march/73

free-tight

official publication of

THE SOARING ASSOCIATION OF CANADA

ORGANIZATION - 1972

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FREE FLIGHT

THE NEWS LETTER OF THE SOARING ASSOCIATION OF CANADA

Issue 2/73 March, 1973

XXV CANADIAN NATIONAL SOARING CHAMPIONSHIPS WINNIPEG, MANITOBA

As a result of the questionnaire on page 45 of the November/December issue of 'Free Flight', the dates for the Nationals have now been set as June 26th - July 5th, 1973. The location is the Winnipeg Gliding Club's field at Pigeon Lake, Manitoba, 45° 59'N, 97° 40'W (see location map in April/May 72 issue of 'Free Flight').

Entries for the Open and Standard Classes will be limited to a number which can be comfortably accommodated at the Pigeon Lake field. In addition, this year, provision is being made for a Sports Class. The purpose of this class is:

- to give less experienced pilots and owners of "club-type" ships an opportunity to fly under competition conditions against other pilots of similar ability from across the country;
- (ii) to provide the incentive for these pilots to tackle a series of cross country tasks which otherwise might remain untried, and to be, in effect, a "Badge Camp" for Silver and Gold legs;
- (iii) to allow potentially competition-minded pilots to try out their fun-ships before making the expensive decision to move up to a super-plane.

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Most of the tasks set for the Sports Class will be specifically badge oriented and will be scheduled and planned so as to minimize any potential conflict with main-event gliders.

Tow Planes: The Winnipeg Gliding Club now owns two tow planes. In addition, two more are being acquired for the duration of the contest.

XXV CANADIAN NATIONALS (Cont.)

Accommodation: Trailers will be obtained and set up at

the field for those who wish to rent them. There is a campsite for out-door types, while motel accommodation is available less than 20 minutes' drive from the field

for the luxury-minded/affluent.

Field Facilities: Toilets have been constructed at the field, and full washing facilities will be

installed during the Spring of 1973.

Operations Centre: A large marquee will be used as the

operations centre for briefings, information, relaxing, shelter, etc. It is anticipated that a snack bar will be set

up here too.

Entry Fees: The entry fee will be \$25.00 (\$5.00

additional for each extra pilot) plus a

\$5.00 deposit for film processing.

Information: Please address all communications

regarding the contest to Mrs. Hazel Flint,

96 Harvard Avenue, Winnipeg, R3M 0K4.

H.F.

(A blank entry form for the Nationals is at the back of this issue. Ed.)

Love is ...

Lelling her how much you need her!

CROSS-COUNTRY TOWS CAN BE FUN!

Dave Tustin, W.G.C.

Several times each season some of our glider guiders have the need for cross country airtows. It could be the return from a cross country flight or to put on a demonstration at St. Andrew's for instance - and of course there are other reasons.

The experience could be a 'no sweat' operation or one that you will remember for a long time because of the wild journey you had.

Here are some pointers:

- Normally a long rope is easier to fly than a short one. For obvious reasons it will give you more time to relax. If the distance is extreme, i.e. 100 miles or so, I would recommend two ropes joined together. Jim O'Toole and I towed a BG 12 from Rosetown to Winnipeg (some 570 miles) in one day with a double rope without a hint of a problem.
- What altitude should be used? Fly as high as is practicable for the distance to be covered. If for some reason you lose the tow rope, you will be able to glide further and will have a choice of some landing sites. If the leg is short and there are thermals present, it might be less taxing to fly at a low altitude so that you are only penetrating small cores. If the leg is long, attempt to out-climb the 'rough' air. The beauty and scenic grandeur of a flight over tops of cumulus clouds has to be seen to be appreciated.
- 3. If a long tow is planned, spend some pre-flight time locating all useable aerodromes on your route that can be used in case of an emergency.
- You will want to cover the distance as fast and as comfortably as possible, so have a set of signals to advise the tow pilot if he is going too fast or too slow. i.e. glider left too slow; glider right too fast.
- If there are thermals present ensure that the tow pilot understands that he should be very cautious about letting down en route as you will have a tendency to overtake the towplane. This is a very interesting occurrence, believe me! The only method with which you can counteract an overtaking situation is to use your spoilers, flaps, or dive brakes.

5. Cont.

Also, if the air is turbulent or there are strong thermals present and the tow pilot picks this moment to descend without an increase in his airspeed, you will find, if there is any 'royapiting' (rolling, yawing and pitching) going on, that you will put your elevator under the influence of turbulent air off your spoilers which creates even more workload for the harried pilot. This situation could occur with a glider with air brakes also, if the location of the brakes on the wing is not too far outboard of the bcrizontal stabilizer. Flapped gliders will not have any problems with overtaking the towplane, as it is quite simple to increase your drag by applying more flap.

- 6. The tow position should be high-tow. If you get any slack rope you certainly don't want it over the glider.
- 7. If you are flying a two seater, try to take another pilot along with you to share the tow, as air loads on the control surfaces of some gliders can soon tire you out especially at higher speeds. Even if this characteristic isn't present in your own particular two-seater, it makes the flight more fun with someone along and, of course, it allows one more pilot to become experienced in cross-country tow procedures.
- 8. Like any flight, this one should be thought out thoroughly before take off. Briefing of the tow pilot is of utmost importance and once airborne, follow your track along on a map so that you are aware of your position at all times.

It's fun when done the right way. Try it!

(Reprinted from Winnipeg Gliding Club's "SOCKTALK")

TRANSPONDERS ANYONE?

by W.J. Quigley, SOSA

The MOT keeps murmuring about transponders. Let's have a quick look at the whys and wherefores of the beast and see what it can do for and to us.

It all starts with a few little flaws in the basic Air Route Surveillance Radar (ARSR) primary system. The ARSR sends out a pulse of radio energy in a narrow beam and listens for reflections of the pulse. The radar tells how far the reflecting object is away by the length of time that it takes for the echo to come back. It tells direction from the direction in which the radar antenna is pointed.

The beauty of the primary radar is that the reflecting object doesn't have to do anything at all - it's enough to be within "sight" of the antenna. Primary radars are favoured by the military who seem to have difficulty in getting their opponents to cooperate; by people looking at the weather, which, as we all know, never cooperates; and by navigators for mapping-type radar, since geography is traditionally uncooperative.

But I mentioned flaws:

- (1) The primary radar cannot "see" things which do not reflect its pulse. Wood, fabric and fiberglass gliders don't reflect worth a darn. A few metal cables, spars, push-rods, or the pilot's stainless steel dentures don't help.
- (2) The primary radar cannot tell, by itself, which particular aircraft each echo is from, and the Controller needs to know the registration or flight number of his IFR echoes. When only primary radar is available, the Controller asks the aircraft that he wants to identify to make specific turns. He then assumes that the aircraft going through the gyrations specified is the one in which he is interested.
- (3) The strength of the echo from a perfect reflector is very small. The Controller can see a 747 at FL350 at 200 miles. He can see a Beech 18 at a few thousand feet ASL at 40 to 60 miles. He can't see a Libelle unless he accidentally looks out of his window!

A secondary radar system solves these problems by having the things that it wants to look at carry a reflector that talks back. This "transponder" consists of a transmitter and a receiver. When it receives a pulse from the ground radar transmitter, it automatically turns on its own transmitter and sends a pulse back. In a secondary

TRANSPONDERS (Cont.)

system the ground radar doesn't have to send out as strong a pulse (it only has to make a one-way trip). The ground receiver doesn't have to scrape around in the noise looking for echoes - it gets a hearty signal back from the transponder.

The transponder can be made so that it reacts only when it gets a particular kind of signal from the ground. It can also send back a short message (full of things every Controller should know) instead of merely saying, "Hello".

Secondary radar is very popular with the military people for telling friend from foe; and with space people who want to track their birds at very long range and feel that they're entitled to more than just a casual "Hi" from their multimillion dollar investments. It is also popular with IFR pilots (who are tired of flying funny-looking patterns in order to identify themselves) and ATC Controllers. The Controller would like to be able to see an ASW-12 at 200 miles, especially if he has cleared a 747 IFR through the same piece of sky and is uncertain how much fiberglass the 747's number 3 engine can safely ingest.

The Controller has another frustration. The primary radar will show him where a seeable aircraft is, but it won't tell him its altitude. He must ask the pilot. On climb-out and descent, in particular, he has to query the pilot - frequently. In high density areas, such as JFK, a large part of the communications consists of Controllers trying to find cut how high everybody is at any given moment as they whistle up and down at high velocity in great numbers in a very limited airspace. It makes you nervous just to listen.

