding the drum back to the take-off time, restarting the mechanism, and tapping the pen at the required timed instants.

Items deleted:

Except for the take-off time, no details of the launch are required. The glider need not land at the goal after completion of the task.

Notice of a Claim:

Written notice of the performance claimed, should reach the F.A.I. representative within seven days of the flight.

John Firth,
Chairman, F.A.I. Committee

HIGH ALTITUDE INDOCTRINATION COURSE

An offer was made to allow S.A.C. members to attend a High Altitude Course being put on for Service Personnel at the end of January. This proved unsatisfactory as it would have required attendance for three days.

The Institute of Aviation Medicine advise that the next free time available will be towards the end of April, when a course for S.A.C. pilots only might be run. It is possible that this could be a one day school.

Gordon MacDonald of SOSA has undertaken to organise such a course with the Institute. Pilots from Eastern Canada, interested in such a course, should write to Gordon at 65 Rameau Drive, Suite 106, Willowdale, Ontario.

R.C. Gairns

INTERNATIONAL F.A.I. BADGES

By Vic Shobridge.

The following were approved in Canada during the months of December, 1970 and January, 1971:

DIAMOND ALTITUDE:

500	Dennis Gyorffy	Libelle	North Conway	SOSA
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GOLD BADGE:

88	Dennis Gyorffy	Libelle	North Conway	SOSA
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SILVER BADGES:

275	Claude Rousseau	Ka6	St. Raymond	QSC
276	William Windover	1-26	Black Forest	

SILVER BADGE LEGS:

503	David John Ferguson	1-26	Alt. & Dur.	Rockton	SOSA
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"C" BADGES:

916	David John Ferguson	1-26	Rockton	SOSA
917	Nigel Newsome	2-33	Hawkesbury	MSC
918	William Windover			

CORRECTION: The Canadian records listed in Issue 1/71 should have been categorized as "Citizen's" records, i.e. made by Canadians OUTSIDE Canada.

It is hoped to publish a complete list of all current Canadian records (both Citizen & Territorial) in the next issue. Ed.

INTERNATIONAL CIVIL AVIATION ORGANIZATION - Personnel/Licencing/Training
Practices/Medical Divisional Meeting held in Montreal from October
20th to November 14th, 1970.

The meeting was well attended, with 47 member countries and 6 international associations participating. One disappointing aspect to the writer was the lack of an F.A.I. representative. NO revision was made in the age limit for issue of a Glider Pilot licence, nor a Private Power Pilot licence.

The changes in recommended practices, for the issue of licences to all categories of aviation personnel, emanating from this meeting were quite extensive. Those affecting the Glider Pilot were:

- Experience - For issue of a licence, an applicant must now have 6 hours of flight time in a glider (an increase over the old requirement of 3 hours. This change was thought necessary in view of the improved performance of modern sailplanes and the increasing responsibilities attached thereto).
- Knowledge - In addition to the existing requirements, an applicant will now also be required to satisfy the Licencing Authority as to his knowledge of safety practices and emergency procedures (associated with the operation of a glider).
- Skill - Applicants will also be required to demonstrate ability to conduct flights in a manner compatible with the activities of other airspace users. (Considered necessary in view of the continuing increase in air traffic, both private and commercial).

Privileges of the Holder of a Glider Pilot Licence:

This was modified to the extent that the holder of a GPL shall be entitled to act as pilot-in-command of any glider and to carry passengers therein, provided that the holder of such licence has ten (10) hours flight experience as a Glider Pilot and that for aero-tow flights, he shall have acquired aero-tow experience.

Flight Instructor Ratings Appropriate to Gliders:

It was left to the State Licencing Authority to make the necessary provisions for such ratings.

Medical Requirements attached to the issue or renewal of a Glider Pilot Licence:

The recommended period between examinations (medical) remained at 24 months up to age 40 and 12 months thereafter.

Some medical requirements presently existing in Annex 1 to the ICAO Convention, which are somewhat vague or restrictive in nature, were updated and expanded in the light of studies and experience gained in the field of medicine. None of these changes can be considered adverse or should not have any effect on the present system being followed by our Department of Transport examiners.

An interesting discussion took place at the meeting on the feasibility of issuing certain licences to applicants with monocular vision (one eye). It was noted that some countries were already issuing licences to such applicants under the existing flexibility clause contained in the ICAO Annex 1. However, major opinion was that further objective data should be gathered over a period of time before a valid conclusion could be reached.

It should be noted that the above are new recommendations or amendments to recommendations already existing in ICAO Annex 1. The fact that the above meeting made these recommendations does not mean that a State (Country) must adhere to them. Should Canada decide to adopt these changes, it is assumed that notification will be made to interested parties in the usual manner, through the issue of a NOTAM or Information Circular. It is hoped that all Glider Pilots will be advised by S.A.C. as well, should any changes occur in the present D.O.T. licencing practices.

G.G. Nye

(Reference to the above meeting is in the Aug-Sept. 1970, issue of "Sailplane & Gliding" page 315, and "Free Flight" issue 6/70, page 5).

A D V E R T I S E M E N T

The ultra-reliable Bertea ML200 Transceiver is now approved and available in Canada. This space-age beauty is fully transistorized, modularized, and epoxied to resist temperature variations, vibration, and humidity. Only 3.5 lbs., adaptable to any 3 1/8 inch cut-out, and less than 10 inches long. Adds a new dimension to soaring fun. Team up for enjoyable cross country flying and organized retrieves!

