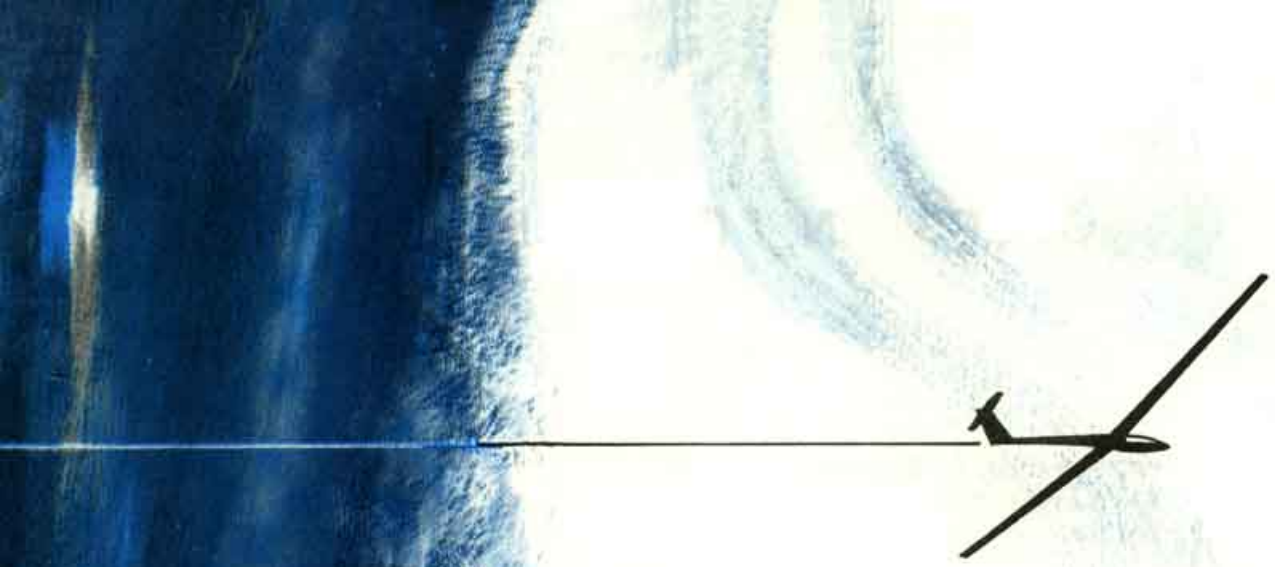

JAN-FEB 75

free flight

official publication of

THE SOARING ASSOCIATION OF CANADA

GP

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FREE FLIGHT EDITOR	Mr. Robert F. Nancarrow, 43 Sealcove Drive, Etobicoke, Ontario, M9C 2C7	(416) 621-2276 H (416) 252-4657 B

Free Flight

THE NEWS LETTER OF THE SOARING ASSOCIATION OF CANADA

ISSUE 1/75 JANUARY - FEBRUARY 1975

CONTENTS

LETTERS

Dear Sir:

I enjoy receiving your publication but would like to make the following suggestions; (1) the colour cover printed by CASF is more pleasing, (2) photographs are a must to keep interest in the reader, (3) the quality of both printers appears equal (4) staple binding is not appealing, (5) please spell my name correctly in mailing.

I will be soaring in Los Vegas at Ross Briegleb's centre this February. Would you like a small article with photographs on this soaring centre?

"Free Flight" like "Soaring" is competition oriented. Perhaps we could have an article or two with photos and maps of the various soaring centres in Canada. For example, I am going to a Wedding in Toronto next August and would love to visit some of the nearby soaring centres, where do I go and what should I expect?

John E. Bachynski,
9303 Saskatchewan Dr.,
Edmonton, T6G 2B3

Thanks for your comments, we are trying to recover the masters for the colour covers; photographs will be used as much as possible if members will send them; improvements in printing quality and binding are being considered and will be improved as costs permit; I'm sure Terry Tucker will have your name correctly spelled on the next mailing; yes, let us have an article and photos of your trip to Los Vegas including the flying; I hope some of the Toronto area clubs will write to you with information on their facilities or send an article to Free Flight as you suggest. If you get to Toronto and still don't have a place to fly, give me a call and we'll organize something.

Ed.

Dear Sir:

I am inquiring about the article in the Sept/Oct issue on the youngest Canadian solo glider pilot. I understand that Carol Bandmann did her solo in the USA and I am wondering who has been the youngest pilot to solo in Canada and how close I stand to that record. My birth date is the 26th of December 1958 and I soloed at 15 years of age last August on the 14th at the Buckingham Gliding Club.

I would also like to know how I stand for the position of the youngest licensed glider pilot in Canada. I am still 15 yrs. old and have accumulated the required amount of flights and have passed the glider pilot examination. I was issued my licence last month, Nov. 7th.

William K. Dick,
213 Albert St.,
Buckingham, Quebec,
J8L 1M5

I don't have any records on this subject but maybe the club secretaries could let us know if there are very young solo pilots on their rosters; or maybe some of the other young pilots across the country will write in to tell us if they have you beaten in the "Youngest Glider Pilot" catagory.

Ed.

Are Towpilots

Second Rate Citizens

at the Glider Camp?

Almost in every walk of life there are second rate citizens, which also seems to be true in the soaring movement. The few who appreciate a good tow pilot are the instructors together with a fistful of contest pilots. For the rest of us, the tow pilot is a necessary evil!

The amazing part is that the tow pilot can get you into a lot of trouble, he can almost decide your badge task and he can cost you and your club a pile of money.

In the trouble department I have found that few glider pilots will assist the tow; especially when it is concerned with a take-off over an obstacle or toward one. The glider usually establishes his position and lets the tow worry about his own airspeed, sink-in or the loss of full take-off power. A mismatch at this point can be nothing but fatal. I am speaking of a student glider pilot and a relatively inexperienced tow pilot, or worse - a newcomer to towing.

Basically, there is nothing so unusual about towing, but when you have to hold right rudder while the towplane is still going to the left without any great response to the control movement, one starts to wonder if at that moment there isn't a tall tree around which the tow rope is tied firmly. These sensations are not experienced elsewhere in powered flight. A particular consequence is the "loss of power" from a solo flight in a relatively heavy powered aircraft to the performance under tow. If a hot summer afternoon is added - and that is when we do our soaring - the density altitude can match Mount Everest.

Most common practice is to let the power plane "fly off" which is in itself a mistake, but pretty well the practice for the average low time pilot or for that matter the average pilot of considerable time.

I have long established the "airline take off", which is the airspeed (V1) at which the aircraft can be lifted off the runway safely and without the fatal sink-in. Especially with retractable gear aircraft, many a pilot has been wondering - and counting his spare change - at the end of the runway with the cabin closer to the ground than usual.

The establishment of such a take off speed (which should be the clean stall speed plus 10 mph) gives us and the tow the opportunity to judge the futher development of the take-off. If at the point of "flying speed" the towpilot is passing a certain point on the runway (which can be determined by consultation) he has two more options. The first one is to pull on flaps and thereby gain reasonable altitude without pulling the airplane fast into the air away from the ground effect. The second option is a team proposition and depends very much on the glider pilot. If the glider is held at a reasonably high position, a dive back to the runway will let the tow come off the ground easily and if the first option (flaps) is applied at the same time there should be no doubt as to a safe take-off. Naturally, care must be taken not to dive the twoplane into the ground while he is still on his

ground roll.

While all these practices take training, the real value lies in the "go" or "no go" aspect of the take-off. Other than for power failures, a release at the point of "V1" will let the towplane go and the glider can land ahead safely in the "over-run". The safety feature in this type of take-off is that the towpilot has definite basic rules for the take-off roll and if the glider pilot is well briefed the two can make a very safe team during that critical part of the flight. There should be no surprise to the glider pilot as he knows the point of "abort" as well as the towpilot and may on his part (preferably) initiate the release.

The second stage of this practice is then initiated for an obstacle. Since generally the first part can be accomplished by the application of flaps at the "V1" speed (or even without), the glider should assume the highest possible position even if the tow is sinking-in and then dive for the obstacle letting the tow go over it without drag from the glider and once safely over the obstacle, the glider is at liberty to apply the drag for his own benefit. This practice is a must for off field retrieves as the unknown terrain can foul the best judgment of both the towpilot and the glider pilot. Again, both pilots could establish the "V1" point by taking into consideration the wind conditions and the "runway" surface. At this point I may mention, that radio communication between the tow and the glider is worth its weight in gold. We have switched from the ordinary hand held mike to the headset mike with push button in the stick. This for the towplane as well as the glider which also proves advantageous for cross country work in the glider.

Now to the thermal department! Of course you have all the signals at your disposal to guide the towplane back to that "woooop" of a thermal and of course "that idiot" should know where he hit it himself. BUT, there is where all his troubles start. He knows from (however little) experience that in or near the thermal his airspeed goes all to hell, his nose is pointing straight up at one time and in seconds he is stopped dead. Now let us apply a little of that human element. He has been towing all afternoon and is asking himself, "What am I doing here pulling these nutheads into the worst conditions a pilot can get in?" To top it off, his instructor had told him time and again that Cu's and turbulence are to be avoided under any circumstance, let alone to fly straight into a rotor.