Since the transponder is sending back a burst of information, you can include the altitude. All you have to do (once you have designed the transponder with this in mind) is connect it to an altimeter with a suitable electrical output. It is important that the altimeter sending the signal to the transponder is the same as the one that the pilot is watching. There must be no disagreement between the Controller and the pilot on aircraft altitude.

The Controller is now much happier. Instead of getting acute eyestrain and ulcers from trying to interpret what finally turns out to be a fly-speck on his 100 mile ring, he gets a beautifully bright bar - even at 200 miles - from everything that is transponder-equipped, be it 747 or parachutist. Other good things happen for the Controller. Instead of having to watch his screen carefully for aircraft flying the triangular emergency pattern,

TRANSPONDERS (Cont.)

ATC has fixed things up so that any transponder set to code 7700 will ring bells and flash lights that say, "EMERGENCY". If you are flying along and your communications fail, you just squawk code 7700 and ATC knows. (When a transponder does its thing, it is said to "squawk".) If you are transponder-equipped and flying VFR, you are supposed to squawk code 1400 above 10,000 feet ASL and code 1200 below 10,000. On the High Level Airways (above FL230, that is) you should be set to code 3000 (unless ATC says otherwise). Your Controller can select a filter so that only those codes in which he is interested appear on his display. When a new aircraft enters his control, he can request the pilot to squawk "Ident". The pilot pushes a button on his transponder control panel and, on the next sweep of the radar, the Controller's display will show him which aircraft pushed the button.

"Altitude-reporting decoding and display" equipment is being evaluated at Moncton ATC. This is its first appearance in Canada. Some transponder-equipped aircraft don't have the electrical encoding altimeters to feed their "altitude reporting" transponders. But the system is coming along.

If you were ATC, you'd like secondary radar. But what is involved in putting it in a glider? Mostly money - so what's new!

A quick look around turns up prices from \$450 to \$3,000 plus. The models that you would probably consider are in the \$550 to \$1,000 bracket. They all require an antenna - about 2" long - which will cost from \$10 up (but shouldn't be too difficult to make). They require a 12 or 24 volt D.C. supply that will deliver 2.5 to 3 amps (at 12 volts) for as long as you are airborne. The Bendix TPR-640 at \$830 seems to be an exception to this, requiring only .8 amps at 12 volts.

Current proposals talk of permitting lower transponder power output for those who don't fly above 15,000 feet. Such units appear to save very little on battery power; they come in the same size packages as their higher powered relatives; and are about ten per cent cheaper.

Single unit transponders occupy about 150 to 200 cubic inches and are available in either a small shoe-box or flat-pack form. All weigh about three pounds.

TRANSPONDERS (Cont.)

While there are four "modes" of transponder transmission, A, B, C, and D, most of the transponders we are talking about do not have anything called "mode select". "A" is the basic identification mode and you automatically go to mode "C" if you turn on altitude reporting. You can select any one of up to 4,096 (usually) codes from the control panel at the request of your neighbourhood Controller. All transponders have an "Ident" switch which you will operate on request, plus "power-on", "self-test" and an assortment of knick-knacks which the manufacturer feels that you cannot live without.

Just to part on a cheerful note - if altitude reporting is required or desired, you can add another few hundred dollars for the special altimeter, but it shouldn't gobble up too much power!

(The above article was reprinted from the "SOSA NEWS")

S.A.C. NEWS:

New Club in Ontario Zone:

We are pleased to welcome the Huronia Soaring Association as a new S.A.C. Member-Club. This brings the total of Member-Clubs to 44, 21 of which are based in the Province of Ontario.

Free Flight:

This issue of Free Flight contains the balance of S.A.C. Committee reports not available for Issue 1/73 which was mailed for printing on Jan. 30/73. It is hoped to publish the report of the A.G.M. as soon as possible after the meeting on March 24. In the meantime, please continue to send articles, club news and ads to "Free Flight" Editor (Mrs. S. Webb), 343 Dufferin Street, Fort Erie, Ontario, L2A 2T8.

LETTER TO THE EDITOR:

"During a recent business trip to the Boston area I had the opportunity of viewing some excellent soaring films, with the Region 1 Soaring Association, and thought that perhaps some of our Canadian soaring pilots would enjoy them as much as I did. The purpose of this note is to pass along the names of the films, plus a few comments, plus the addresses from where the films may be obtained.

"The first film is entitled, "WHERE NO BIRDS FLY" catalog number SD16-7025, available from S.S.A., R.D. No. 1, Elmira, New York 14903. This film was made during the 1970 International Competition at Marfa, Texas. The film runs for approximately 30 to 45 minutes (it comes on an 18" reel) and is superb in its organization, presentation and quality of both audio and visual effects. This film has done an excellent job of capturing the excitement of an international contest (complete with high speed finishes) as well as the depression that sets in when several days of rain wipe the contest out, or when we see beautiful fiberglass gliders bent and broken. Finally, just to keep ourinterests up, there are a few random shots of Canadian pilots (and their crews) such as John Firth, Wolf Mix and a mention of Willi Deleurant - who we don't see because he is too busy walking 20 miles out of the hinterland!

"The second film to be shown is entitled "TWO-NINER JULIET" with identification number SD-16-7057 and also is available from S.S.A. film library. This film was photographed by the National Oceanographic and Atmospheric Administration out of its facility near Denver, Colorado. The story is based on thefully instrumented 2-32, it is used for cloud physics experiments. This film runs about 30 minutes and shows some excellent wave clouds, complete with flight into wave clouds and into the wave area as well as flights into cumulonimbus clouds. Great, brilliant, thick shafts of lightning adds some sparkle (?) to the picture while the commentary is punctuated with rolling claps of thunder.

"The final film, a 9 minute technical presentation "BENDING AILERON FLUTTER OF THE SAILPLANE SB-9", showed the hair raising symmetrical and asymmetrical oscillations of the slender SB-9 wings. This is the same film as was shown at the M.I.T. Symposium in October and has been reviewed in some of the other journals. It is my understanding that this last film is available from two sources:

1) NASA-LANGLEY Research Center, Hampton, Virginia 23365; attention: Mr. W.H. Reed, Mail Stop 340 and reference film as above.

2) Berkshire Manufacturing Corporation, Oakridge, N.Y.; attention:
Mr. A. Zimmermann. This latter company manufactures the Concept 70 sailplane, apparently, and they have a copy of the film and it may be possible to make the necessary arrangements."

CALENDAR OF CANADIAN SOARING EVENTS:

APRIL 14 - 20	 Western Instructors' Seminar - CFB Penhold, Nr. Red Deer, Alberta. Contact: Don Skinner, 3831-7th Street S.W., Calgary, Alta. T2T 2Y4
MAY 19 - 21	 May Meet, Innisfail Airport, Alberta. Hosted by Edmonton Soaring Club. Contact: Dan Pandur, 11950-56th Street, Edmonton, Alberta.
MAY 19 - 21	 Victoria Day Meet, Pendleton A/P, Nr. Ottawa, Ontario. Contact: Gatineau Gliding Club, Box 883, Stn. B, Ottawa KlP 5P9.
MAY 20 - 26	 Eastern Instructors: Course - Pendleton A/P, Ontario. Contact: Walter Piercy, 184 Churchill Cres., Kingston, Ont. K7L 4N2.
JUNE 26 - July 5	 25th Canadian National Soaring Champion- ships, Pigeon Lake (45° 59'N, 97° 40'W), Manitoba. Contact: Mrs. Hazel Flint, 96, Harvard Avenue, Winnipeg, Man. R3M OK4.
JULY 28 - AUG. 6 (Incl.)	Ontario Open Gliding Championships - Rockton A/P (Nr. the African Lion Safari), Ontario. Contact: SOSA, Box 654, Stn. "Q", Toronto 7, Ontario. M4T 2N5

('Free Flight' will be pleased to publish dates and details of inter-club competitions or wave camps, etc., in order to encourage participation in these events. Ed.)

C L U B N E W S

ALBERTA SOARING COUNCIL: From Edmonton S.C.'s "Towline"

The Annual General Meeting of the Alberta Soaring Council was held on Sunday, January 28th in Red Deer. Bruce Hea was elected President and George Dunbar Secretary-Treasurer, both are from Calgary.

The May Meet will be held in Innisfail again on the May long weekend, May 19 - 21. This year it is the E.S.C.'s turn to organize it and Dan Pandur has agreed to be Contest Director. Anyone interested in helping him to run it, should contact him.

Don Skinner gave the details of the next Instructors' School to be held at Penhold this spring, April 14-20. This course is recommended for any prospective instructors, or any current instructors looking to improve themselves.

There was also some great news about the Cowley field. Klaus Stachow (Cu-Nim) reported that the A.S.C. has been granted full use of the Cowley Airport as a public glider -port. This includes approval to sub-lease land for any buildings we may require. This is a major step towards opening of the air-space above Cowley for high-altitude soaring, and a first step towards a full-time flying operation.