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A NOVICE IN WAVE

By Eric Newsome

In September 1970, half the operation of the Montreal Soaring Council was moved from Hawkesbury Airfield to Lake Placid Airport in the Adirondack Mountains of Northern New York State. This was the second annual Lake Placid Wave Encampment.

The club had available a Schweizer 1-26, a 2-32 and a Blanik. The private owners had, between them, assembled a Skylark IIB and IV, a Blanik, a Ka-6 and 8, a Diamant 16.5m., an SHK, a Standard Austria, an SB-7(M), a Libelle H301, a Kestrel, and an LS-1, the latter only two weeks out from Germany. We had quantity, a good deal of quality and most certainly variety. For towing, we had a club Supercub, together with a Citabria and a Cessna belonging to the local field.

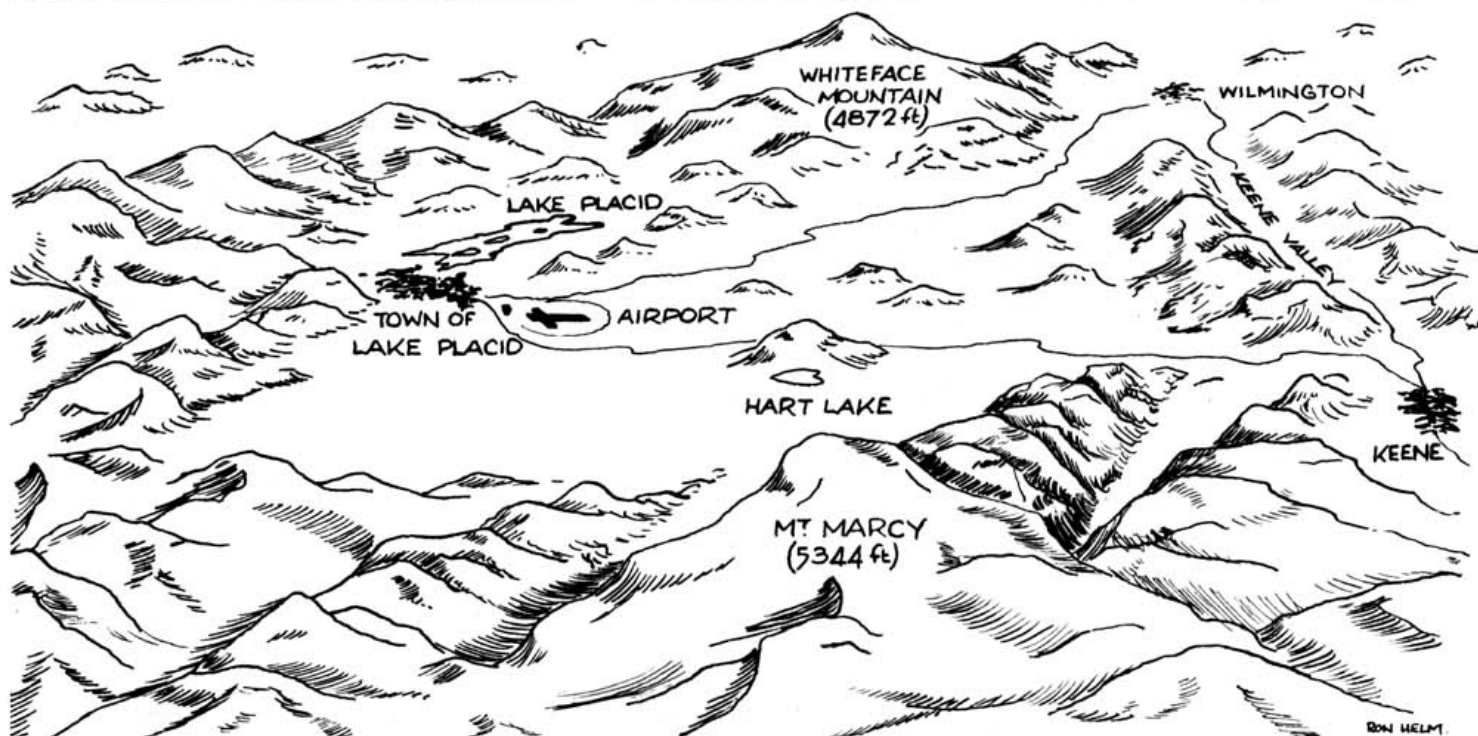
However, pilots of the 40-hour category are not usually in a position to do much more than admire the exotic breeds. For me it was to be the lowly 1-26, slow but sturdy and reliable. My only experience in the mountains had been the previous year when I had taken a familiarization flight in the Blanik and a single solo flight in the 1-26. The solo flight had been brief; long enough for a tow to three thousand feet and then a fairly hasty dash away from the rocks and trees toward the safety of the airport.

Lake Placid airport stands in a mountain-ringed basin, its single paved runway 1,744 feet a.s.l. The airport is quite large and level and its main difficulty to lowland pilots is in the turbulent approach conditions which result from the complex currents stirred up by the surrounding peaks. Approach speeds are generally 20 to 25 knots above the usual.

Whiteface Mountain stands a few miles to the north-east, reaching more than 3,000 feet above the airport. To the south, Mount Marcy, the highest peak in New York State, measures 5,344 feet a.s.l. The Adirondacks are mountains without pattern. Away from the airport, the countryside rapidly degenerates into a jumble of precipitous bare slopes and heavily wooded mountain sides. Trails are few, signs of habitation almost non-existent, and landable fields entail a quick dive back into the valley and even there the choice is very limited.