There, I think starts the real communications gap and there is where we should start to accept our tow pilots as FIRST CLASS citizens. They are quite capable of doing a good job for us and they wouldn't mind the roughness and the bounce if we walked up to them and gave them praise for a good tow. Instead, most of the time he is not even known to the glider pilots or is removed from the action by the very circumstance of the operation.

For the third part of my observations, and a very important one, is the choice of a towplane (if one is to be purchased by the club). There are only a few engines on the market that can stand the constant full power application. One that seems to love full power is the Lycoming 0-320 (150 HP) used in Supercubs and Citabrias. That in itself should testify for the popularity of these two airplanes for towing. Many others have as good an airframe, landing gear and other features but lack the one quality we are most interested in - long life at full power usage. In spite of the ruggedness of the 0-320, the towpilot must consider the heating factor. Full rich with full power to any altitude is required for proper cooling. Any reduction in power will overheat the engine. The towpilot could cost you money if he feels that he should - as trained - reduce power after take-off and he may not be tempted to do so with the foregoing deliberations, but, I have experienced it myself and was surprised that the

towpilot had not been briefed on that point.

What goes up - must come down! There seems to be another "queer" situation in towing. A fast drop after the tow is desired, but who trains pilots these days to side-slip with 2000 rpm on the clock? Here is where the Citabria shines brightly in the club's treasury because of the high red line speed allows a "power on slip" on the verge of the stall or even a straight nose-down for a fast return to the field. The dilemma is in the application of power to avoid fast cooling thus ruining the engine. At the same time a fast return is desired by everyone. The twopilot who masters that kind of return under power (which still gives 1500 - 2000 rpm down) at about 140 mph in the speed department drops nickels and dimes into your club's money belt. While the Citabria (especially the later models) can not be rated appreciably better or worse than the Supercub, the faster return is definitely a factor. With the 120 mph redline on the Cub, none of the above mentioned practice is possible without cuttine power.

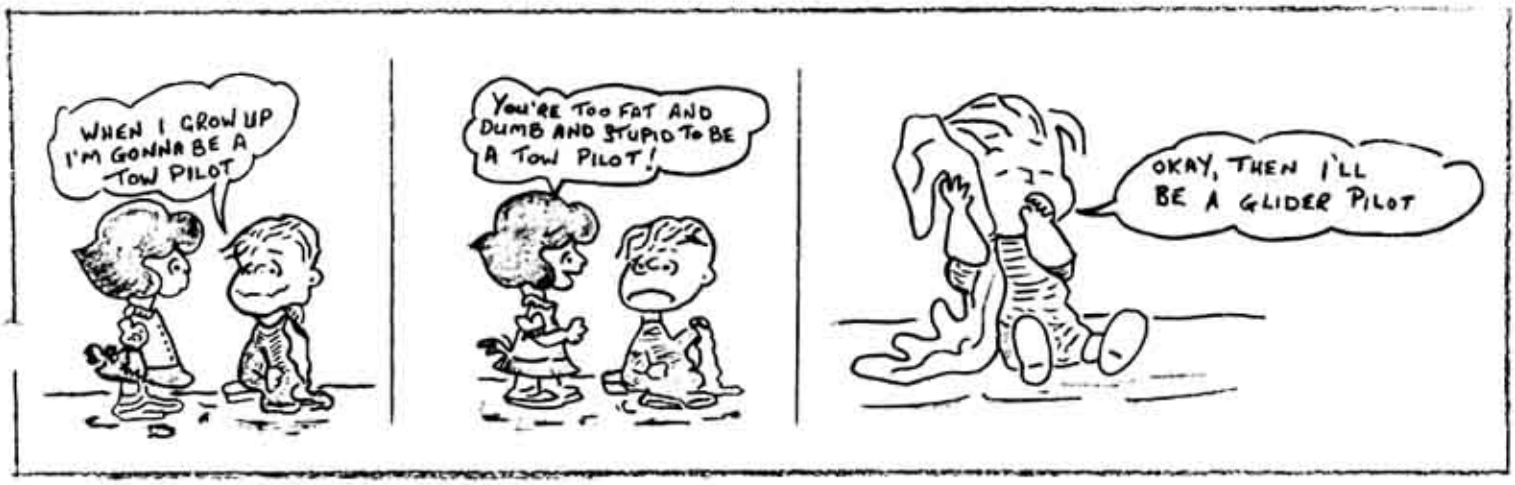
In addition, the high wind handling characteristics of the Citabria - and there the Scout outstrips the other models - are definitely an advantage for a wave camp such as Cowley. While the higher stall speed (50 mph clean and 45 mph with flaps) raises plenty of arguments; the wide gear and big tires are a combination that grow on the towpilot from flight to flight.

For a long time I was studying many of the commercial operations in the U. S. and again had the opportunity to visit El Mirage in the spring of 1974. Their "price horse" in the stable is a Citabria Scout and somehow even the old pros placed their ship in the line-up to be tugged by the Scout.

Being sort of a misfit myself (instructor, towpilot and wingrunner), I had to write it the way I see it and in a way pay tribute to the many pilots that sweat all summer in the cockpit while glider pilots subject them to "unlearn" the many things that they had learned in their training days and paid hard cash for.

I think we owe it to them and I for my part would like to see an Award given to those of outstanding service to the soaring movement in the cockpit of the towplanes across the country.

FRANK HINTEREGGER
Wide Sky Flying Club,
Fort St. John, B. C.



BADGES WON BY CANADIAN PILOTS IN 1974

COMPLETED DIAMOND BADGES

#19	W. F. Chmela	(World #1434)
#20	O. Boesch	(World #1439)

DIAMOND BADGE LEGS

Distance:

J. Carpenter	Waikerie		W. Chmela	Arthur
S. Simon	Erin		O. Boesch	Belwood

Distance to goal:

C. W. Grant	Ephrata		D. G. Tustin	Pigeon Lake
D. M. Williams	Ephrata		M. Fristers	Embro
J. Dodds	Erin		R. Patterson	Erin
D. Band	Arthur		O. Bandmann	Rockton
J. Baldock	Rockton		K. Hertwig	Embro
L. Riegart	Claresholm		M. Gordon-Smith	Hawkesbury
K. Svatos	Rockton		K. R. Park	St. Raymond
J. Burany	Rockton		M. A. Laviolette	St. Raymond

Altitude:

G. T. Ball	Black Forest		F. Markut	Black Forest
M. Radius	Black Forest		E. Flak	Black Forest
M. S. McPhee	Cowley		K. J. Walker	Cowley
J. A. Strong	Cowley		B. Price	Portmoak (U.K.)
R. L. Barry	Black Forest			

COMPLETED GOLD BADGES

#107	L. Riegart	Cold Lake S. C.
#108	R. Patterson	Erin S. S.
#109	D. Band	York S. A.
#110	K. R. Park	Quebec S. C.

GOLD BADGE LEGS

Distance: All flights also qualified for Diamond Goal and are listed above.

Altitude:

F. Archibald	Cowley		D. Smith	Cowley
J. A. Strong	Cowley		J. J. Brennan	White Mountain
T. Beyke	Mount Forest		D. Clarke	Black Forest
H. J. Lohr	Black Forest		R. Patterson	Black Forest
N. Paulsen	Black Forest		P. Rawes	Black Forest
S. Welscher	Black Forest		E. Flak	Black Forest
L. Wheeler	Cowley		J. Bellavance	Baie St. Paul
S. Burns	Black Forest		E. Lewis	Cowley
A. W. Krieger	Baie St. Paul		F. Hinteregger	Cowley
W. L. Springford	Sugarbush		C. B. Falconar	Cowley
K-H Doetsch	Sugarbush			

COMPLETED SILVER BADGES

#369 J. Patterson	S.O.S.A.	#370 W. L. Springford	Gatineau G. C.
#371 K. Ogilvie	Gatineau G. C.	#372 D. Webber	Comox G. C.
#373 D. Robins	Montreal S. C.	#374 F. Mueller	York S. A.
#375 R. Gaettens	York S. A.	#376 P. Masak	York S. A.
#377 L. Holm	York S. A.	#378 B. Gowans	Cu-Nim G. C.
#379 T. Milc	Gatineau G. C.	#380 H. Flint	Winnipeg G. C.
#381 F. Stevens	Winnipeg G. C.	#382 K. Walker	Cold Lake S. C.
#383 G. Droppo	Rideau G. C.	#384 K. Moser	Windsor G. C.
#385 P. Thompson	S.O.S.A.	#386 M. Aubut	Gatineau G. C.
#387 C. Hallmann	Airsailing C.	#388 P. van der Spiegel	Quebec S. C.
#389 G. Boily	Quebec S. C.	#390 C. M. Timms	Vancouver S. A.
#391 C. Juergensen	Airsailing C.	#392 A. Marquis	Montreal S. C.
#393 F. Schreiner	Windsor G. C.	#394 B. Finley	Airsailing C.
#395 G. Heinish	Red River S. A.	#396 K. J. Del Piero	Erin S. S.
#397 H. D. Konig	Gatineau G. C.	#398 J. A. Strong	Edmonton S. C.

CANADIAN RECORDS AS AT DECEMBER 16, 1974.

Unless noted otherwise, all records are both Territorial - T (made in a flight originating in Canada) and Citizen - C (made by a Canadian citizen anywhere in the world. NC indicates no claim has been made for this type of record.