Dave Smith

EDMONTON SOARING CLUB Taken from Towline

With the passage of the new year, many of us look forward with anticipation to the next flying season. This year will undoubtedly be one of the busiest years ever for your club, with the move to Chipman Glider Port.

The Airport Committee has gone back to the drawing board to produce a "field layout" for presentation at the March 14th meeting. At that time we will have to settle on a definite layout so we can mark out parking areas and tie-down areas. As soon as the ground thaws we must put in the tie-downs and clean up the runway ready for use. I expect that it will be late April or early May. Every year the club goes to the May 24th Meet at Innisfail, and this year will be no exception. This event gives us an excellent opportunity to move to Chipman, as the gliders will be trailered for the trip to Innisfail.

In February, the Executive established a "Ways and Means" committee, chaired by Harry Byrt, with Victor Berg and Jim Bell as members. The purpose of this committee is to determine the financial capabilities of our club.

Last Fall we passed a resolution to engage in an exchange membership with the Vancouver Soaring Association.
The details of the exchange were to be worked out between the VSA and ESC executives. At the last Executive Meeting we drew up a recommended set of rules which the writer will discuss with Keith Godfrey, Bernie Brayshaw, Rick Dumala, and other VSA members. in February.

bers, in February.
One last item. I would like to compile a list of records held by members of our club. These will be maintained in two categories:

1) Records held by any member in any ship.

2) Records held by any member in any club ship. If you have flown, or know of members who have flown possible E.S.C. record flights, please send them to me.

m Strong

MONTREAL SOARING COUNCIL:

Taken from "Downwind"

A midwinter social was held on January 27th. During the evening some interesting films were shown including:

SB-9 Flight Test.

 Atmospheric Research Cloud Study Film.

3. "Two Niner Juliet" featuring the Explorer Sailplane.

4. "The Changing Skies", from Wave Flights, Inc.

STOL Flights, Montreal - Ottawa:

An Air Canada pilot, seconded to the STOL project said that when the flights begin, the Twin Otters to be used, will fly at 160 to 170 kts at altitudes between 2000 and 8000 ft. The 2,000 foot levels will only be used on days with low cloudbase, but the levels of 3,000 to 8,000 feet will be used regularly. The flights will be on IFR flight plans, but as the aircraft used have low wingloading, they will not fly in clouds to avoid turbulence.

Due to uncertainties with the present Government and the lack of aircraft, the project may not start until 1974. As the flights will be made in the area south of Hawkesbury, the flight schedules will, no doubt, be of interest to those of us who go on cross-country flights.
L-19:

Oscar Estebany, as Chairman of the KLL towplane syndicate, asked the Directors for an \$8,000 loan to help purchase an ECTOR-made L-19 for \$13,000.00. The Directors asked that KLL be sold first. KLL is presently being advertised for sale. Most syndicate members have agreed to a levy of \$200 each to reflect their share in the higher value of an L-19 when purchased.

T-61 (Motorfalke):

Terry Beasley is interested in buying a Slingsby T-61 two - seat self-launching glider. MSC Directors have agreed in principle to allow Terry to operate such an aircraft for a year, after which MSC would have the option to purchase the aircraft.

Buckshee Building:

The Canadair sports pavilion at Cartierville was sold to M.S.C. for \$1.00. A certain number of noble characters, under the indefatigable leadership of Jim Henry, braved sometimes below zero weather to cut up the structure into manageable pieces, then load the pieces on to rented trucks, go with the trucks to Hawkesbury and unload the pieces there.

Ozzie Maranta.

RED RIVER SOARING ASSOCIATION:

Taken from RRSA Newsletter, Dec. 172. "Aero-Mingle" held at St. Andrew's airfield was a considerable success. It is rare to get a group together of people with different interests, but with a certain amount of common ground. A good time was had by all, whether watching glide aerobatics; parachute jumping; or radio controlled model aircraft, etc. There were demonstrations of 'chute packing, and the group then went and jumped using the newly-packed equipment, just to prove that they really did work. The "E.A.A." boys had their planes on show and (most of them) in the air.

Our executive have authorized the procurement of a new cable for the winch. This will be available for next season, so the muscles of our arms will get a rest!

J.W. Davies.

VANCOUVER SOARING ASSOCIATION - from 'Vancouver Soaring Scene'.

Awards Banquet:

Some 48 members and friends attended the banquet held at the Georgia Hotel in Vancouver. Following the meal, Charles Grant, Awards Committee Chairman, introduced the winners and briefly outlined their flights before the President, Keith Godfrey, presented the Certificates and Trophies.

The Committee this year devised for the first time, an "ORDER OF THE OUTLANDERS" certificate which commemorates a pilot's first off-field landing. Those for 1972 were presented to:

Rick Dumala (Ka8) - landing between Ephrata and Grant Orchard - July 4th.

Keith Duckham (Ka8) - landing between Claresholm and Blackie - July 14th.

Clarence Sharp (Ka7) - landing between Claresholm and Picture Bute.

The annual trophies were then awarded as follows:

Senior Award - PETER LAMLA - Cirrus CF-BMX - 317 miles Diamond Triangle Flight out of Minden on July 26th, average speed 48.2 m.p.h.

Hope Trophy - BERNIE BRAYSHAW - Ka6 CF-SHG - 57 miles from Hope to Langley, B.C.

Eastern Washington Award (formerly Wenatchee Trophy) - PETER TIMM - Phoebus CF-WLR - 225 miles Ephrata - Pullman/Moscow - Wilson Creek.

Junior Trophy - DON TRIFFON - Passed Licence Test before required age and acquired licence on his birthday after a year of solid progress.

It was noted that the B.C. Centennial Trophy had already been awarded to PETER TIMM at Princeton following the spring contest.

A touch of humour was added when Keith Duckham was presented with the "OOPS" award - a delightfully constructed replica of a trailer (towed by Rubber Duck) to commemorate his Silver C distance flight and poke fun at the narrow margin by which he achieved it (.3 kms.)

Christine Timm.

WINNIPEG GLIDING CLUB

from "Socktalk"

1972 Awards:

SCHWEIZER TROPHY:

lst: Hazel Flint (for a flight of 4 hrs. 42 mins.)

2nd: Neil Keating 3rd: Harvey Backman

JACK BARBER TROPHY:

lst: Ian Oldaker (total of 653.5 points)

2nd: Russ Flint 330.5 3rd: Norm Taylor 264.5

JIMMY DEW TROPHY:

1st: Ian Oldaker (distance flight of 183 mile triangle).

2nd: Jeff Tinkler 110 miles to goal 3rd: Russ Flint 70 miles to goal

NORM DYCK TROPHY:

Dennis Miller and Len Pennie.

M.S.C.* TROPHY:

Bob Lancaster (for flight from WGC to RRSA).

Bob Lancaster & Paul Tinkskou,
Trophy Committee

*Manitoba Soaring Council

FOR SALE

HP-11

Retractable wheel, instruments, aluminum covered trailer. Wings filled, beautiful finish, best performance for money. \$5,000.00 or offer considered. Contact: David Clark, 76 Pricefield Road, TORONTO 5, Ont. Tel: (416) 921-7597.

Ka8b

CF-SYZ, with ASI, Winter vario with audio, electric turn and bank, altimeter, compass, oxygen, parachute. Total time 310 hours. Wings refinished May 1971, steel tubing primed and painted 1972, new panel 1972. C of A till June 22, 1973. With covered wooden trailer - \$ 3,700.

Contact: Stuart Bradley, 144 Main Street, Fryeburg, Maine 04037, U.S.A.

Fryeburg, Maine 04037, U.S.A. Tel: (207) 935-2202.

1-23G

Complete with instruments, radios, oxygen, parachute. Excellent condition, new paint. Schweizer trailer.

Contact: Maurice A. Swertz, 452 Woodlawn

Cres., Weyburn, Sask. Phone: (306) 842-4558

DOPPEL RAAB

Damaged - Ground Looped. Fuselage broken at tail section. Slight left wing tip damage, wood frame plywood skin - with instruments \$350.00, without \$200.00.

Contact: John Anthoine, 290 Queen Street East,

Sault Ste. Marie, Ontario. Tel: (705) 253-9703 or (705) 253-5736

-Home.

TERN

PLANS for TERN sailplane. New - worth \$100.00 will sell for \$75.00. Glide Ratio 35:1. Contact: John Belair, R.R. No. 6, Box 647, Ottawa, Ontario. KlG 3N4 Tel: 822-2403 - No collect calls please.

FOR SALE (Cont)

LK-10A

Complete. Overhauled in 1969. Ceconite covered and new control cables. Always hangered. In good shape. \$1,500.00 - instruments included.