On the first Saturday of the Canadian Thanksgiving weekend, the windless valley was shrouded in mist, but as it dissipated, a light breeze sprang up from the south. And the talk sprang up. "Look at the lenticulars!" Which lenticulars? - I see nothing like the beautiful pictures in the soaring books. "See the cap clouds!" Yes, that looks more reasonable, there does seem to be an ugly looking line of cloud squatting on the peaks away to the south. "Look at the classic rotor cloud!" A few scattered wisps hang harmlessly in the sky halfway to the southern peaks. I slide over to another group of experts and ask a diffident question: "Are those rotor clouds?" "Hell, no", comes the reply. Confusion! The lenticulars don't look like lenticulars and the experts assert opposites with calm confidence. Perhaps the only way is to try it and see.

LAKE PLACID WAVE SOARING AREA



WAVE ONE

I settle into the cockpit of the 1-26 carefully checking the newly installed oxygen equipment. Oh, for a chance to use it! Cockpit check done - twice. Straps tight - very tight. Thumbs up and the Super Cub rolls forward to take up the slack. Now all seems right and familiar, except for a tree-clad mountain which seems to sit on the end of the runway. Take-off is no problem and the mountain wasn't really on the end of the runway. We circle to the left over Lake Placid and having gained a thousand feet, head south.

The tow is disturbing, but not excessively violent. Once or twice there is a mighty "whump" and the towplane seems to be almost overhead. Each "whump" is accompanied by a crackling of metal as the old wings "oil-can". Only twice do I ask myself, "What am I doing up here dangling on the end of a rope?" Each time I answer myself, "I'm hanging on the rope because over this territory I don't dare let go". What is more disturbing is the length of the tow. We seem to have been heading south for an age. The airfield is behind, but how far behind? Too far? I have no way of telling. The tow is into the sun and the mountains ahead are indistinct; I have the impression of heading into a valley and directly into a line of cloud resting on the peaks. "Where is this fool taking me?" The variometer has been showing a modest rate of climb and suddenly shows more climb, though still modest. The towplane's wings waggle violently and as I release, his diving turn to the left clears my path. I keep steadfastly on course - if this is wave, I don't intend to lose it. Speed reduced to 40 and I glance along the right wing and see the tip pinned firmly in the steep valley of a mountain stream. Only 200

feet a minute up - but UP. Wave is easy, nothing to do but sit there and climb! One hundred feet a minute up. I glance along the wing again and the tip has dug itself out of the valley and has slipped forward. Reduce speed to 35 - how much slower it seems than when flying over the flat Ottawa Valley! Still 100 fpm up, and then zero. The wing has slipped forward over the ground again. Not enough wind to "park" in the wave.

I turn left ninety degrees and as I drift sideways, the variometer flickers up again: 100 - 200 - 100 again and I am slipping out of the back of the wave. A gentle turn into the wind and again 200 fpm up. Try again at 35. Still slipping forward out of the wave. Better try beating along the wave. A course of 120 magnetic, a turn into wind, a course of 260 magnetic and it seems to hold. The lift varies along the beat, 100, 200, 300, 200, 100 fpm, and turn and repeat. It seems as though the strong part streams back behind a single mountain peak - but which one of the jumbled mass below? Try circling. No that doesn't work, the average rate of climb decreases. The beat gets better results. And the slow climb continues to 8,000 feet.

To windward the mountains stand massive but indistinct, the line of cloud always gives the impression that it is going to drift downwind, but it remains stationary relative to the ground - the cap cloud. There is also cloud high above, it trends vaguely across wind, but it still fails to give any clear indication that it is lenticular. From time to time wisps of cloud form in the valley below causing me to turn uneasily to check my escape route to the airfield.

To the east a Diamant and an LS-1 beat across the wind two thousand feet higher. Join the experts. I turn east but find a gulf of sink. A wall of rock looms up too close for me to press on. I retreat and the wave is lost. A Skylark IV, which released well below me, now crosses slightly above. The variometer shows a gentle but steady sink and the altimeter slowly unwinds. Problem: how long can I search before heading home? I decide that when I get down to release height I will go. But crossing Hart Lake the wave returns as though a gigantic pulse of air is again on the upsurge. Time, the enemy of all who fly club ships, forces me to leave.

Heading North the glinting water signals Lake Placid, the valley floor widens and isolated fields begin to appear, the airfield suggests its position as a cleared area south of town. And then again lift. Tempted once more, I beat east and west and begin to climb gently. The secondary wave. Again I must leave, and wasting height, I head for the circuit and make a fast approach through the ground turbulence. The wheel touches, I clear the runway, slow, and as SEI stops, a wing gently sinks to the ground. Not a long flight, not a spectacular flight, but I flew the wave!

In retrospect: I now believe in the wave and it comes out from the shadows of mythology to which, in my earlier fumbblings, I had once almost consigned the elusive thermal. My wave was a gentle, an elusive and a subtle thing. It did not, at least to me, exhibit the clear cut characteristics we are led to expect - the signs brought contradictory reactions from the experts, it was not as strong as I had expected, it was extremely narrow, it was not particularly quiet and it was not always very smooth.

Wave, it seems, is not only where you find it, it is also how you find it.