TYPE OF RECORD	OPEN		FEMININE		MULTIPLACE	
Straight distance flight	R.M.Cook D.J.Marsden	724 km (C) 676 km (T)	A. Williams	209 km	A. Pow	235 km
Straight goal flight	D.J.Marsden	676 km	A. Cservenka	149 km	R. Shirley	153 km
Out and Return flight	R.M.Cook S.Simon	526 km (C) 520 km (T)	NC		D.Marsden	334 km
Gain of height	W.F.Chmela W. Mix	8320 m (C) 7420 m (T)	A. Cservenka	5898 m (C)	R. Shirley	7100 m
Absolute Altitude	W.F.Chmela W. Mix	12450 m (C) 9705 m (T)	A. Cservenka A. Williams	9772 m (C) 3940 m (T)	W. Krug R. Shirley	9805 m (C) 9085 m (T)
100 km Triangle	R.M.Cook D.J.Marsden	113.4 kph(C) 98.6 kph(T)	A. Cservenka	31.0 kph	G. Redzich	51.2 kph
200 km Triangle	R.Mamini	91.6 kph	M. Barritt	68.7 kph(C)	G. Buhr	42.8 kph
300 km Triangle	R.Mamini	110.1 kph	NC		NC	
400 km Triangle	J.Firth	77.9 kph	NC		NC	
500 km Triangle	R. Mamini	101.8 kph	NC		NC	
100 km Straight	NC		NC		W.Chmela	47.0 kph
200 km Straight	J.Firth	70.0 kph	NC		NC	
300 km Straight	W. Mix	108.6 kph	NC		NC	
400 km Straight	NC		NC		NC	
500 km Straight	D.J.Marsden	97.1 kph	NC		NC	

If you are trying for a new record, the previous record must be exceeded by 10 km on straight distance, straight goal and out & return flights; 2 kph on triangles, 5 kph on straight speed flights and 3% on altitude gains.

The National Sport and Recreation Centre have announced a grant of $25000. by the Prudential Insurance Company of America.

The grant is in the "Science in Sport Series" under the direction of R. T. Hermiston, Technical Consultant. Projects must be practical and be of a promotional or developmental nature. They must be of interest to the technical aspects of the sport as well as to the general public. Projects must be research oriented and be capable of being handled in University Research Facilities.

Anyone interested in this grant with a view to proposing a project in connection with soaring should contact Terry Beasley, 173 Leslie Street, Dollard des Ormeaux, P. Q.

* * * *

OSS SPONSORS GROUND SCHOOL

The Ontario Soaring Society is sponsoring a Glider Pilot Ground School in Toronto this winter. Topics covered will include Airmanship, Air Regs, Theory of Flight, Weather, Maps, and Safety. A "workshop" approach is planned; the group will cover textbook and study material in preparation for each class; classes will be devoted to more difficult or advanced topics, question and answer sessions, and the like. Some films and slides will be shown to spice up the "hanger flying".

The course is designed for pilots who are preparing for the MOT exam or who need a "refresher". But anyone is welcome, and some experienced pilots are expected to come to contribute.

The ground school will be given by the North York Board of Education as a night course at Bathurst Heights Secondary School, 640 Lawrence Ave. West, Toronto.

The school is easily accessible from Highway 401 - (south on Allen Expy, East on Lawrence Ave. just past the first lights). The course will meet Thursdays, 7:30 P. M. January 9 to March 20. Cost will be about $8.00 plus books.

The course will be in operation by the time this is published but there should be room for late joiners. Contact Jack Dodds, (416) 423-8098, Deryck Brown, (416) 759-7503 or the Night School Secretary at the school.

* * * *

WANTED

WINTER BAROGRAPH

SMOKED ALUMINUM FOIL MODEL

PETER MAFAK
911 BRIMORTON DR.
SCARBOROUGH, ONTARIO,
M1G 2T8

(416) 439-7919

MoT Notice Detailing New Technical Requirements for Homebuilts Now Available

OTTAWA — Now available from the MoT is Notice to Aircraft Maintenance Engineers and Aircraft Owners N-AME-AO No. 40/74, dated Sept. 10/74 and titled "Revised Requirements for Ultra-Light (Amateur-Built Aircraft)".

The six-page notice spells out in detail the revised requirements, which are applicable to all ultra-light, amateur-built aircraft for which an application for an initial flight permit has been made since Oct. 1/74, the effective date of 40/74. Builders of existing aircraft may also elect to show compliance with the revised requirements.

Notices of Motion

The following 'Notices of Motion' are applicable to the SAC By-Laws:

1. This one has to do with the recommended deletion of 20 votes per club allotment - Reference item 1.2 of 1973 AGM Minutes, and item 6.03 of 1974 AGM Minutes.

THE MOTION is to replace, under By-Law 2 (a) SUSTAINING MEMBERS, the words, "Such Sustaining Members shall be entitled to 20 votes plus 1 vote for each of its own members", with the words, "Such Sustaining Members shall be entitled to 1 vote for each of its own members".

2. This one deals with the addition of another catagory of Associate Membership, under By-Law 3 (g).

THE MOTION is to reword By-Law 3 (g) as follows:
" (g) ASSOCIATE MEMBERSHIP:
Associate Members shall be admitted as such upon the payment of an annual fee of Four Dollars ($4.00). Such members shall be divided into 3 catagories:
1. Persons who are members of The Soaring Society of America. They shall not be entitled to vote at any meeting of the Corporation but nevertheless shall enjoy all social privileges of the Corporation.
2. Persons who are the children of Club Affiliated Members, Married Couples or Individual Members, and who are eligible as Junior Flying Members as in 3 (c) and with the same privileges.
3. Club tow-pilots who are not also glider pilots in the club. They shall not be entitled to vote at any meeting of the Corporation but nevertheless shall enjoy all social privileges of the Corporation.

Because of the above Motion, By-Law 3 (j) should be changed.

THE MOTION is to replace, under By-Law 3 (j), the words, "All Members of whatever category of the Corporation, except 3 (g)" with the words, "All members of whatever category of the Corporation, except 3 (g)2. and 3 (e) (1 copy)".

W. J. PIERCY

For the benefit of those who do not have a copy of the By-Laws at hand, the following is a complete revised wording of the By-Laws referred to in the Notices of Motion above.

FORMS OF MEMBERS
(a) SUSTAINING MEMBERS:
Sustaining members shall be Clubs, Associations, Societies or Corporations having a minimum of five (5) members, admitted as such by the Board of Directors who have paid the entrance fee of Ten Dollars ($10.00), and who shall pay such annual fee as may be fixed from time to time by the Board of Directors and who shall annually submit a certified statement of its members. Such sustaining members shall be entitled to 1 vote for each of its own members as shown in the said certified statement, at each meeting of the Corporation.
In the event that any Club, Association, Society, or Corporation is admitted as a Sustaining Member, it may by notice in writing to this Corporation, nominate a representative who may on its behalf exercise all or any of its rights of membership until such time as such nomination is revoked. Notice of such revocation shall be given in writing to the Secretary of the Corporation. Each Sustaining

Member shall remain so subject to the foregoing, and subject to the receipt of the annual fees and certified statement of members by the Treasurer of this Corporation.

(g) ASSOCIATE MEMBERSHIP:

Revised form shown completely in the motion on the opposite page.

(j) All members of whatever catagory of the Corporation, except 3 (g)2. and 3 (e) (1 copy) shall be entitled, free of charge, to copies of Free Flight; and all members of catagories 3 (b), 3 (c), 3 (d), 3 (e) (1 copy), 3 (f) and 3 (h) shall be entitled, free of charge, to copies of S.S.A. monthly magazine "Soaring", both mailed to their private addresses, as shown by the Register of Members.

At the Annual General Meeting there will be an opportunity for the members present, and their proxies, to elect two Directors-at-Large. Nominations may be for a member from any zone with enthusiasm, ability and time available to contribute to the Association.

Nominations for the Directors-at-Large may be mailed to Mrs. Terry Tucker, 786 Chapman Blvd., Ottawa, K1G 1T9.

Use the following form and obtain the signatures of five current S.A.C. members together with the consenting signature of the nominee.

WE THE UNDERSIGNED MEMBERS OF THE SOARING ASSOCIATION OF CANADA, HEREBY NOMINATE _____

OF _____ AS A CANDIDATE FOR ELECTION TO THE BOARD OF DIRECTORS OF S. A. C.

SIGNED _____ CLUB _____

SIGNED _____ CLUB _____

SIGNED _____ CLUB _____

SIGNED _____ CLUB _____

SIGNED _____ CLUB _____

CANDIDATE'S CONSENTING SIGNATURE _____

U N I T S

by Russ Flint

Have you ever wondered whether a Bergfalke climbing at 3 meters/second is gaining on a Tern with an indicated 7 knots, not to mention the 1-26 in the same thermal whose pilot later claims he had 1000 ft/min on one side but only 600 on the other? Of course, you have to take into consideration that the Tern's minimum sink is only around 2.1 ft/sec while that of the 1-26 is more like 2.8! And then the Tern was probably flying at 40 knots with the 1-26 doing only 40 mph.