Contact: Québec Soaring Club,

Box 9276, Québec 10, P.Q.

GIV 4Bl

Tel: (418) 651-1761

1958 PA18 -

150 hp, engine 600 hrs. since major. Ceconite cover, hydrosorb gear, brakes one year old. Scott tailwheel, skis, 90-channel VHF, new gas tank, C. of A. August 1973. \$8,500.00.

Contact: O. Estebany, 921 St. Aubin, Montreal 379, P.Q. Tel: (514) 332-5907

TRAILER

A new 26' covered glider trailer on custom heavy-duty undercarriage with F 78-15 tires. Heavy-duty hitch. Easily adaptable to any

glider.

J.P. Parkinson, 782 Eastvale Drive, Contact:

Ottawa KlJ 7Al

Tel: (613) 746-6679.

WINCH

German factory built winch with level winder. 4.000 feet of new cable (the best made) mounted on a Buick with dynaflo transmission. For more information contact John Anthoine at 290 Queen Street East, Sault Ste. Marie, or telephone: 705-253-9703 or 705-253-5736 Home.

All advertising in FREE FLIGHT of personal equipment is FREE to S.A.C. members. For non-S.A.C. members and for commercial ads (aviation supplies & aircraft sales by dealers) a charge of \$8 is made for a full page. (Ads of 2-page at \$4 & 2-page at \$2 are acceptable). Cheques for the latter should accompany the advertisement and be made payable to S.A.C.

FOR SALE OR WANTED:

FOR SALE - 1-26A - With instruments. No trailer. Metalised wing. Excellent condition. Refurbished

1972. \$3,300.00

Contact: SOSA Gliding Club,
Box 654, Station "Q",
TORONTO 7, Ontario, M4T 2N5

SCHWEIZER 2-22CK - Registration CF-PLT. Total hours 454 since new. Asking price \$3,500.00.

Contact: Rideau Gliding Club. c/c Hank Janzen, 172 College Street, KINGSTON, Ont. Tel: 613-546-9281.

WANTED: - Late model SCHWEIZER 2-33 to replace

present 2-22.

Contact: Rideau Gliding Club (address above).

WANTED: - 2-22 in good condition, preferably with

trailer.

Contact: Huronia Soaring Association,

c/o Mark Badior, 435 Hugel Ave., Midland, Ont.

L4R 1V4

Bus. Phone (705) 526-7871 Home " (705) 526-5433

WANTED: - Security 150 or similar very thin parachute;

also wanted: electric variometer.

Contact: J. Dodds, Apt. 3, 112A Avenue Road,

TORONTO, Ontario, M5R 2H4.

WANTED: - A two place sailplane in good condition.

Contact: Capt. E. Maliszewski C.D., 18 Cottingham Road,

TORONTO 7, Ontario. Tel: 416-921-2490.

Box 1173, Stn. B. OTTAWA, Ont. KlP 5AO

List of Supplies

ITEM NO.		DESCRIPTION	PRICE
1.	F.A.I.	Soaring Badges - "A" and "B" (a) Button - Screw Back	\$3.00 ea. 3.50 " 3.50 "
2. 3.	F.A.I.		0.25
4 • 5 • 6 •	S.A.C.	Sporting Code - (Booklet, English & French)	1.50 ea. 0.10 "
7•	S.A.C.	(b) Part II, Air Instruction Notes	0.50 " 1.00 " 3.00/set 0.25 (5/\$1.)
8. 9. 10. 11. 12. 13.	11 11 11 11	Weather Briefing Form N-052 (8½ x ll sheet) Application for Official Observer (1 sheet) Blazer Crest (Navy Blue) Decal Tie (Navy Blue with Glider Design) Cap (Red, Green or Blue with white crest) Glider Pilot Log Book:	No chg. 11 6.50 ea. 0.25 ea.
15. 16. 17.	F.A.I.	(a) Single Copy	1.50 ea. 1.25 " 0.75 " 1.50 "
	NOTES:	1) Item 2 available ONLY from Mr. J. Firth,	

- Item 2 available ONLI from Mr. 3. Firth,
 542 Coronation Avenue,
 OTTAWA, Ont. KlG OMA.

 Item 5 available ALSO from J. Firth.

 Items 6(a), (b) & (c) make up the S.A.C. Manual.

 Item 6(d) Air Cards size 5" x 8".

 Make all cheques payable to S.A.C.

March 1, 1973

SOARING ASSOCIATION OF CANADA List of Member Clubs

* Changes # Additions

Air Cadet League(Quebec),5726 Sherbrooke St.W., Box 340,NDG,Montreal 260,PQ. Appalachian Soaring Club, Box 271, Sherbrooke, P.Q. Buckingham Gliding Club, 146A MacLaren Street, Buckingham, P.Q. Champlain Soaring Association, 11655 Laforest, Montreal 356, P.Q. Lahr Gliding Club,Maj.D McIntosh, ICAG Hq.,S.O.Air, CFPO5000, Belleville, Ont. Montreal Soaring Council, Box 1082, St. Laurent, Montreal 379, P.Q. New Brunswick Soaring Association, c/o F.Fowler,Box 2086,Stn."C", St.John, NB. *Québec Soaring Club, Box 9276, Québec, Québec, GlV 4Bl Soaring Club of Nova Scotia, Box 513, Truro, N.S.

2. ONTARIO ZONE:

*Air Cadet League(Ontario),c/o J.Montle, 1107 Avenue Rd.,Toronto,Ont. 2T4 1L5

*Air Sailing Club, P.O. Box 2, Etobicoke, Ont. M9C 4V2

Algoma Soaring Club, Box 921, Sault Ste. Marie, Ont.
Belleville Flying Club (1960), c/o J.E. Marker, Box 322, Belleville, Ont.

*Bonnechere Soaring Inc., Box 1030, Deep River, Ont. KOJ 1PO

Caledon Gliding Club, R.R. No. 1, Erin, Ont.
Central Ontario Soaring Association, Box 762, Peterborough, Ont.

*Chatham Air Cadet Gliding Club, 561 Lacroix Street, Chatham, Ont. N7M 2X1

*Erin Soaring Society, Box 523, Erin, Ont.

*Gatineau Gliding Club, Box 883, Station "B", Ottawa, Ont. K1P 5P9.

#Huronia Soaring Association,c/o M.Badior, 435 Hugel Ave.,Midland,Ont L4R 1V4

Lakehead Gliding Club, Box 161, Station "F", Thunder Bay, Ont.

London Soaring Society, Box 773, Station "B", London, Ont.

*Pioneer Soaring Inc., c/o F. Simpkin, 29 Unicorn Ave., Willowdale, Ont.

Provincial Motorgliding & Soaring Association, R.R. No. 2, Blackstock, Ont.

Rideau Gliding Club, Box 654, Station "Q", Toronto 7, Ont. M4T 2N5

*Toronto Soaring Club, Box 856, Station "Q", Toronto, Ont. M4T 2N5

*Toronto Soaring Club, Box 856, Station "Q", Toronto, Ont. M4T 2N7

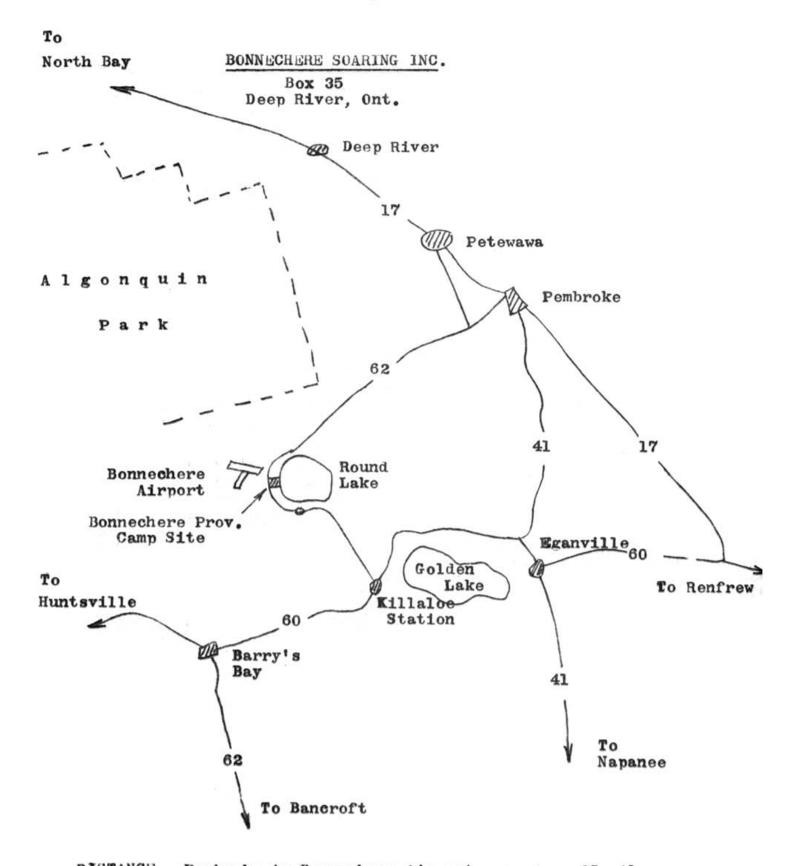
Windsor Gliding Club, c/o H. Preiss, 2058 St. Anne, Windsor 35, Ont.