A RADIO BUYERS GUIDE FOR GLIDER GUIDERS

By John Firth

There are a number of VHF aircraft radios which are moderately suitable for use in gliders, and many which are not. The average pilot is unable to assess them technically, since he often does not know what to look for. While a review of individual sets is out of the question at this time, and indeed would get me into hot water with various vendors who are touting their wares as being the answer to the glider pilot's prayer, these notes may help the understanding of which specifications are really important. A suitable radio should be able to meet the specifications given below easily. The items are listed in order of importance, and do not cover requirements of the licencing regulations. Buyers should call their local D.O.T. radio field office for these.

RECEIVER:

Sensitivity - 1 μ v for 10 db S/N for 50% modulation at 1KHz. This determines the performance at extreme range. Many multichannel sets are not usable at 1 μ v. A very good receiver will give 10 db S/N at 0.3 μ v, which, in a low noise receiving location, is equivalent to 10 times the transmitter power at the other end.

Automatic Gain Control - Audio output should vary less than 6db for signals from 2 μ v to 10 mv. This minimises volume twiddling for transmitters at various ranges, and effects of fading while circling.

Squelch - This should be continuously adjustable; it should be possible to suppress all except very strong signals. Squelch action should be abrupt, a 50% change in signal at any setting should be sufficient. A squelch on/off switch may only be suitable for local communications.

Audio Output - All sets normally meet this requirement easily, for the quiet environment of a glider. Car sets should provide at least $\frac{1}{2}$ W. Modern sets should all produce very little distortion. Test with a known good transmitter.

Noise Limiter - This is essential for use in a car to minimise ignition noise; do not confuse this with squelch, which merely suppresses background noise in the absence of signal.

Drift - Most sets these days are fixed tuned to the channel selected. For those which have continuous tuning, check the amount of retuning necessary after warming up, and with changes in ambient temperature, if possible.

Power Consumption - Less than 100 ma at 12v. Sets taking much in excess of this (and there are several) will need proportionately bigger batteries, if they are not to need recharging after every time you fly

TRANSMITTER:

Modulation - A listening test on another good set is the crucial test; the transmitter should run into a representative antenna and the monitor

receiver without one, or sufficiently far away to prevent overload. A person's voice should be easily recognisable. Full modulation should be reached when talking in a normal tone of voice one inch from the microphone. Individual sets of the same model vary quite widely in their transmission quality. It is no good having ten watts output if the signal is badly distorted.

Power Output - Notice that I have put this second. More than 200 mw is adequate for most purposes; a low power transmitter does ensure that you do not occupy the channel for several hundred miles around. However, if you are a cross country pilot who likes to leave his crew at home on 500 km triangles, a fair amount of power is a help. Beware of Specmanship; some brochures quote P.E.P., peak effective power, or four times the mean carrier power.

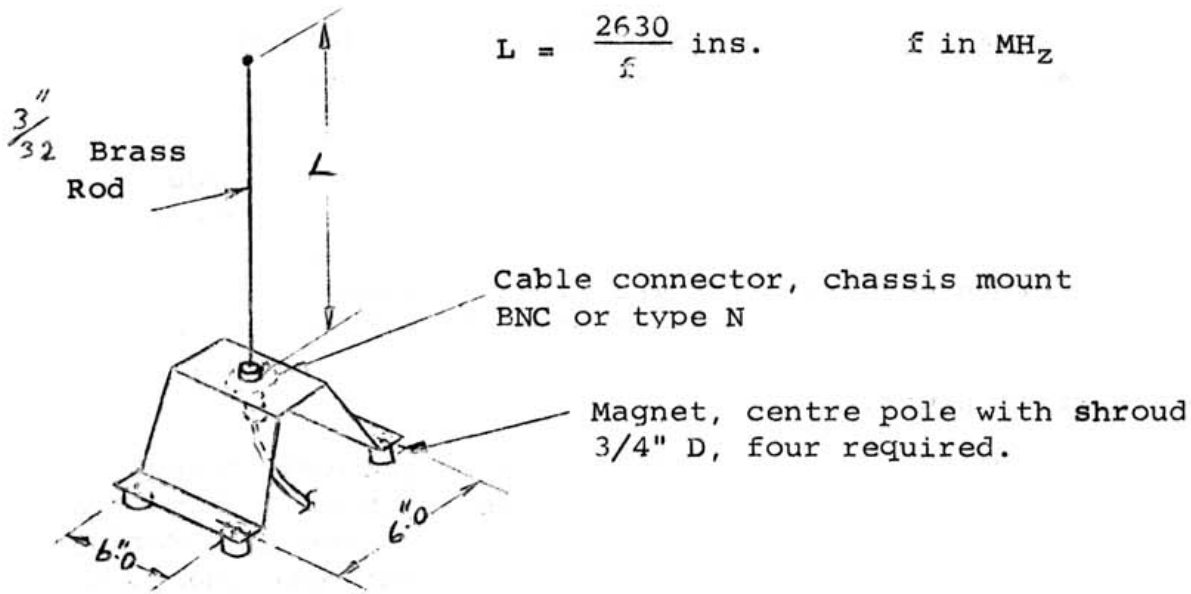
Power Consumption - This is not normally a serious problem, except for those with severe cases of verbal diarrhea. However, bear in mind that although the average power drain may be insignificant, the load during transmitting will be heavy, if the transmitter puts out more than one watt; the battery must be able to supply this without serious voltage drop, or the paper power figure will not be achieved, and the modulation quality may suffer.

Tips for Optimum Performance - The Antenna should be properly connected and matched. It should be clear of metal objects except for its own ground plane. Mounted on the gear door, it can be arranged to stick straight down with the gear up. The location over the wing often seen, is poor. Car antennas should be on the roof, and coaxial cables should be carefully checked for faults; failure at the connectors is common.