Have a look at the instrument panels of the gliders next time you are out at the field. What a nonsensical mish-mash of units you find on the dials - speed in mph, climb in meters/sec, speed in knots, climb in 100's ft/min! Of course, everyone gets used to thier own set of instruments, and knows their best circling speed, cross country speed etc. - and whetherthey want to stay in a 1 m/sec thermal, or if there should be better lift around.

Does it matter what units you have your instruments calibrated in? Well - it depends on the kind of information you want from them. There is an argument that since in North America, we fly altitudes measured in feet, it is convenient to know how fast we are climbing (or sinking) in feet per minute, so we'll know how long it will take us to hit the ground. But wait - is that the thought that is uppermost in our minds when flying around (especially when flying cross country)? Perhaps more useful would be to know what is the best use we can make of our altitude to cover as much distance as possible over the ground, i.e. what is our glide angle. Glide angle is just the ratio of our sinking speed to air speed. Forgetting about altitude corrections, this is given by our variometer reading divided by ASI reading. But how do you divide 50 mph by 1.5 m/sec down and come up with a sensible answer; and have you ever seen an ASI calibrated in 100's ft/min? The only consistent set of dials I have seen are a matched vario and ASI both calibrated in knots. 2.2 knots down at 55 knots indicated, and I am making 25 to 1 through the air. I admit it is hard to find an altimeter calibrated in nautical miles (1 n.m./h= 1knot), but this perhaps a secondary consideration.

Another factor in one's choice of calibrations may be that the F.A.I. uses the metric system (meters, kilometers and km/h). If I fly a 300 km triangle at an average speed of 49 knots, how long will it take me? Another thought is that aeronautical charts with their 1:500,000 scale make measurements in kilometers very easy - 1 cm = 5 km, so that if I am setting out a 300 km triangle, I just need to make sure the sides add up to 60 cm or more. So maybe I should choose my ASI calibration to be in km/h; but even if I try to be consistent and get my vario in meters/sec, I still have that stupid factor of 3600 to divide by to get my glide angle - (when will someone invent the 100 second minute and the 100 minute hour!).

To get back from fantasy to reality - viz. that for some years to come we are going to be living with twenty different ways of saying the same thing. I am summarizing below some useful conversion data in tabular form. The tables are read from left to right, and I have given only 3 significat figures in most instances.

TABLE 1 - DISTANCES

	km.	mi.	n.m.
1 km =	1	0.621	0.540
1 mile =	1.61	1	0.869
1 n.m. =	1.85	1.15	1

NOTE: The most commonly needed conversion here is 1 km = 0.6214 miles. A very convenient approximation (correct to about ½%) is 1 km = 5/8 mile.

TABLE 2 - SPEEDS (HIGH RANGE)

To convert from kilometers per hour to miles per hour and knots etc. use factors given in Table 1.

TABLE 3 - SPEEDS (LOW RANGE)

	ft/sec	100's ft/min	m/sec	knots
1 ft/sec =	1	0.60	0.305	0.593
100 ft/min =	1.67	1	0.508	0.988
1 m/sec =	3.28	1.97	1	1.94
1 knot =	1.69	1.01	0.514	1

Finally, note from Table 3 some other very close approximations, viz. 100 ft/min - 1 knot - ½ m/sec. Then - if you hear Ian claiming he was going up at 10 knots in the Tern, while Vern was getting 5 m/sec in the Berg and Hazel had 1000 ft/min in the 1-26, you know they're all telling the same lie!

Reprinted from SOCK TALK, August 1974
Winnipeg Gliding Club

Book Review

A GIFT OF WINGS by Richard Bach

Published by Delacorte Press, New York
Illustrations by K. O. Eckland

Richard Bach has been flying for fifteen years and writes about these years of experiences in the air with a feeling that takes you into the cockpit with him.

This book is a collection of 48 short stories some of which have appeared previously in "Flying", "Air Progress", "Private Pilot", "Argosy", "Sport Flying" and "Air Facts".

The stories span a period from 1959 to 1972 and include a 1929 open cockpit biplane, an F100, a Seabee and a 1-26 sailplane.

Bach gained fame and fortune with the phenomenal success of "Jonathan Livingston Seagull". Prior to that he wrote three other books, "Stranger to the Ground", "Biplane" and "Nothing by Chance". He not only tells stories of airplanes and flying, in "A Gift of Wings" he also gives some philosophical comments on the fulfilment he has found in his years of flying.

There is only one story about gliding which is written with an interesting twist that shows a knowledge of glider flight. Some of the other stories are written with some mysticism, nostalgia or yearning for the past; a technique that exposes the author's feeling for flying that almost reaches worship.

The excellent illustrations are liberally scattered throughout and add to the reader's enjoyment.

Here is a book that can be picked up and read for a few minutes or for hours; anyone may enjoy it but it will be of particular interest to one who has sat alone in a cockpit and enjoyed a gift of wings.

CLUB NEWS

Well, we didn't make those diamonds promised earlier, at least not this year. But we are convinced more than ever that Baie St. Paul will yield not a few diamonds in future years.

This year we were able to obtain a block clearance to 18000' on weekends in the area immediate to Baie St. Paul, thanks to the efforts of Maurice Laviolette and the co-operation of MOT. Next year we would like to see this ceiling lifted to something like 23000'. Also, thanks to the generosity of L. P. Filion of Baie St. Paul, we were able to use another larger field oriented in line with the predominant winds, eliminating the cross wind problems of last year.

Our six weekend wave camps rewarded us with two Gold Altitudes. The morning of Sunday, October 27th did not look very promising, with moderate but turbulent winds from the north. However the winds intensified dramatically in the afternoon as a depression, slashing through Nova Scotia with over 100 mph winds at ground level, pumped a strong northerly at Baie St. Paul. We estimated about 50 mph winds at 10000'.

That afternoon, Keith Park, who made his first attempt in wave flyingat the old Estey field near Sugarbush, finally completed his Gold Badge in his HP-14. Climbing in the secondary with a maximum lift of 800 fpm, he topped off at 15500'. No one has yet penetrated to the north wave's primary. Alex Frieger, our CFI, made his Gold climb without even realizing it. In his Standard Cirrus, he released at 4000' and spent two hours in tubulent "thermals" without noting his low point. Finally contacting wave, he climbed to 12500' when he decided that the cold and the fatigue were enough, although he was still climbing. Later, he discovered a low point of 2000' on the barograph trace! Gilles Boily, respecting the dictum that first attempts at wave altitude gains cannot succeed, missed his Gold by less than 1000' in the club Ka 6.

This year we contacted some form of wave on most weekends, quite often unexpectedly and inexplicably. The best occasion for wave seemed to be the day after we left; perhaps next year we will organize weekday flying. We still have much to learn about the locale of the wave at Baie St. Paul. The west wave seems to be the easiest to reach - one mile west of the field at 2500'. The north wave's secondary is attainable about four miles north at 3500 to 4500'. The northwest wave is probably the most promising as judged by the lenticulars, but is the most distant with a giant sink hole between the field and the wave.

We will return; the Diamonds <u>are</u> there!

Walter Pille
Quebec Soaring Club

A new gliding and country club is in the process of organization. After incorporation the club's name will be "Omemee Gliding & Country Club". The group consists of glider and power pilots and the aim is to provide facilities for soaring as well as other recreational activities in order to ensure family participation. The primary requirement for such a club was outright ownership of a suitable site which was found and purchased two years ago. The site is located less than a mile north from the village of Omemee (about half way between Peterborough and Lindsay) and is a scant 500 feet from the shore of Pigeon Lake. The field is one hundred acres of flat land with some bush, providing ample camping

CLUB NEWS

space. Hydro facilities were brought in underground and the group intends to build a clubhouse, a swimming pool and a tennis court in addition to the usual gliding facilities. Shareholding members may build cabins on the property, details for the required standards are being negotiated with the Emily Township authorities.

A provision of not more than fifty class "A" shareholders is provided out of which approximately twenty-two are accounted for at this time. Apart from the property and improvements of the runways, no more capital investment has been made. Ideas are being tossed around regarding equipment purchase but more funds are needed. The use of a Ka-2 two seater is available to the club but the towplane procurement is a problem.

The group is open to suggestions from interested parties in form of either syndicate ownership, leasing or renting of a towplane on a pay as you fly basis.

Anyone interested in further details should contact either Hermann Ksander in Peterborough, tel. (705) 743-4938 or Elemer Balint in Toronto (416) 248-3415.

Elemer Balint

Once again the Gatineau Gliding Club seems to have spent more time working 'round the field than in badge hunting. However, a flood of new members has produced a lot of local flying .

After hovering about the 100 mark for the last several years, the membership has soared (no pun intended) to 150; at which point we had to cut it off. We even have a waiting list!

All these new members have generated a lot of student flying. On May 19 we had a record number of 105 launches. During the season 8 students were soloed. In addition, 1 "C" Badge, 9 Silver legs and 2 Gold legs were earned, mainly by private owners.

A Ka6E, a Skylark 4 and an open class Libelle bring the total of privately owned ships to 12. Work is continuing on three homebuilts and the resurrection of a Pratt-Reid.

A 1-26 was completely refurbished by club members. It took all last winter and the flying season to do it. Now the little ship gleams in white and red enamel over new fabric and there is no doubt about her structural integrity. This winter we are overhauling the other club 1-26 and, with the lessons learned from experience, we hope to have it ready when the thermals pop next spring.