*York Soaring Association, Box 660, Station "Q", Toronto, Ont. M4T 2N5

3. PRAIRIE ZONE:
Melville District Gliding & Scaring Club, Box 961, Melville, Sask.
Red River Soaring Association, Box 1074, Winnipeg, Man.
*Regina Gliding & Soaring Club, c/o Miss Audette, 10 Bole Pl, Regina, Sask S4S 3W7
Winnipeg Gliding Club, Box 1255, Winnipeg, Man. R3C 2Y4

4. ALBERTA ZONE:
Cold Lake Soaring Club, Box 1714, Medley, Alberta.
*Cu-Nim Gliding Club, c/o B. Hea, 1528-23 St.N.W., Calgary 42, Alta.
Edmonton Soaring Club, Box 293, Edmonton, Alta.
Red Deer Soaring Association, Box 963, Red Deer, Alta.
Yukon Soaring Association, 508 Hanson. St., Whitehorse, Yukon Territory.

5. PACIFIC ZONE:
Alberni Valley Soaring Association, c/o D. Pearson, R.R.No. 3, Port Alberni, BC *Comox Gliding Club, CFB Comox, Lazo, B.C.
I doops Gliding Club, c/o D. Lurkins, 627 Alberni St., Kamloops, B.C.
Vancouver Soaring Association, 1461 Terrace St., North Vancouver, B.C.
Van Isle Gliding Association, c/o R.J. Hansen, R.R. No. 2, Courtney, B.C.



DISTANCE - Pembroke to Bonnechere Airport - approx. 25 miles. CLUB CONTACTS:

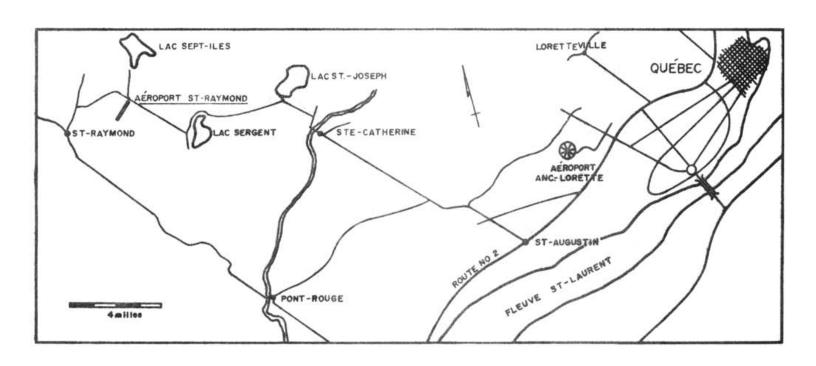
- C. Bruce Bigham, Pres. & C.F.I., Deep River, Ont. Tel. 584-3590
- D. G. Dalrymple, Sec.-Treas., Deep River, Ont. Tel. 584-3616

CLUB DE VOL À VOILE DE QUÉBEC

QUEBEC SOARING CLUB

BOX 9276

QUÉBEC, QUÉBEC. GlV 4B1



OPERATION: At Aeroport St-Raymond, on Road 367

DISTANCE: From Québec City to Aeroport - approx. 35 Miles.

Richard Bernard, Home: (418) 663-6426.
390 Seigneuriale, Office " 643-4813.

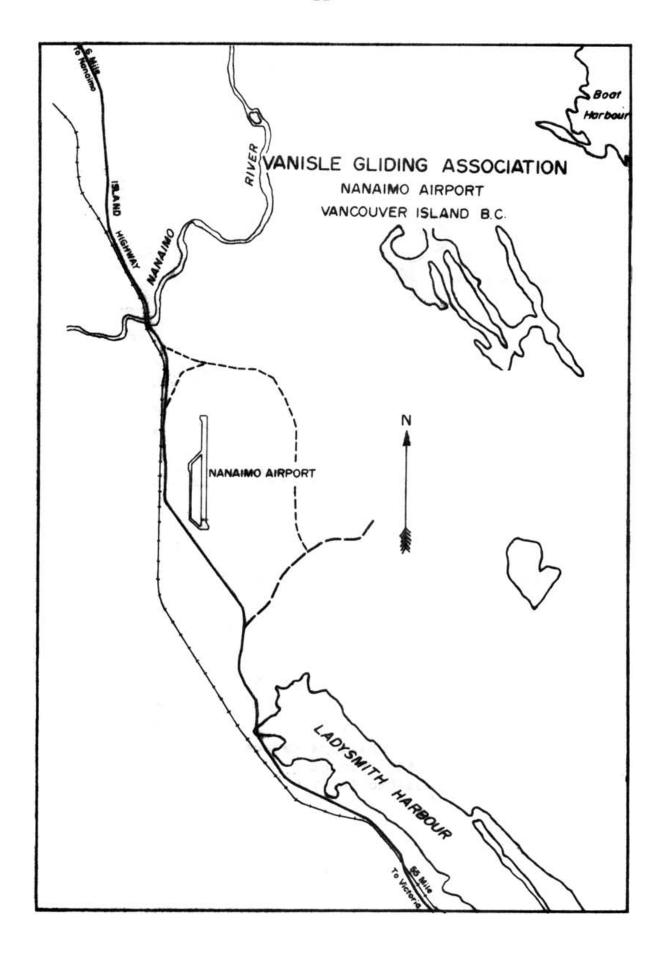
Beauport, Québec 5

P.Q.

CLUB CONTACTS:

Ls. Philippe Lagacé, Home: (418) 653-9546.

2506 Triquet, Québec 10, P.Q



25TH CANADIAN GLIDING CHAMPIONSHIPS WINNIPEG GLIDING CLUB 26TH JUNE to 5TH JULY, 1973

NOTICE OF INTENTION TO ENTER COMPETITION

PILOT:	9
MAILING ADDRESS:	
* * * * * * * * * * * * * * * * * * *	
GLIDER MAKE & MODEL:	0
HIGHEST F.A.I. AWARD HELD:	0
CLASS ENTERED: CHAMPIONSHIP SPORT	
FOR TEAM ENTRY, GIVE NAME OF OTHER PILOT:	
•••••••••••••••	•
QUESTIONS AND/OR COMMENTS:	
•••••••••••••	
•••••••••••••••	٥
••••••••••••••	9
•••••••••••••	9
DATE SIGNATURE	•

MAIL TO: Mrs. Hazel Flint, 96, Harvard Avenue, Winnipeg, R3M OK4

SKY-FEVER

I must go back to the sky again, to the
world of air smooth and soft,
And all I ask is a sleek ship and a
thermal to lift her aloft;
And the cu's kick and the wind's song
and the green ball hopping,
Six thousand feet on a June day, and
white clouds popping.

I must go back to the sky again, for the
call of the mountain wave
Is a wild call and a clear call that lures
the bold and the brave.
And all I ask is a west wind and the
cap cloud standing,
Twelve thousand feet o'er the mountain peak,
And a ship that heeds my commanding.

I must go back to the sky again, to a soaring nomad's life,
To the hawk's way and the eagle's way far from daily strife.

And all I ask is a street of cu 'til the long trek is over,

And a gentle glide at the set of sun to a soft field of clover.

00000

The above poem is based on John Masefield's SEA FEVER and has been copied from an early issue of "Free Flight"

APPENDIX 1

TO

FREE FLIGHT ISSUE 2/73

Contents

S.A.C. COMMITTEE REPORTS:

AIR CADETS		0 0 0	0 0 0	0 0 8	H. BRUHLMAN
AIR SPACE		0 0 0	000	600	D. TUSTIN
F.A.I. AWARDS .			000	0 9 9	C.M. YEATES
F.A.I. RECORDS	0.00	0 0 0	000	000	C.M. YEATES
					J. FIRTH

AIR CADET LIAISON REPORT

The Air Cadet Gliding program enjoyed another successful year. As can be seen from the attached chart of statistics flying has increased by approximately one third and graduates of cadet and adult pilot training courses as well as instructors courses have doubled over the previous year.

Gliding at summer camp increased at three of the four camps: Bagotville doubled the number of flights made the previous year. A greater emphasis was placed on glider pilot training with the result that 70 cadets were trained to glider pilot standard.