Power Connections should be twisted together and go directly to the car battery. Use heavy gauge wire to avoid voltage loss. The car ignition system should be in good condition; corona discharge from dirty wiring can cause a big rise in background hiss.

Maximum Range - Both car and glider will have peaks in their antenna patterns; experiments will show the best orientations for each. The car should be positioned as high as possible, away from buildings and overhead wires, with an unobstructed view towards the glider. Switching off the engine removes ignition noise and helps enormously at extreme range. The pilot should transmit at the top of his thermal a brief message while in the optimum orientation. If there is no acknowledgement, repeat this once or twice; it is common for the crew to hear the glider without the converse.

Please go easy on the jargon; some of it helps but a large amount is superfluous. As a very outstanding pilot remarked at Marfa, of one prominent National Team: "If they talked less, they might go faster".

A SIMPLE CAR ANTENNA

BASE: Make from 1/16" thick (approx.) aluminum

This antenna provides a fairly good match to 50 ohms, when clamped to a car roof. With the magnets properly seated, it will withstand speeds of 70 m.p.h. Ensure that the cable is not pinched in the door.

J.F.

NEXT ISSUE OF 'FREE FLIGHT'

The May 1st issue will contain a complete report of the 1971 Annual General Meeting, including the Committee Chairmen's reports.

Material for the next issue should be sent before April 2nd. Please write to: 'Free Flight' Editor (Mrs. Sylvia Webb), 234 Villeneuve Street, ST. EUSTACHE, Que. Or c/o the S.A.C. P.O. Box in Ottawa.

Remember when HIPPIE meant big in the hips,
 And a TRIP involved travel in cars, planes and ships?
 When POT was a vessel for cooking things in,
 And HOOKED was what grandmother's rug may have been.
 When NEAT meant well-organised, tidy and clean,
 And GRASS was a ground cover normally green?
 When GROOVY meant furrowed with channels and hollows,
 And BIRDS were winged creatures like robins and swallows?
 When FUZZ was a substance, real fluffy like lint,
 And BREAD came from bakeries - and not from the mint?
 When ROLL meant a bun, and ROCK was a stone,
 And HANG-UP was something you did with the phone?
 It's groovy, man, groovy, but English it's not,
 Methinks that our language is going to pot.

Anon.

AIR CADET GLIDING AT CHATHAM, ONTARIO

Many reports have been written on Air Cadet Gliding and its fantastic growth over the past few years. Little is known, however, of the gliding program of 294 Kinsmen Squadron Chatham, which might be called the Number 1 Air Cadet Gliding Centre. The success and growth of this Squadron's gliding activities is worth reporting.

Five years ago in the Spring of 1966, gliding at Chatham was initiated with the purchase of a Schweizer 2-22 two-seat trainer, and the construction of a winch. This was made possible by the financial assistance of the Squadron's sponsors, The Kinsmen Club of Chatham, and the fund raising efforts of the cadets who raised one half the \$4,000 cost.

In the first year, due to a late start, only 78 flights were made, but valuable experience was gained and many of the problems of a new program resolved. It was during this period that the assistance provided by members of the Chatham Pioneer Flying Club, who were on the Squadron staff, proved invaluable.

In its second year of operation, the squadron was called on to provide glider famil. flying at the 1967 Summer Camp at Trenton. This proved to be the start of an extensive Air Cadet Gliding Program, operated by the Ontario Provincial Committee at this base. Besides providing famil. flights to all its cadets, the squadron started the second phase of its program, the instruction of cadets, and five cadets were trained to the solo stage. In all, some 508 flights were made.

1968 marked another milestone. The first cadet trained by the Squadron soloed and with the other trainees went on to complete their licenses, logging over 620 famil. & training flights.

Because of the interest, additional aircraft were required, and a second Schweizer 2-22 trainer and a single seat Schweizer 1-26 sailplane were purchased in 1969. A two week summer glider pilot training course was inaugurated & six cadets were trained to pilot standard. Again, flying activity increased and 1759 flights and 152 hours logged. The previous year's flying was again surpassed in 1970. Another two week course was run, nine cadets trained to pilot standard and 2018 flights, representing 174 hours, flown. A second winch was built to augment the equipment.

The gliding program at Chatham is one of total cadet participation and provided without cost to the cadets. They are trained and carry out duties as winch operators, retrieve car drivers and launch team. Flying training begins at age 15 under the supervision provided by 6 qualified gliding instructors on the Squadron staff. Two of these men are former cadets trained to instructor status by the squadron. Maintenance of gliders and launch support equipment is performed by cadets under the supervision of an aircraft engineer on staff.

Because of the vast experience gained in Air Cadet Gliding activities, Squadron personnel have been called on to assist in the setting up & operation of gliding programs at Trenton, Bagotville, Que., and Greenwood, N.S. The Squadron also trained cadets and instructors of 44 Squadron Sarnia, who have just started gliding activities.

Thus far, 294 Kinsmen squadron has had remarkable success in achieving its aim of providing its cadets with the thrill of soaring & keeping the "AIR" in Air Cadets.

H. Bruhlman, Major,
Commanding Officer.

(Part III)

(This is a continuation of the story written by the late Norm Bruce in Jan. 1948, covering the gliding exhibition tour which started from Calgary, Alberta, on the 25th May, 1935, and covered 2,500 miles).

. . .