As part of the program to preserve Pendleton's paved runways, we have been improving the field's drainage. About 1000 yards of ditches have been cleared of trees and brush to let excavating contractors get at them. All this forestry work was done by club members.

A bit of lumbering was also necessary to extend the trailer park. Also water and electrical services were expanded to serve the entire area. We have about 15 families who maintain house trailers at the field and live out every weekend.

We have arranged some soaring camps but the weather was unkind. The week of the SAC Eastern Instructors' School did not provide any soaring. This also washed out our annual club contest. Our August flying week was also pretty quiet. The annual Thanksgiving Weekend Wave Camp at Sugarbush gave weak wave for just a few hours of one day. But

CLUB NEWS

we had a fantastic week in August soaring with Bonnechere Soaring at Bonnechere airstrip. Just about every day was a five hour day! Almost every privately owned ship was there in addition to the club's ASK-13 and one towplane.

Bonnechere uses auto tow launch so we instructed on aero tow and provided many of their members with thier first taste of real soaring. In return we were instructed on auto tow and were the grateful recipients of the Bonnechere Club's hospitality.

Jim Baxter
Gatineau Gliding Club

Over the past 12 months pilots from our club have flown in New Hampshire, Colorado and Montana as well as at a variety of other fields in Ontario, such as Gananoque, Pendleton, Rockton and Belleville.

The Mt. Washington "wave expedition" arrived in New Hampshire on Saturday, October 12. The Mountain winds officially welcomed us with a beautiful display of lenticulars at sunset.

Sunday dawned balmy and clear, a good day for checkouts and some ridge and thermal soaring that gave us a chance to become familiar with the area. To anyone used to a relatively flat region, the landscape, seen from the air, is almost mind boggling - virtually every piece of real estate in sight is on a slope and covered with trees and/or rock!

The operation of the field was safe and efficient. The less-than-ideal approaches were more than compensated for by the long runway, about 3000' and their powerful towplanes. In addition to an L-19 and a Supercub, there was a Cessna 185 available on weekends. We were usually asked what speed we wished to be towed at and it was usually delivered as requested. It just took a while to get accustomed to the idea of being at 2000' after half-a-turn aroung the field.

To say that the weather deteriorated after Sunday would be to put it mildly. It rained for the next four days with only occassional breaks in the clouds. This was enough to discourage most people from flying, but Peter Rawes rigged almost any time there was a possibility of flying and as a result did more flying and probably had more wave contacts than anyone else in our group.

As the wet week progressed our number increased with the arrival of a few stragglers and some more people from SOSA. Unable to fly, the group occupied itself by ransacking the local tourist traps, attempting to empty the liquor store, or just lazing around soaking in the peace and learning how to "live slow" again.

Patience was eventually rewarded somewhat; Friday dawned cool and clear. The forecast winds had some people out of bed and on the field before sunrise. The wave was working, but apparently to work it required more skill or luck than most of us possessed. Peter Trounce of SOSA had what was perhaps the best, but most frustrating flight of the day with a climb to 18000' where he was stopped by a layer of red tape and regulations.

The next day was similar with some good soaring but no badges. Ah well, there's always next year!

Ken Del Piero
Erin Soaring Society

Where Does Your Dollar Go?!

by Don Wood

No, not an article on inflation - the dollar in question is the one you contribute to help send a Canadian team to the World Gliding Championships. What's that you say? " - never contribute to contests, I'm not a competition type anyway." Don't you believe it, chum! I'm not a competition pilot either but last year your tax dollar and mine helped put Canadians on the scene in Australia and will, hopefully, do the same thing again in Finland for 1976. Also, some of our S.A.C. money was voted into the World Contest Fund and again a lot of people helped by donating and organizing and supporting fund raising projects. The end result was not exactly an overflowing chest of gold but it did create a core of money to be used in a very specific manner, and for well defined and restricted expenses - and thereby hangs my tale.

As team treasurer for the Australian contest, I feel some obligation to let you know of the manner in which a contest is funded. On the job for ten months, it became pretty evident that a lot of misconceptions exist and there is no better way to dispel these than with facts. It also, hopefully, will assist you in making a good decision when asked to vote on future grants or to assist in fund raising. The chart on the opposite page says it all, or "what you sees is what you gets!" Although it depicts the Australian contest, the guideline is generally valid for all World Contests.

The important points are:

- No World Contest or Government funds are used to support pilots and crew at the contest site. This is an expense borne entirely by the individual (Entry Fees).

- No World Contest Funds are used for personal transportation expenses to and from the Contest site. Assistance on this item is confined to the Government grant, if available, and in 1974 was limited to 75% of costs - the actual costs being pre-established and limited.

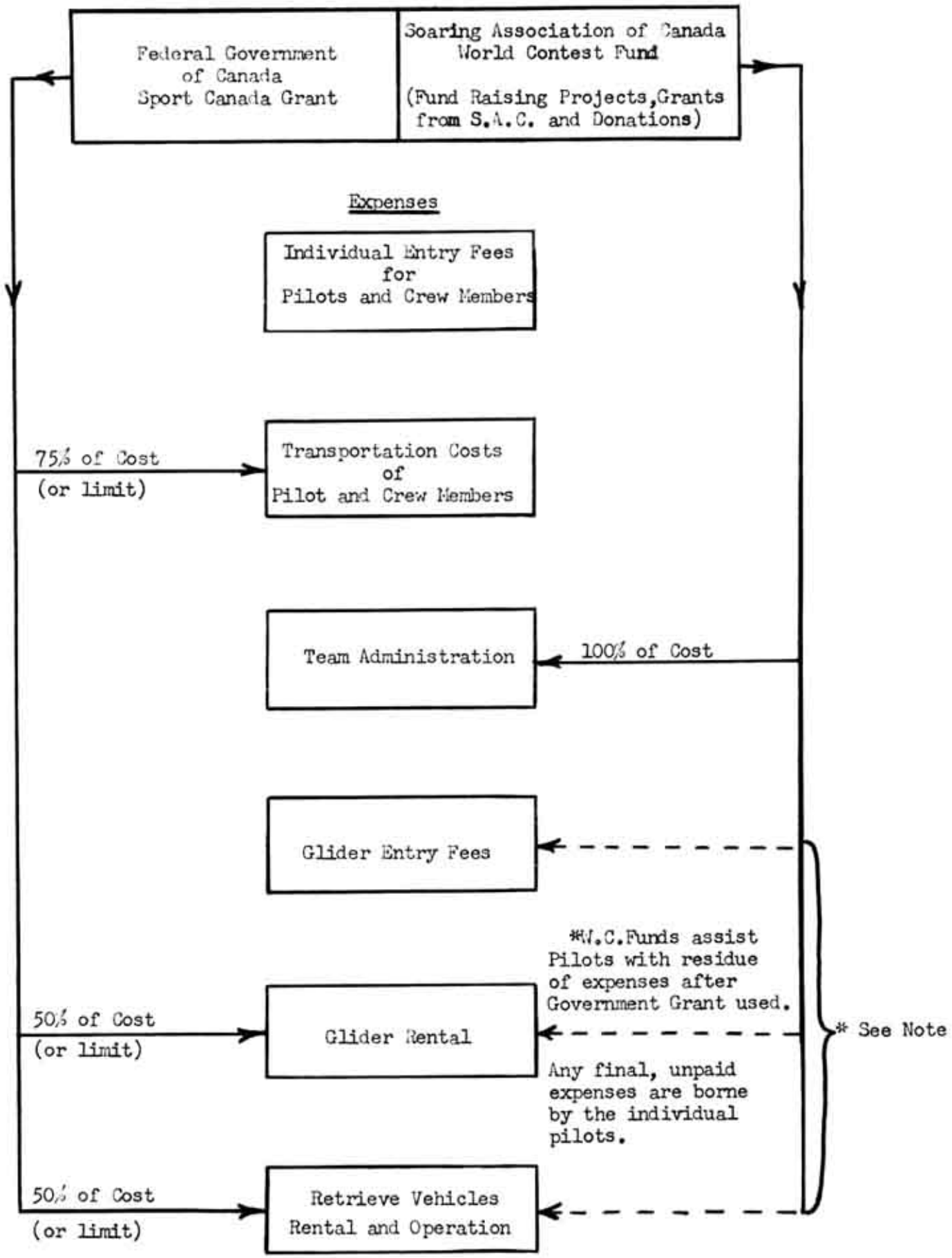
- The Government grant is used to rent equipment, including gliders and retrieve vehicles, up to a predetermined level, but not exceeding 50% of actual costs. However, it does not cover the cost of glider contest entry fees.

- The World Contest Fund is used to pay all of the administrative costs, ranging from stamps and telephone calls to expenses associated with fund raising projects.

When all the feathers have settled what remains to be paid on glider rental, car rental, and glider entry fees is the basic responsibility of the competing pilots (approximately $1500. in Australia). Any money that remains in the World Contest Fund after covering administration expenses is now used to assist each pilot to defray these costs and, finally, what is left is borne by the individual pilot.

WORLD GLIDING CHAMPIONSHIPS - AUSTRALIA 1974

Sources of Monetary Assistance



THE WRONG HANDLE!