With the exception of the Maritimes all areas are operating programs to continue gliding activities in the spring and fall. Ontario has established gliding centres at Trenton, Camp Borden, North Bay and Chatham. The other provinces, mobile operations which visit various areas in order to provide familiarization flights to as many cadets as possible.

An instructors course was held at Camp Borden in June with Walter Piercy in attendance. Nine pilots received SAC Cat.lll ratings; three cat. ll and one a cat. l. Special thanks are due Walter for his assistance.

Comments:

The number of pilots, cadet and adult, trained in 1972 represents approximately 10% of the SAC membership. If we are to encourage these people to join the SAC it will require an effort not only by the SAC but also by local member clubs.

Quite possibly SAC could arrange that each cadet who completes a license gets a copy of Free Flight so that he will know of the clubs where he might continue his gliding. Also clubs could contact these pilots on the local level.

Cadet gliding is growing at a rapid pace. It offers a great opportunity for the SAC and member clubs to add an important youthful element to their membership. How much this program might benefit our organization depends on you.

H. Bruhlman

Chairman SAC Air Cadet Liaison Committee

AIR CADET GLIDING STATISTICS 1972

		SAC	Total F	Flights	Gac	Cadets*	Adu	Adults*	Instructor	ctor	Gliders	
PROVINCE	FACILITY	Mem	1971	1972	71	72	71	72	71	72	Type	Launcu
Brit. Columbia	Chiliwack			582		4					2- 2-22 1 Bork	A
Alberta	Penhold Summer Camp		2917	2048	12	20					5 2-28	A/W
	Namao			236			F				1 2-22	A
	Grand Prairie			32							1 2-22	
Saskatchewan	Mobile Operations	-	258	934				4			1 2-22	W/A
Manitoba	Mobile "	2		435				4			1 2-22	А
North West Ont	Thunder Bay Gliding Club	4		54							1 2-22	W
Ontario	Air Cadet League (Ontario)											
	Trenton Summer Camp		2117	2506	-	20	-		3		3 2-22	W
	Trenton Gliding Centre	2	694	494		± 83		2 8		1	1	W
	Camp Borden Gliding Centre	2	145	701		3 8				2	1 2-22 1 Renk	W
	North Bay Gliding Centre	2	250	132							1 2-22	W
	Chatham Gliding Centre	9	197	930		8 9					1 2-22	W
	Instructor Course - Borden			194		-	31			0	2 2-22	W/A
	Pilots Course - Borden			526				12				W
	294 Squadron Chatham	9	2932	1832	12	10		-	2		2- 2-22 1 1-26	W
	741 Squadron St Thomas		173	1								
Quebec	Air Cadet League (Quebec)											
	Bagotville Summer Camp	2	1718	3534	3	19	1	4	2	2	2-53	W/A
	Mobile Operations		422	246	4		2	2		-	-	W/A
Nova Scotia	Greenwood Summer Camp		2620	2789	2		9	13	-	-	2 2-22	W
	Totals		14198	18876	475	70	10	71	00	16		

* Trained to Licence standard s Trained to Solo

AIRSPACE COMMITTEE REPORT

The Airspace Committee has been reasonably active for the past year and on reflection I would say without hesitation that we have been able to get our point across to the M.O.T., with encouraging results.

The Thanksgiving Cowley Wave Camp is now past history. The operation was curtailed through aircraft unserviceabilities but the pilots that did get launched had good flights and were in some cases able to reach the upper limit of the airspace reservation at FL290. It's rather comforting to hear that Boeing 747's have climb restrictions off Vancouver to cross Cranbrook at FL310 or above - 'traffic-glider airspace reservation FL290 and below'. We're making our small voice heard!

Dick Mamini took over active pursuit of bigger and better things in the Cowley area after the Autumn camp. From Dick's correspondence it appears that we have won some friends in the M.O.T. but still have to do a selling job to others. With continued persistence I'm sure we will be able to win almost total freedom in the upper atmosphere.

A new threat is on the immediate borizon in the form of VITAS. (VFR-IFR Terminal Area Service). It is the intention of the M.O.T. to implement this service in the following locations: Toronto International - possible modification to present TRSA (Terminal Radar Service Area), Montreal, Ottawa, Winnipeg, Calgary, Edmonton International and Vancouver. The effective date will probably be sometime this spring or early summer. Initially the service will be at pilot's request, with the probably exception of Toronto. The M.O.T. is attempting to clarify the VFR-IFR mix problem in the neighbourhood of the previously mentioned terminals and the eventual outcome will be mandatory participation of the VFR pilot if he wishes to use the TRSA airspace with separation being applied in all necessary cases. Briefly, the airspace will be as follows: positive control zone - Il nautical miles of the airport radar site -TRSA based at 2,000 AGL out to 22 N.M. - up to the Block Airspace. Remember - voluntary participation initially with the final closing of the airspace to all VFR pilots who are not qualified or do not have the necessary equipment. This final phase probably won't come for several years in most cases, as ATC is waiting for the installation of a digitized radar system

which is now in the tender area. The Montreal and Toronto A.T.C. Centres will receive the equipment first, sometime in late '74 or early '75.

We are presently negotiating with Central Region administrators concerning the implementation of an 'Alert Area' around the W.G.C. site. Hopefully this will prove to be satisfactory to both parties. Progress in this area will be passed on as soon as something concrete emerges.

If your club site is within 22 N.M. of one of the aforementioned terminals, I would strongly suggest that you get in touch with the Regional Office of A.T.C. and let them know you are concerned.

As a responsible organisation the S.A.C. cannot condone illegal use of prohibited airspace as was the case at Pincher Creek for years, so now is your opportunity to advise M.O.T. of your thoughts on the VITAS matter.

We will be following it closely and inputting our ideas using Winnipeg as an example.

Closing on a cheerier note, we have received confirmation that sailplanes are exempted from carrying E.L.T's (emergency locator transmitters). I guess C.P.I. had a bad connotation.

Dave Tustin, Chairman, S.A.C. Airspace Committee

Winnipeg, 1 March, 1973

INTERNATIONAL F.A.I. BADGES FOR SOARING EARNED AND APPROVED IN CANADA DURING 1972

DIAMOND BADGES:	17 18	Bruce Hea (Cu-Nim) (Peter Lamla (Vancouv	World No. 1206) er) (World No. 1207)
GOLD BADGES:	96 97 98 99 100 101	Julius Nagy John Featherstone U. Werneburg J.B. Brayshaw Frank Markut Walter Pilla	SOSA SOSA Vancouver York Quebec
SILVER BADGES:	300 -	335 Details of recip available for th	ients not is Issue
ALTITUDE DIAMOND: 5,000 m. gain	-	Alex Grenville Mark Badior C.E. Bonds Helmut Kruck U. Werneburg R.W. Innes	Black Forest, Ariz. """""""""""""""""""""""""""""""""""
DISTANCE DIAMOND:	-	Bruce M. Hea Peter Lamla	Calgary Vancouver
GOLD DIAMOND: 300 Km.	-	U. Werneburg J.B. Brayshaw Walter Pilla H.T.F. Vaughan	SOSA Vancouver Quebec SOSA
GOLD ALTITUDE LEGS: 3,000 m. gain		J.D. Risch D.J. Kiklas Cristel Jurgenson H. Tangen Peter Folkes William R. Moore Steven I Simon W.F. Roach	SOSA California Erin M.S.C.
GOLD DISTANCE LEGS: 300 Km.	-	Nil	

Cont'd.

F.A.I. BADGES (Cont.)