Better luck followed us; in fact we had our first real narrow escape. While flying at the Moose Jaw airport, Pelletier discovered that Fretwell and I had been flying with a severed rear spar on the starboard wing. We had noticed a crackling noise in the wing but had assumed it to be caused from the fabric slapping against the ribs. Upon inspection, we found the spar cracked clean through and all that prevented the wing from collapsing was the tautness of the fabric and the ribs binding the cracked portion.

Fortunately for us we had decided that this exhibition would be one without our usual stunts of stall turns, steep dives and zooms. A few years previously the club aero engineer had lost both legs in a glider accident and all the officials were sceptical concerning anything with gliders. To leave a good impression and to fulfil our creed as Glider Boosters, we gave an exhibition of gliding, portraying all the beauty of flight that we knew. For this reason, and this reason alone, do we give credit for surviving these flights without the wings folding up.

Once again we made quick repairs and worked steadily that evening and finished quite late. Having only 42 miles to our next stop at Regina, we decided to drive on that night and in a steady downpour, set off. We were in excellent spirits for the proceeds, nearly \$14.00, gave us a wonderful sense of security. Arriving on the outskirts of Regina in pitch darkness, we found a little stream by the headlights of the car, followed it off the road for a short distance and prepared to camp for the night. Without leaving the car, we let the seats down and, in a crowded fashion, sank into a deep sleep. The sun was well up when we awakened and with a casual glance through the window, I got the surprise of my life. We had, without our knowledge, made camp in the grounds of the Parliament Buildings, and surrounding our site were gardens of beautiful flowers and shrubs. Needless to say, we dressed with all possible speed and without further delay, made our way into town for a hearty breakfast.

The officials at the Regina Airport welcomed us with every courtesy and we enjoyed a long talk about their work as a club and our tour of gliding. Two new Chevrolet cars were loaned for towing purposes and with these powerful cars we got away with good starts. My first flight was similar to the soaring flight of Fretwell's made in Lethbridge on thermals and with graceful banks and spirals, flew up and down the field and over the buildings without loss of height. This flight greatly impressed the club officials and the 1,000 or 1,500 spectators, our largest audience during the tour. To bring the day to a grand finale, the club aeroplanes were brought out and a fine show of stunting gave the crowds an added thrill, which I am sure they will all remember for some time to come.

Driving on to Weyburn, Sask., we interviewed an old glider enthusiast who advised us to fly in a grand field beside the Mental Asylum. Our exhibition went as usual much to the amazement and enjoyment of our audience, but without realizing it, our audience or rather the greater part of it, were inmates from the mental home. No sooner had we got into the air than they surged forward, running helter-skelter in every conceivable direction. They left no room for a landing and our only alternative was to land amongst them, trusting to providence that none would be injured. They yelled with delight as some deliberately ran in front of the landing machine.

A big fellow with an alarm clock attached to a stout cord, came grinning up to me after the flight and in his eye, I could see devilment fostering. The fellow had conceived the novel intention of acquiring my plus-fours for a souvenir, and strange as it may seem, I was really only in a state of security when up flying out of his reach.

One of the most interesting experiences during the tour, was the result of a very interesting phenomenon: Our audience was small and the afternoon was one which bore down hot and sultry with only a faint, soft velvety breeze. The first flight proved a failure. The machine seemed hardly able to support itself in the air and after a rather dangerous take-off, staggered back to the ground as if the wings were unable to support the glider's weight. I had experienced this condition previously during my gliding in Medicine Hat and from past experience, came to the conclusion that to succeed in making a reasonable flight for our audience, the machine must be lightened of all superfluous weight. Being on the lighter side than Fretwell and after emptying my pockets of all trinkets, and removing all superfluous clothing, I was able to lighten the craft to make a fair take-off and perform a flight much to the satisfaction of the small group of people. The glider had little buoyancy, the turns were executed with great difficulty and my flying partner still scoffed at my precautions of lightening the "Lawrence". However, with his fifteen pounds of excess, he was unable to get up to anything but just off the ground, although I gave the tow car all the speed she had. It was my day however, having the advantage over weight and I performed three flights.

To be continued.

C L U B N E W S

CHINOOK GLIDING CLUB

Letter from Mr. A.R. Hanson

It must be two years since our activities were reported. During 1969 the 1-19 made 146 flights with an average of 11 mins. per flight. In 1970 the same machine made 140 flights for an average of 12.6 minutes. The Grunau (CF-ZBH) which is our deluxe machine is used on the better soaring days. In 1969 it made 17 flights and in 1970 23, for an average of 27.6 and 19.9 minutes per flight respectively. Our longest duration flight to date is 3 hr 5 mins in the 1-19. No cross country attempts have been made in the last 2 years. The writer rode the 1-19 to 12,000' ASL last April 11th for a height gain of 7,600'. Harold Cook still holds the best altitude to 13,000', in the 1-19, made in wave during 1967.

Last Fall we trained another student, Max Woslyng, via the ground slide short hop method & so we now have 5 pilots. One member, Bev Woslyng, who lives in Inuvik, NWT, comes out only once a year. He was down for Xmas and so we started the New Year right by going out flying on Jan. 1st, 1971. Our student was introduced to winch tow that day & after two straight hops performed two circuits very capably.

Last October, Dick Mamimi invited Harold and I, and others, to Lee's Lake near Burmis, which is West of Pincher Creek, where he had rigged an excellent auto pulley rope launch. Dick, with his HP-14, and André Dumestre in the Libelle, showed us what flying is all about by using the ridge lift as a step to the wave and the limitless roaming that is possible. Harold and I used the Grunau for about half an hour each in the ridge lift, and we are grateful to our host for this new experience.