It could have been so much worse! After being aero-towed to 2000 feetfrom Byford Aerodrome, Western Australia, the pilot of a Blanik L-13 released from the tug aircraft and commenced thermalling. After about a quarter of an hour's flight during which the glider attained a maximum height of 2300 feet, the pilot returned over the aerodrome to enter a right hand circuit pattern for a landing.

Joining the downwind leg at 850 feet, the pilot saw that he was well positioned for a normal approach and landing and carried out the pre-landing cockpit checks. When the Blanik had descended to 750 feet the pilot lowered what he thought was full flap and began a turn to the right on to base leg. During this turn the pilot saw that the glider was now sinking rapidly so he cut short his base leg, turning early towards the threshold of the strip. The glider continued to descend steeply however, with very low ground speed, grossly undershooting the pilot's original aiming point.

While still turning to line up with the strip, the Blanik descended into a set of powerlines bordering the aerodrome boundary 1500 feet short of the threshold. The glider struck the powerlines with its raised port wing, severing one wire, and slewed violently to the left. The starboard wing tip struck the ground and the aircraft cartwheeled, falling to the ground in a flat attitude. It finally came to rest, still entangled in the severed powerline, facing back in the direction of flight. The pilot was unhurt but seeing the live wire still entwined around his aircraft, he wisely remained seated in the cockpit to await assitance.

The accident had been seen by the chief flying instructor who had been supervising operations at the strip and had been watching the Blanik's circuit and approach to land. He ran to the scene immediately the glider came to rest. Seeing the wire draped across the cockpit canopy, he called to the pilot to keep still. Then taking up a dry branch of a tree, he removed the wire from the aircraft, opened the canopy and the pilot was assisted out.

When the damaged glider was inspected, it was found that the flap lever was still in its "up" detent, but the dive brakes though only slightly extended with the glider at rest, were unlocked and free to move.

Several eye witnesses, including the chief flying instructor, had seen the glider join the circuit at a position which seemed satisfactory in the existing conditions. At least one witness noticed that when the glider was abeam the pilot's planned touchdown point, the dive brakes extended and the glider began to descend rapidly. It was evident to watchers on the ground that when the pilot realized his rate of descent had increased, he modified his circuit for a shorter base leg.

Although the pilot turned on to final approach at about the right

position in the circuit pattern, the glider was obviously very low at this stage and it was clear that it would strike the high tension wires.

The eye witness evidence that the air brakes were fully extended just before the glider turned base, together with the pilot's statement that he had lowered full flap just before turning base and the fact that the dive brakes were unlocked when the glider came to rest, strongly suggests that the pilot misidentified the controls on the port side of the cockpit and extended the dive brakes in the mistaken belief that he was lowering full flap. It is also evident that although the pilot appreciated that the glider's rate of descent had greatly increased, he did not immediately react to the likely cause for this condition, nor did he check to ensure that it was in fact the flaps that he had lowered.

The pilot was 60 years of age and had been a service pilot and flying instructor during the war years. After the war he held a commercial pilot licence for 15 years and later a private licence whish had expired two years before the accident. His total hours in powered aircraft were in excess of 3000. He had taken up gliding only a matter of weeks before the accident and in this time he had accumulated a little over 12 hours. He was regarded by his gliding instructor as a competent glider pilot.

The misidentification of the dive brakes for the flaps is an easily made error in Blanik gliders, and has in fact occurred on a number of occasions, but there is no reason why this should have led to an accident if the pilot had recognized his mistake from the glider's sharply increased rate of descent. It seems likely however, that the pilot's reaction time was such that when the unexpected high rate of sink occurred, he did not instinctively return the control he was operating to the closed or retracted position to reduce the rate of sink. Instead he persisted with his approach to land, even though it should have been obvious that the glider could not reach the intended landing area.

Reprinted from
VANCOUVER SOARING SCENE

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Energy Management

Regardless of the cost of fuel consumed in flying or glider towing operations, the depletion of non-renewable resources such as petrochemical fuels cannot be ignored in any energy activity. It stands to reason that careful management of our available reserves is the only solution to stretch these reserves for a long enough time in order to allow technilogical progress to discover and develop new and more abundant sources of energy. Thrifty management of fuel while providing equivalent or superior service in either power flying or soaring is one of the strongest arguments in favour of motorgliding.

A Cessna 150 "Commuter" cruising at 100 miles per hour and carrying pilot and passenger will use approximately 8 gallons of fuel per hour. The RF-5B Sperber cruising at the same speed and carrying the same two people will use 3.5 gallons per hour resulting in a saving of 56.2%.

Comparing the energy needs of motorgliders to those required for conventional gliding is really surprising, particularly because it is so widely accepted that glider flying being motorless is a fuel saver. Nothing could be farther from the truth. The average flying time per take-off per glider in Canada is about 20 minutes, requiring an aerotow to 2000 feet at an average of 10 minutes per tow using a Piper PA-18 Super-Cub, presently the most popular towplane in Canada. The Super-Cub with an hourly consumption of 12 gallons will use 2 gallons per tow. Since three tows are needed to provide one hour of glider flying, the glider's actual fuel consumption is 6 gallons per hour. Almost twice the amount a motorglider will use in continuous power flying. Also the conventional glider spends 50% of its flying time in the power mode, i.e. in tow, while our experience indicates that in regular soaring club operations a motorglider is using power only for one-third of the total flying time.

Thus for each hour in the air, the motorglider will be climbing under power for about 20 minutes at a fuel consumption of 4 gallons per hour, resulting in an actual fuel consumption of 1.33 gallons per flying hour and 78% saving of fuel, compared to conventional gliders. A glider flying 100 hours per year needs 600 gallons of fuel, while a motorglider using the same amount will provide 450 flying hours.

The question begs asking: "Is it responsible to ignore these facts in our energy management?"

E. Balint

1975 AGM

The Association's Annual General Meeting will be held on March 15th, 1975 at the Fort Liesse Motor Hotel, 6705 Cote de Liesse Road, Montreal. Call (514) 739-2311 for reservations. For further details contact Andy Marquis of Montreal Soaring Council, the host club for this year's AGM. Call (514) 273-6311 (office) or (514) 336-2641 (home).

PHOTOS

If you have interesting photographs of club activities, a homebuilt project or action shots at your home field; send them to us for printing in Free Flight. Be sure to include names and description and mark your name and address on the back if you want them returned. Black and white prints only please.


JUST ONE MORE, OK.. OK? THEN YOU CAN TAKE ONE .. THEN I'LL GIVE YOU A BREAK .. AND THEN..
OUT, HOTSHOT BEFORE I DRAG YOU OUT!
MOVE OVER, YOU FLYING SCHOOL REJECTS ... LEMME AT IT WHILE THERE'S STILL SOME UNDERCARRIAGE LEFT
ACE
GIL PARCELL
Towpilots

MINUTES

Twenty - Ninth Annual General Meeting

of

Soaring Association of Canada

Date: March 23, 1974 Place: Holiday Inn, Toronto.

Host Club: Pioneer Soaring

1.00 Morning Session
The meeting was called to order at 10:00 a.m. by the President, Mr. Terence Beasley.

1.01 Introductions
The members present identified themselves. The Board of Directors were introduced. Mr. Beasley extended a special welcome to delegates from distant clubs - The Air Cadet League, Cold Lake Soaring Club, Lahr Gliding Club, New Brunswick Soaring Association and the Wide Sky Flying Club.

1.02 Voting Powers
The list of clubs and the voting rights of each were posted.

1.03 Minutes of the 1973 Annual General Meeting
Copies of the minutes and the Finacial Statement for the year 1973 had been made available prior to the meeting.

2.00 Committee Reports
Although some committee reports had been published in Issue #1/74 of Free Flight, not all of the delegates present had received their copies. It was decided to present a brief report on those that had bee published. It was mentioned that the service of receiving Free Flight had been most unsatisfactory during the year. The Directors were asked to review the situation and consider producing the issues commercially.

2.01 FAI Awards - Ken J. Round
This report had been published in Free Flight. In his report, Mr. Round had stated that greater care should be taken in completing the application forms for awards. Official Observers have a responsibility to ensure that all the documentation is complete.
Mr. Walter Chmela of York Soaring Association, was presented two FAI Certificates for his recent Record accomplishments.

2.02 Fitness and Amateur Sport Directorate - Walter J. Piercy

2.03 Instructors' Committee - Walter J. Piercy

2.04 Membership Committee - Terry Tucker

2.05 Self Launching Sailplanes - Terence R. Beasley
Mr. Beasley added that since his report had been published in Free Flight, a counter proposal had been submitted to MOT concerning the status of S.L.S.. Mr. E. Balint urged that MOT be pressed for approval. Negotiations had been under way for three years with little results. He volunteered to serve on

the committee if he could be of any value.

2.06 Radio Committee Report - Charles F. Pattenson
There had been nothing to report. It was suggested that MOT be approached for one channel to be used exclusively for glider operations for the future.

2.07 Technical Committee - Terence R. Beasley
Further to his report, Mr. Beasley advised again that no attempt should be made to import a sailplane that does not have a 'type approval'. He advised that the Technical Committee should be consulted before the event of purchase.

2.08 Air Space - Dave Tustin
Mr. B. Hea presented Mr. Tustin's report.

2.09 Meteorology Report - Sepp Froeschl
Mr. R. C. Gairns presented Mr. Froeschl's report.

Coffee Break for one half hour.