SILVER BADGE LEGS: Altitude 1,000m gain		K.A. Duckham J. Vermeulen J. Dodds K.C. Ogilvie Georges Boucher Ralph Webber G.W. Couser R. Burgess O. Maranta H.R. Brown R. Bernard C.J. Powell James Oldham D.R. Richardson P.D. Rawes R.E. Gaettens	Vancouver Winnipeg Erin Gatineau Quebec Windsor M.S.C. M.S.C. M.S.C. Belwood Quebec Erin Pioneer SOSA Erin Erin
DISTANCE: 50 Km	-	D.P. Keegan K.C. Ogilvie A.W. Scott Ralph Webber O. Maranta K.A. Duckham	SOSA Gatineau Windsor Windsor M.S.C. Vancouver
DURATION: 5 hrs		D.P. Keegan K.C. Ogilvie R.W.C. Patterson Ralph Webber R. Burgess R. Bernard Kevin Smith Walter Norris Jurgen Risch James Oldham H. Kirschner P.D. Rawes R.E. Gaettens Clarence Sharp F.A. Lenk	SOSA Gatineau Erin Windsor M.S.C. Quebec Windsor Pioneer Belwood Pioneer M.S.C. Erin Erin Vancouver Belleville
"C" BADGES:	985 993 994	R.J. Bourdeau Ronald Innes R. Burgess	

C.M. Yeates, F.A.I. AWARDS

STATEMENT OF CANADIAN RECORDS & PERFORMANCE AS OF MARCH, 1973 (In Kilometers, meters and Kilometers per hour)

	SI	NGLE SEAT	MULT	I SEAT
	Territorial	Citizen	<u>Territorial</u>	Citizen
*DISTANCE	676.0 (DM)	724.0 (RC)	234.0 (AP)	234.0 (AP)
*DISTANCE (FEM.) GOAL	149.0 (RT) 676.0 (DM)	149.0 (AC) 676.0 (DM)	153.0 (RS)	153.0 (RS)
GOAL *GOAL & RETURN	434.0 (JF)	149.0 (AC) 526.0 (RC)	334.0 (DM)	334.0 (DM)
GAIN OF HEIGHT GAIN OF HEIGHT (FEM.)	7418.0 (WM)	7418.0 (WM) 5898.0 (AC)	7102.0 (RS)	7102.0 (RS) 2987.0 (AC)
ABSOLUTE ALT. (FEM.)	9704.0 (WM)	10363.0 (WD) 9772.0 (AC)	9083.0 (RS)	9537.0 (WK) 4207.0 (AC)
*100 KM. TRIANGLE 100 KM. TRI. (FEM.)	98.5 (DM)	113.0 (RC)	51.2 (GR)	51.2 (GR) 31.0 (AC)
200 KM. TRIANGLE	88.1 (JF)	88.1 (JF)	42.8 (GB)	42.8 (GB)
200 KM. TRI. (FEM.) *300 KM. TRIANGLE	79.2 (JF)	68.7 (MB) 91.3 (WM)	-	_
400 KM. TRIANGLE 500 KM. TRIANGLE	70.2 (JF)	70.2 (JF)	-	-

RECORD HOLDERS:

AC Antonia Cservenka

AP Al Pow

DM Dave Marsden

GB Glen Buhr

GR George Redzich

JF John Firth

MB Marion Barritt

RC Richard Cook

RS R. Shirley

RT Ruth Thumm

WD Willi Deleurant

WK Willibald Krug

WM Wolf Mix

C.M. Yeates & J. Firth S.A.C. F.A.I. Committee.

(* Denotes changes or corrections made by Committee to list published in Free Flight Issue 3672 (Apr-May 72). Ed.)

Box 1173, Station B, Ottawa, Ontario KlP 5AO

TREASURER'S REPORT

1972

Copies of the Financial Statements covering the Associations Affairs for the year 1972, together with the Auditor's Report, have been made available for your examination.

The General Funds:

The total revenue is approximately \$410.00 less than in 1971. Revenue from membership has also decreased. The 3.4% increase in membership registrations as reported by Membership Secretary was in the Junior and Couples catagories. The interest earned has decreased temporarily, due to slightly lower rates of interest and smaller Savings Account bank balance for a few months when funds when transferred to cover a loan which was later declined.

The expenditures have also decreased. The cost of printing, addressing and mailing of Free Flight was reduced greatly because of the assistance we received from the Canadian Amateur Sports Federation. Theincrease in Honorarium was for myself when I assumed the positions of secretary, membership secretary and treasurer. This also includes the Honorarium for the editor of Free Flight. This is, however, balanced partially by the lower cost of administration. Two items of office equipment have been purchased; a Bandastat copier and a Multigraph duplicator-printer.

World Contest Funds:

It is of interest to note in the receipts, that a Grant of \$9236.00 was received from the N.A.C.F.A.S. The other donations of \$1160.00 were funds received in response to the "Letter of Appeal for Funds" to support the team. (In 1970 the non-government contributions had been \$175.00). Of the donations, York Soaring Association members solicited \$425.00 and the balance was received from Industry and a few private contributions.

The disbursements of the World Contest Funds have not been completed. The balance of assistance to the team members is outstanding pending the processing of the claims, and it is also likely that a refund will be due of the Government Grant of \$9236.00.

To conclude this brief review of the Association's financial affairs, I would ask us to consider the net revenue for the year of \$4034.38. The cost of mailing and printing of Free Flight as a result of the assistance of C.A.S.F. has been reduced. Further, due to the fact that S.A.C. now has a central office with part-time paid help, the direct cost of office administration, and postage expenses has been reduced.

As a result of this, the combined expenditure for operations, that is printing, addressing, postage, office administration and Honorariums, has been reduced by \$2,008.54 in 1972. This amounts to almost half of the net revenue for the year. It should be noted that if the association's publication, "Free Flight", should become a monthly publication, and as a means to improved communication that it is printed on the association's printing machine, then the net revenue will be reduced substantially.

Respectfully submitted,

Signed: Terry Tucker, Treasurer. March 24, 1973.

FINANCIAL STATEMENTS

DECEMBER 31, 1972

BOISJOLI, HOUGHTON & CO. CHARTERED ACCOUNTANTS - COMPTABLES AGREES MONTREAL, QUE.

--36--

BOISJOLI, HOUGHTON & CO. CHARTERED ACCOUNTANTS

AUDITORS' REPORT

To the Members of Soaring Association of Canada

We have examined the balance sheet of Soaring Association of Canada as at December 31, 1972, the state-ments of changes in fund accounts and revenue and expense general fund for the year ended on that date. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

We feel that the above mentioned balance sheet, the statements of changes in fund accounts and revenue and expense general fund present fairly the financial position of the Association as at December 31, 1972 and the results of its operations for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year but, since circumstances prevented us from being able to verify the estimated inventory by observation or other means, and in view of the relative importance of this asset, we are unable to express an opinion on these statements.

Boisjoli, Houghton & Co Chartered Accountants

BALANCE SHEET

AS AT DECEMBER 31, 1972

ASSETS

CURRENT ASSETS	1972	1971
Cash Accounts receivable Inventories at estimated cost	\$24,043.24 935.08 3,956.00	\$15,460.27 712.55 1,852.77
	28,934.32	18,025.59
FIXED ASSETS - at cost		
Office equipment Less accumulated depreciation	1,124.16	389.50 274.58
	679.66	114.92
	\$29,613.98	\$18,140.51
LIABILITIES		
CURRENT LIABILITIES		
Accounts Payable	\$ 1,604.33	\$ 321.10
EQUITIES		
World contest fund General fund	7,377.72 20,631.93	1,221.86 16,597.55
	28,009.65	17,819.41
	\$29,613.98	\$18,140.51

This is the balance sheet referred to in our report of March 16, 1973.

Boisjoli, Houghton & Co. Chartered Accountants

STATEMENT OF CHANGES IN FUND ACCOUNTS

FOR THE YEAR ENDED DECEMBER 31, 1972

WORLD CONTEST FUND	1972	1971
BALANCE - Beginning of year	\$ 1,221.86	\$ 3,032.05
Add: Donations received - Government - Other Raffle - net proceeds Team members contributions	9,236.00 1,160.00 1,312.27 4,488.00	-
	17,418,13	3,032,05
Less: Payments and advances to team members Refund to government Contribution to widow's fund less donation received Entrance fees Miscellaneous expenses	5,393.00 190.00 4,284.00 173.41	270.69 1,539.50 - -
	10,040.41	1,810.19
BALANCE - End of year	\$ 7,377.72	\$ 1,221.86
GENERAL FUND		
BALANCE - Beginning of year	\$16,597.55	\$13,444.68
Add net revenue for the year	4,034.38	3,152.87
BALANCE - End of year	\$20,631.93	\$16,597.55

STATEMENT OF REVENUE AND EXPENSE - GENERAL FUND

FOR THE YEAR ENDED DECEMBER 31, 1972

REVENUE	1972	1971
Membership fees Profit on sales of supplies Interest earned Miscellaneous	\$13,554.27 558.25 94.77 56.05	\$13,757.25 589.57 291.26 35.10
	\$14,263.34	\$14,673.18
EXPENSES		
S.S.A. for "Soaring" Printing bulletins and "free flight" Addressing, postage and stationery Instructors school Annual general meeting Honorarium Administration Membership fees Audit fees Bank charges Miscellaneous Depreciation of office equipment	\$ 5,242.54 886.73 634.97 513.15 238.86 1,578.75 404.04 410.00 150.00	\$ 4,952.35 2,039.67 1,701.81 291.65 267.44 750.00 1,021.55 101.00 75.00 4.50 286.62 28.72
	10,228.96	11,520.31
NET REVENUE FOR THE YEAR	\$ 4,034.38	\$ 3,152.87

GLIDER ACCIDENTS - 1972

REPORT TO ANNUAL GENERAL MEETING

KINGSTON ONTARIO

24 MARCH 1973

No. of Clubs Circulated	43
No. of Returns	25
No. of Accidents Reported	16
No. of Accidents to MOT	10
Fatal Accidents	NIL
Tow A/C Accidents	1

As seen above there is improvements in the number of returns. There is a most welcome sign that people are providing more useful information and assessing their accidents in a critical manner. If the returns would only reach 70 or 80%, confidence in the results would be so much greater. It is believed the system now established can continue to provide good and useful information to all of us for many years to come. The immediate notification cards were used on three occasions and their use will be continued for another year or until present stocks run out. It is nice to see Nil in the fatal accident line for Canadian operations; we note with true sorrow the fatal accident which befell Wolf Mix in the World Contest.