EDMONTON SOARING CLUB

Taken from "Towline"

The New Executive for 1971 consists of: Dan Pandur (President), Len Wheeler (V-Pres.), Jack Burrell (Sec'y), & Jan Robertson (Treas.). Dan Wolski, John Pomietlarz, Chester Zwarych and Garnet Thomas (Past-President) are directors. John Pomietlarz has been appointed CFI, and Harry Byrt has been asked to serve as Chief Tow Pilot.

The Land Fund now stands at \$2,949.80. This amount is made up of \$2,400.00 in \$100.00 solo privilege subscriptions and \$549.80 consisting of \$487.00 net profit from the Land Raffle in 1970, and the remainder in interest earned.

In the hope of making the 1-23 pay her way, and to keep her in the air more, she will be available to the first man ready to fly her, for cross-country flying on weekends. At present the aircraft is receiving a face lifting, with trailer improvements, under the supervision of Dan Pandur.

G.T.

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ERIN SOARING SOCIETY

From "THE WEATHERFORECAST"

1970 was a good year for the Erin Soaring Society despite the adverse weather conditions during most of our gliding season. We had a remarkable number of flights - 1,160 in total.

The club at present has 35 members, most of whom are active. Utilisation of club airplanes was very high. 1970 produced a record number of solos: Deana Goulin, Don and Jack Dodds, Harold Goodison, Don Parker, Neil Pool, Steve Simon and Barry Schiele.

Monday, Oct. 26th, marked the arrival of our much talked about trailer. It is 48 feet long with plenty of room to relax, enjoy get-togethers and has sufficient space in which to prepare a snack. ...

Hopefully in 1971 we should be able to release the 1-26 for "C" awards, since the 1-26 trailer will no longer serve as a clubhouse. Talking about "C" awards, our CFI, Dale Goulin, received his Silver C in his BG-12 and also achieved his Gold "C" height whilst trying wave soaring in Vermont last Fall.

Don Bell missed his Silver "C" distance by one mile and landed his Ka-6 in his backyard, neatly steering it around groundhog holes.

Gliding & soaring were promoted last Spring & Fall to High School students in Don Parker's classes. With the help of Walter Keeler and Bill Budachs as tow-pilots and Dale Goulin, Don Bell and Charlie Somfay instructing, they had some midweek flying. On Saturday, Aug. 22nd, some members of the 99ers visited our field to try gliding but unfortunately the soaring was poor.

Over the winter we are going to do some work on our gliders in Walter Keeler's chicken house. It will be heated and thus an excellent workshop to do a little maintenance on the 2-22.

During 1970 our members worked together as never before. We had many good times at the field and we hope our spirit will be as good in the 1971 season.

K VanB & J.G.

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MANITOBA SOARING COUNCIL

Taken from WGC's "SOCK TALK"

The Manitoba Soaring Council - a group of dedicated soaring enthusiasts from Manitoba Clubs, formed to further the development of the soaring movement - elected their Officers at a meeting held January 6th: Dave Tustin (WGC) was elected President, Harry Curtis (RRSA) Vice-President, Glen Buhr (WGC) Sec'y/Treasurer & Franck Pellerin (RRSA), (Past President of Ma.S.C.). Ian Rollo (RRSA) and Robert Lancaster (WGC) are directors.

MONTREAL SOARING COUNCIL

Taken from "Downwind"

M.S.C. was founded in 1946 and after 24 years of operation is worth a considerable amount of money. The club experienced its fastest rate of growth during the past ten years, adding \$4,000 annually to its net worth. The largest steps were taken between 1964 & 66, when M.S.C. members bought the airfield, the hangar and had a clubhouse built. MSC's liabilities at the end of 1966 were \$36,000; by the end of 1970 this had diminished to less than \$20,000.

During 1970, nearly 4,000 flights were made, 2000 of these for training. The Club's Blanik and 2-33 were utilised the most, with 650 & 750 training flights respectively. A second 2-33A has been purchased for the 1971 season. Flying commenced May 8/70, and the closing up party at Hawkesbury was held November 15. During the season, MSC's income reached \$40,000, even though soaring conditions were only marginal. Almost \$3,000 was paid to S.A.C. for membership fees.

To avoid members becoming discouraged due to long waits for club aircraft, a progressive step was taken by the directors and membership, to procure a second Blanik & also a fibreglass LS-1, both aircraft for delivery Spring 1971. The a/c will be paid for through Members' loans to the club (at 5% p.a. interest). MSC will repay the loans commencing in 1975.

All in all it was a most enjoyable and profitable year at MSC due to the combination of a large and enthusiastic membership and seven very capable & energetic directors.

We were all very sorry to see three very active MSC members leave the club: John & Cindy Bisscheroux who moved to N.J. with Rolls-Royce, and John Chamberlin, who moved to Toronto with Collins Radio.

QUEBEC SOARING CLUB

Letter from Fabien Caron

1970 was another good year. Our season was officially "opened" on January 10th, when Daniel Lizotte, with Bonhomme Carnaval as passenger in the 2-33, landed (& groundlooped) on the Plains of Abraham!

The officers decided to buy a Blanik and put the LK up for sale. However, about half the members almost rioted against the latter move and so the LK was kept and later flew 194 flights for 101 hours during the season.