2.10 F.A.I. Committee Report - John Firth

2.11 Safety Committee - A. N. LeCheminant
A short discussion followed on whether shoulder harnesses should be made mandatory for tow planes. No decision was reached. Mr. LeCheminant was asked whether any comparative figures were available to indicate whether towing of gliders was more dangerous than power flying. Mr. LeCheminant stated that he did not have any figures.

2.12 Air Cadet Liaison Report - Hank H. Bruhlman
Mr. Bruhlman added to his report that the Air Cadet Program teaches the students to glide but it would have to be at the individual clubs that the students would learn the soaring technique. S.A.C. clubs would be canvassed during the year for their interest in absorbing these students who graduate as glider pilots from the ACL program.

The meeting adjourned for lunch at 12:15 p.m.

3.00 Afternoon Session
The meeting was called to order at 13:45 p.m.

4.00 Minutes of the Twenty-eighth A.G.M.
Moved by D. Wood, seconded by N. Macdougall, that the minutes be adopted.
Carried.

5.00 Voting Rights
There were no objections to the voting rights as posted.

6.00 Business from the Minutes

6.01 Reorganization of S.A.C. (item 11.0 of 1973 Minutes)
Mr. Beasley reported that this had not been carried out. Requests for suggestions had been sent to the Directors, and published in Free Flight; there had been no response. Mr. Beasley stated that he believed that this should be a priority matter for 1974.

6.02 World Contest Funds (item 15.0 of 1973 Minutes)
The accounts for the 1972 World Contest are still not settled with the Dept. of National Health and Welfare and therefore nothing had been done on contacting the clubs for approval of contributing $2000.00 of General S.A.C. Funds to the World Contest Fund.

6.03 Voting Rights (item 1.2 of 1973 Minutes)
Mr. Trounce questioned whether anything had been done to delete the '20 vote per club' allotment. Mr. Beasley stated that nothing had been done.

Moved by Mr. Peter Trounce, seconded by Mr. T. Talevi, that if the Directors have not resolved this issue by the next AGM, the members present at the AGM would decide it by vote.

Carried - show of hands.

6.04 Insurance - Harold E. Yardy
Mr. Yardy presented the statistics for the first year of operations of the S.A.C. administered Insurance Plan.
Because of the large amount paid in claims, there would be an increase in premiums for the coming year:
Extended coverage from April 1 to June 30 (insurance coverage will coincide with membership year)
$8.00 per insured pilot would be required. The number to based at 2/3 of the total number registered last season per club.
July 1st to June 30, 1975.
$34.00 per solo pilot. The number to be based at 2/3 of the total number of pilots registered last season as insured pilots.
November 1, 1974.
Balance of premiums are due at $34.00 per solo pilot, based upon the actual number of solo pilots in each club during the 1974 flying season.

Mr. Ron Wyatt, of Wyatt and Taylor Insurance Agency, addressed the delegates. He stated that meetings with the Insurance Committee during the year had resulted in a "Soaring Policy". The strip liability had been extended to cover glider ports.
Mr. Peter Trounce, a member of the Insurance Committee, recommended the policy to his club, SOSA, and to the other SAC Clubs. It is good value for the coverage.

New Business

7.00 SAC General Funds
Mr. P. Trounce noted that the Association has shown a net profit for the past years and suggested that perhaps the time had come to consider the hiring of a General Manager. With a slight increase in the annual membership fees, it would be possible to do so.
Mr. D. Winger suggested that a portion of the accumulating SAC Funds be used to cover the expenses of Directors to hold meetings other than the AGM during the year to discuss SAC affairs.
Moved by Mr. A. N. LeCheminant, seconded by Mr. H. Tilgner, that the Directors appoint a committee to prepare, and present to the next AGM, a report on how best to utilize accumulating SAC Funds.
Amendment - Moved by Mr. D. Clarke, seconded by Mr. L. Cotte, that this committee present a Budget Report for hiring a part-time General Manager. This report should include salary and whatever office expenses would be necessary for hiring a part-time General Manager.

Vote - show of hands

Amendment - Carried (against 1)
Motion - Carried (unanimously)

Moved by Mr. E. Balint, seconded by Mr. J. Brennan, that $2000.00 from the General Funds be allocated to support the team for the 1974 World Contest.

Vote - weighted ballot — For - 1071; Against - 125; Carried

8.00 Mr. Paul Schweizer of Schweizer Aircraft Corporation, addressed the meeting. He spoke on the progress of the 1-34 and 1-35 sailplane which their corporation had accomplished. He mentioned the assistance which is being given to the Air Cadet League in the way of scholarships for training at the Schweizer school.

9.00 Financial Statement - Terry Tucker
Treasurer's Report - Terry Tucker
To questions from the floor, Mrs. Tucker replied that the change of auditors from Boisjoli, Houghton in Montreal to Orton and Fraser in Ottawa, had been made for the purpose of convenience.
Further, that the 'qualifying clause' in the Auditor's Report had been made because when the auditors were in Montreal, it had been impossible for an inventory verification to be made. The firm of Orton and Fraser of Ottawa had verified the amount of supplies by actual check this year and that clause should not be included in next year's report.
Moved by Mr. H. Yardy, seconded by Mr. D. Dunn, that the Financial Statement and Treasurer's Report be accepted. Carried

10.00 President's Report - Terence R. Beasley
Further to his report, Mr. Beasley stated that although it was within the authority of the Directors to hire staff members, it was required that continued appointments be approved by the membership. The Directors had hired Mrs. Terry Tucker as Executive Secretary and would like a proposal that the appointment be continued.
Moved by Mr. A. Krieger, seconded by Mr. H. Tilgner, that the Board of Directors be authorized to hire Mrs. Terry Tucker as Executive Secretary.
Carried - Unanimous.

11.00 Mr. B. Budachs addressed the meeting with a small account of sharing Airspace experiences by amateur sports groups. He stated that the Parachute Jump Zones are being violated by gliders. He asked co-operation.

12.00 Regional Meets - 1974
Eastern - Montreal Soaring Council, July 15 - 25
Western - Alberta Soaring Council, June 30 - July 7

A "Fun Contest" at the SOSA site at Rockton, Ontario has been announced. The dates are July 29 to August 7.

It was suggested that if the regional meets were to be made a qualifying component for the National Competitions, it would meet the requirements for application for Government subsidy for the National Competitions.

13.00 National Competition - 1975

Bids to host the 1975 National Competition were received from:
York Soaring Association
Alberta Soaring Council

It was decided that a letter be sent to all the clubs advising that bids are being received and would be required before the end of May for consideration. The FAI Committee, Mr. J. Firth, Chairman would be asked to make the recommendation. Carried - show of hands.

14.00 Election of Directors

Nominated by mail vote:

Mr. R. C. Gairns	-	Quebec & Maritime Zone
Mr. H. Bruhlman	-	Ontario Zone
Dr. G. Anthony	-	Prairie Zone
Mr. B. M. Hea	-	Alberta Zone
Mr. F. Hinteregger	-	Pacific Zone

Moved by Mr. A. Sunley, seconded by Mr. B. Budachs, that because of the arrangement between the clubs in the Prairie Zone in electing their representative, Dr. G. Anthony be accepted in the place of Mr. R. Baptie who had accepted the nomination and then had to decline. Carried.

14.01 Election of Directors-at-Large

Mr. R. Mamini nominated by L. Riegert, seconded by K. Walker
Mr. W. J. Piercy nominated by T. Beasley, seconded by J. Agnew
Mr. J. Brennan nominated by J. Chamberlin, seconder not required
Moved by Mr. D. Clarke that nominations cease, seconded by Mr. P. Trounce.
Carried

The elected Directors:
Mr. R. Mamini and Mr. W. J. Piercy.

15.00 Board of Directors 1974

Dr. G. Anthony
Mr. T. R. Beasley, Past President
Mr. H. H. Bruhlman
Mr. R. C. Gairns
Mr. B. M. Hea
Mr. F. Hinteregger
Mr. R. F. Mamini
Mr. W. J. Piercy, Past Vice-President

At the Directors' Meeting held on March 24, 1974, Mr. T. R. Beasley was elected as President and Mr. W. J. Piercy as Vice-President.

16.00 Mr. Beasley extended a vote of thanks to Mr. D. Brown and the members of Pioneer Soaring who assisted him, for their fine efforts of organization of facilities for the Annual General Meeting.

17.00 The meeting adjourned at 18:00 p.m.

Recorded by:

Mrs. T. Tucker

Trophy Awards

Presented at the Annual General Meeting Dinner - March 23, 1974.

Canadair Trophy	Mr. R. Mamini	
"200" Trophy	Mr. I. Oldaker	
B.A.I.C. Trophy	Dr. D. Marsden and Mr. R. Mamini	
Ball & Chain Trophy	Mr. J. Carpenter -	Presented by President Beasley for Jim's outstanding performance in his first World Championship where he was the only Canadian to win a daily prize.
Shell Trophy	Mr. R. Mamini	
Carling Trophy	not presented - no team entry	
Dow Trophies	Best speed to goal -	Mr. J. Carpenter
	Triangle Speed -	Mr. H. Werneburg
	Triangle Speed (Nationals) -	Mr. R. Mamini
Instructors' Award	Mr. W. Chmela	
SOSA Trophy	Mr. B. Brayshaw	
Hawkesbury Chamber of Commerce	Mr. J. Carpenter	
Wolf Mix Trophy	Mr. H. Werneburg	
Roden Trophy	SOSA Gliding Club	

A plaque was presented to Mrs. Terry Tucker by the Cold Lake Soaring Club, in appreciation for all the work she has contributed to the Association during the year.