The completed analysis sheets are intended to be retained by Club CFI's, some were returned with reports. Some reports did not contain launches and hour figures. It would be appreciated if these could be filled in although it is realized this can most likely be obtained from SAC stats and may not be known to the CFI when the accident return is made.

We had one note of appreciation and in May last a write up on the system was sent to Soaring's Safety Corner -- so far we have had no comment.

Good Soaring for '73

Signed: A.N. le Cheminant

March 1973

(This narrative plus the 3 page Accident Analysis constitute the report.)

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SAFETY COMMITTEE

GLIDER ACCIDENT CODING AND ANALYSIS

	1961	1968	1969	1970	1971	1972	1973	1974	1975	9261
PERSONNEL										-
Death	11		//	,	,				1	The second secon
Serious Injury					111	"	6			
Minor Injury					,	*				
AIRCRAFT										ATTENDED TO THE PERSON NAMED IN
Destryed			`	`	1	IN				A CONTRACTOR OF THE PARTY OF TH
Substantial Damage	`	/	1111		////	// MM				
Minor Damage			`			////				
TYPE OF ACCIDENT						Name and Address of the Owner, where the Owner, which is the Owner, which is the Owner, where the Owner, which is the Owner,				dymentering.
Heavy Landing	`	`		3	11	///		decount management	The state of the s	
Undershoot		,	"	`	"	///				
Overshoot			,		`					
Cllision (Air)				,						
Collision (Ground)				`	H	///				
Stalled			`	1						
Blown Over (Ground)	"		111	///		`				
Spin to Ground			,		_				-	
Structural Failure (Air)			_				1			
Gear Up (Collapsed)				"						
Ground Loop						m				

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Death

Serious Injury 1.2

Minor Injury 1.3

Destryed AIRCRAFT

Minor Damage

TYPE OF ACCIDENT

Heavy Landing Undershoot

Overshoot

Cllision (Air) 3.8 8.8

Collision (Ground 3.5

Stalled 3.6

Blown Over (Groun

Spin to Ground 3.8 Structural Failur

3,10

Ground Loop

GLIDER ACCIDENT CODING AND ANALYSIS

4.5

4.3 4.4
> 4.5 9.4 4.7

AIRFRAME FAILURE Flight Control System Wheel/or mount Elevator Rudder Aileron Flags Wings Flags Wings Fuselage TOWING Release Defective—Prem.Release Failure to Release								
Flight Control System Wheel/or mount Elevator Rudder Aileron Flags Wings Fuselage TOWING Release Defective—Frem.Release Failure to Release			-					
Wheel/or mount Elevator Rudder Aileron Flags Wings Wings Fuselage TOWING Release Defective—Frem.Release Failure to Release								
Elevator Rudder Aileron Flags Wings Fuselage TOWING Release Defective—Frem.Release Failure to Release								
Rudder Aileron Flags Wings Fuselage TOWING Release Defective-Prem.Release Failure to Release				,	//			
Aileron Flags Wings Fuselage TOWING Release Defective-Frem.Release Failure to Release					,			
Flags Wings Fuselage TOWING Release Defective—Frem.Release /				,				
Wings Fuselage TOWING Release Defective—Frem.Release /								
Fuselage TOWING Release Defective-Frem.Release Failure to Release				111				
TOWING Release Defective-Frem.Release / Failure to Release			"	,	///	ĺ		
Release Defective-Frem.Release // Failure to Release								
Failure to Release				"	,			
Rope Break	1			"				
Winch Failure								
Tow Rope Snagged								
PILOT CAUSAL FACTORS								
Misused Controls		,	,		,			
Misjudged Distance	3		,	H	H			
Failed to Compensate for Wind //		///	1		IH			
Failed to Observe Objects		,	,					
Failed to Maintain Flying Speed				,	_			
Exceeded Stress Limitation		,						
Exceeded Ability/Experience					"			
Operated Recklessly/Carelessly	7			,	///			
Inad ate Training or Supervision					"			

6.3

6.1

5.5 5.3 5.4 5.5

8.4

6.5

6.7

GLIDER ACCIDENT CODING AND ANALYSIS

1961	1968	1969	1970	1971	1972	1973	1974	1975	1976
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Low Ceiling 7. 7.1

Rain

Hail 7.3

Cross Winds

Turbulence in Flight

Windshift 9.7

Thunderstorm 7.7

Downdraft 7.8

Cyclonic Conditions Line Squall 7.10

Cyclonic Conditions (on ground) 1.11

Lightning 7.12

SDARING ASSOC	IA	Т	ION		F	СА	N A	DA	, F	·L:	IGH	T S	TAT	IST		. 8	e 4	14	<u>.</u> پ.
S.A.C. MEMBER CLUB:	CLUB GLIDERS	PRIVATE GLIDERS	гиднтя/сив	ноикs, ссив	MILES/ CLUB	FLIGHTS, PRIVATE	HOURS,	MILES/ PRIVATE	AUNCH METHOD	TOWPLANES	MINCHES	M.O.T.LICENSES	"A"BADGES FAI	'B"BADGES FAI	C"BADGES FAI	INACTIVE CLUB GL.	BEING BUILT GLID.	ACT PRIV. GL	BEING BUILT PPTV.
QUEBEC & MARITIME ZONE AIR CADET LEAGUE(QUE) APPALACHIAN BUCKINGHAM GLIDING CLUB	1	-	o ret 643	urn 96	2	_	-	-	E	-	1	6	6	6	4	-	-	4	
CHAMPLAIN SOARING ASSN LAHR GLIDING CLUB/GERMANY MONTREAL SOARING COUNCIL NEW BRUNS S.A. QUEBEC S.C. S.C.NOVA SCOTIA	9 1 5	18	o ret	urn 1227 43 807	96 - 425	-	667	332 6 450	АДА	3 - 2		9 1 10	30 7 -	20 3 -	6 1 4		1	- 1	1 - 2
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BELLEVILLE BONNECHERRE CALEDON	2	-	o ret 621 o ret		-	-	-		CAI	₹-	-	-	-	-	1	-	-	-	-
CENTRAL ONTARIO CHATHAM AIR CADETS ERIN SOARING SOCIETY GATINEAU G.C. LAKEHEAD	3 3 4	1 5 9	1832 711 1380	154 229 559	176	135	17 255 119	991 653	ВФС	1 2	2 -	6 3 1	8 1 -	3 -	9	<u>-</u>	-	=	- 3
LONDON SOARING SOCIETY NORTH BAY PIONEER SOARING	2	2	511 o ret 712	186 urn	30	56 3	83	614	A	1 2		2	- 3	= 2	4 2	-	-	-	-
PROVINCIAL MOTORGLIDING RIDEAU G.C. \$OSA TORONTO WINDSOR YORK SOARING ASSN	28325	1 16 2 6 6	258 2431 412 689 1047	urn 70 1019 162 158	993	22 680 27 150	37 188	1144 50 2200	A	1 2 1	- 1 1	2 10 1 1 3	3 18 5 - 3	2 2	1 - 3 4 3	2 1		14111	- 1
PRAIRIE ZONE MELVICLE D. G.&.S. RED RIVER REGINA	4	-	o ref	-	-	-	-	-			1	2 2	-	-	-	-	-	-	-
WINNIPEG G. C. ALBERTA ZONE	3	7			148	311	223	1052	А	1	-	9	16	2	3	-	-	1	3
COLD LAKE CU NIM EDMONTON RED DEER YUKON PACIFIC ZONE	1	7	o re 127 o re o re	61 turn turn	-	174	447	8640	А	1	1	1	-	-	-	1	-	1	1
ALBERNI VALLEY COMOX KAMLOOPS VANCOUVER VAN ISLE	4	1 5	o re o re 1351	turn turn 417	226	503	739	6218	Ш		1	1	-	-	1	-	-	-	-
TOTALS(FOR REPORTED CLUBS)	75	89	25404	6971	3490	3955	3963	8692		21	11	73	102	42	50	3	1	3	20