Operations began in late April, in a sea of mud; the ruts made in the turf lasted all season. Weather in general was even worse than in 1969, with 5 rained-out weekends in a row. However, Maurice Laviolette still managed to make the best trip ever in the club's history when, on June 7th, he flew the Ka6CR to Coteau Landing via Drummondville, Grandby and Valleyfield, on a 300 K dog-leg fixed goal attempt to Hawkesbury. This would seem to have been flown the wrong way, as such attempts in the area are usually made from west-to-east.

The club Blanik arrived in July and made 247 flights in less than three months.

We closed the season with 65 members, which included 15 recruits and 2 oldtimers who came back. We ran into the dreaded drug problem and are presently overhauling our recruiting procedure, partly to cope with this. Other clubs should bear this in mind when recruiting & learn by our experience. Badgewise 1970 was our best year ever, with 3 "C"s and 3 Silver "C"s.

In September we made the big move and organized a wave camp in Baie Saint-Paul; it was, of course, restricted to the better ships and the more experienced members. The Ka-6 and the HP-14 were trailered, but the Rochette Blanik was Auster-

towed. The weather didn't cooperate too much and the strictly experimental venture was cut short by towplane problems (again!) but several pilots toyed with the low altitude waves. The experience gained there could perhaps be used to ride the gorgeous waves that regularly appear right over Quebec City just before or just after the soaring season!

For 1971 our officers are: Daniel Lizotte (President) and Jean Bellavance (V-Pres.). Daniel has been a power pilot since 1949. He began soaring in 1964 and soon graduated to the rank of instructor. He has held several important official posts at QSC as well as being an Air Cadet gliding instructor since 1966 - 3 years in Penhold and 2 in Bagotville, Que. His tenure as President will certainly be one of great changes, especially in the Chart/Constitution/By-Laws reorganization and in rewriting our safety rules. Jean joined our ranks in Oct. 1968, won our "Best Student" award the following year and our "Best Pilot" award in 1970. He is very gifted for maintenance, too.

Projects for 1971: Much work on the runway and maybe a new towplane hangar to replace our legendary flying barn (holder of a Canadian record for x-countries: 16'!).

WINNIPEG GLIDING CLUB

Taken from "SOCK TALK"

The Club's A.G.M. was held on Dec. 12/70. Our new executive for 1971 is: Bob Lancaster (President); Rod McNaughton (Vice-Pres.); Glen Buhr (Treas.); Alan Suderman (Sec); Zella Vermeulen (Past President); Jack McMorran - Club Meteorologist, (Club A/C Storage Officer); Jeff Tinkler (Chairman Safety Cttee.); Alan Sunley (Chairman Maintenance); Alan Butler (Chief Tow-pilot) and George Evans - Chief Flying Instr.

Total flights during the 1970

season numbered 1573, down from '69 by 337 flights. Flight time, however, increased by 4 hrs. 48 mins., with a total of 400 hours, 37 mins. These figures represent 108 flying days during 1970.

Two "Tern" sailplanes are being built in Pinawa by Tony Sawatzky & Ian Oldaker. Started in 1968, they now have between them, one wing, one partially finished wing, one nearly finished fuselage & assorted spars, instruments, canopies, etc. One of these aircraft was supposed to fly in the 1970 Nationals at Carman. However, Ian is not a very good estimator (Tony says the word should be "lousy"). Rumour has it that he almost has his fuselage finished & has got all the pieces for a steel and aluminum trailer. He is now aiming for a definite first flight in the 1971 season. The other machine boasts the wings and tail assemblies.

The Tern is an all-wood sailplane with an L/D in the mid 30's and a design maximum speed of 140 mph, al-

though the designer says that 120 should never be exceeded intentionally. Cost of materials in the U.S. is reportedly around \$700, but these have worked out at about 50% or 60% more. Such things as covering the all-plywood skin with cloth will add to the basic cost. Arrangements were made with Jim O'Toole to mold some canopies in Winnipeg from a plaster mold. Although they experienced some problems with wrinkling near the edges, both Ian and Tony now reckon they can successfully produce a substantially distortion-free canopy. Anyone for a canopy?

Ian Oldaker says he knows of a source of "Tern" fittings and some instruments. He says the steel work is quite demanding and anyone contemplating building a "Tern" should seriously consider picking up these parts - it will save a lot of effort with hacksaws, files, welding and drilling. Get in touch with him for details.

K. & M. L.

C A L E N D A R

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| March 20th | S.A.C. Annual General Meeting, Ottawa, Ont. |
| April 10-16 incl. | S.A.C. Western Gliding Instructors' School, CFB Penhold, Red Deer, Alta. Pre-registration with \$20 deposit per candidate required 30 days in advance of course. <u>Contact</u> : Don Skinner of the Cu-Nim Gliding Club, Calgary. |
| May 22, 23 & 24 | Victoria Day Competition, Gatineau Gliding Club, Pendleton Airport, Ontario. |
| May 23-29 incl. | S.A.C. Eastern Gliding Instructors' School, Pendleton Airport, Ont. Pre-registration with \$20 deposit per candidate required 30 days in advance of course. <u>Contact</u> : Walter Piercy of Rideau Gliding Club, Kingston. |
| July 6 - 16 | 23rd Canadian National Soaring Championships, Pendleton A/P, Ont. <u>Contact</u> : Gatineau Gliding Club. |

('FREE FLIGHT' will publish details of inter-club competitions or wave camps, etc. in order to encourage participation in these events. ED.)