Call for Papers

CANADIAN AERONAUTICS AND SPACE INSTITUTE

First Canadian Symposium on Recreational Aircraft

Ottawa: 23rd - 25th June, 1975

**Co-sponsors: The Experimental Aircraft Association of Canada: and,
The Soaring Association of Canada: and,
The Canadian Owners and Pilots Association**

Theme: World Trends in the Design of Aircraft for Recreational Flying

Locale: Carleton University, Ottawa, and Pendleton Gliderport, Ontario

The Symposium will consider the theme in four sessions:

(1) Design trends and the Canadian market potential;
(2) Research and Development, with emphasis on new materials and construction techniques;
(3) The role of educational, amateur and government organizations, with reference to airworthiness and operational regulations;
(4) Panel discussion on the specifications of recreational aircraft to meet the demand.

Facilities will be available for fly-in and demonstration purposes at Pendleton Gliderport, 45 miles east of Ottawa.

Papers are invited for presentation at the first three sessions. Authors are invited to consider the challenges that face industry, educational, research and government organizations to provide new generation type certificated, kit and amateur-built recreational aircraft that can be bought, or amateur-built, and operated at reasonable cost. An invitation is extended to submit outline specifications of new generation recreational aircraft for panel discussion in the fourth session.

Submission of papers, including abstracts, and outline specifications of recreational aircraft should be sent *before the 15th March, 1975*, with names and addresses of the authors, to:

The Secretary,
Canadian Aeronautics and Space Institute,
77 Metcalfe St.,
Ottawa, Ontario,
K1P 5L6

Note: Accommodation will be available at Carleton University at the following daily rates: Single $17.80, Double $13.80 per person; both amounts include three meals.

For reservations contact Mr. P.A. Cobbett, Secretary, CASI.

SOARING ASSOCIATION OF CANADA

List of Member Clubs

QUEBEC & MARITIMES ZONE:
Air Cadet League (Quebec), 5726 Sherbrooke St. W., Box 340, NDG, Montreal, PQ., H4A 3P6
Appalachian Soaring Club, Box 271, Sherbrooke, PQ.
Ariadne Soaring Inc., 735 Riviere aux Pins, Boucherville, PQ., J4B 3A8
Buckingham Gliding Club, c/o P. Bisson, Greber, #305D, Pte. Gatineau, PQ.
Champlain Soaring Association, 11655 Laforest, Montreal, PQ., H3M 2W5
Lahr Gliding Club, Maj. D.F. McIntosh, 1CAG Hq., S. O. Air, CFPO 5000, Belleville, Ontario.
Montreal Soaring Council, Box 1082, St. Laurent, Montreal 379, PQ.
New Brunswick Soaring Association, c/o Dr. A. Dobson, 521 Blythwood Ave., Riverview, N. B.
Quebec Soaring Club, Box 9276, Quebec, PQ., G1V 4B1
Soaring Club of Nova Scotia, Box 513, Truro, N. S.
Valley Soaring Society, c/o Mr. E. S. Hansen, Acadia University, Wolfville, N. S.

ONTARIO ZONE:
Air Cadet League (Ontario), c/o J. Montle, 1107 Avenue Road, Toronto, Ontario.
Air Sailing Club, P. O. Box 2, Etobicoke, ONtario, M9C 4V2
Base Borden Soaring Club, c/o J.H. Spratley, 2 Walcheren Loop, CFB Borden, Ontario, L0M 1C0
Belleville Flying Club (1960), c/oJ. E. Marker, Box 322, Belleville, Ontario.
Bonnechere Soaring Inc., Box 1030, Deep River, Ontario, K0J 1P0
Caledon Gliding Club, R. R. 1, Erin, Ontario.
Central Ontario Soaring Association, Box 762, Peterborough, Ontario.
Chatham Air Cadet Gliding Club, 561 Lacroix Street, Chatham, Ontario, N7M 2X1
Erin Soaring Society, Box 523, Erin, Ontario.
Gatineau Gliding Club, Box 883, Station B, Ottawa, Ontario, K1P 5P9
Huronia Soaring Association, c/o M. Badior, 435 Hugel Ave., Midland, Ontario, L4R 1V4
Lakehead Gliding Club, Box 161, Station F, Thunder Bay, Ontario.
London Soaring Society, Box 773, Station B, London, Ontario.
North Bay Gliding Association, Box 1612, Hornell Heights, Ontario.
Provincial Motorgliding & Soaring Assc., R. R. No. 2, Blackstock, Ontario.
Rideau Gliding Club, c/o H. Janzen, 172 College St., Kingston, Ontario.
SOSA Gliding Club, Box 654, Station Q, Toronto, Ontario, M4T 2N5
Toronto Soaring Club, Box 856, Station F, Toronto, Ontario, M4Y 2N7
Windsor Gliding Club, c/o H. Preiss, 2050 St. Anne, Windsor, Ontario, N8N 1V7
York Soaring Association, Box 660, Station Q, Toronto, Ontario, M4T 2N5

PRAIRIE ZONE:
Air Cadet League (Manitoba), c/o Capt. G. Evans, 364 Duffield St, Winnipeg, Manitoba, R3J 2K2
Air Cadet League Saskatchewan), c/o P. Jmaeff, 20 Acadia Bay, Regina, Sask., S4S 4T6
Red River Soaring Association, Box 1074, Winnipeg, Manitoba.
Regina Gliding & Soaring Club, c/o Miss Audette, 10 Bole Place, Regina, Sask., S4S 3W7
Winnipeg Gliding Club, Box 1255, Winnipeg, Manitoba, R3C 2Y4

ALBERTA ZONE:
Cold Lake Soaring Club, Box 1714 Medley, Alberta, T0A 2M0
Cu-Nim Gliding Club, Box 2275, Calgary, Alberta, T2P 2M6
Edmonton Soaring Club, Box 472, Edmonton, Alberta.

PACIFIC ZONE:
Air Cadet League (B. C.), c/o Capt. R. Lacerte, 8908 Glenwood St., Chilliwack, B. C.
Alberni Valley Soaring Association, Box 201, Port Alberni, B. C.
Comox Gliding Club, Box 238, Lazo, B. C., V0R 2K0
Kamloops Gliding Club, c/o D. Lurkins, 627 Alberni Street, Kamloops, B. C.
Vancouver Soaring Association, Box 3651, Vancouver, B. C., V6B 3Y8
Van Isle Gliding Association, c/o R. J. Hansen, R. R. 2, Courtney, B. C.
Wide Sky Flying Club, P. O. 6931, Fort St. John, B. C., V0C 2P0

1975 DIAMOND MINE

Walter Chmela of York Soaring led 18 wave enthusiasts to Black Forest, Colorado the week after New Years and the group hit it big!

On Saturday, January 4th there were six Gold altitude and three Silver altitude gains and eight single Lennie pins won. (A single Lennie is for a flight over 25000')

Monday, January 6th was the best day at Black Forest since 1967. Winds were high, the rotor was rough and the wave was working overtime - TEN DIAMONDS were achieved before the day was over!

In addition, Walter Chmela, holder of the Canadian altitude record set in January last year, set a new citizen's Multiplace record of over 10300 m.

The Diamond winners were Ron Brent, Ted Byke, Don Clarke, Peter Gaettens, R. Kurzwernhard, Peter Masak, Fred Mueller, Dennis Mooney, N. Pool and Peter Rawes.

Peter Masak won the altitude award at the Vintage Sailplane Regatta at Elmira last summer and at 17 is probably the youngest Canadian to have earned his altitude Diamond.

FOR SALE

LIBELLE H301B CF-XZB

enclosed trailer, Available July after US Championship in Minden.

PRICE $12,500.

Write Andre Dumestre,
74330 Epagny,
M. Savoie,
FRANCE

or call Mike Kiss (403) 243-8128

FOR SALE

BG-12B CF-PSO

GOOD CONDITION, LOW TIME,

GLASSED WINGS

PRICED FOR QUICK SALE $2500.

YORK SOARING,
(416) 925-5571 (DAY)
(416) 223-6487 (EVE)

ATTENTION ALL CLUB SECRETARIES

"SOARING" renewals require two months advance notice. It is not too early to send membership renewals. Don't wait til the last minute - do it now! Some members missed copies of "SOARING" last year because renewals were late due to late arrival of SAC membership renewals. Don't let your club members be disappointed.

SEND YOUR CHANGE OF ADDRESS TO:

MRS. TERRY TUCKER,
786 CHAPMAN BLVD.,
OTTAWA, ONTARIO,
K1G 1T9

DO NOT SEND ADVICE OF YOUR CHANGE OF ADDRESS TO "SOARING" IN LOS ANGELES AS THIS IS HANDLED AUTOMATICALLY THROUGH S.A.C. HEADQUARTERS IN OTTAWA.

SOARING ASSOCIATION OF CANADA
L'ASSOCIATION CANADIENNE de VOL A VOILE
Box 1173, Station B, Ottawa, Ontario K1P 5A0